UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 20-F

(Mark One)

☐ **REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934**

OR

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended **December 31, 2024**

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to

OR

☐ **SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Date of event requiring this shell company report _____

Commission file number: **001-39152**

Quantum BioPharma Ltd.

(Exact name of Registrant as specified in its charter)

Ontario, Canada
(Jurisdiction of incorporation or organization)

55 University Avenue, Suite 1003,
Toronto, Ontario, M5J 2H7, Canada
(Address of principal executive offices)

Zeeshan Saeed, Founder, Chief Executive Officer and Co-Executive Chairman of the Board
Quantum BioPharma Ltd.
55 University Avenue, Suite 1003,
Toronto, Ontario, M5J 2H7, Canada
Telephone: (416) 854-8884
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(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act.

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Class B Subordinate Voting Shares, no par value	**QNTM**	**The NasdaqStock Market LLC**

Securities registered or to be registered pursuant to Section 12(g) of the Act. None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.

Class A Multiple Voting Shares, no par value: 12 shares outstanding as of December 31, 2024

Class B Subordinate Voting Shares, no par value: 2,299,502 shares outstanding as of December 31, 2024

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.
Yes ☐ No ☒

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.
Yes ☐ No ☒

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.
Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☐ Accelerated filer ☐ Non-accelerated filer ☒ Emerging growth company ☒

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP ☐	International Financial Reporting Standards as issued by the International Accounting Standards Board ☒	Other ☐

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.
Item 17 ☐ Item 18 ☐

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).
Yes ☐ No ☒

TABLE OF CONTENTS

INTRODUCTION

Unless otherwise noted or the context otherwise requires, all references in this Annual Report on Form 20-F (this "**Annual Report**"), or this Annual Report, to "Quantum", "Quantum BioPharma", "Company", "Corporation", "we", "us", and "our" refer to Quantum BioPharma Ltd., a corporation formed under the *Business Corporations Act* (Ontario) (the "**OBCA**") and the direct or indirect subsidiary entities of Quantum, and any partnership interests held by Quantum BioPharma and its subsidiary entities, including Lucid Psycheceuticals Inc. ("**Lucid**"), FSD BioSciences Inc. ("**FSD Biosciences**"), FV Pharma Inc. ("**FV Pharma**"), Prismic Pharmaceuticals, Inc. ("**Prismic**"), FSD Strategic Investments Inc. ("**FSD Strategic Investments**"), FSD Pharma Australia Pty Ltd. ("**FSD Australia**"), Huge Biopharma Australia Pty Ltd. ("**Huge Biopharma**"), and Celly Nutrition Corp., a corporation organized under the laws of the Province of British Colombia ("**Celly Nu**").

Our fiscal year ends on December 31. This Annual Report includes our audited consolidated financial statements as of December 31, 2024, and 2023 and for the years ended December 31, 2024, and 2023, (the "**2024 Annual Financial Statements**") which are prepared in accordance with International Financial Reporting Standards ("**IFRS**") as issued by the International Accounting Standards Board. None of our financial statements were prepared in accordance with generally accepted accounting principles in the United States of America ("**U.S. GAAP**").

On August 15, 2024, the Corporation consolidated all of its issued and outstanding Class A Multiple Voting Shares (as defined herein) and Class B Subordinate Voting Shares (as defined herein) on a 65:1 basis (the "**2024 Consolidation**"). All references to Class A Multiple Voting Shares, Class B Subordinate Voting Shares, and securities issuable into Class A Multiple Voting Shares and Class B Subordinate Voting Shares in this Annual Report, other than in documents dated prior to August 14, 2024, that are incorporated by reference in this Annual Report, reflect post-2024 Consolidation amounts unless otherwise indicated or the context otherwise requires. All documents dated prior to August 15, 2024, that are incorporated by reference in this Annual Report reflect pre-2024 Consolidation amounts unless otherwise indicated or the context otherwise requires.

Except where expressly indicated otherwise, our financial information is presented in U.S. dollars. All references in this Annual Report to "$" or "US$" mean United States of America ("**U.S.**" or "**United States**") dollars, and all references in this Annual Report to "C$" mean Canadian dollars. For the convenience of the reader, in this Annual Report, unless otherwise indicated, translations from Canadian dollars into U.S. dollars were made at the rate of US$1.00 to C$1.3694, which is the average rate for the 2024 fiscal year, (2023 average rate: US$1.00 to C$1.3497). Such U.S. dollar amounts are not necessarily indicative of the amounts of U.S. dollars that could actually have been purchased upon exchange of Canadian dollars at the dates indicated.

References herein to "Q1 2023", "Q2 2023", "Q2 2024", "Q3, 2024" and "Q4 2024" refers to the three months ended March 31, 2023, June 30, 2023, June 30, 2024, September 30, 2024, and December 31, 2024, respectively.

We have made rounding adjustments to some of the figures included in this Annual Report. Accordingly, numerical figures shown as totals in some tables may not be an arithmetic aggregation of the figures that preceded them.

This Annual Report includes registered and unregistered trademarks such as "ALCOHOLDEATH" which are protected under applicable intellectual property laws and are the property of the Company. Solely for convenience, our trademarks referred to in this Annual Report and in other publicly filed documents may appear without the ® or ™ symbol, but such references are not intended to indicate, in any way, that we will not assert our rights to the fullest extent under applicable law. All other trademarks used in this Annual Report are the property of their respective owners. For more information, please see "*Item 4. Information on the Company. – B. Business Overview – Intellectual Property*".

We are incorporated under the laws of Ontario, Canada. Substantially all of our assets are located outside the United States. In addition, several of our directors and officers are nationals and/or residents of countries other than the United States, and all or a substantial portion of such directors' and officers' assets may be located outside the United States. As a result, it may be difficult for investors to effect service of process within the United States upon us or our officers or directors or to enforce against us or them judgments obtained in United States courts, including judgments predicated upon the civil liability provisions of the securities laws of the United States or any state thereof. In addition, investors should not assume that the courts of Canada (i) would enforce judgments of United States courts obtained in actions against us, our officers or directors, or other said persons, predicated upon the civil liability provisions of the U.S. federal securities laws or other laws of the United States or (ii) would enforce, in original actions, liabilities against us or such directors, officers or experts predicated upon the United States federal securities laws or any securities or other laws of any state or jurisdiction of the United States.

In addition, there is doubt as to the applicability of the civil liability provisions of the United States federal securities law to original actions instituted in Canada. It may be difficult for an investor, or any other person or entity, to assert United States securities laws claims in original actions instituted in Canada.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report contains statements that constitute forward-looking statements. All statements other than statements of historical facts contained in this Annual Report, including statements regarding our future results of operations and financial position, business strategy, product candidates, product pipeline, ongoing and planned clinical studies, including those of our collaboration partners, regulatory approvals, research and development ("**R&D**") costs, timing and likelihood of success, as well as plans and objectives of management for future operations, are forward-looking statements. Many of the forward-looking statements contained in this Annual Report are often, but not always, identified by words or phrases such as "hope", "would", "seek", "anticipate", "believe", "expect", "plan", "continue", "estimate", "will", "predict", "intend", "forecast", "future", "target", "project", "capacity", "could", "should", "might", "focus", "proposed", "scheduled", "outlook", "potential", "may" or similar expressions and includes suggestions of future outcomes, including, but not limited to statements about:

- discussions concerning the Company's exploration of near-term funding strategies;
- the Company's plans to advance the R&D of its Product Candidates (as defined herein) to commercialization through studies and clinical trials, including anticipated timing and associated costs;
- the application and the costs associated with such planned trials, and the Company's ability to obtain required funding and the terms and timing thereof;
- the expansion of our product offering(s);
- our business objectives and the expected impacts of previously announced acquisitions and developments;
- the U.S. Food and Drug Administration ("**FDA**") and Health Canada, or comparable regulatory authority, application process and any review thereof and its effects on our business objectives;
- the Company's focus on the research and development of Lucid-MS to prevent and reverse myelin degradation;
- the Company's Lucid-21-302 clinical development program in multiple sclerosis advancing towards human Phase-2 efficacy trials;
- the Company's intention to retain 100% of the rights to develop products for pharmaceutical and medical uses;
- the Company's intention to maintain a portfolio of strategic investments through FSD Strategic Investments Inc.;
- the Company's belief that its share price does not affect its current financial position and recent operational improvements, and that strong cash and cash equivalents provide a solid foundation for operations and potential growth opportunities;
- agreements with investor relations companies will play a key role in assisting the Company to enhance its market awareness and foster productive, continuing dialogues with shareholders and other market participants;
- industry trends;
- overall market growth rates and the Company's growth rates;
- the Company's business plans and strategies, including acquisition opportunities;
- intentions with respect to, and the ability to execute, the Company's growth strategies;
- future sales of the Company's products;
- future regulatory approval and sales of drugs and devices;
- securing additional licenses from third parties and the entry into license agreements for future product acquisitions;
- assessments of suppliers' manufacturing capacity and downstream supply of raw materials;
- relationships with pharmaceutical licensors;
- relationships with employees and directors;
- the Company's competitive position in the industry;
- anticipated trends and challenges in the Company's business and the markets in which it operates;
- protection of the Company's intellectual property rights;
- the effects of any non-compliance with government regulations;
- the exercise of certain shareholder rights;
- statements with respect to future prospects for Company products;
- the Company's pursuits if additional product and pipeline opportunities in certain therapeutic markets;
- future milestone payments;
- the issuance of Class B Subordinate Voting Shares (as defined herein) pursuant to the ATM Offering (as defined below);
- the Company's anticipated cash needs and its needs for additional financing;
- amendment to any laws, rules or regulations, and the impact and timing thereof, including with respect to approval, pricing or reimbursement of drug products;
- the Company's consideration of cryptocurrencies as both a financial asset and a potential medium of exchange for future transactions; and
- the Company will allow for future financing and other transactions to be carried out in cryptocurrency.

Readers are cautioned not to place undue reliance on Forward-Looking Statements as the Company's actual results may differ materially and adversely from those expressed or implied.

The Company has made certain assumptions with respect to the Forward-Looking Statements regarding, among other things:

- the Company's ability to generate sufficient cash flow from operations and obtain financing, if needed, on acceptable terms or at all;
- the general economic, financial market, regulatory and political conditions in which the Company operates;
- the interest of potential purchasers in the Product Candidates;
- anticipated and unanticipated costs;
- the government regulation of the Corporation's activities and Product Candidates;
- the timely receipt of any required regulatory approvals;
- our ability to obtain qualified staff, equipment and services in a timely and cost efficient manner;
- our ability to conduct operations in a safe, efficient and effective manner;
- our expansion plans and timeframe for completion of such plans'
- our revenue growth and operating efficiencies;
- customer demand for the Company's products;
- the Company will have ongoing patent protection;
- the sufficiency of budgeted capital expenditures in carrying out planned activities;
- the availability and cost of labour and services;
- trends in the bio-pharmaceutical industry;
- there being no significant changes in regulatory, tax and healthcare laws and regulations;
- the absence of a material change in competition;
- our ability to maintain our current strategic relationships with Celly Nu and Celly U.S Nutrition Corp, a Delaware corporation ("**Celly U.S.**"), pursuant to the Celly Nu License Agreement (as defined herein);
- our ability to protect and maintain our, and not infringe on third parties', intellectual property rights throughout the world;
- our ability to raise capital when needed in order to continue our product development programs and commercialization efforts;
- our ability to attract and retain qualified employees and key personnel;
- the Company's ability to successfully develop new commercialized products or find a market for their sale;
- the impact of any future recall of the Company's products;
- the Company's ability to promote and sustain its products, including any restrictions or constraints on marketing practices under the regulatory framework in which the Company operates;
- our ability to issue Class B Subordinate Voting Shares pursuant to the ATM Offering;
- there being generally stable economic and financial conditions in Canada, the United States, Australia, and globally;
- cryptocurrencies having the ability to be both financial asset and a potential medium of exchange for future transactions; and
- the Company will have the ability to allow future financing and other transactions to be carried out in cryptocurrency.

Although the Corporation believes that the expectations and assumptions on which the Forward-Looking Statements are based are reasonable, undue reliance should not be placed on the Forward-Looking Statements, because no assurance can be given that such statements will prove to be correct.

Forward-looking statements appear in a number of places in this Annual Report and include, but are not limited to, statements regarding our intent, belief, or current expectations. Forward-looking statements are based on our management's beliefs and assumptions, and on information currently available to our management. Such statements are subject to risks and uncertainties, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to, those identified under "*Item 3. Key information - D. Risk Factors*" in this Annual Report. These risks and uncertainties include multiple factors:

- the success of our clinical studies, our ability to obtain and maintain regulatory approval and to commercialize our Product Candidates, which include Lucid-21-302 ("**Lucid-MS**"), for the treatment of multiple sclerosis ("**MS**") and our product for alcohol misuse in the healthcare area;
- failure of our licensing partners, Celly Nu and Celly U.S. to continue selling and distributing unbuzzd™, a functional beverage product that seeks to provide relief from inebriation and accelerate alcohol metabolism in the consumer market;
- the ability of our competitors to discover, develop or commercialize competing products to unbuzzd™, Lucid-MS or other product candidates before or more successfully than we do;
- our plans to research, develop and commercialize our Product Candidates;
- the occurrence of serious adverse, undesirable, or unacceptable side effects related to our Product Candidates;
- the acceptance by the FDA and applicable foreign regulatory authorities of data from studies for Lucid-MS or our alcohol misuse products that we and our collaboration partners conduct within and outside the U.S. now and in the future;
- our foreign private issuer status, the loss of which would require us to comply with the Exchange Act of 1934's, as amended (the "**Exchange Act**") domestic reporting regime, and cause us to incur significant legal, accounting, and other expenses;
- our incorporation in Ontario, the laws of which govern our corporate affairs and may differ from those applicable to companies incorporated in the U.S.;
- the limited operating history of the Company and history of losses, and anticipated significant losses for the foreseeable future incurred to pursue commercialization of the Product Candidates;
- the Company's inability to file investigational new drug applications ("**INDs**") or clinical trial application ("**CTAs**") on timelines it reasonably anticipates, if at all;
- the Product Candidates being in the preclinical development stage;
- the Company's reliance on its Product Candidates;
- the Company's ability to identify, license or discover additional product candidates;
- failure to achieve the degree of market acceptance and demand for our products or Product Candidates by physicians, patients, healthcare payors, and others in the medical community which are necessary for commercial success, including due to the possibility that alternative, superior treatments may be available prior to the approval and commercialization of Product Candidates, should such approval be received at all;
- failure of clinical trials to demonstrate substantial evidence of the safety and/or effectiveness of Product Candidates, which could prevent, delay or limit the scope of regulatory approval and commercialization, including from difficulties encountered in enrolling patients in clinical trials, and reliance on third parties to conduct our clinical trials and some aspects of our research and preclinical testing, or results from future clinical testing which may demonstrate opposing evidence and draw negative conclusions regarding the effectiveness of any Product Candidate, including the effectiveness of Lucid-MS as a treatment for MS;

- results of earlier studies or clinical trials not being predictive of future clinical trials and initial studies or clinical trials not establishing an adequate safety or efficacy profile for the Product Candidates to justify proceeding to advanced clinical trials or an application for regulatory approval;
- potential side effects, adverse events or other properties or safety risks of the Product Candidates, which could delay or halt their clinical development, prevent their regulatory approval, cause suspension or discontinuance of clinical trials, abandonment of a Product Candidate, limit their commercial potential, if approved, or result in other negative consequences;
- preliminary, interim data obtained from the Company's clinical trials that it may announce or publish from time to time may not be indicative of future scientific observations or conclusions as more patient data becomes available, further analyses are conducted, and as the data becomes subject to subsequent audit and verification procedures;
- inability to establish sales and marketing capabilities, or enter into agreements with third parties, to sell and market any Product Candidates that the Company may develop;
- the ability to provide the capital required for research, product development, operations and marketing;
- violations of laws and regulations resulting in repercussions;
- risks inherent in a pharmaceutical business and the development and commercialization of pharmaceutical products, including the inability to accurately predict timing or amounts of expenses, requirements of regulatory authorities, and completion of clinical studies on anticipated timelines, which may encounter substantial delays or may not be able to be completed at all;
- delays in clinical trials;
- the Company's inability to attain or maintain the regulatory approvals it needs in any jurisdiction to commercialize, distribute or sell any Product Candidate or other pharmaceutical products;
- failure of counterparties to perform contractual obligations;
- changes, whether anticipated or not, in laws, regulations and guidelines that may result in significant compliance costs for the Company, including in relation to restrictions on branding and advertising, regulation of distribution and excise taxes;
- uncertainty associated with insurance coverage and reimbursement status for newly-approved pharmaceutical products, which could result in Product Candidates becoming subject to unfavorable pricing regulations, third-party coverage and reimbursement practices, or healthcare reform initiatives, including legislative measures aimed at reducing healthcare costs;
- the effect that any public health crises, such as pandemics or epidemics may have on the Company's business;
- the price of our securities may be volatile due to a variety of factors, including volatility in the capital markets generally, geopolitical events, public health emergencies, macro economic pressures and natural disasters;
- the inability to obtain required additional financing on terms favourable to the Corporation or at all;
- the Company's anticipated negative cash flow from operations and non-profitability for the foreseeable future;
- the issuances of equity securities and the conversion of outstanding securities to Class B subordinate voting shares;
- the Company's dual class share structure;
- the market price of the Class B Subordinate Voting Shares possibly being subject to wide price fluctuations;
- whether an active trading market for the Class B Subordinate Voting Shares is sustained;
- the Company's ability to maintain compliance with Nasdaq Stock Market LLC's ("**Nasdaq**") rules for continued listing on the Nasdaq;
- the Company's ability to identify and execute future acquisitions or dispositions effectively, including the ability to successfully manage the impacts of such transactions on its operations;
- lack of dividends, and reinvestment of retained earnings, if any, into the Company's business;
- the Company's reliance on management, key persons and skilled personnel;
- reliance on contract manufacturing facilities;
- manufacturing problems that could result in delay of the Company's development or commercialization programs;
- the Company's expected minimal environmental impacts; insurance and uninsured risks;
- claims from suppliers; conflicts of interest between the Company and its directors and officers;
- the Company's ability to manage its growth effectively;
- the Company's ability to realize production targets;
- supply chain interruptions and the ability to maintain required supplies of, equipment, parts and components;
- the Company's ability to successfully implement and maintain adequate internal controls over financial reporting or disclosure controls and procedures;
- results of litigation;
- the dependence of the Company's operations, in part, on the maintenance and protection of its information technology systems, and the information technology systems of its third-party research institution collaborators, contract research organizations ("**CROs**") or other contractors or consultants, which could face cyber-attacks;
- failure to execute definitive agreements with entities in which the Company has entered into letters of intent or memoranda of understanding;
- unfavorable publicity or consumer perception towards the Product Candidates;
- reputational risks to third parties with whom the Company does business; failure to comply with laws and regulations;
- the Company's reliance on its own market research and forecasts;
- competition from other technologies and pharmaceutical products, including from synthetic production, new manufacturing processes and new technologies, and expected significant competition from other companies with similar businesses, and significant competition in an environment of rapid technological and scientific change;

- the Company's ability to safely, securely, efficiently and cost-effectively transport our products to consumers;
- liability arising from any fraudulent or illegal activity, or other misconduct or improper activities that the Company's directors, officers, employees, contractors, consultants, commercial partners or vendors may engage in, including noncompliance with regulatory standards and requirements;
- unforeseen claims made against the Company, including product liability claims or regulatory actions;
- reliance on single-source suppliers, including single-source suppliers for the acquisition of the drug substance and drug product for any of the Product Candidates;
- inability to obtain or maintain sufficient intellectual property protection for the Product Candidates;
- third-party claims of intellectual property infringement;
- patent terms being insufficient to protect competitive position on Product Candidates;
- inability to obtain patent term extensions or non-patent exclusivity;
- inability to protect the confidentiality of trade secrets;
- inability to protect trademarks and trade names;
- filing of claims challenging the inventorship of the Company's patents and other intellectual property;
- invalidity or unenforceability of patents, including legal challenges to patents covering any of the Product Candidates;
- claims regarding wrongfully used or disclosed confidential information of third parties;
- risks related to the Company's investment in Celly Nu, including the ability of Celly Nu and Celly U.S. to commercialize the exclusive rights to the recreational applications for the Company's alcohol misuse technology for rapid alcohol detoxification;
- inability to protect property rights around the world; the impact of general economic conditions on the Company's mortgage investment activities;
- risks related to the Company's status as a foreign private issuer;
- the Company taking advantage of reduced disclosure requirements applicable to emerging growth companies;
- the Company's classification as a "passive foreign investment company";
- that the Company's international business operations, including expansion to new jurisdictions, could expose it to regulatory risks or factors beyond our control such as currency exchange rates and changes in governmental policy;
- risks related to expansion of international operations;
- the Company's ability to produce and sell products in, and export products to, other jurisdictions within and outside of Canada and the United States, which is dependent on compliance with additional regulatory or other requirements;
- regulatory regimes of locations for clinical trials outside of Canada and the United States;
- failure to obtain approval to commercialize Product Candidates outside of Canada and the United States;
- if clinical trials are conducted for Product Candidates outside of Canada and the United States, FDA, Health Canada and comparable regulatory authorities may not accept data from such trials, or the scope of such approvals from regulatory authorities may be limited;
- other factors beyond the Company's control;
- the Company will not issue Class B Subordinate Voting Shares pursuant to the ATM Offering;
- cryptocurrencies not having the ability to be both financial asset and a potential medium of exchange for future transactions;
- our inability to conduct future financing and other transactions in cryptocurrency;
- the Company being subject to counterparty risks, including particular risks relating to it custodians with regards to the holding of digital assts in custodial accounts; and
- the other risk factors discussed under "*Item 3. Key information - D. Risk Factors*".

These forward-looking statements are applicable only as of the date of this Annual Report, and are subject to a number of risks, uncertainties and assumptions described under the sections in this Annual Report entitled "*Item 3. Key information - D. Risk Factors*" and "*Item 5. Operating and Financial Review and Prospects*" and elsewhere in this Annual Report. Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified and some of which are beyond our control, you should not rely on these forward-looking statements as predictions of future events. The events and circumstances reflected in our forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Moreover, we operate in an evolving environment. New risk factors and uncertainties may emerge from time to time, and it is not possible for management to predict all risk factors and uncertainties. Except as required by applicable law, we do not plan to publicly update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

MARKET AND INDUSTRY DATA

This Annual Report includes market and industry data that has been obtained from third party sources, including industry publications. The Company believes that its industry data is accurate and that its estimates and assumptions are reasonable, but there is no assurance as to the accuracy or completeness of this data. Third party sources generally state that the information contained therein has been obtained from sources believed to be reliable, but there is no assurance as to the accuracy or completeness of included information. Although the data is believed to be reliable, the Company has not independently verified any of the data from third party sources referred to in this Annual Report or ascertained the underlying economic assumptions relied upon by such sources.

SUMMARY RISK FACTORS

Our business is subject to a number of risks and uncertainties, including those risks discussed at length in the section below titled "*Risk Item 3. Key information - D. Risk Factors*". These risks include, among others, the following:

RISKS RELATED TO OUR PRODUCT CANDIDATES

- We have a limited operating history and funding, which may make it difficult to evaluate Lucid-MS, our products for alcohol misuse and their product development, product prospects and overall likelihood of success;
- Our drug product candidate, Lucid-MS or our products relating to alcohol misuse, may not receive regulatory approval from Health Canada or the FDA, in a timely manner, if at all, or may receive regulatory approval on limiting terms;
- We are relying on Celly Nu and Celly U.S., our licensing partners, to develop and promote unbuzzd™, an alcohol misuse product for the retail market;
- The Company may be unable to raise the capital necessary for it to execute its strategy on favorable terms or at all; and
- Drug development is a highly uncertain undertaking and involves a substantial degree of risk.

RISKS RELATED TO THE PHARMACEUTICAL BUSINESS

- We rely on the UHN License (as defined herein) to use for pharmaceutical purposes certain patents and other intellectual property rights associated with Lucid-MS;
- We rely on the Epitech License Agreement (as defined herein) and the UHN License to use for pharmaceutical purposes certain patents and other intellectual property rights associated with FSD-PEA and Lucid-MS;
- Even if Lucid-MS receives regulatory approval, we may nonetheless fail to achieve the degree of market acceptance of Lucid-MS by physicians, patients, healthcare payors, and others in the medical community necessary for commercial success;
- We face significant competition for our Lucid-MS drug, and there is a possibility that our competitors may achieve regulatory approval for an effective treatment for MS before us or develop therapies that are safer, more advanced, or more effective than ours;
- Psychedelic or psychedelic-inspired drugs may never be approved as medicines or other therapeutic applications, and violations of applicable laws and regulations, or changes in the regulatory or political discourse with respect to psychedelic or psychedelic-inspired drugs, could result in repercussions;
- The loss of single-source suppliers, or their failure to supply us with the drug substance or drug product, could materially and adversely affect our business;
- We currently rely on, and expect to continue to rely on, third parties to conduct drug trials and aspects of our research and preclinical testing for Lucid-MS, our products relating to alcohol misuse and other possible drug candidates;
- We, our service providers, or any third-party manufacturers may fail to comply with regulatory requirements which could subject us to enforcement actions;
- The FDA, Health Canada or other comparable regulatory authorities may not accept data from trials conducted in foreign jurisdictions; and
- If and when we begin research on psychedelic drugs again, these drugs may never be approved as medicines or other therapeutic applications, and violations of applicable laws and regulations, or changes in the regulatory or political discourse with respect to psychedelic or psychedelic-inspired drugs, could result in repercussions.

RISKS RELATED TO OUR INTELLECTUAL PROPERTY

- We may be unable to obtain and maintain sufficient intellectual property protection for our Product Candidates and any future products that we may develop;
- Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts; and
- If we are unable to adequately protect the confidentiality of our trade secrets, our trademarks or trade names, our business may be adversely affected.

RISKS RELATED TO OUR CRYPTOCURRENCY CORPORATE TREASURY FUNCTION

- Our treasury holdings in cryptocurrency are and will be less liquid than cash and cash equivalents;
- Cryptocurrencies, including those we hold in our treasury, are regarded as highly volatile assets, and fluctuations in price are likely to significantly influence the Company's financial statements and the price of our common stock;
- Cryptocurrencies are novel assets, and are subject to significant legal, commercial, regulatory and technical uncertainty;
- Our cryptocurrency treasury strategy has not been tested over any period of time or under different market conditions; and
- Our ownership of cryptocurrencies in our treasury can have an impact on our accounting methods.

GENERAL CORPORATE RISKS

- Macroeconomic pressures in the markets in which we operate, including, but not limited to, the lasting effects of the *COVID-19* pandemic, epidemic, or outbreak of an infectious disease, inflation, stagflation, supply chain and interest rate pressures, foreign currency exchange rate fluctuations, the ongoing conflict between Russia and Ukraine and political developments in Hong Kong and Taiwan, natural disasters and other macroeconomic and geopolitical events may materially and adversely affect our business and financial results and could cause a disruption to the development of our Product Candidates;
- The Company operates in a highly regulated industry and is subject to a wide range of federal, state, and local laws, rules, and regulations, including FDA and Health Canada regulatory requirements and laws pertaining to fraud and abuse in healthcare, that affect nearly all aspects of our operations. Failure to comply with these laws, rules, and regulations, or to obtain and maintain required licenses, could subject the Company to enforcement actions, including substantial civil and criminal penalties, and might require us to recall or withdraw a product from the market or cease operations, which could materially and adversely affect our business, financial condition, and results of operations;
- Any significant interruption in the supply chain for key inputs could materially impact the Company's business;
- Future sales or issuances of equity securities and the conversion of outstanding securities to Class B Subordinate Voting Shares could decrease the value of the Class B Subordinate Voting Shares and dilute investors' voting power;
- The Company's dual class structure has the effect of concentrating voting control and the ability to influence corporate matters with a limited number of holders of Class A Multiple Voting Shares;
- A decline in general economic conditions may impact the viability and success of our mortgage investment activities;
- We may lose our status as a foreign private issuer;
- There can be no assurance that we will be able to comply with the continued listing standards of the Nasdaq and/or Canadian Securities Exchange (the "**CSE**");
- The Company is currently party to several legal proceedings and may become a party to potential future litigation; and
- We are a passive foreign investment company for U.S. federal income tax purposes, which may result in adverse U.S. federal income tax consequences for U.S. Holders of our Class B Subordinate Voting Shares.

CAUTIONARY NOTE REGARDING FUTURE ORIENTED FINANCIAL INFORMATION

This Annual Report may contain future oriented financial information ("FOFI") within the meaning of Canadian securities legislation and analogous U.S. securities laws, about prospective results of operations, financial position or cash flows, based on assumptions about future economic conditions and courses of action, which FOFI is not presented in the format of a historical balance sheet, income statement or cash flow statement. The FOFI has been prepared by management to provide an outlook of the Company's activities and results and has been prepared based on a number of assumptions including the assumptions discussed under the heading above entitled "*Cautionary Note Regarding Forward-Looking Statements*" and assumptions with respect to the costs and expenditures to be incurred by the Company, capital expenditures and operating costs, taxation rates for the Company and general and administrative expenses. Management does not have, or may not have had at the relevant date, firm commitments for all of the costs, expenditures, prices or other financial assumptions which may have been used to prepare the FOFI or assurance that such operating results will be achieved and, accordingly, the complete financial effects of all of those costs, expenditures, prices and operating results are not, or may not have been at the relevant date of the FOFI, objectively determinable.

Importantly, the FOFI contained in this Annual Report are, or may be, based upon certain additional assumptions that management believes to be reasonable based on the information currently available to management, including, but not limited to, assumptions about: (i) the future pricing for the Company's products, (ii) the future market demand and trends within the jurisdictions in which the Company may from time to time conduct the Company's business, (iii) the Company's ongoing inventory levels, and operating cost estimates, and (iv) the Company's financial results for 2025. The FOFI or financial outlook contained in this Annual Report do not purport to present the Company's financial condition in accordance with IFRS as issued by the International Accounting Standards Board, and there can be no assurance that the assumptions made in preparing the FOFI will prove accurate. The actual results of operations of the Company and the resulting financial results will likely vary from the amounts set forth in the analysis presented in any such document, and such variation may be material (including due to the occurrence of unforeseen events occurring subsequent to the preparation of the FOFI). The Company and management believe that the FOFI has been prepared on a reasonable basis, reflecting management's best estimates and judgments as at the applicable date. However, because this information is highly subjective and subject to numerous risks including the risks discussed under the heading above entitled "*Cautionary Note Regarding Forward-Looking Statements*" and under the heading "*Risk Factors*" in the Company's public disclosures, FOFI or financial outlook within this Annual Report should not be relied on as necessarily indicative of future results.

Readers are cautioned not to place undue reliance on the FOFI, or financial outlook contained in this Annual Report. Except as required by Canadian securities lawsand analogous U.S. securities laws, the Company does not intend, and does not assume any obligation, to update such FOFI.

PART I

Item 1. Identity of Directors, Senior Management and Advisers.

A. Directors and Senior Management

Not applicable.

B. Advisers

Not applicable.

C. Auditors

Not applicable.

Item 2. Offer Statistics and Expected Timetable.

Not applicable.

Item 3. Key Information

A. [Reserved]

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

An investment in securities of the Company should only be made by persons who can afford a significant or total loss of their investment. We are exposed to a number of risks through the pursuit of our business objectives. The following risks and uncertainties identified below are those we believe may, individually or in combination with other risks and uncertainties, have a material impact on our business, but these are not the only risks and uncertainties we face. Additional risks and uncertainties not presently known to us, or risks that we currently deem immaterial, may also impair our business operations. If any of the following risks, or any other risks and uncertainties that we have not yet identified or that we currently consider not to be material, actually occur, or become material risks, our business, financial condition, results of operations and cash flows, and consequently the price of the Class B Subordinate Voting Shares, could be materially and adversely affected.

The risks discussed below also include Forward-Looking Statements and our actual results may differ substantially from those discussed in these Forward-Looking Statements. See "Cautionary Note Regarding Forward-Looking Statements" in this Annual Report.

Risks relating to our Product Candidates

Drug development is highly uncertain undertaking and involves a substantial degree of risk. We have no product sales, which, together with our limited operating history, makes it difficult to evaluate our business and assess our future viability.

Pharmaceutical and biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We are a biotechnology corporation with a limited operating history. We have no pharmaceutical products approved for commercial sale and have not generated any revenue from pharmaceutical product sales. We are currently focused on developing Lucid-MS, a patented new chemical entity targeting the treatment of MS. The effectiveness of Lucid-MS is not yet known. We continue to incur significant research and development and other expenses related to clinical trials and other operating expenses, ongoing operations and expect to incur losses for the foreseeable future. We anticipate these losses will increase and that we will not generate any revenue from product sales of Lucid-MS unless and until after we have successfully completed clinical development and received regulatory approval, for the commercial sale of this product.

We may never be able to develop or commercialize Lucid-MS or any other drug candidate or achieve profitability. Revenue from the sale of Lucid-MS, if regulatory approval is obtained, will be dependent, in part, upon the size of the markets in the territories for which we obtain regulatory approval, the accepted price for the product, the ability to obtain reimbursement at any price and whether we own the commercial rights for that territory, as well as the efficiency and availability of any comparable products. Our growth strategy depends on our ability to generate revenue. In addition, if the number of addressable patients is less than anticipated, the indication approved by regulatory authorities is narrower than expected, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of Lucid-MS or any other drug product, even if approved. Even if we are able to generate revenue from the sale of Lucid-MS, we may not become profitable and may need to obtain additional funding to continue operations. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to achieve sustained profitability would depress our value and could impair our ability to raise capital, expand our business, diversify our research and development pipeline, market Lucid-MS and any other product candidates that we may identify and pursue or continue our operations.

Our future success is dependent on the regulatory approval and commercialization of our Product Candidates.

We do not have any products that have gained regulatory approval. As a result, our ability to finance our operations and generate revenue, are substantially dependent on our ability to obtain regulatory approval for, and, if approved, to successfully commercialize our product candidates in a timely manner. We cannot commercialize our other product candidates in Canada or the U.S. without first obtaining regulatory approval for each product from Health Canada or the FDA; similarly, we cannot commercialize any product candidates outside of the U.S. or Canada without obtaining regulatory approval from comparable foreign regulatory authorities, including the European Medicines Agency (the "**EMA**"). The FDA review process typically takes years to complete, and approval is never guaranteed. Before obtaining regulatory approvals for the commercial sale of Lucid-MS or any of our potential product candidates for a target indication, we must demonstrate with substantial evidence gathered in preclinical and well-controlled clinical studies, with respect to approval in Canada and in the U.S. to the satisfaction of Health Canada and the FDA, and in Europe, to the satisfaction of the EMA, that the product candidate is safe and effective for use for that target indication; and that the manufacturing facilities, processes and controls are adequate. Obtaining regulatory approval for marketing of Lucid-MS or future product candidates in one country does not ensure we will be able to obtain regulatory approval in other countries. A failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in other countries.

Even if Lucid-MS or any of our other product candidates were to successfully obtain approval from Health Canada or the FDA or comparable foreign regulatory authorities, any approval might contain significant limitations related to use restrictions for specified age groups, warnings, precautions, or contraindications, or may be subject to burdensome post-approval studies or risk management requirements. If we are unable to obtain regulatory approval for our Product Candidates in one or more jurisdictions, or any approval contains significant limitations, we may not be able to obtain sufficient funding or generate sufficient revenue to continue the development of any of our other Product Candidates that we are developing or may discover, in-license, develop or acquire in the future. Also, any regulatory approval of our Product Candidates, once obtained, may be withdrawn. Furthermore, even if we obtain regulatory approval for any of our Product Candidates, their commercial success will depend on a number of factors, including the following:

- development of a commercial organization within the Company or establishment of a commercial collaboration with a commercial infrastructure;
- establishment of commercially viable pricing and obtaining approval for adequate reimbursement from third-party and government payers;
- our ability to manufacture quantities of our Product Candidates using commercially satisfactory processes and at a scale sufficient to meet anticipated demand and enable us to reduce our cost of manufacturing;
- our success in educating physicians and patients about the benefits, administration, and use of our Product Candidates;
- the availability, perceived advantages, relative cost, relative safety, and relative efficacy of alternative and competing treatments;
- the effectiveness of our own or our potential strategic collaborators' marketing, sales and distribution strategy and operations;
- acceptance as a safe and effective therapy by patients and the medical community; and
- a continued acceptable safety profile following approval.

Many of these factors are beyond our control. If we are unable to successfully commercialize our Product Candidates, we may not be able to earn sufficient revenues to continue our business.

We our relying on Celly Nu and Celly U.S., our licensing partners, to promote our unbuzzd™ brand and if we fail to maintain a good relationship with Celly Nu our business, financial condition and results of operations could be adversely affected.

We have licensed certain proprietary intellectual property to Celly Nu and Celly U.S. pursuant to an Amended and Restated Exclusive License Agreement, dated as of August 14, 2024 (the "**Celly Nu IP License Agreement**"). Pursuant to the Celly Nu IP License Agreement, we are relying on Celly Nu and Celly U.S. to promote, commercialize and distribute unbuzzd™ to the consumer market. Although we can maintain control over the products and content developed by Celly Nu and Celly U.S. to a certain degree through contractual provisions in the Celly Nu IP License Agreement, we have limited control over its marketing and commercialization strategy.

The viability of the Celly Nu IP License Agreement depends on our ability to establish and maintain good relationship with Celly Nu and Celly U.S. The value of the unbuzzd™ brand and the rapport that we maintain with Celly Nu and Celly U.S. is an important factor for the success of this relationship. If we are unable to maintain a good relationship with Celly Nu and Celly U.S., it could have a material adverse effect on our results of operations. The Celly Nu License Agreement requires us and our licensees to comply with operational and performance conditions that are subject to interpretation and could result in disagreements. At any given time, we could have a dispute with Celly Nu or Celly U.S. regarding the interpretation of a provision in the Celly Nu IP License Agreement. An adverse result in any such dispute could materially adversely impact our results of operations and business.

For more information, please see "*Item 4. Information on the Company. - A. History and Development of the Company - Overview and History*".

We rely on the UHN License to use for pharmaceutical purposes certain patents and other intellectual property rights associated with Lucid-MS.

One of our principal assets is the UHN License, which provides us with an exclusive, multi-jurisdictional license to use certain patents and other intellectual property rights associated with Lucid-MS, which is owned by the University Health Network ("**UHN**"). We are obligated to make milestone payments and royalties to UHN under the UHN License Agreement, which may limit our future profitability and our ability to enter into marketing partnership agreements. If we materially breach any of the terms of the UHN License Agreement (and fail to cure such breach with the specified time, to the extent a cure period is available for such breach), UHN, could terminate such agreement. If we were to lose or otherwise be unable to maintain the UHN License on acceptable terms, or find that it is necessary or appropriate to secure new licenses from other third parties, we may not be able to market Lucid-MS, and our current business model and plan would be impaired, which would have a material adverse effect on our business, operating results, and financial condition.

After receiving regulatory approvals, Lucid-MS may fail to achieve a sufficient degree of market acceptance by physicians, patients, healthcare payors, and others in the medical community.

The commercial success of Lucid-MS or other drug candidates that we develop, after receiving required regulatory approvals, will depend on their degree of market acceptance by physicians, patients, third-party payors, and others in the medical community. The degree of market acceptance of Lucid-MS will depend on a number of factors, including (i) the availability of alternative, superior treatments for a MS prior to the approval and commercialization Lucid-MS for such treatment; (ii) the efficacy and safety of Lucid-MS, including side effects or unexpected characteristics; (iii) the ability to offer Lucid-MS for sale at competitive prices; (iv) the ability to manufacture Lucid-MS in sufficient quantities and to offer appropriate patient access programs, such as co-pay assistance; (v) convenience and ease of dosing and administration compared to alternative treatments; (vi) the clinical indications for which Lucid-MS is approved by the FDA or Health Canada, if it approved at all, or comparable regulatory agencies; (vii) product labeling or product insert requirements of the FDA, Health Canada or other comparable regulatory authorities, including any limitations, contraindications or warnings contained in a product's approved labeling; (viii) restrictions on how Lucid-MS is distributed; (ix) publicity concerning Lucid-MS or competing products and treatments; (x) the strength of marketing and distribution support; (xi) favorable third-party coverage and sufficient reimbursement; and (xii) the prevalence and severity of any side effects or adverse effects.

Sales of pharmaceutical products, such as Lucid-MS if and when it is approved by regulatory authorities, will depend on the willingness of physicians to prescribe the treatment, which is likely to be based on a determination by these physicians that the products are safe, therapeutically effective and cost effective. In addition, the inclusion or exclusion of products from treatment guidelines established by various physician groups and the viewpoints of influential physicians can affect the willingness of other physicians to prescribe the treatment. We cannot predict whether physicians, physicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that Lucid-MS is safe, therapeutically effective and cost effective as compared with competing treatments. If Lucid-MS does not achieve adequate levels of acceptance, we may not generate significant product revenue, and we may not become profitable.

We face significant competition for our Lucid-MS drug and there is a possibility that our competitors may develop therapies that are safer, more advanced, or more effective than ours from MS.

The development and commercialization of new drug products is highly competitive. We face competition with respect to Lucid-MS for the treatment of MS from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies world-wide. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization. There are a few approved therapies for progressive multiple sclerosis, including ocrelizumab by Roche and siponimod by Novartis, both of which are immunomodulatory drug. Even if we are successful in achieving regulatory approval to commercialize Lucid-MS ahead of our competitors, our future pharmaceutical products may face direct competition from generic and other follow-on drug products.

More established companies may have a competitive advantage over us due to their greater size, cash flows and institutional experience. Compared to us, many of our competitors may have significantly greater financial, technical and human resources. As a result of these factors, our competitors may obtain regulatory approval of their products before we do, which will limit our ability to develop or commercialize any of our Product Candidates. In addition, many companies are developing new therapeutics to supplant or expand upon the standard of care for a number of diseases, as a result, we cannot predict what the standard of care will be as our Product Candidates progress through clinical development.

Interim, "top-line," and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data becomes available or as additional analyses are conducted, and as the data are subject to audit and verification procedures, that could result in material changes in the final data.

From time to time, we may publish interim, "top-line," or preliminary data from our clinical studies. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or "top-line" data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Material adverse changes between preliminary, "top-line," or interim data and final data could significantly harm our business prospects.

We expect to rely on third parties to conduct product candidate drug trials and aspects of our research and preclinical testing.

We currently rely and expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct some aspects of research and preclinical testing and clinical trials. Any of these third parties may terminate their engagements with us or be unable to fulfill their contractual obligations. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms, or at all. If we need to enter into alternative arrangements, it could delay our development activities.

Our reliance on these third parties for research and development activities reduces control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that product candidate drug trials are each conducted in accordance with the general investigational plan and protocols for each trial and applicable legal, regulatory, and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. In addition, the FDA, Health Canada, and other comparable regulatory authorities require compliance with good clinical practices for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible, reproducible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce these good clinical practices through periodic inspections of trial sponsors, principal investigators, and trial sites. If we or any of these third parties fail to comply with applicable good clinical practice regulations, some or all of the clinical data generated in any product candidate drug trials may be deemed unreliable and the FDA, Health Canada or other comparable regulatory authorities may reject our marketing applications or require us to perform additional nonclinical or clinical trials or to enroll additional patients before approving our marketing applications. We cannot be certain that, upon inspection, such regulatory authorities will determine that any product candidate drug trial complies with the good clinical practice regulations. For any violations of laws and regulations during the conduct of clinical trials, we could be subject to untitled and warning letters or enforcement action that may include civil penalties and criminal prosecution. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database within certain timeframes. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or conduct clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for a product candidate and will not be able to, or may be delayed in our efforts to, successfully commercialize product candidates. Our failure or the failure of these third parties to comply applicable regulatory requirements or our stated protocols could also subject us to enforcement action.

We also expect to rely on other third parties to store and distribute drug supplies for product candidate drug trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of any product candidates we may develop or commercialization of our medicines or other therapeutic applications, producing additional losses and depriving us of potential product revenue.

Results of earlier studies or clinical trials may not be predictive of future clinical trial results and may not justify proceeding to advanced clinical trials or an application for regulatory approval.

Success in preclinical testing and early clinical trials does not ensure that later clinical trials will generate adequate data to demonstrate the efficacy and safety of an investigational drug. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience, have suffered significant setbacks in clinical trials, even after seeing promising results in earlier clinical trials. We do not know whether the clinical trials we are conducting, or may conduct, will demonstrate adequate efficacy and safety to result in regulatory approval to market any of our product candidates in any particular jurisdiction. Even if we believe that we have adequate data to support an application for regulatory approval to market our product candidates, the FDA or other comparable foreign regulatory authorities may not agree and could require us to conduct additional research studies, including late-stage clinical trials. If late-stage clinical trials do not produce favorable results, our ability to achieve regulatory approval for any of our product candidates may be adversely impacted.

Product candidates could be associated with side effects which could delay or halt clinical development, prevent regulatory approval, or result in other significant negative consequences.

As is the case with pharmaceuticals generally, it is likely that there may be side effects associated with Lucid-MS or our other drug product candidates. If Lucid-MS or our other drug Product Candidates are associated with undesirable side effects in preclinical studies or clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for this product candidate if approved. We may also be required to modify or terminate our study plans based on findings in our preclinical studies or clinical trials.

Additionally, adverse developments in clinical trials of pharmaceutical and biopharmaceutical products conducted by others may cause the FDA, Health Canada, or other regulatory oversight bodies to suspend or terminate our clinical trials or to change the requirements for approval of Lucid-MS or our other drug product candidates.

Additionally, if we or others later identify undesirable side effects caused by Lucid-MS or our other drug product candidates once approved, several potentially significant negative consequences could result, including: (i) regulatory authorities may suspend or withdraw approvals of such product candidate; (ii) we may be required to change the way a product candidate is administered or conduct additional clinical trials; (iii) we may be required to include additional warnings on a product candidate's labeling or the product candidate may be subject to restrictive distribution requirements; (iv) we could be sued and held liable for harm caused to patients; and (v) our reputation may suffer. Any of these occurrences may harm our business, financial condition, and prospects significantly.

In addition to side effects caused by the product candidate, the administration process or related procedures also can cause adverse side effects. If any such adverse events occur, our clinical trials could be suspended or terminated. If we are unable to demonstrate that any adverse events were caused by the administration process or related procedures, the FDA, Health Canada, or other regulatory authorities could order us to cease further development of, or deny approval of, a product candidate for any or all targeted indications. Even if we can demonstrate that all future serious adverse events are not product-related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete the trial. Moreover, if we elect, or are required, to not initiate, delay, suspend or terminate any future clinical trial of Lucid-MS or any of our product candidates, the commercial prospects of Lucid-MS or such other product candidates may be harmed and our ability to generate product revenues from Lucid-MS or any of these other product candidates may be delayed or eliminated. Any of these occurrences may harm our ability to develop other product candidates, and may harm our business, financial condition, and prospects significantly.

The Company may not be successful in its efforts to identify, license or discover additional product candidates.

Although a substantial amount of the Company's effort will focus on the continued research and pre-clinical and clinical testing, potential approval and commercialization of its Product Candidates, the success of its business also depends in part upon its ability to identify, license or discover additional product candidates. The Company's research programs or licensing efforts may fail to yield additional product candidates for clinical development for a number of reasons, including but not limited to the following: (i) the Company's research or business development methodology or search criteria and process may be unsuccessful in identifying potential product candidates; (ii) the Company may not be able or willing to assemble sufficient resources to acquire or discover additional product candidates; (iii) the Company's product candidates may not succeed in pre-clinical or clinical testing; (iv) the Company's product candidates may be shown to have harmful side effects or may have other characteristics that may make the product candidates unmarketable or unlikely to receive marketing approval; (v) competitors may develop alternatives that render the Company's product candidates obsolete or less attractive; (vi) product candidates the Company develops may be covered by third parties' patents or other exclusive rights; (vii) the market for a product candidate may change during the Company's program such that the further development of a product candidate may become undesirable; (viii) a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and (ix) a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors.

If any of these events occurs, the Company may be forced to abandon its development efforts to identify, license or discover additional product candidates, which could have a material adverse effect on its business, prospects, results of operations and financial condition and could potentially cause the Company to cease operations. Research programs to identify new product candidates require substantial technical, financial, and human resources. The Company may focus its efforts and resources on potential programs or product candidates that ultimately prove to be unsuccessful.

The FDA, Health Canada or other comparable regulatory authorities may not accept data from trials conducted in foreign jurisdictions.

Obtaining regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. We intend on submitting our initial regulatory approvals for Lucid-MS in the U.S. and Canada. Approval processes vary among countries and can involve additional product testing and validation and additional or different administrative review periods, including additional preclinical studies or clinical trials, as data from clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States and Canada, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Non-U.S. and non-Canadian regulatory approval processes may include all of the risks associated with obtaining FDA or Health Canada approval, as well as additional risks. We do not have any Product Candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approval in international markets is delayed, our target market will be reduced and our ability to realize the full market potential of our Product Candidates will be harmed. In addition, if we conduct trials outside of the U.S. or Canada, the FDA or Health Canada, as applicable, may not accept the data from such trials and may require additional trials, which could be costly and time-consuming and delay aspects of our business plan.

Our suppliers could experience manufacturing problems that result in delays in our development or commercialization programs or otherwise harm our business.

Our contract manufacturing organization ("**CMO**") must employ multiple steps to control the manufacturing process to assure that the process is reproducible and the Product Candidates are made strictly and consistently in compliance with the process. Problems with the manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims or insufficient inventory to conduct clinical trials or supply commercial markets. Furthermore, all entities involved in the preparation of product candidates for clinical trials or commercial sale, including our existing CMOs for all of our Product Candidates, are subject to extensive regulation. Components of a finished therapeutic products approved for commercial sale or used in certain clinical trials must be manufactured in accordance with good manufacturing practices ("**GMP**"), or similar regulatory requirements outside the United States and Canada. Our failure, or the failure of third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, suspension of production, seizures or recalls of Product Candidates or marketed drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect clinical or commercial supplies of our Product Candidates and increase our costs. Consequently, there may be a material adverse effect on the business, results of operations, financial condition, and prospects of the Company.

In addition, the FDA, Health Canada, and other regulatory authorities may require us to submit samples of any lot of any approved Product Candidates together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA, Health Canada, or other regulatory authorities may require that we not distribute a lot until the agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. Lot failures or product recalls could cause us to delay product launches or clinical trials, which could be costly to us and otherwise harm our business, results of operations, financial condition, and prospects.

Our CMOs also may encounter problems hiring and retaining the experienced scientific, quality assurance, quality-control and manufacturing personnel needed to operate our manufacturing processes, which could result in delays in production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our CMOs' manufacturing process or facilities could result in delays or cancellations of planned clinical trials, failures in satisfying ongoing regulatory obligations (before and after regulatory approval for a product candidate is obtained) and increased costs. Such problems could also make us a less attractive collaborator for potential partners, including larger biotechnology companies and academic research institutions, which could limit access to additional attractive development programs. Problems in our manufacturing process could restrict our ability to meet potential future market demand for products.

Lucid-MS and other Product Candidates, after it is approved, will be subject to extensive post-approval regulation.

After a product is approved, numerous post-approval requirements apply. Among other things, the holder of an approved NDA is subject to periodic and other FDA monitoring and reporting obligations, including obligations to monitor and report adverse events and instances of the failure of a product to meet the specifications in the NDA. Application holders must submit new or supplemental applications and obtain FDA approval for certain changes to the approved product, product labeling, or manufacturing process. Application holders must also submit advertising and other promotional material to the FDA and report on ongoing clinical studies.

Depending on the circumstances, failure to meet these post-approval requirements can result in criminal prosecution, fines, injunctions, recall or seizure of products, total or partial suspension of production, denial or withdrawal of pre-marketing product approvals, or refusal to allow us to enter into supply contracts, including government contracts. In addition, even if we comply with FDA and other requirements, new information regarding the safety or effectiveness of a product could lead the FDA to modify or withdraw product approval. Similar laws in other jurisdictions would also apply.

After our Product Candidates are commercialized, they may be subject to recalls for a variety of reasons, which could require the Company to expend significant management and capital resources.

Manufacturers and distributors of products are sometimes subject to the recall or return of their products for a variety of reasons, including product defects, such as contamination, unintended harmful side effects or interactions with other substances, packaging safety and inadequate or inaccurate labeling disclosure. If any of the Company's approved and commercialized Product Candidates are recalled due to an alleged product defect or for any other reason, the Company could be required to incur the unexpected expense of the recall and any legal proceedings that might arise in connection with the recall. The Company may lose a significant amount of sales made on such products and may not be able to replace those sales at an acceptable margin or at all. In addition, a product recall may require significant management attention. Although the Company has detailed procedures in place for testing its products, there can be no assurance that any quality, potency, or contamination problems will be detected in time to avoid unforeseen product recalls, regulatory action or lawsuits. Additionally, if one of the Company's significant brands were subject to recall, the image of that brand and the Company could be harmed. A recall for any of the foregoing reasons could lead to decreased demand for the Company's products and could have a material adverse effect on the results of the operations and financial condition of the Company. Additionally, product recalls may lead to increased scrutiny of the Company's operations by the FDA, Health Canada or other regulatory agencies, requiring further management attention and potential legal fees and other expenses.

If approved, Lucid-MS and other Product Candidates may face competition from generic drugs approved through an abbreviated regulatory pathway.

The *Drug Price Competition and Patent Term Restoration Act of 1984*, otherwise known as the *Hatch-Waxman Amendments* to the *Federal Food, Drug, and Cosmetic Act* (the "**FDC Act**"), authorized the FDA to approve generic drugs that are the same as drugs previously approved for marketing under the new drug application ("**NDA**") provisions of the statute pursuant to an abbreviated new drug application ("**ANDA**"). An ANDA relies on the preclinical and clinical testing conducted for a previously approved reference listed drug ("**RLD**"), and must demonstrate to the FDA that the generic drug product is identical to the RLD with respect to the active ingredients, the route of administration, the dosage form, and the strength of the drug and also that it is "bioequivalent" to the RLD. The FDA is prohibited by statute from approving an ANDA when certain marketing or data exclusivity protections apply to the RLD. If any such competitor or third party is able to demonstrate bioequivalence without infringing our patents, then this competitor or third party may then be able to introduce a competing generic product onto the market. The Hatch-Waxman Amendments also enacted the 505(b)(2) NDA pathway, which permits the filing of an NDA where at least some of the information required for approval comes from studies not conducted by or for the applicant and for which the applicant has not obtained a right of reference. A Section 505(b)(2) applicant may eliminate the need to conduct certain preclinical or clinical studies, if it can establish that reliance on studies conducted for a previously approved product is scientifically appropriate.

Market exclusivity provisions authorized under the FDC Act can delay the submission or the approval of certain marketing applications. The FDC Act provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to obtain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not approve or even accept for review an ANDA or an NDA submitted under Section 505(b)(2) by another company for another drug based on the same active moiety, regardless of whether the drug is intended for the same indication as the original innovative drug or for another indication, where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement to one of the patents listed with the FDA by the innovator NDA holder.

The FDC Act also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example new indications, dosages, or strengths of an existing drug. This three-year exclusivity covers only the modification for which the drug received approval on the basis of the new clinical investigations and does not prohibit the FDA from approving ANDAs or 505(b)(2) NDAs for drugs containing the active agent for the original indication or condition of use. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to any preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

If competitors are able to obtain marketing approval for generic drugs referencing our products, our products may become subject to competition from such generic drugs. The availability of competitive generic products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any product candidates that we may develop.

We face an inherent risk of product liability exposure related to the testing of product candidates in human clinical trials and will face an even greater risk if we commercially sell any medicines or other therapeutic applications that we may develop. If we cannot successfully defend ourselves against claims that our Product Candidates, medicines, or other therapeutic applications caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in: (i) decreased demand for any product candidates, medicines or other therapeutic applications that we may develop; (ii) injury to our reputation and significant negative media attention; (iii) withdrawal of clinical trial participants; (iv) significant costs to defend the related litigation; (v) substantial monetary awards to trial participants or patients; (vi) loss of revenue; and (vii) the inability to commercialize our Product Candidates.

Although we intend to maintain product liability insurance, including coverage for clinical trials that we plan to sponsor, it may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage as we commence additional clinical trials and if we successfully commercialize any Product Candidates. The market for insurance coverage is increasingly expensive, and the costs of insurance coverage will increase as our clinical programs increase in size. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

We may become liable for uninsured or uninsurable risk.

The Company may become subject to liability for risks which are uninsurable or against which the Company may opt out of insuring due to the high cost of insurance premiums or other factors. The payment of any such liabilities would reduce the funds available for usual business activities. Payment of liabilities for which insurance is not carried may have a material adverse effect on the Company's financial position and operations.

Our employees, directors, independent contractors, consultants, commercial partners, and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, directors, independent contractors, consultants, commercial partners, and vendors. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to: (i) comply with the requirements of the FDA, Health Canada and other comparable regulatory authorities; (ii) provide true, complete and accurate information to the FDA, Health Canada and other comparable regulatory authorities; (iii) comply with manufacturing standards we have established; (iv) comply with healthcare fraud and abuse laws and similar other fraudulent misconduct laws in the United States or Canada; or (v) report financial information or data accurately or to disclose unauthorized activities appropriately. If we obtain approval of our Product Candidates from the FDA, Health Canada or other comparable regulatory authorities and begin commercializing those products in the United States, Canada or other countries, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. In particular, research, sales, marketing, education, and other business arrangements in the healthcare industry are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, educating, marketing and promotion, sales and commission, certain customer incentive programs and other business arrangements generally. Activities subject to these laws and regulations also involve the improper use of information obtained in the course of patient recruitment for clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. The board of directors of the Company (the "**Board**") has adopted a Code of Conduct and Ethics which provides guidelines surrounding, among other items, compliance with applicable laws, conflicts of interest, certain opportunities, confidentiality and disclosure, employment practices, and use of company property and resources. However, it is not always possible to identify and deter misconduct by employees, directors and third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws and regulations. If any such actions or lawsuits are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions or lawsuits could have a significant impact on our business, including the imposition of significant fines or other sanctions.

We may be unable to establish sufficient sales and marketing capabilities or enter into agreements with third parties to sell and market any product candidates in a compliant manner even if regulatory approvals are obtained.

We do not currently have a comprehensive infrastructure for the sales, marketing, and distribution of pharmaceutical drug products. The cost of establishing and maintaining such an infrastructure may exceed the cost-effectiveness of doing so. In order to market any products that may be approved by the FDA and comparable foreign regulatory authorities, we must build our sales, marketing, managerial and other non-technical capabilities or make arrangements with third parties to perform these services for which we would incur substantial costs. If we are unable to establish adequate sales, marketing, and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not sustain profitability. We will be competing with many companies that have extensive and well-funded sales and marketing operations. Without an internal commercial organization or the support of a third party to perform sales and marketing functions, or a combination of both, we may be unable to compete successfully against more established companies.

Our Product Candidates may become subject to unfavorable pricing regulations, third-party coverage and reimbursement practices, or healthcare reform initiatives, which would harm our business.

The regulations that govern marketing approvals, pricing, coverage, and reimbursement for new drugs vary widely from country to country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more Product Candidates, even if any Product Candidates we may develop obtain marketing approval.

Our ability to successfully commercialize our Product Candidates also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers, and other organizations. If coverage and adequate reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our Product Candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment.

In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. Other countries allow companies to fix their own prices for medicines, but monitor and control corporation profits. Additional price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our Product Candidates.

Risks Related to our Intellectual Property

We may be unable to obtain and maintain sufficient intellectual property protection for our Product Candidates.

As is the case with pharmaceutical companies and other biotechnology companies, our success depends in large part on our ability to obtain and maintain protection of the intellectual property we may own solely and jointly with others, particularly patents, in the United States, Canada and other countries with respect to our Product Candidates and technology. We seek to protect our proprietary position by filing patent applications in the United States, Canada and in other countries related to the Product Candidates or other product candidates that we may identify. On April 24, 2023, the Company filed a provisional patent application with the United States Patent and Trademark Office ("**USPTO**") with respect to the Company's alcohol misuse treatment technology. We have an exclusive license from UHN to use patents and other intellectual property that is used in our Lucid-MS compound.

Obtaining and enforcing pharmaceutical and biopharmaceutical patents is costly, time consuming and complex, and we or our licensors may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce, and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner, if at all. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal, technological, and factual questions and has in recent years been the subject of much litigation. In addition, the laws of certain countries may not protect our rights to the same extent as the laws of other countries, including the United States and Canada, and vice versa. Further, we may not be aware of all third-party intellectual property rights potentially relating to our Product Candidates. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States, Canada and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all. Therefore, we cannot know with certainty whether our licensors were the first to make the inventions claimed in our licensed patents, or that our licensors were the first to file for patent protection of such inventions. Furthermore, the scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history and can involve other factors such as expert opinion. Our analysis of these issues, including interpreting the relevance or the scope of claims in a patent or a pending application, determining applicability of such claims to our proprietary technologies or Product Candidates, predicting whether a third party's pending patent application will issue with claims of relevant scope, and determining the expiration date of any patent in the United States, Canada or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our Product Candidates. We do not always conduct independent reviews of pending patent applications of and patents issued to third parties. As a result, the issuance, scope, validity, enforceability, and commercial value of our patent rights, including licensed patent rights, are highly uncertain. Our future patent applications may not result in patents being issued that protect our Product Candidates, in whole or in part, or which effectively prevent others from commercializing competitive product candidates. Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our licensed patents by developing similar or alternative product candidates in a non-infringing manner.

Our licensors' ability to enforce patent rights also depends on our licensors' ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their products and services. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product or service. We, along with our licensors, may not prevail in any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful. If we initiate lawsuits to protect or enforce our licensed patents, or litigate against third-party claims, such proceedings would be expensive and would divert the attention of our management and technical personnel. Such proceedings could also provoke third parties to assert claims against us, including that some or all of the claims in one or more of our or our licensed patents are invalid or otherwise unenforceable.

Moreover, we may be subject to a third-party pre-issuance submission of prior art to the USPTO, or become involved in opposition, derivation, re-examination, inter partes review, post-grant review or interference proceedings challenging our or our licensors' patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our licensed patents, allow third parties to commercialize our Product Candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize drugs without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our licensed patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

In addition, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our licensed patents may be challenged in the courts or patent offices in the United States, Canada and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated, or held unenforceable, in whole or in part, which could limit our licensors' abilities to stop others from using or commercializing similar or identical product candidates to ours, or limit the duration of the patent protection of our Product Candidates.

Filing, prosecuting, and defending the licensed patents on our Product Candidates in all countries throughout the world would be prohibitively expensive. Additionally, the laws of some other countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we and our licensors may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained licensed patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the U.S. or Canada. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio, including licensed patents, may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to ours.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. In May 2023, GBB Drink Lab, Inc. ("**GBB**") filed a lawsuit against the Company alleging a material breach of a mutual nondisclosure agreement and trade secret misappropriation in the U.S. District Court for the Southern District of Florida. This lawsuit is ongoing. For more information, please see "*Item 8. Financial Information - A. Consolidated Statements and Other Financial Information – Legal Proceedings*".

There is a substantial amount of litigation, both within and outside the U.S. and Canada, involving patent, trade secret and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and inter partes re-examination proceedings. Numerous U.S. and international issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are pursuing development candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that our Product Candidates may be subject to claims of infringement of the patent rights of third parties.

Other third parties may assert that we are employing their proprietary technology without authorization. There may be other third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of the Product Candidates. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that the Product Candidates or other product candidates that we may identify may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of the Product Candidates or other product candidates that we may identify, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire.

Similarly, if any third-party patents were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all, or it may be non-exclusive, which could result in our competitors gaining access to the same intellectual property.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize the Product Candidates or other product candidates that we may identify. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys' fees for willful infringement, pay royalties, redesign our infringing Product Candidates, or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

Parties making claims against us, may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition, and prospects.

If our licensors are not able to obtain patent term extension or non-patent exclusivity in the United States under the Hatch-Waxman Act and in other countries under similar legislation, thereby potentially extending the marketing exclusivity term of our product candidates, our business may be materially harmed.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional or international patent application filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited.

Depending upon the timing, duration, and specifics of FDA marketing approval of our Product Candidates, one of the U.S. patents covering each of such Product Candidates or the use thereof may be eligible for up to five years of patent term extension under the *Hatch-Waxman Act*. The *Hatch-Waxman Act* allows a maximum of one patent to be extended per FDA approved product as compensation for the patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended.

Patent term extension also may be available in certain other countries upon regulatory approval of our Product Candidates. Nevertheless, our licensors may not be granted patent term extension either in the United States, Canada or in any other country because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the term of extension, as well as the scope of patent protection during any such extension, afforded by the governmental authority could be less than requested.

If our licensors are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product may be shortened and our competitors may obtain approval of competing products following the patent expiration sooner, and our revenue could be reduced, possibly materially.

It is possible that our licensors will not obtain patent term extension under the Hatch-Waxman Act for a U.S. patent covering a Product Candidate even where that patent is eligible for patent term extension, or if we obtain such an extension, it may be for a shorter period than we had sought. Further, for certain of our licensed patents, we do not have the right to control prosecution, including filing with the USPTO, a petition for patent term extension under the Hatch-Waxman Act. Thus, if one of our licensed patents is eligible for patent term extension under the Hatch-Waxman Act, we may not be able to control whether a petition to obtain a patent term extension is filed, or obtained, from the USPTO.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

We seek to protect our confidential proprietary information, in part, by confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements are designed to protect our proprietary information. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose proprietary information, including trade secrets, and we may not be able to obtain adequate remedies for such breaches. We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our Product Candidates that we consider proprietary. We may not be able to obtain adequate remedies in the event of such unauthorized use. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive, and time-consuming, and the outcome is unpredictable. In addition, some courts are less willing or unwilling to protect trade secrets. Trade secrets will also over time be disseminated within the industry through independent development, the publication of journal articles and the movement of personnel skilled in the art from corporation to corporation or academic to industry scientific positions. Though our agreements with third parties typically restrict the ability of our advisors, employees, collaborators, licensors, suppliers, third-party contractors, and consultants to publish data potentially relating to our trade secrets, our agreements may contain certain limited publication rights.

In addition, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Despite employing the contractual and other security precautions described above, the need to share trade secrets increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position, business, results of operations, financial condition and prospects would be harmed.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented, or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential collaborators or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our competitive position, business, results of operations, financial condition, and prospects.

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

Our agreements with employees and our personnel policies provide that any inventions conceived by an individual in the course of rendering services to us shall be our exclusive property. Although our policy is to have all such individuals complete these agreements, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. The assignment of intellectual property may not be automatic upon the creation of an invention and despite such agreement, such inventions may become assigned to third parties. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information.

We or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or licensed patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we or our licensors may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our Product Candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our licensors' ownership of our owned or licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our Product Candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Any of the foregoing could have a material adverse effect on our competitive position, business, results of operations, financial condition, and prospects.

We may be subject to claims that our employees, consultants, or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants, and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee's former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Risks relating to our Psychedelic Products

Due to funding issues, we made a decision to place all research relating to Lucid-PSYCH on hold in April 2023. If and when we resume this research, we will encounter the following risks with respect to our Lucid-PSYCH drug.

The loss of single-source suppliers, or their failure to supply us with the drug substance or drug product, could materially and adversely affect our business.

When we were actively researching Lucid-PSYCH, we relied upon a single-source supplier for the supply of drug substances and products for this compound. Although we believe that there are alternate sources of supply that could satisfy our clinical and commercial requirements, we cannot assure you that identifying alternate sources and establishing relationships with such sources would not result in significant delay in the development of the Lucid-PSYCH Product Candidate.

Our dependence on a single-source supplier exposes us to certain risks, that may materially impact our ability to progress our business, including (i) our supplier may cease or reduce production or deliveries, raise prices or renegotiate terms; (ii) delays caused by supply issues which may harm our reputation; and (iii) our single-source supplier or CMOs may experience significant business challenges, disruption or failures due to issues such as financial difficulties or bankruptcy, issues relating to regulatory or quality compliance issues, or other legal or reputational issues.

Additionally, we may not be able to enter into supply arrangements with alternative suppliers on commercially reasonable terms, or at all. A delay in the development of a Product Candidate or having to enter into a new agreement with a different third party on less favorable terms than we have with our current suppliers could have a material adverse impact upon on our business.

Psychedelic or psychedelic-inspired drugs may never be approved as medicines or other therapeutic applications and violations of applicable laws and regulations could result in repercussions.

In the United States, certain psychedelic drugs are classified as Schedule I drugs under the CSA (21 U.S.C. § 811) and the *Controlled Substances Import and Export Act* and as such, medical and recreational use is illegal under the U.S. federal laws.

In Canada, certain substances are classified as controlled substances and are listed on Schedule III of the *Controlled Drugs and Substances Act (Canada)* ("**CDSA**") and are also listed under the Schedule to Part J to the Food and Drug Regulations, which results in very restricted use as substances listed under Part J can generally only be used for research or clinical testing under limited circumstances. There is no guarantee that psychedelic drugs will ever be approved as medicines or other therapeutic applications in any jurisdiction in which the Company operates.

The Company's programs for Lucid-PSYCH involved controlled drugs and were conducted in strict compliance with the laws and regulations regarding the production, storage, and use of such drugs. Although the Company put a temporary hold on all research and development related to controlled drugs, if it begins research again, it will be subject to these risks. As such, all facilities engaged with such substances by or on behalf of the Company do so under current licenses and permits issued by appropriate governmental agencies. Unforeseen delays to the drug substance and drug product manufacture and supply chain may occur due to delays, errors, or other unforeseen problems with the permitting and quota process.

The failure of the Company to maintain compliance with applicable federal, state, or provincial requirements, or the loss or diversion of controlled substances, can result in significant enforcement actions. The Drug Enforcement Administration and/or state authorities could seek civil penalties, refuse to renew registrations, or initiate proceedings to revoke those registrations. In certain circumstances, violations could lead to civil and criminal prosecutions, fines, penalties, and forfeitures. Overall, a violation of any laws and regulations in the jurisdictions in which the Company operates could result in significant fines, penalties, administrative sanctions, convictions, or settlements arising from civil proceedings initiated by either government entities in the jurisdictions in which the Company operates, or by private citizens, or through criminal charges. The loss of the necessary licenses, permits or exemptions, including the loss of access to licensed facilities, for use of controlled drugs could have an adverse effect on the Company's operations.

Regulatory or political change with respect to psychedelic-inspired drugs could occur.

When the Company begins actively researching psychedelic drugs, its success will depend in part, on the legality of the use of psychedelic-inspired drugs for the treatment of neuropsychiatric disorders and the acceptance of such use in the medical community. The political environment surrounding the psychedelics industry in general can be volatile and a shift in the regulatory or political realm could occur and have a drastic impact on the use of psychedelics as a whole, adversely impacting the Company's ability to successfully operate or grow its business. Furthermore, failure to follow applicable regulatory requirements will have a materially negative impact on the business of the Company.

Cryptocurrency Risks

General Risks to Holding Cryptocurrencies in Our Treasury

Cryptocurrencies do not generally pay interest or other returns.
Cryptocurrencies do not generally pay interest, dividends, or other returns merely as a result of ownership. While some processes, such as mining in Proof-of-Work (as defined herein) systems or as staking in Proof-of-Stake systems, allow for network participants to earn rewards or financial incentives, for example, from validating procedures, we may only generate cash from the sale of our cryptocurrency holdings in excess of the price at which we purchased them.

Proof-of-Work: Proof-of-Work is a consensus mechanism used by certain blockchain networks, such as Bitcoin, wherein participants, referred to as miners, compete to solve complex mathematical problems to validate transactions and add them to the blockchain. This process requires significant computational power and energy consumption. Miners are rewarded with cryptocurrency for successfully validating transactions.

Proof-of-Stake: Proof-of-Stake is an alternative consensus mechanism utilized by certain blockchain networks, such as Ethereum. In this system, participants, referred to as validators, are selected to validate transactions and create new blocks based on the number of cryptocurrency tokens they hold and "stake" as collateral. Validators earn rewards for their participation, and the system is designed to reduce energy consumption compared to Proof-of-Work**.**

Cryptocurrencies are highly volatile assets and may not provide an adequate source of liquidity when needed.

The price at which cryptocurrencies trade fluctuates greatly. For example, between March 16, 2024, and March 16, 2025, Bitcoin traded below $70,000 and as high as approximately $108,000. The price of Bitcoin has also been significantly lower and such decline may occur again in the future. The volatility of cryptocurrency prices may have a significant negative impact on our financial condition, our liquidity and operations, and the price of our common stock.

In addition, cryptocurrency exchanges may at times initiate trading halts or freezes, which would inhibit our ability to freely trade our cryptocurrency assets and exchange them for cash or other cash equivalents when we may need. For example, trading halts are sometimes initiated when the S&P 500 falls below certain pre-set thresholds in order to ensure stability and prevent hasty decisions to buy or sell assets. However, this would limit our access to liquidity in volatile market conditions.

Additionally, due to the volatile nature of cryptocurrencies in and of themselves, we may not be able to exchange our crypto assets for fiat currency or cash or cash equivalents in amounts substantially equivalent to our cost basis in a particular crypto asset. Furthermore, parties we transact with or our custodians may not enjoy to the benefits and protections of similar institutions under the regulation of the Deposit Insurance Corporation and the Securities Investor Protection Corporation. Moreover, we may be unable to collateralize our cryptocurrency in order to raise funds through loans the same way that we may be able to utilize other traditional assets such as stocks.

Cryptocurrency market prices may fluctuate due to changing investor confidence

Cryptocurrency market prices are determined primarily using data from various exchanges, over-the-counter markets and derivative platforms. Momentum pricing may have resulted, and may continue to result, in speculation regarding future appreciation in the value of cryptocurrencies, inflating their market prices and making those market prices more volatile. As a result, cryptocurrency market prices may be more likely to fluctuate due to changing investor confidence in future appreciation (or depreciation) in their market prices, which could adversely affect the trading price of the Company’s common shares.

We will be subject to counterparty risks, including in particular risks relating to our custodians.

Applicable insolvency law is not fully developed with respect to the holding of digital assets in custodial accounts. We negotiate specific contractual terms and conditions with our custodians that we believe will help establish, under existing law, that our property interest in the bitcoin held by our custodians is not subject to the claims of the custodian’s creditors in the event the custodian enters bankruptcy, receivership or similar insolvency proceedings. All of our custodians are subject to regulatory regimes intended to protect customers in the event that a custodian enters bankruptcy, receivership or similar insolvency proceedings.

If one or more of our custodially-held cryptocurrencies were considered to be part of our custodians' estates in insolvency proceedings, we could be treated as an unsecured creditor of such custodians, inhibiting our ability to exercise ownership rights with respect to such cryptocurrencies and this may ultimately result in the loss of the value related to some or all of such cryptocurrency. Even if we are able to prevent our cryptocurrency from being considered part of our custodians’ estates in insolvency proceedings, the inability to access our cryptocurrency funds due to delay may have a significant or material adverse effect on our financial condition and liquidity, which may in turn negatively affect our common stock.

Historical instances of financial institutions and cryptocurrency exchanges failing or being tied to fraud may have an adverse effect on the adoption, price, and use of cryptocurrencies in the digital asset markets at large.

Bankruptcy filings involving cryptocurrency exchanges such as Three Arrows Capital, Celsius Network, Voyager Digital, and FTX Trading, the closure or liquidation of certain cryptocurrency-friendly financial institutions including Signature Bank and Silvergate Bank, SEC enforcement actions against Coinbase, Inc. and Binance Holdings Ltd., and the filing of fraud charges against CEO and co-founder of FTX Trading, Samuel Bankman-Fried, have highlighted the counterparty risks applicable to owning and transacting in digital assets. Any similar events may result in the loss of, misappropriation of, or the inability to access our current or future cryptocurrency holdings. Likewise, such events may impact the adoption, use, and price of various cryptocurrencies, which may have a material adverse effect on our financial condition, liquidity, ability to raise capital, our operations, and our stock price.

Changes in accounting treatment could have significant impacts on our financial statements.

We are a foreign issuer and do not prepare our financial statements in accordance with the generally accepted accounting principles ("**GAAP**") issued by the Financial Accounting Standards Board ("**FASB**"). Rather, we prepare our financial statements in accordance with the IFRS. Whereas FASB issued ASU 2023-08, which requires companies to recognize gains and losses from changes in the fair value of our cryptocurrencies in net income each reporting period, IFRS instead requires a company to assess whether a digital asset meets the definition of cash or cash equivalents, financial instruments, inventory, or intangible assets by applying the scope requirements in the relevant standards and applying the 2019 IFRS Interpretation Committee Agenda Decisions. Changes in our accounting methods, how we classify each cryptocurrency, or how we structure our ownership in our cryptocurrencies may have a significant and adverse effect our regulatory requirements, our financial statements and our market perception.

Lack of Comprehensive Accounting Guidance for Cryptocurrencies under IFRS Accounting Standards

Because there has been limited precedent set and a lack of specific accounting guidance for cryptocurrencies under certain applicable accounting standards, including, among other things, revenue recognition, it is unclear how holders of cryptocurrencies (in particular, non-U.S. companies like the Company that utilize IFRS Accounting Standards) may be required to account for cryptocurrency operations, transactions and assets and related revenue recognition. A change in regulatory or financial accounting standards, or interpretations thereof by the SEC, particularly as they relate to the Company and the financial accounting of its cryptocurrency-related operations, could result in changes in the Company's accounting policies. Further, unlike in the case of U.S. generally accepted accounting principles where the Financial Accounting Standards Board has recently issued ASU 2023-08, which addresses the accounting and disclosure requirements for certain crypto assets, no similar guidance has yet been issued in respect of IFRS Accounting Standards. Uncertainties or changes to regulatory or financial accounting standards could result in the need to change our accounting methods and impair our ability to provide timely and accurate financial information, which could negatively impact the Company's business, financial condition, results of operation and ability to raise capital on terms acceptable to the Company.

Cryptocurrencies are novel assets and are subject to ongoing uncertainty due to developments in regulatory spaces across the globe.

The price of cryptocurrencies may be adversely affected by ongoing and uncertain regulatory scrutiny across the United States and the rest of the world. For example, in the United States, the SEC, the Commodity and Futures Trading Commission ("**CFTC**"), and the Financial Crimes Enforcement Network ("**FinCen**"), all claim to have jurisdiction over cryptocurrencies depending on the specific instance. As digital assets have grown in both popularity and market size, the U.S. Executive Branch, Congress and a number of U.S. federal and state agencies, including FinCen, the CFTC, the SEC, the Financial Industry Regulatory Authority, the Consumer Financial Protection Bureau, the Department of Justice, the Department of Homeland Security, the Federal Bureau of Investigation, the IRS and state financial regulators, have been examining the operations of digital asset networks, digital asset users and digital asset exchanges, with particular focus on the extent to which digital assets can be used to violate state or federal laws, including to facilitate the laundering of proceeds of illegal activities or the funding of criminal or terrorist enterprises, and the safety and soundness and consumer-protective safeguards of exchanges or other service-providers that hold, transfer, trade or exchange digital assets for users.

In March 2022, President Joseph R. Biden signed Executive Order 14067, which established a comprehensive framework for the responsible development of digital assets and for consumer protections. While Executive Order 14067 was revoked on January 23, 2025, under the new administration by President Donald J. Trump in an executive order titled "Strengthening American Leadership in Digital Financial Technology", the shifting policies highlight the uncertainty different administrations may have toward the regulation of cryptocurrencies. Additionally, the SEC has taken the position that certain cryptocurrencies are securities under U.S. federal securities laws, and in some instances-initiated enforcement actions wherein the SEC has referred to certain cryptocurrencies or crypto assets as securities. See more detail in Risk Factors – Solana and in Risk Factors – XRP. Moreover, in January 2025, the SEC acting Chairman announced a new Crypto Task Force dedicated to developing a comprehensive and clear regulatory framework for digital assets.

The SEC has also recently proposed amendments to the custody rules under Rule 406(4)-2 of the Investment Advisers Act. The proposed rule changes would amend the definition of a "qualified custodian" under Rule 206(4)-2(d)(6) and expand the current custody rule under Rule 406(4)-2 to cover digital assets and related advisory activities. If enacted as proposed, these rules would likely impose additional regulatory requirements with respect to the custody and storage of digital assets and could lead to additional regulatory oversight of the digital asset ecosystem more broadly.

In Canada, exchanges have taken similar stances regarding the determination of whether cryptocurrencies are securities. For example, in Staff Notice 46-308, the Canadian Securities Administrators endorsed the investment contract test of *Pacific Coast Coin Exchange v. Ontario Securities Commission*, and stated that determining whether a particular cryptocurrency or crypto asset is a security is a fact-specific endeavor based on the particular circumstances of that asset. Furthermore, cryptocurrency exchanges are subject to Proceeds of Crime (Money Laundering) and Terrorist Financing Act, which classifies business "dealing" in virtual currencies in a "business like-matter" as Money Service Businesses and are required to report certain events such receiving more than $10,000 in a single transaction. Additionally, cryptocurrencies are not given the status of legal tender under Section 8 of Canada's Currency Act. Regarding taxation, any transaction involving cryptocurrency may be treated under the Canada Revenue Agency's policy on barter transactions. In an exchange for goods or services, a recipient of cryptocurrency must report the transaction on their income statement, either as business income or capital gains. A description of the foregoing regulations in Canada are in addition to those that can be passed at the provincial level.

Other countries around the world have also addressed cryptocurrencies through regulation:

- In 2021, China banned all crypto transactions and mining activities
- In 2023, the European Union introduced the Markets in Crypto-Assets Regulation ("**MiCA**"), which is intended to serve as a comprehensive regulatory framework for digital asset markets which imposes various obligations on digital asset issuers and service providers. MiCA came into effect in June 2024.
- The Reserve Bank of India in April 2018 banned the entities it regulates from providing services to any individuals or business entities dealing with or selling digital assets. In March 2020, this ban was overturned in the Indian Supreme Court, although the Reserve Bank of India stated that it would be challenging the ruling.
- South Korea determined to amend its Financial Information Act in March 2020 to require virtual asset service providers to register and comply with its anti-money laundering and counter-terrorism funding framework. These measures also provide the government with the authority to close digital asset exchanges that do not comply with specified processes. South Korea has also banned initial coin offerings.

Because of the uncertainty surrounding regulation of cryptocurrencies and crypto assets, there may be increased regulatory compliance costs, transaction costs, and insurance costs that may adversely affect the price of cryptocurrencies, their use and adoption, and liquidity, among other things.

Cryptocurrencies are subject to technical uncertainty and malicious actors.

Cryptocurrencies do not exist outside of the digital record of transactions on their respective blockchain networks. Due to the digital nature of such assets, technical complications can cause uncertainty and malicious actors can manipulate cryptocurrencies through security breaches and cyberattacks.

A successful security breach or cyberattack could result in:

- a partial or total loss of our cryptocurrency in a manner that may not be covered by insurance or the liability provisions of the custody agreements with the custodians who hold our bitcoin;
- harm to our reputation and brand;
- improper disclosure of data and violations of applicable data privacy and other laws; or
- significant regulatory scrutiny, investigations, fines, penalties, and other legal, regulatory, contractual and financial exposure.

The techniques used to obtain unauthorized, improper or illegal access to systems and information (including personal data and digital assets), disable or degrade services, or sabotage systems are constantly evolving, may be difficult to detect quickly and often are not recognized or detected until after they have been launched against a target. These attacks may occur on our systems or those of our third-party service providers or partners. We may experience breaches of our security measures due to human error, malfeasance, insider threats, system errors or vulnerabilities or other irregularities. In particular, unauthorized parties have attempted, and we expect that they will continue to attempt, to gain access to our systems and facilities, as well as those of our partners and third-party service providers, through various means, such as hacking, social engineering, phishing and fraud.

Additionally, technical complications such as "forks" in the Bitcoin blockchain or "slashing" with regard to Solana, or network outages, software bugs, and excessive traffic and memory consumption can negatively affect the adoption, use, and price of such cryptocurrencies where confidence and integrity are undercut. Furthermore, contributors, developers, and other users may fail to monitor and update the blockchain of a particular cryptocurrency if the incentive to validate transactions, for example, become inadequate.

We may be considered an Investment Company Under the Investment Company Act of 1940, as amended.

Under the Investment Company Act of 1940 (the "**1940 Act**"), a company will be considered an "Investment Company" if it engages, or proposes to engage, in the business of investing, reinvesting, owning, holding or trading in securities and it owns or proposes to acquire investment securities having a value exceeding 40% of the value of its total assets (exclusive of U.S. government securities and cash items) on an unconsolidated basis. We do not believe that we are an "investment company," as such term is defined in the 1940 Act, and are not registered as an "investment company" under the 1940 Act as of the date of this Annual Report.

As of December 31, 2024, the fair value of Bitcoin, Solana, XRP, and Dogecoin represented approximately 7.13% of our current assets and 5.02% of our total assets.

As of the date of this Annual Report, the estimated fair value of Bitcoin, Solana, XRP, and Dogecoin represents approximately 27% of our current assets, and 20% of our total assets, calculated based on the total asset figure as of December 31, 2024. It is important to note that these figures are approximations, as dividing the current holdings by the total assets as of December 31, 2024, introduces a slight mathematical inconsistency. Furthermore, applying the same calculation to current assets also results in an inaccurate representation of holdings due to quarterly fluctuations in the composition of current assets.

If the SEC determines that one or more of the cryptocurrencies we hold is a security for the purposes of U.S. federal securities laws, an increase in our ownership in such cryptocurrencies can subject us to significant additional regulatory controls under the 1940 Act that could have a material adverse effect on our ability to execute on our cryptocurrency treasury strategy, and may also require us to substantially change our treasury strategy or capital structure.

If we were to be considered an Investment Company under the 1940 Act, it would subject us to significant additional regulatory controls that could have a material adverse effect on our business and operations and may also require us to change the manner in which we conduct our business. As such, we regularly monitor our assets to maintain compliance with the 1940 Act to help ensure that we will not be considered an "Investment Company." To date, we have established the following protocols to prevent our cryptocurrencies from reaching 40% of our total assets:

- Implement real-time tracking systems to monitor fluctuations in cryptocurrency values and the overall asset composition;
- Conduct weekly reviews to assess the impact of market changes on the percentage of crypto holdings; and
- Establish a discretionary policy framework for the automatic liquidation of cryptocurrency holdings as part of a broader rebalancing strategy. This approach ensures that holdings are adjusted when their value rises and approaches the threshold, preventing them from becoming an excessive percentage of total assets while maintaining alignment with the company's asset allocation objectives.

We may also seek to acquire additional non-investment assets to maintain compliance with the 1940 Act, and we may need to incur debt, issue additional equity or enter into other financing arrangements that are not otherwise attractive to our business. Any of these actions could have a material adverse effect on our results of operations and financial condition. Moreover, we can make no assurance that we would successfully be able to take the necessary steps to avoid being deemed to be an investment company in accordance with the safe harbor.

There is a limited history of the cryptocurrency financial system, which may limit traditional banking opportunities for the Company

Compared to traditional and existing centralized financial systems, the cryptocurrency financial system is relatively new and has a limited history. Online cryptocurrency exchanges and trades therein operate with comparatively little regulation and are particularly susceptible to platform failures and fraudulent activities, which may have an adverse effect on the underlying prices of cryptocurrencies. In fact, many of the largest online cryptocurrency exchanges have been compromised by hackers. In light of these and other factors, traditional banks and other banking institutions may limit or refuse the provision of banking services to businesses that supply cryptocurrencies as payment and may refuse to accept money derived from cryptocurrency-related businesses. The Company may experience banking challenges in the future, which may have a material adverse effect on the value of its crypto assets and the Company's ability to raise capital and store funds.

Lack of regulations and transparency surrounding certain trading platforms.

Cryptocurrency trading platforms are often unregulated and lack transparency, leading to potential market confidence and volatility issues, whether incidents actually occurred or are perceived to be occurring. Reports suggest that a large portion of Bitcoin trading volume is false, especially on unregulated exchanges outside the U.S. For example, the SEC in June 2023 has accused Binance and others of "wash trading" to inflate trading volumes. Such practices may indicate a smaller cryptocurrency market than expected. Recent bankruptcies and SEC actions against major trading venues have led to declines in digital asset prices, potentially affecting stock prices linked to cryptocurrency holdings.

Cryptocurrency Transactions Are Irreversible

Improper or compromised transfers are also generally irreversible and irrevocable. Such errors may be the result of computer or human error despite internal controls the Company has adopted to mitigate this risk. To the extent that the Company is unable to seek a corrective transaction with the third party or is incapable of identifying the third party that has received the Company's cryptocurrencies through error or theft, the Company will be unable to revert or otherwise recover incorrectly transferred cryptocurrencies. The Company may also be unable to convert or recover cryptocurrencies transferred to uncontrolled accounts. The use of cryptocurrencies to, among other things, buy and sell goods and services and complete other transactions is part of a new and rapidly evolving industry that employs digital assets based upon a computer-generated mathematical and/or cryptographic protocol.

Incentives to Validate Crypto Transactions May Change

Incentives to validate transactions may change. For example, when Bitcoin hits 21 million tokens, block rewards will no longer exist, but nodes and miners may instead collect transaction fees. If transaction fees paid for the recording of transactions in the blockchain become too high, the marketplace may be reluctant to accept the network as a means of payment, and existing users may be motivated to switch between cryptocurrencies or back to fiat currency. Decreased use and demand for Bitcoin may adversely affect their value and result in a reduction in the market price of Bitcoin, which could adversely impact the value of the Company's cryptocurrency holdings and investments. Moreover, if miners choose to cease operations, there would be a reduction in collective processing power, which would adversely affect the confirmation process for transactions (i.e., decreasing the speed at which blocks are added to the blockchain until the next scheduled adjustment in difficulty for blockchain solutions) and make the network more vulnerable to a malicious actor or botnet obtaining control in excess of 50 percent of the processing power.

General Corporate Risks

The Company operates in an environment subject to trade policy risks, including potential changes in U.S. tariffs and trade agreements. The imposition of new or increased tariffs, or retaliatory measures by other countries, could adversely affect the Company's operations.

In February 2025, the U.S. government announced a 25% tariff on most Canadian exports (excluding energy products, which face a 10% tariff). In response, Canada imposed reciprocal tariffs on $155 billion of U.S. goods. The U.S. also introduced a 25% tariff on Mexican imports and a 10% tariff on Chinese goods, with potential expansions to other countries under consideration. Although these tariffs were enacted on March 4, 2025, their implementation was paused until April 2, 2025, pending further negotiations. While no material impact is currently expected, the imposition of new or increased tariffs, or retaliatory measures by other countries, could increase costs, disrupt supply chains, delay timelines, or otherwise adversely affect the Company's operations.

Macroeconomic pressures in the markets in which we operate, including, but not limited to, the lasting effects of the COVID-19 pandemic, political developments, geopolitical unrest or other conflicts or natural disasters in foreign nations, including the ongoing conflict between Russia and Ukraine, political developments in Hong Kong and Taiwan, and inflationary pressures may alter the ways in which we conduct our business operations and manage our financial capacities.

To varying degrees, the ways in which we conduct our business operations and manage our financial capacities are influenced by macroeconomic conditions that affect companies directly involved in or providing services related to the drug and biological product development. For example, real GDP growth, business and investor confidence, the lasting effects of the COVID-19 pandemic, inflation, employment levels, oil prices, interest rates, tax rates, availability of consumer and business financing, housing market conditions, foreign currency exchange rate fluctuations, costs for items such as fuel and food and other macroeconomic trends can adversely affect not only our decisions and ability to engage in research and development and clinical trials, but also those of our management, employees, third-party contractors, manufacturers and suppliers, competitors, Shareholders and regulatory authorities. The ongoing military conflict between Russia and Ukraine and other geopolitical and social unrest has created extreme volatility in the global capital markets and is expected to have further global economic consequences, including disruptions of the global supply chain and energy markets. Any such volatility and disruptions may adversely affect our business or the third parties on whom we rely. If the equity and credit markets deteriorate, including as a result of political unrest, natural disasters, or war, it may make any necessary debt or equity financing more difficult to obtain in a timely manner or on favorable terms, more costly or more dilutive. Increased inflation rates can adversely affect us by increasing our costs, including labor and employee benefit costs. In addition, higher inflation and macro turmoil and uncertainty could also adversely affect our customers, which could reduce demand for our products.

Economic uncertainty may adversely affect our access to capital, cost of capital and ability to execute our business plan as scheduled.

Generally, worldwide economic conditions remain uncertain. Access to capital markets is critical to our ability to operate. Traditionally, biotechnology companies have funded their research and development expenditures through raising capital in the equity markets. Declines and uncertainties in these markets in the past have severely restricted raising new capital and have affected companies' ability to continue to expand or fund existing research and development efforts. We require significant capital for research and development for our product candidates and clinical trials. The general economic and capital market conditions, both in the U.S. and worldwide, have been volatile and at times have adversely affected our access to capital and increased the cost of capital. For example, the ongoing military conflict between Russia and Ukraine, the possibility of a wider European or global conflict, global sanctions imposed in response thereto and the possibility of a global energy crisis resulting therefrom, has created extreme volatility in the global capital markets and is expected to have further global economic consequences, including disruptions of the global supply chain and energy markets. Any such volatility and disruptions may adversely affect our business or the third parties on whom we rely. If global capital markets deteriorate, including as a result of political unrest or war, it may make any necessary financing more difficult to obtain in a timely manner or on favorable terms, more costly or more dilutive. If economic conditions become worse, our future cost of equity or debt capital and access to the capital markets could be adversely affected. If we are unable to access the capital markets on favorable terms, our ability to execute our business plan as scheduled would be compromised. Moreover, we rely and intend to rely on third parties, including clinical research organizations, contract manufacturing organizations and other important vendors and consultants. Global economic conditions may result in a disruption or delay in the performance of our third-party contractors and suppliers. If such third parties are unable to adequately satisfy their contractual commitments to us in a timely manner, our business could be adversely affected.

The Company's limited operating history makes it difficult to evaluate its current business and future prospects and the Company may never be able to generate sufficient revenue to be profitable.

The Company's limited operating history makes it difficult to evaluate its current business and future prospectus. The Company has never generated any material amount of revenue and has not generated any revenue from its bio-tech business. We have incurred significant losses since our inception, and we anticipate that we will continue to incur significant losses and will not be profitable or generate positive cash flow from operating activities for the foreseeable future. In addition, the Company expects to continue to increase operating expenses as it implements initiatives to continue to grow its business and pursue the commercialization of its Product Candidates. If the Company does not generate sufficient revenue to offset these expected increases in costs and operating expenses, it will not be profitable. The Company cannot predict when it will generate any revenue, or when or if it will become profitable or generate positive cash flow from operating activities, if at all.

In general, the Company is subject to many of the risks common to early-stage enterprises, including undercapitalization, cash shortages, limitations with respect to personnel, financial, and other resources and lack of revenues. There is no assurance that the Company will be successful in achieving a return on the Company's shareholders' ("**Shareholders**") investment and the likelihood of success must be considered in light of the early stage of our operations.

Future transfers by holders of Class A Multiple Voting Shares to arm's length parties or other than to permitted holders will generally result in those shares converting to Class B Subordinate Voting Shares, which will have the effect, over time, of increasing the relative voting power of those holders of Class A Multiple Voting Shares who retain their shares. Such holders could, in the future, control a significant percentage of the combined voting power of Class A Multiple Voting Shares and Class B Subordinate Voting Shares.

Each of the Company's directors and officers owes a fiduciary duty to the Company and must act honestly and in good faith with a view to the best interests of Company. However, any director and/or officer that is a Shareholder, even a controlling Shareholder, is entitled to vote its shares in its own interests, which may not always be in the interests of the Shareholders generally. The inability of the Class B Subordinate Voting Shares to control the matters affecting the Company, combined with the ability of holders of Class A Multiple Voting Shares to control matters affecting the Company and to take actions that the holders of Class B Subordinate Voting Shares may not view as beneficial, may adversely affect the market price of the Class B Subordinate Voting Shares.

Dilution of the percentage ownership of the Shareholders

Future sales and issuances of Class B Subordinate Voting Shares or rights to purchase Class B Subordinate Voting Shares, including pursuant to the Company's equity incentive plans, could result in additional dilution of the percentage ownership of the Shareholders and could cause the Company's stock price to fall. The Company expects that significant additional capital may be needed in the future to continue its planned operations, including conducting clinical trials, commercialization efforts, expanded research and development activities, potential acquisitions, in licenses, or collaborations and costs associated with operating a public company. To raise capital, the Company may sell Class B Subordinate Voting Shares, convertible securities, or other equity securities in one or more transactions at prices and in a manner it determines from time to time. If the Company sells Class B Subordinate Voting Shares, convertible securities, or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to the Shareholders, and new investors could gain rights, preferences, and privileges senior to the holders of our Class B Subordinate Voting Shares, including Class B Subordinate Voting Shares sold in this offering upon exercise of Class B Subordinate Voting Share purchase warrants.

Failure to comply with laws and regulations could subject the Company to regulatory or agency proceedings which could divert management's attention and resources and result in substantial penalties.

We are subject to complex laws, rules and regulations affecting our domestic and international operations in Canada, the United States and Australia relating to numerous topics, including the research and development of our pharmaceutical drugs, health care and data privacy laws, labor and employment and regulatory requirements of the CSE and Nasdaq. In addition, we are required to comply with certain U.S. Securities Exchange Commission (the "**SEC**") and other legal requirements affecting public companies. Compliance with, and monitoring of, applicable laws and regulations may be difficult, time consuming and costly. Those laws and regulations and their interpretation and application may also change from time to time and those changes could have a material adverse effect on our business, investments, and results of operations. In addition, a failure to comply with applicable laws or regulations, as interpreted and applied, could have a material adverse effect on our business, including our ability to negotiate and complete our initial acquisitions, and our future results.

Although, to our knowledge, we are currently in material compliance with all applicable laws, regulations and guidelines in such jurisdictions, no assurance can be given that new laws, regulations, and guidelines will not be enacted or that existing laws, regulations, and guidelines will not be interpreted or applied in a manner which could limit or curtail our operations in such jurisdictions.

For more information, see "*Item 7. Major Shareholders and Related Party Transactions - B. Related Party Transactions.*"

Any significant interruption in the supply chain for key inputs could materially impact the Company's business.

Our business is dependent on a number of key inputs and their related costs including raw materials and supplies, as well as electricity, water, and other local utilities. The ability of the Company to research and develop pharmaceutical products is dependent upon, among other things, sufficient access to timely delivery of equipment, parts, and components at reasonable costs. Any significant interruption or negative change in the availability or economics of the supply chain for key inputs could materially impact our business, financial condition, and operating results. Any inability to secure required supplies and services or to do so on appropriate terms could have a material adverse impact on our business, financial condition, and operating results.

The Company may be unable to raise the capital necessary for it to execute its strategy on favorable terms or at all.

There is no guarantee that the Company will be able to execute on its strategy. Developing Lucid-MS, a biopharmaceutical products, and products for alcohol misuse, is expensive and time-consuming, and we expect to require substantial additional capital to conduct research, preclinical testing and human studies, to potentially establish pilot scale and commercial scale manufacturing processes and facilities, and to establish and develop quality control, regulatory, marketing, sales and administrative capabilities to support our existing programs and pursue potential additional programs. We are or may in the future also be responsible for the payments to third parties of expenses that may include milestone payments, license maintenance fees and royalties, including in the case of certain of our agreements with academic institutions or other companies from whom intellectual property rights underlying their respective programs have been licensed or acquired. Because the outcome of any preclinical or clinical development and regulatory approval process for Lucid-MS and other product candidates that we may develop in the future is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization of any product candidates we may identify.

Our future funding requirements for the development of pharmaceutical products will depend on many factors, including, but not limited to: (i) the time and cost necessary to complete planned clinical trials to pursue regulatory approvals for our Lucid-MS and any other drug candidates, and to conduct post-marketing studies that could be required by regulatory authorities; (ii) the progress, timing, scope and costs of our nonclinical studies, preclinical studies, clinical trials and other related activities, including the ability to enroll patients in a timely manner for planned clinical trials described in this Annual Report and potential future clinical trials; (iii) the costs of obtaining clinical and commercial supplies of raw materials and drug products for Lucid-MS and other product candidates; (iv) our ability to successfully identify and negotiate acceptable terms for third-party supply and contract manufacturing agreements with CMOs; (v) our ability to successfully commercialize our Product Candidates, either directly or through licensing agreements, ;(vi) the manufacturing, selling and marketing costs associated with our Product Candidates, including the cost and timing of expanding our internal sales and marketing capabilities or entering into strategic collaborations with third parties to leverage or access these capabilities; (vii) the amount and timing of sales and other revenues from our Product Candidates, if any are approved, including the sales price and the availability of adequate third-party reimbursement; (viii) the cash requirements of any future acquisitions or discovery of product candidates; (ix) the time and cost necessary to respond to technological, market, regulatory or political developments; (x) the costs of acquiring, licensing or investing in intellectual property rights (including the protection of such rights), products, product candidates and businesses; and (xi) our ability to attract, hire and retain qualified personnel.

Additional funds may not be available when we need them, on terms that are acceptable, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit, or terminate one or more research or development programs or the commercialization of any Product Candidates or be unable to expand operations or otherwise capitalize on business opportunities, as desired, which could materially affect our business, results of operations, financial condition, and prospects.

In addition, the continued development of the Company's pharmaceutical operations will require significant additional financing over several years. The failure to raise such capital could result in the delay or indefinite postponement of current business strategy or the Company ceasing to carry on business. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be favorable to the Company, at times for reasons beyond the Company's control. For example, economic downturns or uncertain market conditions, whether affecting the economy in general or the pharmaceutical industry in particular, could adversely impact the Company's ability to raise capital through equity or debt financing. In addition, any further issuances of equity securities could have a significant dilutive effect on the holders of Class B Subordinate Voting Shares.

In addition, from time to time, the Company may enter into transactions to acquire assets or the shares of other companies. These transactions may be financed wholly or partially with debt, which may temporarily increase the Company's debt levels above industry standards. Any debt financing secured in the future could involve restrictive covenants relating to capital raising activities and other financial and operational matters, which may make it more difficult for the Company to obtain additional capital and to pursue business opportunities, including potential acquisitions.

Future sales or issuances of equity securities and the conversion of outstanding securities to Class B Subordinate Voting Shares could decrease the value of the Class B Subordinate Voting Shares and dilute investors' voting power.

The Company may sell additional equity securities in future offerings, including through the sale of securities convertible into equity securities, to finance operations, acquisitions or projects, and issue additional Class B Subordinate Voting Shares, which may result in dilution.

The Board has the authority to authorize certain offers and sales of additional securities without the vote of, or prior notice to, Shareholders. Based on the need for additional capital to fund expected expenditures and growth, it is likely that the Company will issue additional securities to provide such capital. Such additional issuances may involve the issuance of a significant number of Class B Subordinate Voting Shares.

Sales of substantial amounts of the Company's securities, or the availability of such securities for sale, as well as the issuance of substantial amounts of the Class B Subordinate Voting Shares upon conversion of outstanding convertible, exercisable or exchangeable securities, could adversely affect the prevailing market prices for the Company's securities and dilute investors' earnings per share. A decline in the market prices of the Company's securities could impair its ability to raise additional capital through the sale of securities should the Company desire to do so.

The success of the Company is dependent upon its senior management and key personnel and ability to hire skilled personnel.

Another risk associated with the production and sale of pharmaceutical products is the loss of important personnel. The success of the Company will be dependent upon the ability, expertise, judgment, discretion and good faith of its senior management and key personnel. While employment agreements are customarily used as a primary method of retaining the services of key employees, these agreements cannot assure the continued services of such employees. While, as of the date of this Annual Report, the Company does not anticipate any senior management turnover in the near term, there is no guarantee that the Company will be able to retain its senior management going forward. If key personnel depart, including Zeeshan Saeed, Anthony Durkacz, Dr. Lakshmi Kotra, or Donal Carroll, the Company may not be able to find appropriate replacements on a timely basis.

Furthermore, each of our executive officers may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or employees. Recruiting and retaining qualified scientific and clinical personnel and, if any of our Product Candidates are commercialized, sales and marketing personnel, will be critical to our success. The loss of the services of key personnel as well as the diversion of management's and the Board's attention to replace the services of such individuals, could have a material adverse effect on the Company's business, operating results, or financial condition.

In addition, the Company's future success depends on its continuing ability to attract, develop, motivate, and retain highly qualified and skilled employees. Due to the specialized scientific and managerial nature of our business, the Company relies heavily on its ability to attract and retain qualified scientific, technical, and managerial personnel. In particular, specialized knowledge with respect to research and clinical development is important to the pharmaceutical industry. Qualified individuals are in high demand, and the Company may incur significant costs to attract and retain them, if it is able to hire them at all. If we are unable to identify, attract, hire, and retain qualified personnel in the future, such inability could have a material adverse effect on our business, operating results, and financial condition.

The Company's dual class structure has the effect of concentrating voting control and the ability to influence corporate matters with a limited number of holders of Class A Multiple Voting Shares.

The Company's dual class structure has the effect of concentrating voting control for holders of Class A Multiple Voting Shares and the ability to influence corporate matters with those Shareholders. Currently, there are 12 outstanding Class A Multiple Voting Shares issued and outstanding. Class A Multiple Voting Shares have 276,660 votes per share and Class B Subordinate Voting Shares have one vote per share. As of December 31, 2024, Shareholders who hold Class A Multiple Voting Shares together hold approximately 59% of the voting power of the Company's outstanding voting shares and therefore have significant influence over management and affairs of the Company and over all matters requiring Shareholder approval.

In addition, because of the voting ratio between Class A Multiple Voting Shares and Class B Subordinate Voting Shares, the holders of Class A Multiple Voting Shares collectively continue to control a majority of the combined voting power of the voting shares even where the Class A Multiple Voting Shares represent a substantially reduced percentage of the total outstanding shares. The different voting rights could diminish the value of the Class B Subordinate Voting Shares to the extent that investors or any potential future purchasers of the Class B Subordinate Voting Shares attribute value to the superior voting or other rights of the Class A Multiple Voting Shares. Other than as required by applicable law, holders of the Class B Subordinate Voting Shares will only have a right to vote, as a class, in limited circumstances as described in its constating documents.

The concentrated voting control of holders of Class A Multiple Voting Shares limits the ability of holders of Class B Subordinate Voting Shares to influence corporate matters and all matters requiring Shareholder approval, including the election of directors as well as with respect to decisions regarding amendment of the Company's share capital, creating and issuing additional classes of shares, making significant acquisitions, selling significant assets or parts of our business, merging with other companies and undertaking other significant transactions.

As a result, holders of Class A Multiple Voting Shares have the ability to control substantially all matters affecting us and actions may be taken that our holders of Class B Subordinate Voting Shares may not view as beneficial. The market price of the Class B Subordinate Voting Shares could be adversely affected due to the significant influence and voting power of the holders of Class A Multiple Voting Shares. Additionally, the significant voting interest of holders of Class A Multiple Voting Shares may discourage transactions involving a change of control, including transactions in which an investor, as a holder of the Class B Subordinate Voting Shares, might otherwise receive a premium for the Class B Subordinate Voting Shares over the then-current market price, or discourage competing proposals if a going private transaction is proposed by one or more holders of Class A Multiple Voting Shares.

The market price of the Class B Subordinate Voting Shares may be subject to wide price fluctuations.

The market price of the Class B Subordinate Voting Shares may be subject to wide fluctuations in response to many factors, including variations in the operating results of the Company and its subsidiaries, divergence in financial results from analysts' expectations, changes in earnings estimates by stock market analysts, changes in the business prospects for the Company, general economic conditions, legislative changes, and other events and factors outside of the Company's control. In addition, stock markets have from time to time experienced extreme price and volume fluctuations, which, as well as general economic and political conditions, could adversely affect the market price for the Class B Subordinate Voting Shares.

There is no assurance of an active or liquid market.

No assurance can be given that an active or liquid trading market for Class B Subordinate Voting Shares will be sustained. If an active or liquid market for the Class B Subordinate Voting Shares fails to be sustained, the prices at which such securities trade may be adversely affected. Whether or not the Class B Subordinate Voting Shares will trade at lower prices depends on many factors, including the liquidity of the Class B Subordinate Voting Shares, prevailing interest rates, the markets for similar securities, general economic conditions and the Company's financial condition, historic financial and operating performance, and future prospects.

The Company may be unable to manage its growth, including capacity constraints and pressure on its internal systems and controls.

The Company may be subject to growth-related risks including capacity constraints and pressure on its internal systems and controls. The ability of the Company to manage growth effectively will require it to continue to implement and improve its operational and financial systems and to expand, train and manage its employee base. The inability of the Company to deal with this growth may have a material adverse effect on the Company's business, results of operations, financial condition and prospects.

Management may not be able to successfully implement and maintain adequate internal controls over financial reporting or disclosure controls and procedures.

Effective internal controls are necessary for the Company to provide reliable financial reports and to help prevent fraud. Although the Company has undertaken a number of procedures and has implemented a number of safeguards, in each case, in order to help ensure the reliability of its financial reports, including those imposed on the Company under applicable securities laws, the Company cannot be certain that such measures will ensure that the Company will maintain adequate control over financial processes and reporting. Failure to implement required new or improved controls, or difficulties encountered in their implementation, could harm the Company's results of operations, or cause it to fail to meet its reporting obligations.

Effective systems of internal control over financial reporting and disclosure are critical to the operation of a public corporation. However, we do not expect that our disclosure controls and procedures or internal control over financial reporting will prevent all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Further, the design of a control system must reflect the fact that there are resource constraints and the benefits of such controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. Due to the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and may not be detected in a timely manner or at all. If we cannot provide reliable financial reports or prevent fraud, our reputation and operating results could be materially adversely affected, which could cause investors to lose confidence in us and our reported financial information, which in turn could result in a reduction in the value of the Class B Subordinate Voting Shares.

A decline in general economic conditions may impact the viability and success of our mortgage investment activities.

FSD Strategic Investments has made and intends on continuing to make investments in loans that are secured by first or second collateral mortgages on residential real estate in the Greater Toronto Area. A decline in general economic conditions could adversely impact the ability of borrowers to service their loans and could cause default rates to increase. This could have a material adverse effect on FSD Strategic Investments' financial condition and results of operations.

A decline in property values could adversely affect the value of the security on mortgages held by FSD Strategic Investments, thereby reducing the ability to liquidate properties held by defaulting borrowers at favorable prices.

The profits earned on mortgages depend, in part, on the spread between mortgage rates and capital market funding rates and any fee income derived therefrom. FSD Strategic Investments' mortgage portfolios include assets whose value can fluctuate because of changing interest rates and economic and market conditions. In addition, some of these assets could be difficult to sell at any given time. Changes in interest rates and other market factors such as stock market prices and demographics could affect the preferences of its customers for different types of loan products and adversely impact our profitability. A reduction in positive spreads between mortgage rates and capital market funding rates could have a material adverse effect on FSD Strategic Investments' financial condition and results of operations.

Investments in mortgages are relatively non-liquid assets. The nature of the assets held by FSD Strategic Investments may inhibit its ability to quickly respond to changes in broader economic or investment conditions. If the value of the properties underlying FSD Strategic Investments' mortgages begin to deteriorate, it will be difficult for FSD Strategic Investments to liquidate certain assets in response to these changes. The liquidity profile of FSD Strategic Investments' mortgages can create challenges for it to manage its risk exposure. Reduced asset liquidity may restrict FSD Strategic Investments' ability to sell assets for cash without taking significant losses, which may result in a material adverse effect on FSD Strategic Investments' financial condition and results of operations.

*Risks related to our status as a foreign private issuer***.**

As a "foreign private issuer" under the rules and regulations of the SEC, we are permitted to, and will, file less or different information with the SEC than a company incorporated in the United States or otherwise subject to these rules, and will follow certain home country corporate governance practices in lieu of certain Nasdaq requirements applicable to U.S. issuers.

The Company is considered a "foreign private issuer" under the Exchange Act and is therefore exempt from certain rules under the Exchange Act. For example, we are not required to file current reports on Form 8-K or quarterly reports on Form 10-Q, we are exempt from the U.S. proxy rules which impose certain disclosure and procedural requirements for U.S. proxy solicitations and we will not be required to file financial statements prepared in accordance with or reconciled to U.S. GAAP so long as our financial statements are prepared in accordance with IFRS as issued by the International Accounting Standards Board. We are not required to comply with Regulation FD, which imposes restrictions on the selective disclosure of material information to shareholders, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions of Section 16 of the Exchange Act. In addition, we are not required to file periodic reports and financial statements with the SEC as frequently or within the same time frames as U.S. companies with securities registered under the Exchange Act. Accordingly, holders of the Company's securities may receive less or different information about the Company than they may receive with respect to public companies incorporated in the United States.

In addition, as a "foreign private issuer" whose common shares are listed on Nasdaq, we are permitted to follow certain home country corporate governance practices in lieu of certain Nasdaq requirements, including those related to: shareholder approval for certain dilutive events under Nasdaq Marketplace Rule 5635, quorum requirements for shareholder meetings under Nasdaq Marketplace Rule 5620(c), certain independence requirements of certain committees of our Board under Nasdaq Marketplace Rule 5605 and proxy delivery requirements under Nasdaq Marketplace Rule 5620(b). Accordingly, the Company has opted to follow certain corporate governance practices required by its home country under the CSE, Canadian federal and provincial corporate and securities laws and the Company's Articles, as applicable. See "*Item 16G. Corporate Governance*" for more details related to the differences between our home country requirements and Nasdaq requirements.

We could lose our status as a "foreign private issuer" under current SEC rules and regulations if more than 50% of our outstanding voting securities become directly or indirectly held of record by U.S. holders and one of the following is true: (i) the majority of our directors or executive officers are U.S. citizens or residents; (ii) more than 50% of our assets are located in the United States; or (iii) our business is administered principally in the United States. If we lose our status as a foreign private issuer in the future, we will no longer be exempt from the rules described above and, among other things, will be required to file periodic reports and annual and quarterly financial statements as if we were a company incorporated in the United States (including preparation of financial statements in accordance with U.S. GAAP). If this were to happen, we would likely incur substantial costs in fulfilling these additional regulatory requirements and members of our management would likely have to divert time and resources from other responsibilities to ensuring these additional regulatory requirements are fulfilled.

There can be no assurance that we will be able to comply with the continued listing standards of Nasdaq and/or CSE.

Our Class B Subordinate Voting Shares are listed on Nasdaq and CSE. There can be no assurance that we will continue to meet Nasdaq and/or CSE's listing standards. On September 27, 2022, and April 5, 2024, we received letters from the listing qualifications department staff of Nasdaq notifying us that the Company was not in compliance with the minimum bid price requirement set forth in Nasdaq's rules for continued listing on the Nasdaq. While we have since regained compliance with Nasdaq's minimum bid price requirement in both situations, there can be no guarantee that we will be able to maintain such compliance in the future. If we lose our ability to maintain compliance with Nasdaq and/or the CSE's continued listing rules, we and our Shareholders could face significant material adverse consequences, including:

- a limited availability of market quotations for our securities;
- reduced liquidity for our securities;
- a determination that our Class B Subordinate Voting Shares is a "penny stock," in the U.S. which will require brokers trading in Class B Subordinate Voting Shares to adhere to more stringent rules and possibly result in a reduced level of trading activity in the secondary trading market for our securities;
- a limited amount of news and analyst coverage; and
- decreased ability to issue additional securities or obtain additional financing in the future.

As an "emerging growth company," the Company cannot be certain if the reduced disclosure and governance requirements applicable to "emerging growth companies" will make its shares less attractive to investors.

As an "emerging growth company," the Company may take advantage of certain exemptions from various reporting requirements that are applicable to other public companies, including not being required to obtain an assessment of the effectiveness of its internal controls over financial reporting from its independent registered public accounting firm pursuant to Section 404 of the *Sarbanes-Oxley Act*, reduced disclosure obligations regarding executive compensation in its periodic reports and proxy statements, and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and shareholder approval of any golden parachute payments not previously approved. In addition, the U.S. *Jumpstart Our Business Startups Act* (the "**JOBS Act**") provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards, which the Company has elected to do.

We cannot predict if investors will find our shares less attractive because we will rely on these exemptions. If some investors find our shares less attractive as a result, there may be a less active market for our shares, our share price may be more volatile and the price at which our securities trade could be less than if we did not use these exemptions.

We expect to incur costs related to our internal control over financial reporting in the upcoming years to further improve our internal control environment. If we identify deficiencies in our internal controls over financial reporting or if we are unable to comply with the requirements applicable to us as a public company, including the requirements of Section 404 of the *Sarbanes-Oxley Act*, in a timely manner, we may be unable to accurately report our financial results, or report them within the timeframes required by the SEC. If this occurs, we also could become subject to sanctions or investigations by the SEC or other regulatory authorities. In addition, if we are unable to assert that our internal controls over financial reporting are effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal control over financial reporting, or express an adverse opinion, investors may lose confidence in the accuracy and completeness of our financial reports, we may face restricted access to the capital markets and our share price may be adversely affected.

We may not be able to successfully identify and execute future acquisitions or dispositions or to successfully manage the impacts of such transactions on our operations.

The Company has made and may continue to pursue acquisition opportunities to advance its strategic plan. The successful integration of an acquired business typically requires the management of the pre-acquisition business strategy, including the retention and addition of senior management, customers, realization of identified synergies, retention of key staff and the development of a common corporate culture. Achieving the benefits of acquisitions depends in part on successfully consolidating functions and integrating operations and procedures in a timely and efficient manner, as well as the ability to realize anticipated growth opportunities and synergies from newly formed partnerships. Any failure to integrate an acquired business or realize the anticipated benefits of new partnerships may have a material adverse effect on the Company's business, results of operations, financial condition, and prospects, including its future prospects for acquisitions or partnerships. There is no assurance that the Company will be able to successfully integrate an acquired business in order to maximize or realize the benefits associated with an acquisition.

In addition, from time to time the Company enters into letters of intent and memoranda of understanding with respect to which definitive agreements have not yet been, but are expected to be, executed. The Company may not be able to perform under these contracts as a result of operational or other breaches or due to events beyond its control, and the Company may not be able to ultimately execute a definitive agreement in cases where one does not currently exist.

Any expansion of our international operations will result in increased operational, regulatory, and other risks.

We have subsidiaries in the United States and in Australia, and may in the future expand into other geographic areas, which could increase our operational, regulatory, compliance, reputational and foreign exchange rate risks. The failure of our operating infrastructure to support such expansion could result in operational failures and regulatory fines or sanctions.

The Company is currently party to several legal proceedings and may become a party to potential future litigation.

The Company is currently party to a number of proceedings; see "*Item 8. Financial Information - A. Consolidated Statements and Other Financial Information – Legal Proceedings*". Such litigation could be costly and time-consuming and could divert the attention of management and other key personnel from the Company's business and operations. The complexity of any such claims and the inherent uncertainty of commercial, employment and other litigation increases these risks. In recognition of these considerations, the Company could suffer significant litigation expenses in defending any of these claims and may enter into settlement agreements.

The Company may also become party to additional litigation in the future, including class action lawsuits, securities litigation and anti-trust and anti-competitive actions, which could adversely affect its business. Should any litigation in which the Company becomes involved be determined against the Company, such a decision could adversely affect the Company's ability to continue operating and the market price for Company's Class B Subordinate Voting Shares and could result in the use of significant resources. Even if the Company is involved in litigation and wins, litigation can redirect significant corporate resources and management attention.

Conflicts of interest may arise between the Company and its directors and officers as a result of other business activities undertaken by such individuals.

Certain directors and officers of the Company are, and may in the future become, directors and officers of other entities, or are otherwise engaged, and will continue to be engaged, in activities that may put them in conflict with the business strategy of the Company. In particular, certain directors and officers of the Company serve as directors or officers of entities that may compete with or have conflicting interests with the Company.

The Company's directors and the officers are required to act honestly and in good faith with a view to its best interests. However, in conflict of interest situations, the Company's directors and officers may owe the same duty to another corporation and will need to balance their competing interests with their duties to the Company. Circumstances (including with respect to future corporate opportunities) may arise that may be resolved in a manner that is unfavorable to the Company. These business interests could require the investment of significant time and attention by our executive officers and directors. In some cases, our executive officers and directors may have fiduciary obligations associated with business interests that interfere with their ability to devote time to our business and affairs, which could adversely affect our operations.

The Company does not anticipate paying dividends in the near future.

Effective November 29, 2023, the Corporation completed the Plan of Arrangement, which included the distribution of the Celly Nu Shares to the FSD Pharma Securityholders. For more information, please see "*Item 4. Information on the Company. - A. History and Development of the Company - Significant Developments in Fiscal 2022 and Fiscal 2023*".

The Company does not anticipate paying cash or stock dividends in the near future. The Company expects to retain earnings to finance the development and enhancement of its Product Candidates, invest further in Bitcoin and other cryptocurrencies, and to otherwise reinvest in the Company's business. Any decision to declare and pay dividends in the future will be made at the discretion of the Board and will depend on, among other things, financial results, cash requirements, contractual restrictions, and other factors that the Board may deem relevant. As a result, investors may not receive any return on their investment in Class B Subordinate Voting Shares unless they sell them for a share price that is greater than that at which such investors purchased them.

The Company's operations depend, in part, on the maintenance and protection of its information technology systems and the information technology systems of its third-party research institution collaborators, CROs or other contractors or consultants, which could face cyber-attacks that cause material losses to our business.

We have entered into agreements with third parties for hardware, software, telecommunications, and other information technology ("**IT**") services in connection with our operations. Our operations depend, in part, on how well we, our CROs, other contractors, consultants and our suppliers protect networks, equipment, IT systems and software against damage from a number of threats, including, but not limited to, cable cuts, damage to physical plants, natural disasters, terrorism, fire, power loss, hacking, computer viruses, vandalism and theft. Our operations also depend on the timely maintenance, upgrade and replacement of networks, equipment, IT systems and software, as well as pre-emptive expenses to mitigate the risks of failures. Any of these and other events could result in information system failures, delays and/or increase in capital expenses. The failure of information systems or a component of information systems could, depending on the nature of any such failure, adversely impact our reputation and results of operations.

For example, the loss of, or damage to, clinical trial data from completed, ongoing or future preclinical or clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely or expect to rely on third parties for research and development, the manufacture and supply of our drug products and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our Product Candidates could be delayed.

Certain data breaches must also be reported to affected individuals and certain regulatory bodies, and in some cases may be required to be publicly disclosed under U.S. federal and state law, federal and provincial data protection legislation in Canada and the requirements of other jurisdictions, and financial or other penalties may also apply.

Cyber incidents can result from deliberate attacks or unintentional events. Cyber-attacks could result in any person gaining unauthorized access to digital systems for purposes of misappropriating assets or sensitive information, including personally identifiable information, corrupting data, or causing operational disruption. Cyber-attacks could also result in important remediation costs, increased cyber security costs, lost revenues due to a disruption of activities, litigation and reputational harm affecting customer and investor confidence, which could materially adversely affect our business and financial results.

We have not experienced any material losses to date relating to cyber-attacks or other information security breaches, but there can be no assurance that we will not incur such losses in the future, which could be in excess of any available insurance and could materially adversely affect our business and financial results. Our risk and exposure to these matters cannot be fully mitigated because of, among other things, the evolving nature of these threats. As a result, cyber security and the continued development and enhancement of controls, processes and practices designed to protect systems, computers, software, data and networks from attack, damage or unauthorized access is a priority. As cyber threats continue to evolve, we may be required to expend additional resources to continue to modify or enhance protective measures or to investigate and remediate any security vulnerabilities.

We may be a passive foreign investment company, which may result in adverse U.S. federal income tax consequences for holders of our Class B Subordinate Voting Shares who are U.S. taxpayers.

Generally, if for any taxable year 75% or more of our gross income is passive income, or 50% or more of the average quarterly value of our assets are held for the production of, or produce, passive income, we would be characterized as a passive foreign investment company, or "passive foreign investment company" ("**PFIC**"), for U.S. federal income tax purposes. The determination of whether we are a PFIC is a fact-intensive determination made on an annual basis applying principles and methodologies that in some circumstances are unclear and subject to varying interpretation, and the Company's PFIC status will depend among other things upon changes in the composition and relative value of its gross receipts and assets. We believe that we were a PFIC for the year ended December 31, 2024. In addition, although PFIC status is determined on an annual basis and generally cannot be determined until the end of the taxable year, we believe that we may be considered a PFIC for the current taxable year. Because we may continue to hold a substantial amount of cash and cash equivalents, and because the market value of the Company's assets (including for this purpose goodwill) may be measured in large part by the market price of our shares, which is likely to fluctuate, no assurance can be given that the Company will not also be a PFIC in any future taxable year. If we are characterized as a PFIC, our Shareholders who are U.S. taxpayers may suffer adverse tax consequences, including the treatment of gains realized on the sale of our Class B Subordinate Voting Shares as ordinary income, rather than as capital gain, the loss of the preferential rate applicable to dividends received on our Class B Subordinate Voting Shares by individuals who are U.S. taxpayers, and the addition of interest charges to the tax on such gains and certain distributions. For more information, please see "*Item 10. Additional Information - E. Taxation - Certain Material U.S. Federal Income Tax Considerations*".

Item 4. Information on the Company.

A. History and Development of the Company

Corporate History

Effective November 1, 1998, pursuant to the amalgamation of Olympic ROM World Inc., 1305206 Ontario Company, 1305207 Ontario Inc., Century Financial Capital Group Inc. and Dunberry Graphic Associates Ltd. in accordance with the provisions of the OBCA, the Company was formed.

Effective May 24, 2018, following receipt of shareholder approval at the March 15, 2018 annual and special meeting of the proposed amendments to the Company's articles, and pursuant to the articles of amendment, the Company changed its name to "FSD Pharma Inc." and the capital structure of the Company was reorganized to create a new class of Class A multiple voting shares (the "**Class A Multiple Voting Shares**"), amended the terms of and re-designated the existing common shares as Class B subordinate voting shares (the "**Class B Subordinate Voting Shares**"), and eliminate the existing non-voting class A preferred shares and non-voting class B preferred shares.

Effective May 29, 2018, the Class B Subordinate Voting Shares commenced trading on the CSE under the trading symbol "HUGE".

Effective October 16, 2019, the Company completed a 201:1 consolidation.

On January 9, 2020, the Class B Subordinate Voting Shares commenced trading on the Nasdaq under the trading symbol "HUGE".

On August 15, 2024, the Company completed the 2024 Consolidation and changed its name to "Quantum BioPharma Ltd.". In connection with the name change, the Company's trading symbol was changed to "QNTM" on both the Nasdaq and CSE.

The Company's principal office is located at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7, Canada, and its telephone number is +1-833-571-1811. As at the date of this Annual Report, the Company is a reporting issuer in each of the provinces and territories of Canada. The Company's registrar and transfer agent is Marrelli Trust Company Limited. The Company's agent for service in the United States is CT Company, 28 Liberty Street, New York, New York 10005.

For a description of our principal capital expenditures, principal acquisitions and divestitures for the three years ended December 31, 2024, 2023, and 2022 and for those currently in progress, see. "*Item 4. Information on the Company - A. History and Development of the Company*" and "*Item 4. Information on the Company - B. Business Overview*" and "*Item 5. - Operating and Financial Review and Prospects*".

The SEC maintains a website at http://www.sec.gov that contains reports, proxy, information statements, and other information regarding issuers that file electronically with the SEC. The Company's website is https://www.quantumbiopharma.com. For more information regarding the Company, please see the Company's profile on the System for Electronic Document Analysis and Retrieval plus ("**SEDAR+**") at www.sedarplus.ca and on EDGAR at www.sec.gov.

Important Events in the Development of the Company's Business in Fiscal 2024 to the date of this Annual Report

January 4, 2024: the registration statement on Form F-3 (File No. 333-276264) filed under the Securities Act with the SEC containing a base shelf prospectus with the SEC on December 22, 2023 (the "**U.S. Base Prospectus**") was declared effective (the "**January 2024 Registration Statement")**. The January 2024 Registration Statement also qualifies the offer, issue and sale, from time to time of Securities up to an aggregate amount of US$50,000,000, subject to limitations, as applicable, under Form F-3. The January 2024 Registration Statement is available for use by the Company until January 4, 2027. The terms of any Securities to be offered under the January 2024 U.S. Base Prospectus will be specified in a prospectus supplement, which will be filed with the SEC in connection with any such offer.

January 8, 2024: the United States District Court for the Southern District of Florida (the "**S.D. Fla.**") dismissed the Corporation's request for a motion to dismiss the complaint filed against it by GBB. For more information about the Company's lawsuit with GBB, please see "*Item 8. Financial Statements – Legal Proceedings*."

January 24, 2024: the Corporation entered into an agreement with SBS Intl Group LLC. ("**SBS**") to assist the Corporation in enhancing its market awareness and foster productive, continuing dialogues with Shareholders and other market participants. The agreement granted SBS 1,539 Options with an exercise price of C$68.25 and expiry date of January 24, 2026. As of the date of this Annual Report, this agreement has been terminated, and all share based compensation forfeited.

January 24, 2024: the Corporation entered into an agreement with Draper, Inc. ("**Draper**") and Carriage House Capital, Corp. ("**Carriage House**") to assist the Corporation in enhancing its market awareness and foster productive, continuing dialogues with Shareholders and other market participants. The agreement granted Draper and Carriage 5,385 Options each with the exercise price of C$68.25 and expiry date of January 24, 2026. As of the date of this Annual Report, this agreement has been terminated, and all share based compensation forfeited.

January 29, 2024: the Corporation appointed Dr. Sanjiv Chopra, MD to the Board to replace Nitin Kaushal.

February 6, 2024: the Court of Appeal for Ontario ("**ONCA**") affirmed the ONSC's judgement in the amount of C$2.8 million plus C$175,000 against Dr. Raza Bokhari. An additional C$5,000 in costs was awarded to the Company by the ONCA in respect of Dr. Raza Bokhari's failed motion for leave to appeal. For more information about the Company's lawsuits with Dr. Raz Bokhari, please see "*Item 8. Financial Statements – Legal Proceedings*."

February 6, 2024: the Company incorporated Huge Biopharma to conduct research related to Lucid-MS in Australia.

February 11, 2024: the Company engaged MZHCI, LLC, an MZ Group Company ("**MZ**") to lead a comprehensive strategic investor relations and financial communications program across all key markets (the "**MZ Agreement**"). Pursuant to the MZ Agreement, MZ is paid US$10,000 per month. Either party has the right to terminate the MZ Agreement upon fifteen days' notice. As of the date of this Annual Report, the MZ Agreement remains in effect.

February 16, 2024: the Company entered into an at-the-market offering agreement (the "**ATM Agreement**") with H.C. Wainwright & Co., LLC ("**Wainwright**"), pursuant to which the Company, at its discretion, may offer and sell, from time to time, through Wainwright as sales agent, Class B Subordinate Voting Shares, having an aggregate offering price of up to US$11,154,232 (the "**ATM Offering**"). A cash commission of 3.0% on the aggregate gross proceeds raised under the ATM Offering is payable to Wainwright in connection with its services. The ATM Offering was made in the United States pursuant to the January 2024 Registration Statement and the prospectus supplement dated February 16, 2024, and as amended pursuant to the Amendment No. 1 to the prospectus supplement dated August 26, 2024 (together with January 2024**Registration Statement**, the "**ATM U.S. Prospectus**") filed with the SEC.

- Sales of the Class B Subordinate Voting Shares under the ATM U.S. Prospectus will and have been made in transactions that are deemed to be "at-the-market" offering as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, (the "**Securities Act**") including sales made directly on or through the Nasdaq. The Class B Subordinate Voting Shares will be distributed at the prevailing market prices at the time of each sale. As a result, prices may vary between purchasers and during the period of distribution. No Class B Subordinate Voting Shares in the ATM Offering will be sold on the CSE or any other trading market in Canada.

- The volume and timing of sales, if any, will be determined at the sole discretion of the Corporation's management and in accordance with the terms of the ATM Agreement. If the Company chooses to sell Class B Subordinate Voting Shares under the ATM Offering, the Company intends to use the net proceeds of the ATM Offering (i) to fund various clinical studies, trials and development programs, (ii) to fund R&D, and (iii) for general corporate purposes and working capital.

- From February 16, 2024, through December 31, 2024, the Company sold an aggregate of 1,384,781 Class B Subordinate Voting Shares on a post-consolidation basis, pursuant to the ATM U.S. Prospectus for gross proceeds of approximately US$ 11,746,730.

February 19, 2024: Huge Biopharma entered into an agreement with Ingenu to conduct the METAL-1 TRIAL. For more information about unbuzzd™ Clinical Trials, please see "*Item 4B. – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

February 28, 2024: the Company announced the settlement of an aggregate of US$492,135 of amounts owing to arm's length creditors through the issuance of 8,385 Class B Subordinate Voting Shares at the deemed price of US$0.903 per Class B Subordinate Voting Share**.**

March 11, 2024: the Company submitted a CTA for a planned Phase-1b clinical trial for the METAL-1 TRIAL. For more information about unbuzzd™ Clinical Trials, please see "*Item 4B. – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

March 26, 2024: Huge Biopharma entered into agreement with Ingenu to conduct a trial in connection with Lucid-21-302.

March 31, 2024: the principal amount of the Celly Nu Loan (as defined herein) was increased by C$300,000.00, pursuant to the Celly Nu Amended Loan Agreement (as defined herein). No retroactive interest was to be charged on the increased amount. Thus, the total principal amount equates to C$1,300,000.00 as of December 31, 2024. The interest rate per annum remained unchanged. For more information, see "*Item 4B. – Significant Operations and Principal Activities in Fiscal 2022 and Fiscal 2023 – July 31, 2023*".

April 5, 2024: the Company received a written notification (the "**April 2024 Nasdaq Notification Letter**") from Nasdaq that the Company was not in compliance with the minimum bid price requirement set forth in Nasdaq's Listing Rule rules for continued listing on the Nasdaq. The April 2024 Nasdaq Notification Letter was a deficiency notice, not a delisting notice, and did not affect the trading of the Class B Subordinating Voting Shares. Nasdaq Listing Rule 5550(a)(2) requires securities listed on Nasdaq to maintain a minimum bid price of US$1.00 per share, and Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum bid price requirement exists if the deficiency continues for a period of 30 consecutive business day. The Class B Subordinate Voting Shares traded at a price of less than $1.00 per share for 30 consecutive business days between from February 22 to April 4, 2024. The Company was given until October 2, 2024, to regain compliance by maintaining a closing bid price of at least $1.00 for 10 consecutive business days. The Company regained compliance on September 6, 2024.

April 22, 2024: Celly U.S. announced its collaboration with BevSource. For more information about Celly Nu Public Relations Partnerships, please see "*Item 4B. – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

April 24, 2024: the Company entered into an agreement with ASPI in Tampa, Florida, to conduct the METAL-2 TRIAL. For more information about unbuzzd™ Clinical Trials, please see "*Item 4B – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

April 25, 2024: Celly U.S. announced its partnership with Six+One. For more information about Celly Nu Public Relations Partnerships, please see "*Item 4B. – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

May 7, 2024: the Corporation announced the submission to HREC of for a trial in connection with Lucid-MS. For more information about Lucid-MS Clinical Trials, please see "*Item 4B – Business Overview – (ii) Lucid-MS".*
May 16, 2024: Celly Nu launched its newly designed packaging and logo.

May 22, 2024: the Corporation entered into an investor relations services agreement with IR Agency LLC ("**IR Agency**"). Pursuant to the agreement, IR Agency agreed to communicate information about the Corporation to the financial community including, but not limited to, creating company profiles, media distribution and building a digital community with respect to the Corporation for a period of one month beginning on May 28, 2024, in exchange for a fee of US$245,000. As at today's date, the Corporation discontinued its engagement with IR Agency.

May 28, 2024: the Company submitted a clinical trial protocol for its METAL-2 TRIAL. For more information about unbuzzd™ Clinical Trials, please see "*Item 4B. – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

June 11, 2024: the Company entered into an option agreement with the University of Southern California ("**USC**") to evaluate dietary supplement technology for commercialization (the "**USC Agreement**"). The USC Agreement allowed the Company to exclusively evaluate its novel technology for a 6-month term. At the end of this USC Agreement, the Company decided not to extend the USC Agreement.

June 27, 2024: the Company received approval from HREC for its trial in connection with Lucid 21-302. For more information about Lucid-MS Clinical Trials, please see "*Item 4B. – Business Overview – (ii) Lucid-MS".*

June 27, 2024: the United States District Court for the Eastern District of Pennsylvania granted judgement in favor of the Company in its case against Dr. Raza Bokhari. For more information about the Company's lawsuits with Dr. Raz Bokhari, please see "*Item 8. Financial Statements – Legal Proceedings*."

June 28, 2024: the Company retained the services of Totaligent, Inc. ("**Totaligent**"), a market awareness firm with 25 years of experience and a 32-million investor database, for a 30-day contract valued at US$30,000, ending July 28, 2024, unless renewed, with both parties maintaining a 5-day termination notice option. As at today's date, the Company discontinued its engagement with Totaligent.

August 13, 2024: the Company entered into an agreement with Ingenu to conduct a clinical study to observe and quantify disease progression in patients with primary progressive multiple sclerosis. This study will facilitate a future phase 2 clinical trial with Lucid-MS. This agreement is still in place.

August 14, 2024: the Celly IP Nu IP License Agreement (i) was amended to add Celly U.S., as a licensee to the Celly Nu IP License Agreement, effective as of the August 14, 2024, and granted Celly U.S. exclusive global rights to commercialize the Licensed IP (as defined herein) from August 14, 2024, (ii) noted that Celly Nu became the sole and exclusive owner of the unbuzzd™ trademark pursuant to an intellectual property purchase agreement with the Company dated October 2, 2023, and amended the definition of the Licensed IP in the Celly Nu IP License Agreement to exclude unbuzzd™ any time after the unbuzzd™ trademark assignment date, and (iii) confirmed that Celly Nu retained an exclusive global license to commercialize the Licensed IP since July 31, 2023, the effective date of the Celly Nu License Agreement. All other terms in the Celly Nu IP License Agreement remained substantially the same.

August 15, 2024: the Company completed the 2024 Consolidation and changed its name to "Quantum BioPharma Ltd.". In connection with the name change, the Company's trading symbol was changed to "QNTM" on both the Nasdaq and CSE. The new CUSIP and ISIN for the Class B Subordinate Voting Shares were changed to 74764Y205 and CA74764Y2050, respectively. After giving effect to the 2024 Consolidation, the Class B Subordinate Voting Shares were reduced from 84,531,149 to approximately 1,300,727 Class B Subordinate Voting Shares and the Class A Multiple Voting Shares were reduced from 72 to 2 Class A Multiple Voting Shares. No fractional Class A Multiple Voting Shares and Class B Subordinate Voting Shares were issued in connection with the 2024 Consolidation. Instead, all fractional Class A Multiple Voting Shares or Class B Subordinate Voting Shares were rounded up to the nearest whole number. The exercise price and/or conversion price and number of Class B Subordinate Voting Shares issuable under any of the Company's outstanding convertible securities were proportionately adjusted in connection with the 2024 Consolidation.

August 15, 2024: the Company closed a non-brokered private placement and issued four (4) Class A Multiple Voting Shares at a price of C$18.00 per Class A Multiple Voting Share for aggregate gross proceeds of C$72.00 (the "**August 2024 Class A Multiple Voting Share Private Placement Offering**"). Xorax Family Trust, a trust of which Zeeshan Saeed, the Chief Executive Officer ("**CEO**") and Co-Executive Chairman of Quantum BioPharma is a beneficiary ("**Xorax**"), and Fortius Research and Trading Corp., a corporation controlled by Anthony Durkacz, a Co-Executive Chairman of Quantum BioPharma, is a director ("**Fortius**"), purchased all the Class A Multiple Voting Shares issued pursuant to the August 2024 Class A Multiple Voting Share Private Placement Offering. The participation by such insiders is considered a "related-party transaction" within the meaning of MI 61-101. For more information, see "*Item 7. Major Shareholders and Related Party Transactions - B. Related Party Transactions.*"

August 23, 2024: the Company canceled an aggregate of 47,358 Options ("**August 2024 Options**") to purchase Class B Subordinate Voting Shares, which were previously granted to board members, advisory board members, employees, advisors and consultants of the Company (each a "**August 2024 Option Participant**"). Management reviewed the Company's outstanding August 2024 Options and determined that certain August 2024 Options granted to such August 2024 Option Participants under the Company's Equity Incentive Plan, at exercise prices, ranging from C$84.50 to C$189.15 per Class B Subordinate Voting Share, no longer represented a realistic incentive to motivate the August 2024 Option Participants.

August 23, 2024: the Company announced the grant of RSUs (**August 2024 RSUs**") pursuant to the Equity Incentive Plan. The Company granted an aggregate of 32,690 August 2024 RSUs to certain officers, directors, and employees of the Company. Each August 2024 RSU granted vests the earlier of: (i) one year; and (ii) the successful implementation of the Lucid-MS MAD study conducted by Ingenu, subject to acceleration in the event of a takeover bid or change of control.

August 23, 2024: the Board authorized and approved bonuses in the amount of C$450,000 to each of Anthony Durkacz, Zeeshan Saeed and Donal Carroll, officers of the Company, (together, the "**Executives**") pursuant to the terms and conditions of certain executive agreements entered into between the Company and each of the Executives (together, the "**Executive Agreements**"). Pursuant to the terms and conditions of the respective Executive Agreements, each Executive was entitled to certain annual bonuses, based on the Executive and Company meeting certain performance milestones, calculated on the basis of 70% of the respective Executive's base salary for the second year of employment and 80% of the respective Executive's base salary for the third year of employment, which equates to a bonus payment of C$210,000 and C$240,000, respectively, for each Executive for each year of service (each, a "**August 2024 Bonus Payment**"). Subject to compliance with CSE policies, the Company and Executives determined that to preserve the Company's cash, it settled the August 2024 Bonus Payments into Class B Subordinate Voting Shares at a deemed price of C$5.44 per Class B Subordinate Voting Share.

August 26, 2024: the Company filed an amendment to the ATM U.S. Prospectus. For more information, see "*Item 4A – Important Events in the Development of the Company's Business in Fiscal 2024 to the date of this Annual Report – February 16, 2024*".

August 30, 2024: Donal Carroll assumed the role of Chief Financial Officer, and Nathan Coyle assumed the role of Controller. In addition, the Company appointed Jason Sawyer as the Head of Finance and Mergers and Acquisitions.

August 30, 2024: Celly Nu launched unbuzzd™ Clear Eyed Citrus Powder grab-and-go stick packs on Amazon.com.

August 30, 2024: the Company regained compliance with Nasdaq's continued listing requirements after receiving the April 2024 Nasdaq Notification Letter. See "*April 5, 2024*" for more information.

September 6, 2024: the Company completed debt settlements in the amount of C$450,000 with the Executives to preserve the Company's cash through the issuance of 248,160 Class B Subordinate Voting Shares, at a deemed price of C$5.44 per Class B Subordinate Voting Share.

September 6, 2024: the Company granted an aggregate of 12,500 Options (the "**September 2024 Options**"), and an aggregate of 7,500 RSUs (the "**September 2024 RSUs**") to a director and certain consultants of the Company. Each September 2024 Option is exercisable at a price of C$5.60 per Class B Subordinate Voting Share, expires two years from the date of grant and vest in one-third increments with the first batch vesting immediately and the remaining two thirds vesting equally on the 6 month and 12-month anniversary of the date of grant. Each September 2024 Option is exercisable to purchase one Class B Subordinate Voting Share. Each September 2024 RSU granted vested immediately.

September 6, 2024: the Company canceled an aggregated of 7,692 warrants to purchase Class B Subordinate Voting Shares, which were previously granted to a board member. Management reviewed the Company's outstanding warrants and determined that the warrants granted to such individual at an exercise price of C$97.50 per Class B Subordinate Voting Share no longer represented a realistic inventive to motivate such individual.

September 13, 2024: the Company closed a non-brokered private placement and issued six Class A Multiple Voting Shares at a price of C$6.00 per Class A Multiple Voting Share for gross proceeds of C$36.00 (the "**September 2024 Class A Multiple Voting Share Private Placement Offering**"). Xorax and Fortius purchased all the Class A Multiple Voting Shares issued pursuant to the September 2024 Class A Multiple Voting Share Private Placement Offering. The participation by such insiders was considered a "related-party transaction" within the meaning of MI 61-101. The Company relied on exemptions from the formal valuation and minority shareholder approval requirements of MI 61-101 contained in respectively, sections 5.5(a) and 5.7(1)(a) of MI 61-101 in respect of related party participation in the September 2024 Class A Multiple Voting Share Private Placement Offering as neither the fair market value (as determined under MI 61-101) of the subject matter of, nor the fair market value of the consideration for, the transaction, insofar as it involved the related parties, exceeded 25% of the Company's market capitalization (as determined under MI 61- 101). Fortius, Xorax and the Company entered into a Shareholder Agreement dated September 13, 2024 ("**Shareholder Agreement**"), which prohibits unauthorized transfers of the Class A Multiple Voting Shares. See "*Item 7. Major Shareholders and Related Party Transactions B. Related Party Transactions – Shareholder Agreement*."

September 27, 2024: the Company announced the grant of 29,500 Options to certain directors, officers, employees, and consultants (the "**September 2024 Options**"). Each September 2024 Option granted vests immediately and is exercisable at a price of C$5.25 for a period of two years from the issue date. A director of the Company received 7,500 of the September 2024 Options, and thus, the foregoing as it applies to such party represents a related-party transaction under MI 61-101. However, the transaction was exempt from the formal valuation and minority shareholder approval requirements of MI 61-101 as neither the fair market value of the subject matter of the transaction nor the consideration exceeds 25% of the Company's market capitalization.

September 27, 2024: the Company announced it has retained the services of Cambridge Consultants Inc. ("**Cambridge**") for $35,000, TD Media LLC dba Life Water Media ("**LWM**") for $75,000, and King Tide Media LLC ("**KTM**") for $50,000. As at today's date, the Company has discontinued its engagement with Cambridge, LWM, and KTM.

October 7, 2024: the Company announced that Celly U.S. signed a master distribution agreement with FUSION. For more information about Celly Nu Public Relations Partnerships, please see "*Item 4B. – Business Overview – (i) unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

October 20, 2024: On October 20, 2024, the Company filed a complaint in the U.S. District Court for the Southern District of New York against CIBC World Markets, Inc., RBC Dominion Securities Inc., and John Does 1-10. For more information about the Company's lawsuit against CIBC World Markets, RCB Dominion Securities, and John Does 1-10 please see "*Item 8. Financial Statements – Legal Proceedings*."

October 29, 2024: the Company engaged Agoracom Independent Trading Group ("**Agoracom**") for C$25,000, Buyins, Inc. ("**Buyins**") for US$15,000, and Stockjock.com LP ("**Stockjock**") for US$15,000, to enhance market awareness and shareholder engagement, following a capital review and in compliance with CSE policies. Agoracom and ITG agreements require 30 days' termination notice, while Buyins and Stockjock require 10 days' notice. The Company remains engaged in these agreements.

October 31, 2024: The Company further decreased its outstanding debt to a creditor through a debt settlement agreement involving cash payments. Previously reported on the balance sheet at approximately US$611,000, the debt has been reduced to around US$211,000, reflecting a substantial reduction of approximately US$400,000.

November 5, 2024: the Company settled its total outstanding debt to a creditor, which was previously reported on the balance sheet at approximately US$278,000. The Company and the creditor reached a debt settlement agreement, whereby the creditor would be compensated by an external party to the Company.

December 5, 2024: the Company announced it intended to complete a non-brokered private placement offering (the "**December 2024 Offering"**) of up to 5,000 convertible debenture units of the Company (each, a "**December 2024 Debenture Unit**") at a price of C$1,000 per Debenture Unit. Each December 2024 Debenture Unit consists of (i) one convertible debenture having a face value of C$1,000.00 (each a "**December 2024 Debenture**"); and (ii) 80 Class B Subordinate Voting Share purchase warrants (each a "**December 2024 Warrant**") exercisable for 80 Class B Subordinate Voting Shares. The December 2024 Debentures matures on the date that is 36 months from the date of issuance and bears interest at a rate of 1.25% per month, beginning on the date of issuance and is payable in cash on the last day of each calendar quarter. The principal sum of the December 2024 Debenture, or any portion thereof, and any accrued but unpaid interest, may be converted into Class B Subordinate Voting Shares at a conversion price of C$6.25 per Class B Subordinate Voting Share. Each December 2024 Warrant shall entitle the holder to acquire one additional Class B Subordinate Voting Share at a price of C$7.00 per Class B Subordinate Voting Share, for a period of five (5) years from the date of issuance. The December 2024 Debenture contained normal course default provisions, and a default if the volume weighted average price of the Class B Subordinate Voting Shares on the Canadian Securities Exchange is at or below C$5.3125 for any period of 10 consecutive trading days (the "**VWAP Default**"). The December 2024 Debenture and December 2024 Warrant contain a provision that prevents conversion or exercise, as applicable, if the holder's interest in the Company would exceed 9.99%. The Company shall have a right to prepay or redeem a part or the entire principal amount of the December 2024 Debenture for a cash amount equal to the sum of all payments of interest on the December 2024 Debenture, that would be due through to the maturity date (the "**Prepayment Penalty**"). In the event the holder converts the entire amount owing on the December 2024 Debenture within 6 months of the issuance date, the holder shall be entitled to receive a cash amount equal to half the sum of all payments of interest on the December 2024 Debenture that would be due through to the maturity date, or at the option of the holder Class B Subordinate Voting Shares at the conversion price (the "**Conversion Bonus**"). The Company used proceeds from the December 2024 Offering for the ongoing development of the Company's business model and for general working capital purposes.

December 10, 2024: the Company's safety review committee recommended commencing dosing of the second cohort in its trial entitled "A Phase 1, Randomised, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study to Evaluate the Safety and Pharmacokinetics of Lucid-21-302 in Healthy Adult Participants." For more information about Lucid-MS Clinical Trials, please see "*Item 4B. – Business Overview – (ii) Lucid-MS"*.

December 13, 2024: the Company closed an initial tranche of the December 2024 Offering and issued 500 December 2024 Debenture Units for C$500,000. See "*December 5, 2024*" above for more details on the December 2024 Offering.

December 18, 2024: the Company entered into an investor relations services agreement with Enterprise Canada Inc. ("**Enterprise**"). Pursuant to the agreement ("**Enterprise Agreement**"), Enterprise has been engaged for an indefinite period. The Enterprise Agreement is structured in three phases, with C$10,000 paid to Enterprise at the start of phase 1, C$2,500 on the completion of phase 2, and C$5,000 due monthly as a public relations retainer (phase 3). Enterprise will be assisting the Company with its public relations strategy, which includes developing the Company's narrative, key messages, and pitching strategies with identified targets. As of the date of this Annual Report, the parties remain engaged in the Enterprise Agreement.

December 20, 2024: the Company closed the second tranche of the December 2024 Offering and issued 500 December 2024 Debenture Units for C$500,000. See "*December 5, 2024*" above for more details on the December 2024 Offering.

December 20, 2024: the Company purchased US$1,000,000 of Bitcoin and other cryptocurrencies as part of its strategic efforts. For more information, please see "*Item 4B. Business Overview – Overview of the Company – Business Segments – (3) Bitcoin and Cryptocurrency Investments"*.

December 24, 2024: the Company entered into a prepaid forward purchase agreement ("**Sports Coat Prepaid Purchase Agreement**") with Sports Coat LLC ("**Sports Coat**"), whereas Sports Coat agreed to provide financing of US$1,000,000 to the Company as consideration for purchasing proceeds of the litigations (the "**Litigation Proceeds**") which includes any of the following involving: (i) claims relating to market manipulation / securities / commodities / exchanges brought by or on behalf of Quantum Biopharma Ltd. or any related entity: or (ii) Dr. Raza Bokhari. Per terms stated in the Sports Coat Prepaid Purchase Agreement, the Company is not obligated to repay US$1,000,000 to Sports Coat if no proceeds are realized from the lawsuit as the financing is considered non-recourse. Sports Coat bears risk of loss in the event of non-collection of the Litigation Proceeds. The Sports Coat Prepaid Purchase Agreement does not have a predefined repayment schedule, or specified due date, and the Company has not generally pledged its assets as collateral to ensure repayment.

January 7, 2025: the Company was approved to dual list its shares on Upstream, a MERJ Exchange market and global securities trading application. The dual listing on Upstream is designed to provide the Company the opportunity to access a global investor base outside of the U.S. that can trade using a credit/debit card, PayPal, USD, or USDC (a stable coin pegged to the USD); unlocking liquidity and enhancing price discovery while globalizing the opportunity to invest in the Company. The Upstream market is open 7 days a week 20 hours a day, Monday to Sunday: 10:00am to 06:00am UTC+4 (1:00am to 9:00pm EST). Traders on Upstream's smart-contract powered market will experience real-time trading and settlement, and a transparent orderbook which does not permit common market manipulations.

January 14, 2025: the Class B Subordinate Voting Shares started trading on the MERJ Exchange at 10:00am ET under the ticker symbol "QNTM". See "*January 7, 2025*" above for more information.

January 20, 2025: the Company closed the third tranche of the December 2024 Offering and issued 1,480 December 2024 Debenture Units for aggregate gross process of C$1,480,000. This third tranche was completed under amended terms, including a reduced conversion price of C$4.85 per share, an increased warrant ratio of 103.093 Warrants per Debenture Unit, and a reduced exercise price of C$5.25 per Warrant share. On February 7, 2025, the investor converted a partial amount of this Debenture into an aggregate of 152,577 shares of the Company's Class B Subordinate Voting Shares. On February 26, 2025, the investor converted the remaining amount of the Debenture into an aggregate amount of 221,237 shares of the Company's Class B Subordinate Voting Shares. Thus, the total amount of Class B Subordinate Voting Shares converted under this Debenture was 373,814. See "*December 5, 2024*" above for more details on the December 2024 Offering.

January 24, 2025: the Company sought a court order from the ONSC declaring Dr. Bokhari to be a vexatious litigant. For more information about the Company's lawsuits with Dr. Raz Bokhari, please see "*Item 8. Financial Statements – Legal Proceedings*."

February 4, 2025: the Company announced that it completed a double-blind, randomized, placebo-controlled crossover design clinical trial (NCT06505239) of unbuzzd™. For more information about unbuzzd™ Clinical Trials, please see "*Item 4B. – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

February 6, 2025: Celly Nu entered into a letter of engagement with a leading New York investment bank to raise up to US$10,000,000 in capital and explore an initial public offering on a major US public exchange.

February 7, 2025: the Company and Empire Market Ventures, LLC ("**Empire**") entered into an investor relations services agreement (the "**Empire Agreement**"). Pursuant to the Empire Agreement, Empire was engaged for a period of three months. The Company paid Empire US$25,000 in fees. Empire will be providing the Company with investor awareness and marketing services, which includes giving the Company access to an exclusive Nasdaq, TSX, and ASX mailing list and investor contacts, content creation, media appearances, branding and consulting, and other services aimed at increasing the Company's engagement with investors.

February 18, 2025: the Company purchased an additional US$1,000,000 worth of Bitcoin and other cryptocurrencies as part of its strategic efforts. For more information, please see "*Item 4B. Business Overview – Overview of the Company – Business Segments – (3) Bitcoin and Cryptocurrency Investments".*

March 6, 2025: the Company closed the fourth tranche of the December 2024 Offering and issued 100 January 2025 Debenture Units for aggregate gross process of C$100,000. On March 25,2025, the investor converted this Debenture into an aggregate of 25,257 Class B Subordinate Voting Shares. In addition, the Company announced it may complete additional tranches of the December 2024 Offering, adjusting the each convertible debenture units (each, a "**March 2025 Debenture Unit**") to include 76 warrants, with an increased conversion price of C$6.60 (the "**March 2025 Debenture**") and an increased exercise price per warrant of C$7.00 (the "**January 2025 Warrants**"). In addition the March 2025 Debenture removed the VWAP Default, the Prepayment Penalty and the Conversion Bonus.

March 7, 2025:
the Company cancelled an aggregate of 7,692 warrants to purchase Class B Subordinate Voting Shares which were previously granted to Mr. Zapolin. The Company and Mr. Zapolin entered into a warrant cancellation agreement, pursuant to which Mr. Zapolin agreed to cancel the warrants. Management had reviewed Mr. Zapolin's outstanding warrants and determined that the warrants granted to Mr. Zapolin under the Equity Incentive Plan no longer represented a realistic incentive to motivate Mr. Zapolin. Concurrently, the Company granted an aggregate of 7,692 Options to Mr. Zapolin to acquire Class B Subordinate Voting Shares (each, a "Zapolin Option") pursuant to the Equity Incentive Plan, with an exercise price of C$6.60 per Class B Subordinate Voting Share. Each Zapolin Option granted vested immediately, and the expiry date of the Zapolin Options are on March 7, 2027. If Mr. Zapolin ceases to be a participant under the Equity Incentive Plan for any reason, the expiry date of the Zapolin Options shall be 90 days following the date Mr. Zapolin ceases to be a participant under the Equity Incentive Plan.

March 20, 2025: The Company increased its cryptocurrency holdings with the purchase of an additional US$1,500,000 worth of Bitcoin and other cryptocurrencies. For more information, please see "*Item 4B. Business Overview – Overview of the Company – Business Segments – (3) Bitcoin and Cryptocurrency Investments*".

March 26, 2025: Celly U.S. released unbuzzd™ "On-the-Go Powder Stick Packs" in an 8-pack display box, facilitating the sale of unbuzzd™ in convenience, liquor, and drug stores across the United States. The 8-pack display box is available for direct sale to consumers on both amazon.com and unbuzzd.com.

March 26, 2025: the Company retained the services of LWM to enhance its market awareness. This engagement is for a period of 45 days, for $55,000.

March 27, 2025:
the Corporation appointed Terry Lynch to the Board to replace Dr. Sanjiv Chopra.

B. Business Overview

Overview of the Company – Business Segments

Quantum BioPharma is a biopharmaceutical company dedicated to building a portfolio of innovative assets and biotech solutions for the treatment of challenging neurodegenerative, inflammatory and metabolic disorders and alcohol misuse disorders with drug candidates ("**Product Candidates**") in different stages of development. Through Lucid, the Company is currently focused on the R&D of its lead compound, Lucid-MS (formerly Lucid-21-302). Lucid-MS is a patented new chemical entity shown to prevent and reverse myelin degradation, the underlying mechanism of multiple sclerosis, in preclinical models. The Company has also licensed unbuzzd™, a proprietary formulation of natural ingredients, vitamins, and minerals to help with liver and brain function for the purposes of quickly relieving individuals from the effects of alcohol consumption, to Celly Nu and Celly U.S., and is entitled to a royalty on the revenue generated by Celly Nu and Celly U.S. from sales of products created using the technology rights granted under the Celly Nu IP License Agreement. Further, the Company is also focused on the R&D of novel formulations for the treatment of alcohol misuse for application in hospitals and other medical practices.

In addition, the Company maintains a portfolio of strategic residential investments through its wholly owned subsidiary, FSD Strategic Investments, which is focused on generating returns and cashflow through the issuance of loans secured by residential real estate property, with FSD Strategic Investments having a first or second collateral mortgage on the secured property.

Finally, the Company has expanded its corporate treasury management function to include investments in cryptocurrencies. This initiative is aligned with the Company's financial diversification goals and supports its long-term strategic objectives.

(1) Biopharmaceutical Operations

(i) Alcohol Misuse Disorder Product Candidates

Excess alcohol consumption (alcohol misuse or mild acute alcohol intoxication) is clinically harmful. Clinical symptoms and manifestations are heterogeneous, and can have behavioral, cardiac, gastrointestinal, pulmonary, neurological, and metabolic effects. The Company is focused on treatments to reverse inebriation and to assist accelerating alcohol metabolism in people who consumed excess alcohol, reaching blood alcohol levels around/slightly above the legal limits in various countries. Available options for emergency response doctors and nurses are to provide a vitamin intravenous drip or let alcohol "wear off", until medical professionals can tend to those individuals who are inebriated, occupying expensive resources in the emergency room. The Company also identified that excess alcohol consumption is a problem in general society (consumer market), and the commonly available remedies mostly fall in the category of "hangover remedies". Thus, there is a great need for immediate treatments that can address the challenges when one consumes excess alcohol.

Medical and R&D teams at Lucid identified several natural ingredients that are dietary supplements that can function as alcohol metabolism accelerants and enhance mental alertness; the team developed several formulations that will help enhance mental alertness, replenish cofactors, and may accelerate the rate of alcohol metabolism. This formulation may be useful in treating intoxicated individuals who wish to speed up their recovery from the effects of alcohol as well as for the treatment of intoxicated patients entering emergency departments in the hospitals. The Company will continue its R&D program and develop products for use in emergency departments and other healthcare settings. Regulatory activity in the United States, and other markets globally will be continued, aligned with the R&D and potential clinical trials (as needed) for commercialization, marketing, and distribution.

With respect to the Product Candidates for alcohol misuse disorders, the Corporation sees two distinct routes where this segment can be developed, (a) recreational retail and (b) healthcare; Celly Nu and Celly U.S., through the Celly Nu IP License Agreement (as defined herein), will be focusing on the recreational retail sector and the Corporation will be focusing on the healthcare sector as further outlined below:

a. Alcohol Misuse: Retail Product (known as "unbuzzd™")

unbuzzd™ is a consumer recreational beverage product that will be sold via retail distribution. The Company entered into the Celly Nu IP License Agreement, which provides Celly Nu and Celly U.S. access to proprietary information for the purposes of consumer product development and marketing in connection with unbuzzd™. For more information, see "*Item 4. Information on the Company – B. Business Overview – Significant Operations and Principal Activities in Fiscal 2022 and Fiscal 2023 – July 31, 2023".*

The Plan of Arrangement has not had, and does not expect to have, an impact on the development of the retail product, unbuzzd™. As of the date of this Annual Report, the Company has trademarks with the Canadian Intellectual Property Office (Registrar of Trademarks) ("**CIPO**") and the USPTO relating to novel treatments for alcohol misuse and related conditions, including ALCOHOLDEATH™, which was licensed to Celly Nu and Celly U.S. pursuant to the Celly Nu IP License Agreement (as defined herein). For more information, see "*Item 4B. – Intellectual Property*".

unbuzzd™ Clinical Trials

On February 19, 2024, FSD Australia, entered into an agreement with Ingenu CRO Pty Ltd. ("**Ingenu**") to conduct "A Randomized, Double-Blind, Placebo-Controlled Crossover Study to Assess the Safety and Efficacy of unbuzzd™ in Healthy Volunteers in an Induced State of Alcohol Intoxication" (the "**METAL-1 TRIAL**").

On March 11, 2024, the Company submitted a CTA for a planned Phase-1b of the METAL-1 TRIAL. This clinical trial application was submitted for review by a human ethics review committee ("**HREC**") in Australia, which is a first step to obtaining permission to initiate the clinical trial. Recruitment of healthy volunteers to this trial is expected following approval by the HREC. The METAL-1 TRIAL was not approved by the HREC, and thus was replaced by the METAL-2 TRIAL (as defined herein),

On April 24, 2024, the Company entered into agreement with Applied Science and Performance Institute (" **ASPI**") in Tampa, Florida, to conduct "A Randomized, Double-Blind, Placebo-Controlled Crossover Study to Assess the Safety and Efficacy of unbuzzd™ in Healthy Volunteers in an Induced State of Alcohol Intoxication" (the "**METAL-2 TRIAL**").

On April 28, 2024, the Company submitted a clinical trial protocol for the METAL-2 TRIAL, which was approved on June 4, 2024. The clinical trial protocol was submitted for review and approval by the institutional review board ("**IRB**") in the USA. Recruitment of healthy volunteers to the trial began following approval by the IRB. In the METAL-2 TRIAL, the ability of unbuzzd™ to help alleviate the effects of acute alcohol intoxication will be studied in a crossover design. The METAL-2 TRIAL has since been completed.

On May 28, 2024, the Company submitted a clinical trial protocol to assess the safety and efficacy of unbuzzd™ in healthy volunteers for its METAL-2 TRIAL. The clinical trial protocol was submitted for review and approval by the IRB in the USA. Recruitment of healthy volunteers to the trial will begin following approval by the IRB. This trial has since been completed.

On June 4, 2024, the Company received IRB approval for its METAL-2 TRIAL in the United States.

On February 4, 2025, the Company announced that it completed a double-blind, randomized, placebo-controlled crossover design clinical trial (NCT06505239) of its dietary supplement product unbuzzd™, investigating its effects on alcohol intoxication and alcohol metabolism. Results of data analysis show definitively that unbuzzd™ accelerated the rate at which blood alcohol concentration was reduced in study subjects, while simultaneously reducing the symptoms of intoxication and hangover. All these results were statistically significant compared to placebo. The study included 26 participants, both male and female, aged between 21 and 43, with weights ranging from 119 to 232 pounds. The positive effects of unbuzzd™ were rapidly apparent, occurring within 30 minutes after consumption of the dissolved powder. unbuzzd™ was well-tolerated and safe, with no reported product-related adverse effects.

Celly Nu Public Relations Partnerships

On April 22, 2024, Celly U.S. announced its collaboration with BevSource, a leading provider of beverage development, production and operations solutions located in St. Paul, Minnesota. This partnership will assist with the production and distribution process of unbuzzd™, commercial formulation consultation, contract packaging solutions, ingredient procurement, commercialization strategies, initial production oversight, and fulfillment center coordination for both the 12oz can and ready-to-mix powder stick packs product formats.

On April 25, 2024, Celly U.S. announced its partnership with Six+One, to enhance the presence of its premier dietary supplement, unbuzzd™, in preparation of the launch in the United States. This strategic alliance aims to utilize Six+One's branding and strategic expertise to redefine wellness. Renowned for its innovative work with brands like vitaminwater and BODYARMOR (both brands later acquired by The Coca-Cola Company), Six+One, an advertising, entertainment, and production agency, is focused on marketing a brand's purpose beyond its product.

Celly Nu Distribution Partnerships

On October 7, 2024, Celly U.S. signed a master distribution agreement with FUSION Distribution Group ("**FUSION**") for distribution of unbuzzd™ across Puerto Rico, the Caribbean, and parts of Central and South America. unbuzzd™ was made available as ready-to-mix powder sticks on Amazon on August 30, 2024, with ready-to-drink 12oz cans planned for future release. FUSION, which distributed brands such as CELSIUS, SHINE Water, Tona Cerveza, and Kin Whiskey, was selected to handle the distribution of both ready-to-mix powder sticks and ready-to-drink 12oz cans. As of the date of this Annual Report, the planned future release of the ready-to-drink 12oz cans have been put on hold.

The Corporation's continued operations are not dependent on the development of unbuzzd™ for recreational use by Celly Nu and Celly U.S. pursuant to the Celly Nu IP License Agreement.

*b. Alcohol Misuse: Healthcare Product (the "**Healthcare Product**")*

The Healthcare Product has the potential to support emergency room physicians and their medical staff by managing the high volume of intoxicated patients who utilize critical resources (i.e. the physicians and their medical staff) that could be used for more urgent and critical needs. The Corporation did not license the intellectual property with respect to the Product Candidate for the Healthcare Product to Celly Nu, and will be conducting further R&D, including clinical trials, into the viability of the Healthcare Product. Although any R&D conducted by the Corporation on the Healthcare Product could be shared with, and may assist, Celly Nu and Celly U.S. in developing unbuzzd™, the Corporation has no obligation, pursuant to the Celly Nu IP License Agreement (as defined herein), to share such information with its licensees.

The viability, development and advancement of the Healthcare Product is dependent on the Corporation obtaining requisite funding, in the amount of approximately US$10,998,811, for the Corporation to complete further R&D. The Corporation, through its initial research, has discovered that there is significant demand in the market for this type of product, an opportunity for them to capture market share and believes that if it were able to develop and sell the Healthcare Product, it would bring immense value to its Shareholders. If the requisition financing is not obtained, the Corporation will be unable to develop the Healthcare Product.

The Corporation's continued operations are not dependent on the Healthcare Product's development.

(ii) Lucid-MS

This program is focused on the development of novel drugs for multiple sclerosis. Available drugs for progressive multiple sclerosis are immunomodulatory, and do not address the neurodegeneration in these patients. The Corporation believes it has a solution that can significantly change the course of neurodegenerative decline in multiple sclerosis patients. The Corporation, through the acquisition of Lucid, acquired the multiple sclerosis program with the lead candidate, Lucid-MS (development code, Lucid-21-302). Lucid-21-302 exhibits moderate inhibition profile against peptidyl arginine deiminase ("**PAD**") 2 and PAD 4 isozymes. There is strong evidence that hypercitrullination of myelin, mediated by increased activities of PAD 2 and potentially PAD 4, may contribute to demyelination and multiple sclerosis pathogenesis through two mechanisms: (1) destabilizing myelin integrity on neuronal axons, leading to demyelination and degeneration, and (2) generating antigenic neoepitopes, leading to immune activation. Lucid-21-302 reduced hypercitrullination, prevented demyelination and helped remyelination in various non-clinical animal models of multiple sclerosis, including functional recovery in the animals. Lucid-MS is being developed as a first-in-class, non-immunomodulatory drug for the treatment of progressive multiple sclerosis. Current data from preclinical and clinical development suggests that Lucid-21-302 could achieve the therapeutic dose to launch a proof-of-concept human study in a small number of patients (Phase 2a PoC clinical trial). This trial will pave way for a larger Phase 2b study, with appropriate biomarkers and endpoints for the treatment of progressive multiple sclerosis with multiple clinical sites. The Corporation has actively been planning a potential phase-2 clinical trial. The current patent on Lucid-21-302 are effective until 2036 (US10716791B2) and was licensed from University Health Network (Toronto, Canada) exclusively for development and commercialization.

Lucid-MS Clinical Trials

On January 17, 2023, the Company submitted the CTA for a planned Phase 1 clinical trial for Lucid-MS to Health Canada.

On February 7, 2023, the Company received regulatory clearance from Health Canada to proceed with the Company's Phase 1 clinical trial of Lucid-MS in Canada, which would evaluate the safety and tolerability of Lucid-MS.

On April 17, 2023, the Company announced the completion of its first-in-human dosing of Lucid-MS in the Company's Phase 1 clinical trial.

On May 10, 2023, the Company announced the completion of dosing the first cohort of patients in the Phase 1 clinical trial of Lucid-MS. The clinical trial (ClinicalTrials.gov Identifier: NCT05821387), is a first-in-human study evaluating Lucid-MS.

On July 10, 2023, the Company received a "no objection letter" for the Phase 1 Lucid-MS clinical trial, which was acknowledged on June 12, 2023. On July 19, 2023, the Company submitted a request for pre-IND meeting to the FDA, which was acknowledged August 3, 2023, and a response was received on September 21, 2023.

On August 25, 2023, the Company received a "no objection letter" for the CTA, which was acknowledged on July 31, 2023.

On September 18, 2023, the completion of study notification (after completion of five cohorts) was submitted to Health Canada. Also, the Company received the interim report for the first-in-human single ascending dose Phase 1 clinical trial evaluating Lucid-MS. This interim blinded report was issued on August 17, 2023, for the first 4 cohorts, with an addendum report describing the results of the fifth cohort submitted on this date.

On October 2, 2023, the Company submitted a provisional patent application to USPTO for the clinical formulation containing Lucid-MS.

In February 2024, the Company presented the results from its first-in-human Phase 1 study of Lucid-MS at the America's Committee meeting for the treatment and research in multiple sclerosis. This presentation detailed the final results including adverse events profile of Lucid-21-302 in the single-ascending dose ("**SAD**") studies. The study concluded that Lucid-21-302 is safe and well-tolerated in the dose range of 50-300 mg *p.o.* administered once, with no difference in pharmacokinetics between the fed and fasted states. There were no serious adverse effects, and most adverse effects (7/12) in participants receiving Lucid-21-302 were characterized as unlikely related or unrelated to study drug. In the dose range 50-300 mg, drug exposure was proportional to dose of the drug. It also demonstrated good oral absorption with 'area under the curve' at 300mg comparable to 'area under the curve' in mouse efficacy studies.

On March 26, 2024, the Company, through its subsidiary, Huge Biopharma, entered into agreement with Ingenu to conduct "A Phase 1, Randomised, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study to Evaluate the Safety and Pharmacokinetics of Lucid-21-302 in Healthy Adult Participants".

On May 7, 2024, the Company announced the submission to HREC in Australia for a trial titled "A Phase 1, Randomized, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study to Evaluate the Safety and Pharmacokinetics of Lucid-MS in Healthy Adult Participants." This CTA is a step that is necessary to obtain permission to initiate the multiple ascending dose ("**MAD**") trial. The MAD trial follows the Phase-1 SAD trial.

On June 27, 2024, the Company announced that it has received approval by the HREC in Australia for its trial entitled "A Phase 1, Randomized, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study to Evaluate the Safety and Pharmacokinetics of Lucid-21-302 in Healthy Adult Participants."

On September 9, 2024, the Company announced that through its subsidiary, Huge Biopharma, it entered into an agreement with Ingenu on August 13, 2024, to conduct a clinical study to observe and quantify disease progression in patients with primary progressive multiple sclerosis.

On October 29, 2024, the Company announced that Huge Biopharma had initiated sentinel dosing in a Phase 1 clinical trial for Lucid-MS. The randomized, double-blind, placebo-controlled trial was designed to evaluate the safety and pharmacokinetics of Lucid-MS in healthy adult participants, marking a significant step toward Phase-2 efficacy trials.

On December 10, 2024, the Company's safety review committee recommended commencing dosing of the second cohort in its trial entitled "A Phase 1, Randomised, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study to Evaluate the Safety and Pharmacokinetics of Lucid-21-302 in Healthy Adult Participants." The safety review committee made this recommendation after reviewing safety and pharmacokinetic data from participants in the first cohort.

Phase 2 Clinical Study

Based on the positive results that the Phase-1 study yielded, the Board, on recommendation from the advisory committee, resolved to proceed with completing a Phase 2 MS-Study on Lucid-MS with the goal of getting the Lucid-MS to commercialization. The Company has determined that in order to get to commercialization it will cost approximately US$31,489,964.

As Lucid-MS advances from Phase-1 to Phase-2, milestone-driven investigations are planned to expedite late-stage clinical development, aligned with our chronic toxicology program. This synergy ensures enabling data for regulatory submissions for the next clinical phases, such as Phase-1b MAD cohorts, Phase-2a, and Phase-2b. To initiate Phase-2, we require data from MAD cohorts, at least three months of toxicology data, and any additional data requested by regulatory authorities. Long-term toxicology data is crucial for dosing extending up to six months or more, reflecting Lucid-MS's potential as a chronic treatment or disease-modifying therapy for multiple sclerosis patients. The Lucid-MS program's ultimate goal is to conduct regulatory clinical studies, investigating its potential as a non-immunomodulatory drug to halt disease progression and neurodegeneration in multiple sclerosis.

The Company's innovative clinical development program targets multiple sclerosis, aiming to create a groundbreaking treatment. The Company has engaged thought leaders and conducted internal discussions on regulatory guidance to design an efficient, cost-effective program spanning chemistry, product development, and data acquisition for clinical stages. The Company's clinical trials are moving forward in Australia.

(iii) FSD-PEA and Lucid-PSYCH

On May 31, 2022, the Company submitted an IND application with the FDA and Health Canada detailing a planned Phase 1 clinical trial of its proprietary ultra-micronized palmitoylethanolamide ("**FSD-PEA**" or "**FSD201**") formulation for the treatment of inflammatory diseases.

On July 13, 2022, Lucid filed a provisional patent application on novel formulations of FSD-PEA. The new patent application is based on the results of completed preclinical animal toxicology studies and Phase 1 clinical trial using FSD-PEA sponsored by the Company.

On September 6, 2022, the Company received a "Study May Proceed" letter from the FDA for its IND application, and a "Notice of Authorization" from Health Canada for its Phase 2 clinical trial of FSD-PEA/FSD201. The corresponding study protocol is titled "A Randomized, Double-Blind Placebo Controlled Parallel Group Study of Safety and Efficacy of FSD201 in Patients with Chronic Widespread Musculoskeletal Nociplastic Pain Associated with Idiopathic Mast Cell Activation Syndrome (Disorder)".

On March 22, 2023, FSD Australia received the certificate of approval from the Alfred Ethics Committee to proceed with a Phase 1 clinical trial of Lucid-201, a novel drug candidate for the potential treatment of Major Depressive Disorder. Since that date, there has been no further activity on Lucid-201.

Suspension and Resumption of FSD-PEA Development

On June 2, 2023, the Corporation terminated any further clinical development FSD-PEA formulation which was being developed for the treatment of inflammatory diseases. The Corporation's team of internal medical experts conducted a profitability assessment of FSD-PEA and ultimately determined that the FSD-PEA molecule was not profitable compared to the currently available products in the market and it would not be possible to cover the Corporation's manufacturing and R&D investments at a price that would be accepted in the market.

In Q3 2024, the Corporation resumed the clinical development of FSD-PEA. The Corporation signed a study order for a Phase 2 clinical trial of FSD-PEA in mast cell activation syndrome ("**MCAS**").

Lucid-PSYCH Put on Hold

Additionally, management made the decision to put the R&D activities associated with Lucid-PSYCH (formerly Lucid-201) on hold during June 2023. This decision was made based on the cumulative cash requirements to advance the R&D of the Company's portfolio of compounds. Due to cash flow prioritization strategies, management elected to prioritize the Lucid-MS compound and its alcohol misuse treatment products. The Corporation has not recognized an amount specific to Lucid-PSYCH. When the Corporation acquired Lucid, it recognized an intangible asset consisting of the world-wide exclusive license agreement with the University Health Network (the "**UHN License**") for the exclusive rights to the Lucid-MS compound and the U.S. patent for the Lucid-MS compound covered by the UHN license. Lucid-PSYCH was not covered by the license agreement and did not have any patent protection.

The Corporation's continued operations are not dependent on its biopharmaceutical operations.

(iv) Prismic

The Corporation does not operate through Prismic, however Prismic holds the right to receive certain payments based on net sales of certain products from the Corporation pursuant to an assignment agreement between Prismic and the Corporation.

(2) FSD Strategic Investments

Residential Property Investments

FSD Strategic Investments is focused on generating returns and cash flow through the issuance of loans secured by residential property.

FSD Strategic Investments has historically not incurred any significant operating expenditure. The loans are arranged through a third-party financing intermediary, and the borrower is responsible for covering all administrative-related costs. FSD Strategic Investments earns interest through fixed-rate lending arrangements that have an average term to maturity of one year from the date of issuance. The loans are secured by residential property with a first or second collateral mortgage on the secured property.

The Board has developed criteria for making investments decisions in residential property as follows: (i) the maximum loan-to-value ratio is 55%; (ii) the maximum dollar value for any given secured loan is not to exceed C$1,200,000; and (iii) the residential property must be located in the Greater Toronto Area. Before issuing a secured loan, the Company undertakes extensive due diligence to ensure that adequate care is exercised in the funding of mortgage or loan transactions, including checking personal identification, verifying title documents, attending the property, or conducting an on-site appraisal to satisfy as to the value of the property, and reviewing application and supporting documentation with legal counsel.

The interest rate for each borrower within FSD Strategic Investments' loan portfolio is determined based on the following criteria: (i) the borrower's credit score; (ii) employment status; (iii) income level; (iv) geographic location of the property; (v) equity held in the property; and (vi) the prevailing Bank of Canada interest rate at the time of mortgage origination.

Notwithstanding the foregoing, the Corporation understands that there may be factors outside of its control that could: (x) attribute to the inability of a mortgage principal or interest payment becoming past due; (y) change the financial condition of the respective borrower; and/or (z) result in the borrower electing to not pay, and therefore the Corporation has set out contingency plans whereby it would sell the outstanding mortgage to a third party and/or have a third party advance money against the securitization of the asset, and if unsuccessful, could foreclose on the asset.

As of December 31, 2024, a total of 10 mortgages remained outstanding, representing a combined principal value of C$4,930,000. All outstanding mortgages are scheduled to mature during the fiscal year 2025. As of the date of this Annual Report, the portfolio has maintained a flawless performance record, with zero instances of default or delinquency. FSD Strategic Investments remains confident in the collection of future proceeds.

(3) Bitcoin and Cryptocurrency Investments

In December 2024, the Company began purchasing Bitcoin and other cryptocurrencies as part of its financial diversification strategy and commitment to exploring innovative opportunities that enhance shareholder value. As of December 31, 2024, the Company has purchased a total of US$1,000,000 worth of Bitcoin and other cryptocurrencies, reported at a fair value of US$861,230 on the balance sheet as part of the Company's current assets. These holdings represented 12.27% of total assets as of December 31, 2024. The Company has holdings in the following cryptocurrencies: Bitcoin, Solana, Dogecoin, and XRP. A summary of these investments is listed as below.

The Company considers cryptocurrencies both a financial asset and a potential medium of exchange for future transactions. Management retains full discretion to adjust cryptocurrency holdings based on market conditions and business priorities. The Company is also equipped to receive financing and execute transactions in cryptocurrencies, further enhancing its operational and financial flexibility.

Bitcoin

Bitcoin is a digital asset that is created and transmitted through the operations of the peer-to-peer Bitcoin network, a decentralized network of computers that operates on cryptographic protocols, which are mathematical rules that secure digital communication by encrypting data, verifying identities, ensuring integrity. This mechanism, whereby users known as "miners" compete to solve complex mathematical problems to validate transactions on the network, is referred to as a "Proof-of-Work" system.

No single entity owns or operates the Bitcoin network, the infrastructure of which is collectively maintained by a decentralized user base.

The Bitcoin network allows people to exchange tokens of value, called Bitcoin, which are recorded on a public transaction ledger known as a blockchain. Bitcoin can be used to pay for goods and services, or it can be converted to fiat currencies, such as the U.S. dollar, at rates determined on Digital Asset Trading Platforms that trade Bitcoin or in individual end-user-to-end-user transactions under a barter system.
The first Bitcoins were created in 2009 after the presumably pseudonymous Satoshi Nakamoto released the Bitcoin network source code (the software and protocol that created and launched the Bitcoin network). The Bitcoin network has been under active development since that time by a group of engineers known as core developers. The core developers are able to access, and can alter and update, the Bitcoin network source code. Users and miners must accept any changes made to the Bitcoin source code by downloading the proposed modification of the Bitcoin network's source code. The modification is effective only with respect to the Bitcoin users and miners that download it. If a modification is accepted by only a percentage of users and miners, a division in the Bitcoin network will occur such that one network will run the pre-modification source code and the other network will run the modified source code. Such a division is known as a "fork."

The supply of new Bitcoin is mathematically controlled so that the amount of Bitcoin grows at a limited rate pursuant to a pre-set schedule. Bitcoin's unique attributes not only differentiate it from fiat money, but also from other cryptocurrencies. While we see the value in Bitcoin as it has the capacity to act as a hedge against inflation due to its limited supply, and former SEC chair Gary Gensler has stated that Bitcoin is not a security, the specific risk factors surrounding Bitcoin include the following:

- "51% attacks", which may occur where a group of malicious miners attain more than 50% of the Bitcoin network's mining power, thereby enabling such miners to control and manipulate the blockchain;
- "Denial-of-service attacks", which may occur when legitimate users are unable to access information systems, devices, or other network resources due to the actions of a malicious actor flooding the network with traffic until the network is unable to respond or crashes;
- Unauthorized wallet access whereby an attacker deceives the victim into sharing private keys;
- Bitcoin is highly volatile and has experienced large fluctuations in its price since its inception and over the previous 12 months;
- The computing power necessary to validate transactions requires vast amounts of energy and produces carbon emissions;
- Bitcoin's network is subject to congestion and the amount of transactions processed in each block is limited and the process of validating transactions can be delayed resulting in an increase in transaction fees; and
- A decrease in incentives to validate transactions on the blockchain after 21 million Bitcoin have been issued.

Solana

The Solana ("**SOL**") protocol was first conceived by Anatoly Yakovenko in a 2017 whitepaper. Development of the Solana network is overseen by the Solana Foundation, a Swiss non-profit organization, and Solana Labs, Inc., a Delaware corporation, which administered the original network launch and token distribution. Smart contract operations are executed on the Solana blockchain in exchange for payment of SOL. In addition to Proof-of-Stake mechanisms, Solana uses a Proof-of-History ("**PoH**") consensus mechanism that automatically orders on-chain transactions by creating a historical record that proves an event has occurred at a specific moment in time. PoH is intended to provide a transaction processing speed and capacity advantage over traditional PoW and PoS networks, which rely on sequential production of blocks and can lead to delays caused by validator confirmations. PoH is a new blockchain technology that is not widely used. PoH may not function as intended. For example, it may require more specialized equipment to participate in the network and fail to attract a significant number of users. In addition, there may be flaws in the cryptography underlying PoH, including flaws that affect functionality of the Solana network or make the network vulnerable to attack.

On September 14, 2021, the Solana network experienced a significant disruption, later attributed to a type of denial-of-service attack, and was offline for 17 hours, only returning to full functionality 24 hours later. The Solana network has also experienced significant disruptions throughout 2022, for example, in January, April, May and June. In February 2022, a vulnerability in a smart contract for Wormhole, a bridge between the Ethereum and Solana networks led to a $320 million theft of Ethereum. In August 2022, over 8,000 internet-connected "hot" Solana wallets were hacked, with millions of dollars' worth of various digital assets stolen. Such disruptions and hacking events may have a material adverse effect on the price of SOL and the confidence of users.

In June 2023, the SEC asserted that SOL is a security in its complaints against Binance and Coinbase. However, in September 2024, in its amended complaint, the SEC removed references that previously insinuated that cryptocurrencies like SOL are a security under U.S. federal securities laws. Notwithstanding the foregoing, there is still concern that the SEC has not abandoned the possibility of classifying SOL as a security.

Additionally, there other risks specific to SOL include, but are not limited to, the following:

- SOL has experienced extreme volatility, for example, from the date of this Annual Report, there has been a 28% decline in the price of SOL since its February 2025 highs;
- Aside from "staking" SOL does not pay interest, dividends, or other returns in connection with mere ownership of SOL;
- SOL is relatively new, having only been developed in 2017, and is not widely adopted and may fail to attract an adequate number of participants;
- SOL's PoH system is relatively new and may not function as intended;
- SOL has been the subject of much regulatory scrutiny, including in major SEC enforcement actions such as against Binance;
- SOL does not have a maximum determined supply and instead uses an inflation model, and a proposal, SIMD-228, to transition to dynamic, market-based model failed in 2025;
- The core developers of Solana have the ability to propose amendments to the Solana network's source code, and to the extent that such amendments are adopted by a significant majority of users and validators on the Solana network, such amendments may materially adversely affect the value of SOL;
- Because developers are not directly compensated for their contributions to the network and addressing emerging issues, inadequate incentives for participation may lead to a decrease in the number of validators and users.

Dogecoin

Dogecoin is a digital asset that functions similarly to Bitcoin through a blockchain that is a decentralized ledger upon which Dogecoin transactions are processed and settled. No single person or entity owns or operates the Dogecoin Blockchain, which is maintained collectively by the decentralized user base. Like Bitcoin, Dogecoin functions on a Proof-of-Work system to validate transactions.

Dogecoin was originally developed by software engineers Billy Markus and Jackson Palmer as a lighthearted take on the rapidly emerging cryptocurrency market. Markus and Palmer believed that existing cryptocurrencies at the time, such as Bitcoin, had overly grandiose goals to "change the world," and launched Dogecoin as a fun, community-driven, and lighthearted alternative. Dogecoin emphasized ease of use and a sense of humor. The project adopted a popular internet meme – a photograph of a Shiba Inu dog named Kabosu, which was the "top meme" for 2013 according to an online meme ranking system called "Know Your Meme" – as its brand image and mascot, and chose the name "Dogecoin" in reference to the dog as a way of emphasizing the fun and friendly aspects of the project. The use of an internet meme as inspiration for the project later caused users to refer to Dogecoin as a meme coin and sparked the creation of many competitor meme coins. Dogecoin quickly became popular following its launch, gaining adoption as a speculative investment and as a tool for tipping and small transactions. Dogecoin is optimized for speed, efficiency, and volume capability, and processes transaction in approximately one minute, as opposed to Bitcoin's 10-minute transaction processing time.

On February 27, 2025, the SEC's Division of Corporation Finance issued a *Staff Statement on Meme Coins* (the "**Meme Coin Statement**"). The Meme Coin Statement clarified whether that the agency believes that meme coins are not securities under U.S. federal securities laws as, among other reasons, they are akin to collectibles and lack utility. The SEC in the Meme Coin Statement noted that meme coins do not constitute any of the common financial instruments within the definition of a security under the Securities Act of 1933. Additionally, meme coins are not considered an investment contract because the offer and sale of meme coins does not involve an investment in an enterprise nor is it undertaken with a reasonable expectation of profits to be derived from the entrepreneurial or managerial efforts of others.

Risks specific to Dogecoin include the following:

- There is no limit to Dogecoin's supply, and although it has a diminished inflation rate because a fixed-rate of 5 billion Dogecoin are created every year, this will not change unless the block reward is adjusted or the network adopts an issuance cap;
- Like Bitcoin, Dogecoin is theoretically susceptible to a "51% attack" as it relies on miners who maintain the consensus in a decentralized computer network;
- Many Dogecoin participants engage in speculative trading;
- Dogecoin's origins as a "meme coin" and that many purchase them for social and entertainment value may contribute to the lack of serious and widespread adoption and use of the cryptocurrency; and
- Dogecoin's price is currently about $0.17 per token and last peaked in May 2021 at $0.64 per token and has not risen to $0.46 per token since November 2024.

XRP

XRP is a digital asset that was created by Chris Larsen, Jed McCaleb, Arthur Britto and David Schwartz (the "**XRP Creators**") in 2012 to address scalability concerns that the XRP creators believed were inherent in the structure of Bitcoin. The XRP Creators created XRP to increase speed, efficiency, and stability of payments. In addition, network transaction fees are substantially lower than Bitcoin, typically less than $0.01.

The total supply of XRP is limited, similar to bitcoin, with 100 billion tokens available, with a significant portion, approximately 55 billion tokens held in escrow by Ripple Labs, Inc. ("**Ripple**"), which was started by the XRP Creators to solve problems regarding payment processing. XRP is released programmatically to ensure liquidity and minimize market disruption.

The inclusion of XRP in our treasury strategy is subject to regulatory scrutiny. The SEC has previously initiated legal proceedings against Ripple alleging that XRP constitutes an unregistered security under the Securities Act of 1933, as amended. A federal court partially ruled on that case determining that XRP is not deemed a security in secondary transactions. In October 2024, the SEC appealed this decision. If
XRP is deemed a security, secondary transactions may be significantly impacted. Trading platforms that facilitate XRP transactions will need to register as national securities exchanges or operate as alternative trading systems to comply with the Exchange Act. As a result, many platforms may delist XRP in that event, which will reduce market liquidity and increase transaction costs. In addition, institutional participants might reduce trading activity due to increased regulatory scrutiny, which further affects liquidity.

The following is a summary of the risk factors associated with XRP:

- The centralization of power in Ripple in contrast to decentralized systems such as Bitcoin may lead to significant influence, control, and manipulation of the market;
- Regulatory uncertainty has contributed to XRP's volatility and hesitation regarding widespread adoption;
- XRP's dependence on Ripple's partnerships and success introduce risks that are not present
- Because Ripple is a payment processing company, XRP users are interested in payment solutions and may not hold XRP for the long term as they might with Bitcoin;
- A decision or other conclusion to the SEC's action against Ripple is imminent, and, if XRP is considered to be a security for the purposes of the Securities Act of 1933, the price of XRP may face a material adverse effect, will be subject to higher transaction and regulatory costs, and may face difficulties in obtaining widespread adoption.

Overall Strategy and Possible Other Currencies

In summary, the Company is actively engaging with the evolving landscape of cryptocurrencies, recognizing both their potential and inherent risks. By maintaining rigorous compliance with financial regulations and strategically diversifying its portfolio across Bitcoin, Solana, Dogecoin, and possible other currencies, the Company aims to capitalize on growth opportunities while safeguarding shareholder interests. As the market continues to develop, the Company remains committed to adapting its strategies to navigate the complexities and uncertainties of the cryptocurrency sector.

Product Development on Hold or Discontinued

In June 2023, the Company put R&D activities with Lucid-PSYCH on hold. While the Company did suspend clinical development of FSD-PEA, research and development activities for FSD-PEA were resumed in Q3 2024. For more information, please see "*Item 4. Information on the Company. – B. Business Overview – (iii) FSD-PEA and Lucid-PSYCH*".

Significant Operations and Principal Activities in Fiscal 2022 and Fiscal 2023

January 4, 2022: on December 21, 2021, the Board authorized a normal course issuer bid pursuant to which the Company was able to repurchase for cancellation up to 2,000,000 (on a pre-consolidation basis) Class B Subordinate Voting Shares, being approximately 5% of the Company's issued and outstanding Class B Subordinate Voting Shares as of December 21, 2021, over a 12-month period (the "**2022 NCIB**"). The 2022 NCIB commenced on January 4, 2022, and terminated on December 21, 2022. Under the 2022 NCIB, the Company repurchased for cancellation 1,999,800 (on a pre-consolidation basis) Class B Subordinate Voting Shares at an average price of approximately C$1.20 per Class B Subordinate Voting Share. All Class B Subordinate Voting Shares were repurchased through the facilities of the CSE at the prevailing market price on the CSE at the time of repurchase.

January 2022: Syneos filed an arbitration proceeding against the Company claiming that the Company owed Syneos US$3,915,388.69 in damages and interest on that amount for a failed Phase 2 FDA trial for FSD201. This matter has since concluded with the Corporation entering into the Syneos Settlement Agreement. For more information, see "*"Item 4B. – Significant Operations and Principal Activities in Fiscal 2022 and Fiscal 2023 – August 2, 2023".*

March 8, 2022: the Company cancelled 504,888 (on a pre-consolidation basis) Class B Subordinate Voting Shares previously issued to the Company's former CEO, Dr. Raza Bokhari. To cancel the shares previously issued to Dr. Raza Bokhari, the Company was forced to seek an order from the ONSC. In July 2021, the Board had terminated Dr. Bokhari from his position as CEO, and he filed an arbitration challenge in Ontario, Canada. An application seeking a Court order was filed by the Company on July 21, 2021. The hearing took place on December 20, 2021, and following an eight-day evidentiary hearing and years of litigation, the arbitrator ruled in favor of the Company, issuing three awards against Dr. Bokhari for damages, fees, and costs. For more information, see "*Item 8. Financial Statements – Legal Proceedings."*

April 15, 2022: the Company entered into a contract with Tekkfund Capital Corp ("**TCC**") for services to structure and assist with certain business development strategies (the "**TCC Agreement**"), pursuant to which the Company (i) paid TCC a monthly fee of C$12,500 plus HST; and (ii) issued, on a monthly basis, 7,000 (on a pre-consolidation basis) Class B Subordinate Voting Shares ("**TCC Consideration Shares**") to TCC for the duration of the TCC Agreement, in accordance with the terms of the TCC Agreement. As at the date of this Annual Report, the Company has discontinued its engagement with TCC.

May 5, 2022: the Delaware court dismissed a derivative claim that was filed by Mr. Maheep Goyal, a shareholder of the Company, on July 20, 2021, against the Company and its directors and officers. In its decision, the court dismissed the claim without prejudice on the grounds that Mr. Maheep Goyal lacked standing to bring his claims. For more information, see "*Item 8. Financial Statements – Legal Proceedings."*

May 6, 2022: the Company decided to focus its efforts and resources on the pharmaceutical business and initiated the process to exit the medical cannabis industry. In connection with that decision, the Company sold its FV Pharma facility located at 520 William Street, Cobourg, Ontario, K9A 3A5 (and the 64-acre property on which the facility was located on) for total consideration of C$16,400,000. The sale included a 26.1-hectacre parcel of land and 50,800 square-meter building, which the Company acquired in November 2017. The Company recognized a gain of C$4,249,582 on the sale and incurred selling expenses of C$616,002.

May 13, 2022: FSD Strategic Investments, a wholly-owned subsidiary of the Company, was incorporated. FSD Strategic Investments is focused on generating returns and cashflow through the issuance of loans secured by residential property. For more information on the FSD Strategic Investments, please see "*Item 4B. – Business Overview – (2)(i) FSD Strategic Investments".*

May 16, 2022: the Company adopted an equity incentive plan (the "**Equity Incentive Plan**"), pursuant to which it may grant Class B Subordinate Voting Shares, restricted share units, performance share units ("**PSUs**") and Options to its directors, officers, employees and service-providers. The Equity Incentive Plan provides that the maximum number of Class B Subordinate Voting Shares that may be issued pursuant to the Equity Incentive Plan, together with all other security-based compensation arrangements of the Company, cannot exceed 10% of the issued and outstanding Class B Subordinate Voting Shares. The Company also granted an aggregate of 2,820,104 (on a pre-consolidation basis) PSUs to its directors and officers.

September 29, 2022: the Company received a written notification (the "**September 2022 Nasdaq Notification Letter**") from Nasdaq that the Company was not in compliance with the minimum bid price requirement set forth in Nasdaq's rules for continued listing on the Nasdaq. The September 2022 Nasdaq Notification Letter was a deficiency notice, not a delisting notice, and did not affect the trading of Class B Subordinating Voting Shares. Nasdaq listing rule 5550(a)(2) requires securities listed on the Nasdaq to maintain a minimum bid price of US$1.00 per share, and Nasdaq listing rule 5810(c)(3)(A) provides that a failure to meet the minimum bid price requirement if the deficiency continues for a period of 30 consecutive business days. Based on the closing bid price of Class B Subordinate Voting Shares for the 30 consecutive business days from August 15, 2022, to September 26, 2022, the Company did not meet the minimum bid price requirement. The Company was given until March 23, 2023, to regain compliance by maintaining a closing bid price of at least $1.00 for 10 consecutive business days. The Company regained compliance on February 15, 2023.

November 9, 2022: the claim for USD $30.2 million brought by the Company's former CEO, Dr. Raza Bokhari, was dismissed in its entirety by Justice Cunningham in a merits award (the "**Merits Award**"). In the Merits Award, the Honourable J. Douglas Cunningham, K.C. ("**Justice Cunningham**") also held Dr. Bokhari responsible for the Company's costs of the arbitration. For an update on the status of our lawsuits with Dr. Raz Bokhari, please see "*Item 8. Financial Statements – Legal Proceedings*."

November 24, 2022: the Corporation incorporated a new Australian subsidiary, FSD Australia, to facilitate its development of Lucid-PSYCH and other assets. FSD Australia is formed under the laws of Australia. The registered and head office of FSD Australia is Level 7 330 Collins Street, Melbourne VIC, 3000. FSD Australia was established to facilitate the Corporation's development of Lucid-PSYCH by running Australian clinical trials in respect of Lucid-PSYCH, and potentially other assets. Subject to satisfaction of relevant eligibility criteria, FSD Australia may be entitled to claim the Australian R&D tax incentive for eligible expenditure it incurs on eligible R&D activities. For more information, see "*Item 6.C. Organization Structure*".

November 25, 2022: the Company appointed Dr. Lakshmi P. Kotra and Mr. Joseph L. Romano to its Board. As at the date of this Annual Report, Mr. Romano is no longer serving as a director on the Board.

January 12, 2023: the Board authorized a normal course issuer bid pursuant to which the Company was able to repurchase for cancellation up to 1,925,210 (on a pre-consolidation basis) Class B Subordinate Voting Shares, being approximately 5% of the Company's issued and outstanding Class B Subordinate Voting Shares as of January 12, 2023, over a 12-month period (the "**2023 NCIB**"). The 2023 NCIB commenced on January 18, 2023, and was terminated on January 12, 2024. Under the 2023 NCIB, the Company repurchased for cancellation 1,904,700 (on a pre-consolidation basis) Class B Subordinate Voting Shares at an average price of approximately C$2.11 per Class B Subordinate Voting Shares. All Class B Subordinate Voting Shares were repurchased through the facilities of the CSE at the prevailing market price on the CSE at the time of repurchase.

February 13, 2023: the Company issued warrants to purchase 500,000 (on a pre-consolidation basis) Class B Subordinate Voting Shares to Jason Gold and warrants to purchase 300,000 Class B Subordinate Voting Shares to Pillow Hog Ventures Inc. in exchange for consulting services provided to the Company. The warrants vested on issuance and expired on March 30, 2024.

February 13, 2023: the Company issued warrants to purchase 500,000 (on a pre-consolidation basis) Class B Subordinate Voting Shares to Zapability LLC in exchange for consulting services provided to the Company. Each tranche of warrants expires 12 months from the first day it vested, with the final tranche expiring on February 15, 2026. The warrants have an exercise price ranging from US$1.85 to US$8.00.

February 15, 2023: the Company regained compliance with Nasdaq's continued listing requirements after receiving the September 2022 Nasdaq Notification Letter. See "*Item 4B. – Significant Operations and Principal Activities in Fiscal 2022 and Fiscal 2023 – September 29, 2022*" above for more information.

February 27, 2023: the Company issued warrants to purchase 1,000,000 (on a pre-consolidation basis) Class B Subordinate Voting Shares to Kevin Harrington in exchange for consulting services provided to the Company. The warrants vested on issuance and expire on February 27, 2026, with an exercise price ranging from US$1.75 USD to US$8.00. Mr. Harrington was appointed to the Company's Advisory Board on March 1, 2023.

March 1, 2023: the Company appointed Kevin Harrington to the Advisory Board. Mr. Harrington has forty (40) years' experience in product introduction and direct marketing, being one of the first to market products through infomercials. A serial entrepreneur, Mr. Harrington appeared as one of the original panelists on the ABC television program, "*Shark Tank*."

March 24, 2023: the Company issued warrants to purchase 1,000,000 (on a pre-consolidation basis) Class B Subordinate Voting Shares to Gerard David in exchange for consulting services provided to the Company. The warrants vested on issuance and will expire on March 24, 2026, with an exercise price ranging from US$1.75 to US$8.00.

March 30, 2023: the Company appointed Gerry David to the Advisory Board. Mr. David is known for his five-year tenure as Chief Executive Officer at zero-calorie fitness drink maker Celsius Holdings, Inc. where he led efforts that increased global sales, attracted strategic investors and enhanced shareholder value significantly.

April 17, 2023: FSD Strategic Investments entered into a secured loan agreement with Mr. Saeed for C$1,200,000, with monthly payments of C$6,000 based on an annual interest rate of 6% and a blended rate of 7% (the "**CEO Mortgage Loan**"). The business purpose of the CEO Mortgage Loan was a treasury function to earn a rate of return on excess capital held. The CEO Mortgage Loan was repaid in full on March 4, 2025. For more information, see "*Item 7. Major Shareholders and Related Party Transactions - B. Related Party Transactions.*"

April 24, 2023: the Company filed a provisional patent application with USPTO with respect to the Company's alcohol misuse treatment technology, which was licensed to Celly Nu under the Celly Nu IP License Agreement for retail use.

May 1, 2023: GBB Drink Lab, Inc. ("**GBB**") had filed a complaint with the S.D. Fla., Fort Lauderdale Division against FSD Biosciences, Inc. and FSD Pharma, Inc. claiming a material breach of a mutual non-disclosure agreement and misappropriation of trade secrets, which GBB claims has and continues to cause irreparable harm, valued, as of August 30, 2022 (prior to the misappropriation and material breach) at $53,047,000. For more information about the Company's lawsuit with GBB, please see "*Item 8. Financial Statements – Legal Proceedings*."

May 6, 2023: Justice Cunningham ruled in favor of the Company, awarding the Company approximately C$2.81 million in costs of arbitration in the arbitration between the Company and its former CEO, Dr. Raza Bokhari (the "**Cost Award**"). The Costs Award particularizes the amount of the Company's costs entitlement. The total costs awarded to the Company in the Costs Award are comprised of legal fees of C$1,981,462.91, disbursements of C$509,005.33 and HST of C$323,760.91, for a total of C$2,814,229.15. For more information about the Company's lawsuits with Dr. Raz Bokhari, please see "*Item 8. Financial Statements – Legal Proceedings*."

May 10, 2023: the Company announced the completion of dosing the first cohort of patients in the Phase 1 clinical trial of Lucid-MS. For more information about Lucid-MS Clinical Trials, please see "*Item 4B. – Business Overview – (ii) Lucid-MS".*

May 25, 2023: the Company appointed Dr. Eric Hoskings to the Company's Board. Effective at the same time was the resignation of Donal Carroll from the Board.

June 2, 2023: the Corporation terminated any further clinical development of FSD-PEA and put on hold further clinical development of Lucid-PSYCH. Clinical development of FSD-PEA has since resumed. For more information, please see "*Item 4. Information on the Company – B. Business Overview – (iii) FSD-PEA and Lucid-PSYCH*".

June 23, 2023: the Corporation filed a motion to dismiss the complaint GBB had filed against the Corporation. For more information about the Company's lawsuit with GBB, please see "*Item 8. Financial Statements – Legal Proceedings*."

June 29, 2023: at the annual general and special meeting of the Shareholders, Messrs. Michael Zapolin and Dr. Eric Hoskins were elected as directors of the Company.

July 4, 2023: the Company announced the appointment of Mr. Zeeshan Saeed as CEO of the Company, to succeed Mr. Anthony Durkacz, who served as interim CEO of the Company since July 2021.
July 10, 2023: the Corporation received a "no objection letter" for a Phase 1 Lucid-MS clinical trial for the submission Clinical Trail Application, which was acknowledged on June 12, 2023. For more information about Lucid-MS Clinical Trials, please see "*Item 4B. – Business Overview – (ii) Lucid-MS".*

July 10, 2023: the Corporation announced that it had retained Christian Attar Law, a regional litigation firm located in Houston, Texas, to co-lead, along with New York City law firm, Warshaw Burstein, LLP, an investigation of any potential naked short selling or other market manipulation of the Corporation's securities. For more information about the Company's lawsuit against CIBC World Markets, RCB Dominion Securities, and John Does 1-10 please see "*Item 8. Financial Statements – Legal Proceedings*."

July 19, 2023: the Corporation submitted a request for pre-IND meeting to the FDA, which was acknowledged August 3, 2023, and a response was received on September 21, 2023. For more information about Lucid-MS Clinical Trials, please see "*Item 4B. – Business Overview – (ii) Lucid-MS".*

July 31, 2023: the Company entered the Celly Nu IP License Agreement and related documents, which were subsequently amended. Pursuant to the Celly Nu IP License Agreement, Celly Nu gained access to proprietary information for the purposes of consumer product development and marketing and was granted the right to a proprietary formulation of natural ingredients, vitamins, and minerals to help with liver and brain function for the purposes of potentially quickly relieving from the effects of alcohol consumption, such as inebriation, and restoring normal lifestyle, and was granted the right to certain trademarks (collectively, the "**Licensed IP**"). The Celly Nu IP License Agreement provided Celly Nu with exclusive global rights to commercialize recreational applications for the Company's alcohol misuse technology worldwide. In exchange, the Company received 200,000,000 common shares in the capital of Celly Nu ("**Celly Nu Shares**") following a 2:1 share-split of Celly Nu. The Company also received an anti-dilution warrant certificate ("**Celly Warrant Certificate**") that entitles it to purchase up to 25% of the Celly Nu Shares deemed outstanding less the 200,000,000 Celly Nu Shares issued under the Celly Nu IP License Agreement and from time to time as a result of any partial exercise under the anti-dilution Celly Warrant Certificate. The Company is also entitled to certain license fees and royalties under the Celly Nu IP License Agreement. Through the Celly Nu IP License Agreement, the Company acquired 34.66% of Celly Nu as of July 31, 2024 (which has decreased to 26.15% as of December 31, 2024). The Company retained all rights to medical and pharmaceutical applications of the Licensed IP to further develop this business as part of its portfolio.

- As part of the Celly Nu IP License Agreement, the Company and Celly Nu entered into a loan agreement for gross proceeds of C$1,000,000 (the "**Celly Nu Loan**"), which was funded on August 1, 2023. Pursuant to the terms of the Celly Nu Loan, the loan was secured by all of Celly Nu's assets and accrues interest at a rate of 10% per annum and matures on July 31, 2026, pursuant to a general security agreement dated July 31, 2023. On April 8, 2024, the Company and Celly Nu amended the Celly Nu Loan such that the interest payment due on the first annual anniversary of the Celly Nu Loan was deferred to the second annual anniversary of the Celly Nu Loan, increased the Celly Nu Loan by C$300,000 to C$1,300,000, and provided the Company with the option to convert any amounts outstanding (inclusive of interest) into Celly Nu Shares upon the occurrence of an event of default pursuant to the Loan Amending Agreement dated as of April 3, 2024, with an effective date of March 31, 2024 (the "**Celly Nu Amended Loan Agreement**"). The Company also entered into an amended and restated general security agreement (the "**Celly Nu Amended Security Agreement**") with Celly Nu in connection with the Celly Nu Amended Loan Agreement.

August 2, 2023: the Corporation entered into a settlement agreement (the "**Syneos Settlement Agreement**") with Syneos Health, LLC and Syneos Health UK Limited (collectively, the "**Syneos**"), whereby the Corporation paid Syneos US$100,000 within five days of the execution of the Settlement Agreement and upon receipt by Syneos of such settlement payment, Syneos shall waive, release and forgive the Corporation's payment of (i) the different between the settlement payment and the damages payment (i.e. US$1,607,831) and (ii) interest on the damages payment ordered by the award, and any other amounts that were or could have been sought in the arbitration. Pursuant to the Syneos Settlement Agreement, Syneos also agreed to withdraw its recognition application that was filed on June 30, 2023. Payment was made by the Corporation on August 4, 2023, and pursuant to the terms of the Settlement Agreement, the matter was concluded in its entirety.

October 4, 2023: the ONSC dismissed the motion to set aside the arbitration award to the Company filed by Dr. Raza Bokhari. For more information about the Company's lawsuits with Dr. Raz Bokhari, please see "*Item 8. Financial Statements – Legal Proceedings*."

October 4, 2023: the Corporation entered into a definitive arrangement agreement with Celly Nu dated October 4, 2023 (the "**Celly Nu Arrangement Agreement**") with respect to the distribution of a portion of the Corporation's shareholdings of Celly Nu to the FSD Pharma Securityholders (as defined herein).

- Pursuant to the Celly Nu Arrangement Agreement, FSD Pharma Securityholders passed a special resolution at the special meeting of Shareholders held on November 20, 2023 to approve a statutory plan of arrangement under section 182 of the OBCA (the "**Plan of Arrangement**"), which involved (i) an amendment to the capital structure of the Corporation (the "**Share Capital Amendment**"); and (ii) the distribution of a portion of the Celly Nu Shares to the holders of the Class B Subordinate Voting Shares, Class A Multiple Voting Shares and outstanding warrants exercisable for the purchase of Class B Subordinate Voting Shares, provided the applicable warrant certificate entitles the holder thereof to receive distributions substantially similar to those received by the holders of Class B Subordinate Voting Shares ("**FSD Pharma Distribution Warrants**" and together with Class A Multiple Voting Shares and Class B Subordinate Voting Shares, the "**FSD Pharma Securities**"). The Shareholders and the holders of FSD Pharma Distribution Warrants (collectively, the "**FSD Pharma Securityholders**") received one Celly Nu Share for each Class A Multiple Voting Share, Class B Subordinate Voting Share or FSD Pharma Distribution Warrant held.

November 24, 2023: the Corporation received a final order from the Ontario Superior Court ("**ONSC**") approving the Plan of Arrangement. The record date of the Plan of Arrangement was set at November 28, 2023, and the ex-dividend date was set at November 27, 2023.

November 29, 2023: the Corporation completed the Plan of Arrangement. Holders of FSD Pharma Securities received one Celly Nu Share for each Class A Multiple Voting Share, Class B Subordinate Voting Share, or FSD Pharma Distribution Warrant held. FSD Pharma Securityholders also received new Class A Multiple Voting Shares, new Class B Subordinate Voting Shares, and new FSD Pharma Distribution Warrants ("**New FSD Pharma Securities**") in exchange for their Class A Multiple Voting Shares, Class B Subordinate Voting Shares, and FSD Pharma Distribution Warrants (the "**Share Exchange**"). Pursuant to the Share Exchange and in accordance with the terms of the Celly Nu Arrangement Agreement, 24 (on a pre-consolidation basis) Class A Multiple Voting Shares were exchanged to 24 (on a pre-consolidation basis) new Class B Subordinate Voting Shares. Following the closing of the Plan of Arrangement, the Corporation had 48 new Class A Multiple Voting Shares, 39,376,723 (on a pre-consolidation basis) new Class B Subordinate Voting Shares, and 6,335,758 (on a pre-consolidation basis) new FSD Pharma Distribution Warrants issued and outstanding. Further details regarding the Plan of Arrangement are described in the management information circular dated October 20, 2023 (the "**October 2023 Circular**"), the supplement to the October 2023 Circular filed November 15, 2023, and the Celly Nu Arrangement Agreement, each of which is available under the Corporation's profile on SEDAR+ and EDGAR.

- All Celly Nu Shares distributed to FSD Pharma Securityholders pursuant to the Plan of Arrangement were subject to restrictions on resale, and were not transferrable until May 31, 2024, provided that, Celly Nu may, in its sole discretion, waive such restrictions, in whole or in part.
- The Plan of Arrangement resulted in an aggregate of 45,712,529 Celly Nu Shares being distributed to the FSD Pharma Securityholders and an aggregate of 154,287,471 Celly Nu Shares were retained by the Corporation, which represented approximately 26.15% of the issued and outstanding Celly Nu Shares on a non-diluted basis.
- The Plan of Arrangement was considered a "business combination" pursuant to Multilateral Instrument 61-101 – *Protection of Minority Security Holders in Special Transactions* ("**MI 61-101**") since (i) the FSD Pharma Securityholders' interest in the FSD Pharma Securities may have been terminated without their consent as a result of the Share Capital Amendment; and (ii) Michael (Zappy) Zapolin, a director of the Corporation and therefore a "related party" under MI 61-101, was party to a "connected transaction" to the Plan of Arrangement. The Plan of Arrangement and subscription by Mr. Zapolin for 28,800,000 Celly Nu Shares on August 1, 2023, were a "connected transaction" (the "**Related Party Purchase**"). Both transactions involved Celly Nu as a common party and the Plan of Arrangement and Related Party Purchase were arguably negotiated at approximately the same time. At the time, Mr. Zapolin owned, directly or indirectly, nil Class B Subordinate Voting Shares, nil Class A Multiple Voting Shares, nil FSD Pharma Distribution Warrants, and 500,000 warrants, each exercisable for the purchase of one Class B Subordinate Voting Share. Any FSD Pharma Securities held by Mr. Zapolin were treated in the same fashion under the Plan of Arrangement as the FSD Pharma Securities held by every other FSD Pharma Securityholder. The Plan of Arrangement was not a "related party transaction" pursuant to MI 61-101 as a result of it being a "business combination" pursuant to MI 61-101. The Plan of Arrangement did not have a material impact or represent a material change on the Corporation's financial performance and condition.

December 4, 2023: the Corporation closed a non-brokered private placement of Class A Multiple Voting Shares for gross aggregate proceeds of C$45.60 through the issuance of 24 (on a pre-consolidation basis) Class A Multiple Voting Shares at a price of C$1.90 per Class A Multiple Voting Share (the " **December 2023 Class A Multiple Voting Share Private Placement**"). The Corporation used the proceeds of the December 2023 Private Placement for general working capital purposes. The participation by such insiders is considered a "related-party transaction" within the meaning of MI 61-101. For more information, see "*Item 7. Major Shareholders and Related Party Transactions - B. Related Party Transactions.*"

December 22, 2023: In order to replace its prior base shelf prospectus that expired, effective December 22, 2023, the Company filed and obtained a receipt for its final short form base shelf prospectus dated December 22, 2023 (the "**December 2023 Canadian Prospectus**", and together with the January 2024 Registration Statement, the "**December 2023 Prospectuses**") to provide the Company with the flexibility to take advantage of financing opportunities and favourable market conditions, if and when needed, during the 25-month period that the Prospectus remains effective (the "**December 2023 Canadian Prospectus Effective Period**"). The December 2023 Canadian Prospectus has been filed in each of the provinces and territories in Canada. The December 2023 Canadian Prospectus enables the Company to offer, issue and sell, from time to time: Class B Subordinate Voting Shares, subscription receipts, warrants and units, or any combination thereof (collectively, the " **Prospectus Securities**") for up to an aggregate offering amount of US$50,000,000, in one or more transactions during the December 2023 Canadian Prospectus Effective Period. Should the Company decide to offer Securities during the December 2023 Canadian Prospectus Effective Period, the specific terms, including the use of proceeds from any offering of Securities, will be set forth in one or more related prospectus supplements to the December 2023 Canadian Prospectus. Effective December 22, 2023, the Company also filed the January 2024 Registration Statement. For more information, see "*Item 4A. History and Development of the Company – Important Events in the Development of the Company's Business in Fiscal 2024 to the date of this Annual Report – January 4, 2024*".

Milestones for Future Development

In light of the above, the Company has determined that it will prioritize the development of its viable assets, utilizing the limited in-house resources available, to maximize the chances of their successful commercialization. Therefore, the Company resolves to push forward with the development of (i) Lucid-MS, (ii) the Healthcare Product, and (iii) its license of unbuzzd™ to Celly Nu and Celly U.S.. As previously discussed, the Company has decided to pause the development of Lucid-PSYCH.

The Company's adaptable trial planning integrates insights from clinical and non-clinical studies, regulatory guidance, and market dynamics. Our adjusted timelines, especially in 2025, are influenced by key market regulations, ensuring efficiency and cost-effectiveness across chemistry, product development, and data acquisition.

The Company's overarching strategy allows it to conduct studies efficiently in terms of time and cost, considering that toxicology and clinical studies can span several months to several years. It also provides flexibility to adjust or explore alternative pathways cost-effectively in case of unexpected toxicities or efficacy issues.

The table below sets forth the status of these milestones as of the date of this Annual Report, the estimated costs and estimated timeframe for completion thereof. The following are "forward-looking statements" and as such, there is no guarantee that such milestones will be achieved on the timelines indicated or at all. Forward-looking statements are based on management's current expectations and are subject to a number of risks, uncertainties, and assumptions. See "*Caution Regarding Forward-Looking Statements*" and "Item 3. Key information - D. Risk Factors" on the Company's ability to achieve certain of its objectives and milestones, which are contingent upon raising additional financing.

Objective	Milestone[(1)(2)]	Estimated Cost 2023 (USD)	Estimated Cost 2024 (USD)	Estimated Timeframe for Completion[(3)(4)]	Notes
1. MAD Cohorts					
	Regulatory Agency Approval	601,742.00	-	Completed	The timeframes for the MAD study were updated based on timeframes given to us by the Australian CRO, Ingenu
	Site Pass Through Costs	730,413.00	730,413.00	Started in Q2 2024 - expected to end in Q2 2025	
	First Participants In	376,012.00	-	Completed	
	Last Participant In	376,012.00	376,012.00	Q2 2025	
	Completion of Report	150,282.00	150,282.00	Q3 2025	
	Sub-total	***2,234,461.00***	***1,256,707.00***		
2. Chronic Toxicity to initiate phase-2 (3-month study)					
	Study design for 2-species toxicity trial	37,158.00	90,000.00	Q2 2025	The changes in total cost and milestones for 3 month toxicity studies are related to finalizing agreement with vendors for the studies. The differences in timeframes for these studes are on new estimates from the CRO. Second interim report was not needed anymore as part of the agreements reached.
	First interim report	260,107.00	261,410.00	Q2 2025	
	Second interim report	260,107.00	-		
	Final Report	185,791.00	338,390.00	Q4 2025	
	Sub-total	***743,163.00***	**689,800.00**		

3. Lucid-MS Program					
Non-clinical studies	Phase 2 enabling pharmacology studies	111,474.00	111,474.00	Q1-Q3 2025	These non-clinical studies will be launched a few months ahead of Phase-2 studies such that continuous safety data from the non-clinical studies will advance Phase-2 dosing for chronic treatment. Reproductive toxicology and autoradiography will be required for an NDA or for Phase 3 trial application submission.
	Chronic tox studies to complete phase-2 (2 species up to 9 months)	1,168,582.00	1,217,000.00	Q3 2026	
	Reproductive toxicology and autoradiography	1,857,907.00	1,857,907.00	Q4 2027	
Drug Substance and Product Manufacturing	Synthesis of non-GMP drug substance for chronic toxicology studies	779,500.00	819,100.00	Q2 2025	Proposed timeline of Q1 2025 is required to obtain the drug substance in time for toxicology studies (3 months and 9 months). The changes in total cost for non-GMP synthesis is related to finalizing agreement with vendor for this project. Synthesis of non-GMP product was completed so that chronic toxicity studies could commence.
	Development of clinical Formulations	334,423.00	334,423.00	Q2-Q3 2025	This development is required for launching Phase-2 clinical studies; thus the time frame is adjusted to fit those milestones.
	Drug Substance for Phase 2 studies	1,114,744.00	1,800,000.00	Q2-Q3 2025	Manufacturing of the drug substance for launching Phase-2 study; time frame aligns with two quarters prior to the initiation of any Phase-2 activity.Manufacturing of the drug substance for launching Phase-2 study; time frame aligns with one quarter prior to the initiation of any Phase-2 activity. The costs are based on newer estimates that were received.
	Drug Product for Phase 2 studies	445,898.00	1,345,898.00	Q2 2025 - Q2 2027	
Clinical Studies	Phase 2 clinical trial sites and CRO identification and deposits	966,112.00	966,112.00	Q3-Q4 2025	The time frame includes submission of regulatory files discussions and approvals from the regulator identification of potential clinical sites and contracts negotiations. The time frame is scheduled after completing 3-month chronic toxicology development of clinical formulation and other Phase-2 enabling studies. The title for this trial was reworded for clarity compared to 2023 annual report.
	Phase 2a proof of concept (“PoC”) clinical trial (launch biomarkers labs clinical site regulatory and other activities)	4,458,977.00	4,458,977.00	Q1 2026-Q2 2027	This time frame is after the above line item to conduct the clinical trial.
	Phase-2b clinical trial (launch biomarkers biostats labs clinical sites regulatory and other activities)	14,863,258.00	14,863,258.00	Q3 2027-Q4 2028	Will be initiated after Phase 2a PoC or can be in place of Phase 2a PoC depending on market/regulatory strategy
Regulatory licensing and other support costs	US FDA/Health Canada/UK MHRA regulatory activities patents maintenance/new filings patent licensing costs.	3,715,815.00	3,715,815.00	Q4 2024-Q4 2028	These are continuous activities for patents maintenance licensing costs (to UHN) regulatory filings for early market access among others. Milestones will be based on each activity undertaken and success of regulatory reviews. Each major milestone calls for a milestone payment to UHN.
	Sub-total	***29,816,690.00***	**31,489,964.00**		

4. Alcohol Misuse Treatments Program: Healthcare Product					
Non-clinical activities	*In vitro* and *in vivo* toxicology studies and dose range for the oral liquid formulation	743,163.00	743,163.00	Q4 2025-Q3 2026	These non-clinical activities will be undertaken as a part of our R&D program for new formulations in late 2025 that will serve the development of hospital and consumer products.
	In vitro and *in vivo* toxicology studies and dose range for the intravenous formulation	2,229,489.00	2,229,489.00	Q3-Q4 2026	These studies are aligned with the above line item for hospital product development.
Drug Substance and Product Manufacturing	Oral liquid formulation development	743,163.00	743,163.00	Q2-Q4 2026	GMP R&D manufacturing of oral liquid formulation for hospital line product; aligned with completion of non-clinical activities above.
	Intravenous formulation development	1,114,744.00	1,114,744.00	Q3 2026-Q2 2027	GMP R&D manufacturing of intravenous formulation for hospital line product; aligned with completion of non-clinical activities above and after the oral formulation development in the above line item.
	Oral liquid formulation manufacturing for clinical study	371,581.00	371,581.00	Q1-Q3 2027	Manufacturing of clinical trial material (liquid oral) will commence after R&D
	GMP Sterile formulation manufacturing for clinical studies	1,114,744.00	1,114,744.00	Q3 2027-Q1 2028	Manufacturing of clinical trial material (intravenous) will commence after R&D
Clinical Studies	Clinical study with one oral formulation	1,114,744.00	1,114,744.00	Q1 2027-Q4 2027	Clinical study using novel oral formulation is scheduled after the completion of toxicology and clinical trial materials manufacturing.
	Clinical study with one intravenous formulation for regulatory submission	1,857,907.00	1,857,907.00	Q2 2028-Q1 2029	Clinical study using novel intravenous formulation is scheduled after the completion of toxicology and intravenous clinical trial materials manufacturing.
Regulatory IP and other support costs	Regulatory activities and submissions in the USA and Canada	222,949.00	222,949.00	Q2 2025-Q2 2029	These are continuous activities for patents maintenance licensing regulatory filings for market access among others. Milestones will be based on each activity undertaken and success of regulatory reviews.
Marketing and related activities	Medical education pre-launch and partnership activities	1,486,326.00	1,486,326.00	Q4 2027-Q3 2029	As the clinical studies commence marketing outreach and partnership activities will be undertaken; the time frame is based on the clinical studies scheduling above and the anticipated prior work for late-stage marketing and potential pre-launch for the products.
	Sub-total	**10,998,810.00**	**10,998,810.00**		

5. FSD201 (ultramicronized palmitoylethanolamide) Program in Mast Cell Activation Syndrome (MCAS)					
Drug Product	Drug substance and Product Manufacturing	-	28,549.00	Q2 2025	Proposed timeline is necessary to submit trial for regulatory agency approval Q3 2025
Clinical Study	Regulatory Agency Approval	-	1,604,296.00	Q3 2025	These are milestones steps for completion of the Phase 2 trial of FSD201(ultramicronized palmitoyl ethanolamide) in MCAS.
	Site Pass Through Costs	-	1,701,452.00	Q32025-Q1 2027	
	First Participants In	-	802,463.00	Q4 2025	
	Last Participant In	-	2,407,388.00	Q4 2026	
	Completion of Report	-	534,975.00	Q2 2027	
	Addition of non-Australian sites	-	5,283,556.00	Q4 2026	If sites in Australia are not able to recruit necessary number of MCAS patients additional sites (Malaysia United Kingdom Ireland or USA) may be activated with estimated additional costs.
	Sub-total	**-**	**12,362,679.00**		
Operations	Team members salaries benefits external consultants and key opinion leaders	-	4,087,396.00	Started in Q4 2024 - expected to continue until Q2 2029	These costs include additional personnel will be required for all planned clinical drug development toxicology project management and regulatory affairs for all programs.
	Information technology legal telecommunications facilities infrastructure travel shipping/logistics	-	2,229,489.00	Started in Q4 2024 - expected to continue until Q2 2029	Planned programs will incur indirect costs in order to support the R&D and clinical activities.
	Sub-total	**-**	**6,316,885.00**		

Notes:

(1) There may be circumstances where, for sound business reasons, the Company's reallocates the funds or determines not to proceed with a milestone.

(2) Subject to receipt of all necessary approvals, including any approvals required by the academic and scientific organizations with which the Company is working.

(3) The total expenditure may be incurred by the Company after the relevant quarter that is indicated as the target timeframe for completion.

(4) Based on a calendar year end.

The materials factors or assumptions used to develop the estimated costs disclosed above are included in the "*Cautionary Note Regarding Forward-Looking Statements*" section above. The actual amount that the Company spends in connection with each of the intended milestones will depend on several factors, including those listed under "*Item 3. Key information - D. Risk Factors*" in or incorporated by reference in this Annual Report or unforeseen events. While the Company believes it has the skills and resources necessary to accomplish these business objectives, there is no guarantee that the Company will be able to do so within the timeframes indicated above, or at all. The Company will rely on third-party opinions evaluating novelty and patentability of its drug compounds, as well as data generated by tests performed by third parties indicating there is preclinical evidence of improved efficacy or safety profiles compared to currently known treatments for challenging neurodegenerative, inflammatory, and metabolic disorders based on scientifically sound preclinical studies. These tests are ongoing. While the Company believes its approach mitigates many risks associated with the challenges of obtaining regulatory approval for certain difficult to treat indications, the development of potential drugs for treatment of challenging neurodegenerative, inflammatory, and metabolic disorders involves a high degree of risk and uncertainty. The Company is committed to funding research it believes is essential for advancing the study of drugs to treat these conditions.

Research and Development

As at the date of this Annual Report, the Corporation has not generated any revenue from the sale of pharmaceutical drugs or other products. The Corporation is focused on development of pharmaceutical drugs and other products, through the R&D of novel chemical compounds and delivery mechanisms and the study of such compounds in preclinical studies. The Corporation's preclinical studies are conducted via the various CROs and contract manufacturers it has engaged, including Ingenu, BioPharma Services Inc. ("**BioPharma**"), and Vibrant Pharma Inc. ("**Vibrant Pharma**"). Each of Ingenu, BioPharma, and Vibrant Pharma are CROs that, in the ordinary course of the Corporation's business, have entered into service agreements with the Corporation to provide services related to the Corporation's preclinical studies and/or the manufacture of its various chemical compounds. The Corporation is not dependent on third party contracts. Although each of the CROs will be involved in the synthesis, or testing thereof, for the Corporation, none of these agreements allows for the various CROs to utilize any of the Corporation's intellectual property, including its patents, formulae, trade secrets, or processes, for their own purposes. The pharmaceutical industry is a competitive and, in the event that one, or all, of these contractual relationships become unsatisfactory, the Corporation does not anticipate having difficulty retaining other services providers to perform similar services. The Corporation does not anticipate generating any revenue from any of these, or any other, service agreements.

The Corporation anticipates growing its pipeline of pharmaceutical drugs and other products through its research, development, proprietary discovery programs, mergers and acquisitions, joint ventures and collaborative development agreements. The Corporation has sought protection for the intellectual property rights generated by its R&D activities through patent applications and as trade secrets. The Corporation anticipates that as these programs mature it will file additional patent applications and details about these programs will be disclosed at such time. The Corporation further anticipates that existing patent applications will result in successful patent grants by the respective intellectual property regulators of each jurisdiction in which the Corporation has submitted such applications.

The Corporation's R&D activities (including such activities conducted by third party contractors) are conducted in strict compliance with the regulations of federal, state, local and regulatory agencies in Canada, Australia and the United States. These regulatory authorities regulate, among other things, the research, manufacture, promotion and distribution of drugs in specific jurisdictions under applicable laws and regulations.

See "*Item 4. Information on the Company. – B. Business Overview - Milestones for Future Development*" for further information on the Corporation's objectives and milestones.

Intellectual Property

The following tables set forth the status for each patent applicable to the Company's current and anticipated business and activities of Lucid-MS, Celly Nu and Celly U.S.:

Title	Jurisdiction of Filing	Patent/Application Number	Filing Date/Patent Date/Priority Date	Status	Program
Inhibitors of PAD Enzymes and Uses Thereof	United States Patent and Trademark Office	Appl. No.: 15/753,208 Patent No.: US10,716,791 B2	Filing Date: 2016-08-15 Patent Date: 2020-07-21	Exclusive license from University Health Network (Toronto)	Lucid-MS
Inhibitors of PAD Enzymes and Uses Thereof	European Patent Office	Appl. No.: 22187901.8	Filing Date: 2016-08-15 Priority Date: 2016-08-15	Exclusive license from University Health Network (Toronto)	Lucid-MS
Methods and Compositions Comprising a 5-HT Receptor Antagonist	United States Patent and Trademark Office	Appl. No.: 63/454,587	Filing Date: 2023-03-24	Provisional patent application (PAT 114860P-2)	Lucid-PSYCH(1)
Ingestible Formulations Comprising Methylliberine and One or More Sugars and Their Use to Treat the Adverse Effects of Alcohol Consumption	International Patent Application	Appl. No.: PCT/IB2024/053952	Priority Date: 2023-04-24 International Filing Date: 2024-04-23	International Patent Application	Lucid-MS (health care) Celly Nu and Celly U.S. licensed for recreational use
Peptidyl Arginine Deiminase (PAD) Inhibitors and Methods of Using the Same	International Patent Application	Appl. No.: PCT/IB2024/059257	Priority Date: 2023-10-02 International Filing Date: 2024-09-23	International Patent Application	Lucid-MS

Note:
(1) The Company has put any future work programs relating to Lucid-PSYCH on hold.

As the Company generates new data, it will continue to file or acquire additional patent applications through the Company's development program.

The Company's wholly owned subsidiary, Lucid, has filed pending applications for the trademarks set forth in the table below with the Innovation, Science and Economic Development Canada – CIPO:

Applicant	Filing Date	Reference Number	File Number	Trademark Details	Trademark Type
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150984-1	2243755	REKVRY	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150985-1	2243758	DETOXIQ	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150986-1	2243760	RESOBER	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150958-1	2243743	ALCOHOLDEATH(1)	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150959-1	2243741	DRUNQUELL	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150957-1	2243742	FRESHKA	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150956-1	2243736	FRESHA	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150955-1	224374	ALKACLEAR	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150954-1	224379	LOWBAC	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150953-1	2243740	SOBRY	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150952-1	2243744	BACLEAR	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 15951-1	2243737	READY IN 1	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150950-1	2243735	QLARITY	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150949-1	2243738	WAKEAID	Standard Characters

Note:

(1) Licensed to Celly Nu and Celly US.

The Company's wholly owned subsidiary, Lucid, has filed pending trademark applications for the marks in the table below with the Innovation, Science and Economic Development Canada – CIPO:

Applicant	Filing Date	Reference Number	File Number	Trademark Details	Trademark Type
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150940-1	2243726	EVERYONE MAY NEED A LITTLE IN THEIR LIFE	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150825-1	2243752	THE RITUAL AFTER THE LAST CALL	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150824-1	2243750	THE PROTOCOL AFTER THE LAST CALL	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150823-1	2243749	HELPS REDUCE BUZZ	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150822-1	2243733	A RESPONSIBLE AFTER DRINK	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150821-1	2243732	THROUGH SCIENCE FIND	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150820-1	2243730	THROUGH SCIENCE, FIND CLARITY	Standard Characters
Lucid PsycheCeuticals Inc.	March 7, 2023	TM 150819-1	2243729	EVERYONE MAY NEED A LITTLE	Standard Characters

As the Company generates new data it will continue to file or acquire additional patent applications through the Company's development program.

Regulatory Environment

The Corporation is currently focused on obtaining regulatory approvals in the United States, Canada and Australia for the drug candidates it is developing, Lucid-MS, and its Alcohol Misuse Disorder Products. In the future, the Corporation may consider seeking approvals for these drug candidates in other countries. The following is a summary of the FDA, Health Canada and the Australian Therapeutics Goods Administration ("**TGA**") approval process that the Corporation and/or its related entities are undertaking with each of the Product Candidates in the United States, Canada and Australia. Assuming the Corporation is successful in obtaining the requisite approvals from the FDA, TGA or Health Canada (together the "**Regulatory Approvals**") pursuant to the process set out below, it may decide to seek comparable approvals in other countries, which would be subject to different and additional regulatory requirements. Obtaining Regulatory Approval often takes several years, involves the expenditure of substantial resources, and depends on a number of factors, including the severity of the disease in question, the availability of alternative treatments, and the risks and benefits demonstrated in clinical trials.

The Corporation will be subject to extensive regulations while it focuses on gaining Regulatory Approvals for treatments it is developing with each of the Product Candidates. The United States *Food, Drug and Cosmetic Act of 1938*, as amended, *Public Health Service Act* (United States), *Therapeutic Goods Act 1989* (Cth) (Australia), and other federal, provincial and state statutes and regulations, govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labelling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical product candidates for their respective jurisdictions. Failure to comply with applicable regulatory requirements may subject the Corporation to a variety of administrative or judicial sanctions, such as application refusals, warning or untitled letters, product candidate recalls, product candidate seizures, total or partial suspension of production or distribution, injunctions, fines, civil penalties and criminal prosecution.

Pharmaceutical product candidate development in the United States, Canada and Australia typically involves pre-clinical laboratory and animal tests, followed by a submission to commence clinical testing to, as applicable:

(a) the FDA for the United States (an IND);
(b) Health Canada for Canada (a CTA)); or
(c) in Australia, (i) where the Clinical Trial Notification ("**CTN**") process is utilized, to a Human Research Ethics Committee, or (ii) where the Australian CTA process is utilized, to the TGA.

If:

(a) there are no comments from the FDA within 30 days after the submission of the application in the United States;
(b) a "no objection letter" is received from Health Canada; or
(c) in Australia, (i) where the CTN process is utilized, the applicable Human Research Ethics Committee provides its approval and the TGA is notified by way of the due submission of a CTN, or (ii) where the Australian CTA process is utilized, the TGA provides its approval,

then clinical trials for the drug may commence in the respective jurisdiction assuming all other requirements are met (such as institution review board approval, informed consents and any additional approvals related to the use of controlled substances). The satisfaction of pre-market approval requirements typically takes many years. The actual time required may vary substantially based upon the type, complexity and novelty of the product candidate or the diseases a product candidate targets.

Before testing any compound in human patients in the U.S., Canada or Australia, a company must generate extensive preclinical data. Preclinical testing generally includes laboratory evaluation of product chemistry and formulation, as well as toxicological and pharmacological studies in several animal species to assess the toxicity and dosing of the product candidate and its potential safety and efficacy. The conduct of the pre-clinical tests must comply with government regulations and requirements, including good laboratory practices. For example, in the U.S., certain animal studies must be performed in compliance with the FDA's Good Laboratory Practice regulations and the U.S. Department of Agriculture's *Animal Welfare Act*.

A Regulatory Approval must be in effect before human clinical trials may commence in the U.S., Canada or Australia, respectively. The results of pre-clinical testing and any previous human experience with the investigational drug are submitted to the FDA, Health Canada or TGA as part of the Regulatory Approval process in each jurisdiction, along with other information, including information about product candidate chemistry, manufacturing and controls, information about the study investigator, and a proposed clinical trial protocol.

There can be regulatory barriers to obtaining an effective Regulatory Approval based on FDA's, Health Canada's or TGA's respective review of the investigative drug and, where applicable, its classification as a known controlled substance.

Clinical trials involve the administration of the product candidate that is the subject of the Regulatory Approval to healthy volunteers or study participants with the disease or condition being studied under the supervision of a qualified investigator. Clinical trials to support an NDA for marketing approval are typically conducted in three sequential phases, but the phases may overlap.

There is a process under which clinical trials may begin and involve the administration of the product candidate that is the subject of the Regulatory Approval to healthy volunteers or patients under the supervision of a qualified investigator. Clinical trials must be conducted: (i) in compliance with applicable government regulations, (ii) in compliance with Good Clinical Practice, an international standard meant to protect the rights and health of patients and to define the roles of clinical trial sponsors, administrators and monitors, and (iii) under protocols detailing the objectives of the trial, the parameters to be used in monitoring safety and the effectiveness criteria to be evaluated. Each protocol involving testing on patients and subsequent protocol amendments must be submitted to the FDA, Health Canada and/or TGA as part of the Regulatory Approval process, as applicable.

The FDA, Health Canada or TGA may order the temporary, or permanent, discontinuation of a clinical trial at any time or impose other sanctions if it believes that the clinical trial either is not being conducted in accordance with applicable regulatory requirements or presents an unacceptable risk to the clinical trial patients. The trial protocol and informed consent information for patients in clinical trials must also be submitted to an IRB for approval. An IRB may also require the clinical trial at the site to be halted, either temporarily or permanently, for failure to comply with the IRB's requirements or may impose other conditions.

If the trials for any of its Product Candidates are successful, the Corporation may pursue additional trials as required and may ultimately pursue an NDA, which may involve applying for additional Regulatory Approvals required to market the Corporation's synthetic treatments in the United States or in other jurisdictions. There is no assurance that the Corporation will be successful in receiving the required approvals, and the clinical trials are subject to numerous risks.

See *"Caution Regarding Forward-Looking Statements"* and *"Item 3. Key information - D. Risk Factors"* in this Annual Report.

New Drug Application and New Drug Submission Process

Assuming successful completion of all required testing in accordance with all applicable regulatory requirements, the results of product development, nonclinical studies and clinical trials are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. The application must include the results of all preclinical, clinical, and other testing and a compilation of data relating to the product's pharmacology and chemistry, manufacture, and controls. Under the Prescription Drug User Fee Act, a substantial application user fee is required for most NDAs, and the applicant under an approved NDA is also subject to an annual program fee for each prescription product.

After evaluating the NDA, the FDA issues either an approval letter or a complete response letter. A complete response letter generally outlines the deficiencies in the submission. Substantial additional testing or information may be required in order for the FDA to reconsider the application. If regulatory approval of a product is granted, such approval will be granted for particular indications and may entail limitations on the indicated uses for which such product may be marketed. Additionally, as a condition of approval, the FDA may impose restrictions that could affect the commercial success of a drug or require post-approval commitments, including the completion within a specified time period of additional clinical studies, which often are referred to as "Phase 4" or "post-marketing" studies. For example, as a condition of approval, the FDA may require a risk evaluation and mitigation strategy ("**REMS**") to help ensure that the benefits of the drug outweigh the potential risks. REMS can include medication guides, communication plans for healthcare professionals, and elements to assure safe use, such as special training or certification for prescribing or dispensing. Moreover, product approval may require substantial post-approval testing and surveillance to monitor the drug's safety or efficacy.

Once granted, product approvals may be withdrawn if compliance with regulatory standards is not maintained or problems are identified following initial marketing. Once an NDA is approved, a product will be subject to certain post-approval requirements, including, among other things, requirements related to record-keeping, providing the FDA with updated safety information, product sampling and distribution, and promotion and advertising. Post-approval modifications to the drug, such as changes in indications, labeling, or manufacturing processes or facilities, may require a sponsor to develop additional data or conduct additional preclinical studies or clinical trials, to be submitted in a new or supplemental NDA, which would require FDA approval.

Similarly, Health Canada and the TGA (in Australia) regulates, among other things, the research, development, testing, manufacture, packaging, storage, recordkeeping, labeling, advertising, promotion, distribution, post-approval monitoring, marketing and import and export of pharmaceutical products. Drug approval laws require licensing of manufacturing facilities, carefully controlled research and testing of products, and government review and approval of experimental results prior to giving approval to sell drug products.

The process required by the applicable regulatory authorities before prescription drug product candidates can be marketed in Canada or Australia requires:

(a) in the case of Canada, the submission of a new drug submission ("**NDS**") to Health Canada; or
(b) in the case of Australia, an application for registration in the Australian Register of Therapeutic Goods ("**ARTG**"), the NDS, and application for registration on the ARTG collectively referred to as "New Drug Application".

Health Canada and/or TGA, as the case may be, must review and approve the relevant "New Drug Application". Health Canada must also and issue a notice of compliance and both Health Canada and TGA must issue a drug identification number prior to any commercial marketing, sale, or shipment of the drug.

Even if Health Canada approves a NDS or TGA registers the drug on the ARTG, the relevant regulatory authority may limit the approved indications for use of the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms.

The regulatory review process of a drug application in each of the U.S., Canada and Australia includes the satisfactory completion of an inspection of the manufacturing facility or facilities where the product is produced (or other evidence acceptable to the regulator) to ensure that the facilities are in compliance with current GMP ("**cGMP**") requirements and are adequate to assure consistent production of the product within required specifications.

The FDA, Health Canada and TGA also conduct regular, periodic visits to re-inspect equipment, facilities, and processes following the initial approval of a product. Failure to comply with applicable cGMP requirements and other conditions of product approval may lead the regulatory authority to take enforcement action or seek sanctions, including fines, issuance of warning letters, civil penalties, injunctions, suspension of manufacturing operations, operating restrictions, withdrawal of approval, seizure or recall of products, and criminal prosecution.

Controlled Substances - United States

In June 2023, the Company decided to stop any development efforts for Lucid-PSYCH, which is considered a controlled-substance in the United States, Canada, and Australia. If and when the Company continues with the development of Lucid-PSYCH for psycho functions, it will need to comply with the controlled substances laws in various jurisdictions.

Drugs and other substances that are determined to have a potential for abuse are also regulated under the United States Comprehensive Drug Abuse Prevention and Control Act of 1970, as amended, also known as the Controlled Substances Act (the "**CSA**") and its implementing regulations, as "controlled substances." The CSA establishes a closed chain of distribution for entities handling controlled substances, which include researchers, manufacturers, distributors, pharmacies and physicians, importers, and exporters. The CSA and regulations enforced by the DEA impose registration, security, quotas inventory, recordkeeping, reporting, storage, manufacturing, distribution, importation, exportation, and other requirements on entities handling controlled substances. Practitioners such as pharmacies and physicians, as well as other types of entities that handle controlled substances, such as researchers and analytical laboratories, are also subject to DEA registration and other requirements related to controlled substances.

The CSA categorizes controlled substances into one of five schedules - Schedule I, II, III, IV, or V - depending on the potential for abuse and physical or psychological dependence. Schedule I substances by definition have a high potential for abuse, have no currently accepted medical use in treatment in the United States, and lack accepted safety for use under medical supervision. They may not be marketed or sold for dispensing to patients in the United States. Certain "hallucinogens" or psychedelic drugs are currently regulated as Schedule I controlled substances, as is any substance that includes any of a Schedule I substance's salts, isomers (e.g., optical, position, and geometric isomers), or salts of isomers, whenever the existence of such salts, isomers, and salts of isomers is possible within the specific chemical. Pharmaceutical products having a currently accepted medical use and that are otherwise approved for marketing may be listed as Schedule II, III, IV, or V substances, with Schedule II substances presenting the highest potential for abuse and physical or psychological dependence, and Schedule V substances presenting the lowest relative potential for abuse and dependence.

Whether a new drug or substance is ultimately controlled or not is a fact specific determination that the DEA makes based on the input of the Department of Health and Human Services (including the FDA), which provides scientific and medical findings and recommendations to the DEA. During the FDA approval process, the FDA will generally conduct an abuse potential evaluation of any substance that could have an effect on the central nervous system. If FDA finds that a new drug or substance may have an abuse potential that would require the drug to be controlled, FDA notifies the DEA and provides information/recommendation to the DEA on its scheduling. The DEA must conduct notice and comment rulemaking to propose scheduling of a new substance. If a drug being approved contains a substance already controlled under the CSA, that drug will generally be controlled in the same schedule absent findings or recommendations that it should be placed in another schedule.

Lucid-PSYCH is a Schedule I listed substance under the CSA. Its use in the United States is highly restricted under Federal law, even though there have been a few state and local laws seeking to loosen restrictions. A facility that seeks to manufacture, distribute, import, or export any Schedule I controlled substance must register with the DEA. The DEA registration is specific to the particular location, activity, and controlled substance. A DEA registered facility must maintain records documenting all activities, including the manufacture, receipt, and distribution, of controlled substances. The import or export of a Schedule I substance requires a permit and may need to comply with international drug control treaties as well as DEA requirements.

Any Schedule I drug or substance approved by the FDA must be rescheduled (or descheduled) to another schedule before it can be commercially marketed in the United States. Rescheduling or descheduling a Schedule I substance to another schedule is dependent on FDA approval and FDA recommendation as to the appropriate schedule. Any rescheduling or descheduling action requires the DEA to conduct notice and comment rulemaking. Such action will be subject to public comment and requests for hearing which could affect the scheduling of these substances.

Controlled Substances – Canada

A controlled substance is a type of drug that the Government of Canada has categorized as having a higher-than-average potential for abuse or addiction and is listed in one of the schedules (I to V) of the CDSA. Lucid-PSYCH is a controlled substance in Canada. The possession, sale or distribution of controlled substances is prohibited unless specifically permitted by the government.

Under section 56 of the CDSA the Minister of Health may exempt a person or a class of persons or any controlled substance or class thereof from the application of all or any provision of the CDSA or regulations if necessary for a medical or a scientific purpose or is otherwise in the public interest. Researchers requiring a controlled substance for research, including clinical trials, must receive an exemption under the CDSA, which can permit the importation, possession and/or use of a specified quantity of the controlled substance for a specified purpose. The Minister of Health can impose any terms and conditions that the Minister considers necessary in respect of the exemption. Through agreements with third parties, the Company has access to facilities that have experience and licenses required to handle Controlled Substances listed under the CDSA. Similar to the United States, in Canada certain scheduled substances would require reclassification to a different schedule in order to permit commercial marketing.

Controlled Substances – Australia

Like in the United States and Canada, a controlled drug is a type of drug that the Australian Government has categorized as having a higher-than-average potential for abuse or addiction and is listed in one of the schedules (1 to 10) of the Poisons Standard.

Substances with therapeutic uses are generally contained in Schedules 2, 3, 4 and 8 with progression through these Schedules signifying increasingly restrictive regulatory controls. Schedule 9 details substances that should be available only for teaching, training, medical or scientific research including clinical trials conducted with the approval of Commonwealth and/or State and Territory health authorities.

Lucid-PSYCH is currently a prohibited drug in Australia, meaning its supply is largely limited to clinical trials.

Specialized Knowledge and Personnel

The Board and executive officers of the Company, led by Zeeshan Saeed, as CEO and Co-Executive Chairman, Anthony Durkacz, Co-Executive Chairman, and Dr. Lakshmi P. Kotra, as director, Dr. Eric Hoskins, as director, Dr. Andrzej Chruscinski, VP-Clinical and Scientific Affairs, and Ms. Ashwini Joshi, Director of Pharmaceutical Development have a wide combination of the skills, knowledge and experience that are necessary for the successful advancement of the Company's business plan. Our future growth and success depend on our ability to recruit, retain, manage, and motivate our qualified employees. The inability to hire or retain experienced personnel in the pharmaceutical field could adversely affect our ability to execute our business plan and harm our operating results. Due to the specialized scientific and managerial nature of our business, we rely heavily on our ability to attract and retain qualified scientific, technical and managerial personnel. The competition for qualified personnel in the pharmaceutical field is intense. Due to this intense competition, we may be unable to continue to attract and retain qualified personnel necessary for the development of our business or to recruit suitable replacement personnel.

Competitive Conditions

The pharmaceutical industry market for MS drugs is highly competitive and subject to rapid change. The industry continues to expand and evolve as an increasing number of competitors and potential competitors enter the market. There are few approved therapies for progressive multiple sclerosis such as ocrelizumab by Roche and siponimod by Novartis, all of which are immunomodulatory drugs. Bruton's Tyrosine Kinase Inhibitors, which also inhibits immune responses, are also being investigated as therapies for progressive MS in Phase 3 clinical trials; for example fenebrutinib by Roche (NCT04544449) and tolebrutinib by Sanofi (NCT04458051 and NCT04411615). In the HERCULES trial (NCT04411615), tolebrutinib was shown to delay disability progression in patients with non-relapsing secondary progressive MS, although elevations of liver enzymes were observed in 4.1% of tolebrutinib-treated participants.

Kyverna Therapeutics had announced their Phase-2 clinical trial on the cell-based therapy candidate KYV-101 (NCT06138132), in people with non-relapsing and progressive forms of multiple sclerosis. Immunic Therapeutics is developing vidofludimus as a potential treatment for all MS types; the Phase 2 CALLIPER clinical trial (NCT05054140) is testing it against a placebo specifically in people with progressive forms of the disease. Tiziana Life Sciences is developing an antibody, foralumab that is designed to reduce inflammation in the brain and spinal cord by blocking CD3, a protein found on the surface of T-cells. This type of immune cells is involved in MS progression. All known drugs and those under development are immunomodulatory, several are biologics and do not directly address demyelination, which is the hallmark feature in MS, to the best of our knowledge. Even if Lucid-MS is approved, it will compete with product offerings from large and well-established companies that have greater marketing and sales experience and capabilities than we have or our third-party research collaborators. Other companies with greater resources than us may announce similar plans in the future.

However, we believe that Lucid-MS will be superior to the other MS products for individuals with progressive MS, because based on our current clinical work, it prevents the myelin sheath from unraveling, thereby inhibiting the process of demyelination.

Environmental Matters

The Company expects the financial and operational effects of environmental protection requirements on its capital expenditures, profit, and competitive position in the current and future financial years to be minimal.

Employees

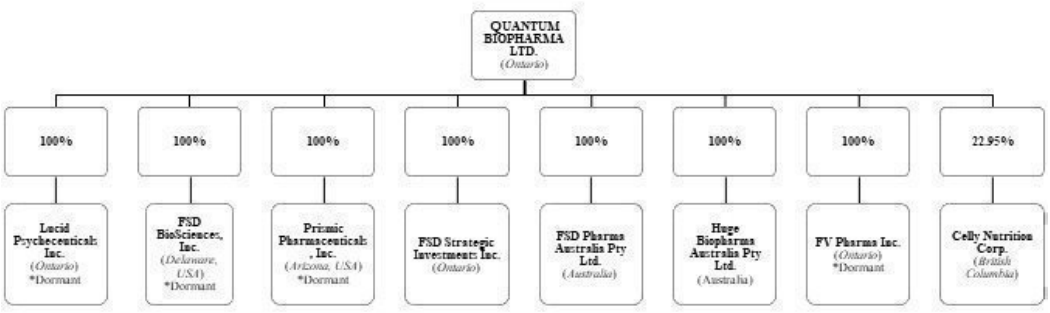
As at December 31, 2024, the Company directly employed seven full-time employees. All of these employees are based in the Toronto, Ontario area. The Company believes its relationship with its employees, consultants and contractors is good. None of the Company's employees are represented by a labour union or subject to a collective bargaining agreement.

Reorganizations

The Company has not completed any material reorganization within the three most recently completed financial years**,** except for the reorganization that occurred pursuant to the Plan of Arrangement.

C. Organizational Structure

As at the date of this Annual Report, the Company has eight subsidiaries, Lucid, FSD BioSciences, Prismic, FSD Strategic Investments, FSD Australia, Huge Biopharma, FV Pharma, and Celly Nu. The corporate chart of the Company including the Company's subsidiaries, together with the jurisdiction of incorporation of the Company and its subsidiary and the percentage of voting securities beneficially owned, controlled, or directed, directly or indirectly, by the Company is as follows:



The Company has four active subsidiaries, which are:

Celly Nu

Celly Nu is focused on the commercialization of unbuzzd™. The Company, on the one hand, and Celly Nu and Celly U.S., on the other hand, are parties to the Celly Nu IP License Agreement dated as of August 14, 2024 which gives Celly Nu and Celly U.S. exclusive global rights to use the Company's alcohol misuse technology for recreational purposes. For more information, please see "*Item 4. Information on the Company – A. History and Development of the Company – Alcohol Misuse Disorder Product Candidates".*

FSD Strategic Investments

FSD Strategic Investments was incorporated in Ontario on May 13, 2022. FSD Strategic Investments is focused on generating returns and cash flow through the issuance of loans secured by residential real estate property. For more information, please see "*Item 4. Information on the Company. – B. Business Overview – (2) FSD Strategic Investments*".

FSD Australia

On November 24, 2022, the Company incorporated FSD Australia, to facilitate its development of Lucid-PSYCH and other assets. The registered and head office of FSD Australia is Suite 1, Level 3, 62 Lygon Street, Carlton South, VIC 3053, Australia. FSD Australia was established to facilitate the Company's development of Lucid-PSYCH by conducting Australian clinical trials in respect of Lucid-PSYCH. In Q3 2024 FSD Australia restarted the clinical development of FSD-PEA, which is being developed for the treatment of inflammatory diseases. FSD Australia signed a study order for a Phase 2 clinical trial of FSD-PEA in MCAS. Subject to satisfaction of relevant eligibility criteria, FSD Australia may be entitled to claim the Australian research and development tax incentive for eligible expenditure it incurs on eligible research and development activities. For more information, please see "*Item 4. Information on the Company. – A. History and Development of the Company".*

Huge Biopharma

On February 6, 2024, the Company incorporated Huge Biopharma to conduct research related to Lucid-MS in Australia. Huge Biopharma's registered and head office is Suite 1, Level 3, 62 Lygon Street, Carlton South, VIC 3053, Australia. The research and related operations conducted by Huge Biopharma in Australia are financed entirely by the Company.

Inactive Subsidiaries

Lucid

Lucid is focused on the development of therapies to treat critical neurodegenerative diseases. Lucid is currently focused on research and development of Lucid-MS, which is a molecular compound identified for potential treatment of MS. Lucid conducted research on Lucid-PSYCH, which was being considered as a treatment for major depressive orders. Research activities in connection with Lucid-PSYCH is currently on hold due to funding concerns.

FV Pharma

The Company suspended all activities by FV Pharma Inc, which had engaged in the cannabis business, as of September 2020 and in May 2022, substantially all of the assets of FV Pharma were sold. FV Pharma has accumulated historic tax losses and continues to exist as an entity wholly owned by the Company. Upon termination of FSD-PEA, Prismic did not have any assets or remaining liabilities other than outstanding notes payable which were assumed on the acquisition of Prismic and are classified as current liabilities of the Company. Prismic has accumulated historic tax losses and continues to exist as an entity wholly owned by the Company. For more information, please see "*Item 4. Information on the Company. – B. Business Overview – Significant Operations and Principal Activities in Fiscal 2022 and Fiscal 2023".*

FSD BioSciences

FSD BioSciences was focused on the research and development of FSD-PEA, an ultra-micronized PEA. Although the Company terminated clinical development of FSD-PEA in 2023, it has restarted development through its Australian subsidiary, FSD Australia. For more information, please see " *Item 4. Information on the Company. – A. History and Development of the Company".*

Prismic

The Company does not operate through Prismic; however, Prismic holds the right to receive certain payments based on net sales of certain products under an amended and restated licensing agreement between Epitech Group SpA dated January 8, 2020, as amended, (the "**Epitech License Agreement**") and the Company pursuant to an assignment agreement between Prismic and the Company (the "**Prismic Assignment Agreement**"). Although the Company initially terminated the clinical development of FSD-PEA, research and development pertaining to FSD-PEA has now restarted. For more information, please see "*Item 4. Information on the Company. – A. History and Development of the Company".*

Property, Plants and Equipment

The Company's current operating plan does not include building infrastructure. The Company operates from its head office located in Toronto, Ontario, Canada. During fiscal year 2024, the head office incurred costs of a total amount of approximately C$150,000, including taxes. The current head office rental agreement concludes on August 31, 2025. The Company believes that its current facilities are adequate to meet its ongoing needs and that if the Company requires additional space, it will be able to obtain additional facilities on commercially reasonable terms.

Item 4A. Unresolved Staff Comments.

Not applicable.

Item 5. Operating and Financial Review and Prospects

A. Operating Results

See the Company's Management's Discussion and Analysis of Financial Condition and Results of Operations for the three months ended and fiscal years ended December 31, 2024 and 2023 (the "**2024 Annual MD&A**") attached hereto as Exhibit 15.1.

B. Liquidity and Capital Resources

See the 2024 Annual MD&A attached hereto as Exhibit 15.1.

C. Research and Development, Patents and Licenses, etc.

For a discussion of our research and development activities, see "*Item 4. Information on the Company. – B. Business Overview - Products and Sales*" and the 2024 Annual MD&A attached hereto as Exhibit 15.1.

D. Trend Information

Other than as disclosed elsewhere in this Annual Report, we are not aware of any trends, uncertainties, demands, commitments, or events for the period from January 1, 2024 to December 31, 2024 that are reasonably likely to have a material adverse effect on our net revenues, income from continuing operations, profitability, liquidity or capital resources, or that would cause our reported financial information not necessarily to be indicative of future operating results or financial condition. For a discussion of trends, see "I*tem 4.B.-Business Overview*" and the 2024 Annual MD&A attached hereto as Exhibit 15.1.

E. Critical Accounting Estimates

See notes 2 and 3 to our 2024 Annual Financial Statements in Item 18.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management.

The following table sets forth certain information with respect to our executive officers and directors as of the date of this Annual Report:

Name	Age	Position(s) with the Company	Other Directorships	Date of Initial Appointment
Anthony Durkacz	49	Co-Executive Chairman and Director	Stock Trend Capital Inc.	May 18, 2018
Zeeshan Saeed	55	CEO, President, Co-Executive Chairman and Director	Celly Nu	May 24, 2018(1)
Donal Carroll	49	Chief Financial Officer ("**CFO**")	Street Capital Inc.; Celly Nu	May 18, 2018(3)
Dr. Lakshmi P. Kotra	54	Director, CEO of Lucid, President of FSD Biosciences and CEO of FSD Australia	Celly Nu	November 25, 2023
Adnan Bashir	55	Director	N/A	June 1, 2021
Dr. Eric Hoskins	64	Director	Celly Nu; Cybin Inc.	June 29, 2023
Terry Lynch(2)	66	Director	Cardiol Therapeutics; Chilean Metals Inc.; Firstgold Corp.; Great Northern Energy Metals Inc.; Kingsmill Capital Ventures Inc.; Power Metallic Mines Inc.; Resolute Resources Ltd.	March 27, 2025
Michael (Zappy) Zapolin	58	Director	N/A	June 29, 2023

Notes:

(1) Mr. Saeed departed from his position as President and director of the Company effective January 25, 2021 but was re-elected as a director of the Company on May 14, 2021 and re-appointed as President of the Company on July 27, 2021.

(2) Terry Lynch replaced Dr. Sanjiv Chopra on the Board effective March 27, 2025.

(3) Mr. Carroll served as the interim CFO from July 27, 2018 until January 2, 2020, when he became the permanent CFO until May 4, 2021. In August 2021, he became the COO and served in this position until August 30, 2024, when he resumed the role of CFO, and resigned as COO, with no replacement hired. He served as a Board member form May 18, 2018 through August 2018, and from May 14, 2021 until January 29, 2024.

Term of Office

Each director is to serve until his or her successor is elected and qualified or until his death, resignation, or removal. Our Board appoints our officers and each officer is to serve until his successor is appointed and qualified or until his or her death, resignation, or removal.

Executive Officers

Anthony Durkacz

Mr. Durkacz has served as the Company's Co-Executive Chairman since May 2021 and as a member of the Board since June 2018. Mr. Durkacz previously served as the Company's interim CEO from July 2021 to July 2023. In addition to his roles with the Company, Mr. Durkacz is also (i) a director and the Executive Vice-President of First Republic, and has served in those roles since 2014, and (ii) the Chairman of World Class Extractions Inc. (CSE: PUMP; PINK: STOCF), and has served in that role since 2018. Prior to co-founding the Company, from January 2013 to December 2013, Mr. Durkacz was President of Capital Ideas Investor Relations. He previously served as the CFO and a director of Snipp Interactive Inc. (TSXV: SPN.V), a global marketing solutions company that provides a modular software-as-a-service technology suite, from January 2011 to January 2013. Mr. Durkacz was instrumental in the financing and public listing of Snipp Interactive Inc. with operations in Canada, the United States, Mexico, and India. From 2006 to 2009, he served as COO and CFO of MKU Canada Inc. and engaged in mergers and acquisitions of companies around the world. From 2002 to 2006, Mr. Durkacz served as the CFO and a director of Astris Energi Inc., a dual-listed public company in the United States and Canada which was acquired by an international conglomerate. Mr. Durkacz began his career at TD Securities on the capital markets trading floor. He holds an Honours Bachelor of Business Administration degree from Brock University with a major in both Accounting and Finance.

Zeeshan Saeed

Mr. Saeed, a co-founder of the Company, has served as the Company's President and Executive Co-Executive Chairman since May 2021 and as the Company's CEO since July 4, 2023. Previously, he served as President of the Company from May 2019 to January 2021 and as a director from May 2018 to January 2021. From December 2017 to May 2019, Mr. Saeed served as Executive Vice President of FV Pharma, a subsidiary of the Company and a former licensed producer of cannabis in Canada under the *Cannabis Act* (Canada). From October 2013 to December 2017, Mr. Saeed provided consulting services to FV Pharma, and from April 2003 to December 2017, he served as President of ZZ Telecommunications Inc., a long-distance telecommunications common carrier. Mr. Saeed is the founder of Platinum Telecommunications Inc. and served as its CEO from 2011 to 2013. He has a Bachelor of Science in Mechanical Engineering from the University of Engineering and Technology Lahore.

Dr. Lakshmi P. Kotra

Dr. Lakshmi P. Kotra has served as CEO of the Company's wholly-owned subsidiary, Lucid, since September 2020, which he co-founded in 2020, and has served as a director on the Company's Board since November 2022. He joined the Leslie Dan Faculty of Pharmacy, University of Toronto, in 2000, where he is currently serving as a Professor of Medicinal Chemistry, and University Health Network in 2006, where he is currently serving as a Senior Scientist. Dr. Kotra received his Ph.D. in Pharmacy (Medicinal Chemistry) from the University of Georgia under Prof. David Chu's supervision, and completed postdoctoral training at Wayne State University under Prof. Shahriar Mobashery's supervision. Dr. Kotra teaches and leads a research group and drug discovery program with multiple portfolios at University of Toronto and University Health Network. Dr. Kotra has contributed to a number of important drug discovery and development projects, including metabolic disorders, neurodegenerative and immunological disorders, anti-HIV drugs, antibacterials, and antimalarials. He has authored/co-authored over 130 publications and delivered over 140 scientific talks internationally. Dr. Kotra is the recipient of several awards for his accomplishments, including the Julia Levy Award in 2021 from the Society of Chemical Industry (SCI) Canada in recognition of his substantial contribution to the successful commercialization of innovation in Canada in the field of biomedical science and engineering. He also serves on the board of Celly Nu.

Donal Carroll

Mr. Carroll has served as CFO of the Company since August 30, 2024. Mr. Carroll was initially appointed as interim CFO in 2018, and was subsequently appointed to the position on a permanent basis in December 2019, where he served until May 2021. Mr. Carroll previously served as COO of the Company from August 15, 2021, until he was appointed as CFO on August 30, 2024, and resigned from his position as COO concurrently. Mr. Carroll had also served as a director on the Company's Board from May 2018 to July 2018 and from May 2021 to January 2024. Mr. Carroll has 20 years of corporate finance leadership and public company experience, as well as experience in syndicate investing both in equity and debt securities. From June 2005 to January 2008, he served as an Accounting Supervisor with Alberto Culver (now Unilever (NYSE:UL)), from February 2008 to October 2013, Mr. Carroll has served as Controller with Videojet Technologies, and from October 2013 to July 2017, he served as a Corporate Controller with Cardinal Meats, where he was instrumental in major restructuring activities, mergers and acquisitions and the implementations of new internal controls and ERP systems. He holds a CPA-CMA designation as well as a Bachelor of Commerce degree from University College Dublin.

Directors

Adnan Bashir

Mr. Bashir has over 14 years of experience in strategic management and operations. He is the founder and President of 58Northwest Inc., a management consulting and marketing services company, and has held the role since 2018. From 2005-2018, Mr. Bashir was General Manager for Al Batha Group, a diversified business conglomerate based in Dubai, United Arab Emirates. Mr. Bashir was responsible for overseeing the management and operations of 4 companies within the group and was instrumental in acquiring and developing new businesses and partners from Europe, the US and China. During his tenure at Al Batha Group, Mr. Bashir gathered extensive experience in executing turnaround strategies, transforming weak businesses into sustainable and profitable ones and implementing new technologies. Mr. Bashir holds a Bachelor of Science Degree in Mechanical Engineering from University of Engineering and Technology Lahore and has completed extensive executive education, including in strategic management, audit, sales management, and technical management.

Dr. Eric Hoskins

Dr. Eric Hoskins is a medical doctor and public health expert with more than 30 years' experience in healthcare, public policy, economic development, and international trade. Dr. Hoskins currently performs in a number of roles, including: (i) Partner, Healthcare, Maverix Private Equity, since December 2018; (ii) Principal, Hoskins International and Associates, since March 2018; (iii) Senior Advisor, Precision Biomonitoring Inc., since October 2020; (iv) Senior Advisor, Medtronic Canada, since January 2020; (v) Advisor, Health Canada, since January 2021; (vi) and Chair of the Federal Advisory Council on the Implementation of National Pharmacare, since March 2018.

Dr. Hoskins previously served as the health minister of Ontario between 2014 and 2018, a role in which he was responsible for one of the largest health care systems in North America. Additionally, he has previously served as President of War Child Canada and was awarded the Order of Canada in 2007 for his humanitarian work. During Dr. Hoskins' nearly 10 years as a member of provincial parliament in Ontario, he held several cabinet positions including Minister of Health and Long-Term Care; Economic Development, Trade and Employment; Children and Youth Services; as well as Citizenship and Immigration. As a tireless health advocate, Dr. Hoskins has many years of experience creating and delivering health programs in Africa and the Middle East.

Terry Lynch

Mr. Lynch is widely known and respected for his role founding and operating Save Canadian Mining, a not-for-profit organization leading the fight against micro-cap stock market manipulation and naked short selling. Mr. Lynch has a long, successful track record as an executive and board member of many public micro-cap companies. Currently he is the CEO of Power Metallic Mines Inc. (TSXV: PNPN), that recently closed a $50 million financing in February 2025 close to its all-time high stock price. Mr. Lynch is also a co-founder of Cardiol Therapeutics, a NASDAQ and TSX listed clinical-stage life sciences company focused on the research and clinical development of cannabidiol as an anti-fibrotic and anti-inflammatory therapy for the treatment of cardiovascular disease. He is also an investor and consultant to bionxt solutions.

Michael (Zappy) Zapolin

Zappy Zapolin is an entrepreneur, well-known futurist, psychedelic concierge to the stars, and award-winning filmmaker dedicated to expanding human consciousness. Mr. Zapolin previously served as CEO of Zappy Incorporated, a cannabis development company founded in 2012.

Mr. Zapolin's film The Reality of Truth won him the Amsterdam Film Festival's Van Gogh Award for directing. It has been seen by more than 20 million people.

Mr. Zapolin is considered a pioneer in the domain name industry. During his time running the domain name investment company Internet Real Estate Group, he helped create and develop major internet brands, including Beer.com, Diamond.com, and CreditCard.com.

He is also a public speaker and the creator of the first e-business elective at Harvard Business School. As a former vice president at investment bank Bear Stearns, Zappy is a frequent commentator on investment opportunities in the biotech and emerging psychedelic industries.

Certain Proceedings involving Directors

Mr. Durkacz has been serving as director of the Company since June 18, 2018. On March 5, 2021, the Company was subject to a court order with respect to the 2021 annual and special meeting of Shareholders (the "**2021 AGSM**") which, among other things, prohibited the Company's then CEO and directors, other than Mr. Durkacz, from voting certain of their shares at the 2021 AGSM. On April 9, 2021, the Court ordered an injunction restraining the Company's then CEO and former directors, other than Mr. Durkacz, from authorizing or undertaking any transaction by FSD other than in the ordinary course of business, issuing any Class B Subordinate Voting Shares or authorizing the payment of any form of compensation to such former CEO and directors prior to the 2021 AGSM.

Family Relationships

There are no family relationships among any of our executive officers or directors.

Special Arrangements

Not applicable.

B. Compensation.

Executive Compensation

The purpose of this Compensation Discussion and Analysis is to provide information about the Company's philosophy, objectives, and processes regarding executive compensation. This disclosure is intended to communicate compensation provided to: (a) the CEO; (b) the CFO; (c) each of the three most highly compensated executive officers of the Company, including any of its subsidiaries, or the three most highly compensated individuals acting in a similar capacity, other than the CEO and CFO, as at the end of the most recently completed financial year whose total compensation was, individually, more than C$150,000; and (d) each individual who would be a NEO under (c) but for the fact that the individual was neither an executive officer of the Company or its subsidiaries, nor acting in a similar capacity, as at December 31, 2024, (collectively, the "**NEOs**") and (v) the directors of the Company.

During the year ended December 31, 2024, the NEOs of the Company were as follows:

1) Zeeshan Saeed, CEO and Co-Executive Chairman, and Director of the Company;
2) Anthony Durkacz, Co-Executive Chairman, and Director of the Company;
3) Donal Carroll, CFO;
4) Dr. Andrzej Chruscinski, Vice-President, Clinical and Scientific Affairs;
5) Dr. Ashwini Joshi, Director of Pharmaceutical Development

The description of the Company's compensation philosophy and objectives and the elements of such compensation for the year ended December 31, 2024, is set forth below:

Compensation Philosophy and Objectives

The executive compensation program adopted by the Company and applied to its executive officers is designed to attract and retain qualified and experienced executives who will contribute to the success of the Company. The executive compensation program attempts to ensure that the compensation of the senior executive officers provides a competitive base compensation package and a strong link between corporate performance and compensation. Senior executive officers are motivated through the program to enhance long-term shareholder value and rewarded for their yearly individual contribution in the context of overall annual corporate performance.

Elements of Compensation

The executive compensation program during the year, ended December 31, 2024, consisted of three principal components: (i) base compensation; (ii) potential annual incentive award; (iii) Options to Class B Subordinate Voting Shares ("**Options**"); (iv) restricted share units ("**RSUs**"); and (v) performance share units ("**PSUs**"). Options, RSUs, and PSUs are granted pursuant to the Company's Equity Incentive Plan which replaced the Company's rolling stock option plan (the "**Stock Option Plan**"). For the year ended December 31, 2024, all executive compensation was determined and administered by the Board based on recommendations by the compensation, nominating and governance committee of the Company ("**Compensation, Nominating and Governance Committee**").

Compensation Governance

The Compensation, Nominating and Governance Committee is currently comprised of three directors, Eric Hoskins (Chair), Zeeshan Saeed, and Adnan Bashir. Zeeshan Saeed is not an independent director, and Eric Hoskins and Adnan Bashir are independent directors.

The primary goal of the Company's executive compensation program is to attract and retain the key executives necessary for the Company's long term success, to encourage executives to further the development of the Company and its operations, and to motivate top quality and experienced executives.

The Compensation, Nominating and Governance Committee has been tasked with establishing an executive compensation program, which, prior to May 16, 2022, included equity compensation by way of share awards and Options granted under the Stock Option Plan. As of May 16, 2022, the executive compensation program includes equity compensation by way of share awards, RSUs, PSUs and Options granted under the Equity Incentive Plan.

The Compensation, Nominating and Governance Committee reviews the adequacy of remuneration for the executive officers by evaluating their performance in light of the Company's goals and objectives, the bonus opportunities contained in their employment agreements, and by comparing the performance of the Company with other reporting issuers of similar size in the same industry. All of the members of the committee have senior executive leadership experience that lends to knowledge of compensation and rewards. They also use key industry metrics and benchmarks to determine compensation packages.

The Board is of the view that all elements of the total program should be considered, rather than any single element. As such, the Company does not use fixed criteria in determining the mix of compensation and instead determines compensation based on a contextual analysis of the Company. While the Company does not have a formally established peer group in determining compensation, the Compensation, Nominating and Governance Committee will on occasion reference other comparable publicly traded Canadian companies to align its compensation practices with market practice.

The terms of any proposed compensation for the directors of the Company who are not also officers of the Company (including any Options, RSUs and PSUs to be granted) will be determined by the Compensation, Nominating and Governance Committee. The compensation program is designed to provide income certainty, to attract and retain executives and to provide incentives for the achievement of both short-term and long-term objectives of the Company.

Compensation Process

The Compensation, Nominating and Governance Committee, through discussion without any formal objectives, criteria, or analysis, determines the compensation of the Company's executive officers. The Compensation, Nominating and Governance Committee has no formal criteria or goals tied to total compensation or any significant element of total compensation. The Board, through the Compensation, Nominating and Governance Committee, is responsible for determining all forms of compensation, including share-based compensation and long-term incentives in the form of Options, RSUs and PSUs to be granted to the Company's executive officers and directors, and for reviewing the recommendations respecting compensation of other officers of the Company from time-to-time, to ensure such arrangements reflect the responsibilities and risks associated with each position. The Compensation Nominating and Governance Committee determines compensation by considering: (i) recruiting and retaining executives critical to the Company's success and the enhancement of shareholder value; (ii) providing fair and competitive compensation; (iii) balancing the interests of management and the Shareholders; and (iv) rewarding performance, both on an individual basis and with respect to the Company's operations in general.

Annual Incentive Awards

Annual incentive awards are designed to motivate NEOs to achieve the Company's short-term corporate goals, and rewards individual and overall performance. Annual incentives are based on objective, identifiable measures set at the beginning of each financial year at the discretion of the Compensation, Nominating and Governance Committee, which may vary from year to year and incentive payments are expected to be determined by the Board on the recommendation of the Compensation, Nominating and Governance Committee.

Option Awards

Long-term incentives in the form of Options are intended to align the interests of the Company's directors and its executive officers with those of its Shareholders, to provide a long-term incentive that rewards these individuals for their contribution to the creation of Shareholder value, and to reduce the cash compensation the Company would otherwise pay. The Equity Incentive Plan is administered by the Board. While the Company does not have a formally established peer group in determining compensation, in considering the number of Options to be granted to the NEOs, reference is made to the number of Options granted to officers of other comparable publicly traded Canadian companies. The Compensation, Nominating and Governance Committee also considers previous grants of equity incentives and the overall number of equity incentives that are outstanding relative to the number of outstanding Shares in determining whether to make any new grants of Options and the size and terms of any such grants, as well as the level of effort, time, responsibility, ability, experience, and level of commitment of the executive officer in determining the level of Option compensation.

Share Unit Awards

The Equity Incentive Plan provides that Eligible Persons (as defined in the Equity Incentive Plan) may be allocated share units in the form of RSUs or PSUs (collectively, "**Share Units**"), which represent the right to receive an equivalent number of Class B Subordinate Voting Shares or the Market Price (as defined in the Equity Incentive Plan) in cash on the vesting date. The issuance of Class B Subordinate Voting Shares may be subject to vesting requirements similar to those described above with respect to the exercise of Options, including such time- or performance-based conditions as may be determined from time to time by the Board in its discretion.

The Equity Incentive Plan provides for the express designation of Share Units as either RSUs, which have time-based vesting conditions, or PSUs, which have performance-based vesting conditions over a specified period. The Equity Incentive Plan provides that if Share Units are scheduled to settle during a blackout period, such settlement shall be postponed until the trading day following the date on which the blackout period ends (or as soon as practicable thereafter, and in any event, within 10 business days following the end of the blackout period), and the Market Price of any RSUs or PSUs settled in cash will be determined as of the trading day immediately prior to the settlement date.

The Compensation, Nominating and Governance Committee also considers previous grants of equity incentives and the overall number of equity incentives that are outstanding relative to the number of outstanding Shares in determining whether to make any new grants of Share Units and the size and terms of any such grants, as well as the level of effort, time, responsibility, ability, experience, and level of commitment of the executive officer in determining the level of Share Unit compensation.

Insider Trading and Blackout Period Policy

All of the Company's executives, other employees and directors are subject to the Company's Insider Trading and Blackout Period Policy, which prohibits trading in the Company's securities while in possession of material undisclosed information about the Company. Under this policy, such individuals are also prohibited from entering into hedging transactions involving securities of the Company, such as short sales, puts and calls. Furthermore, subject to certain limited exceptions, the Company permits executives, including the NEOs, to trade in the Company's securities only during prescribed trading windows.

Risk Analysis

The Board and Compensation, Nominating and Governance Committee considered risks associated with executive compensation and do not believe that the Company's executive compensation policies and practices encourage its executive officers to take inappropriate or excessive risks. Aside from a fixed base salary, NEOs are compensated through the granting of awards, which are compensation that is both "at risk" and associated with long-term value creation. The value of such compensation is dependent upon Shareholder return over award vesting periods which reduces the incentive for executives to take inappropriate or excessive risks as their long-term compensation is at risk.

Performance graph

The following performance graph compares the total cumulative return to a Shareholder who invested C$100 in Shares on December 31, 2020, assuming reinvestment of dividends, with the cumulative total return on the S&P/TSX Composite Total Return Index and SPDR S&P Biotech ETF for each year following December 31, 2020. The performance of the Shares as set out in the graph below does not necessarily indicate future performance.

	December 31, 2020 (C$)	December 31, 2021 (C$)	December 31, 2022 (C$)	December 31, 2023 (C$)	December 31, 2024 (C$)
Quantum BioPharma Ltd.	$ 100.00	$ 65.38	$ 50.54	$ 58.96	$ 3.63
SPDR S&P Biotech ETF (NYSEARCA: XBI)	$ 100.00	$ 121.74	$ 111.19	$ 120.22	$ 141.84
S&P/TSX Composite Total Return Index	$ 100.00	$ 79.53	$ 58.96	$ 63.43	$ 63.97

The Company is of the view that compensation levels for the directors and executive officers cannot and should not be directly compared to year-over-year relative market performance. Market performance is impacted by a number of external factors beyond the control of management and an increase or decrease in the market price and thus should not be a determining factor in establishing the annual compensation of the Company's directors and executive officers. The stock price directly impacts the benefits enjoyed by the directors and executive officers from the Stock Option Plan and Equity Incentive Plan. As a result, the trend shown in the above graph does not necessarily correspond to the Company's compensation to its directors and executive officers for the same period.

The Company's compensation package is based on competitive compensation trends and the value of the services provided and is designed to attract and retain top quality personnel for the longer term in order to manage and grow the business through both adverse and favorable economic cycles. These factors may not yield immediate results in stock price.

Summary Compensation Table

The following table sets out all direct and indirect compensation for, or in connection with, services provided to the Company and its subsidiaries for the three most recently completed financial years of the Company in respect of the NEOs of the Company:

Name and Principal Position	Year	Salary (US$)	Share-Based Awards[1] (US$)	Option-Based Awards[2] (US$)	Non-Equity Incentive Plan Compensation (US$)		Pension Value	All Other Compensation[3] (US$)	Total Compensation (US$)
					Annual incentive plans	Long-term incentive plans			
Zeeshan Saeed *CEO & Co-Executive Chairman*	2024	218,635	365,050	Nil	Nil		Nil	Nil	583,685
	2023	222,625	Nil	377,248	Nil		Nil	Nil	599,873
	2022	239,269	398,010[5]	Nil	Nil		Nil	136,710[6]	773,989
Anthony Durkacz *Co-Executive Chairman and Director*	2024	218,635	365,050	Nil	Nil		Nil	Nil	583,685
	2023	222,625	Nil	377,248	Nil		Nil	Nil	599,873
	2022	239,269	316,834[5]	Nil	Nil		Nil	136,710[6]	692,813
Donal Carroll *CFO*[4]	2024	218,635	365,050	Nil	Nil		Nil	Nil	583,685
	2023	225,625	Nil	377,248	Nil		Nil	Nil	602,873
	2022	239,269	321,543[5]	34,519	Nil		Nil	136,710[6]	732,041
Nathan Coyle *Controller and Former CFO*[5]	2024	93,965	Nil	10,950	Nil		Nil	Nil	104,915
	2023	178,208	Nil	Nil	Nil		Nil	Nil	178,208
	2022	191,891	Nil	Nil	Nil		Nil	Nil	191,891
Dr. Andrzej Chruscinski *Vice-President, Clinical and Scientific Affairs*	2023	178,208	Nil	Nil	Nil		Nil	Nil	178,208
	2022	191,891	Nil	Nil	Nil		Nil	Nil	191,891
	2022	111,370	Nil	Nil	Nil		Nil	Nil	111,370
Dr. Ashwini Joshi *Director of Pharmaceutical Development*	2024	89,397	4,214	10,950	Nil		Nil	Nil	104,561
	2023	107,560	Nil	Nil	Nil		Nil	Nil	107,560
	2022	113,545	Nil	Nil	Nil		Nil	Nil	113,545

Notes:

(1) "**Share-based Award**" means an award of Class B Subordinate Voting Shares and includes PSUs and RSUs. The dollar amount disclosed is based on the closing price per Class B Subordinate Voting Share at the date of each grant.

(2) "**Option-based Award**" means an award of Options under the Stock Option Plan or the Equity Incentive Plan. This does not represent cash paid to the NEO. This figure is based on the grant date fair value of such Options. The grant date fair value was determined in accordance with International Financial Reporting Standards. This methodology was chosen in order to be consistent with the accounting fair value used by the Company in its financial statements, and the Black-Scholes option pricing model is a commonly used methodology for valuing Options which provides an objective and reasonable estimate of fair value. Calculating the value of stock options using the Black-Scholes option pricing model is very different from a simple "in-the-money" value calculation. Accordingly, caution must be exercised in comparing grant date fair value amounts with cash compensation or an in-the-money option value calculation.

(3) Includes Company-paid health and life insurance benefits and car allowances for all NEOs.

(4) Mr. Carroll was appointed as CFO of the Company effective August 30, 2024.

(5) Mr. Coyle resigned from his role as CFO of the Company effective August 30, 2024, and assumed the role of Controller of the Company.

(6) This figure represents PSUs granted under the Equity Incentive Plan. This does not represent cash paid to the NEO. This figure is based on the incremental grant date fair value of such PSUs. The grant date fair value was determined in accordance with International Financial Reporting Standards. The incremental fair value is the difference between the fair value of the PSUs based on the share price on the grant date and the fair value of the Options cancelled as measured on date of modification. This methodology was chosen in order to be consistent with the accounting fair value used by the Company in its financial statements. For further details on the valuation of PSUs, see Note 16 to the 2023 Annual Financial Statements, starting at page F-1.

(7) These amounts represent cash bonuses paid to the NEO.

Outstanding Option-Based and Share-Based Awards

The following table is a summary of all outstanding Options, RSUs and PSUs held by the NEOs which were outstanding as of December 31, 2024:

	Option-based Awards				Share-based Awards		
Name	**Number of securities underlying unexercised options (#)(b)**	**Option exercise price ($)(c)**	**Option expiration date (d)**	**Value of unexercised in-the-money options ($)(e)**	**Number of shares or units of shares that have not vested (#)(f)**	**Market or payout value of share-based awards that have not vested ($)(g)**	**Market or payout value of vested share-based awards not paid out or distributed ($)(h)**
Zeeshan Saeed *CEO, Co-Executive Chairman, and Director*	Nil	Nil	Nil	Nil	Nil	Nil	32,410
Anthony Durkacz *Co-Executive Chairman & Director*	Nil	Nil	Nil	Nil	Nil	Nil	32,410
Donal Carroll *CFO*	Nil	Nil	Nil	Nil	Nil	Nil	32,410
Nathan Coyle *Controller and Former CFO*	3,000	3.65	September 27, 2026	Nil	Nil	Nil	Nil
Dr. Andrzej Chruscinski *Vice-President, Clinical and Scientific Affairs*	5,000	3.65	September 27, 2026	Nil	Nil	Nil	3,885
Dr. Ashwini Joshi *Director of Pharmaceutical Development*	3,000	3.65	September 27, 2026	Nil	Nil	Nil	4,214

Incentive plan awards – value vested or earned during the year

The following table sets forth for each NEO, the value of Option-based awards and share-based awards that vested during the year ended December 31, 2024, and the value of non-equity incentive plan compensation earned during the year ended December 31, 2024:

Name (a)	**Option-based awards – Value vested during the year ($)(b)**	**Share-based awards – Value vested during the year ($)(c)**	**Non-equity incentive plan compensation – Value earned during the year ($)(d)**
Zeeshan Saeed *CEO, Co-Executive Chairman, and Director*	Nil	365,050	Nil
Anthony Durkacz *Co-Executive Chairman & Director*	Nil	365,050	Nil
Donal Carroll *CFO*	Nil	365,050	Nil
Nathan Coyle *Controller and Former CFO*	10,950	Nil	Nil
Dr. Andrzej Chruscinski *Vice-President, Clinical and Scientific Affairs*	18,250	3,885	Nil
Dr. Ashwini Joshi *Director of Pharmaceutical Development*	1,095	4,214	Nil

Stock option plans and other incentive plans

Equity Incentive Plan

On May 16, 2022, the Board adopted the Equity Incentive Plan, which was effective on June 29, 2023, upon the Company receiving shareholder approval at the annual general and special meeting. The Equity Incentive Plan replaced the Stock Option Plan.

Purpose of the Equity Incentive Plan

The principal purposes of the Equity Incentive Plan is to: (i) promote a further alignment of interests between officers, employees and other eligible service providers and the Shareholders, (ii) associate a portion of the compensation payable to officers, employees and other eligible service providers with the returns achieved by the Shareholders, and (iii) attract and retain officers, employees and other eligible service providers with the knowledge, experience and expertise required by the Company.

The Equity Incentive Plan contains provisions applicable to all grants of Options, RSUs, and PSUs (collectively, "**Awards**") in the capital of the Company, to Eligible Persons (as defined in the Equity Incentive Plan).

Equity Incentive Plan Maximum, Limits and Vesting Restrictions

The Equity Incentive Plan provides that: (i) the aggregate number of Class B Subordinate Voting Shares that may be issued pursuant to the Equity Incentive Plan, together with all other security-based compensation arrangements of the Company, shall be equal to 10% of the issued and outstanding Class B, from time to time; (ii) the aggregate number of Class B Subordinate Voting Shares reserved for issuance pursuant to the Equity Incentive Plan to any one participant, together with all other security-based compensation arrangements of the Company, must not exceed 5% of the aggregate issued and outstanding Class B Subordinate Voting Shares; (iii) the maximum number of Class B Subordinate Voting Shares (a) issued to Insiders (as defined in the Equity Incentive Plan) within any one year period, and (b) issuable to Insiders, at any time, under the Equity Incentive Plan or when combined with all other security-based compensation arrangements of the Company, shall not exceed 10% of the number of the aggregate issued and outstanding Class B Subordinate Voting Shares; and (iv) the maximum number of Class B Subordinate Voting Shares issued within any 12-month period to an individual Employed (as defined in the Equity Incentive Plan) by the Company or any of its subsidiaries, or a service provider engaged in investor relations activities must not exceed 1% of the issued and outstanding Class B Subordinate Voting Shares. Unless otherwise designated by the Board in the applicable grant agreement, 25% of the Options granted under the Equity Incentive Plan shall vest and become exercisable on the first anniversary of the grant date and the remaining 75% of the Options shall vest and become exercisable in equal quarterly installments beginning on the 15-month anniversary of the grant date and ending on the four-year anniversary of the grant date.

As at December 31, 2024 the Company had issued an aggregate total of 75,146 Awards outstanding under the Equity Incentive Plan, comprised of 42,456 Options, 32,690 RSUs, nil PSUs, and a total of 154,828 Class B Subordinate Voting Shares remained authorized for issuance under the Equity Incentive Plan.

The Equity Incentive Plan is administered by the Board, which has full and complete discretionary authority with respect to the granting of all awards thereunder. The Board may, subject to applicable law and certain restrictions, delegate its powers, rights, and duties under the Equity Incentive Plan to a committee of the Board, a person or persons, as it may determine, from time to time, on terms and conditions as it may determine. Awards may be granted under the Equity Incentive Plan to such service providers of the Company and its subsidiaries, if any, as the Board may from time to time designate. With respect to Options, exercise prices will be determined by the Board but will, in no event, be less than the market price of the Class B Subordinate Voting Shares on the grant date or the lowest price permitted by the policies of any stock exchange on which the Class B Subordinate Voting Shares may be listed. Generally, all Options granted under the Equity Incentive Plan will expire not later than the date that is ten years from the date that such Options are granted.

With respect to RSUs and PSUs, the number of such awards granted shall be determined by dividing the grant value for such grant, as determined by the Board, by the market price of a subordinate voting share as at the grant date (or otherwise determined by the Board). Settlement of RSUs and PSUs shall be made by the issuance of one Class B Subordinate Voting Share for each RSU or PSU then being settled, a cash payment equal to the market price of one subordinate voting share on the vesting date of the RSUs or PSUs being settled in cash or a combination of Class B Subordinate Voting Shares and cash, all as determined by the Board in its discretion, or as specified in applicable grant agreement. Subject to certain exceptions, any awards granted under the Equity Incentive Plan are not transferable or assignable other than by testamentary disposition or pursuant to the laws of intestate succession.

Stock Option Plan

The Stock Option Plan was replaced by the Equity Incentive Plan. A summary of the material terms of the Stock Option Plan can be found in the management information circular dated May 19, 2023. There are no predecessor Option outstanding under the Stock Option Plan.

Pension Disclosure

The Company established a 401(k) plan on January 31, 2021, but the plan was terminated on December 31, 2021. The Company currently does not have any pension plans that provide for payments or benefits at, following, or in connection with retirement.

Termination and Change of Control

The Company has entered into executive employment agreements with each of the NEOs (the "**Executive Agreements**"). Each Executive Agreement provides for the NEO's annual base salary, vacation entitlement and benefits.

The following is a description of material provisions of the Executive Agreements as they relate to termination and change of control.

Anthony Durkacz (Co-Executive Chairman and Director)

Mr. Durkacz has an executive employment agreement with the Company. In the event of both a change of control transaction and Mr. Durkacz ceasing to be employed by the Company for any reason, all outstanding unvested Options held as of the date Mr. Durkacz ceases to be employed by the Company shall immediately vest and remain outstanding and exercisable for a period of five years from that date. All vested Options held by Mr. Durkacz that are outstanding on that date shall remain outstanding and be exercisable for five years following the applicable vesting date of the Options. Additionally, in the event of any change of control transaction, the expiry date of each Option issued to Mr. Durkacz prior to the date, and during the term, of his Executive Agreement shall be the date that is five years from the applicable vesting date of such Option. In the event Mr. Durkacz's employment is terminated as a result of a change of control transaction, he would be entitled to receive C$600,000.

Zeeshan Saeed (CEO, Co-Executive Chairman and Director)

Mr. Saeed has an executive employment agreement with the Company. In the event the Company terminates Mr. Saeed's employment without cause or in the event of any termination of the agreement by either party following a change of control, the Company will provide Mr. Saeed with a cash payment in an amount equal to 24-months (2 years) compensation, being the sum of: (i) base salary, (ii) the applicable target bonus, and (iii) the cash value of any stock grants provided in the last 12-months. In the event of a change of control transaction and Mr. Saeed ceasing to be employed by the Company for any reason, all outstanding unvested Options held by Mr. Saeed as of the date that he ceases being employed by the Company shall immediately vest and shall remain outstanding and be exercisable for five years following that date. All vested Options held by Mr. Saeed that are outstanding on that date will remain outstanding and be exercisable for five years following the applicable vesting date of the Options. Additionally, in the event of any change of control transaction, the expiry date of each Option issued to Mr. Saeed prior to the date, and during the term, of his Executive Agreement shall be the date that is five years from the applicable vesting date of such Option. In the event Mr. Saeed's employment is terminated without cause or as a result of a change of control transaction, he would be entitled to receive C$600,000.

Donal Carroll (CFO)

Mr. Carroll has an executive employment agreement with the Company. In the event the Company terminates Mr. Carroll's employment without cause or in the event of any termination of the agreement by either party following a change of control, the Company shall pay Mr. Carroll a cash payment in an amount equal to 24 months (two years) compensation, being the sum of: (i) base salary, (ii) the applicable target bonus, and (iii) the cash value of any stock grants provided in the last 12-months. In the event of a change of control transaction and Mr. Carroll ceasing to be employed by the Company for any reason, all outstanding unvested Options, as of the date Mr. Carroll ceases to be employed by the Company shall immediately vest and shall remain outstanding and be exercisable for a period of five years following that date. All vested Options held by Mr. Carroll that are outstanding as of that date shall remain outstanding and be exercisable for five years following the applicable vesting date of the Options. Additionally, in the event of any change of control transaction, the expiry date of each Option issued to Mr. Carroll prior to the date, and during the term, of his Executive Agreement shall be the date that is five years from the applicable vesting date of such Option. In the event Mr. Carroll's employment is terminated without cause or as a result of a change of control transaction, he would be entitled to receive C$600,000.

Nathan Coyle (Controller and Former CFO)

Mr. Coyle had an executive employment agreement with the Company. In the event the Company terminated Mr. Coyle's employment without cause or in the event of any termination of the agreement by either party following a change of control, the Company will paid Mr. Coyle a cash payment in an amount equal to one month's salary per year of employment up to a maximum of 12 months and no less than four months compensation. In the event of a change of control transaction and Mr. Coyle ceasing to be employed by the Company for any reason, the expiry date of each Option issued to Mr. Coyle prior to the date, and during the term, of his Executive Agreement shall be the date that is five years from the applicable vesting date of such Option.

Dr. Andrzej Chruscinski (Vice-President, Clinical and Scientific Affairs)

Dr. Chruscinski has an executive employment agreement with the Company. In the event the Company terminates Dr. Chruscinski 's employment without cause or in the event of any termination of the agreement by either party following a change of control, the Company would pay Dr. Chruscinski a cash payment in an amount equal to one month's salary. In the event of a change of control transaction and Dr. Chruscinski ceasing to be employed by the Company for any reason, the expiry date of each Option issued to Dr. Chruscinski prior to the date, and during the term, of his Executive Agreement shall be the date that is 30 days from the applicable vesting date of such Option.

Dr. Ashwini Joshi (Director of Pharmaceutical Development)

Dr. Joshi has an executive employment agreement with the Company. In the event the Company terminates Dr. Joshi's employment without cause or in the event of any termination of the agreement by either party following a change of control, the Company would pay Dr. Joshi a cash payment in an amount equal to one month's salary. In the event of a change of control transaction and Dr. Joshi ceasing to be employed by the Company for any reason, the expiry date of each Option issued to Dr. Joshi prior to the date, and during the term, of his Executive Agreement shall be the date that is 30 days from the applicable vesting date of such Option.

Liability Insurance of Directors and Officers

The Company has directors' and officers' liability insurance coverage for losses to the Company if the Company is required to reimburse directors and officers, where permitted, and for direct indemnity of directors and officers where corporate reimbursement is not permitted by law. This insurance protects the Company against liability (including costs), subject to standard policy exclusions, which may be incurred by directors and/or officers acting in such capacity for the Company. All directors and officers are covered by the policy and the amount of insurance applies collectively to all. The annual cost for this insurance during the year ended December 31, 2024 was C$108,000 per annum.

Indemnification

Amended and Restated By-Law No. 1 provides for indemnification of each of the Company's directors, former directors, officers, former officers, respective heirs and legal representatives of directors and officers and each individual who acts or acted at the Company's request as a director or officer of a body corporate or an individual acting in a similar capacity of another entity (each, an "**Indemnified Person**") against all costs, charges and expenses reasonably incurred in respect of any civil, criminal or administrative, investigative or other proceeding to which that Indemnified Person is made a party by reason of being or having been at the relevant time a director or officer of the Company or of a body corporate of which the Company is or was a shareholder or creditor, or by reason of having acted in a similar capacity for any other entity that is or was at the relevant time directly or indirectly owned or controlled by the Company, as required by the OBCA.

The Company has entered into indemnity agreements with each director and officer providing that if such director or officer is or was involved in any threatened, pending or completed proceeding by reason of the fact that such director or officer is or was a director or officer of the Company or is or was serving at the Company's request as a director or officer of another entity, such director or officer will be indemnified and held harmless by the Company to the fullest extent authorized by and in the manner set forth in the Amended and Restated By-Law No.1 and OBCA against all expense, liability and loss reasonably incurred or suffered by such director or officer in connection therewith. Under such indemnity agreements, to the fullest extent allowable under applicable law, the Company shall also indemnify against any costs actually and reasonably paid or incurred by a director or officer in connection with any action or proceeding by such director or officer for (i) indemnification or reimbursement of any costs, or payment of any cost advance, by the Company under any provision of the agreements, or under any other agreement or provision of our constating documents and (ii) recovery under any directors' and officers' liability insurance policies maintained by the Company, regardless of whether the director or officer ultimately is determined to be entitled to such indemnification or insurance recovery, as the case may be.

Director Compensation

The following describes the director compensation program. Each director is entitled to an annual retainer of C$50,000, which may be paid entirely in cash, in share-based compensation, or as a combination of both, at the discretion of the Compensation, Nominating, and Governance Committee.

Director Compensation Table

The following table sets forth information concerning compensation accrued or paid to the Company's non-employee directors, other than NEOs whose compensation is reported in the Summary Compensation Table above, during the year ended December 31, 2024:

Name[1]	Fees earned ($)(b)	Share-based awards ($)(c)	Option-based awards ($)(d)	Non-equity incentive plan compensation ($)(e)	Pension value ($)(f)	All other compensation ($)(g)	Total ($)(h)
Dr. Eric Hoskins	65,829	Nil	51,681	Nil	Nil	Nil	117,510
Dr. Lakshmi P. Kotra	Nil	32,410	27,375	Nil	Nil	Nil	59,785
Adnan Bashir	43,727	Nil	Nil	Nil	Nil	Nil	43,727
Dr. Sanjiv Chopra	Nil	Nil	Nil	Nil	Nil	Nil	Nil
Michael (Zappy) Zapolin	49,321	Nil	Nil	Nil	Nil	Nil	49,321

Notes:

(1) The relevant disclosure pertaining to directors who are NEOs (meaning, Zeeshan Saeed and Anthony Durkacz) are reflected in the summary compensation table set forth above.

Directors' Outstanding Share-based Awards, Option-Based Awards and Non-Equity Incentive Plan Compensation

The following table sets forth for each of the Company's directors, other than directors who are also currently NEOs, all share-based awards and Option-based awards outstanding at the end of the year ended December 31, 2024:

Name	Option-based awards – Value vested during the year ($)	Share-based awards – Value vested during the year ($)	Non-equity incentive plan compensation – Value earned during the year ($)
Dr. Eric Hoskins	17,227	Nil	Nil
Dr. Lakshmi P. Kotra	27,375	32,410	Nil
Adnan Bashir	Nil	Nil	Nil
Dr. Sanjiv Chopra	Nil	Nil	Nil
Michael (Zappy) Zapolin	Nil	Nil	Nil

C. Board Practices

Our Board is responsible for our stewardship and strategic direction. It does not actively manage but rather supervises the management of our business and affairs to ensure a consistent focus on increasing shareholder value. In exercising their powers and discharging their duties, our directors shall (a) act honestly and in good faith with a view to the best interests of the Company; and (b) exercise the care, diligence, and skill that a reasonably prudent person would exercise in comparable circumstances.

Board

Our Board currently consists of seven members. The Board is responsible for the stewardship of the Company and for the supervision of management to protect Shareholder interests. The Board oversees the development of the Company's strategic plan and the ability of management to continue to deliver on the corporate objectives.

The independent judgment of the Board in carrying out its responsibilities is the responsibility of all directors. The Board facilitates independent supervision of management through meetings of the Board and through frequent informal discussions among independent members of the Board and management. In addition, the Board has free access to the Company's external auditors, external legal counsel and to the Company's officers.

The Board is responsible for assessing the effectiveness of the Board as a whole, the committees of the Board and the contribution of individual directors. Each Board member has considerable experience in the guidance and management of public companies and the Board has found this has been sufficient to meet the needs of the Company to date.

Composition and Independence of the Board

As at December 31, 2024, the Board was comprised of seven directors: Anthony Durkacz, Zeeshan Saeed, Dr. Sanjiv Chopra, Dr. Eric Hoskins, Adnan Bashir, Dr. Lakshmi P. Kotra, and Michael (Zappy) Zapolin.

The Board has determined that four of the seven directors, namely Dr. Sanjiv Chopra, Dr. Eric Hoskins, Adnan Bashir, and Michael (Zappy) Zapolin, have no material relationship with the Company, either directly or indirectly, which could, in the view of the Board, be reasonably expected to interfere with the exercise of such individual's independent judgment, and are "independent" (as determined under Rule 5605(a)(2) of the Nasdaq Stock Market Rules and as such term is defined in National Instrument 52-110 - *Audit Committees* ("**NI 52-110**")).

Anthony Durkacz, Zeeshan Saeed and Dr. Lakshmi Kotra are not "independent" (as determined under Rule 5605(a)(2) of the Nasdaq Stock Market Rules and as such term is defined in NI 52-110), as Anthony Durkacz is the Co-Executive Chairman of the Company and a holder, through a corporation he owns and controls, of Class A Multiple Voting Shares, Zeeshan Saeed is the CEO and Co-Executive Chairman of the Company and has an interest in Class A Multiple Voting Shares held in a trust for his economic benefit and Dr. Lakshmi Kotra is the CEO of Lucid.

Board Meetings

Although the independent directors do not hold regularly scheduled meetings at which non-independent directors and members of management are not in attendance, the Board has adopted the practice of following each meeting with an independent directors' discussion. The Board ensures open and candid discussion among its independent directors by continuously monitoring situations where a conflict of interest or perceived conflict of interest with respect to a director may exist. In cases where such a conflict of interest or perceived conflict of interest is identified, it is addressed in accordance with the *Business Corporations Act* (Ontario) and the Board Mandate. The Board may determine that it is appropriate to hold an in-camera session excluding a director with a conflict of interest or perceived conflict of interest, or such director may consider that it is appropriate to recuse him or herself from considering and voting with respect to the matter under consideration.

The Co-Executive Chairmen of the Board, Anthony Durkacz and Zeeshan Saeed, are non-independent directors. The independent chair of the Audit Committee, Dr. Eric Hoskins, provides leadership for its independent directors. Messrs. Durkacz, Saeed, and Hoskins are responsible for encouraging open and candid discussion among the independent directors, as discussed above, as well as facilitating Board meetings.

Messrs. Durkacz, Saeed, and Hoskins collaborate when setting the agenda of Board meetings and both work with the broader Board to promote good governance and ethics in the decision-making process of the Board.

Considering the guidelines contained in National Policy 58-201 – *Corporate Governance Guidelines*, the Board convenes meetings, as deemed necessary, of the independent directors at which non-independent directors and members of the management are not in attendance. The Board is of the opinion that no formal leadership of independent directors is required given the size of the Board and the ability of the independent directors to convene meetings of independent directors.

The attendance record of each of the Company's directors for Board meetings and committee meetings held during the year ended December 31, 2024, was as follows:

Name	Board Meetings Attended/Held	Audit Committee Meetings Attended/Held	Compensation, Nominating and Governance Committee Meetings Attended/Held	Disclosure Committee Meetings Attended/Held
Anthony Durkacz	4/4	0	0	1/1
Zeeshan Saeed	4/4	N/A	1/1	N/A
Adnan Bashir	3/4	3/4	1/1	1/1
Nitin Kaushal(1)	N/A	N/A	N/A	N/A
Dr. Sanjiv Chopra	2/4	N/A	N/A	N/A
Dr. Lakshmi P. Kotra	3/4	N/A	N/A	N/A
Dr. Eric Hoskins	4/4	4/4	1/1	N/A
Michael (Zappy) Zapolin	4/4	4/4	N/A	1/1

Notes:

(1) Nitin Kaushal was replaced by Dr. Sanjiv Chopra effective January 29, 2024. Between January 1, 2024 and January 29, 2024, the Company held no board meetings.

Board Mandate

The duties and responsibilities of the directors of the Board are to supervise the management of the business and affairs of the Company; and to act in the best interests of the Company. In discharging its mandate, the directors of the Company are responsible for the oversight and review of the development of, among other things, the following matters:

- the strategic direction of the Company;
- identifying the principal business risks of the Company and ensuring that procedures and people are in place to appropriately manage these risks;
- succession planning, including appointing, training, and monitoring senior management;
- a communications policy for the Company to facilitate communications with investors and other interested parties; and
- the integrity of the internal controls and procedures (including adequate management information systems and the oversight of the testing of internal controls) within the Company.

The Board also has the mandate to assess the effectiveness of the Board as a whole, its committees and the contributions of individual directors. The Board discharges its responsibilities and obligations either directly or through its committees, currently consisting of the Audit Committee, Compensation, Nominating and Governance Committee and the Disclosure Committee.

Position Descriptions

There are currently no position descriptions for the Co-Chairmen of the Corporation and the Chair of each committee. The persons acting as chairs of Board committees have the experience and expertise necessary to assess the role they must play in the context of a public company. The Chairmen and the Chair of each committee presides over all meetings (of the Board or committee, as applicable), participates in the development of meeting calendars and agenda, and ensures the orderly and efficient use of time in the meetings. Each committee chair reports to the Board on a regular basis. The primary role for each is to lead the Board and its committees in fulfilling the duties set out in their charters and/or mandates.

There are also no position descriptions in place for each of the CEO, CFO or COO, respectively. Their roles and responsibilities are delineated through the involvement of the Board in the Corporation's affairs and the ongoing formal and informal communication between the Board and the CEO, CFO and COO, respectively.

Feedback Policy

There are no formal measures in place for receiving feedback from stakeholders

Orientation and Continuing Education

New directors are provided orientations which include meetings with management on business directions, operational issues, and financial aspects of the Company.

The Compensation, Nominating and Governance Committee ensures that new directors receive orientation materials describing the Company's business and its corporate governance policies and procedures. New directors will have meetings with the Co-Executive Chairmen of the Board and CEO, and with the CFO, and are expected to visit the Company's principal offices. The Compensation, Nominating and Governance Committee is responsible for confirming that procedures are in place and resources are made available to provide directors with appropriate continuing education opportunities.

Management updates the Board on a regular basis regarding the business and activities of the Company to ensure that the directors have the necessary knowledge to meet their obligations as directors. Directors are encouraged to communicate with management, the auditors and the Company's legal counsel to keep themselves current with the Company's business. Directors are also provided with full access to the Company's records.

Ethical Business Conduct

All Board members and employees are committed to maintaining the highest standards of integrity and ethical business conduct in the management of the Company and their interaction with all key Shareholders. These standards can only be achieved by the Company by adhering to the values and principles of conduct.

The Company expects all Board members and employees to conduct themselves in an ethical and law-abiding manner, in all areas, including but not limited to conflicts of interest and the protection and proper use of corporate assets, information and opportunities.

The Board has adopted the Code of Conduct and Ethics, which provides guidelines surrounding, among other items, compliance with applicable laws, conflicts of interest, certain opportunities, confidentiality and disclosure, employment practices, and use of company property and resources. The Code of Conduct and Ethics is available on the Company's SEDAR+ profile accessible at www.sedarplus.ca and the Company's website, https://www.quantumbiopharma.com/investors.

The Board has delegated responsibility for monitoring compliance with the Code of Conduct and Ethics and for investigating and enforcing matters related to the Code of Conduct and Ethics to management, who will report breaches of the Code of Conduct and Ethics to the Company's general counsel or human resources.

Directors are required by applicable law and the Code of Conduct and Ethics to promptly disclose any potential conflict of interest that may arise. If a director has a material interest in an agreement or transaction, applicable law, the Code of Conduct and Ethics, and principles of sound corporate governance require them to declare the interest in writing or request to have such interest entered in the minutes of meetings of directors and, where required by applicable law, abstain from voting with respect to the agreement or transaction.

Conflicts of Interest

When faced with a conflict, it is required that business judgment of responsible persons, uninfluenced by considerations other than the best interests of the Company, will be exercised in compliance with the guidelines set out in the Code of Conduct and Ethics. Pursuant to the OBCA, any officer or director of the Company with a conflict of interest must disclose the nature and extent of such conflict to the Board and recuse themselves from a matter that materially conflicts with that individual's duty as a director or senior officer of the Company.

Protection and Proper Use of Corporate Assets, Information and Opportunities

Confidential information is not to be used for any purposes other than those of the Company. This requirement of confidentiality extends beyond the duty not to discuss private information, whether about the Company and/or its management and also applies to any asset of the Company, including trade secrets, patient, supplier or customer lists, business plans, computer software, company records and other proprietary information. The Code of Conduct and Ethics adopted by the Board provides for certain specific guidelines around the duty of confidentiality of employees, officers, and directors of the Company.

In the situation of contracts with third parties such as suppliers and service providers, management is to share only that information which is needed to satisfy the conditions of the contract and only to those individuals who need to know.

The duty of confidentiality applies to all Board members and employees even after leaving the Company regardless of the reason for departing.

Compliance with Laws, Rules, and Regulations

It is required that the Company is in compliance with all legislation applicable to the Company's business operations, including but not restricted to the laws of the Province of Ontario, all Canadian provincial laws and legislation, and any other similar legislation in jurisdictions where the Company operates.

All Board members and employees have a duty to know, understand and comply with any specific legislation pertaining to the business of the Company and any legislation applicable to their duties and responsibilities.

The Board has adopted the Code of Conduct and Ethics which provides guidelines surrounding, among other items, compliance with applicable laws, conflicts of interest, certain opportunities, confidentiality and disclosure, employment practices, and use of company property and resources.

Board Committees

Audit Committee

The Board is responsible for reviewing and approving the unaudited interim financial statements, and annual audited financial statements, together with other financial information of the Company and for ensuring that Management fulfills its financial reporting responsibilities. The Audit Committee assists the Board in fulfilling this responsibility. The Audit Committee meets with management to review the financial reporting process, unaudited interim financial statements, and annual audited financial statements, together with other financial information of the Company. The Audit Committee reports its findings to the Board for its consideration in approving the unaudited interim financial statements, and annual audited financial statements, together with other financial information of the Company for issuance to the Shareholders.

The Audit Committee meets on a quarterly basis. The members of the Audit Committee do not have fixed terms and are appointed and replaced from time to time by resolution of the Board.

Pursuant to NI 52-110, the Audit Committee is required to have a charter, which is incorporated by reference hereto as Exhibit 99.1.

Composition of the Audit Committee

As of the date of this Annual Report, the following are the members of the Audit Committee:

Name	Independent[(1)]	Financially Literate[(2)]
Dr. Eric Hoskins	Yes	Yes
Michael (Zappy) Zapolin	Yes	Yes
Adnan Bashir	Yes	Yes

Notes:

1. Within the meaning of subsection 1.4 of NI 52-110 and as determined under Exchange Act Rule 10A-3 and Rule 5605(a)(2) of the Nasdaq Stock Market Rules.
2. Within the meaning of subsection 1.6 of NI 52-110.

Relevant Education and Experience

The Board believes that the composition of the Audit Committee reflects financial literacy and expertise. Currently, all members of the Audit Committee have been determined by the Board to be "independent" and "financially literate" (as determined under Rule 5605(a)(2) of the Nasdaq Stock Market Rules and as such terms are defined under NI 52-110). The Board has made these determinations based on the education as well as breadth and depth of experience of each member of the Audit Committee.

All the members of the Audit Committee have the education and/or practical experience required to understand and evaluate financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of issues that can reasonably be expected to be raised by the Company's financial statements. For more information related to the experience of each of the members of the Audit Committee, see "*Item 6.A. Directors and Senior Management*".

Audit Committee Oversight

At no time since the commencement of the Company's most recently completed fiscal year was a recommendation of the Audit Committee to nominate or compensate an external auditor not adopted by the Board.

Reliance on Certain Exemptions

At no time since the commencement of the Company's most recently completed fiscal year has the Company relied on an exemption from the provisions of NI 52-110.

Pre-Approval Policies and Procedures

The Audit Committee pre-approves all audit services to be provided to the Company by its independent auditors. Non-audit services that are prohibited to be provided to the Company by its independent auditors may not be pre-approved. In addition, prior to the granting of any pre-approval, the Audit Committee must be satisfied that the performance of the services in question will not compromise the independence of the independent auditors. All non-audit services performed by the Company's auditor for the fiscal year ended December 31, 2024 were pre-approved by the Audit Committee. No non-audit services were approved pursuant to the de minimis exemption to the pre-approval requirement set forth in Rule 2-01(c)(7)(i)(C) of Regulation S-X.

External Auditor Service Fees

Please see, "*Item 16.C. Principal Accountant Fees and Services*".

Compensation, Nominating and Governance Committee

Nomination of Directors

The Compensation, Nominating and Governance Committee is currently comprised of three directors of the Company: Dr. Eric Hoskins (Chair), Zeeshan Saeed and Adnan Bashir. Dr. Eric Hoskins and Adnan Bashir are considered to be "independent" (as determined under Rule 5605(a)(2) of the Nasdaq Stock Market Rules and as such term is defined under NI 52-110).

The Compensation, Nominating and Governance Committee is responsible for recommending to the Board a list of candidates for nomination for election to the Board at each annual meeting of Shareholders. In addition, as the need arises, it will identify and recommend to the Board new candidates for Board membership. The Compensation, Nominating and Governance Committee selects potential directors with the desired background and qualifications, taking into account the needs of the Board at the time. In making its recommendations, the Compensation, Nominating and Governance Committee considers whether each candidate is or would be "independent" and "financially literate" (as determined under Rule 5605(a)(2) of the Nasdaq Stock Market Rules and as such terms are defined under NI 52-110) and possesses the competencies and skills that: (i) are considered to be necessary for the Board, as a whole, to possess; (ii) are considered to be necessary for each existing director to possess; and (iii) each new nominee will bring to the boardroom. The Compensation, Nominating and Governance Committee also considers whether or not each new nominee can devote sufficient time and resources to his or her duties as a Board member.

The Compensation, Nominating and Governance Committee is also responsible for examining the size of the Board and recommending to the Board a size that facilitates effective decision making, reviewing the overall composition of the Board, taking into consideration factors such as business experience, areas of expertise and competency of each director and evaluating whether the necessary and appropriate committees exist to support the work of the Board.

Compensation

For further information on the Company's compensation practices, please see the section entitled *"Item 6.B. Compensation – Compensation Governance"*.

Nomination

The Compensation, Nominating and Governance Committee is also responsible for: (i) ensuring that the mission and strategic direction of the Company is reviewed annually; (ii) ensuring that the Board and each of its committees carry out its functions in accordance with due process; (iii) assessing the effectiveness of the Board as a whole, each committee of the Board, and the contribution of each individual director; (iv) identifying, recruiting, endorsing, appointing, and orienting new directors; (v) reviewing and making compensation related recommendations and determinations regarding senior executives and directors; and (vi) the Company's human resources and compensation policies and processes.

Governance

The Compensation, Nominating and Governance Committee is also responsible for, among other things: (i) assisting the Company and the Board in fulfilling their respective corporate governance responsibilities under applicable securities laws, instruments, rules and mandatory policies and regulatory requirements; (ii) promoting a culture of integrity throughout the Company; and (iii) developing the Company's approach to governance issues and establishing sound corporate governance practices that are in the interests of shareholders and that contribute to effective and efficient decision-making.

Disclosure Committee

The Disclosure Committee is currently comprised of three directors of the Company: Michael (Zappy) Zapolin (Chair), Anthony Durkacz and Adnan Bashir. Michael (Zappy) Zapolin and Adnan Bashir are considered to be "independent" (as determined under Rule 5605(a)(2) of the Nasdaq Stock Market Rules and as such term is defined under NI 52-110).

The Disclosure Committee is responsible for, among other things, ensuring that the Company complies with its timely continuous disclosure obligations, overseeing and monitoring compliance with the Company's disclosure policies, guidelines, and procedures, promoting effective communication and preserving confidentiality of material information.

Assessments

The Board and its individual directors are assessed on an informal basis continually as to their effectiveness and contribution. The Board encourages discussion among members as to evaluation of its effectiveness as a whole, of each individual director and each of its committees. The Board does not consider that formal assessments would be useful at this stage of the Company's development. To assist in its review, the Board may conduct informal surveys of its directors. In addition, the Board works closely with management and, accordingly, are in a position to assess individual director's performance on an ongoing basis.

Director Term Limits and Other Mechanisms of Board Renewal

The Board has not adopted a term limit for directors and, as part of the Board's assessment process, the Board considers the benefit of renewal among directors in the context of the needs of the Board from time to time. In light of the nature of the industry in which the Company operates, the Board does not believe that adopting a term limit for directors is necessary or appropriate at this time.

Policies Regarding the Representation of Women on the Board

The Company does not have a written policy relating to the identification and nomination of women directors. When considering and recommending qualified director nominees, the Compensation, Nominating and Governance Committee evaluates all candidates on their skills and experience in the context of what the Board as a whole requires to be effective, taking the background and diversity, including gender, of all directors and nominees into consideration.

Consideration of the Representation of Women in the Director Identification and Selection Process

The Compensation, Nominating and Governance Committee goes through a rigorous process when considering a director nominee, including an evaluation of the skills and experience of the current directors, determining the gaps in skills and experience that exist and finding potential candidates to fill those gaps and round out the skills and experience of the Board as a whole. Diversity (including the representation of women on the Board and in executive officer positions) is a factor considered in determining the optimal composition of the Board. The final recommendation for nomination or appointment to the Board has been based on the best combination of skills and experience for the position, with due regard for the benefits of diversity on the Board.

Consideration Given to the Representation of Women in Executive Officer Appointments

The Board encourages the consideration of women who have the necessary skills, knowledge, experience, and character when considering new potential candidates for executive officer positions.

Issuer's Targets Regarding the Representation of Women on the Board and in Executive Officer Positions

The Board does not have specific targets in respect of appointing women to the Board and in respect of executive officer appointments.

Number of Women on the Board and in Executive Officer Positions

As of the date of this Annual Report there are no women on the Board or in executive officer positions (0%).

D. Employees

As of December 31, 2024, we had seven full-time employees. None of our employees are represented by collective bargaining agreements. We believe that we maintain good relations with our employees. At each date shown, we had the following number of full-time employees, broken out by function.

	December 31,		
Function	**2024**	**2023**	**2022**
Research and development	2	3	12
General and administrative	5	5	5
Total	7	8	17

E. Share Ownership.

For information regarding the share ownership of our directors and executive officers, see "*Item 6.B.-Compensation*" and "*Item 7.A.-Major Shareholders*."

F. Disclosure of a Registrant's Action to Recover Erroneously Awarded Compensation.

Not applicable.

Item 7. Major Shareholders and Related Party Transactions.

A. Major Shareholders

The following table provides information with respect to the beneficial ownership of our Class A Multiple Voting Shares and Class B Subordinate Voting Shares as of the date of this Annual Report:

- each person, or group of affiliated persons, known by us to beneficially own five percent (5%) or more of any class of our shares;
- each of our NEOs;
- each of our directors; and
- all of our directors and executive officers as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. These rules generally attribute beneficial ownership of securities to persons who possess sole or shared voting power or investment power with respect to those securities and include shares that can be acquired within 60 days of the date of this Annual Report. The percentage ownership information shown in the table is based upon 12 Class A Multiple Voting Shares and 298,793 Class B Subordinate Voting Shares outstanding as of the date of this Annual Report. Each Class A Multiple Voting Share is convertible into one Class B Subordinate Voting Share at the option of the Class A Multiple Voting Shareholder. Class A Multiple Voting Shares have 276,660 votes per share and Class B Subordinate Voting Shares have one vote per share.

As of December 31, 2024, there were 12 Class A Multiple Voting Shares outstanding, representing approximately 59% of the voting power of the Company's outstanding voting shares, and there were 2,299,748 Class B Subordinate Voting Shares outstanding, representing approximately 41% of the voting rights attached to the voting power of the Company's outstanding voting shares. For further information regarding the voting rights of the Class A Multiple Voting Shares and the Class B Subordinate Voting Shares, see Exhibit 2.1, "*Description of Securities*".

Except as otherwise indicated, all persons listed below have sole voting and investment power with respect to the shares beneficially owned by them, subject to applicable community property laws. The information is not necessarily indicative of beneficial ownership for any other purpose.

In computing the number of shares beneficially owned by a person and the percentage ownership of that person, we deemed outstanding shares subject to Options and warrants held by that person that are immediately exercisable or exercisable within 60 days of the date of this Annual Report. We did not deem these shares outstanding, however, for the purpose of computing the percentage ownership of any other person. The information in the table below is based on information known to us or ascertained by us from public filings made by the Shareholders. Except as otherwise indicated, the addresses of the directors, executive officers and named beneficial owners are in the care of the Company at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7, Canada.

For additional information regarding the Options reported in the following table, see "*Item 6. Directors, Senior Management and Employees - B. Compensation*".

	Class A Multiple Voting Shares[1]		Class B Subordinate Voting Shares		Total Voting Power
Name of Beneficial Owner	**Number**	**Percent**	**Number**	**Percent**	**Percent**
Five Percent or Greater Holders					
Rehan Saeed	6[2]	50%	6,786[3]	0.11%	27.77%
Current Directors and Named Executive Officers					
Anthony Durkacz *Co-Executive Chairman and Director*	6[4]	50%	105,750[5]	32.27%	29.42%
Zeeshan Saeed *CEO, Co-Executive Chairman and Director*	6[6]	50%	117,201[7]	35.76%	29.61%
Donal Carroll *CFO*	0	0%	82,720[8]	25.24%	1.38%
Adnan Bashir *Director*	0	0%	146[9]	0.04%	0%
Dr. Eric Hoskins *Director*	0	0%	0	0%	0%
Terry Lynch Director	0	0%	0	0%	0%
Michael (Zappy) Zapolin *Director*	0	0%	0	0%	0%
Dr. Lakshmi P. Kotra *Director, CEO of Lucid*	0	0%	21,881[10]	6.68%	0.36%
Dr. Andrzej Chruscinski *Vice-President, Clinical and Scientific Affairs*	0	0%	0	0%	0%
Dr. Ashwini Joshi *Director of Pharmaceutical Development*	0	0%	0	0%	0%
Total for Current Directors and Named Executive Officers (10 individuals)	**12**	**100%**	**327,698**	**100%**	**60.78%**

Notes:

(1) Class A Multiple Voting Shares have 276,660 votes per share.

(2) The reported number of Class A Multiple Voting Shares consists of 6 shares held by Xorax, which Mr. Rehan Saeed, the trustee of Xorax, has shared voting and dispositive power (and which such Class A Multiple Voting Shares are held for the benefit of Mr. Zeeshan Saeed).

(3) The reported number of Class B Subordinate Voting Shares as to which Mr. Rehan Saeed has shared voting and dispositive power are as follows: (i) 6,786 outstanding Class B Subordinate Voting Shares held by Xorax, and (ii) 6 Class B Subordinate Voting Shares issuable upon conversion of Class A Multiple Voting Shares held by Xorax.

(4) 6 Class A Multiple Voting Shares are held by Fortius, an entity to which Mr. Durkacz controls and has shared voting and dispositive power.

(5) The reported number of Class B Subordinate Voting Shares consists of (a) the following shares as to which Mr. Durkacz has sole voting and dispositive power consists of: (i) 97,722 outstanding Class B Subordinate Voting Shares and (ii) nil Class B Subordinate Voting Shares issuable upon exercise of outstanding Options exercisable within 60 days of the date of this Annual Report; and (b) the following shares as to which Mr. Durkacz has shared voting and dispositive power: (i) 1,632 outstanding Class B Subordinate Voting Shares held by Fortius, and (ii) 647 outstanding Class B Subordinate Voting Shares held by Jacqueline Burns, the spouse of Mr. Durkacz. The reported number of Class B Subordinate Voting Shares does not include 5,749 outstanding Class B Subordinate Voting Shares held by First Republic, of which Mr. Durkacz is a director, Executive Vice President and majority shareholder. Mr. Durkacz does not have or share voting or investment power over the Class B Subordinate Voting Shares held by First Republic.

(6) The reported number of Class A Multiple Voting Shares consists of 6 Class A Multiple Voting Shares held by Xorax, of which Mr. Zeeshan Saeed has shared voting and dispositive power.

(7) The reported number of Class B Subordinate Voting Shares consists of the following shares as to which Mr. Zeeshan Saeed (a) has sole voting and dispositive power: (i) 110,415 outstanding Class B Subordinate Voting Shares and (ii) nil Class B Subordinate Voting Shares issuable upon exercise of outstanding Options exercisable within 60 days of the date of this Annual Report; and (b) has shared voting and dispositive power: (i) 6 Class B Subordinate Voting Shares issuable upon conversion of Class A Multiple Voting Shares held by Xorax and (ii) 6,786 outstanding Class B Subordinate Voting Shares held by Xorax.

(8) The reported number of Class B Subordinate Voting Shares held by Mr. Carroll consists of (a) 82,720 outstanding Class B Subordinate Voting Shares; and (b) nil Class B Subordinate Voting Shares issuable upon exercise of outstanding Options exercisable within 60 days of the date of this Annual Report.

(9) The reported number of Class B Subordinate Voting Shares held by Mr. Bashir consists of (a) 142 outstanding Class B Subordinate Voting Shares as to which Mr. Adnan Bashir has sole voting and dispositive power; (b) 2 outstanding Class B Subordinate Voting Shares held by 58 Northwest, a corporation controlled by Mr. Bashir, and (c) 2 outstanding Class B Subordinate Voting Shares held by TFSA, a corporation controlled by Mr. Bashir.

(10) The reported number of Class B Subordinate Voting Shares held by Dr. Kotra consists of the following shares as to which Dr. Kotra has sole voting and dispositive power: (a) 7,936 outstanding Class B Subordinate Voting Shares; (b) 13,311 outstanding Class B Subordinate Voting Shares held by ILace Therapeutics International Inc., a corporation controlled by Dr. Kotra; (c) 634 outstanding Class B Subordinate Voting Shares held by Kotra Trust, a trust of which Dr. Kotra is the trustee; and (d) nil Class B Subordinate Voting Shares issuable upon exercise of outstanding Options exercisable within 60 days of the date of this Annual Report.

U.S. Share Ownership

As of the date of this Annual Report, we estimate that approximately less than 0.05% of our outstanding Class B Subordinate Voting Shares, which equates to 1,626 Class B Subordinate Voting Shares, were held in the United States by 24 holders of record. This represents less than 0.03% of the voting control of the Company. The number of holders of record does not include beneficial owners whose Class B Subordinate Voting Shares are held in street name by brokers and other nominees. The number of holders of record also does not include holders whose shares may be held in trust by other entities.

Control of Corporation

We are not controlled by another corporation, by any foreign government or by any natural or legal persons except as set forth herein, and there are no arrangements known to us which would result in a change in our control at a subsequent date.

B. Related Party Transactions

Since January 1, 2023, we have engaged in the following transactions with our related parties. For this purpose, our related parties include (a) enterprises that directly or indirectly control or are controlled by, or are under common control with, us; (b) our associates; (c) Shareholders beneficially owning 10% or more of our voting power and other individuals with significant influence over us, and close members of any such individual's family; (d) our directors and executive officers, and close members of their families; and (e) enterprises in which a substantial interest in the voting power is owned, directly or indirectly, by any person described in (c) or (d) or over which such a person is able to exercise significant influence. Our related parties include enterprises owned by directors or major Shareholders and enterprises that have a member of key management in common with us. All of the transactions have been reviewed and approved by our Board or another independent committee of the Board.

Transactions with Celly Nu and Celly U.S.

For more information on the Celly Nu IP License Agreement, Celly Nu Loan Agreement, Celly Nu Amended Loan Agreement, Celly Nu Security Agreement, Celly Nu Amended Security Agreement, Celly Warrant Certificate and Plan of Arrangement, please see " *Item 4. Information on the Company – A. History and Development of the Company Overview and History*".

For accounting purposes, the Company determined that it obtained control of Celly Nu on July 31, 2023, and control was maintained at all times from July 31, 2023, through December 31, 2024. Celly Nu is significantly dependent on the Company as a result of the Celly Nu IP License Agreement and Celly Nu Amended Loan Agreement. As of December 31, 2024, the Corporation holds 26.15% of the voting rights of Celly Nu. In addition, key management personnel of the Company hold three of the four board of director positions of Celly Nu. The assessment of control is performed on a quarterly basis.

The principal amount increased by C$300,000 from C$1,000,000 to C$1,300,000 effective March 31, 2024. The interest rate charged per annum remained unchanged.

Mortgage Loan to CEO

On April 17, 2023, FSD Strategic Investments entered into the CEO Mortgage Loan. The CEO Mortgage Loan matures on April 26, 2025, and is part of FSD Strategic Investments' portfolio of loans. The business purpose of the CEO Mortgage Loan was a treasury function to earn a rate of return on excess capital held.

On September 24, 2024, Mr. Saeed made a partial principal repayment of C$400,000, thereby reducing the total outstanding debt to the Company to C$800,000. Thus, as of December 31, 2024, the outstanding debt amounted to C$800,000.

On March 4, 2025, Mr. Saeed made a payment of C$800,000 towards the CEO Mortgage Loan, thereby settling the total debt outstanding owed to FSD Strategic Investments. As of the date of this Annual Report, Mr. Saeed has no further debt owed to FSD Strategic Investments.

December 2023 Class A Multiple Voting Share Private Placement

Effective December 4, 2023, the Corporation closed the December 2023 Class A Multiple Voting Share Private Placement

Xorax and Fortius purchased all of the Class A Multiple Voting Shares issued pursuant to the December 2023 Class A Multiple Voting Share Private Placement. The participation by such insiders is considered a "related-party transaction" within the meaning of MI 61-101. The Corporation relied on exemptions from the formal valuation and minority shareholder approval requirements of MI 61-101 contained in respectively, sections 5.5(a) and 5.7(1)(a) of MI 61-101 in respect of related party participation in the December 2023 Class A Multiple Voting Share Private Placement as neither the fair market value (as determined under MI 61-101) of the subject matter of, nor the fair market value of the consideration for, the transaction, insofar as it involved the related parties, exceeded 25% of the Corporation's market capitalization (as determined under MI 61-101). The Corporation did not file a material change report more than 21 days before the expected closing of the December 2023 Class A Multiple Voting Share Private Placement because the details of the participation therein by related parties to the Corporation were not settled until shortly prior to the closing, and the Corporation wished to close on an expedited basis for business reasons.

August 2024 Class A Multiple Voting Share Private Placement Offering

On August 15, 2024, the Company completed the August 2024 Class A Multiple Voting Share Private Placement Offering.

Xorax, a trust of which Zeeshan Saeed, the CEO and Co-Executive Chairman of Quantum BioPharma is a beneficiary, and Fortius, a corporation controlled by Anthony Durkacz, a Co-Executive Chairman of Quantum BioPharma, is a director, purchased all the Class A Multiple Voting Shares issued pursuant to the August 2024 Class A Multiple Voting Share Private Placement Offering. The participation by such insiders is considered a "related-party transaction" within the meaning of MI 61-101. The Company relied on exemptions from the formal valuation and minority shareholder approval requirements of MI 61-101 contained in respectively, sections 5.5(a) and 5.7(1)(a) of MI 61-101 in respect of related party participation in the Class A Multiple Voting Share Private Placement Offering as neither the fair market value (as determined under MI 61-101) of the subject matter of, nor the fair market value of the consideration for, the August 2024 Offering, insofar as it involved the related parties, exceeded 25% of the Company's market capitalization (as determined under MI 61- 101).

Shareholder Agreement with the Company, Xorax and Fortius.

Fortius, Xorax and the Company entered into a Shareholder Agreement dated September 13, 2024 ("Shareholder Agreement"), which prohibits unauthorized transfers of the Class A Multiple Voting Shares by either shareholder unless consent is first obtained from other shareholder. If there is a change in control of a corporate shareholder, it is considered a non-permitted transfer unless the written consent of the other shareholder is first obtained. Fortius and the Xorax are permitted to transfer the Class A Multiple Voting Shares to permitted transferees (as defined in the Shareholder Agreement), provided any permittee transferee must execute and delivers an Assumption Agreement, in which it agrees to be bound by the terms of the Shareholder Agreement in the same manner as if it had been an original party to the Shareholder Agreement.

Directors and Officers Liability Insurance

We maintain directors' and officers' liability insurance policies for the liability of our directors and officers arising out of the performance of their duties and for our liability arising out of securities claims. The policies provide coverage for a maximum total liability of C$3,000,000, and includes specific exclusions as outlined in the policy.

D&O Indemnification Agreements

See "*Item 6.B. Compensation - Indemnification*" for details.

Lucid Acquisition

See "*Item 4.A. History and Development of the Company – Important Events in the Development of the Company's Business – Lucid Acquisition"* for further details.

C. Interests of Experts and Counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

Consolidated Financial Statements

Our 2024 Annual Financial Statements are appended at the end of this Annual Report, starting at page F-1, and incorporated herein by reference.

Dividend Distribution Policy

The Company does not currently have any dividend distribution policy. Except for the Celly Nu shares distributed in October 2023 pursuant to the Plan of Arrangement, where the Company distributed an aggregate of approximately 45,712,529 Celly Nu Shares to its Shareholders, the Company has not paid any dividends or distributions on its outstanding Class B Subordinate Voting Shares, and we have no current intention to declare dividends on our Class B Subordinate Voting Shares in the foreseeable future. Any decision to pay dividends on our Class B Subordinate Voting Shares in the future will be at the discretion of our Board and will depend on, among other things, our results of operations, current and anticipated cash requirements and surplus, financial condition, any future contractual restrictions and financing agreement covenants, solvency tests imposed by corporate law and other factors that our Board may deem relevant.

Legal Proceedings

The Company is engaged in certain legal proceedings, as further described below. Litigation has been, and is expected to be, costly and time-consuming and could divert the attention of management and key personnel from our business operations. Although we intend to vigorously defend ourselves against any pending claims, and future claims that may occur, we cannot assure that we will succeed in defending any of these claims and that the judgments will not be upheld against us. If we are unsuccessful in our defense of these claims or unable to settle the claims in a manner satisfactory to us, we may be faced with outcomes that could have a material adverse effect on the Company and its financial condition. Except as otherwise disclosed below, there are no material outstanding legal proceedings or regulatory actions to which the Company is party, nor, to Company's knowledge, are there any such proceedings or actions contemplated.

GBB Drink Lab Litigation

On May 12, 2023, the Corporation announced receipt of a lawsuit filed in S.D. Fla. by GBB against the Corporation, alleging breach of a mutual non-disclosure agreement and misappropriation of trade secrets. GBB claims that its assets were, as of August 30, 2022 (prior to the misappropriation and material breach) valued at US$53,047,000. The Corporation believes the allegations are without merit and continues to defend itself in the lawsuit.

On June 23, 2023, the Corporation filed a motion to dismiss the complaint. On July 3, 2023, GBB responded in opposition to the Corporation's motion to dismiss the complaint. The Motion to Dismiss the Amended Complaint filed on June 23, 2023, has been fully briefed and is awaiting adjudication by S.D. Fla. In the meantime, on August 24, 2023, the parties filed a proposed joint scheduling report with the S.D. Fla., which set forth various deadlines that would govern this action. Under the proposed joint schedule, the case was supposed to be trial-ready by November 30, 2024. On January 8, 2024, the S.D. Fla. Dismissed the Corporation's request for a motion to dismiss the lawsuit.

On January 22, 2024, the Corporation filed a third-party complaint against Joseph Romano (a former director of the Company), and a counterclaim against GBB. The Corporation alleges that Mr. Romano breached his fiduciary duty by providing or fabricating confidential information to GBB, and that GBB aided and abetted this breach. On October 9, 2024, Judge Melissa Damian denied Mr. Romano's motion to dismiss, finding that the Corporation plausibly alleged Romano breached fiduciary duties, including his duties of loyalty, confidentiality, and to act in the company's best interests. GBB and Romano have denied the allegations in their respective answers.

As of March 27, 2025, the parties are finalizing documents to be used in discovery in advance of a May 1, 2025, deadline. Under the proposed schedule, the parties are required to participate in a mediation process by June 18, 2025. The case is expected to be trial-ready by September 2025.

Dr. Raza Bokhari

Following the contested meetings scheduled to be held on June 29, 2021, the former CEO, Dr. Raza Bokhari commenced five actions against the Company and management, which resulted in counterclaims and additional unexpected legal and operating expenses. As at the date of the Annual Report, the status of the matters is as follows:

Wrongful Dismissal Arbitration

On July 15, 2021, the Corporation's former CEO, Dr. Raza Bokhari, filed an arbitration notice seeking C$30.2 million for breach of contract, severance, and damages, along with C$500,000 for punitive damages and legal fees. Dr. Bokhari had been placed on administrative leave after the May 14, 2021, shareholder meeting and was terminated for cause on July 27, 2021, following an investigation by a special committee of the Board. The Company defended the arbitration and counterclaimed against Dr. Bokhari for reimbursement of expenses he directed the Company to pay himself, as well as losses the Company sustained as a result of Dr. Bokhari's decision to authorize a series of dilutive share issuances.

The arbitration concluded in August 2022. In its 174 page Merit Award, the Justice Cunningham dismissed Dr. Bokhari's claims in their entirety. Justice Cunningham also ordered Dr. Bokhari to repay certain monies to the Company in respect of the Company's counterclaim, while also awarding the Company its costs of the arbitration which he subsequently fixed at approximately C$2.8 million, plus interest. The Merits Award is available at the following link: https://fsdpharma.com/wp-content/uploads/2023/05/2023-03-01-Application-Record-Applicant-FSD-Pharma-Inc.pdf.

On December 9, 2022, Dr. Bokhari sought to set aside the award, citing unfair treatment and inadequate reasoning. On October 4, 2023, the Company announced that the ONSC had dismissed Dr. Bokhari's motion to set aside the arbitration award. Dr. Bokhari was required to put up C$150,000 as security for costs before the motion was heard, which he has forfeited. In addition, Dr. Bokhari was ordered to pay C$175,000 to cover the Company's legal costs for his failed set aside motion.

On October 13, 2023, Dr. Bokhari served notices of motion on the Company for leave to appeal the set aside and enforcement orders issued by the ONSC on October 4, 2023. On December 1, 2023, the Company filed a petition to confirm the arbitration award in the United States District Court for Eastern District of Pennsylvania. On December 15, 2023, the Company submitted a responding party's factum to the ONCA. On February 6, 2024, the Company announced that the ONSC affirmed judgment and awarded an additional C$5,000 in costs in light of Dr. Bokhari's failed motion for leave to appeal. On June 27, 2024, the United States District Court for Eastern District of Pennsylvania granted judgement in favor of the Company in its case against Dr. Bokhari. On January 24, 2025, the Company sought a court order from the ONSC declaring Dr. Bokhari to be a vexatious litigant. As of the date hereof, the litigation is ongoing.

Restraining Order and Class B Subordinate Voting Share Cancellation Application

On January 21, 2021, and February 10, 2021, the Board authorized the issuance of an aggregate of 1,349,765 Class B Subordinate Voting Shares as share based awards to certain directors and officers of the Corporation, including Dr. Bokhari. Upon determining that 1,198,146 of these Class B Subordinate Voting Shares (the "**Contested Shares**") had been inappropriately issued contrary to applicable laws, the Board resolved to cancel the Contested Shares on June 1, 2021, and later directed the Corporation's transfer agent to cancel and return the Contested Shares to treasury. On July 2, 2021, Dr. Bokhari, filed an action against the Corporation seeking to prevent the Corporation from cancelling his portion of the Contested States. The motion was heard and denied on July 27, 2021. On July 21, 2021, the Corporation commenced a legal proceeding against Dr. Bokhari, former members of the Board, including James Datin, Robert Ciaruffoli, Stephen Buyer and Gerald Goldberg, Dr. Bokhari's brokerages' Haywood Securities Inc. and Haywood Securities (US) Inc., and the Corporation's transfer agent. The Corporation made an application before the ONSC stating that the Contested Shares were issued contrary to section 23(2) of the OBCA and validly cancelled by resolution of the Board passed on June 1, 2021. The Corporation was able to reach an agreement with all of the former directors other than Dr. Bokhari under which they did not oppose the Corporation's application and agreed to be bound by the decision in the application, and the Corporation agreed not to seek costs against them. Neither the Corporation's transfer agent nor any of Dr. Bokhari's brokerages took any position on the application. On March 8, 2022, the court issued a mixed decision in the application, permitting the Contested Share grant to Dr. Bokhari until the date of his termination but cancelling 504,888 Contested Shares relating to services that were to be provided after the date of termination.

Bokhari v. FSD Pharma Inc. Et al.

On July 2, 2021, Dr Bokhari filed an action against the Corporation, FSD BioSciences, Anthony Durkacz and Zeeshan Saeed. The case was placed in civil suspense pending resolution of arbitration. Therefore, no further activity will occur in this case unless and until the aforementioned arbitration concludes. As of the date hereof, the litigation is ongoing.

Bokhari Wrongful Means Action

In June 2023, Dr. Bokhari commenced an action against the Company and FSD Biosciences by way of notice of action issued out of the ONSC. He subsequently filed a statement of claim, of July 7, 2023 and served the notice of action and statement of claim on a former director of the Company on December 19, 2023. The action seeks USD $1.5 million in damages for intentional interference with economic relations, misrepresentation, negligence, and other causes of action to be specified in a statement of claim. We delivered a notice of intent to defend in the action on January 5, 2024, but thus far not been required to provide a statement of defense. We believe these claims are without merit.

Bokhari Employment Claim

By way of notice of action issued on May 11, 2023, Dr. Bokhari commenced an action for damages for breach of contract against the Company in the ONSC. He subsequently filed a statement of claim in which he specified the claim as a claim for USD $30.2 million in damages on the basis that the Company breached his employment agreement by not providing him notice of default before terminating his employment. On November 10, 2023, the last day on which he could do so, Dr. Bokhari served the notice of action and statement of claim on an FSD director. We served a notice of intent to defend this action on November 22, 2023 but have not been required to serve a statement of defense. We note that to the extent he wished to advance this claim, it is a claim that Dr. Bokhari should have advanced in the employment arbitration, but did not do so As such, and bearing in mind the decision the arbitrator reached in that proceeding in our view, we believe that this claim has no merit.

Cunningham Assessment Application

By notice of application dated September 26, 2023, Dr. Bokhari applied to the ONSC for an order directing an assessment of the accounts/billing rendered by Justice Cunningham in the Wrongful Dismissal Arbitration noted above. In late January 2024, Dr. Bokhari served Arbitrator Cunningham with the notice of application and a supporting affidavit sworn January 24, 2024. Under the terms of the retainer agreement between FSD, Dr. Bokhari and Justice Cunningham, FSD is jointly and severally liable for any costs Justice Cunningham might incur as a result of this proceeding. The liability exposure that FSD could have in this matter is approximately C$182,777.50, which represents half of the arbitration fees, plus any costs in defending the arbitrator To protect its interest, the Company has instructed its legal counsel to move to have the Company joined to the proceeding. We believe this claim is without merit.

As of May 7, 2024, Mr. Bokhari decided to abandon his application to have his accounts assessed.

At a hearing on November 28, 2024, the ONSC awarded the Company C$13,000 for costs. This award was released February 10, 2025, and the amount is currently outstanding. The Company appeared before the registrar on March 12, 2025, to address the collection of the award.

Bokhari Indemnification Application

On November 12, 2021, Dr. Bokhari commenced an application in the ONSC seeking an order appointing an arbitrator to arbitrate his claim to be entitled to indemnification of his legal expenses associated with the litigation he commenced against FSD or in which he was named as a party by FSD. FSD denied the validity of the underlying indemnification agreement and therefore opposed the application. In April 2022, the parties agreed to allow Dr. Bokhari to adjourn the application indefinitely. Last year, Dr. Bokhari retained new counsel who indicated that it intended to pursue the application. To date that new counsel has taken no steps to do so. We believe this claim is without merit.

On April 6, 2022, Dr. Bokhari commenced an application in the Superior Court seeking an order appointing an arbitrator to arbitrate his claim to be entitled to indemnification of his legal expenses associated with the litigation he has commenced against the Corporation or in which he has been named as a defendant against the Corporation. The Corporation denied the validity of the underlying indemnification agreement and opposed the application. In April 2022, the parties agreed to adjourn the application without setting a new hearing date. As of the date hereof, the litigation is ongoing.

The Company's Petition against Raza Bokhari to Confirm Arbitration Award

On December 1, 2023, the Company filed a Petition to Confirm Arbitration (the "**Petition**"), in the Eastern District of Pennsylvania, which seeks to (a) confirm the four awards entered in an arbitration in Ontario, Canada, in favor of the Company and against former CEO Raza Bokhari and (b) enter final judgment against Bokhari in an amount in excess of C$3,000,000. The petition was filed in the U.S. District Court for the Eastern District of Pennsylvania. Dr. Bokhari filed a response on February 9, 2024. The Company filed a response and the litigation is ongoing.

On March 31, 2024, Mr. Bokhari requested a week-long extension, which pushed the Company's deadline of February 23, 2024, by a week. The Company filed a response on March 1, 2024.

As of May 31, 2024, the Company won the petition to confirm the arbitration awards against Dr. Raza Bokhari. As a result, on June 27, 2024, the U.S. District Court for the Eastern District of Pennsylvania confirmed the Company's motion for entry of judgement and granted judgement in favor of the Company of approximately US$3,000,000. As of the date of this Annual Report, the Company has yet to receive payment by Dr. Bokhari.

Parkway Clinical Laboratories

On July 8, 2021, Parkway Clinical Laboratories, a company wholly owned by Dr. Bokhari, filed an action against the Company, which was subsequently settled following a conference between the parties on October 20, 2021.

On July 20, 2021, a shareholder of the Corporation filed a claim in the Delaware Chancery Court against the Corporation and its directors and officers seeking to remedy harm they believe the directors and officers of the Corporation have caused by their actions. The shareholder has filed the claim on count of breach of fiduciary duties and corporate waste against the directors and officers with no dollar amount being claimed. On September 13, 2021, the Corporation filed a motion to dismiss in its entirety and the motion was heard on February 8, 2022. The claim was dismissed by the court May 6, 2022.

Lawsuit against CIBC World Markets, RBC Dominion Securities, and John Does 1-10

On October 20, 2024, the Company filed a complaint in the U.S. District Court for the Southern District of New York against CIBC World Markets, Inc., RBC Dominion Securities Inc., and John Does 1-10. The complaint alleges market manipulation through spoofing activities between January 1, 2020, and August 15, 2024. The Company is seeking damages of more than US$700 million.

The complaint alleges that between January 1, 2020, and August 15, 2024, the defendants engaged in "spoofing," an unlawful trading practice, to manipulate the market price of Quantum's shares. The complaint details that the defendants placed thousands of spoofing orders to sell, creating the illusion that Quantum's share price was declining. This practice allegedly "tricked" other investors into selling their shares at lower prices, driving the company's share price downward. The defendants then purchased shares at artificially depressed prices, positioning themselves to profit when the market price rebounded. The Company claims to have suffered significant damage and seeks to recover more than USD 700 million. It alleges that it sold approximately 90 million shares of its stock on U.S. and Canadian exchanges during the relevant period at artificially depressed prices due to the defendants' spoofing activities. The complaint names CIBC World Markets, Inc., RBC Dominion Securities Inc., and John Does 1 through 10 as defendants. It asserts three claims for relief: violation of Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5(a) and (c), violation of Section 9(a)(2) of the Securities Exchange Act of 1934, and New York Common Law Fraud.

Employment Litigation

From time to time, the Company is involved with employment litigation, in the normal course of its business.

Subsequent to the resignation of two former employees of the Company (the "**Former Employees**"), on July 9, 2021, the Former Employees filed a joint claim against the Corporation. On September 17, 2021, the Corporation filed a motion to dismiss the claim in its entirety. On December 13, 2021, the Court granted the Corporation's motion and dismissed the case. One of the Former Employee's claims was dismissed with prejudice while the other was not.

On July 18, 2023, Kevin Cassidy, a former employee, sued the Company and Lucid. The claim was for wrongful dismissal and the amounts claimed were C$497,000, plus additional damages, which have not been quantified, plus interest and costs. Pleadings have been exchanged, and on January 26, 2024, Cassidy's counsel served a motion for summary judgment.

On September 13, 2024, Cassidy entered into a settlement agreement with the Company. The terms of the settlement stipulate that a sum of C$140,000 shall be paid to Cassidy in 14 equal installments of C$10,000 each. As of the date of this Annual Report, individual payments have been successfully executed according to the schedule outlined in the settlement agreement and are in good standing.

On October 12, 2023, Dr. Sima Salahshor, a former employee, sued the Company and Lucid. The claim is for wrongful dismissal and the amounts claimed are C$97,500, plus other damages, which have not been quantified, plus interest and costs. The claim was served. This matter is at the pleadings stage and we expect that the defense will be served shortly. It is premature to estimate the likely outcome of this claim.

On August 13, 2024, Dr. Salashor entered into a settlement agreement with the Company. The terms of the settlement stipulated that a sum of C$65,000 shall be paid to Dr. Salashor. A single payment of C$65,000 was made on August 19, 2024. The company has satisfied the terms of the settlement agreement reached, and this matter is now closed effective December 31, 2024.

B. Significant Changes

A discussion of the significant changes in our business can be found under "*Item 4. Information on the Company—A. History and Development of the Company*" and "*Item 4. Information on the Company—B. Business Overview*."

Item 9. The Offer and Listing

A. Offer and Listing Details

No offering is made by this Annual Report. The Class B Subordinate Voting Shares commenced trading on the CSE on May 29, 2018, under the symbol "HUGE". Prior to the CSE listing there was no public trading in any securities of the Company. The Class B Subordinate Voting Shares commenced trading on the Nasdaq in the United States on January 9, 2020, under the symbol "HUGE". The Class B Subordinate Voting Shares are listed on the Frankfurt Stock Exchange under the symbol "0K9A". Trading on the FSE market is minimal. On August 15, 2024, in connection with the 2024 Consolidation, the Company's trading symbol was changed to "QNTM" on both the Nasdaq and CSE.

B. Plan of Distribution

Not applicable.

C. Markets

See Item 9.A "Offer and listing details."

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

See Exhibit 1.1 to this Annual Report on Form 20-F for a summary of certain material provisions of our articles of incorporation, as amended; bylaws, as amended; and certain related sections of the OBCA. See Exhibit 1.2 to this Annual Report on Form 20-F for our articles of incorporation, as amended, and Exhibit 1.3 for our bylaws, as amended.

C. Material Contracts.

We have not entered into any material contracts other than in the ordinary course of business and other than those described in "Item 4. Information on the Company" and "Item 7. Major Shareholders and Related Party Transactions" or elsewhere in this annual report on Form 20-F.

The summaries provided below and elsewhere in this Annual Report are not meant to be exhaustive and are qualified in their entirety by the full text of the relevant agreements, copies of which are filed as exhibits to this Annual Report.

Celly Nu IP License Agreement, Plan of Arrangement and Related Documents

For more information on the Celly Nu IP License Agreement, Celly Nu Amended Loan Agreement, Celly Nu Amended Security Agreement, Celly Warrant Certificate, Plan of Arrangement and related documents, please see "*Item 4. Information on the Company. - A. History and Development of the Company Overview and History – Important Events in the Development of the Company's Business*" and Exhibits 4.2-4.9.

Coattail Agreement

In accordance with the rules of the CSE designed to ensure that, in the event of a take-over bid, the holders of Class B Subordinate Voting Shares will be entitled to participate on an equal footing with holders of Class A Multiple Voting Shares, the holders of not less than 80% of the outstanding Class A Multiple Voting Shares have entered into the coattail agreement dated May 24, 2018 among the Company, Computershare Investor Services Inc., the Company's previous registrar and transfer agent of the Company, and certain of the Shareholders holding at least 80% of the Class A Multiple Voting Shares. The Coattail Agreement contains provisions customary for dual class, publicly traded Ontario corporations designed to prevent transactions that otherwise would deprive the holders of Class B Subordinate Voting Shares of rights under the take-over bid provisions of applicable Canadian securities legislation to which they would have been entitled if the Class A Multiple Voting Shares had been Class B Subordinate Voting Shares.

See Exhibit 2.1, "*Description of Securities*," for details.

UHN License Agreement

For more information, please see "*Item 4. Information on the Company. - A. History and Development of the Company - Other Significant Operations and Principal Activities – Fiscal 2022 and 2023*" and Exhibit 4.10.

Epitech License Agreement and Prismic Assignment Agreement

For more information, please see "*Item 4. Information on the Company. – C. Organizational Structure*" and Exhibits 4.13, 4.14, and 4.15.

ATM Agreement

For more information, please see "*Item 4. Information on the Company. - A. History and Development of the Company - Significant Developments in Fiscal 2022 and Fiscal 2023*" and Exhibit 4.1.

Lucid Amalgamation Agreement and Master Agreement

The Lucid Amalgamation Agreement is the amalgamation agreement dated September 20, 2021, entered into among the Company, Lucid and a wholly owned subsidiary of the Company ("**Subco**") in connection with the Lucid Acquisition. Pursuant to the Lucid Amalgamation Agreement, Lucid Psycheceuticals Inc. and Subco agreed to amalgamate into Lucid.

For more information, please see Exhibits 4.11 and 4.12.

Shareholder Agreement

For more information, please see "*Item 7. Major Shareholders and Related Party Transactions –B. Related Party Transactions*" and Exhibit 4.22.

Employment Agreements

The Company has entered into employment agreements with Zeeshan Saeed, its Chief Executive Officer, Anthony Durkacz its Co-Executive Chairman, Donal Carroll, its Chief Financial Officer and Dr. Andrzej Chruscinski, its Vice President, Clinical and Scientific Affairs.

For more information, please see "Exhibits 4.18-4.20.

D. Exchange Controls

The Company was formed under and subject to the laws of the Province of Ontario, Canada. Subject to the next paragraph and the disclosure under "*Exhibit 2.1 - Description of Securities*" below, there is no law or governmental decree or regulation in Canada that restricts the export or import of capital, or affects the payment of dividends or interest or other amounts to a non-resident holder of Class B Subordinate Voting Shares, other than withholding tax requirements.

There is no limitation imposed by Canadian law or by the charter or other constituent documents of the Company on the right of a non-resident to hold or vote Class B Subordinate Voting Shares of the Company. However, the *Competition Act* (Canada) and the *Investment Canada Act* (Canada) have rules regarding certain acquisitions of shares by certain persons, including non-residents, along with other requirements under that legislation.

See "*Item 10. Additional Information - E. Taxation*" for additional information regarding the material U.S. and Canadian federal income tax consequences relating to the ownership and disposition of our Class B Subordinate Voting Shares by U.S. Holders (as defined therein).

E. Taxation

Certain Material U.S. Federal Income Tax Considerations

The following is a general summary of certain material U.S. federal income tax considerations applicable to a U.S. Holder (as defined below) arising from and relating to the acquisition, ownership, and disposition of Class B Subordinate Voting Shares acquired pursuant to the offering.

This summary is for general information purposes only and does not purport to be a complete analysis or listing of all potential U.S. federal income tax considerations that may apply to a U.S. Holder arising from and relating to the acquisition, ownership, and disposition of Class B Subordinate Voting Shares. In addition, this summary does not take into account the individual facts and circumstances of any particular U.S. Holder that may affect the U.S. federal income tax consequences to such U.S. Holder, including, without limitation, specific tax consequences to a U.S. Holder under an applicable income tax treaty. Accordingly, this summary is not intended to be, and should not be construed as, legal or U.S. federal income tax advice with respect to any U.S. Holder. This summary does not address the U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences to U.S. Holders of the acquisition, ownership, and disposition of Class B Subordinate Voting Shares. In addition, except as specifically set forth below, this summary does not discuss applicable tax reporting requirements. Each prospective U.S. Holder is urged to consult its own tax advisor regarding the U.S. federal income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership, and disposition of Class B Subordinate Voting Shares.

No ruling from the Internal Revenue Service (the "**IRS**") has been requested, or will be obtained, regarding the U.S. federal income tax consequences of the acquisition, ownership, and disposition of Class B Subordinate Voting Shares. This summary is not binding on the IRS, and the IRS is not precluded from taking a position that is different from, and contrary to, the positions taken in this summary. In addition, because the authorities on which this summary are based are subject to various interpretations, the IRS and the U.S. courts could disagree with one or more of the conclusions described in this summary.

Scope of this Summary

This summary is based on the Internal Revenue Code of 1986, as amended (the "**Code**"), Treasury Regulations (whether final, temporary, or proposed), published rulings of the IRS, published administrative positions of the IRS, the Convention Between Canada and the United States of America with Respect to Taxes on Income and on Capital, signed September 26, 1980, as amended (the "**Canada-U.S. Tax Convention**"), and U.S. court decisions that are applicable, and, in each case, as in effect, as of the date of this document. Any of the authorities on which this summary is based could be changed in a material and adverse manner at any time, and any such change could be applied retroactively. This summary does not discuss the potential effects, whether adverse or beneficial, of any proposed legislation.

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of Class B Subordinate Voting Shares acquired pursuant to the offering that is for U.S. federal income tax purposes:

- an individual who is a citizen or resident of the United States;
- a corporation (or other entity treated as a corporation for U.S. federal income tax purposes) organized under the laws of the United States, any state thereof or the District of Columbia;
- an estate whose income is subject to U.S. federal income taxation regardless of its source; or
- a trust that (i) is subject to the primary supervision of a court within the United States and the control of one or more U.S. persons for all substantial decisions or (ii) has a valid election in effect under applicable Treasury Regulations to be treated as a U.S. person.

For purposes of this summary, the term "U.S. Holder" means a beneficial owner of Class B Subordinate Voting Shares acquired pursuant to the offering that is for U.S. federal income tax purposes:

This summary does not address the U.S. federal income tax considerations applicable to U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders that: (a) are tax-exempt organizations, qualified retirement plans, individual retirement accounts, or other tax-deferred accounts; (b) are financial institutions, underwriters, insurance companies, real estate investment trusts, or regulated investment companies; (c) are broker-dealers, dealers, or traders in securities or currencies that elect to apply a mark-to-market accounting method; (d) have a "functional currency" other than the U.S. dollar; (e) own Class B Subordinate Voting Shares as part of a straddle, hedging transaction, conversion transaction, constructive sale, or other arrangement involving more than one position; (f) acquire Class B Subordinate Voting Shares in connection with the exercise of employee stock options or otherwise as compensation for services; (g) hold Class B Subordinate Voting Shares other than as a capital asset within the meaning of Section 1221 of the Code (generally, property held for investment purposes); (h) are required to accelerate the recognition of any item of gross income with respect to Class B Subordinate Voting Shares as a result of such income being recognized on an applicable financial statement; or (i) own, have owned or will own (directly, indirectly, or by attribution) 10% or more of the total combined voting power or value of the outstanding shares of the Company. This summary also does not address the U.S. federal income tax considerations applicable to U.S. Holders who are: (a) U.S. expatriates or former long-term residents of the U.S.; (b) persons that have been, are, or will be a resident or deemed to be a resident in Canada for purposes of the Tax Act; (c) persons that use or hold, will use or hold, or that are or will be deemed to use or hold Class B Subordinate Voting Shares in connection with carrying on a business in Canada; (d) persons whose Class B Subordinate Voting Shares constitute "taxable Canadian property" under the Tax Act; or (e) persons that have a permanent establishment in Canada for the purposes of the Canada-U.S. Tax Convention. U.S. Holders that are subject to special provisions under the Code, including, but not limited to, U.S. Holders described immediately above, should consult their own tax advisor regarding the U.S. federal income, U.S. federal alternative minimum, U.S. federal estate and gift, U.S. state and local, and non-U.S. tax consequences relating to the acquisition, ownership, and disposition of Class B Subordinate Voting Shares.

If an entity or arrangement that is classified as a partnership (or other "pass-through" entity) for U.S. federal income tax purposes holds Class B Subordinate Voting Shares, the U.S. federal income tax consequences to such entity and the partners (or other owners) of such entity generally will depend on the activities of the entity and the status of such partners (or owners). This summary does not address the tax consequences to any such partner (or owner). Partners (or other owners) of entities or arrangements that are classified as partnerships or as "pass-through" entities for U.S. federal income tax purposes should consult their own tax advisors regarding the U.S. federal income tax consequences arising from and relating to the acquisition, ownership, and disposition of Class B Subordinate Voting Shares.

Ownership and Disposition of Class B Subordinate Voting Shares

The following discussion is subject in its entirety to the rules described below under the heading "*Passive Foreign Investment Company Rules*".

Taxation of Distributions

A U.S. Holder that receives a distribution, including a constructive distribution, with respect to a Class B Subordinate Voting Share will be required to include the amount of such distribution in gross income as a dividend (without reduction for any foreign income tax withheld from such distribution) to the extent of the current or accumulated "earnings and profits" of the Company, as computed for U.S. federal income tax purposes. To the extent that a distribution exceeds the current and accumulated "earnings and profits" of the Company, such distribution will be treated first as a tax-free return of capital to the extent of a U.S. Holder's tax basis in the Class B Subordinate Voting Shares and thereafter capital gain to the extent of the excess over the U.S. Holder's tax basis, Capital gain will be taxed in the manner described below at "*Sale or Other Taxable Disposition of Class B Subordinate Voting Shares*". The Company may not maintain the calculations of its earnings and profits in accordance with U.S. federal income tax principles, and each U.S. Holder may have to assume that any distribution by the Company with respect to the Class B Subordinate Voting Shares will constitute dividend income. Dividends received on Class B Subordinate Voting Shares by corporate U.S. Holders generally will not be eligible for the "dividends received deduction". Subject to applicable limitations and provided the Company is eligible for the benefits of the Canada-U.S. Tax Convention or the Class B Subordinate Voting Shares are readily tradable on a United States securities market, dividends paid by the Company to non-corporate U.S. Holders, including individuals, generally will be eligible for the preferential tax rates applicable to long-term capital gains for dividends, provided certain holding period and other conditions are satisfied, including that the Company not be classified as a PFIC in the tax year of distribution or in the preceding tax year. The dividend rules are complex, and each U.S. Holder should consult its own tax advisor regarding the application of such rules.

Sale or Other Taxable Disposition of Class B Subordinate Voting Shares

A U.S. Holder will recognize gain or loss on the sale or other taxable disposition of Class B Subordinate Voting Shares in an amount equal to the difference, if any, between (a) the amount of cash plus the fair market value of any property received and (b) such U.S. Holder's tax basis in such Class B Subordinate Voting Shares sold or otherwise disposed of. Any such gain or loss generally will be capital gain or loss, which will be long-term capital gain or loss if, at the time of the sale or other disposition, such Class B Subordinate Voting Shares are held for more than one year.

Preferential tax rates apply to long-term capital gains of a U.S. Holder that is an individual, estate, or trust. Deductions for capital losses are subject to significant limitations under the Code.

Passive Foreign Investment Company Rules

If the Company were to constitute a PFIC for any year during a U.S. Holder's holding period, then certain potentially adverse rules would affect the U.S. federal income tax consequences to a U.S. Holder resulting from the acquisition, ownership, and disposition of Class B Subordinate Voting Shares. The Company believes that it was a PFIC for the prior tax year ended December 31, 2024, and based on current business plans and financial expectations, the Company expects to be a PFIC for the current tax year. If the Company is a PFIC in the taxable year in which a U.S. Holder first invests in the Company, the adverse rules described below will apply indefinitely unless the Company no longer is a PFIC in a subsequent taxable year and the U.S. Holder makes a timely "purging election" as described below. No opinion of legal counsel or ruling from the IRS concerning the status of the Company as a PFIC has been obtained or is currently planned to be requested. However, PFIC classification is fundamentally factual in nature, generally cannot be determined until the close of the tax year in question, and is determined annually. In addition, the analysis depends, in part, on the application of complex U.S. federal income tax rules, which are subject to differing interpretations.

General PFIC Rules

In any year in which the Company is classified as a PFIC, a U.S. Holder will be required to file an annual report with the IRS containing such information as Treasury Regulations and/or other IRS guidance may require. In addition to penalties, a failure to satisfy such reporting requirements may result in an extension of the time period during which the IRS can assess a tax. U.S. Holders should consult their own tax advisors regarding the requirements of filing such information returns under these rules, including the requirement to file an IRS Form 8621 annually.

The Company generally will be a PFIC if, after the application of certain "look-through" rules with respect to subsidiaries in which the Company holds at least 25% of the value of such subsidiary, for a tax year, (a) 75% or more of the gross income of the Company for such tax year is passive income (the "**income test**") or (b) 50% or more of the value of the Company's assets either produce passive income or are held for the production of passive income (the "asset test"), based on the quarterly average of the fair market value of such assets. "Gross income" generally includes all sales revenues less the cost of goods sold, plus income from investments and from incidental or outside operations or sources, and "passive income" generally includes, for example, dividends, interest, certain rents and royalties, certain gains from the sale of stock and securities, and certain gains from commodities transactions. Active business gains arising from the sale of commodities generally are excluded from passive income if substantially all of a foreign corporation's commodities are stock in trade or inventory, depreciable property used in a trade or business or supplies regularly used or consumed in the ordinary course of its trade or business, and certain other requirements are satisfied.

If the Company were a PFIC in any tax year during which a U.S. Holder held Class B Subordinate Voting Shares, and subject to a U.S. Holder making a "QEF Election" or "Mark-to-Market Election" as described below, such holder generally would be subject to special rules with respect to "excess distributions" made by the Company on the Class B Subordinate Voting Shares and with respect to gain from the disposition of Class B Subordinate Voting Shares. An "excess distribution" generally is defined as the excess of distributions with respect to the Class B Subordinate Voting Shares received by a U.S Holder in any tax year over 125% of the average annual distributions such U.S. Holder has received from the Company during the shorter of the three preceding tax years, or such U.S. Holder's holding period for the Class B Subordinate Voting Shares. Generally, a U.S. Holder would be required to allocate any excess distribution or gain from the disposition of the Class B Subordinate Voting Shares ratably over its holding period for the Class B Subordinate Voting Shares. Such amounts allocated to the year of the disposition or excess distribution would be taxed as ordinary income, and the preferential tax rates applicable to capital gains or dividends received on our Class B Subordinate Voting Shares would not be available. In addition, amounts allocated to prior tax years would be taxed as ordinary income at the highest tax rate in effect for each such year and an interest charge would apply at a rate applicable to underpayments. These adverse tax consequences would not apply to a pension or profit-sharing trust or other tax-exempt organization that did not borrow funds or otherwise utilize leverage in connection with its acquisition of Class B Subordinate Voting Shares. In addition, if a non-electing U.S. Holder who is an individual dies while owning our Class B Subordinate Voting Shares, such U.S. Holder's successor generally would not receive a step-up in tax basis with respect to such Class B Subordinate Voting Shares, but instead would have a tax basis equal to the lower of the fair market value of such Class B Subordinate Voting Shares or the decedent's tax basis in such Class B Subordinate Voting Shares.

QEF Election

The tax consequences described above upon a PFIC determination may be mitigated if a U.S. Holder makes a timely "qualified electing fund" election (a "**QEF election**") with respect to its interest in the PFIC, provided the Company provides the U.S Holder with the necessary information regarding its ordinary earnings and net capital gain. Consequently, if the Company is classified as a PFIC, it would likely be advantageous for a U.S. Holder to elect to treat the investment as a "qualified electing fund" (a "**QEF**") with respect to such U.S. Holder in the first year in which it holds Class B Subordinate Voting Shares. If a U.S. Holder makes a timely QEF election with respect to the Company, the electing U.S. Holder would be required in each taxable year that the Company is considered to be a PFIC to include in gross income (i) as ordinary income, the U.S. Holder's pro rata share of the ordinary earnings of the Company and (ii) as capital gain, the U.S. Holder's pro rata share of the net capital gain (if any) of the Company, whether or not the ordinary earnings or net capital gain are distributed. An electing U.S. Holder's basis in its Class B Subordinate Voting Shares will be increased to reflect the amount of any taxed but undistributed income. Distributions of income that had previously been taxed will result in a corresponding reduction of basis in the Class B Subordinate Voting Shares and will not be taxed again as distributions to the U.S. Holder. Gain realized from the sale of our Class B Subordinate Voting Shares covered by a QEF election would be taxed as a capital gain and the denial of the basis step-up at death described above would not apply. Generally, a QEF election must be made by the U.S. Holder in a timely filed tax return for the first taxable year in which the U.S. Holder held our Class B Subordinate Voting Shares that includes the close of our taxable year for which we met the PFIC gross income test or asset test. A separate QEF election would need to be made for any of our subsidiaries that are classified as a PFIC. A QEF election is made on IRS Form 8621.

The U.S. federal income tax on any gain from the disposition of Class B Subordinate Voting Shares or from the receipt of Excess Distributions may be greater than the tax that would apply if a timely QEF election is made. If the Company does not provide the required information with regard to the QEF election, U.S. Holders will not be able to make a QEF election and will, subject to the discussion of the mark-to-market election below, continue to be subject to the general PFIC rules as described above. U.S. Holders are urged to consult their own tax advisors regarding the advisability and availability of making a QEF election with respect to the Company.

Mark-to-Market Election

Alternatively, if the Company were to be classified as a PFIC, a U.S. Holder could also avoid certain of the general PFIC rules described above by making a timely mark-to-market election on Form 8621 (instead of a QEF election), provided the Class B Subordinate Voting Shares are treated as regularly traded on a qualified exchange or other market within the meaning of the applicable Treasury regulations. U.S. Holders are urged to consult their own tax advisers regarding the potential availability and consequences of a mark-to-market election. A U.S. Holder who makes the mark-to-market election generally must include as ordinary income each year the increase in the fair market value of the Class B Subordinate Voting Shares and deduct from gross income the decrease in the value of such shares during each of its taxable years, but with losses limited to the amount of previously recognized net gains. The U.S. Holder's tax basis in the Class B Subordinate Voting Shares would be adjusted to reflect any income or loss recognized as a result of the mark-to-market election. If a mark-to-market election with respect to our Class B Subordinate Voting Shares is in effect on the date of a U.S. Holder's death, the tax basis of the Class B Subordinate Voting Shares in the hands of a U.S. Holder who acquired them from a decedent will be the lesser of the decedent's tax basis or the fair market value of the Class B Subordinate Voting Shares. Any gain from a sale, exchange or other disposition of the Class B Subordinate Voting Shares in any taxable year in which we are a PFIC (i.e., when we meet the gross income test or asset test described above) would be treated as ordinary income and any loss from a sale, exchange or other disposition would be treated first as an ordinary loss (to the extent of any net mark-to-market gains previously included in income) and thereafter as a capital loss. If we cease to be a PFIC, any gain or loss recognized by a U.S. Holder on the sale or exchange of the Class B Subordinate Voting Shares would be classified as a capital gain or loss. The Class B Subordinate Voting Shares should be marketable stock as long as they are listed on the Nasdaq and are regularly traded. A mark-to-market election will not apply to the Class B Subordinate Voting Shares for any taxable year during which we are not a PFIC but will remain in effect with respect to any subsequent taxable year in which we again become a PFIC. Such election will not apply to any subsidiary that we own. Accordingly, a U.S. Holder may continue to be subject to the PFIC rules with respect to any lower-tier PFICs notwithstanding the U.S. Holder's mark-to-market election.

Purging Election

If we are a PFIC at any time when a U.S. Holder holds our Class B Subordinate Voting Shares, we will generally continue to be treated as a PFIC with respect to the U.S. Holder for all succeeding years during which the U.S. Holder holds our Class B Subordinate Voting Shares even if we cease to meet the PFIC gross income test or asset test in a subsequent year. However, if we cease to meet these tests, a U.S. Holder can avoid the continuing impact of the PFIC rules by making a special election (a Purging Election) to recognize gain by making a "deemed sale" election with respect to all of the U.S. Holder's Class B Subordinate Voting Shares and have such Class B Subordinate Voting Shares deemed to be sold at their fair market value on the last day of the last taxable year during which we were a PFIC. Under another type of purging election, the Company will be deemed to have made a distribution to the U.S. Holder of such U.S. Holder's pro rata share of the Company's earnings and profits as determined for U.S. federal income tax purposes. In order for the U.S. Holder to make this second election, the Company must also be determined to be a "controlled foreign corporation" as defined by the U.S. Tax Code (which may not be the case, but please see the Controlled Foreign Corporation section below). The shareholder makes a purging election under Code section 1298(b)(1) and regulations section 1.1298–3 on IRS Form 8621 attached to the shareholder's tax return (including an amended return), or requests the consent of the IRS Commissioner to make a late election under Code section 1298(b)(1) and regulations section 1.1298–3(e) (late purging election) on Form 8621-A. In addition, for a U.S. Holder making such an election, a new holding period would be deemed to begin for our Class B Subordinate Voting Shares for purposes of the PFIC rules. After the Purging Election, the Class B Subordinate Voting Shares with respect to which the Purging Election was made will not be treated as shares in a PFIC unless we subsequently again become a PFIC.

Each U.S. person who is a shareholder of a PFIC generally must file an annual report (on IRS Form 8621) with the IRS containing certain information, and the failure to file such report could result in the imposition of penalties on such U.S. person and in the extension of the statute of limitations with respect to federal income tax returns filed by such U.S. person.

U.S. Holders should be aware that, for each tax year, if any, that the Company is a PFIC, the Company can provide no assurances that it will satisfy the record keeping requirements or make available to U.S. Holders the information such U.S. Holders require to make a QEF Election with respect to the Company or any subsidiary that also is classified as a PFIC. U.S. Holders should consult their own tax advisors regarding the potential application of the PFIC rules to the ownership and disposition of Class B Subordinate Voting Shares, and the availability of certain U.S. tax elections under the PFIC rules.

Additional Considerations

Controlled Foreign Corporation

As a result of the enactment of the Tax Cuts and JOBS Act and the repeal of Code section 958(b)(4), it is possible to accidentally create a controlled foreign corporation ("**CFC**") without having a direct or indirect United States shareholder. Historically, Code section 958(b)(4) prevented stock owned by a foreign person from being attributed downward to a U.S. person (e.g., a partnership, corporation, trust, or estate) owned by such foreign person. Effective as of the last taxable year of a foreign corporation beginning before January 1, 2018, stock may be attributed downward from a person to a corporation if "50 percent or more in value of the stock in a corporation is owned, directly or indirectly by or such person." As a result of the repeal of Code section 958(b)(4), it is thus possible to accidentally create CFCs without a direct or indirect United States shareholder. This is because, since the repeal, a U.S. corporation owned by a foreign parent corporation may be treated as constructively owning the stock of the foreign parent or even the foreign parent's foreign subsidiaries (i.e., foreign brother-sister companies). The Company believes that certain case law along with the legislative intent of the repeal may substantiate that it is not a CFC, although it is possible that the IRS may disagree. In discussing the repeal of Code section 958(b)(4), the Senate amendment that was followed by the Conference Report provides: "[f]urthermore, the Senate Finance Committee explanation states that the provision is not intended to cause a foreign corporation to be treated as a controlled foreign corporation regarding a U.S. shareholder as a result of attribution of ownership under section 318(a)(3) to a U.S. person that is not a related person (within the meaning of section 954(d)(3)) to such U.S. shareholder as a result of the repeal of section 958(b)(4)." The Tax Court case of *Nettie Miller v. Commissioner* stands for the premise that reading the current rules strictly would result in an absurd result that the Company's U.S. subsidiary (a non-Code section 958(a) shareholder) is treated as constructively owning the Company. Furthermore, in Rev. Rul. 74-605, the IRS concluded that a subsidiary could not be attributed ownership of its direct or indirect parent corporations for purposes of applying Code section 304. The IRS's rationale is that if a subsidiary were treated as constructively owning its parent (or grandparent) under the constructive ownership rules (that is, Code section 318(a)(3)(C)), it would further be treated as owning its own stock. The IRS concluded that treating a subsidiary as owning its own stock would violate regulation section 1.318-1(b)(1), which provides that "a corporation shall not be considered to own its own stock by reason of section 318(a)(3)(C)." Thus, the Company may not be a CFC as a result of Rev. Rul. 74-605, *Nettie Miller*, and the legislative intent of the repeal of Code section 958(b)(4). It should be noted, however, that the rationale for the Company not being classified as a CFC may not extend to the Company's non-U.S. subsidiaries. As such, any U.S. Holders that own 10 percent or more of the total combined voting power of all classes of stock entitled to vote of the Company, or 10 percent or more of the total value of shares of all classes of stock of the Company should consider whether the overlap rules for CFCs and PFICs apply to them pursuant to Code section 1297(d) when determining their U.S. tax obligations for the Company or any of its non-U.S. subsidiaries. U.S. Holders should consult their own tax advisors regarding the application of this rule since the attribution rules related to ownership are very complex.

Additional Tax on Passive Income

Certain U.S. Holders that are individuals, estates and trusts whose income exceeds certain thresholds will be required to pay a 3.8% surtax on "net investment income" including, among other things, dividends, and net gain from disposition of property (other than property held in certain trades or businesses). U.S. Holders should consult their own tax advisors regarding the application, if any, of this tax on their ownership and disposition of Class B Subordinate Voting Shares.

Receipt of Foreign Currency

The amount of any distribution paid to a U.S. Holder in foreign currency, or on the sale, exchange, or other taxable disposition of Class B Subordinate Voting Shares, generally will be equal to the U.S. dollar value of such foreign currency based on the exchange rate applicable on the date of receipt (regardless of whether such foreign currency is converted into U.S. dollars at that time). A U.S. Holder will have a basis in the foreign currency equal to its U.S. dollar value on the date of receipt. Any U.S. Holder who converts or otherwise disposes of the foreign currency after the date of receipt may have a foreign currency exchange gain or loss that would be treated as ordinary income or loss, and generally will be U.S. source income or loss for foreign tax credit purposes. Different rules apply to U.S. Holders who use the accrual method of tax accounting. Each U.S. Holder should consult its own U.S. tax advisor regarding the U.S. federal income tax consequences of receiving, owning, and disposing of foreign currency.

Foreign Tax Credit

Subject to the PFIC rules discussed above, a U.S. Holder that pays (whether directly or through withholding) Canadian income tax with respect to dividends paid on the Class B Subordinate Voting Shares generally will be entitled, at the election of such U.S. Holder, to receive either a deduction or a credit for such Canadian income tax. Generally, a credit will reduce a U.S. Holder's U.S. federal income tax liability on a dollar-for-dollar basis, whereas a deduction will reduce a U.S. Holder's income that is subject to U.S. federal income tax. This election is made on a year-by-year basis and applies to all foreign taxes paid (whether directly or through withholding) by a U.S. Holder during a year.

Complex limitations apply to the foreign tax credit, including the general limitation that the credit cannot exceed the proportionate share of a U.S. Holder's U.S. federal income tax liability that such U.S. Holder's "foreign source" taxable income bears to such U.S. Holder's worldwide taxable income. In applying this limitation, a U.S. Holder's various items of income and deduction must be classified, under complex rules, as either "foreign source" or "U.S. source." Generally, dividends paid by a foreign corporation should be treated as foreign source for this purpose, and gains recognized on the sale of stock of a foreign corporation by a U.S. Holder should be treated as U.S. source for this purpose, except as otherwise provided in an applicable income tax treaty, and if an election is properly made under the Code. However, the amount of a distribution with respect to the Class B Subordinate Voting Shares that is treated as a "dividend" may be lower for U.S. federal income tax purposes than it is for Canadian federal income tax purposes, resulting in a reduced foreign tax credit allowance to a U.S. Holder. In addition, this foreign tax credit limitation is calculated and applied separately with respect to specific categories of income. The foreign tax credit rules are complex, and each U.S. Holder should consult its own U.S. tax advisor regarding the foreign tax credit rules.

Backup Withholding and Information Reporting

Under U.S. federal income tax law and Treasury Regulations, certain categories of U.S. Holders must file information returns with respect to their investment in, or involvement in, a foreign corporation. For example, U.S. return disclosure obligations (and related penalties) are imposed on individuals who are U.S. Holders that hold certain specified foreign financial assets in excess of certain threshold amounts. The definition of specified foreign financial assets includes not only financial accounts maintained in foreign financial institutions, but also, unless held in accounts maintained by a financial institution, any stock or security issued by a non-U.S. person, any financial instrument or contract held for investment that has an issuer or counterparty other than a U.S. person and any interest in a foreign entity. U. S. Holders may be subject to these reporting requirements unless their Class B Subordinate Voting Shares are held in an account at certain financial institutions. Penalties for failure to file certain of these information returns are substantial. U.S. Holders should consult their own tax advisors regarding the requirements of filing information returns, including the requirement to file an IRS Form 8938.

Payments made within the United States or by a U.S. payor or U.S. middleman, of dividends on, and proceeds arising from the sale or other taxable disposition of, Class B Subordinate Voting Shares will generally be subject to information reporting and backup withholding tax, at the rate of 24%, if a U.S. Holder (a) fails to furnish such U.S. Holder's correct U.S. taxpayer identification number (generally on Form W-9), (b) furnishes an incorrect U.S. taxpayer identification number, (c) is notified by the IRS that such U.S. Holder has previously failed to properly report items subject to backup withholding tax, or (d) fails to certify, under penalty of perjury, that such U.S. Holder has furnished its correct U.S. taxpayer identification number and that the IRS has not notified such U.S. Holder that it is subject to backup withholding tax. However, certain exempt persons generally are excluded from these information reporting and backup withholding rules. Backup withholding is not an additional tax. Any amounts withheld under the U.S. backup withholding tax rules generally will be allowed as a credit against a U.S. Holder's U.S. federal income tax liability, if any, or will be refunded, if such U.S. Holder furnishes required information to the IRS in a timely manner.

The discussion of reporting requirements set forth above is not intended to constitute a complete description of all reporting requirements that may apply to a U.S. Holder. A failure to satisfy certain reporting requirements may result in an extension of the time period during which the IRS can assess a tax, and under certain circumstances, such an extension may apply to assessments of amounts unrelated to any unsatisfied reporting requirement. Each U.S. Holder should consult its own tax advisor regarding the information reporting and backup withholding rules.

THE ABOVE SUMMARY IS NOT INTENDED TO CONSTITUTE A COMPLETE ANALYSIS OF ALL TAX CONSIDERATIONS APPLICABLE TO U.S. HOLDERS WITH RESPECT TO THE ACQUISITION, OWNERSHIP, AND DISPOSITION OF CLASS B SUBORDINATE VOTING SHARES. U.S. HOLDERS SHOULD CONSULT THEIR OWN TAX ADVISORS AS TO THE TAX CONSIDERATIONS APPLICABLE TO THEM IN THEIR OWN PARTICULAR CIRCUMSTANCES.

Certain Canadian Federal Income Tax Considerations

The following summary describes, as of the date of this Annual Report, the material Canadian federal income tax considerations generally applicable to a Shareholder who is a beneficial owner of our Class B Subordinate Voting Shares and who, at all relevant times, for the purposes of the application of the *Income Tax Act* (Canada) and the *Income Tax Regulations* (collectively, the "**Canadian Tax Act**"), (1) is not, and is not deemed to be, resident in Canada for purposes of the Canadian Tax Act and any applicable income tax treaty or convention; (2) deals at arm's length with us; (3) is not affiliated with us; (4) does not use or hold, and is not deemed to use or hold, Class B Subordinate Voting Shares in a business or part of a business carried on in Canada; (5) has not entered into, with respect to the Class B Subordinate Voting Shares, a "derivative forward agreement", as that term is defined in the Canadian Tax Act and (6) holds the Class B Subordinate Voting Shares as capital property (a "**Non-Canadian Holder**"). This summary does not apply to a Non-Canadian Holder that is an insurer carrying on an insurance business in Canada and elsewhere or an "authorized foreign bank", as that term is defined in the Canadian Tax Act. Such Non-Canadian Holders should consult their own tax advisors for advice having regards to their particular circumstances.

This summary is based on the current provisions of the Canadian Tax Act and the Canada-United States Tax Convention (1980), as amended (the "**Canada-U.S. Tax Treaty**"), and an understanding of the current administrative policies and assessing practices of the Canada Revenue Agency published in writing prior to the date hereof. It takes into account all specific proposals to amend the Canadian Tax Act and the Canada-U.S. Tax Treaty, publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date hereof (the "**Proposed Amendments**") and assumes that all Proposed Amendments will be enacted in the form proposed. However, no assurances can be given that the Proposed Amendments will be enacted as proposed, or at all. This summary does not otherwise take into account or anticipate any changes in law or administrative policy or assessing practice whether by legislative, regulatory, administrative or judicial decision or action nor does it take into account tax legislation or considerations of any province, territory or foreign jurisdiction, which may differ from those discussed herein.

This summary is of a general nature only and is not, and is not intended to be, legal or tax advice to any particular shareholder, and no representations with respect to the income tax consequences to any particular shareholder are made. This summary is not exhaustive of all Canadian federal income tax considerations. Accordingly, you should consult your own tax advisor with respect to your particular circumstances.

Generally, for purposes of the Canadian Tax Act, all amounts relating to the acquisition, holding or disposition of the Class B Subordinate Voting Shares must be converted into Canadian dollars based on the exchange rate quoted by the Bank of Canada on the date such amount arose or such other rate of exchange as is acceptable to the Minister of National Revenue (Canada).

Dividends

Dividends paid or credited on the Class B Subordinate Voting Shares or deemed to be paid or credited on the Class B Subordinate Voting Shares to a Non-Canadian Holder will be subject to Canadian withholding tax at the rate of 25% on the gross amount of the dividend, subject to any reduction in the rate of withholding to which the Non-Canadian Holder is entitled under any applicable income tax treaty or convention between Canada and the country in which the Non-Canadian Holder is resident. For example, under the Canada-U.S. Tax Treaty, where dividends on the Class B Subordinate Voting Shares are considered to be paid to or derived by a Non-Canadian Holder that is a beneficial owner of the dividends and is a U.S. resident for the purposes of, and is entitled to the full benefits of, the Canada-U.S. Tax Treaty, the applicable rate of Canadian withholding tax is generally reduced to 15%. We will be required to withhold the applicable withholding tax from any dividend and remit it to the Canadian government for the Non-Canadian Holder's account. Non-Canadian Holders are urged to consult their own advisors to determine their entitlement to relief under an applicable income tax treaty or convention.

Dispositions

A Non-Canadian Holder will not be subject to tax under the Canadian Tax Act on any capital gain realized on a disposition or deemed disposition of a Class B Subordinate Voting Share, unless the Class B Subordinate Voting Share is "taxable Canadian property" to the Non-Canadian Holder for purposes of the Canadian Tax Act at the time of disposition and the Non-Canadian Holder is not entitled to relief under an applicable income tax treaty or convention between Canada and the country in which the Non-Canadian Holder is resident.

Generally, the Class B Subordinate Voting Shares will not constitute "taxable Canadian property" to a Non-Canadian Holder at a particular time provided that the Class B Subordinate Voting Shares are listed at that time on a "designated stock exchange" (as defined in the Canadian Tax Act), which currently includes the CSE and the Nasdaq, unless at any particular time during the 60-month period that ends at that time the following two conditions are met concurrently:

- at least 25% of the issued shares of any class or series of our capital stock was owned by or belonged to any combination of (a) the Non-Canadian Holder, (b) persons with whom the Non-Canadian Holder does not deal at arm's length for purposes of the Canadian Tax Act, and (c) partnerships in which the Non-Canadian Holder or a person described in (b) holds a membership interest directly or indirectly through one or more partnerships, and
- more than 50% of the fair market value of the Class B Subordinate Voting Shares was derived, directly or indirectly, from one or any combination of: (i) real or immoveable property situated in Canada, (ii) "Canadian resource properties" (as that term is defined in the Canadian Tax Act), (iii) "timber resource properties" (as that term is defined in the Canadian Tax Act) or (iv) options in respect of, or interests in, or for civil law rights in, a property described in any of the foregoing whether or not the property exists.

Notwithstanding the foregoing, in certain circumstances, Class B Subordinate Voting Shares could be deemed to be "taxable Canadian property" to a Non-Canadian Holder. **Non-Canadian Holders whose Class B Subordinate Voting Shares are, or may constitute, "taxable Canadian property" should consult their own tax advisors**.

F. Dividends and Paying Agents

Not applicable.

G. Statement by Experts

Not applicable.

H. Documents on Display

We are subject to the information reporting requirements of the Exchange Act applicable to foreign private issuers and under those requirements will file reports with the SEC. Those reports may be inspected without charge at the locations described below. As a foreign private issuer, we are exempt from the rules under the Exchange Act related to the furnishing and content of proxy statements, and our officers, directors and principal shareholders are exempt from the reporting and short-swing profit recovery provisions contained in Section 16 of the Exchange Act. In addition, we are not required under the Exchange Act to file periodic reports and financial statements with the SEC as frequently or as promptly as United States companies whose securities are registered under the Exchange Act. Nevertheless, we will file with the SEC an Annual Report on Form 20-F containing financial statements that have been examined and reported on, with and opinion expressed by an independent registered public accounting firm.

We maintain a corporate website at https://www.quantumbiopharma.com. We intend to post our Annual Report on Form 20-F on our website promptly following its filing with the SEC. Information contained on, or that can be accessed through, our website does not constitute a part of this Annual Report. We have included our website address in this Annual Report solely as an inactive textual reference.

The SEC maintains a website (*www.sec.gov*) that contains reports, proxy and information statements and other information regarding registrants, such as us, that file electronically with the SEC.

This Annual Report, copies of our financial statements and other continuous disclosure documents required under the *Securities Act* (Ontario) are available for viewing on the Company's SEDAR+ profile accessible at www.sedarplus.ca. All of the documents referred to are in English.

With respect to references made in this Annual Report to any contract or other document of our company, such references are not necessarily complete, and you should refer to the exhibits attached or incorporated by reference to this Annual Report for copies of the actual contract or document.

I. Subsidiary Information

Not applicable.

J. Annual Report to Security Holders

Not applicable.

Item 11. Quantitative and Qualitative Disclosures About Market Risk.

Foreign Currency Risk

We operate primarily in Canada, the United States, and Australia. Therefore, we are exposed to foreign currency risk associated with our expenses outside of Canada. We do not use financial derivative instruments to manage this market risk.

Interest Rate Risk

None of the Company's long-term debts contain interest rate provisions that may be subject to fluctuations in market interest rates. As such, the Company does not have a significant interest rate risk or has entered into any financial instruments to mitigate such risk.

We do not use financial instruments for trading purposes and are not parties to any leverage derivatives. We do not currently engage in hedging transactions. For more information, see "*Item 4.A - Information on the Company*".

Cryptocurrency Risk

The Company holds certain cryptocurrency assets, which exposes us to risks associated with the volatility of cryptocurrency markets. The value of these holdings is subject to significant fluctuations due to changes in market conditions, investor sentiment, regulatory developments, and technological changes. Cryptocurrencies are inherently speculative and may experience periods of illiquidity, which could impact our ability to convert these holdings into cash when required. Additionally, the regulatory environment for cryptocurrencies is evolving and may result in changes that could adversely affect the value or usability of our cryptocurrency holdings. We do not currently engage in hedging transactions to mitigate these risks.

Item 12. Description of Securities Other than Equity Securities

A. Debt Securities

Not applicable.

B. Warrants and Rights

Not applicable.

C. Other Securities

Not applicable.

D. American Depositary Shares

Not applicable.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

Not applicable.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds.

A.-D.

Not applicable.

E. Use of Proceeds

See the 2024 Annual MD&A attached hereto as Exhibit 15.1.

Item 15. Controls and Procedures

A. Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of our CEO and CFO, our management has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2024, the end of the period covered by this annual report. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2024.

The effectiveness of our disclosure controls and procedures and our internal control over financial reporting is subject to various inherent limitations, including cost limitations, judgments used in decision making, assumptions about the likelihood of future events, the soundness of our systems, the possibility of human error, and the risk of fraud. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions and the risk that the degree of compliance with policies or procedures may deteriorate over time. Because of these limitations, there can be no assurance that any system of disclosure controls and procedures or internal control over financial reporting will be successful in preventing all errors or fraud or in making all material information known in a timely manner to the appropriate levels of management.

B. Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is the process designed by and under the supervision of our CEO and CFO to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external reporting in accordance with IFRS.

Under the supervision and with the participation of our CEO and CFO, our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2024, and concluded that it was effective.

C. Attestation Report of the Registered Public Accounting Firm

Not applicable.

D. Changes in Internal Control Over Financial Reporting

Under the supervision and with the participation of our CEO and CFO, our management has evaluated changes in our internal control over financial reporting that occurred during the period covered by this Annual Report. Based on that evaluation, our CEO and CFO did not identify any change in our internal control over financial reporting that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Item 16. [Reserved.]

Item 16A. Audit Committee Financial Expert.

Our Board has determined that Dr. Eric Hoskins, the Chair of the Audit Committee of our Board, is an "audit committee financial expert" as defined by SEC rules and has the requisite financial sophistication under the listing standards of Nasdaq. Mr. Hoskins meets the standards of independence applicable to audit committees under Rule 10A-3 under the Exchange Act and under the listing standards of Nasdaq.

Item 16B. Code of Ethics.

We have adopted the Code that is applicable to all of our directors, executive officers, and employees, including our principal executive officer, principal financial officer, principal accounting officer and controller. A copy of the Code is available on our website at https://www.quantumbiopharma.com.

During 2024, except for the CEO Mortgage Loan, no provision of the Code applicable to our principal executive officer, principal financial officer, principal accounting officer or controller was amended (other than technical, administrative, or other non-substantive amendments), nor did we grant any waiver (including an implicit waiver) of any provision of the Code to any such officer. During the first quarter of 2025, Mr. Saeed had fully settled his CEO Mortgage Loan, and currently has no other outstanding debt owed to the Company as of the date of this Annual Report.

We intend to disclose any amendments to the Code applicable to our principal executive officer, principal financial officer, principal accounting officer or controller (other than technical, administrative, or other non-substantive amendments) and any waiver of the Code for any such officer on our website within five business days following the date of the amendment or waiver. We expect to maintain any such disclosure on our website for a period of at least twelve months from the date of posting.

Item 16C. Principal Accountant Fees and Services.

MNP LLP, auditors of the Company since November 29, 2019, served as our independent registered public accounting firm for the years ended December 31, 2024, 2023 and 2022. The following table provides a summary of the fees for professional services rendered by MNP for the years ended December 31, 2024, and 2023:

PCAOB ID:1930
Mississauga, Canada

Auditors' Fees

The following table sets forth the fees billed by the Company's auditor during the years ended December 31, 2024, and December 31, 2023:

Fee	2024	2023
Audit Fees(1)	C$363,335	C$380,138
Audit-Related Fees(2)	C$0	C$57,432
Tax Fees(3)	C$59,488	C$63,990.28
All Other Fees(4)	C$53,200	$57,432
Total	C$476,023	$558,503

Notes

(1) "Audit Fees" include fees necessary to perform the annual audit and quarterly reviews of the Company's consolidated financial statements. Audit Fees include fees for review of tax provisions and for accounting consultations on matters reflected in the financial statements. Audit Fees also include audit or other attest services required by legislation or regulation, such as comfort letters, consents, reviews of securities filings and statutory audits.
(2) "Audit-Related Fees" include services that are traditionally performed by the auditor. These audit-related services include employee benefit audits, due diligence assistance, accounting consultations on proposed transactions, internal control reviews and audit or attest services not required by legislation or regulation.
(3) "Tax Fees" include fees for all tax services other than those included in "Audit Fees" and "Audit-Related Fees". This category includes fees for tax compliance, tax planning and tax advice. Tax planning and tax advice includes assistance with tax audits and appeals, tax advice related to mergers and acquisitions, and requests for rulings or technical advice from tax authorities.
(4) "All Other Fees" include all other non-audit services.

All permissible categories of non-audit services require pre-approval by the Audit Committee, subject to certain statutory exemptions.

Item 16D. Exemptions from the Listing Standards for Audit Committees.

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers.

On January 12, 2023, the Board authorized the 2023 NCIB, pursuant to which the Company was able to repurchase for cancellation up to 1,925,210 Class B Subordinate Voting Shares, being approximately 5% of the Company's issued and outstanding Class B Subordinate Voting Shares as of January 12, 2023, over a 12-month period. The 2023 NCIB commenced on January 18, 2023, and was terminated on January 12, 2024. Under the 2023 NCIB, the Company repurchased for cancellation 1,904,700 Class B Subordinate Voting Shares at an average price of approximately C$2.11 per Class B Subordinate Voting Shares. All Class B Subordinate Voting Shares were repurchased through the facilities of the CSE at the prevailing market price on the CSE at the time of repurchase.

The following table specifies the number of shares purchased by the Company under the 2023 NCIB:

Period	Total Number of Shares Purchased	Average Price Paid Per Share (C$)	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
Month #1 (January 1, 2023 - January 31, 2023)	289,600	1.39	289,600	1,635,610
Month #2 (February 1, 2023 - February 28, 2023)	1,328,700	2.27	1,618,300	306,910
Month #3 (March 1, 2023 - March 31, 2023)	286,400	2.10	1,904,700	20,510
Month #4 (April 1, 2023 - April 30, 2023)	-	-	1,904,700	20,510
Month #5 (May 1, 2023 - May 31, 2023)	-	-	1,904,700	20,510
Month #6 (June 1, 2023 - June 30, 2023)	-	-	1,904,700	20,510
Month #7 (July 1, 2023 - July 31, 2023)	-	-	1,904,700	20,510
Month #8 (August 1, 2023 - August 31, 2023)	-	-	1,904,700	20,510
Month #9 (September 1, 2023 - September 30, 2023)	-	-	1,904,700	20,510
Month #10 (October 1, 2023 - October 31, 2023)	-	-	1,904,700	20,510
Month #11 November 1, 2023 - November 30, 2023	-	-	1,904,700	20,510
Month #12 (December 1, 2023 - December 31, 2023)	-	-	1,904,700	20,510
Month #13 (January 1, 2024 - January 12, 2024)	-	-	1,904,700	20,510

Item 16F. Change in Registrant's Certifying Accountant.

Not applicable.

Item 16G. Corporate Governance.

The Company is a foreign private issuer, and its Class B Subordinate Voting Shares are listed on Nasdaq. Nasdaq Marketplace Rule 5615(a)(3) permits a foreign private issuer to follow its home country practices in lieu of most of the requirements of the 5600 Series of the Nasdaq Marketplace Rules. In order to claim such an exemption, the Company must disclose the significant differences between its corporate governance practices and those required to be followed by U.S. domestic issuers under Nasdaq's corporate governance requirements. Set forth below is a brief summary of such differences:

Independent Director Requirements

Nasdaq Marketplace Rule 5605(b)(1) requires a majority of the board of directors of each issuer to be comprised of independent directors, as that term is defined under Rule 5605(a)(2). The Company has a majority of independent directors and follows the Nasdaq Marketplace Rule and complies with the applicable CSE rules and applicable Canadian and Ontario corporate and securities regulatory requirements.

Shareholder Approval Requirements

Nasdaq Marketplace Rule 5635 requires each issuer to obtain shareholder approval prior to certain dilutive events, including a transaction other than a public offering involving the sale of 20% or more of the issuer's outstanding shares of common stock prior to the transaction for less than the greater of book or market value of the stock. The Company does not follow this Nasdaq Marketplace Rule. Instead, and in accordance with the Nasdaq exemption, the Company complies with Ontario corporate and securities laws, which do not require shareholder approval for dilutive events unless the Company were to dispose of all or substantially all of its undertaking. In addition, the Company follows the CSE policies which require shareholder approval on the occurrence of a "fundamental change," defined by the policies of the CSE to be a "major acquisition" (whereby for the next 12-month period at least 50% of the issuer's assets will be comprised of, or anticipated revenues are expected to be derived from, the assets, properties, businesses or other interests that are the subject of the major acquisition) accompanied or preceded by a "change of control." In such context, a "change of control" would include the distribution of a number of equity securities of the issuer equal to or greater than 100% of the number outstanding prior to the transaction, as well as a substantial change of management or the board of directors of the issuer.

In addition, Nasdaq Marketplace Rule 5635 requires shareholder approval of most equity compensation plans and material revisions to such plans. We do not follow this Nasdaq Marketplace Rule. Instead, and in accordance with the Nasdaq exemption, we comply with Ontario corporate and securities laws, which do not require shareholder approval of equity compensation plans. In addition, the Company intends to follow the CSE policies and certain provisions of Canadian securities laws which require limitations on the number of equity compensation securities that can be distributed to persons performing investor relations services to 1% of the issued and outstanding amount of listed securities in a 12-month period, and further limit the number of equity compensation securities that can be distributed to a director, officer or a related entity of the issuer, or an associate thereof (each a "related person"), on a fully diluted basis to not exceed 5% of the outstanding securities of the issuer, or collectively to related persons exceeds 10% of the outstanding securities of the issuer.

Quorum Requirement

Nasdaq Marketplace Rule 5620(c) requires that each company that is not a limited partnership shall provide for a quorum as specified in its by-laws for any meeting of holders of common stock; provided, however, that in no case shall such quorum be less than 33-1/3% of the outstanding shares of the Company's common voting stock. The Company does not presently follow this Nasdaq Marketplace Rule. Instead, the Company complies with Ontario corporate and securities laws and its by-laws which do not require a quorum of no less than 33-1/3% of the outstanding shares of the Company's common voting stock and provides that the quorum for the transaction of business at a meeting of Shareholders is at least two voting persons holding or representing, in the aggregate, not less than 10% of the issued and outstanding shares of the applicable class.

Independent Director Oversight of Executive Compensation and Board Nominations

Nasdaq's Marketplace Rule 5605(d) requires independent director oversight of executive officer compensation arrangements by approval of such compensation by a committee comprised solely of independent directors, and Marketplace Rule 5605(e) requires similar oversight with respect to the process of selecting nominees to the board or oversight by a majority of the independent directors. Under the exemption available to foreign private issuers under Rule 5615(a)(3), the Company is not required to comply with Nasdaq Marketplace Rules 5605(d) or 5605(e). Instead, and in accordance with the Nasdaq exemption, the Company complies with the applicable CSE rules and applicable Canadian corporate and securities regulatory requirements.

Proxy Delivery Requirements

Nasdaq Marketplace Rule 5620(b) requires that a listed company that is not a limited partnership to solicit proxies and provide proxy statements for all meetings of Shareholders and also provide copies of such proxy solicitation materials to Nasdaq. The Company is a "foreign private issuer" as defined in Rule 3b-4 under the Exchange Act, and the equity securities of the Company are accordingly exempt from the proxy rules set forth in Sections 14(a), 14(b), 14(c) and 14(f) of the Exchange Act. The Company solicits proxies in accordance with applicable rules and regulations in Canada.

Item 16H. Mine Safety Disclosure

Not applicable.

Item 16I. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections

Not applicable.

Item 16J. Insider Trading Policies

All of the Company's executives, other employees and directors are subject to the Company's Insider Trading and Blackout Period Policy, which prohibits trading in the Company's securities while in possession of material undisclosed information about the Company. The Insider Trading and Blackout Period Policy is reasonably designed to promote compliance with applicable insider trading laws, rules, and regulations, and any listing standards applicable to the Company. Under this policy, such individuals are also prohibited from entering into hedging transactions involving securities of the Company, such as short sales, puts and calls. Furthermore, subject to certain limited exceptions, the Company permits executives, including the NEOs, to trade in the Company's securities only during prescribed trading windows.

A copy of the Insider Trading and Blackout Period Policy, as currently in effect, is filed as Exhibit 11.1 to this Annual Report.

Item 16K. Cybersecurity.

We have established policies and processes for assessing, identifying, and managing risks from cybersecurity threats, and have integrated these processes into our overall risk management systems and processes. We routinely assess risks from cybersecurity threats, including any potential unauthorized occurrence on or conducted through our information systems that may result in adverse effects on the confidentiality, integrity, or availability of our information systems or any information residing therein.

We conduct periodic risk assessments to identify cybersecurity threats, as well as assessments in the event of a material change in our business practices that may affect information systems that are vulnerable to such cybersecurity threats. These risk assessments include identification of reasonably foreseeable internal and external risks, the likelihood and potential damage that could result from such risks, and the sufficiency of existing policies, procedures, systems, and safeguards in place to manage such risks.

Following these risk assessments, we evaluate whether and how to re-design, implement, and maintain reasonable safeguards to minimize identified risks; reasonably address any identified gaps in existing safeguards; and regularly monitor the effectiveness of our safeguards. We devote significant resources and designate high-level personnel, including our CFO, who reports to our Board, to manage the risk assessment and mitigation process.

As part of our overall risk management system, we monitor our safeguards and train our employees on these safeguards. Personnel at all levels and departments are made aware of our cybersecurity policies through trainings integrated into new employee onboarding processes and annual employee re-training.

We engage consultants, experts, or other third parties in connection with our risk assessment processes. These third parties assist us in designing and implementing our cybersecurity policies and procedures, as well as in monitoring and testing our safeguards.

We require each third-party service provider who may have access to our systems and/or our sensitive data to confirm that it has the ability to implement and maintain appropriate security measures, consistent with all applicable laws, to implement and maintain reasonable security measures in connection with their work with us, and to promptly report any suspected breach of its security measures that may affect our company.

We have not experienced any cybersecurity incidents that have been determined to be material in the past, however, like other biopharmaceutical companies, we have experienced cybersecurity incidents and may continue to experience them in the future. For additional information regarding whether any risks from cybersecurity threats are reasonably likely to materially affect our company, including our business strategy, results of operations, or financial condition, please refer to "*Item 3. Key information - D. Risk Factors*" in this Annual Report on Form 20-F.

Governance

One of the key functions of our Board is informed oversight of our risk management process, including risks from cybersecurity threats. Our Board is responsible for monitoring and assessing strategic risk exposure, and our executive officers are responsible for the day-to-day management of the material risks we face. Our Board administers its cybersecurity risk oversight function directly as a whole, as well as through the audit committee.

Our CFO and our management committee on cybersecurity, and outside consultants, who collectively possess significant experience in evaluating, managing, and mitigating security and other risks, including cybersecurity risks, are primarily responsible for assessing and managing our material risks from cybersecurity threats.

Our CFO and our management committee on cybersecurity oversee our cybersecurity policies and processes, including those described in "Risk Management and Strategy" above. The processes by which our CFO and representatives from our management committee on cybersecurity are informed about and monitor the prevention, detection, mitigation, and remediation of cybersecurity incidents include the following:

- monitoring of Company computer and information systems for potential malware, ransomware and other malicious activity, and remediation of identified issues, including mitigation of identified risks and containment and elimination of any malicious software;
- mandatory cybersecurity training as part of new employee onboarding along with required annual employee cybersecurity re-training;
- monitoring of systems and network infrastructure by security information and event management application;
- prompt incident reporting directly to the Board; and
- escalation to the Company's Audit Committee and Board as warranted based upon the nature of the identified issue.

Our CFO and/or representatives from our management committee on cybersecurity provide periodic briefings to the Audit Committee regarding our Company's cybersecurity risks and activities, including any recent cybersecurity incidents and related responses, cybersecurity systems testing, activities of third parties, and the like. Our Audit Committee provides regular updates to the Board on such reports.

PART III

Item 17. Financial Statements

Not applicable.

Item 18. Financial Statements

See pages F-1 through F-42 appearing at the end of this Annual Report on Form 20-F following the signature page.

Item 19. Exhibits.

1.1	Articles of Amalgamation of the Company dated November 1, 1998, as amended (incorporated by reference to Exhibit 99 in FS Pharma Inc.'s Form 6-K filed with the SEC on May 31, 2022).
1.2	Certificate of Amendment and Articles of Amendment of the Company issued by the Ontario Ministry of Public and Business Service Delivery on August 6, 2024 (incorporated by reference from Exhibit 3.1 in the Company's Current Report on Form 6-K filed with the SEC on August 16, 2024).
1.3	Amended and Restated By-Law Number and Bylaw 2 (incorporated by Exhibit 2.2 in the Company's Annual Report on Form 20-K filed with the SEC on April 2, 2024).
2.1*	Description of Securities.
2.2*	Form of Unsecured Convertible Debentures issued to investors in December 2024 and January 2025 private offerings.
2.3*	Form of Class B Common Stock Purchase warrants issued to investors in December 2024 and January 2025 private offerings.
2.4	Coattail Agreement dated May 24, 2018, by and among the Company, Computershare Trust Company of Canada and each of the individuals listed on Schedule A thereto (incorporated by reference to Exhibit 99.18 in the Company's Report on Form 40-F filed with the SEC on December 6, 2019).
4.1	At the Market Offering Agreement dated February 16, 2024 between the Company and H.C. Wainwright Co. LLC (incorporated by reference to Exhibit 10.1 in the Company's Form 6-K filed with the SEC on February 20, 2024).
4.2	Celly Nu Arrangement Agreement dated as October 4, 2023 by and between the Company and Celly Nutrition Corp. (incorporated by reference to Exhibit 4.2 in the Company's Form 20-F filed with the SEC on April 2, 2024).
4.3	Amended and Restated Exclusive Intellectual Property License Agreement dated August 14, 2024 by and between the Company, Celly Nutrition Corp., a British Colombia corporation and Lucid PsycheCeuticals, Inc., an Ontario corporation (incorporated by reference to Exhibit 4.1 in the Company's Form 6-K filed with the SEC on August 27, 2024).
4.4	Intellectual Property Purchase Agreement dated October 2, 2023 by and between the Company and Lucid PsycheCeuticals Inc. (incorporated by reference to Exhibit 4.2 in the Company's Form 6-K filing with the SEC on August 27, 2024).
4.5	Amended and Restated General Loan Agreement, dated as of April 3, 2024 by and between Celly Nutrition Corp., a British Colomubia corporation in favor of the Company (incorporated by reference to Exhibit 4.3 in the Company's Form 6-K filed with the SEC on August 27, 2024).
4.6	Amended and Restated General Security Agreement dated as of April 3, 2024 made by an between Celly Nutrition Corp., a British Colombia corporation in favor of the Company (incorporated by reference to Exhibit 4.4 in the Company's Form 6-K filed with the SEC on August 27, 2024).
4.7	Exclusive Intellectual Property Agreement dated July 31, 2023, by and between the Company, Celly Nutrition Corp. and Lucid PsycheCeuticals, Inc. (incorporated by reference to Exhibit 4.3 in the Company's Annual Report on Form 20-F filed with the SEC on April 2, 2024).
4.8	Warrant Certificate dated July 31, 2023 granted to the Company's to purchase shares of common stock of Celly Nutrition Corp. (incorporated by reference to Exhibit 4.4 in the Company's Annual Report on Form 20-F filed with the SEC on April 2, 2024)
4.9	Celly Nu Loan Agreement and Celly Nu Security Agreement dated as of July 31, 2023 by and between Celly Nutrition Corp and the Company (incorporated by reference to Exhibit 4.5 in the Company's Annual Report on Form 20-F filed with the SEC on April 2, 2024)
4.10	Exclusive License Agreement dated May 19, 2021 by and between Lucid PsycheCeuticals Inc. and the University Health Network (incorporated by reference to Exhibit 4.19 in the Company's Form 20-F filed with the SEC on March 31, 2023).
4.11	Master Agreement dated August 25, 2021, by and among the Company, 2861435 Ontario Inc. and Lucid PsycheCeuticals Inc. (incorporated by reference to Exhibit 99.1 in the Company's Form 6-K filed with the SEC on September 21, 2021).
4.12	Amalgamation Agreement dated September 20, 2021, by and among the Company, 2861435 Ontario Inc. and Lucid PsycheCeuticals Inc. (incorporated by reference to Exhibit 99.2 in the Company's Form 6-K filed with the SEC on September 21, 2021).
4.13	Amended and Restated License Agreement dated January 8, 2020, by and between the Company and Epitech Group SPA (incorporated by reference to Exhibit 99.1 in the Company's form 6-K filed with the SEC on March 18, 2020).
4.14	First Amendment to the Restated License Agreement dated July 9, 2020 by and between the Company and Epitech Group SPA (incorporated by reference to Exhibit 4.4 in the Company's Form 20-F filed with the SEC on March 31, 2023).
4.15	Assignment Agreement dated June 28, 2019 by and between the Company and Prismic Pharmaceuticals, Inc. (incorporated by reference to Exhibit 4.5 to the Company's Form 20-F filed with the SEC on March 31, 2023).
4.16†	the Company Equity Incentive Plan dated May 16, 2022 (incorporated by reference from Exhibit 4.18 in the Company's Form 20-F filed with the SEC on March 31, 2023). †

4.17†	the Company Stock Option Plan dated February 9, 2018 (incorporated by reference to Exhibit 99.9 in the Company's Form 40-F filed with the SEC on December 6, 2019). †
4.18 †	Employment Agreement dated July 26, 2021 by and between Anthony Durkacz (incorporated by reference to Exhibit 4.15 in the Company's Form 20-F filed with the SEC on March 31, 2023). †
4.19 †	Employment Agreement dated July 26, 2021, and between the Company And Zeeshan Saeed (incorporated by reference to Exhibit 4.16 in the Company's Form 20-F filed with the SEC on March 31, 2023). †
4.20†	Employment Agreement dated August 29, 2021 by and between the Company and Donal Carroll (incorporated by reference to Exhibit 4.17 in the Company's Form 20-F filed with the SEC on March 31, 2023).†
4.21 †	Employment Agreement dated March 21, 2023 by and between the Company and Dr. Andrezj Chruscinski (incorporated by reference to Exhibit 4.19 in the Company's Form 20-F filed with the SEC on March 31, 2023).
4.22*	Shareholder Agreement dated September 13, 2024 by and between Fortius Research and Trading Corp., Xorax Family Trust and the Company.
4.23*	Form of Secured Convertible Debentures issued to investors in January 2025 private offering.
4.24*	Form of General Security Agreement issued to investors in January 2025 private offering.
4.25*	Form of Agency and Interlender Agreement issued to investors in January 2025 private offering.
8.1*	List of subsidiaries of the Registrant.*
11.1*	Insider Trading and Blackout Period Policy*
12.1*	Certification by the Principal Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
12.2*	Certification by the Principal Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a) as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
13.1**	Certification by the Principal Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
13.2**	Certification by the Principal Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
15.1*	Management's Discussion and Analysis of Financial Condition and Results of Operations for three months ended and fiscal years ended December 31, 2024 and 2023
15.2*	Consent of Independent Auditor
97.1*	Quantum BioPharma Ltd. Clawback Policy
99.1	Audit Committee Charter (incorporated by reference to Exhibit 99.1 in the Company's Form 20-F filed with the SEC on March 31, 2023).
101.1*	Interactive Data File.
101.INS*	Inline XBRL Instance Document–the instance document does not appear in the Interactive Data File as its XBRL tags are embedded within the Inline XBRL document.
101.SCH*	Inline XBRL Taxonomy Extension Schema Document.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase Document.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase Document.
101 LAB*	Inline XBRL Taxonomy Extension Label Linkbase Document
101 PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (embedded within the Inline XBRL and contained in Exhibit 101)

* Filed herewith.

** Furnished herewith.

† Indicates a management contract or any compensatory plan, contract, or arrangement.

SIGNATURES

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

Quantum BioPharma Ltd.

By: */s/ Zeeshan Saeed*
Name: Zeeshan Saeed
Title: Chief Executive Officer
Date: March 27, 2025

Quantum Biopharma Ltd. (formerly, FSD Pharma Inc.)
Consolidated financial statements

For the years ended December 31, 2024, 2023, and 2022
[expressed in United States dollars]

QUANTUM BIOPHARMA LTD. (FORMERLY, FSD PHARMA INC.)
CONSOLIDATED STATEMENTS OF FINANCIAL POSITION
[expressed in United States dollars]

As at	Notes	December 31, 2024 $	December 31, 2023 $
ASSETS			
Current assets			
Cash and cash equivalents		**5,995,872**	2,757,040
Other receivables	4	374,678	228,764
Prepaid expenses and deposits	5	**69,036**	155,413
Finance receivables, net	6	**3,432,340**	7,187,988
Investments	7	**1,202,349**	756,100
Inventory	8	**117,242**	-
Digital assets	9	**861,230**	-
		12,052,747	11,085,305
Non-current assets			
Equipment, net		**76,894**	87,583
Long-term investments	7	**2,224**	6,049
Right-of-use asset, net		**53,488**	32,838
Finance receivables, net	6	**-**	907,366
Intangible assets, net	10	**4,933,871**	5,355,687
Total assets		17,119,224	17,474,828
LIABILITIES			
Current liabilities			
Trade and other payables	11,22	4,362,068	4,195,029
Lease obligations		**53,780**	38,650
Warrants liability	12	**212,002**	31,338
Derivative liabilities	14	**280,000**	-
Deferred income	21	**1,000,000**	-
Notes payable	13	**619,029**	300,549
Convertible debentures	14	**152,113**	-
		6,678,992	4,565,566
Total liabilities		6,678,992	4,565,566
SHAREHOLDERS' EQUITY			
Class A Multiple Voting Share capital	15	**151,701**	151,622
Class B Subordinate Voting Share capital	15	**150,318,624**	137,626,863
Warrants	15	**1,997,759**	2,723,356
Contributed surplus		**31,072,543**	30,225,741
Foreign exchange translation reserve		**50,795**	417,341
Accumulated deficit		**(172,110,884)**	(157,908,160)
Equity attributable to shareholders of the Company		11,480,538	13,236,763
Non-controlling interests	17	**(1,040,306)**	(327,501)
		10,440,232	12,909,262
Total liabilities and shareholders' equity		17,119,224	17,474,828
Commitments and contingencies	21		
Subsequent events	27		

On behalf of the Board:

"Signed"
Director - Zeeshan Saeed

"Signed"
Director - Eric Hoskins

The accompanying notes are an integral part of these consolidated financial statements.

QUANTUM BIOPHARMA LTD. (formerly, FS PHARMA INC.)
CONSOLIDATED STATEMENTS OF LOSS AND COMPREHENSIVE LOSS
[expressed in United States dollar, except number of shares]

For the years ended December 31,	Notes	**2024** **$**	2023 $	2022 $
Expenses				
General and administrative	19	**9,410,097**	9,032,724	14,450,094
External research and development fees		6,083,378	3,859,178	6,910,844
Share-based payments	16	**152,214**	3,835,475	1,531,258
Depreciation and amortization	10	**490,571**	2,506,316	4,537,415
Impairment loss	10	**-**	4,555,805	-
Total operating expenses		16,136,260	23,789,498	27,429,611
Loss from operations		**(16,136,260)**	(23,789,498)	(27,429,611)
Interest income	20	**(572,891)**	(786,363)	(367,735)
Other income		**(3,989)**	-	-
Finance expense, net		**33,017**	299	48,822
Accretion expense	14	**14,560**	-	-
Gain on settlement of debt		**(732,417)**	-	-
Gain on measurement of financial liability		**-**	(4,939,015)	(119,453)
Gain on change in fair value of derivative liabilities and warrant liability	12,14	**(104,483)**	(212,256)	(521,809)
Unrealized loss on change in fair value of digital assets	9	**141,770**	-	-
Loss on changes in fair value of investments	7	**3,702**	378,425	234,226
Net loss from operations		**(14,915,529)**	(18,230,588)	(26,703,662)
Net income from discontinued operations	24	**-**	-	3,096,834
Net loss		**(14,915,529)**	(18,230,588)	(23,606,828)
Other comprehensive loss				
Items that may be subsequently reclassified to loss:				
Exchange gain (loss) on translation of foreign operations		**(366,546)**	(235,260)	412,989
Comprehensive loss		**(15,282,075)**	(18,465,848)	(23,193,839)
Net loss attributable to:				
Equity owners of the Company		**(14,202,724)**	(17,902,179)	(23,606,828)
Non-controlling interests	17	**(712,805)**	(328,409)	-
		(14,915,529)	(18,230,588)	(23,606,828)
Net (loss) per share				
Basic and diluted - continuing operations	18	**$ (13.12)**	$ (29.93)	$ (44.81)
Basic and diluted - discontinued operations		**$ -**	$ -	$ 5.20
Weighted average number of shares outstanding – basic and diluted	18	**1,136,922**	609,056	595,883

The accompanying notes are an integral part of these consolidated financial statements.

QUANTUM BIOPHARMA LTD. (formerly, FS PHARMA INC.)
CONSOLIDATED ISTATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY
For the years ended December 31, 2024, 2023, and 2022
[expressed in United States dollars, except number of shares]

	Class A shares		Class B shares		Warrants		Contributed surplus	Non-controlling interests	Foreign exchange translation reserve	Accumulated deficit	Total
	#	$	#	$	#	$	$	$	$	$	$
Balance, December 31, 2021	**2**	**151,588**	**622,319**	**152,173,089**	**107,028**	**5,137,417**	**22,583,649**	**—**	**239,612**	**(126,154,317)**	**54,131,038**
Share repurchase [note 15]	—	—	(30,766)	(7,523,117)	—	—	—	—	—	5,596,880	(1,926,237)
Share-based payments [note 16]	—	—	2,433	169,500	—	—	1,361,758	—	—	—	1,531,258
Share cancellation [note 15]	—	—	(7,768)	(1,752,090)	—	—	1,752,090	—	—	—	—
Warrants expired [note 15]	—	—	—	—	(7,303)	(2,995,017)	2,995,017	—	—	—	—
PSUs converted to shares [note 15,16]	—	—	6,154	191,590	—	—	(191,590)	—	—	—	—
Comprehensive loss for the year	—	—	—	—	—	—	—	—	412,989	(23,606,828)	(23,193,839)
Balance, December 31, 2022	**2**	**151,588**	**592,372**	**143,258,972**	**99,725**	**2,142,400**	**28,500,924**	**—**	**652,601**	**(144,164,265)**	**30,542,220**
Initial recognition of non-controlling interests	—	—	—	—	—	—	—	(24,467)	—	(40,583)	(65,050)
Plan of arrangement [note 15]	—	34	1	—	—	—	—	8,673	—	(8,673)	34
Share repurchase [note 15]	—	—	(29,303)	(7,165,356)	—	—	—	—	—	4,207,540	(2,957,816)
Share-based payments [note 16]	—	—	555	36,000	—	—	2,410,010	16,702	—	—	2,462,712
Share options exercised [note 15]	—	—	323	33,247	—	—	(13,000)	—	—	—	20,247
PSUs converted to shares [note 15,16]	—	—	41,848	1,464,000	—	—	(1,464,000)	—	—	—	—
Warrants issued [note 15]	—	—	—	—	61,154	1,372,763	—	—	—	—	1,372,763
Warrants expired [note 15]	—	—	—	—	(2,047)	(791,807)	791,807	—	—	—	—
Comprehensive loss for the year	—	—	—	—	—	—	—	(328,409)	(235,260)	(17,902,179)	(18,465,848)
Balance, December 31, 2023	**2**	**151,622**	**605,796**	**137,626,863**	**158,832**	**2,723,356**	**30,225,741**	**(327,501)**	**417,341**	**(157,908,160)**	**12,909,262**
Shares issued [note 15]	10	79	1,384,783	10,670,539	—	—	—	—	—	—	10,670,618
Shares for debt [note 15,16]	—	—	301,423	1,990,213	—	—	—	—	—	—	1,990,213
Share-based payments [note 16]	—	—	—	—	—	—	152,214	—	—	—	152,214
Warrants issued [note 14, 15]	—	—	—	—	80,000	—	—	—	—	—	—
Warrants expired [note											

15]	—	—	—	—	(20,770)	(286,189)	286,189	—	—	—	—
Warrants cancelled [note 15]	—	—	—	—	(7,692)	(439,408)	439,408	—	—	—	—
RSU converted to shares [15,16]	—	—	7,500	31,009	—	—	(31,009)	—	—	—	—
Comprehensive loss for the year	—	—	—	—	—	—	—	(712,805)	(366,546)	(14,202,724)	(15,282,075)
Balance, December 31, 2024	**12**	**151,701**	**2,299,502**	**150,318,624**	**210,370**	**1,997,759**	**31,072,543**	**(1,040,306)**	**50,795**	**(172,110,884)**	**10,440,232**

The accompanying notes are an integral part of these consolidated financial statements.

QUANTUM BIOPHARMA LTD. (FORMERLY, FSD PHARMA INC.)
CONSOLIDATED STATEMENTS OF CHANGES IN CASH FLOWS
For the years ended December 31, 2024, 2023 and 2022
[expressed in United States dollar]

	2024	2023	2022
	$	$	$
Operating activities			
Net loss from continuing operations	**(14,915,529)**	(18,230,588)	(26,703,662)
Add (deduct) items not affecting cash			
Depreciation and amortization	**490,571**	2,506,316	4,534,586
Interest expense	**9,343**	24,288	63,411
Accretion expense	**14,560**	—	—
Share-based payments	**152,214**	3,835,475	1,531,258
Change in fair value of investments	**3,702**	378,425	234,226
Change in fair value of derivative liabilities	**(104,483)**	(212,256)	(521,809)
Unrealized foreign exchange (gain) loss	**(1,692,842)**	(383,514)	934,100
Unrealized loss on change in fair value of digital assets	**141,770**	—	—
Gain on settlement of debt	**(732,417)**	—	—
Gain on measurement of financial liability	**—**	(4,939,015)	(119,453)
Impairment loss	**—**	4,555,805	—
Gain on net investment in lease	**—**	—	(22,619)
Changes in non-cash working capital balances			
Finance receivables	**4,663,014**	(663,698)	(7,431,656)
Other receivables	**(145,914)**	159,585	215,175
Prepaid expenses and deposits	**86,377**	316,724	795,930
Note receivable	**—**	(224,610)	—
Inventory	**(117,242)**	—	—
Deferred income	**1,000,000**	—	—
Trade and other payables	**4,270,397**	2,049,799	(699,778)
Cash used in continuing operating activities	**(6,876,479)**	(10,827,264)	(27,190,291)
Cash used in discontinued operating activities	**—**	—	(1,142,982)
Cash used in operating activities	**(6,876,479)**	(10,827,264)	(28,333,273)
Investing activities			
Redemption of investments	**6,189,077**	—	—
Purchase of investments	**(6,689,636)**	(744,500)	(401,612)
Purchase of equipment	**—**	—	(113,958)
Additions to intangible assets	**—**	—	(250,000)
Net cash upon control of subsidiary	**—**	31,783	—
Purchases of digital assets	**(1,003,000)**	—	—
Proceeds from sale of investments	**—**	443,138	158,036
Cash (used in) continuing investing activities	**(1,503,559)**	(269,579)	(607,534)
Cash provided by discontinued investing activities	**—**	—	12,730,942
Cash (used in) provided by investing activities	**(1,503,559)**	(269,579)	12,123,408
Financing activities			
Share repurchase	**—**	(2,957,816)	(1,926,237)
Proceeds from issuance of shares, net	**10,670,618**	34	—
Proceeds from convertible debentures	**702,700**	—	—
Payment of lease obligation	**(63,586)**	(189,054)	(143,071)
Share options exercised	**—**	20,247	—
Proceeds from loans	**309,138**	—	—
Cash provided by (used in) continuing financing activities	**11,618,870**	(3,126,589)	(2,069,308)
Cash provided by (used in) financing activities	**11,618,870**	(3,126,589)	(2,069,308)
Net increase (decrease)	**3,238,832**	(14,223,432)	(18,279,173)
Cash and cash equivalents, beginning of the year	**2,757,040**	16,980,472	35,259,645
Cash and cash equivalents, end of the year	**5,995,872**	2,757,040	16,980,472
Non-cash transactions			
Shares issued for debt	**1,990,213**	—	—

The accompanying notes are an integral part of these consolidated financial statements.

1. Nature of business

Quantum BioPharma Ltd. (formerly, FSD Pharma Inc.) ("Quantum" or the "Company") is a biopharmaceutical company dedicated to building a portfolio of innovative assets and biotech solutions for the treatment of challenging neurodegenerative, inflammatory and metabolic disorders and alcohol misuse disorders with drug candidates in different stages of development. Through its wholly-owned subsidiary, Lucid Psycheceuticals Inc. ("Lucid"), Quantum is focused on the research and development of its lead compound, Lucid-MS (formerly Lucid-21-302) ("Lucid-MS"). Lucid-MS is a patented new chemical entity shown to prevent and reverse myelin degradation, the underlying mechanism of multiple sclerosis, in preclinical models. Quantum is also focused on the research and development of a treatment for alcohol misuse for application in hospitals and other medical practices. Quantum maintains a portfolio of strategic investments through its wholly-owned subsidiary, FSD Strategic Investments Inc., which represent loans secured by residential property.

The Company's registered office is located at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7. On August 15, 2024, the Company consolidated its Class A Multiple Voting Shares and Class B Subordinate Voting Shares (each as defined hereinafter) on a 65:1 basis and changed its name to "Quantum BioPharma Ltd." with a new trading symbol "QNTM" on both NASDAQ and CSE.

On July 31, 2023, the Company entered into an exclusive intellectual property license agreement (the "License Agreement") with Celly Nutrition Corp. ("Celly"). The License Agreement provides Celly access to proprietary information for the purposes of consumer product development and marketing. The License Agreement grants Celly the rights to a proprietary formulation of natural ingredients, vitamins, and minerals to help with liver and brain function for the purposes of potentially quickly relieving from the effects of alcohol consumption, such as inebriation, and restoring normal lifestyle. The License Agreement also grants Celly rights to certain trademarks. In exchange, Quantum received 200,000,000 common shares in the capital of Celly following a 2:1 share-split. The Company also received an anti-dilution Warrant Certificate that entitles Quantum to purchase up to 25% of the common shares deemed outstanding less the 200,000,000 common shares issued under the License Agreement and from time to time as a result of any partial exercise under the anti-dilution Warrant Certificate. Quantum is also entitled to certain license fees and royalties under the License Agreement. Through the License Agreement, Quantum acquired 34.66% of Celly. On July 31, 2023, the Company and Celly entered into a loan agreement for gross proceeds of C$1,000,000. The loan was funded on August 1, 2023, and accrues interest at a rate of 10% per annum. Interest is payable annually and the loan matures on July 31, 2026. On April 3, 2024, an amendment to the loan agreement was approved for additional gross proceeds of C$300,000. In November 2023, through the Plan of Arrangement the Company distributed 45,712,529 of its 200,000,000 shares of Celly to its shareholders. The consolidated financial statements incorporate the assets and liabilities of Celly as of December 31, 2024, and the results of operations and cash flows for the years ended December 31, 2024, and 2023 [Note 2(c) and (viii)]. As of December 31, 2024, the Company had a 22.95% (December 31, 2023 - 26.15%) ownership interest in Celly through common shares held in Celly.

Subsidiaries

These consolidated financial statements are comprised of the financial results of the Company and its subsidiaries, which are the entities over which the Company has control. An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and can affect those returns through its power over the investee. The Company has the following subsidiaries:

Entity Name	Country	Ownership percentage as at December 31, 2024 %	Ownership percentage as at December 31, 2023 %	Ownership percentage as at December 31, 2022 %
FSD Biosciences Inc.	USA	100.00	100.00	100.00
Prismic Pharmaceuticals Inc.	USA	100.00	100.00	100.00
FV Pharma Inc.	Canada	100.00	100.00	100.00
Lucid Psycheceuticals Inc.	Canada	100.00	100.00	100.00
FSD Strategic Investments Inc.	Canada	100.00	100.00	100.00
FSD Pharma Australia Pty Ltd	Australia	100.00	100.00	100.00
Celly Nutrition Corp.	Canada	22.95	26.15	-
Huge Biopharma Australia Pty Ltd	Australia	100.00	-	-

Non-controlling interests ("NCI") represent ownership interests in consolidated subsidiaries by parties that are not shareholders of the Company. They are shown as a component of total equity in the consolidated statements of financial position, and the share of income (loss) attributable to non-controlling interests is shown as a component of net income (loss) in the consolidated statements of loss and comprehensive loss. Changes in the parent company's ownership that do not result in a loss of control are accounted for as equity transactions.

2. Basis of presentation

[a] Statement of compliance

These consolidated financial statements have been prepared by management in accordance with IFRS® Accounting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). The policies set out below have been consistently applied to all periods presented, unless otherwise noted.

These financial statements were approved and authorized for issuance by the Board of Directors (the "Board") of the Company on March 24, 2025.

[b] Functional currency and presentation currency

The consolidated financial statements of each company within the consolidated group are measured using their functional currency, which is the currency of the primary economic environment in which an entity operates. These consolidated financial statements are presented in United States dollars ("USD"), which is the Company's functional and presentation currency for all periods presented. The Company's functional currency is the United States dollar and the functional currencies of its subsidiaries are as follows:

FSD Biosciences Inc.	United States Dollar
Prismic Pharmaceuticals Inc.	United States Dollar
FV Pharma Inc.	Canadian Dollar
Lucid Psycheceuticals Inc.	Canadian Dollar
FSD Strategic Investments Inc.	Canadian Dollar
FSD Pharma Australia Pty Ltd	Australian Dollar
Celly Nutrition Corp.	Canadian Dollar
Huge Biopharma Australia Pty Ltd	Australian Dollar

[c] Use of estimates and judgments

The preparation of these consolidated financial statements in conformity with IFRS requires management to make estimates, judgments and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities as at the date of the financial statements and the reported amounts of revenue and expenses during the reporting periods. Actual results could differ from these estimates.

Estimates are based on management's best knowledge of current events and actions that the Company may undertake in the future. Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimate is revised if the revision affects only that period, or in the period of the revision and future periods if the revision affects both current and future periods.

The following include items requiring critical judgments, apart from those involving estimations, that management has made in the process of applying the Company's accounting policies and that have the most significant effect on the amounts recognized in the consolidated financial statements:

[i] Going concern

Judgement is required in determining if disclosure of a material uncertainty related to events or conditions which might cast significant doubt on the Company's ability to continue as a going concern is required in the notes to the consolidated financial statements. In management's judgement, such disclosure is not required. This judgement is dependent on management's expectations of future net cash flows, existing borrowing capacity and financial obligations in the next 12 months.

Although during the year ended December 31, 2024, the Company had a loss from operations and negative cash flows from operation activities, the Company was able to secure debt and equity financing to fulfill its operational needs. Based on management's expectations of future net cash flows, management has applied judgement that there is no material uncertainties related to events or conditions that may cast substantial doubt on the Company's ability to continue as a going concern.

[ii] Contingencies

From time to time, the Company is named as a party to claims or involved in proceedings, including legal, regulatory and tax related, in the ordinary course of its business. While the outcome of these matters may not be estimable at the reporting date, the Company makes provisions, where possible, for the estimated outcome of such claims or proceedings. Should a loss result from the resolution of any claims or proceedings that differs from these estimates, the difference will be accounted for as a charge to profit or loss in that period. The actual results may vary and may cause significant adjustments.

[iii] Intangible assets

The Company employs significant estimates to determine the estimated useful lives of intangible assets, considering the nature of the asset, contractual rights, expected use and review of asset useful lives. The Company reviews amortization methods and useful lives annually or when circumstances change and adjusts its amortization methods and assumptions prospectively.

The Company reviews intangible assets for impairment annually or when impairment indicators exist. If the recoverable amount of the respective intangible asset is less than its carrying amount, it is considered to be impaired. In the process of measuring the recoverable amount, management makes assumptions about future events and circumstances. The actual results may vary and may cause significant adjustments.

[iv] Valuation of share-based payments and warrants

Management measures the costs for share-based payments and warrants, including certain warrant liabilities, using market-based option valuation techniques. Assumptions are made and estimates are used in applying the valuation techniques. These include estimating the future volatility of the share price, expected dividend yield, expected term, expected risk-free interest rate and the rate of forfeiture. For performance share units ("PSUs"), management is required to estimate when the vesting conditions will be met. Such estimates and assumptions are inherently uncertain. Changes in these assumptions affect the fair value estimates of share-based payments, warrants and warrant liabilities.

[v] Allowance for credit losses

Judgment is required as to the timing of establishing an allowance for credit losses and to estimate the amount of expected credit losses taking into consideration counterparty creditworthiness, the fair value of underlying collateral, current and future economic trends, the expected residual value of the underlying assets and past experience.

[vi] Functional currency

The Company and its subsidiaries are required to determine their functional currencies based on the primary economic environment in which each entity operates. In order to do that, management has to analyze several factors, including which currency mainly influences the cost of undertaking the business activities, in which currency the entity has received financing, and in which currency it keeps its receipts from operating activities. Management uses its judgment to determine which factors are most important when the above indicators are mixed and the functional currency is not obvious.

[vii] Disclosure of interests in other entities

To assess the investment in Celly, judgment was required to determine if the Company has significant influence or control of Celly. The Company considered the relevant guidance in *IFRS 10 – Consolidated Financial Statements, IAS 24 – Related Party Disclosures and IAS – 28 Investments in Associates and Joint Ventures.*

Judgment is applied in determining when the Company controls an investment even if the Company holds less than a majority of the investee's voting rights (the existence of de facto control). The Company concluded it has control of Celly even though the Company only held 22.95% of the voting rights as of December 31, 2024 (December 31, 2023 – 26.15%). The Company concluded that it has control of Celly as the Company, together with persons or entities considered to be de facto agents of the Company, held a combined 56.83% (December 31, 2023 - 52.05%) of the voting rights of Celly. In addition, key management personnel of the Company hold three of the four board of director positions of Celly. The assessment of control is performed on a continuous basis. The Company determined that it obtained control of Celly on July 31, 2023, and control was maintained from July 31, 2023, through December 31, 2024.

Celly is significantly dependent on the Company as a result of the License Agreement and the loan. The NCI component of Celly is included as a separate component in equity (Note 17).

[viii] Derivative liability in Convertible Debenture

The estimates and judgements made in relation to the fair value of derivative liabilities are subject to measurement uncertainty. The valuation technique used to determine the fair value requires inputs that involve assumptions and judgement such as the credit risk of the Company, volatility of the Company, probability of default event and foreign exchange rate. Such judgement and assumptions are inherently uncertain. Changes in these assumptions will affect the fair value of the derivative liability.

[ix] Measurement of digital assets, at fair value less costs to sell:

Digital assets consist of electronic currency, coins, or alternative cryptocurrency coins (altcoins) - a type of currency only available in digital form.

There are inherent and higher risks to digital assets including the risk associated with traditional securities, which include significant price volatility, the loss of the digital assets, fraud, and high transaction fees.

Where the fair values of digital assets recorded on the consolidated statements of financial position cannot be derived from active markets, they are determined using a variety of valuation techniques. The inputs to these models are derived from observable market data where possible, but where observable market data are not available, judgment is required to establish fair values. Changes in estimates and assumptions about these inputs could affect the reported fair value.

3. Material accounting policies

[a] Equipment

Equipment is measured at cost less accumulated depreciation and impairment losses. The cost of an item of equipment includes expenditures that are directly attributable to the acquisition or construction of the asset.

Depreciation is based on the estimated useful lives of the assets provided as follows:

Computer equipment	3 years
Furniture and fixtures	3 – 10 years
Lease improvements	Over the term of the lease

An item of equipment and any significant part initially recognized are derecognized upon disposal or when no future economic benefits are expected from their use or disposal. Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the consolidated statements of loss and comprehensive loss when the asset is derecognized. The assets' residual values, useful lives and methods of depreciation and the depreciation charge are adjusted prospectively, if appropriate.

[b] Intangible Assets

Intangible assets are recorded at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized in the consolidated statements of loss and comprehensive loss on a straight-line basis over the useful life, as follows:

Intellectual Property	5 – 15 years

Expenditures on internally generated intangible assets during the research phase are expensed as incurred. Expenditures on internally generated intangible assets during the development phase, which comprise deferred development costs, are initially capitalized and recognized in the consolidated balance sheet if they meet the recognition criteria. Subsequent to initial recognition, deferred development costs are accounted for at cost less accumulated amortization and are amortized on a straight-line basis over an estimated useful life beginning once the deferred development costs are used in commercial production.

[c] Foreign Currency Transactions

Foreign currency transactions are translated into functional currencies at exchange rates in effect on the date of the transactions. At the end of each reporting period, monetary assets and liabilities denominated in foreign currencies are translated into functional currencies at the foreign exchange rate applicable at that period-end date. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the date of the transaction. Realized and unrealized exchange gains and losses are recognized in the consolidated statements of loss and comprehensive loss.

On consolidation, assets and liabilities of operations with a functional currency other than United States dollar are translated into United States dollar at period end foreign currency rates. Expenses of such operations are translated into the United States dollar at average rates for the period. Foreign currency translation gains and losses are

recognized in other comprehensive income. The relevant amount in cumulative foreign currency translation adjustment is reclassified into earnings upon disposition of a foreign operation.

[d] Financial Instruments

Financial assets and financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments.

Financial assets and financial liabilities are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets and financial liabilities (other than financial assets and financial liabilities at fair value through profit or loss) are added to or deducted from the fair value of the financial assets or financial liabilities, as appropriate, on initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognized immediately in the consolidated statements of loss and comprehensive loss.

- Financial assets

  On initial recognition, a financial asset is classified as measured at amortized cost, fair value through other comprehensive income (“FVOCI”), or fair value through profit and loss (“FVTPL”). The classification of financial assets is based on the business model in which a financial asset is managed and its contractual cash flow characteristics.

  A financial asset is measured at amortized cost if it meets both of the following conditions and is not designated as at FVTPL:

  - It is held within a business model whose objective is to hold assets to collect contractual cash flows; and
  - Its contractual terms give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

A financial asset (unless it is a trade receivable without a significant financing component that is initially measured at the transaction price) is initially measured at fair value plus, for an item not at FVTPL, transaction costs that are directly attributable to its acquisition.

The following accounting policies apply to the subsequent measurement of financial assets.

Financial assets at FVTPL	Subsequently measured at fair value. Net gains and losses, including any interest or dividend income, are recognized in the consolidated statements of loss and comprehensive loss.
Financial assets at amortized cost	Subsequently measured at amortized cost using the effective interest method, less any impairment losses. Interest income, foreign exchange gains and losses and impairment losses are recognized in profit or loss. Any gain or loss on derecognition is recognized in consolidated statements of loss and comprehensive loss.

Digital assets at fair value

Digital coins and digital tokens held by the Company are carried at fair value. The Company determines the fair value of such digital coins and digital tokens using the closing price on the valuation date provided by the custodian that the Company uses for holding these digital assets.

To determine the fair value of a particular digital asset, the Company relies on its custodian as the primary source for price information, which management considers as approximate fair value. Unlike traditional methods that involve assessing multiple exchanges and applying specific criteria, the Company uses the custodian's published price data directly as the relevant and reliable source for determining fair value. This approach aligns with the Company's operational and reporting practices.

The Company evaluates the principal markets annually and conducts a quarterly analysis to determine if any changes in the principal market are required.

- Financial liabilities

  The Company initially recognizes financial liabilities at fair value on the date at which the Company becomes a party to the contractual provisions of the instrument.

  The Company classifies its financial liabilities as either financial liabilities at FVTPL or amortized cost.

  Subsequent to initial recognition, other liabilities are measured at amortized cost using the effective interest method. Financial liabilities at FVTPL are stated at fair value with changes being recognized in consolidated statements of loss and comprehensive loss.

  The Company derecognizes a financial liability when its contractual obligations are discharged or cancelled or expire.

- Financial liabilities and equity instruments

  - Classification as debt or equity

    Debt and equity instruments issued by the Company are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangements and the definitions of a financial liability and an equity instrument. The Company does not reclassify financial liabilities or equity after initial recognition due to a change in circumstance.

  - Equity instruments

    An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by a group entity are recognized at the proceeds received, net of direct issue costs.

    Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in the consolidated statements of loss and comprehensive loss on the purchase, sale, issue or cancellation of the Company's own equity instruments

- Classification of financial instruments

The Company classifies its financial assets and liabilities depending on the purpose for which the financial instruments were acquired, their characteristics and management intent as outlined below:

Cash and cash equivalent	Amortized cost
Digital assets	Fair value through profit or loss
Investments	Fair value through profit or loss
Finance receivables	Amortized cost
Trade and other payables	Amortized cost
Warrants liability	Fair value through profit or loss
Notes payable	Amortized cost
Convertible debentures	Amortized cost
Derivative liabilities	Fair value through profit or loss

- Impairment of financial assets
  - Finance receivables

Finance receivables are a financial asset initially recognized at fair value and are subsequently carried at amortized cost using the effective interest method. The Company's business model is to hold these receivables to collect contractual cash flows that represent solely payments of principal and interest. Finance receivables are assessed for impairment at the end of each reporting period in accordance with IFRS 9 as outlined below.

The ECL model is based on the credit losses expected to arise over the life of the assets, unless there has been no significant increase in credit risk since origination, in which case the allowance is based on the 12 months' expected credit loss. The ECL model uses a three-stage impairment approach based on changes in the credit risk of the finance receivable since initial recognition. The three stages are as follows:

Stage 1– Finance receivables that have not experienced a significant increase in credit risk since initial recognition.

Stage 2– Finance receivables that have experienced a significant increase in credit risk since initial recognition.

Stage 3 – Finance receivables for which there is objective evidence of impairment.

The Company considers a number of factors when assessing if there has been a significant increase in credit risk, including the number of days past due, changes in the financial condition of the borrower, responsiveness of the borrower and other borrower specific information that may be available, without consideration of collateral.

In determining its estimation of the ECL allowances, the Company also considers past events, current market conditions including interest rates, real estate market statistics, and supportable forward-looking information, including macro-economic factors, such as housing price and interest rate forecasts.

The ECL model requires the recognition of credit losses equal to 12-month ECLs for Stage 1 and recognition of lifetime expected credit losses for Stage 2 and 3. The 12-month ECLS are lifetime ECLS that are expected to occur within 12 months after the reporting date. The lifetime ECLs represent the expected loss in value due to possible default events over the life of a mortgage receivable weighted by the likelihood of a loss. Three factors are primarily used to measure ECLs: probability of default (PD), loss given default (LGD) and exposure at default (EAD).

[e] Impairment of long-lived assets

Long-lived assets, including equipment and intangible assets are tested for impairment at each reporting date when there are indicators of impairment or whenever events or changes in circumstances indicate that the carrying amount of an asset exceeds its recoverable amount. Intangible assets with an indefinite useful life are tested for impairment at least annually in the fourth quarter and whenever there is an indication that the asset may be impaired. The Company has no indefinite life intangible assets.

For the purpose of impairment testing, assets that cannot be tested individually are grouped together into the smallest group of assets that generates cash inflows from continuing use that are largely independent of the cash inflows of other assets or groups of assets (the cash-generating unit, or "CGU"). The recoverable amount of an asset or a CGU is the higher of its fair value less costs to sell and its value in use. If the carrying amount of an asset exceeds its recoverable amount, an impairment charge is recognized immediately in net loss equal to the amount by which the carrying amount exceeds the recoverable amount. Where an impairment loss subsequently reverses, the carrying amount of the asset is increased to the lesser of the revised estimate of the recoverable amount, and the carrying amount that would have been recorded had no impairment loss been recognized previously.

[f] Income Taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in net profit or loss except to the extent that it relates to a business combination or items recognized directly in equity or in other comprehensive loss.

Current income taxes are recognized for the estimated income taxes payable or receivable on taxable income or loss for the current year and any adjustment to income taxes payable in respect of previous years. Current income taxes are determined using tax rates and tax laws that have been enacted or substantively enacted by the year-end date.

Deferred tax assets and liabilities are recognized where the carrying amount of an asset or liability differs from its tax base, except for taxable temporary differences arising on the initial recognition of goodwill and temporary differences arising on the initial recognition of an asset or liability in a transaction which is not a business combination and at the time of the transaction affects neither accounting nor taxable profit or loss.

Recognition of deferred tax assets for unused tax losses, tax credits and deductible temporary differences is restricted to those instances where it is probable that future taxable profit will be available against which the deferred tax asset can be utilized. At the end of each reporting period, the Company reassesses unrecognized deferred tax assets. The Company recognizes a previously unrecognized deferred tax asset to the extent that it has become probable that future taxable profit will allow the deferred tax asset to be recovered.

[g] Share-based Compensation

Share options and warrants awarded to non-employees are accounted for using the fair value of the instrument awarded or service provided, whichever is considered more reliable. Share options, performance share units ("PSUs"), restrictive units ("RSUs") and warrants awarded to employees are accounted for using the fair value method. The fair value of the share options, PSUs, RSUs and warrants granted are recognized as an expense on a proportionate basis consistent with the vesting features of each tranche of the grant. The fair value of share options and warrants are calculated using the Black-Scholes option pricing model with assumptions applicable at the date of grant. The fair value of PSUs is calculated using market share prices at the date of grant.

[h] Net Loss per Share

Net loss per share is calculated based on the loss for the financial year and the weighted average number of common shares outstanding during the year. Diluted net loss per share is calculated using the loss for the financial year adjusted for the effect of any dilutive instruments and the weighted average diluted number of shares (ignoring any potential issue of common shares that would be anti-dilutive) during the year.

[i] External research and development

External research and development costs are expensed in the periods in which they are incurred, with the exception of development costs for new products with proven technical feasibility and for which a defined future market exists. Such development costs are capitalized in accordance with the Company's policy for intangible assets. The Company's external research and development costs relate primarily to third-party contract research organizations.

[j] Discontinued operations

Discontinued operations are reported when a component of the Company, representing a separate major line of business or area of operations with clearly distinguishable cash flows, has been disposed of or is held for sale. Classification as a discontinued operation occurs upon disposal or when the operation meets the criteria to be classified as held for sale, if earlier. Discontinued operations are reported as a separate element of net income or loss on the consolidated statements of loss and comprehensive loss for both the current and comparative periods. When a disposal group is classified as held for sale, assets and liabilities are aggregated and presented as separate line items, respectively, on the consolidated statements of financial position. Comparative periods are not restated on the consolidated statements of financial position. Assets held for sale are not depreciated and are measured at the lower of carrying value and fair value less costs to sell.

[k] Share Capital

Common shares are classified as equity. Incremental costs directly attributable to the issue of common shares are recognized as a deduction from equity, net of any tax effects.

[l] Warrants

The Company follows the relative fair value method with respect to the measurement of common shares and warrants issued as private placement units. The proceeds from the issuance of units are allocated between share capital and warrants. The warrant component is recorded in contributed surplus. Unit proceeds are allocated to common shares and warrants using the Black-Scholes option pricing model and the share price at the time of financing. If the warrants are exercised, consideration paid by the warrant holder, together with the amount previously recognized in contributed surplus, is recorded as an increase to share capital. Upon expiration of warrants, the amount applicable to expired warrants is left in contributed surplus.

[m] Convertible debentures

The Company issues convertible debentures which can be converted into common shares at the option of the holder, at a fixed conversion price denominated in Canadian dollars.

For convertible debentures which provide conversion into a variable number of shares or into a fixed number of shares for a variable amount of consideration, the conversion option is accounted for as an embedded derivative, which is separated from the host contract. Upon initial recognition, the derivative liability is valued at fair value using a valuation model. The carrying amount of the convertible debenture (host debt) will be recognized as the difference between the total proceeds received from the issuance and the fair value of the derivative liability. Any directly attributable transaction costs are allocated to the derivative liability and host contract in proportion to their initial carrying amounts.

[n] Inventories

Inventories consist of purchased finished goods and raw materials that will be used in the manufacturing of finished goods. The cost of raw materials inventory is determined on a first-in, first-out basis. The cost of finished goods are valued at the lower cost or net realizable value. The inventories balance is included in these financial statements as part of the Company's investment in Celly (Note 17).

New standards, amendments and interpretations adopted by the Company

Amendment to IAS 1, Presentation of Financial Statements, Issued but not yet effective

IAS 1 was amended in January 2020 to address inconsistences with how entities apply the standard over classification of current and non-current liabilities. The amendment serves to address whether, in the statement of financial position, debt and other liabilities with an uncertain settlement should be classified as current or non-current. The amendment is effective for annual reporting periods beginning on or after January 1, 2024. Earlier adoption is permitted. The Company adopted this amendment as of the effective date, and there were no material changes upon adoption.

IFRS 16 – Leases ("IFRS 16")

In September 2022, the IASB issued amendments to IFRS 16, Leases, which add to requirements explaining how a company accounts for a sale and leaseback after the date of the transaction.

The amendments are effective for annual reporting periods beginning on or after January 1, 2024. The amendment did not have a material impact on the consolidated financial statements.

All other IFRSs and amendments issued but not yet effective have been assessed by the Company and are not expected to have a material impact on the consolidated financial statements.

[expressed in United States dollars]

4. Other receivables

The Company's other receivables are comprised of the following as at:

	December 31, 2024	December 31, 2023
	$	$
Sales tax recoverable	367,480	209,550
Interest receivable	**156**	15,511
Other receivables	**7,042**	3,703
	374,678	228,764

5. Prepaid expenses and deposits

The Company's prepaid expenses and deposits include the following:

	December 31, 2024	December 31, 2023
	$	$
Research and development	**26,348**	30,705
Insurance	**36,162**	60,999
Other prepaids and deposits	**6,526**	63,709
	69,036	155,413

6. Finance receivables

Finance receivables consist of secured loan receivables measured at amortized cost, net of allowance for expected credit losses. Finance receivables for the following years are as follows:

	$
Balance – December 31, 2022	7,431,656
Additions	1,021,489
Add: Interest income	568,919
Less: Interest payments	(597,986)
Less: Principal payments	(526,107)
Effects of foreign exchange	197,383
Balance – December 31, 2023	8,095,354
Additions	2,300,368
Add: Interest income	513,925
Less: Interest payments	(490,277)
Less: Principal payments	(6,632,290)
Effects of foreign exchange	(354,740)
Balance – December 31, 2024	**3,432,340**
Current	3,432,340
Non-current	-
Balance – December 31, 2024	**3,432,340**

Allowances for expected credit losses as at December 31, 2024, were $nil (December 31, 2023 - $nil). Finance receivables earn fees at fixed rates between 6%-8% per annum and have an average term to maturity of one year from the date of issuance. The loans are secured by residential property with a first or second collateral mortgage on the secured property, except for the loan issued to a related party (Note 22). Loans are issued up to 55% of the initial appraised value of the secured property at the time of issuance.

[expressed in United States dollars]

Finance receivables include the following as at December 31, 2024:

	$
Minimum payments receivable	3,250,668
Unearned income	181,672
Net investment	3,432,340
Allowance for credit losses	—
Finance receivables, net	**3,432,340**

As at December 31, 2024, all loans were classified at amortized cost.

7. Investments

The following tables outline changes in investments during the years:

Entity	Instrument	Note	Balance at December 31, 2023 $	Additions $	Redemptions	Change in fair value through profit or loss $	Effects of foreign exchange $	Balance at December 31, 2024 $
A2ZCryptoCap Inc.	Shares	(i)	6,049	—	—	(3,702)	(123)	2,224
Royal Bank of Canada	GIC	(ii)	756,100	—	(738,000)	—	(18,100)	—
Royal Bank of Canada	GIC	(iii)	—	2,955,610	(2,934,760)	—	—	20,850
Bank of Montreal	GIC	(iv)	—	500,000	(500,000)	—	—	—
Meridian	GIC	(v)	—	3,234,026	(2,016,317)	—	(36,210)	1,181,499
			762,149	**6,689,636**	**(6,189,077)**	**(3,702)**	**(54,433)**	**1,204,573**
							Current	**1,202,349**
							Non-Current	**2,224**
								1,204,573

Entity	Instrument	Note	Balance at December 31, 2022 $	Proceeds from sale $	Additions $	Change in fair value through profit or loss $	Effects of foreign exchange $	Balance at December 31, 2023 $
Solarvest BioEnergy Inc.	Shares	(vi)	221,490	—	—	(221,490)		—
Solarvest BioEnergy Inc.	Convertible debenture	(vi)	177,192	—	—	(177,192)	—	—
A2ZCryptoCap Inc.	Shares	(i)	10,632	—	—	(4,583)	—	6,049
Lions Bay Fund	Shares	(vii)	418,298	443,138	—	24,840	—	—
Royal Bank of Canada	GIC	(ii)	—	—	744,500	—	11,600	756,100
			827,612	**443,138**	**744,500**	**(378,425)**	**11,600**	**762,149**
						Current		**756,100**
						Non-Current		**6,049**
								762,149

(i) A2ZCryptoCap Inc. ("A2Z")

On June 23, 2022, the Company acquired 80,000 shares of A2Z for C$0.10 per share. As at December 31, 2024, the fair value of the shares was determined based on the quoted market price of the shares of C$0.04 per share (December 31, 2023 – C$0.10). The shares have been classified as level 1 within the fair value hierarchy – quoted market price.

(ii) On August 9, 2023, the Company purchased a Guaranteed Investment Certificate ("GIC") in the amount of C$744,500 from Royal Bank of Canada ("RBC") with a maturity date of August 9, 2024. The GIC pays variable interest based on RBC's Prime Interest Rate minus 2.00%. During the year ended December 31, 2024, the Company redeemed the full amount for gross proceeds of $738,000. The balance outstanding as at December 31, 2024 is $nil.

iii) During the year ended December 31, 2024, the Company purchased four GICs for a total amount of C$4,030,000 from RBC with maturity dates ranging from February 14, 2025, to September 12, 2025. The GICs pay variable interest ranging from 4.20% to 4.95% per annum. As of December 31, 2024, the total balance outstanding was C$30,000 as three GICs out of the four were effectively redeemed prior to maturity.

iv) During the year ended December 31, 2024, the Company purchased a GIC in the amount of USD$500,000 from Bank of Montreal ("BMO") with a maturity date of October 11, 2024. The GIC paid a variable interest rate of 4.50% per annum. As of December 31, 2024, the total balance outstanding is $nil as the entire amount was redeemed at maturity

(v) During the year ended December 31, 2024, the Company purchased three GICs for a total amount of C$4,520,000 from Meridian Credit Union ("Meridian") with maturity dates ranging from December 21, 2024, to March 25, 2025. The GICs pay variable interest ranging from 3.52% to 3.78% per annum. As of December 31, 2024, the total balance outstanding was C$1,700,000 as C$2,820,000 was redeemed at maturity.

(vi) Solarvest BioEnergy Inc. ("Solarvest")

The Company held 3,000,000 common shares of Solarvest and a convertible debenture with a principal amount of C$2,400,000, which matured on May 31, 2024. The convertible debenture can be converted into common shares of Solarvest at a price of $1.00 per share.

As at December 31, 2023 and 2024, the fair value of the shares was determined to be $nil given the halt in trading of Solarvest's shares as a result of the entity failing to maintain a transfer agent and due to the significant financial and operational challenges being faced by the entity. The fair value of the convertible debenture was determined to be $nil as well. The shares have been classified as level 1 within the fair value hierarchy – quoted market price, and the convertible debenture has been classified as level 2 – valuation technique with observable market inputs.

(vii) Lions Bay Fund ("Fund")

During the year ended December 31, 2022, the Company invested $395,450 into the Fund. The investment was sold for proceeds of $443,138. The Company recognized a gain of $24,840 on the sale of the Fund during the year ended December 31, 2023.

[expressed in United States dollars]

8. Inventory

Inventories consist of purchased raw materials that will be used in the manufacturing of finished goods and are valued at lower of cost or net realizable value. The cost of inventory is determined on a first-in, first-out basis. The cost of work in-process and finished goods are valued at the lower of cost or net realizable value. As at December 31, 2024, the Company's inventory consisted of the following:

	$
Outstanding as at December 31, 2023	—
Raw materials	51,973
Finished goods	65,269
Outstanding as at December 31, 2024	**117,242**

9. Digital assets

(a) The fair value and cost of digital assets are as follows as at December 31, 2024:

	Cost $	Unrealized (loss) on change in fair value $	Fair value $
Bitcoin	401,000	(44,123)	356,877
Dogecoin	201,000	(46,686)	154,314
Solana	401,000	(50,961)	350,039
	1,003,000	(141,770)	861,230

Digital currency prices are affected by various forces including global supply and demand, interest rates, exchange rates, inflation or deflation and the global political and economic conditions. Digital assets have a limited history, and the fair value historically has been very volatile. The Company may not be able to liquidate its inventory of digital assets currency at its desired price if required. The Company has recognized a change in fair value $141,770 that is included in the net loss from operations.

The following table presents the Company's digital assets, measured at fair value less costs to sell and categorized into levels of the fair value hierarchy on the consolidated statements of financial position as at December 31, 2024:

Digital assets, at fair value less costs to sell	Level 1 Quoted market price $	Level 2 Valuation technique - observable market inputs $	Level 3 Valuation technique - unobservable market inputs $
Digital coins	—	861,230	—

[expressed in United States dollars]

10. Intangible assets

Intangible assets as at December 31, 2024 are as follows:

Cost	**Innovet**	**Prismic**	**Lucid**	**Total**
	$	**$**	**$**	**$**
As at December 31, 2022	750,000	19,201,493	6,314,571	26,266,064
Impairment	(750,000)	(19,201,493)	—	(19,951,493)
As at December 31, 2023 and December 31, 2024	**—**	**—**	**6,314,571**	**6,314,571**
Accumulated amortization	**$**	**$**	**$**	**$**
As at December 31, 2022	**229,933**	**13,457,622**	**538,220**	**14,225,775**
Amortization	39,971	1,904,348	420,664	2,364,983
Impairment	(269,904)	(15,361,970)	—	(15,631,874)
As at December 31, 2023	—	—	958,884	958,884
Amortization	—	—	421,816	421,816
As at December 31, 2024	**—**	**—**	**1,380,700**	**1,380,700**
Net book value				
As at December 31, 2023	—	—	5,355,687	5,355,687
As at December 31, 2024	**—**	**—**	**4,933,871**	**4,933,871**

During the year ended December 31, 2023, the Company recognized an impairment loss of $480,096 in the statements of loss and comprehensive loss related to the Innovet License Agreement as the Company made a strategic decision to no longer pursue the development of ultra-micro PEA for veterinary purposes.

During the year ended December 31, 2023, the Company recognized an impairment loss of $3,839,523 in the statements of loss and comprehensive loss related to licensed compound ultra-micro PEA (“FSD-201”) acquired through the acquisition of Prismic as the Company made a strategic decision to no longer pursue the development of FSD-201.

The Company’s intangible asset for Lucid represents the license agreement with the University Health Network giving the Company world-wide exclusive rights to the Lucid-MS compound and related patents.

11. Trade and other payables

Trade and other payables consist of the following as at:

	December 31, 2024	December 31, 2023
	$	$
Trade payables	3,254,838	3,240,658
Accrued liabilities (i)	**1,107,230**	954,371
	4,362,068	4,195,029

(i) Accrued liabilities consist of the following as at:

	December 31, 2024	December 31, 2023
	$	$
External research and development fees	**55,670**	—
Operational expenses	**178,307**	71,953
Professional and other fees	**464,060**	473,225
Accrued interest	**409,193**	409,193
	1,107,230	954,371

12. Warrants Liability

[a] August 2022 Warrants

In August 2020, the Company issued 42,499 Class B Subordinate Voting Shares and 21,250 warrants to purchase Class B Subordinate Voting Shares for total cash proceeds of $9,999,997. Each warrant is exercisable to purchase one Class B Subordinate Voting Share of the Company at an exercise price of $276.90 per share and expire five years from the date of issuance. The fair value of these warrants is classified as Level 2 in the fair value hierarchy.

On initial recognition the Company determined that these warrants did not meet the IFRS definition of equity due to the exercise price being denominated in United States dollar, which was not the functional currency of the Company at the time resulting in variability in exercise price. The change in functional currency on October 1, 2020, was determined to be a change in circumstance and, as such, the Company has made an accounting policy choice to continue to recognize the warrants as a financial liability classified at fair value through profit or loss.

The fair value of the warrants liability as at December 31, 2024, was $2 (December 31, 2023 – $31,338) resulting in a gain on change in fair value of $31,336 for the year ended December 31, 2024 (2023 – $113,211). The fair value was determined using the Black-Scholes option pricing model and the following assumptions as at:

	December 31, 2024	**December 31, 2023**
Share price	$ 3.68	$ 59.80
Exercise price	$ 276.90	$ 276.90
Expected dividend yield	-	-
Risk free interest rate	2.91%	3.91%
Expected life	0.60	1.60
Expected volatility	134%	66%

[expressed in United States dollars]

[b] December 2024 Warrants

During the year ended December 31, 2024, the Company issued warrants attached to its convertible debenture (Note 14).

The Company determine that these warrants were exchangeable into a variable number of shares due to foreign exchange, and as such, the warrants were classified as financial liabilities measured at fair value through profit or loss ("FVTPL"). The Company uses the Black-Scholes pricing model to estimate fair value. Expected volatility has been based on an evaluation of the historical volatility of the Company's share price. The risk-free interest rate for the life of the warrants was based on the yields available on government benchmark bonds with a term approximating the remaining term of the warrants. The life of the warrants is based on the contractual term. The fair value of the warrant liability as at December 13, 2024, the date of issuance was $245,147. The fair value of the warrants as of December 31, 2024 was $212,000 resulting in a gain on change in fair value of $33,000. The fair value was determined using the Black-Scholes option pricing model and the following assumptions as at:

	December 13, 2024	December 31, 2024
Share price (CAD)	$ 5.80	$ 5.20
Exercise price (CAD)	$ 7.00	$ 7.00
Risk free interest rate	2.97%	2.96%
Expected life	5.00	4.95
Expected volatility	104.39%	104.52%
Foreign exchange rate	0.70	0.70

13. Notes payable

As at December 31, 2024, the Company has total notes payable balance of $619,029 (December 31, 2023 - $300,549).

During the year ended December 31, 2024, the Company issued a note payable of $309,138 (AUD $500,000) to RH Capital Finance CO LLC ("RH Capital"), with an interest rate of 17.0% per annum and maturing in June 2025. During the year ended December 31, 2024, the Company accrued interest of $9,343 (AUD $15,111) and the total outstanding balance was $318,480 (AUD $515,111).

During the year ended December 31, 2024, the Company issued a note payable of $290,387 (AUD $440,000) to RH Capital, with an interest rate of 16.0% per annum and maturing in June 2024. During the year ended December 31, 2024, the Company accrued interest of $30,547 (AUD $34,941). The total balance including interest was received during the year ended December 31, 2024, and there was no balance remaining as of December 31, 2024. This loan allowed the Company to access liquidity with respect to the Australian tax rebate scheme structure.

The remaining note payable balance of $300,549 was assumed on the acquisition of Prismic and is due on demand.

[expressed in United States dollars]

14. Convertible debentures

In December 2024, the Company issued a total of 1,000 convertible debenture units of the Company (the "Debenture Units") at a price of C$1,000 per Debenture Unit (the "Issue Price") for total gross proceeds of C$1,000,000. Each Debenture Unit consists of (i) one secured convertible debenture having a face value of C$1,000 (each a "Debenture"); and (ii) 80 class B common share purchase warrants (each a "Warrant") exercisable for 80 Class B subordinate voting shares in the Company (each, a "Share"). The Debentures mature 36 months from the date of issuance (the "Maturity Date") and bear interest at a rate of 1.25% per month, beginning on the date of issuance and payable in cash on the last day of each calendar quarter. The principal sum of the Debentures, or any portion thereof, and any accrued but unpaid interest, may be converted into class B Shares at a conversion price of C$6.25 per class B Share. Each Warrant shall entitle the holder to acquire one additional class B Share (each, a "Warrant Share") at a price of C$7.00 per Warrant Share, for a period of five years from the date of issuance.

The Company may redeem the Debentures at any time prior to maturity, in whole or in part, upon fifteen days' notice and payment of certain penalties as applicable.

The convertible debenture was determined to be a financial instrument comprising a host debt component, a conversion feature and a warrant component which are both considered to be embedded derivatives due to variable consideration payable upon conversion caused by foreign exchange. On initial recognition, the fair value of the embedded derivatives is calculated first, with the residual value being assigned to the host financial liability. The initial fair value of the warrants is $245,147 (Note 12).

The fair value of the conversion feature is determined by using with-and-without method that considers change in expected cash flows due to the conversion. The model includes all terms of the convertible debenture described above as well as the probability of conversion, the impact of default barrier and the implied credit spread of the Company. The fair value of the conversion feature as at December 13, 2024, the date of issuance was $320,000. The fair value of the warrants as at December 31, 2024 was $280,000 resulting in a gain on change in fair value of $40,000. The fair value was determined using the assumptions below:

	December 13, 2024	December 31, 2024
Share price (CAD)	$ 5.85	$ 5.20
Conversion price (CAD)	$ 6.25	$ 6.25
Expected Volatility	98.04%	100.68%
Risk free interest rate	2.78%	2.70%
Expected life	3.00	2.95
Credit Spread	12.25%	12.25%
Foreign exchange rate	0.7025	0.6952

As of December 31, 2024, the Company had the following Debenture balance outstanding:

Proceeds	$ 702,700
Value of conversion option	320,000
Value of warrants (Note 12 [b])	245,147
Initial recognition of debt	**$ 137,553**
Accretion and interest expense	14,560
Balance, December 31, 2024	**$ 152,113**

[expressed in United States dollars]

15. Share capital

[a] Authorized

The Company is authorized to issue an unlimited number of class A multiple voting shares ("Class A Multiple Voting Shares") and an unlimited number of class B subordinate voting shares ("Class B Subordinate Voting Shares"), all without par value. All shares are ranked equally regarding the Company's residual assets.

The Class B Subordinate Voting Shares are “restricted securities” within the meaning of such term under applicable Canadian securities laws, as these securities do not carry equal voting rights as compared with the Class A Multiple Voting Shares.

The holders of Class A Multiple Voting Shares are entitled to 276,660 votes per Class A Multiple Voting Share held. Class A Multiple Voting Shares are held by the Chief Executive Officer (“CEO”), President, Executive Co-Chairman of the Board and the Director and Executive Co-Chairman of the Board. The holders of Class B Subordinate Voting Shares are entitled to one (1) vote per share held.

[b] Issued and outstanding

During the year ended December 31, 2024, the Company consolidated its Class A and Class B shares on a 65:1 basis, and the effect was applied retroactively for all comparative periods presented.

Reconciliation of the Company’s share capital is as follows, adjusted for the share consolidation:

	Class A Multiple Voting Shares		Class B Subordinate Voting Shares		Warrants	
	#	$	#	$	#	$
Balance, December 31, 2021	**2**	**151,588**	**622,319**	**152,173,089**	**107,028**	**5,137,417**
Shares repurchase [a]	—	—	**(30,766)**	**(7,523,117)**	—	—
Share-based payments [b]	—	—	**2,433**	**169,500**	—	—
Share cancellation [c]	—	—	**(7,768)**	**(1,752,090)**	—	—
PSU converted to shares	—	—	**6,154**	**191,590**	—	—
Warrants expired	—	—	—	—	**(7,303)**	**(2,995,017)**
Balance, December 31, 2022	**2**	**151,588**	**592,372**	**143,258,972**	**99,725**	**2,142,400**
Plan of arrangement [d]	—	34	1	—	—	—
Shares repurchase [e]	—	—	(29,303)	(7,165,356)	—	—
Warrants issued [f]	—	—	—	—	61,154	1,372,763
PSU converted to shares [g]	—	—	41,848	1,464,000	—	—
Share options exercised [h]	—	—	323	33,247	—	—
Share-based payments [i]	—	—	555	36,000	—	—
Warrants expired [j]	—	—	—	—	(2,047)	(791,807)
Balance, December 31, 2023	**2**	**151,622**	**605,796**	**137,626,863**	**158,832**	**2,723,356**
Shares issued [k]	10	79	1,384,783	10,670,539	—	—
Shares for debt [l]	—	—	301,423	1,990,213	—	—
Warrants expired [m]	—	—	—	—	(20,770)	(286,189)
Warrants cancelled [n]	—	—	—	—	(7,692)	(439,408)
RSU converted to shares [o]	—	—	7,500	31,009	—	—
Warrants issued (p)	—	—	—	—	80,000	—
Balance, December 31, 2024	**12**	**151,701**	**2,299,502**	**150,318,624**	**210,370**	**1,997,759**

Activity during the year ended December 31, 2022

[a] During the year ended December 31, 2022, the Company repurchased and cancelled 30,766 Class B Common Shares at prevailing market prices as part of its share repurchase program.

[b] During the year ended December 31, 2022, the Company issued 1,648 Class B shares for services received during the period with a fair value of $120,000. The fair value was based on services received. During the year ended December 31, 2022, the Company issued 785 Class B shares for services received during the period with a fair value of $49,500. The Company determined the fair value of the services received could not be measured reliably and determined fair value based on the underlying share price on the date of issuance.

[c] On March 29, 2022, the Company cancelled 7,768 Class B shares previously held by the former CEO following a court decision with respect to the shares issued in February 2021.

Activity during the year ended December 31, 2023

[d] In November 2023, the Company completed the Plan of Arrangement reorganization. The Company cancelled all 2 Class A Shares of the Company and reissued 1 new Class B shares and 2 new Class A Shares. The Company cancelled all 605,795 Class B shares outstanding and reissued 605,795 new Class B shares. There was 1 previously issued Class B share that was removed due to an administrative adjustment. The Company also cancelled and reissued 94,473 FSD Pharma New Distribution Warrants. Each holder of the Company's Class A shares, Class B shares and the FSD Pharma New Distribution Warrants was distributed a share of Celly from the Company for each Class A share, Class B share and New Distribution Warrant held. As a result, the Company issued 703,270 shares of Celly which was recognized as a deemed dividend of $8,673 with a corresponding adjustment to NCI.

[e] The Company repurchased and canceled 29,303 Class B Subordinate Voting Shares at prevailing market prices as part of its share repurchase program.

[f] The Company issued 61,154 warrants for consulting services with a fair value of $1,384,970. The Company recognized $1,372,763 as expense during the year ended December 31, 2023, with the remaining $12,206 to be recognized over the vesting period of certain warrants. The Company determined the fair value of the services received could not be measured reliably and determined the fair value using the Black-Scholes model.

[g] The Company converted 41,848 PSUs to Class B Subordinate Voting Shares following the completion of the vesting condition on January 6, 2023, the filing of the MS Phase 1 IND.

[h] 323 share options were exercised with an exercise price of C$84.50 in exchange for 323 Class B Common shares.

[i] The Company issued 555 Class B Subordinate Voting Shares for services received during the period with a fair value of $36,000.

[j] 2,047 warrants expired unexercised.

Activity during the year ended December 31, 2024:

[k] The Company entered into an at-the-market offering agreement (the "ATM Agreement") to sell Class B Subordinate Voting Shares, having an aggregate offering price up to $11,154,232. During the year ended December 31, 2024, the Company issued 1,384,783 common shares for gross proceeds of $11,146,731. A cash commission of $334,403 based on 3.0% of the aggregate gross proceeds, plus other trading expenses of $141,789, resulted in total share issuance costs of $476,192. The net proceeds were $10,670,539.

During the year ended December 31, 2024, the Company issued 10 Class A Multiple Voting Shares of the Company for total gross proceeds of approximately $79 (C$108).

[l] During the year ended December 31, 2024, the Company issued a total of 53,263 Class B Subordinate Voting Shares to settle debts owing to arm's length creditors at various prices for total fair value of $972,757. The number of shares issued include 846 RSU that were issued and converted into shares for debt. The decrease in the payable for these creditors was based on the total fair value of the shares issued.

During the year ended December 31, 2024, the Company issued a total of 248,160 Class B Subordinate Voting Shares in lieu of a cash bonus granted to executives of the Company. The total fair value of the shares issued was $1,017,456. The fair value of the bonus was recognized under payroll expenses.

[m] 20,770 warrants expired unexercised.

[n] On September 6, 2024, the Company cancelled an aggregate of 7,692 warrants with an exercise price of C$97.50 to purchase Class B Subordinate Voting Shares, which were previously granted to a board member.

[o] On September 6, 2024, the Company granted 7,500 RSUs to an arm's length party with a price of $4.13 per unit for a total value of $31,009 based on the share price at the date of issuance. The total amount was recognized as share-based compensation expense as the RSUs vested immediately upon issuance and 7,500 Class B Subordinate Voting Shares were issued for the same value.

[p] On December 13, 2024, 80,000 warrants of the Company were issued as part of the issuance of Debentures (Note 14).

The changes in the number of warrants outstanding during the years ended December 31, 2024, 2023 and 2022 were as follows:

	Number of warrants #	**Weighted average exercise price C$**
Outstanding as at December 31, 2021	107,028	357.52
Expired	(7,303)	555.17
Outstanding as at December 31, 2022	99,725	355.95
Issued	61,154	295.75
Expired	(2,047)	260.65
Outstanding as at December 31, 2023	158,832	328.30
Issued	80,000	7.00
Cancelled	(7,692)	97.50
Expired	(20,770)	305.41
Outstanding as at December 31, 2024	**210,370**	**250.33**

[expressed in United States dollars]

Measurement of fair values

During the year ended December 31, 2024, 80,000 warrants of the Company were issued in connection with the issuance of convertible debentures, exercisable until December 13, 2029 (Note 14). The warrants are classified as derivative liabilities (Note 12b).

The fair value of the warrants issued during the years ending December 31, 2023, under equity, was estimated at the date of grant using the Black-Scholes option pricing model with the following inputs:

	2023
Grant date share price	C$93.60 - C$148.85
Exercise price	C$97.50 - C$703.30
Expected dividend yield	—
Risk free interest rate	3.08% - 4.26%
Expected life	0.75 - 5 years
Expected volatility	64% - 109%

The following table is a summary of the Company's warrants outstanding as at December 31, 2024:

Expiry Date		Exercise price C$	Number outstanding #
February 27, 2025	(i)	163.67	6,154
February 27, 2025	(i)	374.10	6,154
February 27, 2025	(i)	748.20	3,077
May 15, 2025		97.50	577
May 15, 2025		195.00	577
May 23, 2025		97.50	769
March 24, 2025	(i)	166.19	6,154
March 24, 2025	(i)	385.61	6,154
March 24, 2025	(i)	782.73	3,077
May 4, 2025		1,737.65	57
May 10, 2025		1,737.65	29
May 17, 2025		1,737.65	57
May 31, 2025		1,737.65	29
June 8, 2025		627.25	23,077
August 6, 2025	(i)	602.65	21,249
October 20, 2025	(i)	357.19	53,147
January 16, 2026		1,737.65	26
January 20, 2026		1,737.65	6
December 13, 2029		7.00	80,000
		250.33	**210,370**

(i) Warrants were issued in US$

[expressed in United States dollars]

The following table is a summary of the Company's warrants outstanding as at December 31, 2023:

Expiry Date	Exercise price C$	Number outstanding #
March 14, 2024 (i)	159.04	3,077
March 14, 2024 (i)	366.23	1,538
March 14, 2024 (i)	687.75	3,077
March 30, 2024 (i)	128.95	4,615
March 30, 2024 (i)	257.91	3,846
March 30, 2024 (i)	386.86	3,846
May 24, 2024 (i)	128.95	769
February 27, 2025 (i)	150.45	6,154
February 27, 2025 (i)	343.88	6,154
February 27, 2025 (i)	687.75	3,077
March 15, 2025	97.50	577
March 15, 2025	195.00	577
March 23, 2025	97.50	769
March 24, 2025 (i)	150.45	6,154
March 24, 2025 (i)	343.88	6,154
March 24, 2025 (i)	687.75	3,077
Sunday, May 4, 2025	1,737.65	57
Saturday, May 10, 2025	1,737.65	30
Saturday, May 17, 2025	1,737.65	57
Saturday, May 31, 2025	1,737.65	30
Sunday, June 8, 2025	627.25	23,077
August 6, 2025 (i)	366.23	21,249
October 20, 2025 (i)	223.52	53,147
Friday, January 16, 2026	1,737.65	26
Tuesday, January 20, 2026	1,737.65	6
May 15, 2028	97.50	7,692
	328.32	**158,832**

(i) Warrants were issued in US$

The following table is a summary of the Company's warrants outstanding as at December 31, 2022:

Expiry Date		Exercise price C$	Number outstanding #
May 20, 2023		1,045.20	112
June 23, 2023		162.50	1,538
July 24, 2023		849.23	52
September 11, 2023		352.76	344
May 4, 2025		1,737.65	58
May 10, 2025		1,737.65	29
May 17, 2025		1,737.65	58
May 31, 2025		1,737.65	29
June 8, 2025		627.25	23,077
August 6, 2025	(i)	375.03	21,249
October 20, 2025	(i)	228.89	53,147
January 16, 2026		1,737.65	26
January 20, 2026		1,737.65	6
		355.95	**99,725**

(i) Warrants were issued in US$

[expressed in United States dollars]

16. Share-based compensation

The Company has established a share option plan (the "Option Plan") for directors, officers, employees and consultants of the Company. The Company's Board determines, among other things, the eligibility of individuals to participate in the Option Plan, the term and vesting periods, and the exercise price of options granted to individuals under the Option Plan.

Each share option is converted into one common share of the Company on exercise. No amounts are paid or payable by the individual on receipt of the option. The options carry neither rights to dividends nor voting rights. Options may be exercised at any time from the date of vesting to the date of their expiry.

[i] Share-based payment arrangements

During the year ended December 31, 2024, the Company granted a total of 54,308 (2023 – 38,277 and 2022 – 923) share options.

During the year ended December 31, 2024, the Company cancelled an aggregate of 48,804 options (2023 – Nil and 2022 – 43,385), which were previously granted to Board members, advisory Board members, employees, advisors and consultants of the Company.

During the year ended December 31, 2024, an aggregate of 904 (2023 – 4,637 and 2022 - 650) share options expired.

The changes in the number of share options outstanding during the year ended December 31, 2024, are as follows:

	Number of options #	Weighted average exercise price C$
Outstanding as at December 31, 2023	37,856	101.59
Granted	54,308	26.24
Cancelled	(48,804)	95.68
Expired	(904)	352.83
Outstanding as at December 31, 2024	**42,456**	**6.97**
Exercisable as at December 31, 2024	**34,123**	**7.30**

The changes in the number of share options outstanding during the year ended December 31, 2023 are as follows:

	Number of options #	Weighted average exercise price C$
Outstanding as at December 31, 2022	6,439	241.47
Granted	38,277	99.05
Forfeited	(1,900)	135.64
Exercised	(323)	84.50
Expired	(4,637)	262.12
Outstanding as at December 31, 2023	37,856	101.59
Exercisable as at December 31, 2023	36,875	100.01

[expressed in United States dollars]

The changes in the number of share options outstanding during the year ended December 31, 2022 are as follows:

	Number of options #	Weighted average exercise price C$
Outstanding as at December 31, 2021	49,613	178.83
Granted	923	84.50
Forfeited	(62)	243.75
Expired	(650)	241.19
Cancelled	(43,385)	166.50
Outstanding as at December 31, 2022	6,439	241.47
Exercisable as at December 31, 2022	6,404	241.42

Measurement of fair values

The fair value of share options granted during the years ended December 31, 2024, 2023 and 2022, were estimated at the date of grant using the Black-Scholes option pricing model with the following inputs:

	2024	2023	2022
Grant date share price	**C$5.20 - C$72.15**	C$83.20 - $C161.20	C$77.35
Exercise price	**C$5.25 - C$97.50**	C$84.50 - $C159.25	C$84.50
Expected dividend yield	**—**	—	—
Risk free interest rate	**2.91% - 4.20%**	2.88% - 3.99%	2.87%
Expected life	**2.00 years**	2.91 – 5.00 years	3 years
Expected volatility	**66% - 103%**	95% - 110%	112%

Expected volatility was estimated by using the annualized historical volatility of the Company. The expected option life represents the period that options granted are expected to be outstanding. The risk-free interest rate is based on Canadian government bonds with a remaining term equal to the expected life of the options.

The following table is a summary of the Company's share options outstanding as at December 31, 2024:

Options outstanding			**Options exercisable**	
Exercise price C$	Number outstanding #	Weighted average remaining contractual life [years] #	Exercise price C$	Number exercisable #
154.39	228	1.16	154.39	228
156.55	228	1.23	156.55	228
5.60	12,500	1.68	5.60	4,167
5.25	29,500	1.74	5.25	29,500
6.97	**42,456**	**1.72**	**7.30**	**34,123**

[expressed in United States dollars]

The following table is a summary of the Company's share options outstanding as at December 31, 2023:

Options outstanding			Options exercisable	
Exercise price C$	Number outstanding #	Weighted average remaining contractual life [years] #	Exercise price C$	Number exercisable #
84.50	30,769	4.07	84.50	30,769
110.50	1,046	1.87	110.50	1,046
146.25	769	0.42	146.25	769
150.15	231	2.16	150.15	231
150.15	231	2.23	150.15	231
159.25	4,523	2.15	159.25	3,562
189.15	79	2.00	189.15	79
243.75	77	0.21	243.75	77
250.90	77	2.86	250.90	58
3,266.25	54	0.28	3,266.25	53
101.59	**37,856**	**3.66**	**100.01**	**36,875**

The following table is a summary of the Company's share options outstanding as at December 31, 2022:

Options outstanding			Options exercisable	
Exercise price C$	Number outstanding #	Weighted average remaining contractual life [years] #	Exercise price C$	Number exercisable #
84.50	923	2.58	84.50	923
110.50	1,592	2.21	110.50	1,592
146.25	2,598	1.04	146.25	2,598
169.85	195	0.49	169.85	195
189.15	79	3.00	189.15	79
243.75	77	1.21	243.75	77
250.90	77	3.86	250.90	42
352.76	250	0.49	352.76	250
692.45	57	0.49	692.45	57
849.23	167	0.49	849.23	167
875.36	22	0.49	875.36	22
1,045.20	283	0.49	1,045.20	283
1,162.79	64	0.49	1,162.79	64
3,266.25	55	1.28	3,266.25	55
241.47	**6,439**	**1.52**	**241.42**	**6,404**

[ii] Performance Share Units ("PSUs") and Restrictive Share Units ("RSUs")

In May 2022, the Company established a performance share unit plan ("PSU Plan") and a restrictive unit plan ("RSU Plan"), for directors, offers, employees and consultants of the Company. The Company's Board determines the eligibility of individuals to participate in the PSU Plan and RSU Plan to align their interests with those of the Company's shareholders.

No amounts are paid or payable by the individual on receipt of the PSUs and RSUs. Each PSU and RSU converts into one Class B Subordinate Voting Share of the Company at $nil exercise price. The Company's PSU Plan and RSU Plan provides that the number of common shares reserved for issuance may not exceed 10% of the aggregate number of common shares that are outstanding unless the Board has increased such limit by a Board resolution.

[expressed in United States dollars]

PSUs

There were no PSUs issued during the year ended December 31, 2024. As at December 31, 2024, there were no PSUs outstanding (December 31, 2023 – Nil and December 31, 2022 - 37,232).

During the year ended December 31, 2023, the Company converted 41,848 PSUs to Class B Subordinate Voting Shares. The PSUs were fully vested as of January 6, 2023, upon the filing of the MS Phase 1 IND. During the year ended December 31, 2023, 1,538 PSUs related to a former independent director who are no longer with the Company were forfeited.

The change in the number of PSUs during the year ended December 31, 2024, is as follows:

	Number of PSUs #
Outstanding as at December 31, 2021	—
Granted	43,386
Converted to Class B Common shares	(6,154)
Outstanding as at December 31, 2022	37,232
Granted	6,154
Forfeited	(1,538)
Converted to Class B Common shares	(41,848)
Outstanding as at December 31, 2024 and 2023	—

RSUs

On February 23, 2024, the Company granted 846 RSUs pursuant to the shares for debt transaction (Note 15). The RSUs vested immediately upon grant and 846 Class B Subordinate Voting Shares were issued with a total fair value of $49,665, which was determined based on the share price of the Company on the date of the grant.

On August 23, 2024, the Company granted an aggregate of 32,690 RSUs at a price of $4.21 per unit for a total value of $137,625 based on the share price at the date of issuance. Each RSU granted vests the earlier of: (i) one year; and (ii) the successful implementation of the MS MAD study conducted by Ingenu of Australia, subject to acceleration in the event of a takeover bid or change of control. During the year ended December 31, 2024, the Company recognized $49,057 as share-based compensation expense and contributed surplus.

On September 6, 2024, the Company granted 7,500 RSUs at a price of $4.13 per unit for a total value of $31,009 based on the share price at the date of issuance, which was recognized as share-based compensation expense. The RSUs vested immediately upon issuance and 7,500 Class B Subordinate Voting Shares were issued for the same value.

The change in the number of RSUs during the year ended December 31, 2024, is as follows:

	Number of RSUs #
Outstanding as at December 31, 2023	—
Granted	41,036
Converted to common shares	(8,346)
Outstanding as at December 31, 2024	**32,690**

[expressed in United States dollars]

The Company recognized share-based compensation as follows for the years ended December 31, 2024, 2023 and 2022:

	2024	2023	2022
	$	$	$
Share options	**72,149**	1,951,757	69,780
RSUs	**80,065**	—	—
PSUs	—	458,253	1,291,978
Shares for services	—	36,000	169,500
Warrants for services	—	1,372,763	—
Other (i)	—	16,702	—
	152,214	3,835,475	1,531,258

i) Share-based compensation related to share options and restricted share units issued by Celly and convertible into common shares of Celly.

17. Non-controlling interests

Through the License Agreement, Quantum acquired 34.66% of Celly on July 31, 2023. As of December 31, 2024, the Company has a 22.95% (December 31, 2023 – 26.15%) ownership interest in Celly through common shares held in Celly. The non-controlling interest represents the common shares of Celly not attributable to the Company.

Reconciliation of non-controlling interest is as follows:

	$
Balance, December 31, 2022	—
Initial recognition of non-controlling interests	(24,467)
Share-based payments	16,702
Dividend	8,673
Net loss for the year	(328,409)
Balance, December 31, 2023	(327,501)
Net loss for the year	(712,805)
Balance, December 31, 2024	**(1,040,306)**

18. Loss per share

Net loss per common share represents net loss attributable to common shareholders divided by the weighted average number of common shares outstanding during the year.

For all the years presented, diluted loss per share equals basic loss per share due to the anti-dilutive effect of warrants, share options, PSUs and RSUs. The outstanding number and type of securities that could potentially dilute basic net loss per share in the future but would have decreased the loss per share (anti-dilutive) for the years ended December 31, 2024, 2023, and 2022 are as follows:

	December 31, 2024	December 31, 2023	December 31, 2022
	#	#	#
Warrants	**210,370**	158,831	99,725
Share Options	**42,456**	37,856	6,439
RSUs	**32,690**	—	—
PSUs	—	—	37,232
	285,516	196,687	143,396

[expressed in United States dollars]

19. General and administrative

Components of general and administrative expenses for the years ended December 31, 2024, 2023 and 2022 were as follows:

	2024	2023	2022
	$	$	$
Professional fees	**3,074,130**	3,248,233	5,208,356
Investor relations	**1,748,242**	665,915	1,495,695
Salaries, wages and benefits (Note 15[l])	**2,658,364**	1,855,087	2,798,074
Consulting fees	**797,863**	1,305,434	1,452,070
Office and general administrative	**879,272**	2,294,476	2,838,303
Foreign exchange loss (gain)	**252,226**	(336,421)	1,323,242
Building and facility costs	**-**	-	519,954
	9,410,097	9,032,724	15,635,694
Allocated to:			
Continuing operations	**9,410,097**	9,032,724	14,450,094
Discontinued operations	**-**	-	1,185,600

20. Segment information

Reportable segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker, with appropriate aggregation. The chief operating decision maker is the CEO who is responsible for allocating resources, assessing the performance of the reportable segment and making key strategic decisions. The Company operates in two segments: Biopharmaceutical and Strategic Investments.

The Company's Biopharmaceutical segment is focused on furthering the research and development of the Company's drug candidates and the development of a treatment for alcohol misuse for application in hospitals and other medical practices. The Biopharmaceutical segment primarily earns interest income on excess cash on hand invested in short-term guaranteed investment certificates.

The Company's Strategic Investments segment is focused on generating returns and cash flow through the issuance of loans secured by residential property, with FSD Strategic Investments having a first or second collateral mortgage on the secured property.

The following tables summarize the Company's total current and non-current assets and current and non-current liabilities as of December 31, 2024, and 2023, on a segmented basis:

	As at December 31, 2024		
	Biopharmaceutical	**Strategic Investments**	**Total**
	$	**$**	**$**
Current assets	8,620,407	3,432,340	**12,052,747**
Non-current assets	5,066,477	—	**5,066,477**
Current liabilities	6,678,992	—	**6,678,992**
Non-current liabilities	—	—	**—**

	As at December 31, 2023		
	Biopharmaceutical	Strategic Investments	Total
	$	$	$
Current assets	3,897,317	7,187,988	**11,085,305**
Non-current assets	5,482,157	907,366	**6,389,523**
Current liabilities	4,565,566	—	**4,565,566**
Non-current liabilities	—	—	—

The following tables summarize the Company's interest income, total operating expenses, and net loss for the years ended December 31, 2024, and 2023 on a segmented basis:

	For the years ended December 31, 2024		
	Biopharmaceutical	Strategic Investments	Total
	$	$	$
Interest expense (income)	(14,695)	(558,196)	**(572,891)**
Total operating expenses	16,135,899	361	16,136,260
Net (loss) income	(15,473,364)	557,835	**(14,915,529)**

	For the years ended December 31, 2023		
	Biopharmaceutical	Strategic Investments	Consolidated
	$	$	$
Interest income	(675,731)	(110,632)	(786,363)
Total operating expenses	23,169,675	619,823	23,789,498
Net (loss)	(18,204,886)	(25,702)	(18,230,588)

21. Commitments and contingencies

Commitments

Lucid-MS Agreement

The Company has entered into a license agreement that governs the Lucid-MS compound. Under the terms of the agreement, the Company shall pay a yearly license maintenance fee of C$100,000 until the first commercial sale of a product is made.

Under the agreement the Company is committed to minimum milestone payments of $nil and maximum milestone payments of C$12,500,000 if all product development and regulatory milestones are met. Furthermore, the Company is also responsible for paying revenue milestone payments and royalties if revenue milestones from commercial sales are achieved. Milestones can be extended by mutual agreement. No payments have been made to date related to these milestones.

Contingencies

Legal Matters

From time to time, the Company is named as a party to claims or involved in proceedings, including legal, regulatory and tax related, in the ordinary course of its business. While the outcome of these matters may not be estimable at the reporting date, the Company makes provisions, where possible, for the estimated outcome of such claims or proceedings. Should a loss result from the resolution of any claims or proceedings that differs from these estimates, the difference will be accounted for as a charge to the consolidated statements of loss and comprehensive loss in that year.

GBB Drink Lab, Inc.

On May 12, 2023, the Company announced receipt of a lawsuit filed in S.D. Fla. by GBB against the Company, alleging breach of a mutual non-disclosure agreement and misappropriation of trade secrets. GBB claims that its assets were, as of August 30, 2022 (prior to the misappropriation and material breach) valued at US$53,047,000. The Company believes the allegations are without merit and continues to defend itself in the lawsuit.

On June 23, 2023, the Company filed a motion to dismiss the complaint. On July 3, 2023, GBB responded in opposition to the Company ‘s motion to dismiss the complaint. The Motion to Dismiss the Amended Complaint filed on June 23, 2023, has been fully briefed and is awaiting adjudication by S.D. Fla. On August 24, 2023, the parties filed a proposed joint scheduling report with the S.D. Fla., which set forth various deadlines that would govern this action. Under the proposed joint schedule, the case was to be trial-ready by November 30, 2024. On January 8, 2024, the S.D. Fla. Dismissed the Company’s request for a motion to dismiss the lawsuit.

On January 22, 2024, the Company filed a third-party complaint against Joseph Romano (a former director of the Company), and a counterclaim against GBB. The Company alleges that Mr. Romano breached his fiduciary duty by providing or fabricating confidential information to GBB, and that GBB aided and abetted this breach. On October 9, 2024, Judge Melissa Damian denied Mr. Romano’s motion to dismiss, finding that the Company plausibly alleged Romano breached fiduciary duties, including his duties of loyalty, confidentiality, and to act in the Company’s best interests. GBB and Romano have denied the allegations in their respective answers.

As of March 17, 2025, the parties are finalizing documents to be used in discovery in advance of a May 1, 2025, deadline. Under the proposed schedule, the parties are required to participate in a mediation process by June 18, 2025. The case is expected to be trial-ready by September 2025.

Raza Bokhari

On July 15, 2021, the Company’s former CEO, Raza Bokhari, filed a notice of arbitration seeking relief and support for breach of contract and severance and damages in the amount of $30,200,000, for aggravated and punitive damages in the amount of $500,000 and legal fees and disbursements associated with the arbitration.

Raza Bokhari was placed on administrative leave from his role as the Company’s Chief Executive Officer following the Company’s annual general and special meeting of shareholders on May 14, 2021, pending the outcome of an investigation of various concerns by a Special Committee comprised of independent directors using independent legal counsel. Upon the recommendation of the Special Committee, Raza Bokhari’s employment was terminated for cause by the Company’s board on July 27, 2021.

The Company disputed the allegations and counterclaimed against Raza Bokhari for losses sustained as a result of his alleged breaches of his duties to the Company. The arbitration hearing concluded in August 2022 and the arbitrator issued his decision in November 2022. Raza Bokhari's claim for USD $30.2 million was dismissed along with his claim that he had been wrongfully dismissed. The arbitrator ordered that Raza Bokhari repay certain monies to Quantum, while also holding him responsible for Quantum's costs of the arbitration.

On December 9, 2022, Raza Bokhari filed an application in the Ontario Superior Court seeking to set aside the arbitral award of the court on the grounds that he was not treated equally and fairly and the arbitrator's written award provided inadequate reasons for his decision.

On December 20, 2022, the Company's legal counsel wrote to the Commercial List of the Ontario Superior Court of Justice seeking to transfer the application from the Civil List to the Commercial List. The request was granted on January 12, 2023.

On April 28, 2023, the court ordered the case to be heard at the Commercial List on September 27, 2023.

On September 27 and 28, 2023, the application to set aside the award and cost of ground of unfairness was dismissed. As Raza Bokhari lost the set aside application, the court ordered Raza Bokhari to pay the Company C$165,000 to cover the Company's legal expenses.

On October 13, 2023, Raza Bokhari filed a "Notice of Motion for Leave to Appeal" with the Court of Appeal for Ontario.

On December 15, 2023, the Company submitted a responding party's factum to the Court of Appeal for Ontario.

On February 6, 2024, the Ontario Superior Court of Justice affirmed the judgment and awarded an additional C$5,000 in costs considering Raza Bokhari's failed motion for leave to appeal. As of the date hereof, the litigation is ongoing.

On May 31, 2024, the United States District Court for the Eastern District of Pennsylvania confirmed Quantum's Petition to Confirm Arbitration Awards entered against Dr. Raza Bokhari.

On June 27, 2024, the US District Court for the Eastern District of Pennsylvania confirmed Quantum's motion for entry of judgment and granted judgment in favor of Quantum of approximately USD $3 million.

Deferred Income

On December 24, 2024, the Company entered into a Prepaid Forward Purchase Agreement (the "Purchase Agreement") with Sports Coat LLC ("Buyer"). Under the terms of the agreement, the Buyer agreed to provide financing of US$1,000,000 to the Company in exchange for the right to receive a portion of the proceeds from certain ongoing litigations.

These litigations include, but are not limited to:

- Claims related to market manipulation involving FSD Pharma Inc, Quantum Biopharma Ltd., or any related entity; and
- Claims involving Raza Bokhari

The financing provided under the Purchase Agreement is non-recourse, which stipulates that the Company is not obligated to repay the US$1,000,000 if no proceeds are realized from the litigations. The Buyer assumes the risk of loss in the event of non-collection of litigation proceeds. The agreement does not include a predefined repayment schedule, a specified due date, or a general pledge of the Company's assets as collateral for repayment.

The Purchase Agreement specifies events of default, including failure to pay amounts due, breach of material terms, termination of legal representation without cause, misrepresentation, misappropriation of litigation proceeds, insolvency, or challenges to the agreement's validity. In such cases, the Buyer may declare the full amount immediately due and enforce its security interest.

The Company received the full US$1,000,000, which has been recorded as deferred income. Due to the uncertainty surrounding the timing of the litigation outcomes, the amount is classified as a current liability.

22. Related party transactions

Related parties and related party transactions impacting the consolidated financial statements are summarized below and include transactions with the following individuals or entities:

Key management personnel

Related parties include directors, officers, close family members, certain consultants and enterprises that are controlled by these individuals as well as certain persons performing similar functions.

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company directly or indirectly, including any directors (executive and non-executive) of the Company.

Transactions with key management and directors comprise the following:

a) Director's compensation for the year ended December 31, 2024, was $161,048 (2023 – $175,140 and 2022 - $215,104).
b) During the year ended December 31, 2024, the Company granted Nil (2023 – 6,154 and 2022 – 43,386) PSUs to independent members of the Board. As at December 31, 2024, the PSUs had fully vested upon the filing of the MS Phase 1 IND on January 6, 2023 and were settled with the issuance of Class B Subordinate Voting Shares.
c) During the year ended December 31, 2024, the Company granted 23,000 options to officers and employees of the Company each with exercise prices ranging from C$5.25 to C$5.60 and expiring two years from date of issuance.
d) During the year ended December 31, 2024, the Company cancelled 30,768 options held by officers and employees of the company. They issued RSU of 30,768 in replacement of the cancelled options.
e) During the year ended December 31, 2024, the Company granted the Co-Chairman of the board, the CEO and the current CFO total shares of 248,160 with a fair value of $1,017,456 as bonus for the year.
f) During the year ended December 31, 2023, the Company granted the previous interim CEO, the current CEO, the Chief Operating Officer ("COO") and the CEO of Lucid, 7,692 share options each with an exercise price of C$84.50 and an expiry date of January 25, 2028. All options were fully vested on grant. Each share option can be exercised to acquire one Class B Subordinate Voting Share.
g) On August 15, 2024, the Company closed a non-brokered private placement and issued 4 Class A Multiple Voting Shares at a price of C$18 per Class A Multiple Voting Share for aggregate gross proceeds of C$72 to Xorax and Fortius, with each entity receiving 2 Class A Multiple Voting Shares.
On September 13, 2024, the Company closed a non-brokered private placement and issued 6 Class A Multiple Voting Shares at a price of $6 per Class A Multiple Voting Share for gross proceeds of C$36 to Xorax and Fortius, with each entity receiving 3 Class A Multiple Voting Shares.
h) During the year ended December 31, 2023, the Company entered into a secured loan agreement with the CEO for C$1,200,000, with monthly payments of C$6,000 based on an annual interest rate of 6%. The loan had a maturity date of April 26, 2025, and was part of FSD Strategic Investments' portfolio of finance receivables. During the year ended December 31, 2024, a payment of C$400,000 was made by the CEO, and monthly payments were subsequently reduced to C$4,000. Subsequent to December 31, 2024, the CEO made a payment of C$800,000 towards the loan, thereby settling the total debt outstanding owed to FSD Strategic Investments (Note 26).

[expressed in United States dollars]

i) During the year ended December 31, 2023, the Company issued 15,385 warrants for consulting services to certain independent members of the Board of Directors with a fair value of $533,206, prior to them joining the Board of Directors. The Company determined the fair value of the services received could not be measured reliably and determined the fair value using the Black-Scholes model.

j) For the year ended December 31, 2023, the Company reimbursed $145,081 to a related party of the CEO, President, and Executive Co-Chairman of the Board for legal expenses

Key management personnel compensation during the years ended December 31, 2024, and 2023 is comprised of:

	2024	2023	2022
	$	$	$
Salaries, benefits, bonuses and consulting fees	**908,052**	1,395,096	1,839,441
Share-based payments	**1,085,669**	1,980,732	1,345,952
	1,993,721	3,375,828	3,185,393

As at December 31, 2024, the Company owed an executive officer $Nil (December 31, 2023 - $140,012), for legal fees incurred by the Company and paid by the executive officer on behalf of the Company. The amount owed is recorded within trade and other payables.

As at December 31, 2024, the Company has $Nil owing to related parties included in accounts payable and accrued liabilities (December 31, 2023 - $Nil).

23. Capital Management

The Company defines capital as the aggregate of its capital stock and borrowings and convertible debentures.

As at December 31, 2024, the Company's share capital was $150,470,325 (December 31, 2023 – $137,778,485). The Company does not have any long-term debt.

The Company manages its capital structure in accordance with changes in economic conditions. To maintain or adjust its capital structure, the Company may elect to issue or repay financial liabilities, issue shares, repurchase shares or undertake any other activities as deemed appropriate under specific circumstances. The Company is not subject to any externally imposed capital requirements. There were no changes in capital management during the years ended December 31, 2024 and 2023.

24. Discontinued operations

In March 2020, the Company decided to focus its efforts and resources on the pharmaceutical business and initiated the process to exit the medical cannabis industry and sell FV Pharma's facility located at 520 William Street, Cobourg, Ontario, K9A 3A5 (the "Facility") and the 64-acre property on which the Facility is located (the "Facility Property"). On May 6, 2022, the Company closed the sale of the Facility and the Facility Property for total consideration of $12,730,942 (C$16,400,000). The Company recognized a gain of $4,249,582 on the sale of the Facility and the Facility Property and incurred selling expenses of $616,002 for the year ended December 31, 2022.

Results of operations related to the Disposal Group are reported as discontinued operations for the year ended December 31, 2022.

[expressed in United States dollars]

Net income from discontinued operations for the year ended December 31, 2022 is comprised of the following:

	$
Expenses	
General and administrative	1,185,600
Total operating expenses	1,185,600
Loss from discontinued operations	(1,185,600)
Other income	(32,852)
Gain on sale of property and plant	(4,249,582)
Net income (loss) from discontinued operations	3,096,834

25. Financial Instruments and Risk Management

Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from deposits with banks and outstanding other receivables and finance receivables. The Company trades only with recognized, creditworthy third parties.

The Company does not hold any collateral as security for its outstanding finance receivables but mitigates this risk by dealing only with, what management believes to be, financially sound counterparties and, accordingly, does not anticipate significant loss for non-performance. The loans are secured by real estate properties and the Company is granted a first or second collateral charge mortgage on the properties for a sum equal to the interest payments plus the principal amount. The Company performs assessments on factors such as: timing of payments, loan to value, communications with the borrower and external macro factors such as interest rates and economic conditions to mitigate risks.

Liquidity risk

Liquidity risk is the risk the Company will not be able to meet its financial obligations as they come due. The Company's exposure to liquidity risk is dependent on the Company's ability to raise additional financing to meet its commitments and sustain operations. The Company mitigates liquidity risk by management of working capital, cash flows, the issuance of share capital and if desired, the issuance of debt. The Company's trade and other payables and notes payables are all due within twelve months from the date of these financial statements.

If unanticipated events occur that impact the Company's ability to carry out the planned clinical trials, the Company may need to take additional measures to increase its liquidity and capital resources, including issuing debt or additional equity financing or strategically altering the business forecast and plan. In this case, there is no guarantee that the Company will obtain satisfactory financing terms or adequate financing. Failure to obtain adequate financing on satisfactory terms could have a material adverse effect on the Company's results of operations or financial condition.

Market risk

Market risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: foreign currency risk, interest rate risk and other price risk.

- Foreign currency risk

  Foreign currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured. The Company's primary exposure with respect to foreign currencies is from Canadian dollar denominated cash, investments and trade and other payables. A 1% change in the foreign exchange rates would not result in any significant impact to the financial statements.

- Interest rate risk

  Interest rate risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company does not have any material long-term borrowings outstanding subject to variable interest rates. Therefore, the Company is not exposed to interest rate risk as at December 31, 2024.

- Other price risk

  Other price risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market. The Company is not exposed to other price risk as at December 31, 2024.

[expressed in United States dollars]

Fair values

The carrying values of cash, other receivables, trade and other payables and notes payable approximate fair values due to the short-term nature of these items or they are being carried at fair value or, for notes payable, interest payables are close to the current market rates. The risk of material change in fair value is not considered to be significant. The Company does not use derivative financial instruments to manage this risk.

Financial instruments recorded at fair value on the consolidated statement of financial position are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The Company categorizes its fair value measurements according to a three-level hierarchy. The hierarchy prioritizes the inputs used by the Company's valuation techniques. A level is assigned to each fair value measurement based on the lowest-level input significant to the fair value measurement in its entirety. The three levels of the fair value hierarchy are defined as follows:

- Level 1 – Unadjusted quoted prices as at the measurement date for identical assets or liabilities in active markets.
- Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.
- Level 3 – Significant unobservable inputs that are supported by little or no market activity. The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The fair value hierarchy requires the use of observable market inputs whenever such inputs exist. A financial instrument is classified to the lowest level of the hierarchy for which a significant input has been considered in measuring fair value. During the year, there were no transfers of amounts between levels.

26. Income taxes

The reconciliation of income tax expense for the years ended December 31, 2024, 2023 and 2022 consists of the following:

	2024	2023	2022
	$	$	$
Loss from continuing operations before income taxes	**(14,915,529)**	(18,230,588)	(26,703,662)
Statutory federal and provincial tax rate	**26.50%**	26.50%	26.50%
Income tax recovery at the statutory tax rate	**(3,952,615)**	(4,831,106)	(7,076,470)
Permanent differences	**(118,813)**	2,557,822	1,639,590
Book to filing adjustments	**—**	(119,668)	438,255
Share issuance cost booked directly to equity	**(126,188)**	—	—
Impact of tax rate changes	**(197,652)**	(42,277)	—
Foreign exchange	**2,250,728**	(582,404)	1,044,135
Change in tax benefits not recognized	**2,144,540**	3,017,633	3,954,490

Deferred tax assets have not been recognized in respect of the following temporary differences as at December 31, 2024 and 2023:

	2024	2023	2022
	$	$	
Non-capital losses - Canada	**96,555,590**	88,880,329	77,271,986
Net-operating loss - US	**5,073,167**	5,073,156	5,120,395
Unrealized foreign exchange loss	**—**	—	94,733
Share-issuance costs	**631,807**	1,046,314	2,045,027
Capital losses carried forward	**3,248,902**	3,534,651	—
Other investments	**2,320,154**	2,528,002	5,542,253
IFRS 16	**294**	5,814	37,439
Property, plant and equipment	**1,249,717**	849,854	324,798
Total	**109,079,631**	101,918,120	90,436,631

[expressed in United States dollars]

The Company's Canadian non-capital income tax losses expire as follows:

2038	$ 5,702,162
2039	10,100,844
2040	20,283,487
2041	18,140,317
2042	19,006,739
2043	6,846,306
2044	10,245,472
Indefinite	6,230,263
	$ 96,555,590

The Company has cumulative US federal net operating loss carryforwards of approximately $5.07 million which will start to expire in 2026. Utilization of net operating loss carryforwards may be subject to limitations in the event of a change in ownership pursuant to United States Internal Revenue Code ("IRC") § 382, and similar state provisions. As a result of the acquisition of Prismic on June 28, 2019, the preacquisition net operating loss carryforwards of approximately $4.93 million could be subject to IRC § 382 limitation as the acquisition could constitute a change of ownership.

27. Subsequent Events

The following events took place subsequent to December 31, 2024:

- On January 6, 2025, the Company successfully settled its outstanding debt to a creditor, which was previously reported on the statement of financial position at approximately US$659,000.
- On January 20, 2025, the Company issued an additional 1,480 Debenture Units, raising a total amount of C$1,480,000 under the non-brokered private placement offering announced on December 5, 2024. This third tranche was completed under amended terms, including a reduced conversion price of C$4.85 per share, an increased warrant ratio of 103.093 Warrants per Debenture Unit, and a reduced exercise price of C$5.25 per Warrant share.
- On February 4, 2025, Celly Nutrition signed a letter of engagement with a leading New York Investment Bank to raise up to US$10,000,000 in capital and explore an initial public offering on a major U.S. exchange.
- On February 18, 2025, the Company secured an additional loan facility of AU$700,000, through its subsidiary, Huge Biopharma.
- On March 4, 2025, the CEO repaid C$800,000 towards his outstanding loan, classified under FSD Strategic Investments' portfolio of residential property investments, thereby fully settling the debt owed to the Company. As of the date of this report, the CEO has no remaining obligations to the Company.
- On March 5, 2025, and March 11, 2025, the Company expanded its portfolio of residential mortgages by issuing two new mortgage loans, each with a principal amount of C$100,000 with a maturity of one year.
- On March 6, 2025, the Company closed the fourth tranche of the December 2024 Offering and issued 100 January 2025 Debenture Units for aggregate gross proceeds of C$100,000. On March 25,2025, the investor converted this Debenture into an aggregate of 25,257 Class B Subordinate Voting Shares.
- On March 20, 2025, the Company successfully expanded its cryptocurrency holdings to a total value of US$3,500,000.
- On March 27, 2025, the Company appointed Terry Lynch to the Board to replace Dr. Sanjiv Chopra.

EXHIBIT 2.1

DESCRIPTION OF SECURITIES

Except as otherwise stated, the information in this Description of Securities is provided as of the date of the Annual Report. The following summary does not purport to be complete. The summary is subject to and qualified by the Articles of Amalgamation of Quantum BioPharma Ltd. dated November 1, 1998, as amended though the date of the Annual Report ("**Articles**") and Amended and Restated By-Law Number 1 ("**Bylaws**"). Additionally, the Ontario Business Corporation Act (" **OBCA**"), as amended, also affects the terms of our capital stock.

Capital Stock

The Corporation's authorized share capital consists of an unlimited number of Class A multiple voting shares ("**Class A Multiple Voting Shares**") and an unlimited number of Class B subordinate voting shares ("**Class B Subordinate Voting Shares**"), each with no par value. Neither the Class A Multiple Voting Shares nor the Class B Subordinate Voting Shares are bearer shares; instead, the Corporation maintains a register of the holders of the Class A Multiple Voting Shares and the Class B Subordinate Voting Shares and engages a transfer agent and registrar to process transfers of shares and maintain the register. The Class B Subordinate Voting Shares are "restricted securities" within the meaning of such term under applicable Canadian securities laws, as these shares do not carry equal voting rights as compared with our Class A Multiple Voting Shares.

The Class B Subordinate Voting Shares are registered under Section 12(b) of the Exchange Act and trade on the Canadian Securities Exchange and Nasdaq Capital Market under the symbol "QNTM". The Class B Subordinate Voting Shares are also listed and posted for trading on the Börse Frankfurt, or Frankfurt Stock Exchange, under "WKN: A2JM6M" and the trading symbol "0K9A". The Class B Subordinate Voting Shares are approved trade on the MERJ Exchange under the ticker symbol "QNTM." Prior to the CSE listing, there was no public trading in any securities of the Corporation.

The following is a summary of the rights, privileges, restrictions and conditions attached to the Class A Multiple Voting Shares and Class B Subordinate Voting Shares.

Meetings and Voting Rights

The holders of the Class A Multiple Voting Shares and Class B Subordinate Voting Shares are entitled to notice of and to attend all meetings of shareholders and to vote at all such meetings together as a single class, except in respect of matters where only the holders of shares of one class or series of shares are entitled to vote separately pursuant to applicable law. At any meeting at which the holders of the Class A Multiple Voting Shares and the holders of the Class B Subordinate Voting Shares are entitled to vote together, the Class B Multiple Voting Shares carry one vote per share and the Class A Multiple Voting Shares carry 276,660 votes per share.

Generally, all matters to be voted on by shareholders must be approved by a simple majority (or, in the case of election of directors where the number of candidates nominated for election exceeds the number of directors to be elected, by a plurality, and in the case of an amalgamation or amendments to our Articles, by two-thirds) of the votes cast in respect of Class A Multiple Voting Shares and Class B Subordinate Voting Shares held by persons present in person or by proxy, voting together.

Rank, Liquidation, and Participation

The Class A Multiple Voting Shares and Class B Subordinate Voting Shares rank pari passu with respect to the payment of dividends, return of capital and distribution of assets in the event of the liquidation, dissolution or winding up of the Corporation. In the event of the liquidation, dissolution or winding-up of the Corporation or any other distribution of its assets among its shareholders for the purpose of winding-up its affairs, whether voluntarily or involuntarily, the holders of Class A Multiple Voting Shares and the holders of Class B Subordinate Voting Shares are entitled to participate equally, share for share, subject always to the rights of the holders of any class of shares ranking senior to the Class A Multiple Voting Shares and the Class B Subordinate Voting Shares, in the remaining property and assets of the Corporation available for distribution to Shareholders, without preference or distinction among or between the Class A Multiple Voting Shares and the Class B Subordinate Voting Shares.

Dividends

Holders of Class A Multiple Voting Shares and Class B Subordinate Voting Shares are entitled to receive, subject always to the rights of the holders of any class of shares ranking senior to the Class A Multiple Voting Shares and Class B Subordinate Voting Shares, dividends out of the assets of the Corporation legally available for the payment of dividends at such times and in such amount and form as the Board may from time to time determine, and the Corporation will pay dividends thereon on a pari passu basis, if, as and when declared by the Board.

Conversion

The Class B Subordinate Voting Shares are not convertible into any other class of shares. Each outstanding Class A Multiple Voting Share may, at any time at the option of the holder, be converted into one Class B Subordinate Voting Share. Upon the first date that any Class A Multiple Voting Share is held other than by a permitted holder, the permitted holder which held such Class A Multiple Voting Share until such date, without any further action, shall automatically be deemed to have exercised his, her or its rights to convert such Class A Multiple Voting Share into a fully paid and non-assessable Class B Subordinate Voting Share.

Future transfers by holders of Class A Multiple Voting Shares to arm's length parties or other than to permitted holders will generally result in those shares converting to Class B Subordinate Voting Shares, which will have the effect, over time, of increasing the relative voting power of those holders of Class A Multiple Voting Shares who retain their shares. Such holders could, in the future, control a significant percentage of the combined voting power of Class A Multiple Voting Shares and Class B Subordinate Voting Shares.

Modification, Subdivision and Consolidation

Any modification to the provisions attaching to either the Class A Multiple Voting Shares or the Class B Subordinate Voting Shares requires the separate affirmative vote of two-thirds of the votes cast by the holders of the Class A Multiple Voting Shares and the Class B Subordinate Voting Shares respectively, voting as separate classes. The Company may not subdivide or consolidate the Class A Multiple Voting Shares or the Class B Subordinate Voting Shares without at the same time proportionally subdividing or consolidating the shares of the other class and on the same basis.

On August 15, 2024, the Corporation completed a consolidation ("**Consolidation**') of all of its issued and outstanding Class A Multiple Voting Shares and Class B Subordinate Voting Share. Pursuant to the Consolidation, all of the issued and outstanding Class A Multiple Voting Shares and Class B Subordinate Voting Shares were consolidated on the basis of one post-Consolidation share for every 65 pre-Consolidation shares of each class.

Creation of Other Voting Shares

The Company may not create any class or series of shares, or issue any shares of any class or series (other than Class A Multiple Voting Shares or Class B Subordinate Voting Shares) having the right to vote generally on all matters that may be submitted to a vote of shareholders (except matters for which applicable law requires the approval of holders of another class or series of shares voting separately as a class or series) without the separate affirmative vote of two-thirds of the votes cast by the holders of the Class A Multiple Voting Shares or the Class B Subordinate Voting Shares, respectively, voting as separate classes.

Other Rights

Neither the Class A Multiple Voting Shares nor the Class B Subordinate Voting Shares are redeemable, nor do the holders of such shares have pre-emptive purchase rights. Directors do not stand for re-election at staggered intervals. There are no provisions in the By-Laws requiring disclosure of share ownership.

Substantial Shareholders

Other than the Coattail Agreement provisions described under the caption "Takeover Bid Provisions," there are no provisions in the Articles or By-laws discriminating against any existing or prospective holder of our securities as a result of such shareholder owning a substantial number of our securities.

However, transactions involving shareholders that hold a substantial number of securities may be subject to Multilateral Instrument 61-101 – *Protection of Minority Security Holders in Special Transactions* ("**MI 61-101**"). MI 61-101 contains requirements in connection with certain types of transactions including related party transactions. Related party transactions include, for an issuer, certain types of transactions between the issuer and a person that is a related party of the issuer at the time the transaction is agreed to, whether or not there are also other parties to the transaction. Related parties of an issuer include, among others, control persons of the issuer, directors, senior officers and persons that have beneficial ownership or control or direction over (or a combination thereof), directly or indirectly, 10% of the voting securities of the issuer. Subject to the availability of certain exemptions, MI 61-101 provides certain procedural protections for minority or disinterested shareholders in connection with the types of transactions that are subject to MI 61-101. In particular, MI 61-101 requires, subject to certain exemptions: (i) more detailed disclosure in the proxy material sent to security holders in connection with a transaction; (ii) the preparation of a formal valuation of the subject matter of the transaction; (iii) minority approval of the proposed transaction by a majority of the votes cast by minority or disinterested shareholders; and (iv) in certain circumstances, the formation of a special committee.

Change of Control Transactions

As set forth in the Articles, the holders of Class B Subordinate Voting Shares are entitled to participate on an equal basis with holders of Class A Multiple Voting Shares in the event of a Change of Control Transaction (as defined in the Articles) requiring approval of the holders of Class A Multiple Voting Shares and Class B Subordinate Voting Shares under the OBCA, unless different treatment of the shares of each such class is approved by a majority of the votes cast by the holders of outstanding Class A Multiple Voting Shares and by a majority of the votes cast by the holders of outstanding Class B Subordinate Voting Shares, each voting separately as a class.

Proposals to Amend the Articles

Neither the holders of the Class A Multiple Voting Shares nor the holders of the Class B Subordinate Voting Shares shall be entitled to vote separately as a class upon a proposal to amend the Articles in the case of an amendment referred to in paragraph (a) or (e) of subsection 170(1) of the OBCA.

Neither the holders of the Class A Multiple Voting Shares nor the holders of the Class B Subordinate Voting Shares shall be entitled to vote separately as a class upon a proposal to amend the Articles in the ease of an amendment referred to in paragraph (b) of subsection 170(1) or the OBCA unless such exchange, reclassification or cancellation: (a) affects only the holders of that class; or (b) affects the holders of Class A Multiple Voting Shares and Class B Subordinate Voting Shares differently, on a per share basis, and such holders are not otherwise entitled to vote separately as a class under any applicable law or the Articles in respect of such exchange, reclassification or cancellation. Any amendment to the Articles generally requires the affirmative vote of two-thirds of the votes cast by the holders of the Class A Multiple Voting Shares and/or Class B Subordinate Voting Shares.

Articles or Bylaw Provisions which are more restrictive than the OBCA

Certain conditions imposed by our Articles or Bylaws governing changes in the Company's capital are more stringent than those required by the OBCA.

With regards to conversion, the Company's Articles are slightly more stringent because the automatic conversion upon transfer imposes an additional restriction on ownership, compared to OBCA's default rule, which is that automatic conversion upon transfer is not a requirement, but is allowed if included in the articles. With the Company's conversion provision, over time, the voting power of the remaining Class A holders increases, making this provision more restrictive in terms of governance.

Pertaining to the modification to the rights of Class A or Class B shares, the Company's Articles require 2/3 votes of each class, voting separately. Basically, the Company can require a separate class vote for all modifications, but OBCA's default rule is a 2/3 vote is required only if the amendment adversely affects the rights of that class. Furthermore, the Company's Articles require that the subdivision/ consolidation of one class must also apply proportionally to the other class, while the OBCA does not have this requirement.

Take-Over Bid Protection

Under applicable Canadian law, an offer to purchase Class A Multiple Voting Shares would not necessarily require that an offer be made to purchase Class B Subordinate Voting Shares. In accordance with the rules of the CSE designed to ensure that, in the event of a take-over bid, the holders of Class B Subordinate Voting Shares will be entitled to participate on an equal footing with holders of Class A Multiple Voting Shares, the holders of not less than 80% of the outstanding Class A Multiple Voting Shares have entered into the Coattail Agreement. The Coattail Agreement contains provisions customary for dual class, publicly-traded Ontario corporations designed to prevent transactions that otherwise would deprive the holders of Class B Subordinate Voting Shares of rights under the take-over bid provisions of applicable Canadian securities legislation to which they would have been entitled if the Class A Multiple Voting Shares had been Class B Subordinate Voting Shares.

The undertakings in the Coattail Agreement do not apply to prevent a sale of Class A Multiple Voting Shares by a holder of Class A Multiple Voting Shares party to the Coattail Agreement if concurrently an offer is made to purchase Class B Subordinate Voting Shares that:

(a) offers a price per Class B Subordinate Voting Share at least as high as the highest price per share paid or required to be paid pursuant to the take-over bid for the Class A Multiple Voting Shares;

(b) provides that the percentage of outstanding Class B Subordinate Voting Shares to be taken up (exclusive of shares owned immediately prior to the offer by the offeror or persons acting jointly or in concert with the offeror) is at least as high as the percentage of outstanding Class A Multiple Voting Shares to be sold (exclusive of Class A Multiple Voting Shares owned immediately prior to the offer by the offeror and persons acting jointly or in concert with the offeror);

(c) has no condition attached other than the right not to take up and pay for Class B Subordinate Voting Shares tendered if no shares are purchased pursuant to the offer for Class A Multiple Voting Shares; and

(d) is in all other material respects identical to the offer for Class A Multiple Voting Shares.

In addition, the Coattail Agreement does not prevent the sale of Class A Multiple Voting Shares by a holder thereof to a permitted holder, provided such sale does not or would not constitute a take-over bid or, if so, is exempt or would be exempt from the formal bid requirements (as defined in applicable securities legislation). The conversion of Class A Multiple Voting Shares into Class B Subordinate Voting Shares shall not, in or of itself, constitute a sale of Class A Multiple Voting Shares for the purposes of the Coattail Agreement.

Under the Coattail Agreement, any sale of Class A Multiple Voting Shares (including a transfer to a pledgee as security) by a holder of Class A Multiple Voting Shares party to the Coattail Agreement is conditional upon the transferee or pledgee becoming a party to the Coattail Agreement, to the extent such transferred Class A Multiple Voting Shares are not automatically converted into Class B Subordinate Voting Shares in accordance with the Articles of Amendment.

The Coattail Agreement contains provisions for authorizing action by the trustee to enforce the rights under the Coattail Agreement on behalf of the holders of the Class B Subordinate Voting Shares. The obligation of the trustee to take such action will be conditional on the Corporation or holders of the Class B Subordinate Voting Shares providing such funds and indemnity as the trustee may require. No holder of Class B Subordinate Voting Shares has the right, other than through the trustee, to institute any action or proceeding or to exercise any other remedy to enforce any rights arising under the Coattail Agreement unless the trustee fails to act on a request authorized by holders of not less than 10% of the outstanding Class B Subordinate Voting Shares and reasonable funds and indemnity have been provided to the trustee.

The Coattail Agreement may not be amended, and no provision thereof may be waived, unless, prior to giving effect to such amendment or waiver, the following have been obtained: (a) the consent of the CSE and any other applicable securities regulatory authority in Canada and (b) the approval of at least $66^{2}/_{3}\%$ of the votes cast by holders of Class B Subordinate Voting Shares represented at a meeting duly called for the purpose of considering such amendment or waiver, excluding votes attached to Class B Subordinate Voting Shares held directly or indirectly by holders of Class A Multiple Voting Shares, their affiliates and related parties and any persons who have an agreement to purchase Class A Multiple Voting Shares on terms which would constitute a sale for purposes of the Coattail Agreement other than as permitted thereby.

No provision of the Coattail Agreement limits the rights of any holders of Class B Subordinate Voting Shares under applicable law.

Competition Act

Limitations on the ability to acquire and hold our Class B Subordinate Voting Shares may be imposed by the *Competition Act* (Canada). This legislation establishes a pre-merger notification regime for certain types of merger transactions that exceed certain statutory shareholding and financial thresholds. Transactions that are subject to notification cannot be closed until the required materials are filed and the applicable statutory waiting period has expired or been waived by the Commissioner of Competition (the "**Commissioner**"). Further, the *Competition Act* (Canada) permits the Commissioner to review any acquisition of control over or of a significant interest in us, whether or not it is subject to mandatory notification. This legislation grants the Commissioner jurisdiction, for up to one year following completion of an acquisition, to challenge this type of acquisition before the Canadian Competition Tribunal if the Commissioner believes it would, or would be likely to, prevent or lessen competition substantially in any market in Canada.

Investment Canada Act

The following discussion summarizes the principal features of the Investment Canada Act (Canada) for a non-resident who proposes to acquire Class B Subordinate Voting Shares. The discussion is general only; it is not a substitute for independent legal advice from an investor's own advisor; and it does not anticipate statutory or regulatory amendments.

There are no limitations under the OBCA, the law of Canada or in the organizing documents of the Company on the right of foreigners to hold or vote securities of the Company, except that the *Investment Canada Act* (Canada)may require that a "non-Canadian" not acquire "control" of the Company without prior review and approval by the Minister of Innovation, Science and Economic Development, where applicable thresholds are exceeded. The acquisition of one-third or more of the voting shares of the Company would give rise a rebuttable presumption of an acquisition of control, and the acquisition of more than fifty percent of the voting shares of the Company would be deemed to be an acquisition of control.

In addition, the Investment Canada Act provides the Canadian government with broad discretionary powers in relation to national security to review and potentially prohibit, condition or require the divestiture of, any investment in the Company by a non-Canadian, including non-control level investments. "Non-Canadian" generally means an individual who is neither a Canadian citizen nor a permanent resident of Canada within the meaning of the *Immigration and Refugee Protection Act* (Canada) who has been ordinarily resident in Canada for not more than one year after the time at which he or she first became eligible to apply for Canadian citizenship, or a corporation, partnership, trust or joint venture that is ultimately controlled by non-Canadians.

In 2009, amendments were enacted to the *Investment Canada Act* (Canada) concerning investments that may be considered injurious to national security. If the Minister of Innovation, Science and Industry has reasonable grounds to believe that an investment by a non-Canadian "could be injurious to national security," the Minister of Innovation, Science and Industry may send the non-Canadian a notice indicating that an order for review of the investment may be made. The review of an investment on the grounds of national security may occur whether or not an investment is otherwise subject to review on the basis of net benefit to Canada or otherwise subject to notification under the *Investment Canada Act* (Canada). The Minister of Innovation, Science and Industry has published guidelines that provide an open-ended list of factors that may be considered in determining whether an investment may be "injurious to national security". These include the potential effects of the investment on the transfer of sensitive technology (including biotechnology) that may have military, intelligence, or dual military/civilian applications.

Certain transactions, except those to which the national security provisions of the *Investment Canada Act* (Canada) may apply, relating to Class B Subordinate Voting Shares are exempt from the *Investment Canada Act* (Canada), including:

(a) acquisition of Class B Subordinate Voting Shares by a person in the ordinary course of that person's business as a trader or dealer in securities,

(b) acquisition of control of the Corporation in connection with the realization of security granted for a loan or other financial assistance and not for a purpose related to the provisions on the *Investment Canada Act* (Canada), and

(c) acquisition of control of the Corporation by reason of an amalgamation, merger, consolidation or corporate reorganization following which the ultimate direct or indirect control in fact of the Corporation, through the ownership of Class B Subordinate Voting Shares, remained unchanged.

See "Item 10.E.-Taxation" for additional information regarding the material U.S. and Canadian federal income tax consequences relating to the ownership and disposition of our Class B Subordinate Voting Shares by Non-Canadian Holders (as defined therein) in the Company's Annual Report on Form 20-F for its fiscal year ended December 31, 2024..

Any of these provisions may discourage a potential acquirer from proposing or completing a transaction that may have otherwise presented a premium to our shareholders. We cannot predict whether investors will find the Corporation and our Class B Subordinate Voting Shares less attractive because we are governed by Canadian laws.

Exhibit A-1

EXHIBIT "A"

FORM OF DEBENTURE CERTIFICATE

CONVERTIBLE DEBENTURE CERTIFICATE QUANTUM BIOPHARMA LTD.

(Incorporated under the laws of the Province of British Columbia)

DEBENTURE CERTIFICATE NO. 20__-12-00[●] **PRINCIPAL AMOUNT: $**

Quantum Biopharma Ltd. of 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7 (the "**Company**"), for value received, hereby acknowledges itself indebted and promises to pay to [●] of [●] (hereinafter referred to as the "**Debentureholder**") on _____ [●], ____ (the "**Maturity Date**"), at such place as the Debentureholder may reasonably designate by notice in writing to the Company, the outstanding Principal Amount (the Principal Amount, as may from time to time be increased as hereinafter provided, the "**Principal Amount**"), in the manner hereinafter provided, and to pay interest on the Principal Amount outstanding from time to time and owing hereunder to the date of payment as hereinafter provided, after maturity or demand, default and judgement. This Debenture is issued on _____[●], 2024 (the "**Issue Date**").

The Debentureholder has the right, from time to time and at any time while any portion of the Principal Amount or any accrued and unpaid interest on the Debenture ("**Interest**") is outstanding under this Debenture, to convert all or any portion of the outstanding Principal Amount and Interest (if any) into Class B shares in the capital of the Company (each, a "**Class B share**"), at a price of $6.25 per Class B share, subject to adjustment as herein provided.

This Debenture is issued upon and subject to the terms and conditions appended hereto as Schedule "A".

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Debenture to be executed by a duly authorized officer. DATED for reference this ___ day of _____ ___.

QUANTUM BIOPHARMA LTD.

Per: _____
Authorized Signing Officer

Exhibit A-3

SCHEDULE "A"

TERMS AND CONDITIONS FOR DEBENTURE

ARTICLE 1
DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Debenture, unless there is something in the subject matter or context inconsistent therewith, the following words and terms shall have the meanings set out below.

(a) "**Applicable Securities Laws**" means the securities laws, regulations, policies, notices, rulings and orders in all the Provinces and Territories of Canada.

(b) "**Business Day**" means a day, other than a Saturday, Sunday or statutory holiday in the Province of Ontario.

(c) "**Change of Control**" means (i) any event, as a result of or following which, any Person, or group of Persons (whether acting alone or "acting jointly or in concert", within the meaning of applicable Canadian securities laws), beneficially own(s) or exercise(s) control or direction over an aggregate of more than fifty percent (50%) of the then outstanding Class B shares, or (ii) the sale or other transfer of all or substantially all of the consolidated assets and properties of the Company. Notwithstanding the foregoing, a Change of Control shall not include any sale, merger, reorganization or other similar transaction if the previous holders of Class B shares hold not less than fifty percent (50%) of the voting securities of such merged, reorganized or other continuing entity.

(d) "**Class B shares**" means fully-paid and non-assessable Class B shares in the capital of the Company as constituted on the date hereof, and after the date hereof any other shares, other securities, money or property which the Debentureholder is entitled to receive in respect or substitution thereof upon conversion of this Debenture pursuant to Article 5.

(e) "**Company**" means Quantum Biopharma Ltd. and its successors and assigns.

(f) "**Conversion Date**" or "**Date of Conversion**" means the date on which a written notice of conversion is received by the Company pursuant to §5.2(a).

(g) "**Conversion Price**" means, subject to §5.3, $6.25 per Class B share.

(h) "**Conversion Rights**" means the rights of the Debentureholder to convert the Debenture into Class B shares pursuant to Article 5.

(i) "**Debenture**" means this convertible debenture as supplemented, amended or otherwise modified, renewed or replaced from time to time.

(j) "**DRS**" means direct registration system.

(k) "**Eastern Time**" means the local time in Toronto, Ontario, Canada.

(l) "**Events of Default**" shall have the meaning set forth in §6.1.

(m) "**Exchange**" means the Canadian Securities Exchange, or such other stock exchange on which the Class B shares may, from time to time, principally trade.

(n) "**Indebtedness**" means, at any time and from time to time, all of the Principal Amount, any accrued Interest and any other amount owing pursuant to this Debenture, in each case which has not been paid to the Debentureholder by the Company.

(o) "**Interest**" means any accrued but unpaid interest with respect to the Principal Amount.

(p) "**Issue Date**" means _____ [●], _____.

(q) "**Law**" includes any law (including common law and equity), statute, treaty, regulation, rule, ordinance, order, injunction, writ, decree or award of any Official Body.

(r) "**Maturity Date**" means _____ [●], _____.

(s) "**Obligations**" shall have the meaning set forth in §**Error! Reference source not found.**.

(t) "**Official Body**" means any government or political subdivision or any agency, authority, bureau, central bank, monetary authority, commission, department or instrumentality thereof, or any court, tribunal or arbitrator, whether foreign or domestic.

(u) "**Other Debentures**" means, collectively, all other convertible debentures of the Company issued on or about the Issue Date, and having the same material terms as the Debenture.

(v) "**Person**" means an individual, partnership, corporation, trust, unincorporated association, joint venture or government or any agent, instrument or political subdivision thereof.

(w) "**Principal Amount**" means the principal amount outstanding under this Debenture from time to time.

(x) "**Subscription Agreement**" means the subscription agreement of even date between the Company and the Debentureholder providing for the issuance of the Debenture.

(y) "**USA**", "**United States**", or "**U.S.**" means the United States of America, its territories and possessions and any state of the United States, and the District of Columbia.

1.2 Interpretation

For the purposes of this Debenture, except as otherwise expressly provided herein:

(a) The words "**herein**", "**hereof**", and "**hereunder**" and other words of similar import refer to this Debenture as a whole and not to any particular Article, clause, subclause or other subdivision or Schedule.

(b) A reference to an Article means an Article of this Debenture and the symbol § followed by a number or some combination of numbers and letters refers to the section, paragraph or subparagraph of this Debenture so designated.

(c) The headings are for convenience only, do not form a part of this Debenture and are not intended to interpret, define or limit the scope, extent or intent of this Debenture or any of its provisions.

(d) The word "including", when following a general statement, term or matter, is not to be construed as limiting such general statement, term or matter to the specific items or matters set forth or to similar items or matters (whether or not qualified by non-limiting language such as "without limitation" or "but not limited to" or words of similar import) but rather as permitting the general statement or term to refer to all other items or matters that could reasonably fall within its possible scope.

(e) Unless otherwise indicated, a reference to currency means Canadian currency.

(f) Words importing the masculine gender include the feminine or neuter, words in the singular include the plural, words importing a corporate entity include individuals, and vice versa.

ARTICLE 2
DEBENTURE

2.1 Principal Amount

The Company agrees to repay to the Debentureholder the Principal Amount of the Debenture, together with Interest thereon, if any, by 5:00 p.m. (Eastern Time) on the Maturity Date, subject to the early redemption or conversion of the Debenture, pursuant to the terms set forth in §2.4 and Article 5 respectively.

2.2 Interest on Debenture

The Principal Amount will bear Interest at a rate of 1.25% per month. Interest is to be calculated from the Issue Date and paid quarterly in cash on the last business day of each calendar quarter, first interest payment being paid on _____

The Principal Amount will bear Interest at an additional rate of 25% per annum on and from the date on which there occurs an Event of Default which is continuing and shall be payable monthly in cash in arrears on the last Business Day of each month of each calendar year while any amount remains outstanding hereunder if such Event of Default is continuing. If the Debentureholder elects, in its sole and absolute discretion, Interest may be paid in Class B shares at the Conversion Price in effect on the date of such payment.

For the purposes of the *Interest Act* (Canada) and disclosure thereunder only, whenever any interest or fee payable is calculated using a rate based on a year of 365 or 366 days, as the case may be, the rate determined pursuant to such calculation, when expressed as an annual rate, is equivalent to (i) the applicable rate based on a year of 365 days or 366 days, as the case may be, (ii) multiplied by the actual number of days in the calendar year in which such rate is to be ascertained and (iii) divided by 365 or 366, as the case may be.

2.3 Payment of Principal Amount and Interest on Debenture

Unless the Indebtedness is redeemed or converted in accordance with this Debenture, the Company shall pay to the Debentureholder the Indebtedness on the Maturity Date.

2.4 Early Redemption of Debenture

This Debenture is redeemable by the Company at any time upon, in whole or in part, from time to time at the option of the Company on 15 days' notice at a price equal to:

(a) 100% of the principal amount thereof; plus

(b) accrued and unpaid interest thereon; plus

(c) a cash amount equal to the sum of all payments of interest that would be due through the Maturity Date after the date of such redemption.

2.5 Use of Proceeds

The proceeds of the Debenture shall be used for the ongoing development of the Company's business model and for general working capital purposes.

2.6 Outstanding Balance

Notwithstanding the stated Principal Amount of this Debenture, the actual outstanding balance of the Debenture from time to time shall be the aggregate outstanding Principal Amount of the Debenture, together with any Interest thereon payable by the Company to the Debentureholder pursuant to this Debenture.

ARTICLE 3
SECURITY

INTENTIONALLY REMOVED

ARTICLE 4
COVENANTS

4.1 Covenants of the Company

The Company covenants and agrees with the Debentureholder that, unless otherwise consented to in writing by the Debentureholder:

(a) **Reservation of Class B shares.** The Company shall at all times have reserved for issuance out of its authorized capital a sufficient number of Class B shares to satisfy its obligations to issue and deliver Class B shares upon the due conversion of the Debenture.

(b) **Insurance and Good Corporate Governance.** The Company shall at all times (i) maintain insurance policies in accordance with good commercial practices applicable in the circumstances, if any, (ii) do or cause to be done all things necessary to maintain its corporate existence in good standing, and (iii) do or cause to be done all things necessary to keep in full force and effect all properties, rights, franchisees, licences and qualifications which are material for the Company to carry on its business in all applicable jurisdictions.

(c) **Notification of Changes.** The Company shall forthwith provide the Debentureholder with written notice of any material fact or development, as well as of any change in any representation, warranty or other information relating to the Company. Notwithstanding the foregoing, such notice shall only be provided if any such material fact, developments or changes have not been publicly disclosed by the Company.

(d) **Approvals and Filings.** The Company shall, in connection with the execution and delivery of this Debenture and the possible conversion of the Debenture into Class B shares, obtain any and all statutory and regulatory approvals required to effect and complete the same and shall file all notices, reports and other documents required to be filed by or on behalf of the Company pursuant to Applicable Securities Laws in respect thereof, including the rules and regulations of the Exchange.

(e) **Restrictions in U.S.** This Debenture and the securities deliverable upon conversion hereof have not been and will not be registered under the *United States Securities Act of 1933*, as amended (the "**U.S. Securities Act**"), or the securities laws of any state of the United States. This Debenture may not be converted in the United States, or by or for the account or benefit of a U.S. person or a person in the United States, unless (i) the Class B shares are registered under the U.S. Securities Act and the applicable laws of any such state, or (ii) an exemption from such registration requirements is available, and (iii) the Debentureholder has complied with the requirements set forth in the conversion form. For the purposes of this §4.1(e), "United States" and "U.S. person" are as defined in Regulation S under the U.S. Securities Act.

(f) **Canadian Securities Laws.** All Class B shares issued to the Debentureholder upon conversion of the Debenture or any part thereof shall be made pursuant to an exemption from the prospectus requirements available to the Debentureholder or the Company in respect of the transactions contemplated herein under Applicable Securities Laws.

(g) **Maintain Listing.** The Company will use reasonable commercial efforts to maintain the listing of the Class B shares on the Canadian Securities Exchange, and to maintain the Company's status as a "reporting issuer" not in default of the requirements of the applicable Securities Laws, provided that if all of the issued and outstanding Class B shares of the Company are acquired pursuant to a takeover bid, arrangement or other form of merger or acquisition, then this covenant will not operate to prohibit the completion of such transaction.

ARTICLE 5
CONVERSION OF DEBENTURE

5.1 Conversion Privilege and Conversion Price

The Debentureholder shall have the right, from time to time and at any time while any while any Indebtedness is outstanding under this Debenture, subject to early redemption, to convert to Class B shares, all or any part of the outstanding Indebtedness on the Conversion Date (if any), at the Conversion Price.

In the event that the Debentureholder converts the entire Principal Amount at any time on or before the six-month anniversary of the Issue Date, the Debentureholder will be entitled to receive a cash amount equal to half the sum of all payments of interest that would be due through the Maturity Date, which the Debentureholder may convert all or any part of into Class B shares at the Conversion Price.

5.2 Manner of Exercise of Right to Convert or Purchase

(a) The Debentureholder may, at any time following the Issue Date and at any time while any portion of the Principal Amount is outstanding under this Debenture, convert the outstanding Principal Amount together with any Interest on the Conversion Date (if any), in whole or in part, into Class B shares at the Conversion Price, by delivering to the Company the conversion form executed by the Debentureholder or the Debentureholder's attorney duly appointed by an instrument in writing, exercising the Debentureholder's right to convert the Debenture in accordance with the provisions of this Article 5. Thereupon, the Debentureholder, subject to payment of all applicable stamp or security transfer taxes or other governmental charges, shall be entitled to be entered in the books of the Company as at the Conversion Date (or such later date as is specified in §5.2(b) as the holder of the number of Class B shares into which the Debenture is convertible in accordance with the conversion form then received by the Company and the provisions of this Article 5 and, as soon as practicable thereafter, the Company shall deliver to the Debentureholder and/or, subject as aforesaid, the Debentureholder's nominee(s) or assignee(s), a certificate or certificates or DRS advice statement for such Class B shares affixed with all legends required by applicable securities laws. If the Company fails to deliver the certificate or DRS advice statement representing such Class B share to the Debentureholder, or its nominee(s), or assignee(s), as the case may be, within five (5) Business Days of conversion pursuant to this 5.2(a), subject to the Debentureholder being in compliance with the terms of conversion as set out herein, the Company shall pay to the Debentureholder, in cash, an amount equal to 2% of the Indebtedness being converted pursuant to the written notice of conversion in the form of Appendix "B" (the "Conversion Notice"), for the applicable Date of Conversion, which amount shall accrue daily until the certificates or DRS advice statement representing such Class B share have been delivered to the Debentureholder, or its nominee(s), or assignee(s), as applicable (the "Delivery Penalty"). Notwithstanding the foregoing, the Delivery Penalty shall not accrue, be payable, or be owed by the Company to the Debentureholder if the Company has submitted, within three (3) Business Days of the receipt of the Conversion Notice, a treasury direction to the Company's transfer agent requesting that certificates or DRS advice statement representing such Class B share shall be delivered to the Debentureholder, or its nominee(s), or assignee(s), as applicable.

(b) For the purposes of this Article 5, the Debenture shall be deemed to be converted on the Conversion Date on which the conversion form under §5.2(a) is actually received by the Company, provided that if such Conversion Notice is received on a day on which the register of Class B shares is closed, the person or persons entitled to receive Class B shares shall become the holder or holders of record of such Class B shares as at the date on which such register is next reopened.

(c) Any part of the Principal Amount together with any Interest may be converted as provided in §5.2(a).

(d) The Debentureholder shall be entitled in respect of Class B shares issued upon conversion of the Debenture to dividends declared in favour of shareholders of record of the Company on and after the Conversion Date or such later date as the Debentureholder shall become the holder of record of such Class B shares pursuant to §5.2(b), from which applicable date any Class B shares so issued to the Debentureholder shall for all purposes be and be deemed to be outstanding as fully paid and non-assessable.

5.3 Adjustment of Conversion Price

The Conversion Price in effect at any date shall be subject to adjustment from time to time as follows:

(a) If and whenever at any time while any portion of the Principal Amount is outstanding under this Debenture (referred to in this §5.3 as the "**Time of Expiry**"), the Company shall:

(i) subdivide, redivide or change its Class B shares into a greater number of shares,

(ii) consolidate, reduce or combine its Class B shares into a lesser number of shares, or

(iii) issue Class B shares to all or substantially all of the holders of its Class B shares by way of a stock dividend or other distribution on such Class B shares payable in Class B shares (other than dividends paid in the ordinary course);

(any such event being hereinafter referred to as a "**Capital Reorganization**"), the Conversion Price shall be adjusted by multiplying the Conversion Price in effect on the effective date of such event referred to in §5.3(a)(i) or §5.3(a)(ii) or on the record date of such stock dividend referred to in §5.3(a)(iii), as the case may be, by a fraction, the numerator of which shall be the number of Class B shares outstanding before giving effect to such Capital Reorganization and the denominator of which shall be the number of Class B shares outstanding after giving effect to such Capital Reorganization. Such adjustment shall be made successively whenever any Capital Reorganization shall occur and any such issue of Class B shares by way of a stock dividend or other such distribution shall be deemed to have been made on the record date thereof for the purpose of calculating the number of outstanding Class B shares under §5.3(a)(i) and §5.3(a)(ii).

(b) If and whenever at any time prior to the Time of Expiry, the Company shall fix a record date for the issuance of rights, options or warrants to all or substantially all the holders of Class B shares entitling them, for a period expiring not more than 45 days after such record date, to subscribe for or purchase Class B shares at a price per share (or having a conversion or exchange price per share) of less than 95% of the Current Market Price (as defined below) per Class B share on such record date (any such event being hereinafter referred to as a "**Rights Offering**"), the Conversion Price, subject to prior approval of the Exchange if required, shall be adjusted immediately after such record date so that it shall equal the price determined by multiplying the Conversion Price in effect on such record date by a fraction, of which the numerator shall be the total number of Class B shares outstanding on such record date plus a number equal to the number determined by dividing the aggregate purchase price of the additional Class B shares offered for subscription or purchase by such Current Market Price per Class B share, and of which the denominator shall be the total number of Class B shares outstanding on such record date plus the number of the additional Class B shares offered for subscription or purchase. Any Class B shares owned by or held for the account of the Company shall be deemed not to be outstanding for the purpose of any such computation. Such adjustment, if having received any required prior Exchange approval, shall be made successively whenever such a record date is fixed. To the extent that such Rights Offering is not made or any such rights, options or warrants are not exercised prior to the expiration thereof, the Conversion Price shall then be readjusted to the Conversion Price which would then have been in effect if such record date had not been fixed or if such expired rights, options or warrants had not been issued.

(c) If and whenever at any time prior to the Time of Expiry, the Company shall fix a record date for the distribution to all or substantially all the holders of its Class B shares of:

(i) shares of any class whether of the Company or any other corporation (excluding dividends paid in the ordinary course);

(ii) rights, options or warrants;

(iii) evidences of indebtedness; or

(iv) other assets or property (excluding dividends paid in the ordinary course);

and if such distribution does not constitute a Capital Reorganization or a Rights Offering or does not consist of rights, options or warrants entitling the holders, for a period expiring not more than 45 days after such record date, to subscribe for or purchase Class B shares at a price per share or having a conversion or exchange price per share of at least 95% of the Current Market Price per Class B share on such record date (any such non-excluded event being hereinafter referred to as a "**Special Distribution**"), the Conversion Price, subject to prior approval of the Exchange if required, shall be adjusted immediately after such record date so that it shall equal the price determined by multiplying the Conversion Price in effect on such record date by a fraction, of which the numerator shall be the total number of Class B shares outstanding on such record date multiplied by the Current Market Price per Class B share determined on such record date, less the excess of the fair market value (as determined by the board of directors of the Company, which determination shall be conclusive) of such Special Distribution over the fair market value (as determined by the board of directors of the Company, which determination shall be conclusive) of the consideration therefor, if any, received by the Company and of which the denominator shall be the total number of Class B shares outstanding on such record date multiplied by such Current Market Price per Class B share. Any Class B shares owned by or held for the account of the Company shall be deemed not to be outstanding for the purposes of any such computation. Such adjustment shall be made successively whenever such a record date is fixed. The extent that such Special Distribution is not so made or to the extent any such rights, options or warrants are not exercised prior to the expiration thereof, the Conversion Price shall then be readjusted to the Conversion Price which would then be in effect if such record date had not been fixed or if such expired rights, options or warrants had not been issued.

(d) For the purpose of any computation under §5.3(b) or §5.3(c), the "**Current Market Price**" per Class B share at any record date referred to therein shall be the closing market price per share of such Class B shares on the day immediately preceding such record date on the Exchange, or, if the Class B shares are not then listed on any Exchange, then the Current Market Price will be determined by a firm of chartered accountants appointed by the Company (who may be auditors of the Company) and acceptable to the Debentureholder, acting reasonably.

(e) If and whenever at any time prior to the Time of Expiry, there is a reclassification or change of Class B shares into other shares or there is a consolidation, merger, reorganization or amalgamation of the Company with or into another corporation or entity that results in any reclassification of Class B shares or a change of Class B shares into other shares or there is a transfer of the undertaking or assets of the Company as an entirety or substantially as an entirety to another person (any such event being hereinafter referred to as a "**Reclassification of Class B shares**"), the Debentureholder shall be entitled to receive and shall accept, upon the exercise of the Debentureholder's right of conversion at any time after the effective date thereof, in lieu of the number of Class B shares to which the Debentureholder was theretofore entitled on conversion, the kind and amount of shares or other securities or money or other property that the Debentureholder would have been entitled to receive as a result of such Reclassification of Class B shares, if, on the effective date thereof, the Debentureholder had been the registered holder of the number of such Class B shares to which the Debentureholder was theretofore entitled upon conversion, subject to adjustment thereafter in accordance with provisions the same, as nearly as may be possible, as those contained in this §5.3.

(f) In any case in which this §5.3 shall require that an adjustment become effective immediately after a record date or agreement date for an event referred to herein, the Company may defer, until the occurrence of such event, issuing or transferring to the Debentureholder who converts on a Conversion Date after such record date or agreement date and before the occurrence of such event the additional Class B shares issuable upon conversion by reason of the adjustment of the Conversion Price required by such event before giving effect to such adjustment; provided, however, that the Company shall deliver to the Debentureholder an appropriate instrument evidencing the Debentureholder's right to receive such additional Class B shares upon the occurrence of the event requiring such adjustment and the right to receive any distributions made on such additional Class B shares on and after the Date of Conversion or such later date as the Debentureholder would, but for the provisions of this §5.3(f), have become the holder of record of such additional Class B shares pursuant to §5.3(c).

(g) In case the Company after the date hereof shall take any action affecting its Class B shares, other than any action described in this §5.3, which would, in the opinion of the directors of the Company, acting reasonably materially affect the conversion rights of the Debentureholder, the Conversion Price shall be adjusted in such manner, at such time and by such action by the directors of the Company, as they may determine, acting reasonably, to be equitable to the Debentureholder and the Company in the circumstances, but subject in all cases to any necessary regulatory approval.

(h) The adjustments provided for in this §5.3 are cumulative and shall apply to successive subdivisions, redivisions, reductions, combinations, consolidations, distributions, issues or other events resulting in any adjustment under the provisions of this §5.3, provided that, notwithstanding any other provision of this §5.3, no adjustment shall be made which would result in any increase in the Conversion Price (except upon a consolidation, reduction or combination of outstanding Class B shares) and no adjustment of the Conversion Price shall be required unless such adjustment would require a decrease of at least 1% in the Conversion Price then in effect; provided, however, that any adjustments which by reason of this subsection (h) are not required to be made shall be carried forward and taken into account in any subsequent adjustment.

(i) In the event that the Exchange or any securities regulatory body of an applicable jurisdiction does not approve (if such approval is required) a requested downward Conversion Price adjustment as provided for under this Debenture, then such adjustment shall be reduced to the maximum permitted price, and any such shortfall will be paid to the Debentureholder in cash, securities, or a combination thereof by the Company, at the reasonable discretion of the board of directors of the Company, to achieve a substantially similar economic result to the Debentureholder subject to compliance with the rules and policies of the Exchange or applicable securities regulatory body.

(j) In the event of any dispute arising with respect to the adjustments provided in this §5.3, such question shall be conclusively determined by a firm of chartered accountants appointed by the Company (who may be auditors of the Company) and acceptable to the Debentureholder, acting reasonably. Such accountants shall have access to all necessary records of the Company and such determination shall be binding upon the Company and the Debentureholder.

(k) Notwithstanding any other provision herein contained, no adjustment to the Conversion Price shall be made in respect of any event described in this §5.3 (other than the events referred to in paragraphs (i) and (ii) of subsection (a)), if the Debentureholder is entitled, without converting the Debenture, to participate in such event on the same terms mutatis mutandis as if the Debentureholder had converted the Debenture into Class B shares prior to or on the effective date or record date of such event.

5.4 No Requirement to Issue Fractional Shares

The Company shall not be required to issue fractional Class B shares upon the conversion of the Debenture pursuant to this Article 5.

5.5 Certificate as to Adjustment

The Company shall from time to time forthwith after the occurrence of any event which requires adjustment or readjustment as provided in §5.3, deliver to the Debentureholder at the Debentureholder's address set forth on the final page hereof, an officer's certificate specifying the nature of the event requiring the same and the amount of the adjustment necessitated thereby and setting forth in reasonable detail the method of calculation and the facts upon which such calculation are based.

ARTICLE 6
EVENTS OF DEFAULT

1.1 General

The occurrence of any one or more of the following events ("**Events of Default**") will constitute a default hereunder (whether any such event is voluntary or involuntary or is effected by operation of law or pursuant to or in compliance with any judgment, decree or order of any court of any order, rule or regulation of any administrative or governmental body):

(a) **Non-Compliance:** (A) the Company fails to make any material required filing with a securities regulatory authority by the applicable deadline, if such failure continues unremedied for a period of 30 days, except in the case where the Company files for a management cease trade order, in which case, if such failure continues for a period of 90 days from the date of issuance of the management cease trader order; (B) the Company fails to observe or perform one or more material covenants, agreements, conditions or obligations in favour of the Debentureholder, including a failure to pay any or all of the Principal Amount, Interest and other monies due under the Debenture when due, if such failure continues unremedied for a period of 10 Business Days; or (C) the Company defaults pursuant to, or fails to observe or perform one or more material covenants, agreements, conditions or obligations under this Debenture, the Other Debentures or any other ancillary document or instrument entered into in connection with the transaction in which this Debenture was issued, if such failure continues unremedied for a period of 10 Business Days.

(b) **Ceasing to be Reporting Issuer:** the Company ceases to be a reporting issuer in at least one jurisdiction of Canada for any reason ("**Default Date**"). Notwithstanding the foregoing, the Company will have a cure period of 30 days after the date of such Default Date so long as the event does not trigger a cease trade order, in which case the Default Date is the date the cease trade order is issued.

(c) **Bankruptcy or Insolvency:** the Company becomes insolvent or makes a voluntary assignment or proposal in bankruptcy or otherwise acknowledges its insolvency, or a bankruptcy petition is filed or presented against the Company which is not stayed or dismissed within 60 days, or the Company commits or threatens to commit an act of bankruptcy.

(d) **Receivership:** a receiver or receiver manager of the Company is appointed under any statute or pursuant to any document issued by the Company.

(e) **Compromise or Arrangement:** any proceeding with respect to the Company is commenced under the compromise or arrangement provisions of the corporations statute pursuant to which the Company is governed, or the Company enters into an arrangement or compromise with all of its creditors generally pursuant to such provisions or otherwise.

(f) **Companies' Creditors Arrangement Act:** any proceeding with respect to the Company is commenced in any jurisdiction under the *Companies' Creditors Arrangement Act* (Canada) or any similar legislation unless the proceeding is being actively and diligently contested in good faith by appropriate and timely proceedings and is dismissed, vacated or indefinitely stayed within 60 days of knowledge by the Company of the appointment.

(g) **Liquidation:** an order is made, a resolution is passed, or a petition is filed, for the liquidation, dissolution or winding-up of the Company.

(h) If following the Issue Date the volume weighted average price of the Shares on the Exchange is at or below $5.3125 for any period of 10 consecutive trading days.

(i) If an event of default occurs under any other debt obligation of the Company, which is not waived by the applicable creditor or cured within the applicable cure period set forth therein.

ARTICLE 7
RIGHTS, REMEDIES AND POWERS

7.1 Upon Default

Upon the occurrence of an Event of Default and at any time thereafter, so long as such Event of Default is continuing, the Debentureholder may exercise any or all of the rights, remedies and powers of the Debentureholder under any applicable legislation or otherwise existing, whether under this Debenture or any other agreement or at law or in equity, and in addition will have the right and power (but will not be obligated) to declare any or all of the Indebtedness outstanding to be immediately due and payable.

7.2 Waiver

The Debentureholder in its absolute discretion may at any time and from time to time by written notice waive any breach by the Company of any of its covenants or agreements herein. No failure or delay on the part of the Debentureholder to exercise any right, remedy or power given herein or by any other existing or future agreement or now or hereafter existing by statute, at law or in equity will operate as a waiver thereof, nor will any single or partial exercise of any such right, remedy or power preclude any other exercise thereof or the exercise of any other such right, remedy or power, nor will any waiver by the Debentureholder be deemed to be a waiver of any subsequent, similar or other event.

ARTICLE 8
OTHER AGREEMENTS

8.1 Withholding Taxes

If the Company is obliged to withhold any payment hereunder on account of present or future taxes, duties, assessments or other governmental charges required by Law, the Company shall make such withholding or deduction and pay the balance owing to the Debentureholder.

8.2 Amendment and Waiver

Neither this Debenture nor any provision hereof may be amended, waived, discharged or terminated except by a document in writing executed by the party against whom enforcement of the amendment, waiver, discharge or termination is sought.

8.3 Notices and Other Instruments

Any notice, demand or other communication required or permitted to be given to any party hereunder shall be in writing and shall be:

(a) personally delivered to such party;

(b) except during a period of strike, lock-out or other postal disruption, sent by double registered mail, postage prepaid to the address of such party set forth on page one; or

(c) sent by email or other means of electronic communication to the address of such party as designated by such party in a written notice to the other party,

and shall be deemed to have been received by such party on the earliest of the date of delivery under subsection (a), the actual date of receipt when mailed under subsection (b), and the Business Day following the date of communication under subsection (c). Any party may give written notice to the other parties of a change of address to some other address, in which event any communication shall thereafter be given to such party as hereinbefore provided, at the last such changed address of which the party communication has received written notice.

8.4 Maximum Rate

Notwithstanding any other provisions of this Debenture or any other agreement, the maximum amount (including interest and any other consideration) payable to the Debentureholder in connection with the Obligations and each part thereof shall not exceed the maximum allowable return permitted under the laws of the Provinces of Ontario and the federal laws of Canada applicable therein, and the provisions of this Debenture and all other existing and future agreements are hereby modified to the extent necessary to effect the foregoing.

8.5 Successors and Assigns

This Debenture shall be binding upon the Company and its successors. Except as contemplated in §8.9, this Debenture is neither transferable nor assignable by the Company without the prior written consent of the Debentureholder. Notwithstanding anything to the contrary herein, this Debentureholder may assign or transfer any right or interest in this Debenture, subject to compliance with Applicable Securities Laws and provided that the transferee, assignee or Debentureholder as the case may be, furnishes to the Company such evidence as the Company may reasonably require in order to satisfy itself with respect to the foregoing. Notwithstanding anything to the contrary herein, subject to compliance with Applicable Securities Laws, no prior written consent of, or notice to, the Company is required to permit the assignment or transfer of any right or interest in this Debenture by the Debentureholder to any affiliate of the Debentureholder or to any investment fund managed by the Debentureholder's manager or its affiliate.

8.6 Severability

The provisions of this Debenture are intended to be severable. If any provision of this Debenture shall be deemed by any court of competent jurisdiction or held to be invalid or void or unenforceable in whole or in part in any jurisdiction, such provision shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without in any manner affecting the validity or enforceability thereof in any other jurisdiction or the remaining provisions hereof in any jurisdiction.

8.7 Modification

From time to time the Company may modify the terms and conditions hereof for any purpose not inconsistent the terms hereof, including the correction or rectification of any ambiguities, defective provisions, errors or omissions herein.

8.8 Governing Law

This Debenture shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein and shall be treated in all respects as an Ontario contract.

8.9 Change of Control.

(a) Not less than five (5) Business Days following the occurrence of a Change of Control, the Company shall deliver to the Debentureholder and each of the holders of the Other Debentures, a notice in writing (a "**Change of Control Notice**"), which notice shall specify the date on which such Change of Control occurred, and provide, in reasonable detail, particulars of such Change of Control (including, particulars of the circumstances or events giving rise thereto).

The Debentureholder shall have the right (but not the obligation) (the "**Change of Control Purchase Option**"), exercisable by providing written notice of such exercise to the Company no later than the date that is thirty (30) Business Days from the date on which the Debentureholder receives a Change of Control Notice, to require the Company to purchase, on or before the date that is thirty (30) Business Days from the date on which the Company receives such written notice, the Debenture (the actual date of such purchase, the "**Change of Control Purchase Date**"), in whole or in part, at a purchase price (the "**Change of Control Purchase Price**") equal to 105% of the aggregate Principal Amount and Interest outstanding as at the Change of Control Purchase Date.

(b) If 90% or more in aggregate principal amount of the Debenture and the Other Debentures outstanding on the date the Company provides the Change of Control Notice to the Debentureholder and holders of the Other Debentures have been surrendered for purchase pursuant to the Change of Control Purchase Option on the expiration thereof, the Company shall have the right (but not the obligation), upon not less than ten (10) Business Days' written notice provided to the Debentureholder and the holders of the Other Debentures, as applicable, to redeem the Debenture and the Other Debentures remaining outstanding on the expiration of the Change of Control Purchase Option at the Change of Control Purchase Price calculated as at the Change of Control Purchase Date (the "**90% Redemption Right**").

(c) Upon receipt of notice that the Company has exercised or is exercising the 90% Redemption Right and is acquiring the remaining Debenture or Other Debentures, the Debentureholder and the holders of the Other Debentures shall promptly transfer their Debenture or Other Debentures, as applicable, to the Company on the same terms as those holders that exercised the Change of Control Purchase Option, and must send their Debenture or Other Debentures, duly endorsed for transfer, to the Company within ten (10) Business Days after the sending of such notice.

8.10 Successor Company

The Company shall not, directly or indirectly, sell, lease, transfer or otherwise dispose of all or substantially all of its property and assets as an entirety to any other corporation (any such other corporation being herein referred to as a "**Successor Company**") unless such Successor Company shall execute, prior to or contemporaneously with the consummation of any such transaction, an agreement together with such other instruments as are, in the opinion of counsel to the Company, necessary or advisable to evidence the assumption by the Successor Company of the due and punctual payment of this Debenture and the Interest thereon and all other moneys payable hereunder and its agreement to observe and perform all the covenants and obligations of the Company under this Debenture.

8.11 Limitation on Conversion (9.9% Limit)

The Debentureholder agrees that it shall be prohibited from converting this Debenture if the aggregate number of Class B shares owned or controlled, directly or indirectly, by the Debentureholder and any affiliates of the Debentureholder (including Class B shares of which the Debentureholder has deemed beneficial ownership), collectively, as a result of such conversion would equal or exceed 10% of the issued and outstanding Class B shares calculated on the date of conversion of the Debenture. To the extent the above limitation applies, the determination of whether this Debenture shall be convertible (vis-à-vis other convertible, redeemable, exercisable or exchangeable securities owned by the Debentureholder or any of its affiliates) and of which such securities shall be convertible, redeemable, exercisable or exchangeable (as among all such securities owned by the Debentureholder and its affiliates) shall, subject to the above limitation, be determined on the basis of the first submission to the Company for conversion, exercise, redemption or exchange (as the case may be). No prior inability to convert this Debenture or to issue Class B shares pursuant to this Section 8.11 shall have any effect on the applicability of the provisions of this Section 8.11 with respect to any subsequent determination of convertibility.

8.12 Fees and Expenses

The Company acknowledges and agrees that all costs and expenses incurred by the Debentureholder, including any fees and disbursements of any counsel retained by the Debentureholder, relating to the purchase, resale, legend removal, or transfer of the Securities shall be borne by the Company.

8.13 Indemnity

The Company hereby indemnifies and saves harmless the Debentureholder and its directors, officers, employees, agents and shareholders from and against any and all loss, damages, charges, expenses, claims, demands, actions or liability whatsoever which may be brought against the Debentureholder or which it may suffer or incur as a result of or arising out of this Debenture or any document or agreement related hereto, including, without limitation, counsel fees, costs of suit and interest which the Debentureholder may incur. Without limiting the generality of the foregoing, the obligation to indemnify, defend and save harmless in accordance herewith shall apply in respect of liabilities suffered by, imposed upon, incurred in any way connected with or arising from, directly or indirectly, by any securities commission, stock exchange or similar regulatory authority. This indemnity shall survive the repayment of the Debenture. The Debentureholder shall notify the Company promptly of any claim for which it may seek indemnity. The Company shall defend the claim and the Debentureholder shall cooperate in the defence. The Debentureholder may have separate counsel and the Company shall pay the fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent must not be unreasonably withheld.

Exhibit A-16

APPENDIX "B"
CONVERSION NOTICE

TO: QUANTUM BIOPHARMA LTD. (THE "COMPANY")

Reference is made to the convertible debenture of Quantum Biopharma Ltd. dated ____ [●], ___ (the "**Debenture**"). Any term not otherwise defined in this Notice shall have the meaning ascribed to it in the Debenture.

The undersigned holder of the Debenture hereby gives notice that it elects to convert certain Indebtedness for the undernoted number of Class B shares in accordance with the terms of the Debenture and as follows:

Amount of Indebtedness Being Converted: $_____

Class B shares to be Issued: _____

Effective Date: _____

The undersigned hereby directs that the shares are to be issued and delivered as follows:

Registration Instructions:	**Delivery Instructions:**
_____	_____
_____	_____
_____	_____

The undersigned hereby represents, warrants and certifies to the Company that at the time of conversion (PLEASE CHECK [✓] ONE OF THE FOLLOWING):

A. ☐ The undersigned holder (i) at the time of conversion of this Debenture is not in the United States;
(ii) is not a "U.S. Person" as defined in Regulation S under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**") and is not converting this Debenture on behalf of a "U.S. Person"; and
(iii) did not execute or deliver this Conversion Notice in the United States.

OR

B. ☐ The undersigned holder (i) is an "accredited investor", as defined in Rule 501(a) under the U.S. Securities Act, who acquired the Debenture directly from the Company; (ii) is converting the Debenture solely for its own account and not on behalf of any other person; and (iii) each of the representations and warranties made in connection with the issuance of the Debenture remains true and correct on the date of conversion of the Debenture.

OR

C. ☐ The undersigned holder has delivered to the Company an opinion of counsel in form and substance satisfactory to the Company (in its sole discretion) to the effect that the exemption from the registration requirements of the U.S. Securities Act and applicable state securities laws is available.

The undersigned understands that unless box A above is checked, the certificate or Direct Registration System ("**DRS**") statements (as applicable) representing the Shares will bear a legend restricting transfer without registration under the U.S. Securities Act and applicable state securities laws unless an exemption from registration is available.

[signature page follows]

Dated this _____day _____, 20_____.

[DEBENTUREHOLDER]

Per: _____
Name:
Title:
(authorized signing officer)

Instructions for Conversion

This conversion notice is to be signed by the Debentureholder.

The Debenture must be surrendered at the office of the Company, located at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7 or by email to zsaeed@quantumbiopharma.com.

Fractional Class B shares will not be issued on any conversion and in lieu thereof the Company will round up to the next full Class B share if the fraction is 0.5 or greater, and will round down and issue no additional Class B share if the fraction is below 0.5.

Upon surrender of the Debenture, the Company will issue to the Debentureholder the number of shares converted and shall deliver a certificate(s), or DRS advice statement or other evidence of such shares. The Company shall also deliver a new debenture in the event of a partial conversion.

EXHIBIT "B"

FORM OF WARRANT CERTIFICATE

THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFER OR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE CORPORATION OR ITS TRANSFER AGENT

UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY AND ANY SECURITY ISSUED ON EXERCISE HEREOF MUST NOT TRADE THE SECURITY BEFORE [●], [●], 2025.

THE WARRANTS REPRESENTED HEREBY WILL BE VOID AND OF NO VALUE AFTER 5:00 PM (EASTERN TIME) ON [●][●], 2029.

WARRANT CERTIFICATE
QUANTUM BIOPHARMA LTD.
(Incorporated under the laws of the Province of British Columbia)

CERTIFICATE NUMBER: 2024-12-00[●] **NUMBER OF WARRANTS: [●]**

CLASS B SHARE PURCHASE WARRANTS

THIS IS TO CERTIFY THAT, for value received, [●] of [●] or its lawful assignee (the "**Holder**") is entitled to subscribe for and purchase up to [●] fully paid and non-assessable Class B shares without par value of Quantum Biopharma Ltd. (collectively, the "**Shares**" and individually, a "**Share**") at any time on or before 5:00 p.m. Eastern Time on December [●], 2029 (the "**Expiry Date**"), at a price of $5.25 per Share, subject, however, to the provisions and upon the Terms and Conditions attached hereto as Schedule "A" and forming part hereof.

The rights represented by this Warrant Certificate may be exercised by the Holder, in whole or in part (but not as to a fraction of a Share) by surrender of this Warrant Certificate (properly endorsed as required), together with a Warrant Exercise Form in the form attached hereto as Appendix "B", duly completed and executed, to Quantum Biopharma Ltd. (the "**Company**") at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7, Attention: Zeeshan Saeed, or by email to zsaeed@quantumbiopharma.com, or such other address as the Company may from time to time in writing direct, together with a certified cheque or bank draft payable to or to the order of the Company in payment of the purchase price of the number of Shares subscribed for, or such other payment as requested or approved by the Company. The Holder is advised to read "Instruction to Holders" attached hereto as Appendix "A" for details on how to complete the Warrant Exercise Form (as such term is defined in Schedule "A").

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Warrant Certificate to be executed by a duly authorized officer.

DATED for reference this ____day of _____, 20__.

QUANTUM BIOPHARMA LTD.

Per: _____
Authorized Signing Officer

SCHEDULE "A"

TERMS AND CONDITIONS
ATTACHED TO CLASS B SHARE PURCHASE WARRANTS
ISSUED BY QUANTUM BIOPHARMA LTD.
(the "Company")

Each Warrant of the Company, whether single or part of a series, is subject to these Terms and Conditions as they were at the date of issue of the Warrant.

PART 1
DEFINITIONS AND INTERPRETATION

Definitions

1.1 In these Terms and Conditions, except as otherwise expressly provided herein, the following words and phrases will have the following meanings:

(a) "**Business Day**" means a day, other than a Saturday, Sunday or statutory holiday in the Province of Ontario.

(b) "**Company**" means Quantum Biopharma Ltd. and includes any successor corporations.

(c) "**Eastern Time**" means the local time in Toronto, Ontario, Canada.

(d) "**Exchange**" means the Canadian Securities Exchange, or such other stock exchange on which the Shares principally trade.

(e) "**Exercise Price**" means $5.25 per Share or as may be adjusted as per §5.2.

(f) "**Expiry Date**" means the date defined as such on the face page of the Warrant Certificate.

(g) "**Expiry Time**" means 5:00 p.m. Eastern Time on the Expiry Date.

(h) "**Holder**" means the registered holder of a Warrant.

(i) "**Issue Date**" means December [●], 2024.

(j) "**person**" means an individual, corporation, partnership, trustee or any unincorporated organization, and words importing persons have a similar meaning.

(k) "**Shares**" or "**shares**" means the Class B shares in the authorized share structure of the Company, and any shares resulting from any event referred to in §5.2.

(l) "**Warrant**" means a warrant as evidenced by this Warrant Certificate, whereby one (1) Warrant entitles the holder thereof to purchase one (1) Share of the Company (subject to adjustment) on or before the Expiry Date at the Exercise Price.

(m) "**Warrant Certificate**" means the certificate evidencing the Warrant.

(n) "**Warrant Exercise Form**" means Appendix "B" hereof.

(o) "**Warrant Transfer Form**" means Appendix "C" hereof.

Interpretation

1.2 In these Terms and Conditions, except as otherwise expressly provided herein:

(a) The words "**herein**", "**hereof**", and "**hereunder**" and other words of similar import refer to this Warrant Certificate as a whole and not to any particular Part, clause, subclause or other subdivision.

(b) A reference to a Part means a Part of these Terms and Conditions and the symbol § followed by a number or some combination of numbers and letters refers to the section, paragraph or subparagraph of these Terms and Conditions so designated.

(c) The headings are for convenience only, do not form a part of these Terms and Conditions and are not intended to interpret, define or limit the scope, extent or intent of these Terms and Conditions or any of its provisions.

(d) All dollar amounts referred to herein are expressed in Canadian funds.

(e) Time will be of the essence hereof.

(f) Words importing the singular number include the plural and vice versa, and words importing the masculine gender include feminine and neuter genders.

Applicable Law

1.3 The Warrants will be construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable thereto and will be treated in all respects as legal contracts under the laws of the Province of Ontario.

PART 2
ISSUE OF WARRANTS

Additional Warrants

2.1 The Company may at any time and from time to time issue warrants or grant options or similar rights to purchase shares in its capital.

Issue in Substitution for Lost Warrants

2.2 In case a Warrant Certificate will become mutilated, lost, destroyed or stolen, the Company in its discretion may issue and deliver a new Warrant Certificate of like date and tenor as the one mutilated, lost, destroyed or stolen in exchange for, and in place of, and upon cancellation of, such mutilated Warrant Certificate, or in lieu of and in substitution for such lost, destroyed or stolen Warrant Certificate, and the Warrants represented by such substituted Warrant Certificate will be entitled to the benefit hereof and rank equally in accordance with its terms with all other Warrants of the same issue. The Company may charge a reasonable fee for the issuance and delivery of a new Warrant Certificate.

2.3 The applicant for the issue of a new Warrant Certificate pursuant hereto will bear the cost of the issue thereof and in the case of loss, destruction or theft furnish to the Company such evidence of ownership, and of loss, destruction or theft of the Warrant Certificate so lost, destroyed or stolen as will be satisfactory to the Company in its discretion; and such applicant may also be required to furnish indemnity in amount and form satisfactory to the Company in its discretion and will pay the reasonable charges of the Company in connection therewith.

Holder not a Shareholder

2.4 The holding of a Warrant will not constitute the Holder a shareholder of the Company, nor entitle the Holder to any right or interest in respect thereof, except as expressly provided in the Warrant Certificate.

Securities Law Exemption

2.5 The Holder acknowledges and agrees that the Warrants and any Shares issued pursuant to the exercise of any Warrants have been or will be issued only on a basis exempt from the prospectus requirement of applicable securities legislation and that the Company has no obligation to, and does not intend to, file any prospectus or registration statement in any jurisdiction in order to qualify any of such Warrants and/or Shares for resale.

PART 3
OWNERSHIP AND TRANSFER OF WARRANT

Exchange of Warrants

3.1 A Warrant Certificate in any authorized denomination, upon compliance with the reasonable requirements of the Company, may be exchanged for a Warrant Certificate(s) in any other authorized denomination of the same issue entitling the Holder to purchase an equal aggregate number of Shares at the same Exercise Price and on the same terms as the Warrant Certificate so exchanged.

3.2 Warrants may be exchanged only with the Company. Any Warrants tendered for exchange will be surrendered to the Company and cancelled.

3.3 Subject to compliance with applicable securities laws, the Warrants are transferable on the terms and conditions contained herein and by the Holder completing and submitting to the Company a completed and duly executed Warrant Transfer Form.

Charges for Exchange

3.4 On exchange of Warrants, the Company, except as otherwise herein provided, may charge a reasonable fee for each new Warrant Certificate issued, and payment of any transfer taxes or governmental or other charges required to be paid will be made by the party requesting such exchange.

Ownership of Warrants

3.5 The Company may deem and treat the Holder of a Warrant as the absolute owner of such Warrant for all purposes and will not be affected by any notice or knowledge to the contrary.

Notice to Holder

3.6 Unless herein otherwise expressly provided, any notice to be given hereunder to a Holder will be deemed to be validly given, if mailed to the address of the Holder as set out on the Warrant Certificate. Any notice so given will be deemed to have been received five days from the date of mailing to the Holder or any market intermediary then holding the Warrants of the Holder in any trust account.

PART 4
EXERCISE OF WARRANTS

Method of Exercise of Warrants

4.1 The right to purchase Shares conferred by a Warrant may be exercised by the Holder surrendering the Warrant Certificate, together with a duly completed and executed Warrant Exercise Form and a certified cheque or bank draft payable to, or to the order of, the Company at the address as set out on the Warrant Certificate, or such other form of payment as the Company may request or agree, for the purchase price applicable at the time of surrender in respect of the Shares subscribed for in lawful money of Canada to the Company at the address as set out on the Warrant Exercise Form.

4.2 **Cashless Exercise**. In lieu of exercising this Warrant upon payment of the Exercise Price, the Holder may, at its sole option, elect to receive Shares equal to the value (as determined below) of this Warrant (or the portion thereof being cancelled) by surrendering this Warrant Certificate and delivering the Warrant Exercise Form with the election thereon to receive the Shares without payment of the Exercise Price (the "**Cashless Exercise**"). In the event the Cashless Exercise is elected, the Company shall issue to the Holder a number of Shares computed and determined by multiplying the number of Shares as to which this Warrant is then being exercised by a fraction, the numerator of which shall be the amount by which the Fair Market Value (as defined in this Section 4.2) per Share exceeds the Exercise Price and the denominator of which shall be the Fair Market Value per Share. For purposes of this Section 4.2, the "**Fair Market Value**" means the deemed value of one Share determined by the volume weighted average trading price of the Shares on the Exchange for the five consecutive trading days immediately prior to the election of the cashless exercise.

4.3 For the purposes of this Warrant Certificate, the Exercise Price or any other amount hereunder is required to be converted from U.S. Dollars to Canadian Dollars or from Canadian Dollars to U.S. Dollars, such amount shall be converted based on the Exchange Rate.

For the purposes of this Warrant Certificate, the term "**Exchange Rate**" on any given date in respect of an amount to be converted from U.S. Dollars to Canadian Dollars means the amount of Canadian Dollars that can be purchased with one U.S. Dollar based on the rate published by, or displayed on the website of, the Bank of Canada on a business day immediately preceding such date, and in respect of an amount to be converted from Canadian Dollars into U.S. Dollars means the inverse of such rate.

Effect of Exercise of Warrants

4.4 Upon surrender and the clearance and settlement of the payment as aforesaid, the Shares so subscribed for will be deemed to have been issued, and the Holder will be deemed to have become the holder of such Shares on the date of such surrender and payment, and such Shares will be issued at the Exercise Price as may be adjusted in the events and in the manner described herein.

4.5 Within five (5) Business Days after surrender and the clearance and settlement of the payment as aforesaid, the Company will forthwith cause to be delivered to the person in whose name the Shares are directed to be registered as specified in such Warrant Exercise Form, or if no such direction is given, the Holder, a certificate for the appropriate number of Shares not exceeding those which the Holder is entitled to purchase pursuant to the Warrant Certificate surrendered. If the Company fails to deliver the certificate representing such Shares to the Holder, or its nominee(s), or assignee(s), as the case may be, within such five (5) Business Day period, the Company shall, subject to the Holder being in compliance with the terms of exercise set out herein, pay to the Holder, in cash, an amount equal to 2% of the payment of the purchase price for the Shares subscribed for, which amount shall accrue daily until such certificate has been delivered to the Holder, or its nominee(s), or assignee(s), as the case may be (the "**Delivery Penalty**"). Notwithstanding the foregoing, the Delivery Penalty shall not accrue, be payable, or be owed by the Company to the Holder if the Company has submitted, within three (3) Business Days of the receipt such Warrant Exercise Form, the surrender of the Warrant Certificate and clearance and settlement of the payment as aforesaid, a treasury direction to the Company's transfer agent requesting that certificates or DRS advice statement representing such Shares shall be delivered to the Holder, or its nominee(s), or assignee(s), as applicable.

Subscription for Less than Entitlement

4.6 A Holder may purchase a number of Shares less than the number which the Holder is entitled to purchase pursuant to the surrendered Warrant Certificate. In the event of any purchase of a number of Shares less than the number which can be purchased pursuant to a Warrant Certificate, the Holder, upon exercise thereof, will, in addition to certificates representing Shares issued on such exercise, and be entitled to receive a new Warrant Certificate in respect of the balance of the Shares which the Holder was entitled to purchase pursuant to the surrendered Warrant Certificate but which were not then purchased.

Warrants for Fractions of Shares

4.7 To the extent that a Holder is entitled to receive on the exercise or partial exercise thereof a fraction of a Share, such right may be exercised in respect of such fraction only in combination with another Warrant which in the aggregate will entitle the Holder to receive a whole number of Shares.

Expiration of Warrants

4.8 After the Expiry Date, all rights under the Warrants will wholly cease and terminate, and the Warrants will thereupon be void and of no effect.

Exercise Price

4.9 The price per Share which must be paid to exercise a Warrant is the Exercise Price, as may be adjusted in the events and in the manner described herein.

PART 5
ADJUSTMENTS

Adjustments

5.1 Unless there is something in the subject matter or context inconsistent therewith, in this Part 5, the words and terms defined below will have the following respective meanings:

(a) "**Adjustment Period**" means the period commencing on the Issue Date and ending at the Expiry Time.

(b) "**Current Market Price**" of the Shares at any date means the closing market price per Share of such Shares on the day immediately preceding such date on the Exchange, or, if the Shares are not then listed on any Exchange, then the Current Market Price will be determined by a firm of chartered accountants appointed by the Company (who may be auditors of the Company) and acceptable to the Holder, acting reasonably.

(c) "**director**" means a director of the Company for the time being and, unless otherwise specified herein, a reference to action "by the directors" means action by the directors of the Company as a board or, whenever empowered, action by the executive committee of such board.

(d) "**trading day**" with respect to a stock exchange or over-the-counter market means a day on which such stock exchange or market is open for business.

5.2 The Exercise Price and the number of Shares issuable to the Holder will be subject to adjustment from time to time in the events and in the manner provided as follows:

(a) If at any time during the Adjustment Period the Company:

(i) fixes a record date for the issue of, or issues, Shares to the holders of all or substantially all of the outstanding Shares by way of a stock dividend;

(ii) fixes a record date for the distribution to, or makes a distribution to, the holders of all or substantially all of the Shares payable in Shares or securities exchangeable for or convertible into Shares;

(iii) subdivides the outstanding Shares into a greater number of Shares; or

(iv) consolidates the outstanding Shares into a lesser number of Shares;

(any of such events in subparagraphs (i), (ii), (iii) and (iv) above being herein called a "**Class B share Reorganization**"), the Exercise Price will be adjusted on the earlier of the record date on which holders of Shares are determined for the purposes of the Class B share Reorganization and the effective date of the Class B share Reorganization to the amount determined by multiplying the Exercise Price in effect immediately prior to such record date or effective date, as the case may be, by a fraction:

(I) the numerator of which will be the number of Shares outstanding on such record date or effective date before giving effect to such Class B share Reorganization; and

(II) the denominator of which will be the number of Shares that will be outstanding immediately after giving effect to such Class B share Reorganization (including in the case of a distribution of securities exchangeable for or convertible into Shares at no additional cost to the holder thereof the number of Shares that would be outstanding had such securities all been exchanged for or converted into Shares on such date).

To the extent that any adjustment in the Exercise Price occurs pursuant to this §5.2(a) as a result of the fixing by the Company of a record date for the distribution of securities exchangeable for or convertible into Shares, the Exercise Price will be readjusted immediately after the expiry of any relevant exchange or conversion right to the Exercise Price that would then be in effect based upon the number of Shares actually issued and remaining issuable after such expiry and will be further readjusted in such manner upon the expiry of any further such rights.

(b) If at any time during the Adjustment Period the Company fixes a record date for the issue or distribution to the holders of all or substantially all of the outstanding Shares of rights, options or warrants pursuant to which such holders are entitled, during a period expiring not more than 45 days after the record date for such issue (such period being the "**Rights Period**"), to subscribe for or purchase Shares or securities exchangeable for or convertible into Shares at a price per Share (or in the case of securities exchangeable for or convertible into Shares at an exchange or conversion price per Share at the date of issue of such securities) of less than 95% of the Current Market Price of the Shares on such record date (any of such events being herein called a "**Rights Offering**"), the Exercise Price, subject to the approval of the Exchange, if required, will be adjusted effective immediately after the record date for the Rights Offering to the amount determined by multiplying the Exercise Price in effect on such record date by a fraction:

(i) the numerator of which will be the aggregate of:

(I) the number of Shares outstanding on the record date for the Rights Offering; and

(II) the quotient determined by dividing:

(A) either (a) the product of the number of Shares offered during the Rights Period pursuant to the Rights Offering and the price at which such Shares are offered, or, (b) the product of the exchange or conversion price of the securities so offered and the number of Shares for or into which the securities offered pursuant to the Rights Offering may be exchanged or converted, as the case may be, by

(B) the Current Market Price of the Shares as of the record date for the Rights Offering; and

(ii) the denominator of which will be the aggregate of the number of Shares outstanding on such record date and the number of Shares offered pursuant to the Rights Offering

(including in the case of the issue or distribution of securities exchangeable for or convertible into Shares the number of Shares for or into which such securities may be exchanged or converted).

If by the terms of the rights, options, or warrants referred to in this §5.2(b)(ii), there is more than one purchase, conversion or exchange price per Share, the aggregate price of the total number of additional Shares offered for subscription or purchase, or the aggregate conversion or exchange price of the convertible or exchangeable securities so offered, will be calculated for purposes of the adjustment on the basis of the lowest purchase, conversion or exchange price per Share, as the case may be. Any Shares owned by or held for the account of the Company will be deemed not to be outstanding for the purpose of any such calculation. To the extent that any adjustment in the Exercise Price occurs pursuant to this §5.2(b)(ii) as a result of the fixing by the Company of a record date for the issue or distribution of rights, options or warrants referred to in this §5.2(b)(ii), the Exercise Price will be readjusted immediately after the expiry of any relevant exchange, conversion or exercise right to the Exercise Price that would then be in effect based upon the number of Shares actually issued and remaining issuable after such expiry and will be further readjusted in such manner upon the expiry of any further such rights.

(c) If at any time during the Adjustment Period there occurs:

(i) a reclassification or redesignation of the Shares, any change of the Shares into other shares or securities or any other capital reorganization involving the Shares, other than a Class B share Reorganization;

(ii) a consolidation, amalgamation or merger of the Company with or into any other body corporate that results in a reclassification or redesignation of the Shares or a change of the Shares into other shares or securities; or

(iii) the transfer of the undertaking or assets of the Company as an entirety or substantially as an entirety to another corporation or entity;

(any of such events being herein called a "**Capital Reorganization**"), then after the effective date of the Capital Reorganization the Holder will be entitled to receive, and shall accept, for the same aggregate consideration, upon exercise of the Warrants, in lieu of the number of Shares to which the Holder was theretofore entitled upon the exercise of the Warrants, the kind and aggregate number of shares and other securities or property resulting from the Capital Reorganization which the Holder would have been entitled to receive as a result of the Capital Reorganization if, on the effective date thereof, the Holder had been the registered holder of the number of Shares that the Holder was at such time entitled to purchase or receive upon the exercise of the Warrants. If necessary, as a result of any Capital Reorganization, appropriate adjustments will be made in the application of the provisions of this Warrant Certificate with respect to the rights and interest thereafter of the Holder to the end that the provisions of this Warrant Certificate will thereafter correspondingly be made applicable as nearly as may reasonably be possible in relation to any shares or other securities or property thereafter deliverable upon the exercise of the Warrants.

(d) If at any time during the Adjustment Period any adjustment or readjustment in the Exercise Price occurs pursuant to the provisions of §5.2(a), §5.2(b) or §5.2(c), then the number of Shares purchasable upon the subsequent exercise of the Warrants will be simultaneously adjusted or readjusted, as the case may be, by multiplying the number of Shares purchasable upon the exercise of the Warrants immediately prior to such adjustment or readjustment by a fraction that is the reciprocal of the fraction used in the adjustment or readjustment of the Exercise Price.

5.3 The following rules and procedures will be applicable to any adjustments made pursuant §5.2:

(a) Subject to the following provisions of this §5.3, any adjustments made will be made successively whenever an event referred to in §5.2 occurs.

(b) No adjustment in the Exercise Price will be required unless the adjustment would result in a change of at least one percent (1%) in the Exercise Price then in effect and no adjustment will be made in the number of Shares purchasable or issuable on the exercise of the Warrants unless it would result in a change of at least one one-hundredth of a Share; provided, however, that any adjustments that, except for the provisions of this paragraph, would otherwise have been required to be made will be carried forward and taken into account in any subsequent adjustment. Notwithstanding any other provision of §5.2, no adjustment of the Exercise Price will be made that would result in an increase in the Exercise Price or a decrease in the number of Shares issuable upon the exercise of the Warrants (except in respect of a consolidation of the outstanding Shares).

(c) If at any time during the Adjustment Period the Company takes any action affecting the Shares, other than an action or an event described in §5.2, which in the opinion of the directors would have a material adverse effect upon the rights of the Holder under this Warrant, the Exercise Price and/or the number of Shares purchasable under this Warrant will be adjusted in such manner and at such time as the directors may determine to be equitable in the circumstances, but subject in all cases to any necessary regulatory approval, including approval of the Exchange (or such other stock exchange or quotation system on which the Shares are then listed and posted (or quoted) for trading, as applicable). Failure of the taking of action by the directors so as to provide for an adjustment prior to the effective date of any action by the Company affecting the Shares will be deemed to be conclusive evidence that the directors have determined that it is equitable to make no adjustment in the circumstances.

(d) No adjustment in the Exercise Price or in the number or kind of securities purchasable on the exercise of the Warrants will be made in respect of any event described in §5.2 if the Holder is entitled to participate in such event on the same terms mutatis mutandis as if the Holder had exercised the Warrants prior to, or on, the record date or effective date, as the case may be, of such event.

(e) If the Company sets a record date to determine holders of Shares for the purpose of entitling such holders to receive any dividend or distribution or any subscription or purchase rights and thereafter and before the distribution to such holders of any such dividend, distribution or subscription or purchase rights legally abandons its plan to pay or deliver such dividend, distribution or subscription or purchase rights, no adjustment in the Exercise Price or the number of Shares purchasable upon the exercise of the Warrants will be required by reason of the setting of such record date and any such adjustment that has been made will be reversed.

(f) In any case in which this Warrant requires that an adjustment become effective immediately after a record date for an event referred to in §5.2, the Company may defer, until the occurrence of such event:

(I) issuing to the Holder, to the extent that the Warrants are exercised after such record date and before the occurrence of such event, the additional Shares issuable upon such exercise by reason of the adjustment required by such event; and

(ii) delivering to the Holder any distribution declared with respect to such additional Shares after such record date and before such event,

provided, however, that the Company delivers to the Holder an appropriate instrument evidencing the right of the Holder, upon the occurrence of the event requiring the adjustment, to an adjustment in the Exercise Price or the number of Shares purchasable upon the exercise of the Warrants.

(g) As a condition precedent to the taking of any action that would require an adjustment pursuant to §5.2, the Company will take any action that may, in the opinion of the Company's legal counsel, be necessary in order that the Company may validly and legally issue as fully paid and non-assessable all of the Shares that the Holder is entitled to receive in accordance with the provisions of this Warrant.

(h) All adjustments to the Exercise Price or the number of Shares purchasable pursuant to this Warrant are subject to the prior approval of the Exchange (or such other stock exchange or quotation system on which the Shares are then listed and posted (or quoted) for trading, as applicable). The Company shall keep the Holder, or its agent, reasonably updated and informed with respect to such approval process.

(i) In the event that the Exchange (or such other stock exchange or quotation system on which the Shares are then listed and posted (or quoted) for trading, as applicable) or any securities regulatory body of an applicable jurisdiction does not approve a requested downward adjustment to the Exercise Price as provided for under this Warrant Certificate, then such adjustment shall be reduced to the maximum permitted price, and any such shortfall will be paid to the Holder in cash, securities, or a combination thereof by the Company, at the reasonable discretion of the board of directors of the Company, to achieve a substantially similar economic result to the Holder subject to compliance with the rules and policies of the Exchange (or such other stock exchange or quotation system on which the Shares are then listed and posted (or quoted) for trading, as applicable) or applicable securities regulatory body.

(j) If any questions will at any time arise with respect to the Exercise Price or any adjustment provided for in this Part 5, such questions will be conclusively determined by a firm of chartered accountants appointed by the Company (who may be auditors of the Company) and acceptable to the Holder, acting reasonably, and such accountants shall have access to all necessary records of the Company and such determination shall be binding upon the Company and the Holder.

Hold Period

5.4 The Shares received by the Holder upon the exercise of the Warrants may be subject to restrictions on resale under the *Securities Act* (Ontario), the rules and policies of the Exchange and/or other applicable securities laws.

PART 6
COVENANTS BY THE COMPANY

Reservation of Shares

6.1 The Company will reserve, and there will remain unissued out of its authorized share structure, a sufficient number of shares to satisfy the rights of purchase provided for in all Warrants from time to time outstanding.

PART 7
MODIFICATION OF TERMS, SUCCESSORS

Modification of Terms and Conditions for Certain Purposes

7.1 From time to time the Company may, subject to the provisions of the Warrant Certificate and the policies of the Exchange, modify the terms and conditions hereof, without the prior consent of the Holder, for the purposes of:

(a) adding to the provisions hereof such additional covenants and enforcement provisions as, in the reasonable opinion of counsel for the Company, are necessary or advisable in the circumstances for the protection of the Warrantholders;

(b) Making such provisions not inconsistent herewith as may be necessary or desirable for the purpose of obtaining a listing or quotation of Warrants on any stock exchange, bourse or quotation system;

(c) Adding to or altering the provisions hereof in respect of: (i) the registration of Warrants; (ii) the exchange of Warrant Certificate of different denominations, and (iii) making any modification in the form of Warrant Certificate; which do not affect the substance thereof;

(d) For any other purpose not inconsistent with the terms hereof, including the correction or rectification of any ambiguities, defective provisions, errors or omissions herein; or

(e) To evidence any succession of any corporation and the assumption by any successor of the covenants of the Company herein and in the Warrants contained as provided hereafter in this Part 7.

Company may Amalgamate on Certain Terms

7.2 Nothing herein contained will prevent any amalgamation or merger of the Company with or into any other company, or the sale of the property or assets of the Company to any company lawfully entitled to acquire the same; provided however that the company formed by such merger or amalgamation or which acquires by conveyance or transfer all or substantially all the properties and assets of the Company will, simultaneously with such amalgamation, merger, conveyance or transfer, assume the due and punctual performance and observance of all the covenants and conditions hereof to be performed or observed by the Company and will succeed to and be substituted for the Company, and such changes in phraseology and form (but not in substance) may be made in the Warrant Certificate as may be appropriate in view of such amalgamation, merger or transfer.

Additional Financings

7.3 Nothing herein contained will prevent the Company from issuing any other securities or rights during the period within which a Warrant is exercisable, upon such terms as the Company may deem appropriate.

Limitation on Exercise (9.9% Limit)

7.4 The Holder agrees that it shall be prohibited from exercising any Warrants represented by this Warrant Certificate if the aggregate number of Shares owned or controlled, directly or indirectly, by the Holder and any affiliates of the Holder (including Shares of which the Holder has deemed beneficial ownership under applicable securities law), collectively, as a result of such exercise would equal or exceed 10% of the issued and outstanding Shares calculated on the date of exercise of the Warrants. To the extent the above limitation applies, the determination of whether any Warrants shall be exercisable (vis-à-vis other convertible, redeemable, exercisable or exchangeable securities owned by the Holder or any of its affiliates) and of which such securities shall be convertible, redeemable, exercisable or exchangeable (as among all such securities owned by the Holder and its affiliates) shall, subject to the above limitation, be determined on the basis of the first submission to the Company for conversion, exercise, redemption or exchange (as the case may be). No prior inability to exercise any Warrants represented by this Warrant Certificate or to issue Shares pursuant to this Section 7.4 shall have any effect on the applicability of the provisions of this Section 7.4 with respect to any subsequent determination of exercisability.

Miscellaneous

7.5 All notices or other communications to be given under this Warrant Certificate shall be delivered by hand, by post or by electronic mail and, if delivered by hand, shall be deemed to have been given on the delivery date, if delivered by post, on the third business day next following the post thereof, and, if sent by electronic mail, on the date of transmission if sent before 5:00 p.m., Toronto time, on a business day or, if sent after 5:00 p.m., Toronto time, or such day is not a business day, on the first business day following the date of transmission.

APPENDIX "A"
INSTRUCTIONS TO HOLDERS

TO EXERCISE:

To exercise Warrants, the Holder must complete, sign and deliver the Warrant Exercise Form, attached as Appendix "B" and deliver the Warrant Certificate(s) to the Company, indicating the number of Class B shares to be acquired.

TO TRANSFER:

To transfer Warrants, and subject to compliance with applicable securities laws, the Holder must complete, sign and deliver the Warrant Transfer Form, attached as Appendix "C" and deliver the Warrant Certificate(s) to the Company. The Company may require such other certificates or opinions to evidence compliance with applicable securities legislation in Canada.

To transfer Warrants, the Warrant Holder's signature on the Warrant Transfer Form must be guaranteed by an authorized officer of a chartered bank, trust company or an investment dealer who is a member of a recognized stock exchange.

GENERAL:

If forwarding any documents by mail, registered mail must be employed.

If the Warrant Exercise Form is signed by a trustee, executor, administrator, curator, guardian, attorney, officer of a corporation or any person acting in a fiduciary or representative capacity, the Warrant Certificate must also be accompanied by evidence of authority to sign satisfactory to the Company.

The address of the Company is:

Quantum Biopharma Ltd.
55 University Avenue, Suite 1003
Toronto, Ontario, M5J 2H7
Attention: Zeeshan Saeed

[End of Appendix "A"]

APPENDIX "B"
WARRANT EXERCISE FORM

TO: Quantum Biopharma Ltd.
55 University Avenue, Suite 1003
Toronto, Ontario, M5J 2H7

Attention: Chief Financial Officer

1. Exercise

The undersigned hereby subscribes for _____Class B shares (the "**Shares**") of the Corporation according to the terms and conditions set forth in the annexed Warrant Certificate (or such number of other securities or property to which such Warrant Certificate entitles the undersigned to acquire under the terms and conditions set forth in such Warrant Certificate).

Address for Delivery of Shares: _____

_____

_____

Attention: _____

Exercise Price Tendered ($5.25 per Share or as adjusted) $_____

2. Cashless Exercise

The undersigned hereby elects to exercise the Warrants to acquire Shares through "cashless exercise" in the manner specified in Section 4.2 of the Warrant Certificate. This method of exercise is used with respect to _____Warrants.

By checking the applicable line below, the undersigned represents, warrants and certifies as follows (only one of the following must be checked):

A. ☐ at the time of execution of this Warrant Exercise Form, it (and any person named hereunder to which Shares are to be issued) (i) is not a U.S. person or a person within the United States and is not exercising the Warrants on behalf of a U.S. person or a person within the United States; and (ii) did not execute or deliver this Warrant Exercise Form in the United States;

(For purposes hereof, "United States" and "U.S. person" shall have the meanings given to such terms in Regulation S under the United States Securities Act of 1933 (the "U.S. Securities Act"));

or

B. ☐ it is furnishing herewith a written opinion of counsel of recognized standing or other evidence (which must be satisfactory to the Corporation) to the effect that the Shares issuable upon exercise of the Warrants have been registered under the United States Securities Act of 1933, as amended, and applicable state securities laws or are exempt from registration requirements thereunder.

Note: The undersigned understands that unless Box A above is checked, the certificate representing the Shares will bear a legend restricting transfer without registration under the U.S. Securities Act and applicable state securities laws unless an exemption from registration is available.

- **Note**: Certificates representing Shares will not be registered or delivered to an address in the United States unless Box B above is checked. If Box B is checked, any opinion or other evidence tendered must be in form and substance reasonably satisfactory to the Corporation. Holders planning to deliver an opinion of counsel or other evidence in connection with the exercise of Warrants should contact the Corporation in advance to determine whether any opinions or other evidence to be tendered will be acceptable to the Corporation.

Dated at _____, this ___day of _____, 20____.

	)	
	)	
	)	
	)	_____
Witness:	)	**HOLDER'S NAME**
	)	
	)	_____
	)	**AUTHORIZED SIGNATURE**
	)	
	)	_____
	)	**TITLE (IF APPLICABLE)**

[End of Appendix "B"]

APPENDIX "C"
WARRANT TRANSFER FORM

TO: Quantum Biopharma Ltd.
55 University Avenue, Suite 1003
Toronto, Ontario, M5J 2H7

Attention: Zeeshan Saeed

FOR VALUE RECEIVED, the undersigned holder of the within Warrants hereby sells, assigns and transfers to _____, _____ Warrants of Quantum Biopharma Ltd. (the "**Company**") registered in the name of the undersigned on the records of the Company and irrevocably appoints _____ the attorney of the undersigned to transfer the said securities on the books or register with full power of substitution.

The undersigned hereby directs that the Warrants hereby transferred be issued and delivered as follows:

NAME IN FULL	ADDRESS	NUMBER OF WARRANTS

DATED this _____day of_____, 202__.

_____ _____
Signature of Warrant Holder Signature Guaranteed

INSTRUCTIONS FOR TRANSFER

Signature of the Warrant Holder must be the signature of the person appearing on the face of this Warrant Certificate.

If the Transfer Form is signed by a trustee, executor, administrator, curator, guardian, attorney, officer of a corporation or any person acting in a fiduciary or representative capacity, the certificate must be accompanied by evidence of authority to sign satisfactory to the Company.

The signature on the Transfer Form must be guaranteed by a chartered bank or trust company, or a member firm of an approved signature guarantee medallion program. The guarantor must affix a stamp bearing the actual words: "SIGNATURE GUARANTEED".

The Warrants will only be transferable in accordance with applicable laws. The Warrants and the Class B shares issuable upon exercise thereof have not been and will not be registered under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**"), or under the securities laws of any state of the United States, and may not be transferred to or for the account or benefit of a U.S. person or any person in the United States without registration under the U.S. Securities Act and applicable state securities laws, or compliance with the requirements of an exemption from registration. "**United States**" and "**U.S. person**" are as defined in Regulation S under the U.S. Securities Act.

[End of Appendix "C"]

EXHIBIT 4.22

SHAREHOLDERS AGREEMENT

BETWEEN:

Fortius Research and Trading Corp.

- and -

Xorax Family Trust

- and -

Quantum BioPharma Ltd.

TABLE OF CONTENTS

SHAREHOLDER AGREEMENT

THIS AGREEMENT is made the 13th, day of September, 2024.

BETWEEN:

FORTIUS RESEARCH AND TRADING CORP., a corporation incorporated under the laws of the Province of Ontario

("**Fortius**")

- and -

XORAX FAMILY TRUST, a trust under the laws of the Province of Ontario

("**Xorax**")

- and -

QUANTUM BIOPHARMA LTD., a corporation incorporated under the laws of the Province of Ontario

("**Quantum**")

RECITALS:

A. The authorized capital of the Corporation consists of Class A Shares and Class B Shares.

B. As at the date of this Agreement, the issued and outstanding shares in the capital of the Corporation consist of 12 Class A Shares and 1,864,400 Class B Shares.

C. The parties to this Agreement are the holders of record and the beneficial owners of the following number of issued and outstanding Class A Shares in the capital of the Corporation:

Holder of Class A Shares	Number of Class A Shares
Fortius	6
Xorax	6

D. The parties to this Agreement wish to make arrangements regarding certain aspects of their Class A Shares and their respective rights and obligations to each other.

NOW THEREFORE, in consideration of the foregoing and the representations, warranties, covenants, conditions, agreements and promises contained in this Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged by the parties to this Agreement, the parties agree as follows:

ARTICLE I

PRELIMINARY MATTERS

1.1 Recitals

Each party respectively acknowledges and declares that the foregoing Recitals, insofar as they relate to it, are true and correct.

1.2 Prior Agreements

Other than the Coattail Agreement, all other agreements regarding the matters contained in this Agreement, whether written or oral, are terminated.

ARTICLE II

DEFINITIONS AND RULES OF INTERPRETATION

2.1 Definitions

Throughout this Agreement, except as otherwise expressly provided, the following terms shall have the following corresponding meanings:

"**Act**" means the *Business Corporations Act* (Ontario).

"**Affiliated Body Corporate**" has the meaning given to it in the Act.

"**Assumption Agreement**" means an agreement among the Corporation, the Shareholders remaining after a Transfer of Shares and the transferee of those Shares pursuant to which the transferee of those Shares, if not a Shareholder before the Transfer, agrees to be bound by this Agreement in the same manner as if it had been an original party and to the same extent as the transferor Shareholder.

"**Business Day**" means any day which is not a Saturday, a Sunday or a day observed as a statutory or civic holiday under the laws of the Province of Ontario or the federal laws of Canada applicable in the Province of Ontario, on which the principal Canadian chartered banks in the City of Toronto, Ontario are open for business.

"**Class A Share**" means a class A multiple voting share in the capital of the Corporation.

"**Class B Share**" means a class B subordinate voting share in the capital of the Corporation.

"**Coattail Agreement**" means coattail agreement dated May 24, 2018 among the Corporation, Computershare Trust Company of Canada, Xorax, Fortius and Thomas Fairfull.

"**Control**" means, when applied to the relationship between a Person and a corporation, the beneficial ownership by that Person at the relevant time of shares of that corporation carrying the greater of (a) a majority of the voting rights ordinarily exercisable at meetings of shareholders of that corporation and (b) the percentage of voting rights ordinarily exercisable at meetings of shareholders of that corporation that are sufficient to elect a majority of the directors, and when applied to the relationship between a Person and a partnership, limited partnership, trust or joint venture, means the beneficial ownership by that Person at the relevant time of more than 50% of the ownership interests of the partnership, limited partnership, trust or joint venture or the contractual right to direct the affairs of the partnership, limited partnership, trust or joint venture; and the words "**Controlled by**", "**Controlling**" and similar words have corresponding meanings; provided that a Person who Controls a corporation, partnership, limited partnership or joint venture will be deemed to Control a corporation, partnership, limited partnership, trust or joint venture which is Controlled by such Person and so on.

"**Fortius Group**" means, collectively, Fortius and any Person to whom Shares are transferred by Fortius or any other member of the Fortius Group in accordance with this Agreement, so long as such Person holds any Shares.

"**Governmental Authority**" means any government, regulatory authority, governmental department, agency, commission, board, panel, tribunal, Crown corporation or court or other law, rule or regulation-making entity having or purporting to have jurisdiction on behalf of any nation, or province, territory or state or other subdivision thereof or any municipality, district or other subdivision thereof.

"**Group Representative**" means, in the case of the Xorax Group, Xorax, and in the case of the Fortius Group, Fortius.

"**Groups**" means, collectively, the Xorax Group and the Fortius Group, and "Group" means any one of them.

"**Member of the Immediate Family**" means, with respect to any individual, that individual, the spouse of that individual, a person of the same or opposite sex with whom that individual is living in a conjugal relationship outside marriage and those individuals who are within the degrees of affinity and consanguinity that bar the marriage of that individual to such individual pursuant to the provisions of the *Marriage Act* (Ontario).

"**Notices**" has the meaning given to it in Section 4.1.

"**Permitted Transferee**" means:

(a) with respect to any Shareholder,

(i) the Principal of the Shareholder,

(ii) a Member of the Immediate Family of the Principal of the Shareholder,

(iii) a corporation of which the Members of the Immediate Family of the Principal of the Shareholder are at all times the legal and beneficial owners of shares carrying at least 100% of the issued and outstanding voting rights, which votes are sufficient, if exercised, to elect a majority of the board of directors of such corporation,

(iv) a trust, the sole beneficiaries of which are the Members of the Immediate Family of the Principal of the Shareholder,

(v) an Affiliated Body Corporate of the Shareholder; and

(b) with respect to any Shareholder that is an individual,

(i) a Member of the Immediate Family of that Shareholder,

(ii) a corporation of which the Members of the Immediate Family of the Shareholder are at all times the legal and beneficial owners of shares carrying at least 100% of the issued and outstanding voting rights of such corporation, which votes are sufficient, if exercised, to elect a majority of the board of directors of such corporation, and

(iii) a trust, the sole beneficiaries of which are the Members of the Immediate Family of the Shareholder.

"**Person**" means any individual, sole proprietorship, limited or unlimited liability corporation, partnership, unincorporated association, unincorporated syndicate, unincorporated organization, body corporate, joint venture, trust, pension fund, union, Governmental Authority, and a natural person including in such person's capacity as trustee, heir, beneficiary, executor, administrator or other legal representative.

"**Principal**" means Zeeshan Saeed in the case of Xorax and, Anthony Durkacz in the case of Fortius.

"**Share**" means only a Class A Share in the capital of the Corporation.

"**Shareholders**" means, collectively, Fortius and Xorax and any Person to whom Class A Shares may be Transferred or issued in accordance with this Agreement, so long as such Person holds any Class A Shares; and "**Shareholder**" means any one of them.

"**Transfer**" means to sell, assign, surrender, gift, transfer, pledge, mortgage, charge, create a security interest in, hypothecate or otherwise encumber any of the Shares or any interest, whether legal or beneficial, in the Shares, whether voluntary, involuntary, by operation of law or otherwise.

"**Xorax Group**" means, collectively, Xorax and any Person to whom Shares are transferred by Xorax or any other member of the Xorax Group in accordance with this Agreement, so long as such Person holds any Shares.

2.2 Rules of Interpretation

In this Agreement:

(a) **Time** – Time is of the essence in and of this Agreement.

(b) **Calculation of Time** – Unless otherwise specified, time periods within or following which any payment is to be made or act is to be done shall be calculated by excluding the day on which the period commences and including the day on which the period ends. Where the last day of any such time period is not a Business Day, such time period shall be extended to the next Business Day following the day on which it would otherwise end.

(c) **Business Days** – Whenever any action to be taken or payment to be made pursuant to this Agreement would otherwise be required to be made on a day that is not a Business Day, such action shall be taken or such payment shall be made on the first Business Day following such day.

(d) **Currency** – Unless otherwise specified, all references to amounts of money in this Agreement refer to the lawful currency of Canada.

(e) **Headings** – The descriptive headings preceding Articles and Sections of this Agreement are inserted solely for convenience of reference and are not intended as complete or accurate descriptions of the content of such Articles or Sections. The division of this Agreement into Articles and Sections shall not affect the interpretation of this Agreement.

(f) **Including** – Where the word "including" or "includes" is used in this Agreement, it means "including without limitation" or "includes without limitation".

(g) **Plurals and Gender** – The use of words in the singular or plural, or referring to a particular gender, shall not limit the scope or exclude the application of any provision of this Agreement to such persons or circumstances as the context otherwise permits.

(h) **Statutory References** – Any reference to a statute shall mean the statute in force as at the date of this Agreement (together with all regulations promulgated thereunder), as the same may be amended, re-enacted, consolidated or replaced from time to time, and any successor statute thereto, unless otherwise expressly provided.

2.3 Entire Agreement

(a) Except for the Coattail Agreement, this Agreement together with the agreements and other documents to be delivered pursuant to this Agreement, constitute the entire agreement between the parties pertaining to the subject matter of this Agreement and supersede all prior agreements, understandings, negotiations and discussions, whether oral, written or otherwise, of the parties. Except for the Coattail Agreement, there are no representations, warranties, covenants or other agreements between the parties in connection with the subject matter of this Agreement except as specifically set forth in this Agreement and any document delivered pursuant to this Agreement.

(b) No supplement, modification, amendment, waiver or termination of this Agreement shall be binding unless executed in writing by the party to be bound thereby.

2.4 Applicable Law

This Agreement shall be construed in accordance with the laws of the Province of Ontario and the laws of Canada applicable therein.

ARTICLE III

TRANSFER OF SHARES

3.1 Warranty as to Ownership

Each Shareholder represents and warrants that it is the registered and beneficial owner of that number of Shares set opposite its name in the Recitals to this Agreement, free and clear of all liens, claims, charges, security interests, encumbrances or rights in favour of other Persons, other than pursuant to this Agreement.

3.2 Prohibition on Unauthorized Transfers

Except as otherwise expressly permitted in this Agreement or unless the written consent of the other Shareholders is first obtained, no Shareholder shall Transfer any Shares. A change in the Control of a corporate Shareholder shall be deemed to be a Transfer by such Shareholder of its Shares and shall be prohibited unless the written consent of the other Shareholders is first obtained.

3.3 New Shareholders

Without limiting the effect of Section 3.2, no Person who is not a Shareholder may acquire Shares unless that Person first executes and delivers an Assumption Agreement.

3.4 Transfer to Permitted Transferees

Notwithstanding any other provision of this Agreement, each Shareholder shall be entitled after giving three (3) Business Days' written notice to the other Shareholders and to the Secretary of the Corporation to Transfer any of the Shares beneficially owned by it to a Permitted Transferee, provided that:

(a) in the case of a Permitted Transferee that is a corporation, the transferor Shareholder, the other shareholders of the Permitted Transferee and the Permitted Transferee agree not to transfer or issue any shares of the Permitted Transferee, either directly or indirectly, for so long as such Permitted Transferee shall own any Shares;

(b) the transferor Shareholder guarantees the obligations of such Permitted Transferee under this Agreement;

(c) the Permitted Transferee executes and delivers an Assumption Agreement; and

(d) in the case of a Permitted Transferee that is a corporation, a certificate of the Secretary of the Permitted Transferee setting forth the names and addresses of all of the shareholders of the Permitted Transferee, together with their respective shareholdings in the Permitted Transferee.

ARTICLE IV
GENERAL

4.1 Notices

All notices, requests, demands or other communications required or permitted to be given by one party to another under this Agreement (each, a "**Notice**") shall be given in writing and delivered by personal delivery or delivery by recognized national courier, sent by facsimile transmission or delivered by registered mail, postage prepaid, or by electronic communication (including e-mail addressed as follows:

(a) If to Xorax:

3688 Stratton Woods Court
Mississauga, Ontario L5L 4V2

Attention: Zeeshan Saeed
E-Mail: zsaeed@quantumbiopharma.com

(b) If to Fortius:

2045 Lake Shore Blvd W Suite 3006
Toronto, Ontario M8V 2Z6

Attention: Anthony Durkacz
E-Mail: adurkacz@quantumbiopharma.com

(c) If to the Corporation:

55 University Avenue, Suite 1003
Toronto, Ontario M5J 2H7

Attention: Donal Carroll
E-Mail: dcarroll@quantumbiopharma.com

or at such other address or facsimile number or e-mail address at which the addressee may from time to time notify the addressor. Any Notice delivered by personal delivery or by courier to the party to whom it is addressed as provided above shall be deemed to have been given and received on the day it is so delivered at such address. If such day is not a Business Day, or if the Notice is received after 4:00 p.m. (addressee's local time), then the Notice shall be deemed to have been given and received on the next Business Day. Any Notice sent by prepaid registered mail shall be deemed to have been given and received on the fourth Business Day following the date of its mailing. Any Notice transmitted by facsimile shall be deemed to have been given and received on the day in which transmission is confirmed. If such day is not a Business Day or if the facsimile transmission is received after 4:00 p.m. (addressee's local time), then the Notice shall be deemed to have been given and received on the first Business Day after its transmission. Notices sent to an e-mail address shall be deemed to be received upon the sender's receipt of an acknowledgement from the intended recipient (such as by the "return receipt requested" function, as available, return e-mail or other written acknowledgement), provided that if such Notice is not sent on a Business Day or is sent after 4:00 p.m. (addressee's local time) on a Business Day, such Notice shall be deemed to have been given and received on the first Business Day after its transmission.

4.2 Term of Agreement

This Agreement shall take effect on the date first written above and shall remain in full force and effect unless otherwise agreed by all parties.

4.3 Implementation of this Agreement and Paramountcy

The parties hereto shall sign such further and other documents, cause such meetings to be held, cause such resolutions to be passed and such by-laws to be enacted, exercise their vote and influence and do and perform (and cause to be done and performed) such further and other acts or things as may be necessary or desirable in order to give full effect to this Agreement and every part of it. If any conflict shall appear between the articles, by-laws or resolutions of the Corporation and the provisions of this Agreement, the provisions of this Agreement shall govern and supersede the provisions of the articles, by-laws and resolutions. If there shall be any such conflict, the Shareholders shall amend the articles, by-laws and resolutions so as to ensure conformity with the terms of this Agreement.

4.4 Endorsement on Certificates

All share certificates of the Corporation shall be endorsed with the following legend:

"This certificate is subject to a shareholder agreement and is transferable only in accordance with the provisions of such agreement."

4.5 Authorized Representative

For all purposes of this Agreement, any notice or other instrument in writing which is required to be delivered by a Group shall be effective only if such notice or other instrument is executed by each of the members of such Group or by the Group Representative on behalf of the Group, in which event the members of the other Group shall be entitled to rely on such notice or other instrument as being duly authorized by each member of the Group on whose behalf it has been delivered.

4.6 Waiver

Except as otherwise expressly set out herein, no waiver of any provision of this Agreement shall be binding unless it is in writing. No indulgence, forbearance or other accommodation by a party shall constitute a waiver of such party's right to insist on performance in full and in a timely manner of all covenants in this Agreement or in any document delivered pursuant to this Agreement. Waiver of any provision shall not be deemed to waive the same provision thereafter, or any other provision of this Agreement at any time.

4.7 Severability

If any provision of this Agreement or portion thereof or the application thereof to any Person or circumstance shall to any extent be illegal, invalid or unenforceable: (a) the remainder of this Agreement or the application of such provision or portion thereof to any other Person or circumstance shall not be affected thereby; and (b) the parties will negotiate in good faith to amend this Agreement to implement the intentions set forth in this Agreement. Each provision of this Agreement shall be legal, valid and enforceable to the fullest extent permitted by law.

4.8 Equitable Remedies

The parties have acknowledged that the restrictions contained in this Agreement are reasonable, and if any party breaches the terms of this Agreement the remaining parties, in addition to any other rights and remedies, shall be entitled to equitable remedies that may include an injunction to stop the contravention of this Agreement or an order for specific performance to compel compliance with this Agreement.

4.9 Binding Effect

This Agreement shall enure to the benefit of and be binding upon the parties hereto and their respective heirs, executors, administrators, successors and permitted assigns.

4.10 Execution by Electronic Transmission

The signature of any of the parties hereto may be evidenced by a facsimile, scanned email or internet transmission copy of this Agreement bearing such signature.

4.11 Counterparts

This Agreement may be signed in one or more counterparts, each of which so signed shall be deemed to be an original, and such counterparts together shall constitute one and the same instrument. Notwithstanding the date of execution or transmission of any counterpart, each counterpart shall be deemed to have the effective date first written above.

[SIGNATURE PAGES TO IMMEDIATELY FOLLOW]

IN WITNESS WHEREOF the parties have duly executed this Agreement as of the date first written above.

FORTIUS RESEARCH AND TRADING CORP.

Per: /s/ Anthony Durkacz
Authorized Signatory

XORAX FAMILY TRUST

Per: Rehan Saeed
Authorized Signatory

QUANTUM BIOPHARMA LTD.

Per: /d/ Donal Carroll
Authorized Signatory

EXHIBIT 4.23

[UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY (OR THE CLASS B SHARES ISSUABLE ON CONVERSION THEREOF) BEFORE [●]]

THESE SECURITIES HAVE NOT BEEN REGISTERED WITH THE SECURITIES AND EXCHANGE COMMISSION OR THE SECURITIES COMMISSION OF ANY STATE IN RELIANCE UPON AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD EXCEPT PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT OR PURSUANT TO AN AVAILABLE EXEMPTION FROM, OR IN A TRANSACTION NOT SUBJECT TO, THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT AND IN ACCORDANCE WITH APPLICABLE STATE SECURITIES LAWS AS EVIDENCED BY A LEGAL OPINION OF COUNSEL TO THE TRANSFER OR TO SUCH EFFECT, THE SUBSTANCE OF WHICH SHALL BE REASONABLY ACCEPTABLE TO THE CORPORATION OR ITS TRANSFER AGENT.

SECURED CONVERTIBLE DEBENTURE CERTIFICATE
QUANTUM BIOPHARMA LTD.

(Incorporated under the laws of the Province of Ontario)

DEBENTURE CERTIFICATE NO. [●] **PRINCIPAL AMOUNT: $[●]**

Quantum Biopharma Ltd. of 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7 (the "**Company**"), for value received, hereby acknowledges itself indebted and promises to pay to [●] of [●] (hereinafter referred to as the "**Debentureholder**") on [●] (the "**Maturity Date**"), at such place as the Debentureholder may reasonably designate by notice in writing to the Company, the outstanding Principal Amount (the Principal Amount, as may from time to time be increased as hereinafter provided, the "**Principal Amount**"), in the manner hereinafter provided, and to pay interest on the Principal Amount outstanding from time to time and owing hereunder to the date of payment as hereinafter provided, after maturity or demand, default and judgement. This Debenture is issued on [●] (the "**Issue Date**").

The Debentureholder has the right, from time to time and at any time while any portion of the Principal Amount or any accrued and unpaid interest on the Debenture ("**Interest**") is outstanding under this Debenture, to convert all or any portion of the outstanding Principal Amount and Interest (if any) into Class B shares in the capital of the Company (each, a "**Class B share**"), at a price of $**[●]** per Class B share, subject to adjustment as herein provided.

This Debenture is issued upon and subject to the terms and conditions appended hereto as Schedule "A". The indebtedness evidenced by the Debenture, including the Principal Amount thereof and any Interest thereon, and all other obligations and liability of the Company to the Debentureholder pursuant to this Debenture will be collaterally secured as more particularly described in Schedule "A".

[Remainder of page intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, the Company has caused this Debenture to be executed by a duly authorized officer.

DATED for reference this **[●]** day of **[●]**, **[●]**.

QUANTUM BIOPHARMA LTD.

Per: _____
Authorized Signing Officer

SCHEDULE "A"

TERMS AND CONDITIONS FOR DEBENTURE

ARTICLE 1
DEFINITIONS AND INTERPRETATION

1.1 Definitions

In this Debenture, unless there is something in the subject matter or context inconsistent therewith, the following words and terms shall have the meanings set out below.

(a) "**Applicable Securities Laws**" means the securities laws, regulations, policies, notices, rulings and orders in all the Provinces and Territories of Canada.

(b) "**Business Day**" means a day, other than a Saturday, Sunday or statutory holiday in the Province of Ontario.

(c) "**Change of Control**" means (i) any event, as a result of or following which, any Person, or group of Persons (whether acting alone or "acting jointly or in concert", within the meaning of applicable Canadian securities laws), beneficially own(s) or exercise(s) control or direction over an aggregate of more than fifty percent (50%) of the then outstanding Class B shares, or (ii) the sale or other transfer of all or substantially all of the consolidated assets and properties of the Company. Notwithstanding the foregoing, a Change of Control shall not include any sale, merger, reorganization or other similar transaction if the previous holders of Class B shares hold not less than fifty percent (50%) of the voting securities of such merged, reorganized or other continuing entity.

(d) "**Class B shares**" means fully-paid and non-assessable Class B shares in the capital of the Company as constituted on the date hereof, and after the date hereof any other shares, other securities, money or property which the Debentureholder is entitled to receive in respect or substitution thereof upon conversion of this Debenture pursuant to Article 5.

(e) "**Company**" means Quantum Biopharma Ltd. and its successors and assigns.

(f) "**Conversion Date**" or "**Date of Conversion**" means the date on which a written notice of conversion is received by the Company pursuant to §5.2(a).

(g) "**Conversion Price**" means, subject to §5.3, $**[●]** per Class B share.

(h) "**Conversion Rights**" means the rights of the Debentureholder to convert the Debenture into Class B shares pursuant to Article 5.

(i) "**Debenture**" means this secured convertible debenture as supplemented, amended or otherwise modified, renewed or replaced from time to time.

(j) "**DRS**" means direct registration system.

(k) "**Eastern Time**" means the local time in Toronto, Ontario, Canada.

(l) "**Events of Default**" shall have the meaning set forth in §6.1.

(m) "**Exchange**" means the Canadian Securities Exchange, or such other stock exchange on which the Class B shares may, from time to time, principally trade.

(n) "**Indebtedness**" means, at any time and from time to time, all of the Principal Amount, any accrued Interest and any other amount owing pursuant to this Debenture, in each case which has not been paid to the Debentureholder by the Company.

(o) "**Interest**" means any accrued but unpaid interest with respect to the Principal Amount.

(p) "**Issue Date**" means [●].

(q) "**Law**" includes any law (including common law and equity), statute, treaty, regulation, rule, ordinance, order, injunction, writ, decree or award of any Official Body.

(r) "**Liquidating Event**" shall have the meaning set forth in §3.2.se

(s) "**Maturity Date**" means [●].

(t) "**Obligations**" shall have the meaning set forth in §3.1.

(u) "**Official Body**" means any government or political subdivision or any agency, authority, bureau, central bank, monetary authority, commission, department or instrumentality thereof, or any court, tribunal or arbitrator, whether foreign or domestic.

(v) "**Other Debentures**" means, collectively, all other secured convertible debentures of the Company issued as part of the same financing, even if the conversion prices differ.

(w) "**Person**" means an individual, partnership, corporation, trust, unincorporated association, joint venture or government or any agent, instrument or political subdivision thereof.

(x) "**Principal Amount**" means the principal amount outstanding under this Debenture from time to time.

(y) "**Subscription Agreement**" means the subscription agreement of even date between the Company and the Debentureholder providing for the issuance of the Debenture.

(z) "**USA**", "**United States**", or "**U.S.**" means the United States of America, its territories and possessions and any state of the United States, and the District of Columbia.

1.2 Interpretation

For the purposes of this Debenture, except as otherwise expressly provided herein:

(a) The words "**herein**", "**hereof**", and "**hereunder**" and other words of similar import refer to this Debenture as a whole and not to any particular Article, clause, subclause or other subdivision or Schedule.

(b) A reference to an Article means an Article of this Debenture and the symbol § followed by a number or some combination of numbers and letters refers to the section, paragraph or subparagraph of this Debenture so designated.

(c) The headings are for convenience only, do not form a part of this Debenture and are not intended to interpret, define or limit the scope, extent or intent of this Debenture or any of its provisions.

(d) The word "including", when following a general statement, term or matter, is not to be construed as limiting such general statement, term or matter to the specific items or matters set forth or to similar items or matters (whether or not qualified by non-limiting language such as "without limitation" or "but not limited to" or words of similar import) but rather as permitting the general statement or term to refer to all other items or matters that could reasonably fall within its possible scope.

(e) Unless otherwise indicated, a reference to currency means Canadian currency.

(f) Words importing the masculine gender include the feminine or neuter, words in the singular include the plural, words importing a corporate entity include individuals, and vice versa.

ARTICLE 2
DEBENTURE

2.1 Principal Amount

The Company agrees to repay to the Debentureholder the Principal Amount of the Debenture, together with Interest thereon, if any, by 5:00 p.m. (Eastern Time) on the Maturity Date, subject to the early redemption or conversion of the Debenture, pursuant to the terms set forth in §2.4 and Article 5 respectively.

2.2 Interest on Debenture

The Principal Amount will bear Interest at a rate of 1.25% per month. Interest is to be calculated from the Issue Date and paid quarterly in cash on the last business day of each calendar quarter, first interest payment being paid on **[●]**.

The Principal Amount will bear Interest at an additional rate of 25% per annum on and from the date on which there occurs an Event of Default which is continuing and shall be payable monthly in cash in arrears on the last Business Day of each month of each calendar year while any amount remains outstanding hereunder if such Event of Default is continuing. If the Debentureholder elects, in its sole and absolute discretion, Interest may be paid in Class B shares at the Conversion Price in effect on the date of such payment.

For the purposes of the *Interest Act* (Canada) and disclosure thereunder only, whenever any interest or fee payable is calculated using a rate based on a year of 365 or 366 days, as the case may be, the rate determined pursuant to such calculation, when expressed as an annual rate, is equivalent to (i) the applicable rate based on a year of 365 days or 366 days, as the case may be, (ii) multiplied by the actual number of days in the calendar year in which such rate is to be ascertained and (iii) divided by 365 or 366, as the case may be.

2.3 Payment of Principal Amount and Interest on Debenture

Unless the Indebtedness is redeemed or converted in accordance with this Debenture, the Company shall pay to the Debentureholder the Indebtedness on the Maturity Date.

2.4 Early Redemption of Debenture

This Debenture is redeemable by the Company at any time upon, in whole or in part, from time to time at the option of the Company on 15 days' notice at a price equal to the principal amount thereof plus accrued and unpaid interest thereon.

2.5 Use of Proceeds

The proceeds of the Debenture shall be used for the ongoing development of the Company's business model and for general working capital purposes.

2.6 Outstanding Balance

Notwithstanding the stated Principal Amount of this Debenture, the actual outstanding balance of the Debenture from time to time shall be the aggregate outstanding Principal Amount of the Debenture, together with any Interest thereon payable by the Company to the Debentureholder pursuant to this Debenture.

ARTICLE 3
SECURITY

3.1 Security Interest

The Indebtedness evidenced by the Debenture, including the Principal Amount thereof and any Interest thereon, and all other obligations and liability of the Company to the Debentureholder pursuant to this Debenture (collectively, the "**Obligations**"), shall be secured against the assets and properties of the Company pursuant to the terms of a general security agreement of the Company issued in favor of the Debentureholder.

3.2 Distribution on Dissolution, Etc.

Upon any sale, in one transaction or a series of transactions, of all, or substantially all, of the assets of the Company or distribution of the assets of the Company upon any dissolution or winding-up or total liquidation of the Company, whether in bankruptcy, liquidation, re-organization, insolvency, receivership or other similar proceedings or upon an assignment to or for the benefit of creditors of the Company or otherwise (each a "**Liquidating Event**"), the proceeds of such Liquidating Event will be delivered to the Debentureholder in satisfaction of the Obligations, up to a maximum of the total amount due and owing pursuant to this Debenture together with the other Debentureholders on a *pari passu* basis in satisfaction of the Obligations, up to a maximum of the total amount due and owing pursuant to this Debenture and the Other Debentures.

3.3 Certificate Regarding Creditors

Upon any payment or distribution of assets of the Company referred to in this Article 3, the Debentureholder shall be entitled to rely upon a certificate of the trustee in bankruptcy, receiver, assignee of or for benefit of creditors or other liquidating agent of the Company making such payment or distribution, delivered to the Debentureholder, for the purpose of ascertaining the persons entitled to participate in such distribution, and other indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article 3.

3.4 Rights of Debentureholder Reserved

Nothing contained in this Article 3 or elsewhere in this Debenture is intended to or shall impair, as between the Company and the Debentureholder, the obligation of the Company, which is absolute and unconditional, to pay to the Debentureholder the Principal Amount and Interest on the Debenture, as and when the same shall become due and payable in accordance with their terms, nor shall anything herein prevent the Debentureholder from exercising all remedies otherwise permitted by applicable Law upon default under this Debenture.

3.5 Payment of Debenture Permitted

Nothing contained in this Debenture shall (i) prevent the Company, at any time, from making payments of the Principal Amount, Interest and other amounts to the Debentureholder under this Debenture as herein provided, (ii) prevent the conversion of this Debenture into Class B shares as herein provided or as otherwise permitted according to Law, including in connection with a bankruptcy, reorganization, insolvency, or other arrangement with creditors, of the Company, or (iii) prevent the redemption of this Debenture by the Company as herein provided or as otherwise permitted according to Law.

3.6 Security Interest Discharge

The Company shall be entitled to a release and discharge of the security interest registered to secure this Debenture upon full payment and satisfaction of all Obligations and upon written request by the Company, at the Company's expense.

3.7 Debenture to Rank *Pari Passu*

The Debentureholder shall enter into an interlender agreement with the holders of the Other Debentures providing that this Debenture shall rank *pari-passu* with the Other Debentures as if this Debenture and the Other Debentures had been issued and negotiated simultaneously.

ARTICLE 4
COVENANTS

4.1 Covenants of the Company

The Company covenants and agrees with the Debentureholder that, unless otherwise consented to in writing by the Debentureholder:

(a) **Reservation of Class B shares.** The Company shall at all times have reserved for issuance out of its authorized capital a sufficient number of Class B shares to satisfy its obligations to issue and deliver Class B shares upon the due conversion of the Debenture.

(b) **Insurance and Good Corporate Governance.** The Company shall at all times (i) maintain insurance policies in accordance with good commercial practices applicable in the circumstances, if any, (ii) do or cause to be done all things necessary to maintain its corporate existence in good standing, and (iii) do or cause to be done all things necessary to keep in full force and effect all properties, rights, franchisees, licences and qualifications which are material for the Company to carry on its business in all applicable jurisdictions.

(c) **New Corporate Subsidiaries.** The Company shall forthwith provide the Debentureholder with written notice of the formation or acquisition of any new corporate subsidiary, and at the request of the Debentureholder, provide a guarantee and any other security from any newly formed or acquired corporate subsidiary in favour of the Debentureholder, in a form acceptable to the Debentureholder (acting reasonably).

(d) **Notification of Changes.** The Company shall forthwith provide the Debentureholder with written notice of any material fact or development, as well as of any change in any representation, warranty or other information relating to the Company. Notwithstanding the foregoing, such notice shall only be provided if any such material fact, developments or changes have not been publicly disclosed by the Company.

(e) **Approvals and Filings.** The Company shall, in connection with the execution and delivery of this Debenture and the possible conversion of the Debenture into Class B shares, obtain any and all statutory and regulatory approvals required to effect and complete the same and shall file all notices, reports and other documents required to be filed by or on behalf of the Company pursuant to Applicable Securities Laws in respect thereof, including the rules and regulations of the Exchange.

(f) **[Resale Restrictions.** All Class B shares issued to the Debentureholder upon conversion of the Debenture or any part thereof from time to time will be subject to resale restrictions imposed under Applicable Securities Laws and applicable federal and "blue sky" securities laws of the United States and the rules of regulatory bodies having jurisdiction including, without limiting the generality of the foregoing, that the Class B shares so issued shall not be traded for a period of four months and one day from the date of the execution of this Debenture except as permitted by Applicable Securities Laws and, if applicable, with the consent of the Exchange.]– **Remove for Entities**

(g) **Restrictions in U.S.** This Debenture and the securities deliverable upon conversion hereof have not been and will not be registered under the *United States Securities Act of 1933*, as amended (the "**U.S. Securities Act**"), or the securities laws of any state of the United States. This Debenture may not be converted in the United States, or by or for the account or benefit of a U.S. person or a person in the United States, unless (i) the Class B shares are registered under the U.S. Securities Act and the applicable laws of any such state, or (ii) an exemption from such registration requirements is available, and (iii) the Debentureholder has complied with the requirements set forth in the conversion form. For the purposes of this §4.1(g), "United States" and "U.S. person" are as defined in Regulation S under the U.S. Securities Act.

(h) **[Certificate Legend.** A legend will be placed on the certificates representing the Class B shares issued on conversion of the Debenture denoting the restrictions on transfer imposed by Applicable Securities Laws and the policies of the Exchange, if applicable, including but not limited to the following legend:

"UNLESS PERMITTED UNDER SECURITIES LEGISLATION, THE HOLDER OF THIS SECURITY MUST NOT TRADE THE SECURITY BEFORE [●]"]

(i) **Canadian Securities Laws.** All Class B shares issued to the Debentureholder upon conversion of the Debenture or any part thereof shall be made pursuant to an exemption from the prospectus requirements available to the Debentureholder or the Company in respect of the transactions contemplated herein under Applicable Securities Laws.

(j) **Maintain Listing.** The Company will use reasonable commercial efforts to maintain the listing of the Class B shares on the Canadian Securities Exchange, and to maintain the Company's status as a "reporting issuer" not in default of the requirements of the applicable Securities Laws, provided that if all of the issued and outstanding Class B shares of the Company are acquired pursuant to a takeover bid, arrangement or other form of merger or acquisition, then this covenant will not operate to prohibit the completion of such transaction.

ARTICLE 5
CONVERSION Of DEBENTURE

5.1 Conversion Privilege and Conversion Price

The Debentureholder shall have the right, from time to time and at any time while any while any Indebtedness is outstanding under this Debenture, subject to early redemption, to convert to Class B shares, all or any part of the outstanding Indebtedness on the Conversion Date (if any), at the Conversion Price.

5.2 Manner of Exercise of Right to Convert or Purchase

(a) The Debentureholder may, at any time following the Issue Date and at any time while any portion of the Principal Amount is outstanding under this Debenture, convert the outstanding Principal Amount together with any Interest on the Conversion Date (if any), in whole or in part, into Class B shares at the Conversion Price, by delivering to the Company the conversion form executed by the Debentureholder or the Debentureholder's attorney duly appointed by an instrument in writing, exercising the Debentureholder's right to convert the Debenture in accordance with the provisions of this Article 5. Thereupon, the Debentureholder, subject to payment of all applicable stamp or security transfer taxes or other governmental charges, shall be entitled to be entered in the books of the Company as at the Conversion Date (or such later date as is specified in §5.2(b) as the holder of the number of Class B shares into which the Debenture is convertible in accordance with the conversion form then received by the Company and the provisions of this Article 5 and, as soon as practicable thereafter, the Company shall deliver to the Debentureholder and/or, subject as aforesaid, the Debentureholder's nominee(s) or assignee(s), a certificate or certificates or DRS advice statement for such Class B shares affixed with all legends required by applicable securities laws. If the Company fails to deliver the certificate or DRS advice statement representing such Class B share to the Debentureholder, or its nominee(s), or assignee(s), as the case may be, within five (5) Business Days of conversion pursuant to this 5.2(a), subject to the Debentureholder being in compliance with the terms of conversion as set out herein, the Company shall pay to the Debentureholder, in cash, an amount equal to 2% of the Indebtedness being converted pursuant to the written notice of conversion in the form of Appendix "B" (the "**Conversion Notice**"), for the applicable Date of Conversion, which amount shall accrue daily until the certificates or DRS advice statement representing such Class B share have been delivered to the Debentureholder, or its nominee(s), or assignee(s), as applicable (the "**Delivery Penalty**"). Notwithstanding the foregoing, the Delivery Penalty shall not accrue, be payable, or be owed by the Company to the Debentureholder if the Company has submitted, within three (3) Business Days of the receipt of the Conversion Notice, a treasury direction to the Company's transfer agent requesting that certificates or DRS advice statement representing such Class B share shall be delivered to the Debentureholder, or its nominee(s), or assignee(s), as applicable.

(b) For the purposes of this Article 5, the Debenture shall be deemed to be converted on the Conversion Date on which the conversion form under §5.2(a) is actually received by the Company, provided that if such Conversion Notice is received on a day on which the register of Class B shares is closed, the person or persons entitled to receive Class B shares shall become the holder or holders of record of such Class B shares as at the date on which such register is next reopened.

(c) Any part of the Principal Amount together with any Interest may be converted as provided in §5.2(a).

(d) The Debentureholder shall be entitled in respect of Class B shares issued upon conversion of the Debenture to dividends declared in favour of shareholders of record of the Company on and after the Conversion Date or such later date as the Debentureholder shall become the holder of record of such Class B shares pursuant to §5.2(b), from which applicable date any Class B shares so issued to the Debentureholder shall for all purposes be and be deemed to be outstanding as fully paid and non-assessable.

5.3 Adjustment of Conversion Price

The Conversion Price in effect at any date shall be subject to adjustment from time to time as follows:

(a) If and whenever at any time while any portion of the Principal Amount is outstanding under this Debenture (referred to in this §5.3 as the "**Time of Expiry**"), the Company shall:

(i) subdivide, redivide or change its Class B shares into a greater number of shares,

(ii) consolidate, reduce or combine its Class B shares into a lesser number of shares, or

(iii) issue Class B shares to all or substantially all of the holders of its Class B shares by way of a stock dividend or other distribution on such Class B shares payable in Class B shares (other than dividends paid in the ordinary course);

(any such event being hereinafter referred to as a "**Capital Reorganization**"), the Conversion Price shall be adjusted by multiplying the Conversion Price in effect on the effective date of such event referred to in §5.3(a)(i) or §5.3(a)(ii) or on the record date of such stock dividend referred to in §5.3(a)(iii), as the case may be, by a fraction, the numerator of which shall be the number of Class B shares outstanding before giving effect to such Capital Reorganization and the denominator of which shall be the number of Class B shares outstanding after giving effect to such Capital Reorganization. Such adjustment shall be made successively whenever any Capital Reorganization shall occur and any such issue of Class B shares by way of a stock dividend or other such distribution shall be deemed to have been made on the record date thereof for the purpose of calculating the number of outstanding Class B shares under §5.3(a)(i) and §5.3(a)(ii).

(b) If and whenever at any time prior to the Time of Expiry, the Company shall fix a record date for the issuance of rights, options or warrants to all or substantially all the holders of Class B shares entitling them, for a period expiring not more than 45 days after such record date, to subscribe for or purchase Class B shares at a price per share (or having a conversion or exchange price per share) of less than 95% of the Current Market Price (as defined below) per Class B share on such record date (any such event being hereinafter referred to as a "**Rights Offering**"), the Conversion Price, subject to prior approval of the Exchange if required, shall be adjusted immediately after such record date so that it shall equal the price determined by multiplying the Conversion Price in effect on such record date by a fraction, of which the numerator shall be the total number of Class B shares outstanding on such record date plus a number equal to the number determined by dividing the aggregate purchase price of the additional Class B shares offered for subscription or purchase by such Current Market Price per Class B share, and of which the denominator shall be the total number of Class B shares outstanding on such record date plus the number of the additional Class B shares offered for subscription or purchase. Any Class B shares owned by or held for the account of the Company shall be deemed not to be outstanding for the purpose of any such computation. Such adjustment, if having received any required prior Exchange approval, shall be made successively whenever such a record date is fixed. To the extent that such Rights Offering is not made or any such rights, options or warrants are not exercised prior to the expiration thereof, the Conversion Price shall then be readjusted to the Conversion Price which would then have been in effect if such record date had not been fixed or if such expired rights, options or warrants had not been issued.

(c) If and whenever at any time prior to the Time of Expiry, the Company shall fix a record date for the distribution to all or substantially all the holders of its Class B shares of:

(i) shares of any class whether of the Company or any other corporation (excluding dividends paid in the ordinary course);

(ii) rights, options or warrants;

(iii) evidences of indebtedness; or

(iv) other assets or property (excluding dividends paid in the ordinary course);

and if such distribution does not constitute a Capital Reorganization or a Rights Offering or does not consist of rights, options or warrants entitling the holders, for a period expiring not more than 45 days after such record date, to subscribe for or purchase Class B shares at a price per share or having a conversion or exchange price per share of at least 95% of the Current Market Price per Class B share on such record date (any such non-excluded event being hereinafter referred to as a "**Special Distribution**"), the Conversion Price, subject to prior approval of the Exchange if required, shall be adjusted immediately after such record date so that it shall equal the price determined by multiplying the Conversion Price in effect on such record date by a fraction, of which the numerator shall be the total number of Class B shares outstanding on such record date multiplied by the Current Market Price per Class B share determined on such record date, less the excess of the fair market value (as determined by the board of directors of the Company, which determination shall be conclusive) of such Special Distribution over the fair market value (as determined by the board of directors of the Company, which determination shall be conclusive) of the consideration therefor, if any, received by the Company and of which the denominator shall be the total number of Class B shares outstanding on such record date multiplied by such Current Market Price per Class B share. Any Class B shares owned by or held for the account of the Company shall be deemed not to be outstanding for the purposes of any such computation. Such adjustment shall be made successively whenever such a record date is fixed. The extent that such Special Distribution is not so made or to the extent any such rights, options or warrants are not exercised prior to the expiration thereof, the Conversion Price shall then be readjusted to the Conversion Price which would then be in effect if such record date had not been fixed or if such expired rights, options or warrants had not been issued.

(d) For the purpose of any computation under §5.3(b) or §5.3(c), the "**Current Market Price**" per Class B share at any record date referred to therein shall be the closing market price per share of such Class B shares on the day immediately preceding such record date on the Exchange, or, if the Class B shares are not then listed on any Exchange, then the Current Market Price will be determined by a firm of chartered accountants appointed by the Company (who may be auditors of the Company) and acceptable to the Debentureholder, acting reasonably.

(e) If and whenever at any time prior to the Time of Expiry, there is a reclassification or change of Class B shares into other shares or there is a consolidation, merger, reorganization or amalgamation of the Company with or into another corporation or entity that results in any reclassification of Class B shares or a change of Class B shares into other shares or there is a transfer of the undertaking or assets of the Company as an entirety or substantially as an entirety to another person (any such event being hereinafter referred to as a "**Reclassification of Class B shares**"), the Debentureholder shall be entitled to receive and shall accept, upon the exercise of the Debentureholder's right of conversion at any time after the effective date thereof, in lieu of the number of Class B shares to which the Debentureholder was theretofore entitled on conversion, the kind and amount of shares or other securities or money or other property that the Debentureholder would have been entitled to receive as a result of such Reclassification of Class B shares, if, on the effective date thereof, the Debentureholder had been the registered holder of the number of such Class B shares to which the Debentureholder was theretofore entitled upon conversion, subject to adjustment thereafter in accordance with provisions the same, as nearly as may be possible, as those contained in this §5.3.

(f) In any case in which this §5.3 shall require that an adjustment become effective immediately after a record date or agreement date for an event referred to herein, the Company may defer, until the occurrence of such event, issuing or transferring to the Debentureholder who converts on a Conversion Date after such record date or agreement date and before the occurrence of such event the additional Class B shares issuable upon conversion by reason of the adjustment of the Conversion Price required by such event before giving effect to such adjustment; provided, however, that the Company shall deliver to the Debentureholder an appropriate instrument evidencing the Debentureholder's right to receive such additional Class B shares upon the occurrence of the event requiring such adjustment and the right to receive any distributions made on such additional Class B shares on and after the Date of Conversion or such later date as the Debentureholder would, but for the provisions of this §5.3(f), have become the holder of record of such additional Class B shares pursuant to §5.3(c).

(g) In case the Company after the date hereof shall take any action affecting its Class B shares, other than any action described in this §5.3, which would, in the opinion of the directors of the Company, acting reasonably materially affect the conversion rights of the Debentureholder, the Conversion Price shall be adjusted in such manner, at such time and by such action by the directors of the Company, as they may determine, acting reasonably, to be equitable to the Debentureholder and the Company in the circumstances, but subject in all cases to any necessary regulatory approval.

(h) The adjustments provided for in this §5.3 are cumulative and shall apply to successive subdivisions, redivisions, reductions, combinations, consolidations, distributions, issues or other events resulting in any adjustment under the provisions of this §5.3, provided that, notwithstanding any other provision of this §5.3, no adjustment shall be made which would result in any increase in the Conversion Price (except upon a consolidation, reduction or combination of outstanding Class B shares) and no adjustment of the Conversion Price shall be required unless such adjustment would require a decrease of at least 1% in the Conversion Price then in effect; provided, however, that any adjustments which by reason of this subsection (h) are not required to be made shall be carried forward and taken into account in any subsequent adjustment.

(i) In the event that the Exchange or any securities regulatory body of an applicable jurisdiction does not approve (if such approval is required) a requested downward Conversion Price adjustment as provided for under this Debenture, then such adjustment shall be reduced to the maximum permitted price, and any such shortfall will be paid to the Debentureholder in cash, securities, or a combination thereof by the Company, at the reasonable discretion of the board of directors of the Company, to achieve a substantially similar economic result to the Debentureholder subject to compliance with the rules and policies of the Exchange or applicable securities regulatory body.

(j) In the event of any dispute arising with respect to the adjustments provided in this §5.3, such question shall be conclusively determined by a firm of chartered accountants appointed by the Company (who may be auditors of the Company) and acceptable to the Debentureholder, acting reasonably. Such accountants shall have access to all necessary records of the Company and such determination shall be binding upon the Company and the Debentureholder.

(k) Notwithstanding any other provision herein contained, no adjustment to the Conversion Price shall be made in respect of any event described in this §5.3 (other than the events referred to in paragraphs (i) and (ii) of subsection (a)), if the Debentureholder is entitled, without converting the Debenture, to participate in such event on the same terms mutatis mutandis as if the Debentureholder had converted the Debenture into Class B shares prior to or on the effective date or record date of such event.

5.4 No Requirement to Issue Fractional Shares

The Company shall not be required to issue fractional Class B shares upon the conversion of the Debenture pursuant to this Article 5.

5.5 Certificate as to Adjustment

The Company shall from time to time forthwith after the occurrence of any event which requires adjustment or readjustment as provided in §5.3, deliver to the Debentureholder at the Debentureholder's address set forth on the final page hereof, an officer's certificate specifying the nature of the event requiring the same and the amount of the adjustment necessitated thereby and setting forth in reasonable detail the method of calculation and the facts upon which such calculation are based.

ARTICLE 6
EVENTS OF DEFAULT

6.1 General

The occurrence of any one or more of the following events ("**Events of Default**") will constitute a default hereunder (whether any such event is voluntary or involuntary or is effected by operation of law or pursuant to or in compliance with any judgment, decree or order of any court of any order, rule or regulation of any administrative or governmental body):

(a) **Non-Compliance:** (A) the Company fails to make any material required filing with a securities regulatory authority by the applicable deadline, if such failure continues unremedied for a period of 30 days, except in the case where the Company files for a management cease trade order, in which case, if such failure continues for a period of 90 days from the date of issuance of the management cease trader order; (B) the Company fails to observe or perform one or more material covenants, agreements, conditions or obligations in favour of the Debentureholder, including a failure to pay any or all of the Principal Amount, Interest and other monies due under the Debenture when due, if such failure continues unremedied for a period of 10 Business Days; (C) the Company defaults pursuant to the general security agreement of the Company, issued in favour of the Debentureholder, if such failure continues unremedied for a period of 10 Business Days; or (D) the Company defaults pursuant to, or fails to observe or perform one or more material covenants, agreements, conditions or obligations under this Debenture, the Other Debentures or any other ancillary document or instrument entered into in connection with the transaction in which this Debenture was issued, if such failure continues unremedied for a period of 10 Business Days.

(b) **Ceasing to be Reporting Issuer:** the Company ceases to be a reporting issuer in at least one jurisdiction of Canada for any reason ("**Default Date**"). Notwithstanding the foregoing, the Company will have a cure period of 30 days after the date of such Default Date so long as the event does not trigger a cease trade order, in which case the Default Date is the date the cease trade order is issued.

(c) **Bankruptcy or Insolvency:** the Company becomes insolvent or makes a voluntary assignment or proposal in bankruptcy or otherwise acknowledges its insolvency, or a bankruptcy petition is filed or presented against the Company which is not stayed or dismissed within 60 days, or the Company commits or threatens to commit an act of bankruptcy.

(d) **Receivership:** a receiver or receiver manager of the Company is appointed under any statute or pursuant to any document issued by the Company.

(e) **Compromise or Arrangement:** any proceeding with respect to the Company is commenced under the compromise or arrangement provisions of the corporations statute pursuant to which the Company is governed, or the Company enters into an arrangement or compromise with all of its creditors generally pursuant to such provisions or otherwise.

(f) **Companies' Creditors Arrangement Act:** any proceeding with respect to the Company is commenced in any jurisdiction under the *Companies' Creditors Arrangement Act* (Canada) or any similar legislation unless the proceeding is being actively and diligently contested in good faith by appropriate and timely proceedings and is dismissed, vacated or indefinitely stayed within 60 days of knowledge by the Company of the appointment.

(g) **Liquidation:** an order is made, a resolution is passed, or a petition is filed, for the liquidation, dissolution or winding-up of the Company.

(h) ***Pari Passu***: the Company issues any debt or security which rank senior or *pari passu* to the Debenture, other than the Other Debentures.

(i) **Failure to Provide New Security:** the Company fails to provide any guarantee or other security, as requested by the Debentureholder and required hereunder, or any other ancillary document or instrument entered into in connection with the transaction in which this Debenture was issued, from any newly formed or acquired corporate subsidiary, or fails to provide the same in a form acceptable to the Debentureholder (acting reasonably).

(j) If an event of default occurs under any other debt obligation of the Company, which is not waived by the applicable creditor or cured within the applicable cure period set forth therein.

ARTICLE 7
RIGHTS, REMEDIES AND POWERS

7.1 Upon Default

Upon the occurrence of an Event of Default and at any time thereafter, so long as such Event of Default is continuing, the Debentureholder may exercise any or all of the rights, remedies and powers of the Debentureholder under any applicable legislation or otherwise existing, whether under this Debenture or any other agreement or at law or in equity, and in addition will have the right and power (but will not be obligated) to declare any or all of the Indebtedness outstanding to be immediately due and payable.

7.2 Waiver

The Debentureholder in its absolute discretion may at any time and from time to time by written notice waive any breach by the Company of any of its covenants or agreements herein. No failure or delay on the part of the Debentureholder to exercise any right, remedy or power given herein or by any other existing or future agreement or now or hereafter existing by statute, at law or in equity will operate as a waiver thereof, nor will any single or partial exercise of any such right, remedy or power preclude any other exercise thereof or the exercise of any other such right, remedy or power, nor will any waiver by the Debentureholder be deemed to be a waiver of any subsequent, similar or other event.

ARTICLE 8
OTHER AGREEMENTS

8.1 Withholding Taxes

If the Company is obliged to withhold any payment hereunder on account of present or future taxes, duties, assessments or other governmental charges required by Law, the Company shall make such withholding or deduction and pay the balance owing to the Debentureholder.

8.2 Amendment and Waiver

Neither this Debenture nor any provision hereof may be amended, waived, discharged or terminated except by a document in writing executed by the party against whom enforcement of the amendment, waiver, discharge or termination is sought.

8.3 Notices and Other Instruments

Any notice, demand or other communication required or permitted to be given to any party hereunder shall be in writing and shall be:

(a) personally delivered to such party;

(b) except during a period of strike, lock-out or other postal disruption, sent by double registered mail, postage prepaid to the address of such party set forth on page one; or

(c) sent by email or other means of electronic communication to the address of such party as designated by such party in a written notice to the other party,

and shall be deemed to have been received by such party on the earliest of the date of delivery under subsection (a), the actual date of receipt when mailed under subsection (b), and the Business Day following the date of communication under subsection (c). Any party may give written notice to the other parties of a change of address to some other address, in which event any communication shall thereafter be given to such party as hereinbefore provided, at the last such changed address of which the party communication has received written notice.

8.4 Maximum Rate

Notwithstanding any other provisions of this Debenture or any other agreement, the maximum amount (including interest and any other consideration) payable to the Debentureholder in connection with the Obligations and each part thereof shall not exceed the maximum allowable return permitted under the laws of the Provinces of Ontario and the federal laws of Canada applicable therein, and the provisions of this Debenture and all other existing and future agreements are hereby modified to the extent necessary to effect the foregoing.

8.5 Successors and Assigns

This Debenture shall be binding upon the Company and its successors. Except as contemplated in §8.9, this Debenture is neither transferable nor assignable by the Company without the prior written consent of the Debentureholder. Notwithstanding anything to the contrary herein, this Debentureholder may assign or transfer any right or interest in this Debenture, subject to compliance with Applicable Securities Laws and provided that the transferee, assignee or Debentureholder as the case may be, furnishes to the Company such evidence as the Company may reasonably require in order to satisfy itself with respect to the foregoing. Notwithstanding anything to the contrary herein, subject to compliance with Applicable Securities Laws, no prior written consent of, or notice to, the Company is required to permit the assignment or transfer of any right or interest in this Debenture by the Debentureholder to any affiliate of the Debentureholder or to any investment fund managed by the Debentureholder's manager or its affiliate.

8.6 Severability

The provisions of this Debenture are intended to be severable. If any provision of this Debenture shall be deemed by any court of competent jurisdiction or held to be invalid or void or unenforceable in whole or in part in any jurisdiction, such provision shall, as to such jurisdiction, be ineffective to the extent of such invalidity or unenforceability without in any manner affecting the validity or enforceability thereof in any other jurisdiction or the remaining provisions hereof in any jurisdiction.

8.7 Modification

From time to time the Company may modify the terms and conditions hereof for any purpose not inconsistent the terms hereof, including the correction or rectification of any ambiguities, defective provisions, errors or omissions herein.

8.8 Governing Law

This Debenture shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein and shall be treated in all respects as an Ontario contract.

8.9 Change of Control.

(a) Not less than five (5) Business Days following the occurrence of a Change of Control, the Company shall deliver to the Debentureholder and each of the holders of the Other Debentures, a notice in writing (a "**Change of Control Notice**"), which notice shall specify the date on which such Change of Control occurred, and provide, in reasonable detail, particulars of such Change of Control (including, particulars of the circumstances or events giving rise thereto).

The Debentureholder shall have the right (but not the obligation) (the "**Change of Control Purchase Option**"), exercisable by providing written notice of such exercise to the Company no later than the date that is thirty (30) Business Days from the date on which the Debentureholder receives a Change of Control Notice, to require the Company to purchase, on or before the date that is thirty (30) Business Days from the date on which the Company receives such written notice, the Debenture (the actual date of such purchase, the "**Change of Control Purchase Date**"), in whole or in part, at a purchase price (the "**Change of Control Purchase Price**") equal to 105% of the aggregate Principal Amount and Interest outstanding as at the Change of Control Purchase Date.

(b) If 90% or more in aggregate principal amount of the Debenture and the Other Debentures outstanding on the date the Company provides the Change of Control Notice to the Debentureholder and holders of the Other Debentures have been surrendered for purchase pursuant to the Change of Control Purchase Option on the expiration thereof, the Company shall have the right (but not the obligation), upon not less than ten (10) Business Days' written notice provided to the Debentureholder and the holders of the Other Debentures, as applicable, to redeem the Debenture and the Other Debentures remaining outstanding on the expiration of the Change of Control Purchase Option at the Change of Control Purchase Price calculated as at the Change of Control Purchase Date (the "**90% Redemption Right**").

(c) Upon receipt of notice that the Company has exercised or is exercising the 90% Redemption Right and is acquiring the remaining Debenture or Other Debentures, the Debentureholder and the holders of the Other Debentures shall promptly transfer their Debenture or Other Debentures, as applicable, to the Company on the same terms as those holders that exercised the Change of Control Purchase Option, and must send their Debenture or Other Debentures, duly endorsed for transfer, to the Company within ten (10) Business Days after the sending of such notice.

8.10 Successor Company

The Company shall not, directly or indirectly, sell, lease, transfer or otherwise dispose of all or substantially all of its property and assets as an entirety to any other corporation (any such other corporation being herein referred to as a "**Successor Company**") unless such Successor Company shall execute, prior to or contemporaneously with the consummation of any such transaction, an agreement together with such other instruments as are, in the opinion of counsel to the Company, necessary or advisable to evidence the assumption by the Successor Company of the due and punctual payment of this Debenture and the Interest thereon and all other moneys payable hereunder and its agreement to observe and perform all the covenants and obligations of the Company under this Debenture.

8.11 Limitation on Conversion (9.9% Limit)

Except for Debentureholder who hold, together with affiliates of the Debentureholder, that already equal or exceed 10% of the issued and outstanding Shares, the Debentureholder agrees that it shall be prohibited from converting this Debenture if the aggregate number of Class B shares owned or controlled, directly or indirectly, by the Debentureholder and any affiliates of the Debentureholder (including Class B shares of which the Debentureholder has deemed beneficial ownership), collectively, as a result of such conversion would equal or exceed 10% of the issued and outstanding Class B shares calculated on the date of conversion of the Debenture. To the extent the above limitation applies, the determination of whether this Debenture shall be convertible (vis-à-vis other convertible, redeemable, exercisable or exchangeable securities owned by the Debentureholder or any of its affiliates) and of which such securities shall be convertible, redeemable, exercisable or exchangeable (as among all such securities owned by the Debentureholder and its affiliates) shall, subject to the above limitation, be determined on the basis of the first submission to the Company for conversion, exercise, redemption or exchange (as the case may be). No prior inability to convert this Debenture or to issue Class B shares pursuant to this Section 8.11 shall have any effect on the applicability of the provisions of this Section 8.11 with respect to any subsequent determination of convertibility.

8.12 Fees and Expenses

The Company acknowledges and agrees that all costs and expenses incurred by the Debentureholder, including any fees and disbursements of any counsel retained by the Debentureholder, relating to the purchase, resale, legend removal, or transfer of the Securities shall be borne by the Company.

8.13 Indemnity

The Company hereby indemnifies and saves harmless the Debentureholder and its directors, officers, employees, agents and shareholders from and against any and all loss, damages, charges, expenses, claims, demands, actions or liability whatsoever which may be brought against the Debentureholder or which it may suffer or incur as a result of or arising out of this Debenture or any document or agreement related hereto, including, without limitation, counsel fees, costs of suit and interest which the Debentureholder may incur. Without limiting the generality of the foregoing, the obligation to indemnify, defend and save harmless in accordance herewith shall apply in respect of liabilities suffered by, imposed upon, incurred in any way connected with or arising from, directly or indirectly, by any securities commission, stock exchange or similar regulatory authority. This indemnity shall survive the repayment of the Debenture. The Debentureholder shall notify the Company promptly of any claim for which it may seek indemnity. The Company shall defend the claim and the Debentureholder shall cooperate in the defence. The Debentureholder may have separate counsel and the Company shall pay the fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent must not be unreasonably withheld.

APPENDIX "B"
CONVERSION NOTICE

TO: QUANTUM BIOPHARMA LTD. (THE "COMPANY")

Reference is made to the secured convertible debenture of Quantum Biopharma Ltd. dated [●] (the "**Debenture**"). Any term not otherwise defined in this Notice shall have the meaning ascribed to it in the Debenture.

The undersigned holder of the Debenture hereby gives notice that it elects to convert certain Indebtedness for the undernoted number of Class B shares in accordance with the terms of the Debenture and as follows:

Amount of Indebtedness Being Converted: $_____

Class B shares to be Issued: _____

Effective Date: _____

The undersigned hereby directs that the shares are to be issued and delivered as follows:

Registration Instructions:	**Delivery Instructions:**

The undersigned hereby represents, warrants and certifies to the Company that at the time of conversion (PLEASE CHECK ☑ ONE OF THE FOLLOWING):

A. ☐ The undersigned holder (i) at the time of conversion of this Debenture is not in the United States; (ii) is not a "U.S. Person" as defined in Regulation S under the United States Securities Act of 1933, as amended (the "**U.S. Securities Act**") and is not converting this Debenture on behalf of a "U.S. Person"; and (iii) did not execute or deliver this Conversion Notice in the United States.

OR

B. ☐ The undersigned holder (i) is an "accredited investor", as defined in Rule 501(a) under the U.S. Securities Act, who acquired the Debenture directly from the Company; (ii) is converting the Debenture solely for its own account and not on behalf of any other person; and (iii) each of the representations and warranties made in connection with the issuance of the Debenture remains true and correct on the date of conversion of the Debenture.

OR

C. ☐ The undersigned holder has delivered to the Company an opinion of counsel in form and substance satisfactory to the Company (in its sole discretion) to the effect that the exemption from the registration requirements of the U.S. Securities Act and applicable state securities laws is available.

The undersigned understands that unless box A above is checked, the certificate or Direct Registration System ("**DRS**") statements (as applicable) representing the Shares will bear a legend restricting transfer without registration under the U.S. Securities Act and applicable state securities laws unless an exemption from registration is available.

[signature page follows]

Dated this _____day _____, 20_____.

[DEBENTUREHOLDER]

Per: _____
Name:
Title:
(authorized signing officer)

Instructions for Conversion

This conversion notice is to be signed by the Debentureholder.

The Debenture must be surrendered at the office of the Company, located at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7 or by email to zsaeed@quantumbiopharma.com.

Fractional Class B shares will not be issued on any conversion and in lieu thereof the Company will round up to the next full Class B share if the fraction is 0.5 or greater, and will round down and issue no additional Class B share if the fraction is below 0.5.

Upon surrender of the Debenture, the Company will issue to the Debentureholder the number of shares converted and shall deliver a certificate(s), or DRS advice statement or other evidence of such shares. The Company shall also deliver a new debenture in the event of a partial conversion.

EXHIBIT 4.24

GENERAL SECURITY AGREEMENT

THIS GENERAL SECURITY AGREEMENT (as amended, modified, supplemented, restated or replaced from time to time, this "**Agreement**"), dated as of **[●]**, made by and between Quantum Biopharma Ltd., a corporation existing under the laws of Ontario (the "**Obligor**"), in favor of **[●]** (the "**Secured Party**").

WHEREAS the Obligor has received signed subscription agreements and has issued certificates representing up to $5,000,000 principal amount of secured convertible debentures of the Obligor dated on or about the date hereof, and may, from time to time, issue various additional secured convertible debentures to holders thereof (collectively, the "**Purchasers**" and each a "**Purchaser**") (all such notes on equal form (other than with respect to dates entered into and principal amount) entered into as of the date hereof, or in the future, as the same may be amended, restated, modified or replaced from the time to time, the "**Debentures**").

AND WHEREAS the Purchasers and the Secured Party may enter into an agency and interlender agreement as of the date hereof (the "**Agency and Interlender Agreement**") with respect to the Secured Obligations (as therein defined) and the security interests granted in favour of the Secured Party, for and on behalf of the Purchasers, by the Obligor and each other Person guaranteeing the payment and performance of all indebtedness, obligations and liabilities of the Obligor to the Secured Party, for and on behalf of the Purchasers.

AND WHEREAS as a condition for subscribing for the Debentures, the Purchasers require, among other things, that the Obligor grant to the Secured Party, for the benefit of the Purchasers, a lien on and security interest in the personal property and fixtures of the Obligor described herein subject to the terms and conditions hereof.

AND WHEREAS the Obligor will substantially benefit from the proceeds raised through the subscription by the Purchasers for the Debentures.

AND WHEREAS the Obligor has duly authorized the execution, delivery and performance of this Agreement.

NOW THEREFORE, in consideration of the mutual covenants, terms and conditions set forth herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by the parties hereto, and in order to induce the Purchasers to subscribe for the Debentures, the Obligor agrees with the Secured Party, for the benefit of each Purchaser, as follows:

1. As general and continuing security for the payment and performance of the Obligations (as defined hereinafter) the Obligor assigns, transfers, sets over, grants a security interest in, mortgages and charges to the Secured Party, for the benefit of the Purchasers, as and by way of a fixed and specific mortgage, charge and security interest in, all of the present and after acquired personal property and all of the present and future assets, property (personal) and undertaking of the Obligor (excluding any personal property, assets, property and undertaking to the extent the Secured Party is prohibited from taking possession of or obtaining a security interest in such personal property, assets, property and undertaking pursuant to applicable law) and in all right, title and interest which the Obligor now has or may hereafter have in all of its assets, property and undertaking, including without limitation, all present and after acquired assets, property and undertaking of the kinds hereinafter described (collectively, the "**Collateral**"):

(a) All goods comprising the inventory of the Obligor, including but not limited to goods held for sale or lease or furnished or to be furnished under a contract of service or that are raw materials, work in progress or materials used or consumed in a business or profession or finished goods, including, without limitation, "inventory" as defined in the PPSA (hereinafter sometimes collectively referred to as "**Inventory**").

(b) All goods which are not inventory or consumer goods, including but not limited to furniture, fixtures, equipment, machinery, plant, tools, vehicles and other tangible personal property, including, without limitation, "equipment" as defined in the PPSA (hereinafter sometimes collectively referred to as "**Equipment**").

(c) All Computer Hardware and Software Collateral (as defined below).

(d) All accounts, debts, demands and choses in action which are now due, owing or accruing due or which may hereafter become due, owing or accruing due to the Obligor and all claims of any kind which the Obligor now has or may hereafter have, including but not limited to claims against the Crown and claims under insurance policies (hereinafter sometimes collectively referred to together with intangibles and the Collateral described in paragraphs 1(f) and (n) as "**Receivables**").

(e) All Intellectual Property Collateral (as defined below).

(f) All chattel paper.

(g) All warehouse receipts, bills of lading and other documents of title, whether negotiable or not.

(h) All Equity Interest Collateral (as defined below).

(i) All financial assets.

(j) All securities entitlements.

(k) All investment property.

(l) All securities accounts in the name of the Obligor, including any and all assets of whatever type or kind deposited in or credited to such securities accounts, including all financial assets, all security entitlements related to such financial assets, and all certificates and other instruments from time to time representing or evidencing the same, and all dividends, interest, distributions, cash and other property from time to time received or receivable upon or otherwise distributed or distributable in respect of or in exchange for any or all of the foregoing.

(m) All rights, contracts (including, without limitation, rights and interests arising thereunder or subject thereto), instruments, agreements, licences, permits, consents, leases, policies, approvals, development agreements, building contracts, performance bonds, purchase orders, plans and specifications all of which may or may not be personal property but may be rights in which the Obligor has interests, all as may be amended, modified, supplemented, replaced or restated from time to time.

(n) All rents, present or future, under any lease or agreement to lease any part of the lands of the Obligor or any building, erection, structure or facility now or hereafter constructed or located on such lands, income derived from any tenancy, use or occupation thereof and any other income and profit derived therefrom.

(o) All intangibles, including but not limited to all money, cheques, deposit accounts, letters of credit, advances of credit and goodwill.

(p) With respect to the property described in paragraphs 1(a) to (o) inclusive, all books, accounts, invoices, letters, papers, documents and other records in any form evidencing or relating thereto and all contracts, securities, instruments and other rights and benefits in respect thereof.

(q) With respect to the property described in paragraphs 1(a) to (p) inclusive, all substitutions and replacements thereof and increases, additions and accessions thereto.

(r) With respect to the property described in paragraphs 1(a) to (q) inclusive, all proceeds therefrom including personal property in any form or fixtures derived directly or indirectly from any dealing with such property or proceeds therefrom and any insurance or other payment as indemnity or compensation for loss of or damage to such property or any right to such payment, and any payment made in total or partial discharge or redemption of an intangible, chattel paper, instrument or security.

The security interest created hereby shall not charge, encumber, create a lien upon or otherwise mortgage any consumer goods which the Obligor may own. In this Agreement, the words "accessions", "account", "chattel paper", "consumer goods", "document of title", "equipment", "goods", "instrument", "intangible", "inventory" and "proceeds" shall have the same meanings as their defined meanings in the *Personal Property Security Act* (Ontario), as amended, re-enacted or replaced from time to time (the "**PPSA**"), and the terms "certificated security", "entitlement holder", "entitlement order", "financial asset", "security", "securities account", "security entitlement", "security intermediary" and "uncertificated security" whenever used herein have the meanings given to these terms in the *Securities Transfer Act* (Ontario) (the "**STA**") as amended, re-enacted or replaced from time to time.

The said mortgage, charge and security interest shall not extend or apply to the following:

(i) The last day of the term of any lease or any agreement therefor now held or hereafter acquired by the Obligor, but should such mortgage, charge and security interest become enforceable, the Obligor shall thereafter stand possessed of such last day and shall hold it in trust to assign the same to any Person acquiring such term or the part thereof mortgaged and charged in the course of any enforcement of the said mortgage, charge and security or any realization of the subject matter thereof.

(ii) Any present or after-acquired agreement, right, franchise, licence or permit (for the purpose of this paragraph, the "contractual rights") to which the Obligor is a party or of which the Obligor has the benefit to the extent that the creation of the mortgage, charge or security therein would constitute a breach of the terms of or permit any Person to terminate any of the contractual rights or otherwise constitute a breach of or violation under any existing law, statute or regulation to which the Obligor is subject, provided that all such contractual rights will be held in trust by the Obligor for the benefit of the Secured Party, for and on behalf of the Purchasers. Notwithstanding the foregoing, the said mortgage, charge and security interest shall apply to any proceeds of the disposition of any such contractual rights and the Obligor further agrees to hold such proceeds in trust for the Secured Party, for and on behalf of the Purchasers, and to keep such proceeds in a segregated account for the benefit of the Purchasers. In addition, the said mortgage, charge and security interest shall extend to the contractual rights upon delivery by the Secured Party to the Obligor of written notice to such effect following the occurrence of an Event of Default.

2. Unless otherwise defined herein or the context otherwise requires, capitalized terms used herein shall have the meanings provided in the Agency and Interlender Agreement, and, in this Agreement:

(a) "**Agreement**" means this general security agreement and all renewals, substitutions, amendments and replacements hereof. The terms "Section", "Subsection" and "Paragraph" and similar terms refer to the specified section, subsection, paragraph or other portion of this general security agreement, and the expressions "herein", "hereof", "hereto", "above", "below" and similar expressions used in this general security agreement refer and relate to the whole of this general security agreement and not to any part unless otherwise expressly provided.

(b) "**Applicable Law**" means, in relation to any Person, property, transaction or event, all applicable provisions of: (a) statutes, laws (including the common law), rules, regulations, decrees, ordinances, codes, proclamations, treaties, declarations or orders of any Governmental Authority; (b) any consents or approvals of any Governmental Authority; and (c) any orders, decisions, advisory or interpretative opinions, injunctions, judgments, awards, decrees of, or agreements with, any Governmental Authority, in each case applicable to or binding upon such Person, property, transaction or event.

(c) **"Computer Hardware and Software Collateral"** means:

(i) all computer and other electronic data processing hardware, integrated computer systems, central processing units, memory units, display terminals, printers, features, computer elements, card readers, tape drives, hard and soft disk drives, cables, electrical supply hardware, generators, power equalizers, accessories and all peripheral devices and other related computer hardware;

(ii) all software programs (including both source code, object code and all related applications and data files), whether now owned, licenced or leased or hereafter acquired by the Obligor, designed for use on the computers and electronic data processing hardware described in clause (i) above;

(iii) all firmware associated therewith;

(iv) all documentation (including flow charts, logic diagrams, manuals, guides and specifications) with respect to such hardware, software and firmware described in the preceding clauses (i) through (iii); and

(v) all rights with respect to all of the foregoing, including, without limitation, any and all intellectual property rights, copyrights, leases, licences, options, warranties, service contracts, program services, test rights, maintenance rights, support rights, improvement rights, renewal rights and indemnifications and any substitutions, replacements, additions or model conversions of any of the foregoing.

(d) **"Control Agreement"** means:

(i) with respect to any uncertificated securities included in the Collateral, an agreement between the issuer of such uncertificated securities and another Person whereby such issuer agrees to comply with instructions that are originated by such Person in respect of such uncertificated securities, without the further consent of the Obligor; and

(ii) with respect to any security entitlements in respect of financial assets deposited in or credited to a securities account included in the Collateral, an agreement between the securities intermediary and another Person in respect of such security entitlements pursuant to which such securities intermediary agrees to comply with any entitlement orders with respect to such security entitlements that are originated by the Secured Party, without the further consent of the Obligor.

(e) **"Copyright Collateral"** means:

(i) all copyrights (including without limitation copyrights for semi-conductor chip product mask works and all integrated circuit topography) of the Obligor, whether statutory or common law, registered or unregistered, now or hereafter in force throughout the world, and all applications for registration thereof, whether pending or in preparation, and all copyrights resulting from such applications;

(ii) all extensions and renewals of any thereof;

(iii) all copyright licences and other agreements providing the Obligor with the right to use any of the items of the type referred to in clauses (i) and (ii);

(iv) the right to sue for past, present and future infringements of any of the Copyright Collateral referred to in clauses (i) and (ii) and, to the extent applicable, clause (iii); and

(v) all proceeds of the foregoing, including, without limitation, licences, royalties, income, payments, claims, damages and proceeds of suit.

(f) "**Equity Interest Collateral**" means all instruments, shares, stock, equity interests, warrants, bonds, debentures, debenture stock or other securities relating to the Obligor's equity interests in each of the Guarantors, whether certificated or uncertificated.

(g) "**Event of Default**" has the meaning ascribed to the term in the Debentures.

(h) "**Governmental Authority**" means: (a) any government, parliament or legislature, any regulatory or administrative authority, agency, commission or board and any other statute, rule or regulation making entity having jurisdiction in the relevant circumstances; (b) any Person acting within and under the authority of any of the foregoing or under a statute, rule or regulation thereof; and (c) any judicial, administrative or arbitral court, authority, tribunal or commission having jurisdiction in the relevant circumstances.

(i) "**Intellectual Property Collateral**" means, collectively, the Copyright Collateral, the Patent Collateral, the Trademark Collateral and the Trade Secrets Collateral.

(j) "**Obligations**" means all of the present and future indebtedness, liabilities and obligations of the Obligor of any and every kind, nature or description whatsoever (whether direct or indirect, joint or several or joint and several, absolute or contingent, matured or unmatured, in any currency, and whether as principal debtor, guarantor, surety or otherwise, including without limitation any interest that accrues thereon after or would accrue thereon but for the commencement of any case, proceeding or other action, whether voluntary or involuntary, relating to the bankruptcy, insolvency or reorganization of the Obligor, whether or not allowed or allowable as a claim in any such case, proceeding or other action) to the Purchasers (and their Affiliates) under, in connection with, relating to or with respect to the Debentures and each of the security documents to which they are a party, and any unpaid balance thereof.

(k) "**Patent Collateral**" means:

(i) all letters patent and applications for letters patent throughout the world, including all patent applications in preparation for filing anywhere in the world;

(ii) all reissues, divisions, continuations, continuations-in-part, extensions, renewals and re-examinations of any of the items described in clause (i);

(iii) all patent licences and other agreements providing the Obligor with the right to use any of the items of the type referred to in clauses (i) and (ii);

(iv) the right to sue third parties for past, present or future infringements of any patent or patent application, and for breach or enforcement of any patent licence; and

(v) all proceeds of, and rights associated with, the foregoing (including licence royalties and proceeds of infringement suits), and all rights corresponding thereto throughout the world.

(l) "**Permitted Encumbrances**" shall have the meaning ascribed to such term in the Debentures.

(m) "**Person"** means an individual, company, partnership (whether or not having separate legal personality), corporation (including a business trust), joint stock company, trust, unincorporated association, joint venture or other entity, or a government, state or political subdivision thereof.

(n) "**Trademark Collateral**" means:

(i) all trademarks, trade names, corporate names, company names, business names, fictitious business names, trade dress, service marks, logos, other source of business identifiers, prints and labels on which any of the foregoing have appeared or appear and designs (all of the foregoing items in this clause (i) being collectively called a "Trademark"), now existing anywhere in the world or hereafter adopted or acquired, whether currently in use or not, all registrations and recordings thereof and all applications in connection therewith, whether pending or in preparation for filing, including registrations, recordings and applications in the Trade-marks Branch of the Canadian Intellectual Property Office or in any office or agency of Canada or any Province thereof or any foreign country, and all reissues, extensions or renewals thereof;

(ii) all Trademark licences and other agreements providing the Obligor with the right to use any items of the type described in clause (i);

(iii) all of the goodwill of the business connected with the use of, and symbolized by, the items described in clause (i);

(iv) the right to sue third parties for past, present and future infringements of any Trademark Collateral described in clauses (i) and (ii); and

(v) all proceeds of, and rights associated with, the foregoing, including any claim by the Obligor against third parties for past, present or future infringement or dilution of any Trademark, Trademark registration or Trademark licence, or for any injury to the goodwill associated with the use of any such Trademark or for breach or enforcement of any Trademark licence and all rights corresponding thereto throughout the world.

(o) "**Trade Secrets Collateral**" means all common law and statutory trade secrets and all other confidential or proprietary or useful information (to the extent such confidential, proprietary or useful information is protected by the Obligor against disclosure and is not readily ascertainable) and all know-how obtained by or used in or contemplated at any time for use in the business of the Obligor, including without limitation recipes and food processing know-how (all of the foregoing being collectively called a "**Trade Secret**"), whether or not such Trade Secret has been reduced to a writing or other tangible form, including all documents and things embodying, incorporating or referring in any way to such Trade Secret, all Trade Secret licences, and including the right to sue for and to enjoin and to collect damages for the actual or threatened misappropriation of any Trade Secret and for the breach or enforcement of any such Trade Secret licence.

3. The fixed and specific mortgages and charges and the security interest granted under this Agreement secure payment and performance of all Obligations.

4. The Obligor hereby represents and warrants to the Purchasers as at the date of this Agreement and as at the date of the acquisition by the Obligor of Collateral (including any acquisition of Collateral after the date hereof) as follows:

(a) The Obligor is a corporation duly incorporated, organized and subsisting under the laws of its jurisdiction of incorporation with the corporate power to enter into this Agreement, this Agreement has been duly authorized by all necessary corporate action on the part of the Obligor and constitutes a legal and valid agreement binding of the Obligor, enforceable against the Obligor in accordance with its terms; the making and performance of this Agreement will not result in the breach of, constitute a default under, contravene any provision of, or result in the creation of, any lien, charge, security interest, encumbrance or any other rights of others upon any property of the Obligor pursuant to any agreement, indenture or other instrument to which the Obligor is a party or by which the Obligor or any of its property may be bound or affected.

(b) All of the Collateral (i) is located at the places specified in Schedule I hereto, and (ii) is, or when the Obligor acquires any right, title or interest therein, will be the sole property of the Obligor, free and clear of all liens, charges, security interests, encumbrances or any other rights, except: (x) the Permitted Encumbrances; (y) as may be permitted by the Debentures; and (z) for those permitted liens expressly consent to in writing by the Secured Party.

(c) With respect to any material Intellectual Property Collateral:

(i) such Intellectual Property Collateral is subsisting and has not been adjudged invalid or unenforceable, in whole or in part; and

(ii) the Obligor is the exclusive owner of the entire right, title and interest in and to such Intellectual Property Collateral owned by the Obligor and is entitled to use the Intellectual Property Collateral leased or licensed to the Obligor and, to its knowledge, no claim has been made that the use of such Intellectual Property Collateral does or may violate the asserted rights of any third party.

(d) The security interest created by this Agreement, once properly perfected in accordance with Applicable Law, will be a valid first priority security interest in the Collateral, subject only to the Permitted Encumbrances and permitted liens expressly consent to in writing by the Secured Party.

(e) The address of the Obligor's chief executive office, principal place of business and the office where it keeps its records respecting the Receivables is that given at the end of this Agreement.

(f) The Obligor has not granted "control" (within the meaning of such term under the STA) over any investment property forming part of the Collateral to any Person other than the Secured Party.

(g) Except for Canadian Securities Exchange filings, and the filings and registrations necessary to perfect the security interests created herein or otherwise provided for in the Debentures, no authorization, approval or other action by, and no notice to or filing with, any governmental authority, regulatory body or any other Person is required for the grant by the Obligor of the security interest granted hereby in the Collateral or for the execution, delivery and performance of this Agreement by the Obligor.

5. So long as any portion of the Obligations shall remain unpaid, the Obligor covenants with the Secured Party, for and on behalf of the Purchasers, that it will comply with or perform, or cause to be complied with or performed, the following obligations:

(a) The Obligor shall maintain, use and operate the Collateral in accordance with past business practices and in accordance with the terms and conditions of the Debentures.

(b) The Obligor shall keep proper books of account with respect to the Collateral in accordance with generally accepted accounting practice.

(c) The Obligor shall not sell, lease or otherwise dispose of the Collateral without the prior written consent of the Secured Party, except as permitted by the Debentures or in the ordinary course of business, which shall include the sale of inventory and finished products, and the lease and sublease of properties of the Obligor in the ordinary course of business.

(d) The Obligor shall, upon reasonable request by the Secured Party, execute and deliver all such financing statements, certificates, further assignments and documents and do all such further acts and things as may be necessary and reasonably requested by the Secured Party to give effect to the intent of this Agreement.

(e) The Obligor acknowledges that no material Collateral shall become affixed to any real property not subject to a security interest in favour of the Secured Party without the prior written consent of the Secured Party.

(f) The Obligor will immediately, and in any event within 24 hours, notify the Secured Party if it becomes aware that any Person has the right to go into, collect or seize possession of the Collateral by means of execution, garnishment or other legal process.

(g) Except with respect to goods in transit or with respect to Equipment out for repair, the Obligor shall keep all material Equipment and other tangible personal property of the Obligor in jurisdictions in which all required filings have been made for the perfection of the security interests created hereby.

(h) With respect to any Equipment or Inventory in the possession or control of any third party, upon the request of the Secured Party, acting reasonably, the Obligor shall notify such third party of the Purchasers' security interest in such Equipment or Inventory and, upon the Secured Party's request following the occurrence and during the continuance of an Event of Default, direct such third party to hold all such Equipment or Inventory for the Purchasers' account and subject to the Secured Party's instructions.

(i) The Obligor shall not change the location of its chief executive office or the location of the office where it keeps its records respecting the Receivables without giving prior written notice to the Secured Party of the new location and the date upon which such change is to take effect.

(j) In the event of an Event of Default which is continuing, upon the reasonable request of the Secured Party, the Obligor shall deliver to the Secured Party possession of all originals of all negotiable documents, instruments and chattel paper owned or held by the Obligor evidencing an aggregate amount payable in excess of $150,000 or evidencing any right in goods in an aggregate amount exceeding $150,000 (duly endorsed in blank, if requested by the Secured Party).

(k) If an Event of Default shall have occurred and be continuing, at the written direction of the Secured Party, all proceeds of Collateral received by the Obligor shall be delivered in kind to the Secured Party for deposit to a deposit account (the "**Collateral Account**") of the Obligor maintained at the Obligor's bank for the benefit of the Secured Party, for and on behalf of the Purchasers, and the Obligor shall hold all such proceeds in express trust for the benefit of the Purchasers until delivery thereof is made to the Secured Party. All amounts so held by the Secured Party or by the Obligor in trust for the Secured Party, for the benefit of the Purchasers and all income in respect thereof will continue to be collateral security for the Obligations and will not constitute payment thereof until approved as hereinafter provided. No funds, other than proceeds of Collateral, will be deposited in the Collateral Account.

(l) Following the Secured Party's exercise of the remedy provided for in paragraph 5(k) hereof, the Secured Party shall have the right but not the obligation to apply any amount held in the Collateral Account to the payment of any Obligations which are due and payable or payable upon demand in such order as the Secured Party may determine in accordance with the term and conditions of the Agency and Interlender Agreement. The Secured Party may at any time transfer to the Obligor's general demand deposit accounts any or all of the collected funds in the Collateral Account; provided, however, that any such transfer shall not be deemed to be a waiver or modification of any of the Secured Party's rights under this paragraph 5.

(m) The Obligor shall not, unless the Obligor shall reasonably and in good faith determine (and notice of such determination, in form and substance satisfactory to the Purchasers, shall have been delivered to the Secured Party) that any of the Intellectual Property is not material to the business of the Obligor and has negligible economic value, do any act, or omit to do any act, whereby any of the Intellectual Property may lapse or become abandoned, dedicated to the public, placed in the public domain, invalid or unenforceable, as the case may be.

(n) The Obligor shall notify the Secured Party promptly if it knows, or has reason to believe, that any application or registration relating to any material item of the Intellectual Property Collateral may become abandoned, dedicated to the public, placed in the public domain, invalid or unenforceable, or of any materially adverse determination or development regarding the Obligor's ownership of any of the Intellectual Property Collateral, its right to register the same or to keep and maintain and enforce the same.

(o) At the reasonable request of the Secured Party, the Obligor shall execute and deliver to the Secured Party any document required to acknowledge or register or perfect the Secured Party's interest in any part of the Intellectual Property Collateral.

(p) The Obligor shall defend the title to the Collateral against all Persons and shall, upon reasonable demand by the Secured Party, furnish further assurance of title and execute any written instruments or do any other acts necessary to make effective the purposes and provisions of this Agreement.

(q) The Obligor shall ensure that the representations and warranties set forth in paragraph 4 hereof will be true and correct at all times.

6. The Obligor will maintain or cause to be maintained with reputable insurance companies insurance with respect to the Collateral against such casualties and contingencies and of such types and in such amounts as are required under the Debentures.

7. The Obligor shall not create or suffer to exist any lien upon any of the Collateral to secure any indebtedness or liabilities of any Person, except: (i) for the mortgages, charges and security interest created by this Agreement; (ii) for the Permitted Encumbrances; (iii) as may be permitted by the Debentures; (iv) for those permitted liens expressly consent to in writing by the Secured Party; and (v) specifically excludes purchase money security interests in equipment, inventory, or leases for equipment or machinery.

8. If an Event of Default shall have occurred and be continuing, (i) the Secured Party may notify any parties obligated on any of the Collateral to make any payment to the Secured Party, for and on behalf of the Purchasers, of any amounts due or to become due thereunder and enforce collection of any of the Collateral by suit or otherwise and surrender, release, or exchange all or any part thereof, or compromise or extend or renew for any period (whether or not longer than the original period) any indebtedness thereunder or evidenced thereby, (ii) upon written request of the Secured Party, the Obligor will, at its own expense, notify any parties obligated on any of the Collateral to make any payment to the Secured Party, for and on behalf of the Purchasers, of any amounts due or to become due thereunder, and (iii) any payment or other proceeds received by the Obligor from any party obligated on any of the Collateral shall be held by the Obligor in trust for the Secured Party, for and on behalf of the Purchasers, and paid over to the Secured Party, for and on behalf of the Purchasers, forthwith upon request.

9. The Obligor agrees that, forthwith upon request by the Secured Party, from time to time at its own expense, the Obligor will promptly execute and deliver all further instruments and documents, and take all further action, that may be necessary and reasonably requested by the Secured Party in order to perfect, preserve and protect any mortgages, charges and security interest created, granted or purported to be created or granted hereby or to enable the Secured Party to exercise and enforce its rights and remedies hereunder with respect to any Collateral. Without limiting the generality of the foregoing, the Obligor will:

(a) If reasonably requested by the Secured Party, mark conspicuously each chattel paper included in the Receivables and each related contract with a legend, in form and substance satisfactory to the Secured Party, indicating that such document, chattel paper or related contract is subject to the security interest granted hereby.

(b) If reasonably requested by the Secured Party, if any Receivable shall be evidenced by a promissory note or other instrument, negotiable document or chattel paper, deliver and pledge to the Secured Party hereunder such promissory note, instrument, negotiable document or chattel paper duly endorsed and accompanied by duly executed instruments of transfer or assignment, all in form and substance satisfactory to the Secured Party.

(c) Execute and file such financing or financing change statements, or amendments thereto (including, without limitation, any assignment of claim from or other formality under or pursuant to the *Financial Administration Act* (Canada) or similar provincial or territorial legislation), and such other instruments or notices, as may be necessary and reasonably requested by the Secured Party in order to perfect and preserve the security interests and other rights granted or purported to be granted to the Secured Party, for and on behalf of the Purchasers, hereby.

(d) Furnish to the Secured Party, from time to time at the Secured Party's reasonable request, statements and schedules further identifying and describing the Collateral and such other reports in connection with the Collateral as the Secured Party may reasonably request, all in reasonable detail.

(e) Direct the issuer of any certificated securities included in or relating to the Collateral as the Secured Party may specify in its request to register the applicable security certificate in the name of the Secured Party or such nominee as they may direct.

(f) Direct the issuer of any uncertificated securities included in or relating to the Collateral as the Secured Party may specify in its request to register in the books and records of such issuer the Secured Party or such nominee as they may direct as the registered owner of the uncertificated security.

(g) Direct the securities intermediary for any security entitlements in respect of financial assets deposited in or credited to a securities account included in or relating to the Collateral as the Secured Party may specify in its request to transfer any or all of the financial assets to which such security entitlements relate as the Secured Party may specify.

Notwithstanding the foregoing, the Secured Party will be entitled, but not bound or required, to exercise any of the rights that any holder of the above may at any time have. The Secured Party will not be responsible for any loss occasioned by its exercise of such rights or by failure to exercise the same within the time limited for the exercise thereof other than any loss resulting from the gross negligence or wilful misconduct of the Secured Party.

With respect to the foregoing and the grant of the security interest hereunder, the Obligor hereby authorizes the Secured Party, for and on behalf of the Purchasers, to file one or more financing or financing change statements, and amendments thereto, relative to all or any part of the Collateral without the signature of the Obligor, where permitted by law. The Secured Party shall provide a copy of such statement to the Obligor together with details of registration thereof. A photographic or other reproduction of this Agreement or any financing statement covering the Collateral, or any part thereof shall be sufficient as a financing statement, where permitted by law.

10. The Obligor agrees that forthwith, upon request from time to time by the Secured Party acting reasonably, the Obligor shall give its consent in writing to:

(a) The entering into by any issuer of any uncertificated securities included in or relating to the Collateral as the Secured Party may specify in its request, of a Control Agreement with the Secured Party in respect of such uncertificated securities, which consent may be incorporated into an agreement to which such issuer, the Secured Party and the Obligor are parties.

(b) The entering into by any securities intermediary for any security entitlements in respect of the financial assets deposited in or credited to a securities account included in or relating to the Collateral as the Secured Party may specify in its request, of a Control Agreement with the Secured Party in respect of such security entitlements which consent may be incorporated into an agreement to which such securities intermediary, the Secured Party and the Obligor are parties.

11. The Obligor agrees that it shall not consent to:

(a) The entering into by any issuer of any uncertificated securities included in or relating to the Collateral of a Control Agreement in respect of such uncertificated securities with any Person other than the Secured Party or such nominee or agent as they may direct.

(b) The entering into by any securities intermediary for any security entitlements in respect of the financial assets deposited in or credited to a securities account included in or relating to the Collateral of a Control Agreement with respect to such securities accounts or security entitlements with any Person other than the Secured Party or such nominee or agent as they may direct.

12. If an Event of Default shall have occurred and be continuing, the Obligor may use the Collateral in any lawful manner not inconsistent with this Agreement, the Debentures, or Agency and Interlender Agreement, as applicable, and the Secured Party and its representatives shall have the right to inspect the operations of the Obligor, its books and records and the Collateral at anytime during normal business hours upon providing twenty four (24) hours' reasonable notice to the Obligor.

13. If an Event of Default shall have occurred and be continuing, the Secured Party, for and on behalf of the Purchasers, may have any Collateral comprising instruments, shares, stock, equity interests, warrants, bonds, debentures, debenture stock or other securities, registered in its name or in the name of its nominee and will be entitled but not bound or required to exercise any of the rights that any holder of such securities may at any time have, but the Secured Party shall not be responsible for any loss occasioned by the exercise of any of such rights or by failure to exercise the same within the time limit for the exercise thereof save and except for the gross negligence or wilful misconduct of the Secured Party.

14. Upon the Obligor's failure to perform any of its duties hereunder the Secured Party may, but shall not be obliged to, perform any or all of such duties, without waiving any rights to enforce this Agreement, and the Obligor shall pay to the Secured Party, for and on behalf of the Purchasers, forthwith upon written demand therefor, an amount equal to the reasonable costs, fees and expenses incurred by the Secured Party in so doing plus interest thereon from the date such costs, fees and expenses are incurred until paid at the rate or rates set out in the Debentures.

15. If an Event of Default shall have occurred and be continuing, the security hereby granted shall immediately become enforceable and the Secured Party may, in accordance with the terms and conditions of the Agency and Interlender Agreement, forthwith or at any time thereafter:

(a) Declare any or all of the Obligations not then due and payable to be immediately due and payable in accordance with the terms of the Debentures and, in such event, such Obligations shall be forthwith due and payable to the Secured Party, for and on behalf of the Purchasers, without presentment protest or notice of dishonour.

(b) Commence legal action to enforce payment or performance of the Obligations.

(c) Require the Obligor to disclose to the Secured Party the location or locations of the Collateral and the Obligor agrees to make such disclosure when so required by the Secured Party.

(d) Require the Obligor, at the Obligor's sole expense, to assemble the Collateral and deliver or make the Collateral available at a place or places designated by the Secured Party to the Obligor that is reasonably convenient for the Obligor, and the Obligor agrees to so assemble, deliver or make available the Collateral.

(e) Enter any premises where the Collateral may be situated and take possession of the Collateral by any method permitted by law.

(f) Repair, process, modify, complete or otherwise deal with the Collateral and prepare for the disposition of the Collateral, whether on the premises of the Obligor or otherwise and take such steps as it considers necessary to maintain, preserve or protect the Collateral.

(g) Seize, collect, realize or dispose of the Collateral or any part thereof by private sale, public sale, lease, or otherwise upon such terms and conditions as the Secured Party may determine in accordance with the terms and conditions of the Agency and Interlender Agreement.

(h) Carry on all or any part of the business or businesses of the Obligor and may, to the exclusion of all others, enter upon, occupy and use all or any of such premises, buildings, plant, undertaking and other property of or used by the Obligor as part of or for such time and in accordance with the terms and conditions of the Agency and Interlender Agreement, free of charge, and the Secured Party shall not be liable to the Obligor for any act, omission, or negligence (other than gross negligence or wilful misconduct) in so doing or for any rent, charges, depreciation, damages or other amount in connection therewith or resulting therefrom and any sums expended by the Secured Party shall bear interest at the rate or rates set out in the Debentures.

(i) File such proofs of claim or other documents as may be necessary or desirable to have its claim lodged in any bankruptcy, winding-up, liquidation, dissolution or other proceedings (voluntary or otherwise) relating to the Obligor.

(j) Borrow money for the purpose of carrying on the business of the Obligor or for the maintenance, preservation or protection of the Collateral and mortgage, charge, pledge or grant a security interest in the Collateral, whether or not in priority to the security created herein, to secure repayment of any money so borrowed.

(k) Where the Collateral has been disposed of by the Secured Party, for and on behalf of the Purchasers, as provided in paragraph 15(g), commence legal action against the Obligor for any deficiency.

(l) Pay or discharge any Lien or claims by any Person in the Collateral and the amount so paid shall be added to the Obligations and secured hereby and shall bear interest at the rate or rates set out in the Debentures until payment thereof.

(m) Take any other action, suit, remedy or proceeding authorized or permitted by this Agreement, the PPSA or by law or equity.

(n) To the extent permitted by Applicable Law, transfer any securities forming part of the Collateral into the name of the Secured Party, or its nominee, for and on behalf of the Purchasers, with or without disclosing that the securities are subject to a security interest and cause the Secured Party or its nominee, for and on behalf of the Purchasers, to become the entitlement holder with respect to any security entitlements forming part of the Collateral.

(o) Sell, transfer or use any investment property included in the Collateral of which the Secured Party or its agent has "control" within the meaning of Section 1(2) of the PPSA.

16. Where required to do so by the PPSA or other Applicable Law, the Secured Party shall give to the Obligor the minimum written notice required by the PPSA or other Applicable Law of any intended disposition of the Collateral.

17. Any notice or communication to be given under this Agreement to the Obligor or the Secured Party shall be effective if given in accordance with the provisions of the Agency and Interlender Agreement as to the giving of notice, and the Obligor and the Secured Party may change their respective address for notices in accordance with the said provisions.

18. If the Secured Party is entitled to exercise its rights and remedies in accordance with paragraph 15 hereof, the Secured Party may take proceedings in any court of competent jurisdiction for the appointment of a receiver (which term shall include a receiver and manager) (each herein referred to as a "**Receiver**") of the Collateral or may by appointment in writing appoint any Person to be a Receiver of the Collateral and may remove any Receiver so appointed by the Secured Party and appoint another in its stead; and any such Receiver appointed by instrument in writing shall have powers of the Secured Party set out in subparagraphs 15(b) to (l), inclusive, including, without limitation, the power (i) to take possession of the Collateral, (ii) to carry on the business of the Obligor, (iii) to borrow money required for the maintenance, preservation or protection of the Collateral or for the carrying on of the business of the Obligor on the security of the Collateral in priority to the security interest created under this Agreement, and (iv) to sell, lease or otherwise dispose of the whole or any part of the Collateral at public auction, by public tender or by private sale, either for cash or upon credit, in accordance with the terms and conditions of the Agency and Interlender Agreement; provided that, to the extent permitted and in the manner prescribed by law any such Receiver shall be deemed the agent of the Obligor and no Purchaser shall be in any way responsible for any misconduct or negligence of any such Receiver.

19. Any proceeds of any disposition of any Collateral may be applied by the Secured Party to the payment of reasonable expenses incurred in connection with retaking, holding, repairing, processing, preparing for disposition and disposing of the Collateral (including the remuneration of any Receiver appointed pursuant to paragraph 18, solicitor's fees on a substantial indemnity basis and legal expenses and any other expenses), and any balance of such proceeds shall be applied by the Secured Party towards the payment of the Obligations in such order of application as the Purchasers may from time to time elect, subject to the provisions of the Agency and Interlender Agreement. All such expenses and all amounts borrowed on the security of the Collateral under paragraphs 15 and 18 hereof shall bear interest at the rate or rates set out in the Debentures. If the disposition of the Collateral fails to satisfy the Obligations and the expenses incurred by the Purchasers, the Obligor shall be liable to pay any deficiency to the Purchasers on demand.

20. Subject to Applicable Law, the Secured Party is authorized, in connection with any offer or sale of any securities forming part of the Collateral, to comply with any limitation or restriction as it may be advised by counsel is necessary to comply with Applicable Law, including compliance with procedures that may restrict the number of prospective bidders and purchasers, requiring that prospective bidders and purchasers have certain qualifications and restricting prospective bidders and purchasers to Persons who will represent and agree that they are purchasing for their own account or investment and not with a view to the distribution or resale of such securities. Subject to Applicable Law, the Secured Party will not be liable or accountable to the Obligor for any discount, on commercially reasonable terms, allowed by reason of the fact that such securities are sold in compliance with any such limitation or restriction.

21. The Obligor further agrees and acknowledges as follows:

(a) The Obligor shall not be discharged by any extension of time, additional advances, renewals and extensions, the taking of further security, releasing security, extinguishment of the security interest as to all or any part of the Collateral, or any other act except a release or discharge of the security interest upon the full payment of the Obligations including reasonable charges, expenses, fees, costs and interest.

(b) Any failure by the Secured Party to exercise any right set out in this Agreement shall not constitute a waiver thereof; nothing in this Agreement or in the Obligations shall preclude any other remedy by action or otherwise for the enforcement of this Agreement or the payment in full of the Obligations.

(c) The Secured Party may waive, in whole or in part, any breach by the Obligor of any of the provisions of this Agreement, any default by the Obligor in payment or performance of any of the Obligations or any of its rights and remedies, whether provided for herein or otherwise, provided that no such waiver shall be effective unless given by the Secured Party to the Obligor in writing.

(d) No waiver given in accordance with paragraph 21(c) shall be a waiver of any other or subsequent breach by the Obligor of any of the provisions of this Agreement, of any other or subsequent default by the Obligor in payment or performance of any of the Obligations or any of the rights and remedies of the Secured Party, whether provided for herein or otherwise.

(e) All rights of the Secured Party and the Purchasers hereunder shall be assignable to the extent permitted under the Debentures and Agency and Interlender Agreement, as applicable.

(f) The mortgage, charge and security interest created by this Agreement is intended to attach when this Agreement is signed by the Obligor with respect to all items of Collateral in which the Obligor has rights at that moment and shall attach to all other Collateral immediately upon the Obligor acquiring any rights therein.

(g) Value has been given.

22. The Obligor acknowledges having received an executed copy of this Agreement and of the financing statement registered under the PPSA evidencing the security interest created hereby.

23. If an Event of Default shall have occurred and be continuing, the Obligor hereby irrevocably constitutes and appoints the Secured Party and each of its officers holding office from time to time as the true and lawful attorney of the Obligor with power of substitution in the name of the Obligor, to do any and all such acts and things or execute and deliver all such agreements, documents and instruments as the Secured Party, in its sole discretion, considers necessary or desirable to carry out the provisions and purposes of this Agreement or to exercise any of its rights and remedies hereunder, and to do all acts or things necessary to realize or collect the proceeds, including, without limitation:

(a) To ask, demand, collect, sue for, recover, compromise, receive and give a quittance and receipts for moneys due and to become due under or in respect of any of the Collateral.

(b) To receive, endorse, and collect any drafts or other instruments, documents and chattel paper, in connection with clause (a) above.

(c) To file any claims or take any action or institute any proceedings which the Secured Party may reasonably deem necessary or desirable for the collection of any of the Collateral or otherwise to enforce the rights of the Purchasers with respect to any of the Collateral.

(d) To perform the affirmative obligations of the Obligor hereunder.

The Obligor hereby acknowledges, consents and agrees that the power of attorney granted pursuant to this paragraph is irrevocable (until termination of the security interest hereunder) and coupled with an interest. The Obligor hereby ratifies and agrees to ratify all acts of any such attorney taken or done in accordance with this paragraph. The Secured Party agrees that it shall not exercise the power of attorney granted pursuant to this paragraph 23 unless an Event of Default has occurred and is continuing.

24. The powers conferred on the Secured Party, for and on behalf of the Purchasers, hereunder are solely to protect their interests in the Collateral and shall not impose any duty on the Secured Party to exercise any such powers. Except for reasonable care of any Collateral in its possession and the accounting for moneys actually received by it hereunder, the Secured Party shall have no duty as to any Collateral or as to the taking of any necessary steps to preserve rights against prior parties or any other rights pertaining to any Collateral.

25. Notwithstanding any other term or condition of this Agreement, this Agreement shall not relieve the Obligor or any other party to any of the Collateral from the observance or performance of any term, covenant, condition or agreement on its part to be observed or performed thereunder or from any liability to any other party or parties thereto or impose any obligation on the Secured Party to observe or perform any such term, covenant, condition or agreement to be so observed or performed, and the Obligor hereby agrees to indemnify and hold harmless the Secured Party from and against any and all losses, liabilities (including liabilities for penalties), costs and expenses which may be incurred by the Secured Party under or in respect of the Collateral and from all claims, alleged obligation or undertaking on its part to observe, perform or discharge any of the terms, covenants and agreements contained in or with respect to the Collateral. The Secured Party may, at its option, perform any term, covenant, condition or agreement on the part of the Obligor to be performed under or in respect of the Collateral (and/or enforce any of the rights of the Obligor thereunder) without thereby waiving any rights to enforce this Agreement. Nothing contained in this paragraph 25 shall be deemed to constitute the Secured Party the mortgagee in possession of the Collateral or the lessee under any lease or agreement to lease unless the Secured Party has agreed to become such mortgagee in possession or to be a lessee.

26. All rights of the Secured Party and Purchasers, as applicable, hereunder shall enure to the benefit of their respective successors and permitted assigns, provided that the Secured Party nor any Purchaser shall be entitled to transfer or assign any of its right, title or interest in, to, or arising under this Agreement except in accordance with the provisions governing assignment contained in the Agency and Interlender Agreement and Debentures, as applicable, and all obligations of the Obligor hereunder shall bind the Obligor and its successors and assigns.

27. The Obligor acknowledges and agrees that in the event it amalgamates with any other corporation or corporations, it is the intention of the parties hereto that the security interest created hereby (i) shall extend to "Collateral" (as that term is herein defined) owned by each of the amalgamating corporations and the amalgamated corporation at the time of amalgamation and to any "Collateral" thereafter owned or acquired by the amalgamated corporation, such that the term the "Obligor" when used herein would apply to each of the amalgamating corporations and the amalgamated corporation and (ii) shall secure the "Obligations" (as that term is herein defined) of each of the amalgamating corporations and the amalgamated corporation to the Secured Party and/or Purchasers, as applicable, at the time of amalgamation and any "Obligations" of the amalgamated corporation to the Secured Party and/or Purchasers, as applicable, thereafter arising. The security interest shall attach to the additional "Collateral" at the time of amalgamation and to any "Collateral" thereafter owned or acquired by the amalgamated corporation when such becomes owned or is acquired.

28. This Agreement shall be governed by and construed in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein.

29. In the event of any conflict between the provisions hereunder and the provisions of the Debentures and/or Agency and Interlender Agreement, as applicable, then, notwithstanding anything contained in this Agreement, the provisions contained in the Debentures and/or Agency and Interlender Agreement, as applicable, shall prevail and the provisions of this Agreement will be deemed to be amended to the extent necessary to eliminate such conflict. If any act or omission of the Obligor is expressly permitted under the Debentures and/or Agency and Interlender Agreement, as applicable, but is expressly prohibited hereunder, such act or omission shall be permitted. If any act or omission is expressly prohibited hereunder, but the Debentures and/or Agency and Interlender Agreement, as applicable, does not expressly permit such act or omission, or if any act is expressly required to be performed hereunder but the Debentures and/or Agency and Interlender Agreement, as applicable, does not expressly relieve the Obligor from such performance, such circumstance shall not constitute a conflict between the applicable provisions hereunder and the provisions of the Debentures and/or Agency and Interlender Agreement, as applicable.

30. This Agreement and the security interest, assignment and mortgage and charge granted hereby are in addition to and not in substitution for any other security now or hereafter held by the Secured Party, for and on behalf of the Purchaser, and this Agreement is a continuing agreement and security that will remain in full force and effect until discharged by the Secured Party, for and on behalf of the Purchaser.

31. The Obligor shall be entitled to a release and discharge of this Agreement and the security interest, assignment and mortgage and charge granted hereby upon full payment and satisfaction of all Obligations and upon written request by the Obligor at the Obligor's expense.

32. If any provision of this Agreement is determined to be invalid or unenforceable in whole or in part, such invalidity or unenforceability shall attach only to such provision or part thereof and the remaining part of such provision and all other provisions hereof shall continue in full force and effect.

33. This Agreement may be executed by one or more of the parties to this Agreement on any number of separate counterparts (including by telecopy or pdf), and all of said counterparts taken together shall be deemed to constitute one and the same instrument.

[*Remainder of page intentionally left blank. Signature page follows.*]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

QUANTUM BIOPHARMA LTD.,
as *Obligor*

By _____
Name: Zeeshan Saeed
Title: Chief Executive Officer

Address for Notices:
Quantum Biopharma Ltd.
55 University Avenue, Suite 1003
Toronto, Ontario, M5J 2H7

Attention: Zeeshan Saeed
Email: zsaeed@quantumbiopharma.com

[●]
as *Secured Party*

By _____
Name: **[●]**
Title: **[●]**

Address for Notices:
[●]
[●]
[●]

Attention: **[●]**
Email: **[●]**

Schedule I

Location of Collateral

55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7

EXHIBIT 4.24

AGENCY AND INTERLENDER AGREEMENT

THIS AGENCY AND INTERLENDER AGREEMENT (as amended, restated or otherwise modified from time to time, this "**Agreement**") dated as of **[●]**.

AMONG:

[●]. having an address **[●]**

(the "**Agent**")

AND:

Quantum Biopharma Ltd., having its domicile at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7

(the "**Company**")

AND:

THE HOLDERS LISTED ON SCHEDULE "A" ATTACHED HERETO

WHEREAS:

A. Pursuant to the Subscription Agreements (as defined below) and subject to the terms and conditions thereof, the Holders (as defined below) have agreed to subscribe for the Debentures (as defined below); and

B. The Holders wish to appoint the Agent to act on their behalf as to certain matters relating to the Debentures and to set out their rights and obligations with respect to one another, each as provided for in this Agreement.

NOW, THEREFORE, in consideration of the premises set out herein and other good and valuable consideration, the sufficiency and receipt of which are hereby acknowledged, the parties hereto agree as follows:

1. INTERPRETATION

1.1 Defined Terms

In this Agreement, capitalized terms used but not otherwise defined herein have the meanings given to such terms in the applicable Debenture Certificates (a copy of which the Agent acknowledges receipt of), and the following terms will have the following meanings:

(a) "**Business Day**" means any day except Saturday, Sunday and any day on which banking institutions in the Province of Ontario are authorized or required by law or other government action to close;

(b) "**Debenture Certificates**" means the certificates representing, and setting out the terms of, the Debentures;

(c) "**Debentures**" means, collectively, the secured convertible debentures issued by the Company to each of the Holders in connection with the Offering, having the terms set out in the Debenture Certificates and dated on or about [●];

(d) "**Enforcement Notice**" means written notice given by the Majority Holders to the Agent stating that an Event of Default as defined in the applicable Debenture Certificates (the "**Event of Default**") has occurred and setting forth details of the Event of Default and instructions to the Agent to exercise all or any such rights, powers and remedies as are available to the Holders and the Agent under the Subscription Documents and this Agreement;

(e) "**Enforcement Rights**" means any and all demand, remedial and enforcement rights against the Company granted to or in favour of the Holders and the Agent under the Subscription Documents or which they may otherwise be entitled to by way of statute, equity or other means from time to time;

(f) "**Holders**" means, collectively, the holders of Debentures listed at Schedule A hereto, and each other holder of Debentures from time to time who has signed a Joinder Agreement;

(g) "**Joinder Agreement**" means an agreement in form and substance satisfactory to the Agent and the Company, acting reasonably, pursuant to which the assignee or transferee of a Holder, a new Holder or the assignee of the Agent becomes a party to this Agreement;

(h) "**Lien**" means any mortgage, charge, pledge, hypothecation, security interest, assignment, encumbrance, lien (statutory or otherwise), charge, title retention agreement or arrangement, restrictive covenant or other encumbrance of any nature, or any other arrangement or condition that in substance secures payment or performance of an obligation;

(i) "**Majority Holders**" means, at any time, the Holders holding a majority in value of the Obligations;

(j) "**Obligations**" means all monies now or at any time hereafter owing or payable by the Company to the Holders and all obligations (whether now existing, presently arising or created in the future) of the Company in favour of the Holders pursuant to the Debentures;

(k) "**Offering**" means the offering of Debentures of the Company pursuant to the Subscription Agreements to raise gross proceeds of up to $5,000,000;

(l) "**Principal Amount**" means, with respect to each Holder, the amount designated as the Principal Amount on the Debenture Certificates to which it is party and "**Principal Amounts**" means the aggregate of all principal amounts;

(m) "**Person"** is to be construed broadly and includes an individual, a partnership, a corporation, a joint stock company, a trust, an unincorporated association, a joint venture or other entity or a governmental body or any agency or political subdivision thereof;

(n) "**Rateable Benefit Percentage**" means, with respect to each Holder, the percentage calculated as (x) its Principal Amount (less the aggregate of any amounts repaid by the Company to such Holder) divided by (y) Principal Amounts (less the aggregate of all amounts repaid by the Company to all of the Holders) of all Holders;

(o) "**Subscription Agreement**" means, with respect to each Holder, the subscription agreement to which the Company and such Holder are parties and pursuant to which such Holder agreed to purchase its Debentures; and

(p) "**Subscription Documents**" means, collectively, the Subscription Agreements, the Debenture Certificates and all other security and agreements to be entered into pursuant to, or granted under, the Subscription Agreements and the Debenture Certificates, as each may be amended, extended, renewed, replaced, restated and in effect from time to time.

1.2 Certain Meanings

The words "**hereof**," "**herein**" and "**hereunder**" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement and section references are to this Agreement unless otherwise specified. The meanings given to terms defined herein shall be equally applicable to both the singular and plural forms of such terms.

2. APPOINTMENT

2.1 Appointment and Acceptance of Appointment

Each Holder hereby appoints and designates the Agent as agent hereunder and under the Debentures issued to such Holder to carry out the responsibilities and exercise the powers and rights constituting its Enforcement Rights and the powers and rights set out in this Agreement. The security interest granted in favour of the Agent shall be held and registered in all public offices as may be necessary or desirable to perfect the security interest granted therein in the name of the Agent for itself and on behalf of the Holders. The Agent hereby accepts such appointment on the terms and conditions set forth herein.

2.2 Authorizations

Each Holder hereby authorizes the Agent to:

(a) carry out the responsibilities and exercise the powers and rights vested in the Agent in this Agreement and under the terms of the Debentures;

(b) exercise all of the Holder's respective Enforcement Rights; and

(c) exercise such other rights and powers as are reasonably incidental to the foregoing rights and powers, or as are customarily and typically exercised by agents performing duties similar to the duties of the Agent hereunder and under the terms of the Debentures.

The duties of the Agent shall be deemed administrative in nature, and the Agent shall not have, by reason of this Agreement, or any of the Subscription Documents, a fiduciary relationship with any Holder. The Agent shall exercise that degree of care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances.

2.3 Agent's Individual Capacity

The Agent shall have the same rights and powers in its capacity as a Holder as any other Holder and may exercise the same as though it were not an Agent and the term "Holder" or "Holders" shall, unless otherwise expressly indicated, or unless the context otherwise requires, include the Agent in its capacity as a Holder. The Agent may generally engage in any kind of business with the Company, the Holders, or any of their respective affiliates as if the Agent were not an Agent hereunder and without any duty to account therefor to the Holders.

2.4 Agent's Related Party Transactions

Each Holder acknowledges and agrees that:

(a) the Agent and its present or former employees, directors, officers, managers, representatives or affiliates, and the immediate family members of any of the foregoing persons, are, or may become in the future, party to, or a beneficiary of, a contract with the Company, and have, or may have in the future, an interest in property used or held for use by the Company or take actions that may conflict with the interests of the Holders (collectively, the "**Affiliate Activities**");

(b) the Agent is not under any duty to disclose to any Holder or use on behalf of the Holders any information whatsoever about or derived from the Affiliate Activities, or to account for any revenue or profits obtained in connection with the Affiliate Activities, as a result of acting as the Agent or in any other capacity hereunder and under the Subscription Documents; and

(c) the Agent is not required to restrict any of its activities as a result of acting as the Agent (or in any other capacity) hereunder and under the Subscription Documents, and it may undertake any activities without further consultation with, or notification to, any Holder.

3. LIMITATIONS ON DUTIES AND ACTIONS OF AGENT

The Agent shall have full authority to act on behalf of the Holders in all matters set out in Section 2. The Agent shall not have any duties or responsibilities except those expressly set forth in this Agreement and the other Subscription Documents except that the Agent shall not be bound by any duties or responsibilities set forth in any Subscription Document entered into after the date hereof that are more burdensome to the Agent than those set forth herein or in the Subscription Documents as in effect on the date hereof. The Agent shall not be liable for any action taken or omitted by it, or any action suffered by it to be taken or omitted, unless as a result of its own gross negligence or intentional misconduct.

4. AGENT'S USE OF PROFESSIONALS

The Agent may, at the expense of the Holders, employ one or more professionals to advise or assist it from time to time. The Agent shall be entitled to rely on the advice and statements of professionals so selected. The Agent may pay reasonable remuneration for all services performed for it in the discharge of its duties hereof.

5. INSTRUCTIONS FROM Holders; PERMITTED INACTION

Unless otherwise excused as provided herein, the Agent shall act on all written instructions received from the Majority Holders with respect to any action to be taken or not to be taken in connection with this Agreement or the Debentures including, without limitation, actions to be taken pursuant to the Enforcement Rights. If the Agent shall request instructions from the Majority Holders with respect to taking any particular action in connection with this Agreement or the Debentures, the Agent shall be entitled to refrain from taking such particular action unless and until it shall have received written instructions from the Majority Holders (in which event it shall be required to act in accordance with such written instructions unless otherwise excused as provided herein), and the Agent shall not incur any liability to any Person for so refraining. Without limiting the foregoing, the Holders shall not have any right of action whatsoever against the Agent as a result of the Agent taking or not taking any action hereunder or under the terms of the Debentures pursuant to or in accordance with the written instructions of the Majority Holders, except as may result from the Agent's own gross negligence or intentional misconduct in connection with any action taken or not taken by it. In addition, without limiting the generality of the above provisions of this Section 5, the Agent shall not be required to act on any instructions purportedly given by the Majority Holders if it has any reason to question whether the Majority Holders have given such instructions, or if it believes that there is any question of interpretation as to the meaning of such instructions, until such time as it is satisfied that the Majority Holders have given such instructions or such question of interpretation has been resolved to the Agent's satisfaction. Notwithstanding anything to the contrary contained in this Agreement or the Debenture Certificates, the Agent shall not be required to take any action that is, in the Agent's opinion (which may be, but is not required to be, based on the advice of legal counsel), contrary to Applicable Laws or the terms of any of the Subscription Documents, or any action that would, in its reasonable opinion, subject the Agent, or any of its officers, employees, representatives, directors or affiliates, as applicable, to personal liability, or that would require the Agent to expend or risk the Agent's own funds.

6. INSTRUCTIONS BY Holders

An approval, instruction or other expression of the Majority Holders may be obtained by instrument in writing without any meeting of the Holders. An approval, instruction or other expression by the Majority Holders shall be binding upon all Holders as against the Agent, and the Agent shall be bound to give effect thereto accordingly (unless explicitly excused pursuant to the provisions hereof). Nothing in this Section 6 shall require any meeting of the Holders to be held for any purpose, nor shall any Holder be required to attend any such meeting. The Holders have appointed the Agent to act on their behalf in accordance with this Agreement and the Debentures and the Holders agree that if the Company receives oral or written instructions from any Holder (including the Majority Holders) with respect to taking any particular action in connection with this Agreement or the Debentures, the Company shall, and the Company hereby agrees to, refrain from taking such particular action unless and until they have received written instructions from the Agent (in which case they shall be required to act in accordance with such written instructions unless otherwise excused as provided herein) and the Company shall not incur any liability to any Person for so refraining.

7. BANK ACCOUNT

Without restricting its other powers set out in this Agreement, the Agent may maintain a bank account (the "**Agent's Account**") and deposit into the Agent's Account all payments it may receive in exercising any Enforcement Rights and to pay those amounts on a *pro rata* basis to the Holders based on their Rateable Benefit Percentage within five Business Days of those amounts being credited to the Agent's Account.

8. NO RESPONSIBILITY OF AGENT FOR CERTAIN MATTERS

The Agent:

(a) shall not be responsible in any manner whatsoever for the correctness of any recitals, statements, representations, or warranties contained herein or in any of the other Subscription Documents except for those expressly made by the Agent herein;

(b) makes no representation or warranty as to, and is not responsible in any way for:

(i) the financial condition of the Company;

(ii) the sufficiency of the security afforded by the Subscription Documents or whether registration in respect thereof has been properly effected or maintained;

(iii) the validity, genuineness, correctness, perfection, or priority of any Lien other than in respect of itself, subject to the Agent's representations herein, the validity, proper execution, enforceability, legality, or sufficiency of this Agreement or any Subscription Document; or

(iv) the identity, authority or right of any Holder or the Company executing any document;

and the Agent shall have no liability or responsibility in respect of any such matters, or for the filing or renewal of any registration of any security interest under the Debentures. The Agent shall not be required to ascertain or inquire as to the performance by the Company of any of its covenants or obligations hereunder or under any of the other Subscription Documents.

9. RELIANCE ON EXPERTS AND WRITINGS

The Agent shall be entitled and fully authorized to rely and act, and shall be fully protected in relying and acting, upon any writing, instruction, resolution, notice, consent, certificate, affidavit, letter, facsimile, email or other document believed by it to be genuine and correct and to have been signed or sent by, or on behalf of, the proper Person or Persons, and upon advice and statements of professionals (including, without limitation, counsel to the Holders), independent accountants and other experts selected by the Agent, the Company or the Holders. The Agent shall not have any duty to verify or confirm the content of any writing, instruction, resolution, notice, consent, certificate, affidavit, letter, facsimile, email or other document.

10. Addition of Holders

The Agent shall have no obligation to arrange for additional subscribers to subscribe for Debentures, lend money to the Company or otherwise extend credit to the Company.

11. RESIGNATION AND REMOVAL OF AGENT

11.1 Resignation or Removal

The Agent may resign on 90 days' prior written notice (or such shorter period as may be agreed to by the Majority Holders and the Agent) to the Holders, and may be removed for or without cause at any time by the Majority Holders. In the event of any resignation or removal of the Agent, the Majority Holders shall have the right to appoint a successor Agent, but, if the Majority Holders have not appointed a successor agent within 60 days after the retiring Agent's giving of notice of resignation or its removal, the retiring Agent shall, at the expense of the Holders, on behalf of the Holders either appoint a successor agent or apply to the appropriate court to make such appointment. Upon the acceptance of any appointment as an agent hereunder by a successor, to be evidenced by the successor agent's execution and delivery to the other parties hereto of a counterpart of this Agreement and a Joinder Agreement, such successor agent shall thereupon succeed to and become vested with all the rights, powers, privileges, duties and obligations of the retiring Agent, and the retiring Agent shall be discharged from any further duties and obligations as Agent, as appropriate, under this Agreement and the Subscription Documents.

11.2 Vesting

Upon the request of any successor agent, at the expense of the Company, the Holders, the Company and the predecessor Agent shall promptly execute and deliver such instruments, conveyances, and assurances reflecting terms consistent with the terms of this Agreement and the Debentures for the purpose of more fully and certainly vesting and confirming in such successor agent all rights, powers, duties, and obligations of the predecessor Agent hereunder and under the Debentures.

11.3 Successors

Any entity into which an Agent may be amalgamated, merged or with which it may be consolidated, or any entity resulting from any amalgamation, merger or consolidation to which an Agent shall be a party, shall be the successor of such Agent hereunder if legally bound hereby as such successor, without the necessity for execution or filing of any paper or any further act on the part of any of the parties hereto, anything to the contrary contained herein notwithstanding.

12. INDEMNITY

12.1 Indemnity by Holders

The Holders agree that they will indemnify the Agent rateably in accordance with the Rateable Benefit Percentage at the time such claim arises; provided that no Holder shall be liable to the Agent for all or any portion of such claims resulting from the Agent's gross negligence or intentional misconduct.

12.2 Survival

The obligations of the Holders under this Section 12 shall survive the payment in full of the Obligations, the resignation or removal of the Agent, and the termination of this Agreement.

13. AGENT'S FUNDS NOT AT RISK

For purposes of clarity, no provision of this Agreement or the Subscription Documents, and no request of any Holder or other Person, shall require the Agent to expend or risk any of the Agent's own funds, or to take any legal or other action under this Agreement or the Subscription Documents which might in its reasonable judgment involve any expense or any financial or other liability, unless the Agent shall be furnished with indemnification acceptable to it, acting reasonably, including the advance of funds sufficient in the judgment of the Agent to satisfy such liability, costs and expenses. For the avoidance of doubt, any and all costs and expenses incurred by the Agent in connection with this Agreement and the Subscription Documents shall be reimbursed by the Holders severally and jointly.

14. INDEPENDENT CREDIT DECISIONS

Each Holder acknowledges that it has, independently and without reliance upon the Agent or any other Holder, and based upon such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement and the Subscription Documents. Each Holder also acknowledges that it will, independently and without reliance upon either the Agent or any other Holder, and based upon such documents and information as it shall deem appropriate at the time, continue to make its own credit decisions in taking or not taking action hereunder or under the Subscription Documents.

15. DETERMINATION OF Holders and obligations

In determining the identity of Holders and Obligations outstanding thereto, the Agent may rely on the records of the Company, absent manifest error, and shall not be liable in any manner whatsoever to any Holder for any action taken in reliance of such records.

16. INTERLENDER PROVISIONS

16.1 Enforcement Action

Notwithstanding any provision or condition, express or implied, in the Subscription Documents or any other agreement, document or instrument, each Holder hereby irrevocably covenants to the Agent and each other that it will not exercise any Enforcement Rights it may have against the Company, or take or threaten to take any other enforcement action whatsoever with respect to the Company, except to the extent such Holder is acting or qualifies as the "Majority Holders" and is instructing the Agent.

16.2 Remedies

(a) The Holders hereby irrevocably agree that the Agent shall be authorized, upon receipt by it of an Enforcement Notice and until such time as the Event of Default described therein is cured or waived, and at the direction of the Majority Holders, for the purpose of carrying out the terms of this Agreement and the Debentures, to exercise any and all Enforcement Rights, which such Enforcement Rights the Holders hereby assign to the Agent to exercise pursuant to the terms of this Agreement, and to execute any and all documents and instruments that may be necessary or desirable to accomplish the purposes hereof and thereof.

(b) Upon the receipt of an Enforcement Notice, the Agent shall immediately provide a copy of such Enforcement Notice to all Holders.

16.3 Application of Proceeds

(a) The Holders, the Company and the Agent agree that: (i) if a Holder (a "**Receiving Party**") receives a payment (such payment, a "**Shared Payment**") following the delivery of a notice of a copy of an Enforcement Notice, until such time as the Agent confirms in writing to all Holders that the Event of Default described in the Enforcement Notice has been cured or waived by the Majority Holders, such Shared Payment shall be paid over to the Agent to be distributed as provided below; and (ii) if the Agent for any reason receives a Shared Payment or if the Agent otherwise receives any moneys in respect of the Obligations as a result of the exercise of Enforcement Rights or an insolvency proceeding or otherwise, the Agent shall treat such moneys as a Shared Payment to be distributed as provided below. Such obligation to pay over the Shared Payment shall apply regardless of whether the Shared Payment is paid directly by the Company as a payment in respect of any of the Obligations, obtained by means of a set-off, received as insurance or expropriation proceeds pursuant to any of the Subscription Documents, or paid as a distribution in any insolvency proceeding, but shall not apply to amounts received by operation of clauses First through Fifth of this Section 16.3 set out below. Shared Payments shall be applied by the Agent as follows:

First: to the payment of (i) all costs and expenses (including legal or other professional fees, currency conversion expenses and tax liabilities) incurred by the Agent in connection with the execution of its duties hereunder, including all such costs and expenses incurred in connection with the sale, collection or any Enforcement Rights taken in respect of any Subscription Document or in repayment of all monies borrowed by the Agent to pay such costs and expenses;

Second: to the Holders pro rata calculated using their respective Rateable Benefit Percentage constituting accrued and unpaid expenses owed to the Holders under the Subscription Documents;

Third: to the Holders pro rata calculated using their respective Rateable Benefit Percentage (other than the Obligations described in clause "Second") owed to the Holders under the Subscription Documents;

Fourth: to the payment of other obligations of the Company to any of the Holders which are not paid in accordance with the preceding subparagraphs, rateably in accordance with the respective amounts of such other obligations; and

Fifth after indefeasible payment in full of all Obligations, to the Company or upon the order of the Company, or to whomsoever may be lawfully entitled to receive the same or as a court of competent jurisdiction may direct, of any surplus then remaining from such amounts.

(b) For any distribution of monies pursuant to this Section 16.3 made to a Holder and denominated in a currency other than the currency in which such distribution is denominated, the Agent shall exchange the relevant portion of such distribution into the equivalent amount of the applicable currency based on exchange rates on the date of distribution.

16.4 Insurance and Expropriation Proceeds

If, at any time after an Event of Default has occurred and is continuing, the Agent receives or, at the time such Event of Default occurs, the Agent is otherwise holding, any insurance or expropriation proceeds pursuant to any of the Subscription Documents, the Agent shall hold all such amounts and distribute the same in accordance with Section 16.3 hereof.

17. COMPANY'S Acknowledgement and covenant

The Company hereby acknowledges and agrees to the terms and conditions of this Agreement including, without limitation, the appointment of the Agent and the interlender provisions set out in Section 17.

The Company hereby covenants that it will not issue any Debentures to any Person unless such Person executes and delivers a Joinder Agreement.

18. MISCELLANEOUS

18.1 Notices

Each notice and other communication provided for herein shall be in writing. A notice may be given by delivery to an individual or by email or by other means of electronic communication capable of producing a printed copy and will be validly given if delivered on a Business Day to an individual at the following address, or, if transmitted on a Business Day by email or other electronic communication addressed to the following party:

(a) If to the Agent:

[●]
[●]
[●]

Attention: [●]
Email: [●]

(b) If to the Holders:

As set out next to each Holder's name in Schedule A attached to this Agreement.

(c) If to the Company:

Quantum Biopharma Ltd.
55 University Avenue, Suite 1003
Toronto, Ontario, M5J 2H7

Attention: Zeeshan Saeed
Email: zsaeed@quantumbiopharma.com

or to any other address, fax number or individual that the party designates. Any notice:

(a) if validly delivered, will be deemed to have been given when delivered;

(b) if validly transmitted by fax (or other electronic transmission) before 3:00 p.m. (local time at the place of receipt) on a Business Day, will be deemed to have been given on that Business Day; and

(c) if validly transmitted by fax (or other electronic transmission) after 3:00 p.m. (local time at the place of receipt) on a Business Day, will be deemed to have been given on the Business Day after the date of the transmission.

18.2 Amendments

Neither this Agreement nor any of the Subscription Documents may be amended or waived except by a writing signed by the Majority Holders, the Agent and the Company.

18.3 Successors and Assigns

This Agreement shall be binding upon and inure to the benefit of the Agent and the Holders and their respective successors and assigns. If any Holder shall transfer the Obligations owing to it, it shall promptly so notify the Agent in writing. No Holder which transfers any Obligations owing to it shall transfer its benefits under the Subscription Documents without obtaining from the transferee and delivering to the Agent and the Holders, a Joinder Agreement and an executed acknowledgement of the transferee agreeing to be bound by the terms hereof to the same extent as if it had been a Holder on the date hereof. Each transferee of any Obligations shall take such Obligations subject to the provisions of this Agreement and to any request made, waiver or consent given or other action taken or authorized hereunder by each previous holder of such Obligations prior to the receipt by the Agent of written notice of such transfer; and, except as expressly otherwise provided in such notice, the Agent shall be entitled to assume conclusively that the transferee named in such notice shall thereafter be vested with all rights and powers as a Holder under this Agreement (and the Agent may conclusively assume that no Obligations have been subject to any transfer other than transfers of which the Agent has received such a notice). Upon the written request of any Holder, the Agent will provide such Holder with copies of any written notices of transfer received pursuant hereto.

18.4 Continuing Effectiveness

This Agreement shall continue to be effective among the Agent and the Holders even though a case or proceeding under any bankruptcy or insolvency law or any proceeding in the nature of a receivership, whether or not under any insolvency law, shall be instituted with respect to the Company or any portion of the property or assets of the Company, or by the Agent with regard to such proceeding shall be determined by the Majority Holders as provided for herein; provided, however, that nothing herein shall be interpreted to preclude any Holder from filing a proof of claim with respect to its Obligations or from casting its vote, or abstaining from voting, for or against confirmation of a plan of reorganization in a case of bankruptcy, insolvency or similar law in its sole discretion.

18.5 Further Assurances

The Company agrees to do such further acts and things and to execute and deliver such additional agreements, powers and instruments as any Holder or the Agent may reasonably request to carry into effect the terms, provisions and purposes of this Agreement or to better assure and confirm unto the Agent or any of the Holders its respective rights, powers and remedies hereunder.

18.6 Counterparts

This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument, and any of the parties hereto may execute this Agreement by signing any such counterpart. An emailed copy (or other electronic communication in PDF format) of the signature of any party on any counterpart shall be effective as the signature of the party executing such counterpart for purposes of effectiveness of this Agreement.

18.7 Effectiveness

This Agreement shall become effective immediately upon execution hereof by the Agent and the Holders, and upon execution and delivery by the Company of the Subscription Documents to which each is a party, and shall continue in full force and effect until the date on which the Obligations are paid in full.

18.8 Governing Law

All questions concerning the construction, validity, enforcement and interpretation of this Agreement will be governed by and construed and enforced in accordance with the laws of the Province of Ontario and the federal laws of Canada applicable therein, without regard to the principles of conflicts of law thereof.

18.9 Headings

Headings of sections of this Agreement have been included herein for convenience only and should not be considered in interpreting this Agreement.

18.10 No Implied Beneficiaries

Nothing in this Agreement, expressed or implied, is intended or shall be construed to confer upon or give to any Person other than the Holders and the Agent any right, remedy or claim under or by reason of this Agreement or any covenant, condition or stipulation herein contained.

18.11 Severability

If any provision of this Agreement shall be held or deemed to be, or shall in fact be, inoperative or unenforceable as applied in any particular case in any jurisdiction, or because it conflicts with any other provision or provisions hereof or with any constitution or statute or rule of public policy, or for any other reason, such circumstance shall not have the effect of rendering the provision in question inoperative or unenforceable in any other case or circumstance, or rendering any other provision herein contained invalid, inoperative or unenforceable to any extent whatsoever. Upon the determination that any term or other provision of this Agreement is invalid, illegal or incapable of being enforced, the parties hereto shall negotiate in good faith to modify this Agreement so as to give effect to their original intention as closely as possible in an acceptable manner to the end that the transactions contemplated hereby are fulfilled to the maximum extent possible.

18.12 Obligations Several

The obligations and representations and warranties of each of the Holders and the Agent herein are several. Nothing herein contained shall be construed as creating among the Holders a partnership, joint venture or other joint association.

18.13 Representations of Parties

Each of the parties hereto, severally and not jointly, represents and warrants to the other parties hereto that such party has all requisite power and capacity to execute, deliver and perform this Agreement and that the execution, delivery and performance of this Agreement has been duly authorized by all necessary action on the part of such party and that this Agreement constitutes the legal, valid and binding obligation of such party, enforceable against such party in accordance with its terms except as such enforceability may be limited by:

(a) bankruptcy, insolvency, reorganization or similar laws affecting the enforcement of Holders' rights generally; and

(b) general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or law).

18.14 Third Party Interests

Each party to this Agreement hereby represents to the Agent that any account to be opened by, or interest to held by the Agent in connection with this Agreement, for or to the credit of such party, either:

(a) is not intended to be used by or on behalf of any third party; or

(b) is intended to be used by or on behalf of a third party, in which case such party hereto agrees to complete and execute forthwith a declaration in the Agent's prescribed form as to the particulars of such third party.

18.15 Agent Not Bound to Act

The Agent shall retain the right not to act and shall not be liable for refusing to act if, due to a lack of information or for any other reason whatsoever, the Agent, in its sole judgment, determines that such act might cause it to be in non-compliance with any applicable anti-money laundering or anti-terrorist legislation, regulation or guideline, provided that it shall give written notice of such determination to each Holder. Further, should the Agent, in its sole judgment, determine at any time that its acting under this Agreement has resulted in its being in non-compliance with any applicable anti-money laundering or anti-terrorist legislation, regulation or guideline, then it shall have the right to resign on 10 days' written notice to the other parties to this Agreement, provided:

(a) that the Agent's written notice shall describe the circumstances of such non-compliance; and

(b) that if such circumstances are rectified to the Agent's satisfaction within such 10-day period, then such resignation shall not be effective.

18.16 No Contra Preferentum

The Parties acknowledge that their respective legal counsel have reviewed and participated in settling the terms of this Agreement and the Parties agree that any rule of construction to the effect that any ambiguity is to be resolved against the drafting Party will not be applicable in the interpretation of this Agreement. For certainty, the language in all parts of this Agreement will in all cases be construed as a whole and neither strictly for nor strictly against any of the Parties.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, each of the undersigned has caused this Agreement to be duly executed and delivered as of the date first above written.

AGENT

[●]

Per: /s/
Name: **[●]**
Title: **[●]**

Acknowledged, Agreed and Consented to by:

COMPANY

QUANTUM BIOPHARMA LTD.

Per: _____
Zeeshan Saeed
Chief Executive Officer

SCHEDULE A
LIST OF HOLDERS

Full name and residential address of Subscriber
[●]
[●]
[●]
[●]
[●]
[●]
[●]
[●]

The signature page for each of the Holders is attached hereto as Exhibit I to Schedule A.

EXHIBIT I
TO SCHEDULE A OF AGENCY AND INTERLENDER AGREEMENT
HOLDER SIGNATURE PAGES

Principal Amount of Debentures: $

[If Holder is a corporation, complete the following]

Print Name of Holder: _____

Signature of Authorized Signatory: _____

Print Name of Authorized Signatory: _____

Print Title of Authorized Signatory: _____

[If Holder is an individual, complete the following]

SIGNED in the presence of:

_____
Signature

_____
Print Name

_____
Address

_____

_____
Occupation

_____
Signature of Holder

Print Name of Holder:

Exhibit 8.1 – Subsidiaries.

Subsidiaries		
Name of Subsidiary	**State or Other Jurisdiction of Incorporation**	**Name Under Which the Subsidiary Transacts Business**
FSD Australia Pty Ltd.	Australia	
FSD BioSciences, Inc.	Delaware	
FSD Strategic Investments Inc.	Ontario, Canada	
FV Pharma Inc.	Ontario, Canada	
Huge Biopharma Australia Pty Ltd.	Australia	
Lucid Psycheceuticals Inc.	Ontario, Canada	
Prismic Pharmaceuticals, Inc.	Arizona	
Celly Nutrition Corp.	British Columbia, Canada	Celly Nutrition

EXHIBIT 11.1

INSIDER TRADING AND BLACKOUT PERIOD POLICY

Effective as of and from March 30, 2023

FSD PHARMA INC.

INSIDER TRADING AND BLACKOUT PERIOD POLICY

1.0 PURPOSE

FSD Pharma Inc. (the "**Company**") believes its employees, officers and directors may consider becoming shareholders of the Company on a long-term investment basis, if such an investment is appropriate for that individual.[1] Since Company Personnel (as defined below) may, from time to time, become aware of important corporate developments, significant plans or other material information before such matters are made public, the Company has established this Insider Trading and Blackout Period Policy (the "**Policy**") to assist such individuals in complying with applicable securities, criminal and other laws and stock exchange rules, including rules and regulations of the Canadian Securities Exchange (the "**CSE**"), the Nasdaq Stock Market (the "**Nasdaq**") and any other stock exchange upon which the Company's securities are traded from time to time (together with the CSE and the Nasdaq, the "**Exchanges**"), related to "insider trading", "tipping" and "recommending" (each as defined below) (collectively, "**securities laws**"). This Policy is also intended to help the Company's reporting insiders comply with additional securities law obligations.

In particular, each of the following is against the law, may expose applicable individuals to criminal, quasi-criminal, and regulatory prosecution or civil lawsuits, can harm their reputation, and/or could result in the termination of their employment or appointment with the Company:

(a) trading securities of the Company while in possession of information (i) that has not been generally disclosed and (ii) the disclosure of which would reasonably be expected to have a significant effect on the market price or value of any of the Company's securities or that would reasonably be expected to affect the decision of a reasonable investor to buy, sell or hold any of the Company's securities (known as "**insider trading**");

(b) subject to limited exceptions described in this Policy, disclosing such information to a third party before it has been generally disclosed (known as "**tipping**"); or

(c) subject to limited exceptions described in this Policy, recommending or encouraging a third party to purchase or sell the Company's securities while in possession of such information (known as "**recommending**").

[1] The Company strongly encourages each individual contemplating an investment in FSD Pharma Inc. to consult with their own financial and accounting advisors prior to committing to an investment. This is not an offer to sell or a solicitation of an offer to buy any securities of the Company. Before making any investment decision in FSD Pharma Inc., every potential investor is strongly encouraged to review the information disclosed by the Company in its public filings on SEDAR (which can be found here: https://www.sedar.com/FindCompanyDocuments.do) and EDGAR (which can be found here: https://www.sec.gov/edgar/browse/?CIK=1771885&owner=exclude), specifically, the Company's financial statements and notes thereto and the risk factors that are disclosed as part of the Company's Annual Report on Form 20-F, which may be updated from time to time. The Company's publicly disclosed filings can also be found on the Company's website (https://fsdpharma.com) under the "Investors" tab.

Anyone violating the securities laws is subject to personal liability and could face criminal and civil penalties, fines, or imprisonment as well as causing significant damage to the Company's reputation. Such actions can also be expected to result in a lack of confidence in the market for the Company's securities, harming both the Company and its shareholders (for which you could be held accountable).

This Policy is a general framework, designed to assist Company Personnel (as defined below) in understanding and not engaging in insider trading, tipping or recommending, or otherwise being perceived as having violated such prohibitions under applicable securities laws. However, Company Personnel have the ultimate responsibility for complying with applicable securities laws on their own and should obtain additional guidance, including independent legal advice, as may be appropriate for their own circumstances, recognizing that their actions will be viewed after the fact and with the benefit of hindsight.

Trading in securities of the Company, including without limitation the purchase and sale of shares and the exercise of stock options, by Company Personnel, must also avoid the appearance of impropriety, as well as remain in full compliance with securities laws. Accordingly, you must exercise good judgment when engaging in securities transactions and when relaying to others information obtained as a result of your employment with or other relationship to the Company. If you have any doubt whether a particular situation requires refraining from effecting a transaction in the Company's securities or sharing information with others, such doubt should be resolved in a manner that avoids the appearance of impropriety and you are encouraged to contact the Insider Trading Policy Administrator and seek independent legal advice where appropriate.

The Company's Board of Directors (the "**Board**") will designate one or more individuals from time to time as Insider Trading Policy Administrators for the purpose of administering this Policy. At the date hereof, the designated Insider Trading Policy Administrator is the Chief Financial Officer of the Company. This Policy has been reviewed and approved by the Board and will be reviewed periodically by the Company's Compensation, Nominating and Governance Committee. Any amendments to this Policy will be subject to approval by the Board.

2.0 APPLICATION

The following persons are required to observe and comply with this Policy:

(a) all directors, officers and employees of the Company or its subsidiaries;

(b) partnerships, trusts, corporations, limited liability companies, RRSPs and similar entities over which any of the above-mentioned individuals exercise control or direction; and

(c) any other individual or entity who may have material Inside Information (as defined below) about the Company.

For the purposes of this Policy, the persons listed above are collectively referred to as "**Company Personnel**".

Company Personnel should also be aware that while this Policy only applies to the foregoing persons, the laws underlying the procedures and restrictions set forth in this Policy are also generally applicable to, among others, associates of Company Personnel (such as family members who reside in the same home as any Company Personnel), persons retained by or engaged in business or professional activity with or on behalf of the Company or any of its subsidiaries (such as a consultant, independent contractor or adviser), and further insiders of the Company (such as 10% shareholders and their directors and officers) and, where applicable, Company Personnel may also be held responsible for actions by such persons.

Under this Policy, all references to "**trading**" in securities of the Company include:

(a) any sale or purchase of securities of the Company, including any exercise of stock options granted by the Company and, for greater certainty, any associated sale of securities to fund tax obligations or payment of any exercise price;

(b) any settlement of share units granted pursuant to any securities-based compensation arrangement of the Company; and

(c) any other derivatives-based or other transaction, agreement, arrangement or understanding, or material amendment or termination thereof, that has the effect of altering Company Personnel's economic exposure to the Company or that would be required to be reported in accordance with applicable laws or regulations (including National Instrument 55-104 – *Insider Reporting Requirements and Exemptions*, Part XXI of the *Securities Act* (Ontario) and the guidance in Staff Notice 55-312 – *Insider Reporting Guidelines for Certain Derivative Transactions (Equity Monetization)*); provided that, solely for such purposes, all Company Personnel shall be deemed to be reporting insiders.

3.0 INSIDE INFORMATION

"**Inside Information**" (also commonly referred to as material non-public information) generally means:

(a) information relating to a change in the business, operations or capital of the Company that would reasonably be expected to have a significant effect on the market price or value of the securities of the Company (which includes any decision to implement such a change by the Board or by senior management who believe that confirmation of the decision by the Board is probable);

(b) a fact that significantly affects, or would reasonably be expected to have a significant effect on, the market price or value of the securities of the Company; or

(c) any information that would reasonably be expected to affect the decision of a reasonable investor to buy, sell or hold securities of the Company;

in each case, which has not been generally disclosed to the public. Inside Information is considered to be "generally disclosed" when it has been publicly disclosed in a manner calculated to effectively reach the marketplace and public investors have been given a reasonable amount of time to analyze the information. Disclosure of this information will most often occur by way of press release but may be disclosed by other means in accordance with the Company's Corporate Disclosure Policy. Examples of information that may constitute Inside Information are set out in Schedule "A" attached hereto.

If you have any doubt whether certain information is "Inside Information" you should *not* trade or communicate such information.

It is the responsibility of any Company Personnel contemplating a trade in securities of the Company (or any discussion concerning the Company or its securities) to determine prior to such trade (or discussion) whether they are aware of any information that constitutes Inside Information. It is not always clear what information constitutes Inside Information and may depend on each particular circumstance. If in doubt, the individual should consult with the Insider Trading Policy Administrator.

4.0 PROHIBITED AND RESTRICTED ACTIVITIES

4.1 Insider Trading

You must not engage in transactions in any securities, whether of the Company or of any other companies, while in possession of Inside Information regarding such company or securities, including engaging in transactions in any securities of companies with which the Company does business, or may do business.

Company Personnel with the knowledge of Inside Information must not trade in securities of the Company until:

(a) the completion of one full trading day after the Inside Information is first publicly disclosed (e.g., by press release) in a manner calculated to effectively reach the marketplace; or

(b) the Inside Information ceases to be material and Company Personnel are so advised by the Insider Trading Policy Administrator (e.g. a potential transaction that was the subject of the information is abandoned).

Notwithstanding (b) above, you may exercise stock options granted under the Company's stock option plan for cash, but the sale of any shares issued on the exercise of Company-granted stock options are subject to the foregoing prohibition. Notwithstanding item (c) above, regular purchases (or sales) in accordance with a previously approved automated trading plan are exempt from the foregoing prohibition; however, starting, stopping, or making changes to your Pre-Approved Trading Plan (defined below), is prohibited during any period of time you are in possession of Inside Information about the Company (and during certain other periods).

In addition, Company Personnel must not make any trades in securities of the Company during the Blackout Periods described in this Policy.

4.2 Tipping and Recommending

You must not disclose Inside Information or other confidential information relating to the Company, its subsidiaries or other companies, when obtained in the course of service to the Company, to anyone, inside or outside of the Company (including family members), except on a strict need-to-know basis as is necessary in the course of the Company's business, compelled by law or otherwise in accordance with the Company's Corporate Disclosure Policy and under circumstances that make it reasonable to believe that the information will not be misused or improperly disclosed by the recipient. You must treat all information concerning the Company, other than the Company's previous public disclosures in its securities filings, in press releases or on its website, as confidential and proprietary to the Company. Any uncertainty concerning the disclosure of any such information to other persons in the course of the Company's business should be immediately brought to the attention of the Insider Trading Policy Administrator for resolution.

Company Personnel with knowledge of Inside Information shall not recommend or encourage any other person to trade in the securities of the Company (other than as required in the necessary course of business), regardless of whether the Inside Information is specifically communicated by Company Personnel to such person. If any Company Personnel has any doubt with respect to whether any information is Inside Information or whether disclosure of Inside Information, or recommending or encouraging trading in Company securities, is in the necessary course of business, the individual is required to contact the Insider Trading Policy Administrator.

Both the person who provides the information and the person who receives the information are liable under securities laws if the person who receives the information trades in securities based on the provided non-public information. Discussing Inside Information within the hearing of, or leaving it exposed to, any person who has no need to know is to be avoided at all times.

4.3 Trading During Blackouts

You must not, directly or indirectly, trade in securities of the Company during any Blackout Period (as described below), subject to the pre-clearance exemption described in Section 5.0 below.

4.4 Hedging Transactions

You must not engage in hedging transactions. Certain forms of hedging or monetization transactions, such as zero-cost collars and forward sale contracts, allow an employee to lock in much of the value of his or her shareholdings, often in exchange for all or part of the potential for upside appreciation in the shares. These transactions allow you to continue to own the covered securities, but without the full risks and rewards of ownership. When that occurs, you may no longer have the same objectives as the Company's other shareholders. Therefore, you are prohibited by this Policy from engaging in any such hedging transactions.

4.5 Margin Accounts and Pledges

You must not hold securities of the Company in a margin account or pledge Company securities as collateral. Securities held in a margin account may be sold by the broker without the customer's consent if the customer fails to meet a margin call. Similarly, securities pledged (or hypothecated) as collateral for a loan may be sold in foreclosure if the borrower defaults on the loan. Because a margin sale or foreclosure sale may occur at a time when the pledgor is aware of Inside Information or otherwise is not permitted to trade in Company securities, you are prohibited from holding Company securities in a margin account or pledging Company securities as collateral for a loan.

4.6 Securities of Other Companies

In the course of the Company's business, Company Personnel may obtain information about another publicly-traded issuer that has not been generally disclosed by that other issuer to the public, including such an issuer in respect of which the Company is considering or evaluating whether, or proposing, to (a) engage in a material business transaction, (b) make a take-over bid, (c) become a party to a reorganization, amalgamation, merger, arrangement or similar business combination or (d) acquire a substantial portion of the property. The restrictions set out in this Policy apply to all Company Personnel with respect to trading in the securities of another issuer while in possession of such information, communicating such information to any person, and recommending or encouraging any person to trade in securities of such other publicly-traded issuer, whether such issuer's securities are publicly-traded within Canada, the United States or otherwise.

5.0 BLACKOUT PERIODS

The Company reserves the right to restrict trading by directors, officers, employees and agents in securities of the Company. Such restriction is generally referred to as a "**Blackout Period**" and is in place when there is, or is potential for, a significant event pending or there is potentially Inside Information.

The "**Blackout Period**" is:

(a) for quarterly financial results, the period beginning at the end of the trading day that is two (2) weeks prior to the end of the quarter and ending at the end of the first full trading day after the financial results are publicly disclosed. This Blackout Period applies to all Company Personnel;

(b) for annual financial results, the period beginning at the end of the trading day that is two (2) weeks prior to the end of the fiscal year and ending at the end of the first full trading day after the annual financial results are publicly disclosed. This Blackout Period applies to all Company Personnel;

(c) for news releases containing material information, other than financial results, the period beginning at the end of the trading day that is one (1) week prior to the date of such announcement (or, if later, the date such information first comes to the attention of the Company) and ending at the end of the first full trading day immediately following the date of the announcement. This Blackout Period applies to all directors and officers and other employees as determined by senior management; or

(d) any other time and for any length of time as deemed necessary by the Company Personnel responsible for public disclosure under the Company's Corporate Disclosure Policy. In such circumstances, the Insider Trading Policy Administrator

will issue a notice instructing the affected individuals not to trade in securities of the Company until further notice. This notice will contain a reminder that the fact that there is a restriction on trading may itself constitute Inside Information or information that may lead to rumours and must be kept confidential.

Where Company Personnel wishes to trade during the periods referenced in (a) or (b), above, he or she must seek the prior approval of the Board. If the Board is satisfied, in its sole discretion, that such trade would not constitute a trade while in possession of Inside Information (if, e.g., the financial information not yet disclosed is limited to previously disclosed ordinary course expenses), then the Board may grant an exemption in respect of such trade.

All efforts will be made to advise of Blackout Periods as soon as possible; however, it is your responsibility to ensure that you are not in violation of the prohibition against trading during a Blackout Period by pre-clearing transactions with the Insider Trading Policy Administrator in accordance with this Policy. If the Company Personnel seeking such pre-clearance is the Insider Trading Policy Administrator, then such pre-clearance shall be sought from the Chairman of the Board.

Notwithstanding the above, Company Personnel are never permitted to trade with knowledge of any Inside Information, regardless of whether or not there is a Blackout Period in effect.

5.1 NO STANDING ORDERS OR DISCRETIONARY AUTHORITY

In order to avoid inadvertent conflict with this Policy and contravention of applicable securities laws, Company Personnel should not place standing orders (e.g., "limit" orders) with a broker to trade in Company securities, unless such instructions are made in compliance with securities laws and guidance concerning automatic trading plans and the applicable Company Personnel has informed the Company of any such automatic trading plan prior to its implementation. Standing orders leave Company Personnel without any control over the timing of the transaction, which could be executed by the broker when the Company Personnel is aware of Inside Information. Similarly, Company Personnel are also cautioned not to provide others (such as brokers) with discretion to make purchases or dispositions of Company securities on behalf of Company Personnel, as for securities law purposes such trades are considered to be those of the Company Personnel.

6.0 PRE-APPROVED TRADING PLANS

Notwithstanding any of the prohibitions contained in this Policy, Company Personnel may trade in Company securities at any time pursuant to a trading plan (e.g., an automatic securities purchase plan) that has been properly adopted and is properly administered in accordance with National Instrument 55-104 - *Insider Reporting Requirements and Exemptions* (a "**Pre-Approved Trading Plans**"). All adopted Pre-Approved Trading Plans must comply with all applicable policies established by the Company, in addition to complying with securities laws.

The rules applicable to Pre-Approved Trading Plans are complex and technical in nature, so you should not employ a Pre-Approved Trading Plan without obtaining advice from independent legal counsel. A Pre-Approved Trading Plan may not be adopted at any time when you are aware of Inside Information or are subject to a Blackout Period (or during certain other periods).

The Company reserves the right to consider and determine whether public announcement of a Pre- Approved Trading Plan should be made.

7.0 INSIDER REPORTING OBLIGATIONS

The directors, certain officers and certain other employees of the Company and its subsidiaries are "**Reporting Insiders**" under applicable securities laws. Reporting Insiders are required to file reports (generally within five calendar days) of any direct or indirect beneficial ownership of, or control or direction over, securities of the Company and of any change in such ownership, control or direction with Canadian securities regulatory authorities pursuant to the electronic filing system known as SEDI. Additional reports may be required by other applicable governmental or regulatory authorities or Exchanges. In addition, Reporting Insiders must also file reports in respect of interest in, or right or obligation associated with, a related financial instrument (i.e., a derivative) involving a security of the Company, as well as any monetization transaction, secured loan with recourse limited to securities of the Company, or similar arrangement, trade or transaction that changes the Reporting Insider's economic exposure to or interest in securities of the Company, which may not necessarily involve a purchase or sale.

The Company will assist any Reporting Insider in the preparation and filing of insider reports upon a timely request, however, you are personally responsible (and not the Company or its advisors) for compliance with reporting requirements under applicable securities laws. Reporting Insiders are required to provide the Insider Trading Policy Administrator with a copy of any insider report completed by the Reporting Insider concurrent with or in advance of its filing.

A person that is uncertain as to whether they are a Reporting Insider of the Company or whether they may be eligible to be exempted from these requirements should contact the Insider Trading Policy Administrator. Reporting Insiders who are exempted from these requirements remain subject to all of the other provisions of applicable securities law and this Policy.

8.0 COMPLIANCE

Your actions with respect to matters governed by this Policy are significant indications of your judgment, ethics, and competence. Any actions in violation of this Policy may be grounds for disciplinary action, up to and including immediate dismissal, as well as exposure to civil and criminal liability.

9.0 REVIEW OF POLICY

This Policy shall be reviewed periodically by the Company's Compensation, Nominating, and Governance Committee to determine whether the Policy is effective. Any amendments to this Policy shall be subject to approval by the Board.

10.0 QUERIES

If you have any questions about how this Policy should be followed in a particular case, please contact the Insider Trading Policy Administrator.

11.0 APPROVAL

Adopted by the Board as of March 30, 2023

SCHEDULE "A"

Common Examples of Potential Inside Information

The following examples are not exhaustive.

- the success or failure of any preclinical clinical study or trial for any product candidate
- any material adverse patient health event involving a product candidate
- any event questioning the safety or effectiveness of any product candidate
- the success or failure of a product candidate in meeting any regulatory milestone
- any failure to obtain desired payment coverage for any product candidate
- any material contract or agreement
- proposed major reorganizations, amalgamations, or mergers
- proposed significant public or private sale of additional securities
- planned significant repurchases or redemptions of securities
- planned stock splits or offerings of warrants or rights to buy shares
- proposed share consolidation, share exchange, or stock dividend
- proposed significant acquisitions or dispositions of assets or subsidiaries
- proposed significant acquisitions of other companies
- bankruptcy or receivership
- changes to executive management or control of the company
- commencement of, or developments in, material legal proceedings or regulatory matters
- proposed listing or de-listing of company securities on a quotation system or exchange
- pending change in the company's auditors
- results of the submission of matters to a vote of securityholders
- borrowing or lending of a significant amount of money outside the ordinary course of business
- defaults under material obligations, agreements to restructure debt, or planned enforcement procedures by a bank or any other creditors
- significant new credit arrangements
- a major cybersecurity incident
- any other development that significantly affects or is reasonably expected to significantly affect the company's financial condition, financial performance, cash flows or objectives

EXHIBIT 12.1

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Zeeshan Saeed, certify that:

1. I have reviewed this annual report on Form 20-F of Quantum BioPharma Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditor and the audit committee of the company's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 27, 2025

By: /s/ Zeeshan Saeed
Zeeshan Saeed
CEO, President and Co-Executive Chairman
(Principal Executive Officer)

EXHIBIT 12.2

CERTIFICATION REQUIRED BY RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Donal Carroll certify that:

1. I have reviewed this annual report on Form 20-F of Quantum BioPharma Ltd.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the company as of, and for, the periods presented in this report;

4. The company's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the company and have:

    a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

    b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

    c) Evaluated the effectiveness of the company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

    d) Disclosed in this report any change in the company's internal control over financial reporting that occurred during the period covered by the annual report that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting; and

5. The company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the company's auditor and the audit committee of the company's board of directors (or persons performing the equivalent functions):

    a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the company's ability to record, process, summarize and report financial information; and

    b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the company's internal control over financial reporting.

Date: March 27, 2025

By: /s/ Donal Carroll
Donal Carroll
Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 13.1

CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 20-F of Quantum BioPharma Ltd. (the "Company") for the period ended December 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Zeeshan Saeed, Chief Executive Officer, President and Co-Executive Chairman of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 27, 2025

By: /s/ Zeeshan Saeed
Zeeshan Saeed
CEO, President and Co-Executive Chairman
(Principal Executive Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 13.2

CERTIFICATION PURSUANT TO
18 U.S.C. §1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 20-F of Quantum BioPharma Ltd. (the "Company") for the period ended December 31, 2024, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Nathan Coyle, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in this Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 27, 2025

By: /s/ Donal Carroll
Donal Carroll
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

QUANTUM BIOPHARMA LTD. (FORMERLY, FSD PHARMA INC.)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

As used in this management's discussion and analysis of financial condition and results of operations (this "MD&A"), unless the context indicates or requires otherwise, all references to the "Company", "Quantum", "Quantum BioPharma", "we", "us" or "our" refer to Quantum BioPharma Ltd., together with our subsidiaries, on a consolidated basis as constituted on December 31, 2024.

This MD&A for the three months and years ended December 31, 2024, 2023 and 2022 should be read in conjunction with the Company's audited consolidated financial statements and the accompanying notes for the years ended December 31, 2024, 2023 and 2022 (the "financial statements"). The financial information presented in this MD&A is derived from the financial statements which have been prepared in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board. All amounts are in United States dollars except where otherwise indicated.

This MD&A is dated as of March 27, 2025.

About Quantum BioPharma Ltd.

Quantum BioPharma is a biopharmaceutical company dedicated to building a portfolio of innovative assets and biotech solutions for the treatment of challenging neurodegenerative, inflammatory and metabolic disorders and alcohol misuse disorders with drug candidates ("Product Candidates") in different stages of development. Through Lucid, the Company is currently focused on the R&D of its lead compound, Lucid-MS (formerly Lucid-21-302). Lucid-MS is a patented new chemical entity shown to prevent and reverse myelin degradation, the underlying mechanism of multiple sclerosis, in preclinical models. The Company has also licensed unbuzzd™, a proprietary formulation of natural ingredients, vitamins, and minerals to help with liver and brain function for the purposes of quickly relieving individuals from the effects of alcohol consumption, to Celly Nu and Celly U.S., and is entitled to a royalty on the revenue generated by Celly Nu and Celly U.S. from sales of products created using the technology rights granted under the Celly Nu IP License Agreement. Further, the Company is also focused on the R&D of novel formulations for the treatment of alcohol misuse for application in hospitals and other medical practices.

In addition, the Company maintains a portfolio of strategic residential investments through its wholly owned subsidiary, FSD Strategic Investments, which is focused on generating returns and cashflow through the issuance of loans secured by residential real estate property, with FSD Strategic Investments having a first or second collateral mortgage on the secured property.

Finally, the Company has expanded its corporate treasury management function to include investments in cryptocurrencies. This initiative is aligned with the Company's financial diversification goals and supports its long-term strategic objectives.

On August 15, 2024, the Company consolidated its class A multiple voting shares ("Class A Multiple Voting Shares") and class B subordinate voting shares ("Class B Subordinate Voting Shares"), on a 65:1 basis and changed its name to "Quantum BioPharma Ltd." with a new trading symbol "QNTM" on both the Nasdaq Stock Market LLC ("Nasdaq") and Canadian Securities Exchange (the "CSE") stock exchanges.

The Class B Subordinate Voting Shares are "restricted securities" within the meaning of such term under applicable Canadian securities laws, as these securities do not carry equal voting rights as compared with the Class A Multiple Voting Shares. For more information, please see the section entitled "*Outstanding Share Data*".

FORWARD-LOOKING INFORMATION

This MD&A contains forward-looking statements and forward-looking information (collectively, "forward-looking statements") within the meaning of applicable securities laws. Any statements that are contained in this MD&A that are not statements of historical fact may be deemed to be forward-looking statements. Forward-looking statements are often identified by terms such as "plans", "expects", "expected", "scheduled", "estimates", "intends", "anticipates", "hopes", "planned" or "believes", or variations of such words and phrases, or states that certain actions, events, or results "may", "could", "would", "might", "potentially" or "will" be taken, occur or be achieved. More particularly, and without limitation, this MD&A contains forward-looking statements contained in this MD&A include statements concerning the future of Quantum and are based on certain assumptions that Quantum has made in respect thereof as of the date of this MD&A. Quantum cannot give any assurance that such forward-looking statements will prove to have been correct.

Since forward-looking statements relate to future events and conditions, by their very nature they require making assumptions and involve inherent risks and uncertainties. The Company cautions that although it believes the expectations and material factors and assumptions reflected in these forward-looking statements are reasonable as of the date hereof, there can be no assurance that these expectations, factors and assumptions will prove to be correct, and these risks and uncertainties give rise to the possibility that actual results may differ materially from the expectations set out in the forward-looking statements. These forward-looking statements are not guarantees of future performance and are subject to a number of known and unknown risks and uncertainties including, but not limited to: the fact that the drug development efforts of both Lucid and FSD BioSciences Inc. ("FSD Biosciences") are at a very early stage; the fact that preclinical drug development is uncertain, and the drug product candidates of Lucid and FSD BioSciences may never advance to clinical trials; the fact that results of preclinical studies and early-stage clinical trials may not be predictive of the results of later stage clinical trials; the uncertain outcome, cost, and timing of product development activities, preclinical studies and clinical trials of Lucid and FSD BioSciences; the uncertain clinical development process, including the risk that clinical trials may not have an effective design or generate positive results; the potential inability to obtain or maintain regulatory approval of the drug product candidates of Lucid and FSD BioSciences; the introduction of competing drugs that are safer, more effective or less expensive than, or otherwise superior to, the drug product candidates of Lucid and FSD BioSciences; the initiation, conduct, and completion of preclinical studies and clinical trials may be delayed, adversely affected, or impacted by COVID-19 related issues; the potential inability to obtain adequate financing; the potential inability to obtain or maintain intellectual property protection for the drug product candidates of Lucid and FSD BioSciences; and other risks. Accordingly, readers should not place undue reliance on the forward-looking statements contained in this MD&A, which speak only as of the date of this MD&A.

Further information regarding factors that may cause actual results to differ materially are included in the Company's annual and other reports filed from time to time with the Canadian Securities Administrators on SEDAR+ (www.sedarplsu.ca) and with the U.S. Securities and Exchange Commission on EDGAR (www.sec.gov), including the Company's Annual Report on Form 20-F for the fiscal year ended December 31, 2024, under the heading "Risk Factors." This list of risk factors should not be construed as exhaustive. Readers are cautioned that events or circumstances could cause results to differ materially from those predicted, forecasted or projected. The forward-looking statements contained in this document speak only as of the date of this document. Quantum does not undertake any obligation to publicly update or revise any forward-looking statements or information contained herein, except as required by applicable laws. The forward-looking statements contained in this document are expressly qualified by this cautionary statement. Additional information relating to Quantum can be found on SEDAR+ at www.sedarplus.ca and on EDGAR at www.sec.gov.

OVERVIEW

1. Corporate Structure

Effective November 1, 1998, pursuant to the amalgamation of Olympic ROM World Inc., 1305206 Ontario Company, 1305207 Ontario Inc., Century Financial Capital Group Inc. and Dunberry Graphic Associates Ltd. in accordance with the provisions of the OBCA, the Company was formed.

Effective May 24, 2018, following receipt of shareholder approval at the March 15, 2018 annual and special meeting of the proposed amendments to the Company's articles, and pursuant to the articles of amendment, the Company changed its name to "FSD Pharma Inc." and the capital structure of the Company was reorganized to create a new class of Class A multiple voting shares (the "Class A Multiple Voting Shares"), amended the terms of and re-designated the existing common shares as Class B subordinate voting shares (the "Class B Subordinate Voting Shares"), and eliminate the existing non-voting class A preferred shares and non-voting class B preferred shares.

Effective May 29, 2018, the Class B Subordinate Voting Shares commenced trading on the CSE under the trading symbol "HUGE".

Effective October 16, 2019, the Company completed a 201:1 consolidation.

On January 9, 2020, the Class B Subordinate Voting Shares commenced trading on the Nasdaq under the trading symbol "HUGE".

On August 15, 2024, the Company completed the 2024 Consolidation and changed its name to "Quantum BioPharma Ltd.". In connection with the name change, the Company's trading symbol was changed to "QNTM" on both the Nasdaq and CSE.

The Company's principal office is located at 55 University Avenue, Suite 1003, Toronto, Ontario, M5J 2H7, Canada, and its telephone number is +1-833-571-1811. As at the date of this Annual Report, the Company is a reporting issuer in each of the provinces and territories of Canada. The Company's registrar and transfer agent is Marrelli Trust Company Limited. The Company's agent for service in the United States is CT Company, 28 Liberty Street, New York, New York 10005.

2. Business Segments

Quantum BioPharma operates through three core segments: biopharmaceutical innovation, strategic residential investments, and cryptocurrency holdings. Within biopharmaceuticals, the company focuses on two key areas: (1) alcohol misuse disorder, including the retail product *unbuzzd*™, which is a consumer-facing dietary supplement for alcohol recovery and clinical-stage healthcare solutions for emergency settings, and (2) neurodegenerative therapeutics, led by *Lucid-MS*, a first-in-class drug candidate for progressive multiple sclerosis currently advancing toward Phase 2 trials. The Company also maintains selective R&D programs for inflammatory diseases (*FSD-PEA*) and depression (*Lucid-PSYCH*), though these initiatives remain secondary priorities.

Additionally, through its subsidiary FSD Strategic Investments, the company generates cash flow via secured residential real estate loans in the Greater Toronto Area, adhering to strict underwriting criteria. Finally, as part of its treasury strategy, Quantum BioPharma holds a diversified portfolio of cryptocurrencies to align with long-term financial diversification goals.

As of the date hereof, the Company currently has the following subsidiaries:

(i) FSD BioSciences Inc. ("FSD Biosciences"), which is wholly owned by the Company and incorporated under the laws of the State of Delaware;

(ii) Prismic Pharmaceuticals Inc. ("Prismic"), which is wholly owned by the Company and incorporated under the laws of the State of Arizona;

(iii) FV Pharma Inc. ("FV Pharma"), which is wholly owned by the Company and incorporated under the OBCA;

(iv) Lucid Psycheceuticals Inc. ("Lucid"), which is wholly owned by the Company and incorporated under the OBCA;

(v) FSD Strategic Investments Inc. ("FSD Strategic Investments"), which is wholly owned by the Company and incorporated under the OBCA;

(vi) FSD Pharma Australia Pty Ltd. ("FSD Australia"), which is wholly owned by the Company and incorporated under the laws of Australia;

(vii) Celly Nutrition Corp. ("Celly Nu") or ("Celly"), an entity controlled by the Company and incorporated under the British Columbia Business Corporations Act; and

(viii) Huge Biopharma Australia Pty Ltd ("Huge Biopharma"), which is wholly owned by the Company and incorporated under the laws of Australia.

IMPORTANT EVENTS IN THE DEVELOPMENT OF THE COMPANY'S BUSINESS IN FISCAL YEAR 2024 TO THE DATE OF THIS MD&A REPORT.

January 4, 2024: the registration statement on Form F-3 (File No. 333-276264) filed under the Securities Act with the SEC containing a base shelf prospectus with the SEC on December 22, 2023 (the "**U.S. Base Prospectus**") was declared effective (the "**January 2024 Registration Statement")**. The January 2024 Registration Statement also qualifies the offer, issue and sale, from time to time of Securities up to an aggregate amount of US$50,000,000, subject to limitations, as applicable, under Form F-3. The January 2024 Registration Statement is available for use by the Company until January 4, 2027. The terms of any Securities to be offered under the January 2024 U.S. Base Prospectus will be specified in a prospectus supplement, which will be filed with the SEC in connection with any such offer.

January 8, 2024: the United States District Court for the Southern District of Florida (the "**S.D. Fla.**") dismissed the Company's request for a motion to dismiss the complaint filed against it by GBB.

January 24, 2024: the Company entered into an agreement with SBS Intl Group LLC. ("**SBS**") to assist the Company in enhancing its market awareness and foster productive, continuing dialogues with Shareholders and other market participants. The agreement granted SBS 1,539 Options with an exercise price of C$68.25 and expiry date of January 24, 2026. As of the date of this report, this agreement has been terminated, and all share based compensation forfeited.

January 24, 2024: the Company entered into an agreement with Draper, Inc. ("**Draper**") and Carriage House Capital, Corp. ("**Carriage House**") to assist the Company in enhancing its market awareness and foster productive, continuing dialogues with Shareholders and other market participants. The agreement granted Draper and Carriage 5,385 Options each with the exercise price of C$68.25 and expiry date of January 24, 2026. As of the date of this report, this agreement has been terminated, and all share based compensation forfeited.

January 29, 2024: the Company appointed Dr. Sanjiv Chopra, MD to the Board to replace Nitin Kaushal.

February 6, 2024: the Court of Appeal for Ontario ("**ONCA**") affirmed the ONSC's judgement in the amount of C$2.8 million plus C$175,000 against Dr. Raza Bokhari. An additional C$5,000 in costs was awarded to the Company by the ONCA in respect of Dr. Raza Bokhari's failed motion for leave to appeal.

February 6, 2024: the Company incorporated Huge Biopharma to conduct research related to Lucid-MS in Australia.

February 11, 2024: the Company engaged MZHCI, LLC, an MZ Group Company ("**MZ**") to lead a comprehensive strategic investor relations and financial communications program across all key markets (the "**MZ Agreement**"). Pursuant to the MZ Agreement, MZ is paid US$10,000 per month. Either party has the right to terminate the MZ Agreement upon fifteen days' notice. As of the date of this Annual Report, the MZ Agreement remains in effect.

February 16, 2024: the Company entered into an at-the-market offering agreement (the "**ATM Agreement**") with H.C. Wainwright & Co., LLC ("**Wainwright**"), pursuant to which the Company, at its discretion, may offer and sell, from time to time, through Wainwright as sales agent, Class B Subordinate Voting Shares, having an aggregate offering price of up to US$11,154,232 (the "**ATM Offering**"). A cash commission of 3.0% on the aggregate gross proceeds raised under the ATM Offering is payable to Wainwright in connection with its services. The ATM Offering was made in the United States pursuant to the January 2024 Registration Statement and the prospectus supplement dated February 16, 2024, and as amended pursuant to the Amendment No. 1 to the prospectus supplement dated August 26, 2024 (together with January 2024 **Registration Statement**, the "**ATM U.S. Prospectus**") filed with the SEC.

- Sales of the Class B Subordinate Voting Shares under the ATM U.S. Prospectus will and have been made in transactions that are deemed to be "at-the-market" offering as defined in Rule 415(a)(4) promulgated under the Securities Act of 1933, as amended, (the "**Securities Act**") including sales made directly on or through the Nasdaq. The Class B Subordinate Voting Shares will be distributed at the prevailing market prices at the time of each sale. As a result, prices may vary between purchasers and during the period of distribution. No Class B Subordinate Voting Shares in the ATM Offering will be sold on the CSE or any other trading market in Canada.
- The volume and timing of sales, if any, will be determined at the sole discretion of the Company's management and in accordance with the terms of the ATM Agreement. If the Company chooses to sell Class B Subordinate Voting Shares under the ATM Offering, the Company intends to use the net proceeds of the ATM Offering (i) to fund various clinical studies, trials and development programs, (ii) to fund R&D, and (iii) for general corporate purposes and working capital.
- From February 16, 2024, through December 31, 2024, the Company sold an aggregate of 1,384,781 Class B Subordinate Voting Shares on a post-consolidation basis, pursuant to the ATM U.S. Prospectus for gross proceeds of approximately US$ 11,746,730.

February 19, 2024: Huge Biopharma entered into an agreement with Ingenu to conduct the METAL-1 TRIAL.

February 28, 2024: the Company announced the settlement of an aggregate of US$492,135 of amounts owing to arm's length creditors through the issuance of 8,385 Class B Subordinate Voting Shares at the deemed price of US$0.903 per Class B Subordinate Voting Share**.**

March 11, 2024: the Company submitted a CTA for a planned Phase-1b clinical trial for the METAL-1 TRIAL.

March 26, 2024: Huge Biopharma entered into agreement with Ingenu to conduct a trial in connection with Lucid-21-302.

March 31, 2024: the principal amount of the Celly Nu Loan (as defined herein) was increased by C$300,000.00, pursuant to the Celly Nu Amended Loan Agreement (as defined herein). No retroactive interest was to be charged on the increased amount. Thus, the total principal amount equates to C$1,300,000.00 as of December 31, 2024. The interest rate per annum remained unchanged.

April 5, 2024: the Company received a written notification (the "**April 2024 Nasdaq Notification Letter**") from Nasdaq that the Company was not in compliance with the minimum bid price requirement set forth in Nasdaq's Listing Rule rules for continued listing on the Nasdaq. The April 2024 Nasdaq Notification Letter was a deficiency notice, not a delisting notice, and did not affect the trading of the Class B Subordinating Voting Shares. Nasdaq Listing Rule 5550(a)(2) requires securities listed on Nasdaq to maintain a minimum bid price of US$1.00 per share, and Listing Rule 5810(c)(3)(A) provides that a failure to meet the minimum bid price requirement exists if the deficiency continues for a period of 30 consecutive business day. The Class B Subordinate Voting Shares traded at a price of less than $1.00 per share for 30 consecutive business days between from February 22 to April 4, 2024. The Company was given until October 2, 2024, to regain compliance by maintaining a closing bid price of at least $1.00 for 10 consecutive business days. The Company regained compliance on September 6, 2024.

April 22, 2024: Celly U.S. announced its collaboration with BevSource.

April 24, 2024: the Company entered into an agreement with ASPI in Tampa, Florida, to conduct the METAL-2 TRIAL.

April 25, 2024: Celly U.S. announced its partnership with Six+One.

May 7, 2024:
the Company announced the submission to HREC of for a trial in connection with Lucid-MS.

May 16, 2024: Celly Nu launched its newly designed packaging and logo.

May 22, 2024: the Company entered into an investor relations services agreement with IR Agency LLC ("**IR Agency**"). Pursuant to the agreement, IR Agency agreed to communicate information about the Company to the financial community including, but not limited to, creating company profiles, media distribution and building a digital community with respect to the Company for a period of one month beginning on May 28, 2024, in exchange for a fee of US$245,000. At the date of this report, the Company discontinued its engagement with IR Agency.

May 28, 2024: the Company submitted a clinical trial protocol for its METAL-2 TRIAL.

June 11, 2024: the Company entered into an option agreement with the University of Southern California ("**USC**") to evaluate dietary supplement technology for commercialization (the "**USC Agreement**"). The USC Agreement allowed the Company to exclusively evaluate its novel technology for a 6-month term. At the end of this USC Agreement, the Company decided not to extend the USC Agreement.

June 27, 2024: the Company received approval from HREC for its trial in connection with Lucid 21-302.

June 27, 2024: the United States District Court for the Eastern District of Pennsylvania granted judgement in favor of the Company in its case against Dr. Raza Bokhari.

June 28, 2024: the Company retained the services of Totaligent, Inc. ("**Totaligent**"), a market awareness firm with 25 years of experience and a 32-million investor database, for a 30-day contract valued at US$30,000, ending July 28, 2024, unless renewed, with both parties maintaining a 5-day termination notice option. As at today's date, the Company discontinued its engagement with Totaligent.

August 13, 2024: the Company entered into an agreement with Ingenu to conduct a clinical study to observe and quantify disease progression in patients with primary progressive multiple sclerosis. This study will facilitate a future phase 2 clinical trial with Lucid-MS. This agreement is still in place.

August 14, 2024: the Celly IP Nu IP License Agreement (i) was amended to add Celly U.S., as a licensee to the Celly Nu IP License Agreement, effective as of the August 14, 2024, and granted Celly U.S. exclusive global rights to commercialize the Licensed IP (as defined herein) from August 14, 2024, (ii) noted that Celly Nu became the sole and exclusive owner of the unbuzzd™ trademark pursuant to an intellectual property purchase agreement with the Company dated October 2, 2023, and amended the definition of the Licensed IP in the Celly Nu IP License Agreement to exclude unbuzzd™ any time after the unbuzzd™ trademark assignment date, and (iii) confirmed that Celly Nu retained an exclusive global license to commercialize the Licensed IP since July 31, 2023, the effective date of the Celly Nu License Agreement. All other terms in the Celly Nu IP License Agreement remained substantially the same.

August 15, 2024: the Company completed the 2024 Consolidation and changed its name to "Quantum BioPharma Ltd.". In connection with the name change, the Company's trading symbol was changed to "QNTM" on both the Nasdaq and CSE. The new CUSIP and ISIN for the Class B Subordinate Voting Shares were changed to 74764Y205 and CA74764Y2050, respectively. After giving effect to the 2024 Consolidation, the Class B Subordinate Voting Shares were reduced from 84,531,149 to approximately 1,300,727 Class B Subordinate Voting Shares and the Class A Multiple Voting Shares were reduced from 72 to 2 Class A Multiple Voting Shares. No fractional Class A Multiple Voting Shares and Class B Subordinate Voting Shares were issued in connection with the 2024 Consolidation. Instead, all fractional Class A Multiple Voting Shares or Class B Subordinate Voting Shares were rounded up to the nearest whole number. The exercise price and/or conversion price and number of Class B Subordinate Voting Shares issuable under any of the Company's outstanding convertible securities were proportionately adjusted in connection with the 2024 Consolidation.

August 15, 2024: the Company closed a non-brokered private placement and issued four (4) Class A Multiple Voting Shares at a price of C$18.00 per Class A Multiple Voting Share for aggregate gross proceeds of C$72.00 (the "**August 2024 Class A Multiple Voting Share Private Placement Offering**"). Xorax Family Trust, a trust of which Zeeshan Saeed, the Chief Executive Officer ("**CEO**") and Co-Executive Chairman of Quantum BioPharma is a beneficiary ("**Xorax**"), and Fortius Research and Trading Corp., a Company controlled by Anthony Durkacz, a Co-Executive Chairman of Quantum BioPharma, is a director ("**Fortius**"), purchased all the Class A Multiple Voting Shares issued pursuant to the August 2024 Class A Multiple Voting Share Private Placement Offering. The participation by such insiders is considered a "related-party transaction" within the meaning of MI 61-101.

August 23, 2024: the Company canceled an aggregate of 47,358 Options ("**August 2024 Options**") to purchase Class B Subordinate Voting Shares, which were previously granted to board members, advisory board members, employees, advisors and consultants of the Company (each a "**August 2024 Option Participant**"). Management reviewed the Company's outstanding August 2024 Options and determined that certain August 2024 Options granted to such August 2024 Option Participants under the Company's Equity Incentive Plan, at exercise prices, ranging from C$84.50 to C$189.15 per Class B Subordinate Voting Share, no longer represented a realistic incentive to motivate the August 2024 Option Participants.

August 23, 2024: the Company announced the grant of RSUs (**August 2024 RSUs**") pursuant to the Equity Incentive Plan. The Company granted an aggregate of 32,690 August 2024 RSUs to certain officers, directors, and employees of the Company. Each August 2024 RSU granted vests the earlier of: (i) one year; and (ii) the successful implementation of the Lucid-MS MAD study conducted by Ingenu, subject to acceleration in the event of a takeover bid or change of control.

August 23, 2024: the Board authorized and approved bonuses in the amount of C$450,000 to each of Anthony Durkacz, Zeeshan Saeed and Donal Carroll, officers of the Company, (together, the "**Executives**") pursuant to the terms and conditions of certain executive agreements entered into between the Company and each of the Executives (together, the "**Executive Agreements**"). Pursuant to the terms and conditions of the respective Executive Agreements, each Executive was entitled to certain annual bonuses, based on the Executive and Company meeting certain performance milestones, calculated on the basis of 70% of the respective Executive's base salary for the second year of employment and 80% of the respective Executive's base salary for the third year of employment, which equates to a bonus payment of C$210,000 and C$240,000, respectively, for each Executive for each year of service (each, a "**August 2024 Bonus Payment**"). Subject to compliance with CSE policies, the Company and Executives determined that to preserve the Company's cash, it settled the August 2024 Bonus Payments into Class B Subordinate Voting Shares at a deemed price of C$5.44 per Class B Subordinate Voting Share.

August 26, 2024: the Company filed an amendment to the ATM U.S. Prospectus.

August 30, 2024: Donal Carroll assumed the role of Chief Financial Officer, and Nathan Coyle assumed the role of Controller. In addition, the Company appointed Jason Sawyer as the Head of Finance and Mergers and Acquisitions.

August 30, 2024: Celly Nu launched unbuzzd™ Clear Eyed Citrus Powder grab-and-go stick packs on Amazon.com.

August 30, 2024: the Company regained compliance with Nasdaq's continued listing requirements after receiving the April 2024 Nasdaq Notification Letter. See "*April 5, 2024*" for more information.

September 6, 2024: the Company completed debt settlements in the amount of C$450,000 with the Executives to preserve the Company's cash through the issuance of 248,160 Class B Subordinate Voting Shares, at a deemed price of C$5.44 per Class B Subordinate Voting Share.

September 6, 2024: the Company granted an aggregate of 12,500 Options (the "**September 2024 Options**"), and an aggregate of 7,500 RSUs (the "**September 2024 RSUs**") to a director and certain consultants of the Company. Each September 2024 Option is exercisable at a price of C$5.60 per Class B Subordinate Voting Share, expires two years from the date of grant and vest in one-third increments with the first batch vesting immediately and the remaining two thirds vesting equally on the 6 month and 12-month anniversary of the date of grant. Each September 2024 Option is exercisable to purchase one Class B Subordinate Voting Share. Each September 2024 RSU granted vested immediately.

September 6, 2024: the Company canceled an aggregated of 7,692 warrants to purchase Class B Subordinate Voting Shares, which were previously granted to a board member. Management reviewed the Company's outstanding warrants and determined that the warrants granted to such individual at an exercise price of C$97.50 per Class B Subordinate Voting Share no longer represented a realistic inventive to motivate such individual.

September 13, 2024: the Company closed a non-brokered private placement and issued six Class A Multiple Voting Shares at a price of C$6.00 per Class A Multiple Voting Share for gross proceeds of C$36.00 (the "**September 2024 Class A Multiple Voting Share Private Placement Offering**"). Xorax and Fortius purchased all the Class A Multiple Voting Shares issued pursuant to the September 2024 Class A Multiple Voting Share Private Placement Offering. The participation by such insiders was considered a "related-party transaction" within the meaning of MI 61-101. The Company relied on exemptions from the formal valuation and minority shareholder approval requirements of MI 61-101 contained in respectively, sections 5.5(a) and 5.7(1)(a) of MI 61-101 in respect of related party participation in the September 2024 Class A Multiple Voting Share Private Placement Offering as neither the fair market value (as determined under MI 61-101) of the subject matter of, nor the fair market value of the consideration for, the transaction, insofar as it involved the related parties, exceeded 25% of the Company's market capitalization (as determined under MI 61- 101). Fortius, Xorax and the Company entered into a Shareholder Agreement dated September 13, 2024 ("**Shareholder Agreement**"), which prohibits unauthorized transfers of the Class A Multiple Voting Shares. See "*Item 7. Major Shareholders and Related Party Transactions B. Related Party Transactions – Shareholder Agreement*."

September 27, 2024: the Company announced the grant of 29,500 Options to certain directors, officers, employees, and consultants (the "**September 2024 Options**"). Each September 2024 Option granted vests immediately and is exercisable at a price of C$5.25 for a period of two years from the issue date. A director of the Company received 7,500 of the September 2024 Options, and thus, the foregoing as it applies to such party represents a related-party transaction under MI 61-101. However, the transaction was exempt from the formal valuation and minority shareholder approval requirements of MI 61-101 as neither the fair market value of the subject matter of the transaction nor the consideration exceeds 25% of the Company's market capitalization.

September 27, 2024: the Company announced it has retained the services of Cambridge Consultants Inc. ("**Cambridge**") for $35,000, TD Media LLC dba Life Water Media ("**LWM**') for $75,000, and King Tide Media LLC ("**KTM**') for $50,000. As at today's date, the Company has discontinued its engagement with Cambridge, LWM, and KTM.

October 7, 2024: the Company announced that Celly U.S. signed a master distribution agreement with FUSION.

October 20, 2024: On October 20, 2024, the Company filed a complaint in the U.S. District Court for the Southern District of New York against CIBC World Markets, Inc., RBC Dominion Securities Inc., and John Does 1-10.

October 29, 2024: the Company engaged Agoracom Independent Trading Group ("**Agoracom**") for C$25,000, Buyins, Inc. ("**Buyins**") for US$15,000, and Stockjock.com LP ("**Stockjock**") for US$15,000, to enhance market awareness and shareholder engagement, following a capital review and in compliance with CSE policies. Agoracom and ITG agreements require 30 days' termination notice, while Buyins and Stockjock require 10 days' notice. The Company remains engaged in these agreements.

October 31, 2024: The Company further decreased its outstanding debt to a creditor through a debt settlement agreement involving cash payments. Previously reported on the balance sheet at approximately US$611,000, the debt has been reduced to around US$211,000, reflecting a substantial reduction of approximately US$400,000.

November 5, 2024: the Company settled its total outstanding debt to a creditor, which was previously reported on the balance sheet at approximately US$278,000. The Company and the creditor reached a debt settlement agreement, whereby the creditor would be compensated by an external party to the Company.

December 5, 2024: the Company announced it intended to complete a non-brokered private placement offering (the "**December 2024 Offering"**) of up to 5,000 convertible debenture units of the Company (each, a "**December 2024 Debenture Unit**") at a price of C$1,000 per Debenture Unit. Each December 2024 Debenture Unit consists of (i) one convertible debenture having a face value of C$1,000.00 (each a "**December 2024 Debenture**"); and (ii) 80 Class B Subordinate Voting Share purchase warrants (each a "**December 2024 Warrant**") exercisable for 80 Class B Subordinate Voting Shares. The December 2024 Debentures matures on the date that is 36 months from the date of issuance and bears interest at a rate of 1.25% per month, beginning on the date of issuance and is payable in cash on the last day of each calendar quarter. The principal sum of the December 2024 Debenture, or any portion thereof, and any accrued but unpaid interest, may be converted into Class B Subordinate Voting Shares at a conversion price of C$6.25 per Class B Subordinate Voting Share. Each December 2024 Warrant shall entitle the holder to acquire one additional Class B Subordinate Voting Share at a price of C$7.00 per Class B Subordinate Voting Share, for a period of five (5) years from the date of issuance. The December 2024 Debenture contained normal course default provisions, and a default if the volume weighted average price of the Class B Subordinate Voting Shares on the Canadian Securities Exchange is at or below C$5.3125 for any period of 10 consecutive trading days (the "**VWAP Default**"). The December 2024 Debenture and December 2024 Warrant contain a provision that prevents conversion or exercise, as applicable, if the holder's interest in the Company would exceed 9.99%. The Company shall have a right to prepay or redeem a part or the entire principal amount of the December 2024 Debenture for a cash amount equal to the sum of all payments of interest on the December 2024 Debenture, that would be due through to the maturity date (the "**Prepayment Penalty**"). In the event the holder converts the entire amount owing on the December 2024 Debenture within 6 months of the issuance date, the holder shall be entitled to receive a cash amount equal to half the sum of all payments of interest on the December 2024 Debenture that would be due through to the maturity date, or at the option of the holder Class B Subordinate Voting Shares at the conversion price (the "**Conversion Bonus**"). The Company used proceeds from the December 2024 Offering for the ongoing development of the Company's business model and for general working capital purposes.

December 10, 2024: the Company's safety review committee recommended commencing dosing of the second cohort in its trial entitled "A Phase 1, Randomised, Double-Blind, Placebo-Controlled, Multiple Ascending Dose Study to Evaluate the Safety and Pharmacokinetics of Lucid-21-302 in Healthy Adult Participants."

December 13, 2024: the Company closed an initial tranche of the December 2024 Offering and issued 500 December 2024 Debenture Units for C$500,000. See "*December 5, 2024*" above for more details on the December 2024 Offering.

December 18, 2024: the Company entered into an investor relations services agreement with Enterprise Canada Inc. ("**Enterprise**"). Pursuant to the agreement ("**Enterprise Agreement**"), Enterprise has been engaged for an indefinite period. The Enterprise Agreement is structured in three phases, with C$10,000 paid to Enterprise at the start of phase 1, C$2,500 on the completion of phase 2, and C$5,000 due monthly as a public relations retainer (phase 3). Enterprise will be assisting the Company with its public relations strategy, which includes developing the Company's narrative, key messages, and pitching strategies with identified targets. As of the date of this Annual Report, the parties remain engaged in the Enterprise Agreement.

December 20, 2024: the Company closed the second tranche of the December 2024 Offering and issued 500 December 2024 Debenture Units for C$500,000. See "*December 5, 2024*" above for more details on the December 2024 Offering.

December 20, 2024: the Company purchased US$1,000,000 of Bitcoin and other cryptocurrencies as part of its strategic efforts.

December 24, 2024: the Company entered into a prepaid forward purchase agreement ("**Sports Coat Prepaid Purchase Agreement**") with Sports Coat LLC ("**Sports Coat**"), whereas Sports Coat agreed to provide financing of US$1,000,000 to the Company as consideration for purchasing proceeds of the litigations (the "**Litigation Proceeds**") which includes any of the following involving: (i) claims relating to market manipulation / securities / commodities / exchanges brought by or on behalf of Quantum Biopharma Ltd. or any related entity: or (ii) Dr. Raza Bokhari. Per terms stated in the Sports Coat Prepaid Purchase Agreement, the Company is not obligated to repay US$1,000,000 to Sports Coat if no proceeds are realized from the lawsuit as the financing is considered non-recourse. Sports Coat bears risk of loss in the event of non-collection of the Litigation Proceeds. The Sports Coat Prepaid Purchase Agreement does not have a predefined repayment schedule, or specified due date, and the Company has not generally pledged its assets as collateral to ensure repayment.

January 7, 2025: the Company was approved to dual list its shares on Upstream, a MERJ Exchange market and global securities trading application. The dual listing on Upstream is designed to provide the Company the opportunity to access a global investor base outside of the U.S. that can trade using a credit/debit card, PayPal, USD, or USDC (a stable coin pegged to the USD); unlocking liquidity and enhancing price discovery while globalizing the opportunity to invest in the Company. The Upstream market is open 7 days a week 20 hours a day, Monday to Sunday: 10:00am to 06:00am UTC+4 (1:00am to 9:00pm EST). Traders on Upstream's smart-contract powered market will experience real-time trading and settlement, and a transparent orderbook which does not permit common market manipulations.

January 14, 2025: the Class B Subordinate Voting Shares started trading on the MERJ Exchange at 10:00am ET under the ticker symbol "QNTM". See "*January 7, 2025*" above for more information.

January 20, 2025: the Company closed the third tranche of the December 2024 Offering and issued 1,480 December 2024 Debenture Units for aggregate gross process of C$1,480,000. This third tranche was completed under amended terms, including a reduced conversion price of C$4.85 per share, an increased warrant ratio of 103.093 Warrants per Debenture Unit, and a reduced exercise price of C$5.25 per Warrant share. On February 7, 2025, the investor converted a partial amount of this Debenture into an aggregate of 152,577 shares of the Company's Class B Subordinate Voting Shares. On February 26, 2025, the investor converted the remaining amount of the Debenture into an aggregate amount of 221,237 shares of the Company's Class B Subordinate Voting Shares. Thus, the total amount of Class B Subordinate Voting Shares converted under this Debenture was 373,814. See "*December 5, 2024*" above for more details on the December 2024 Offering.

January 24, 2025: the Company sought a court order from the ONSC declaring Dr. Bokhari to be a vexatious litigant.

February 4, 2025: the Company announced that it completed a double-blind, randomized, placebo-controlled crossover design clinical trial (NCT06505239) of unbuzzd™. For more information about unbuzzd™ Clinical Trials, please see "*Item 4B. – Business Overview – (i)unbuzzd™ Retail Product Treatment for Alcohol Misuse".*

February 6, 2025: Celly Nu entered into a letter of engagement with a leading New York investment bank to raise up to US$10,000,000 in capital and explore an initial public offering on a major US public exchange.

February 7, 2025: the Company and Empire Market Ventures, LLC ("**Empire**") entered into an investor relations services agreement (the "**Empire Agreement**"). Pursuant to the Empire Agreement, Empire was engaged for a period of three months. The Company paid Empire US$25,000 in fees. Empire will be providing the Company with investor awareness and marketing services, which includes giving the Company access to an exclusive Nasdaq, TSX, and ASX mailing list and investor contacts, content creation, media appearances, branding and consulting, and other services aimed at increasing the Company's engagement with investors.

February 18, 2025: the Company purchased an additional US$1,000,000 worth of Bitcoin and other cryptocurrencies as part of its strategic efforts.

March 6, 2025: the Company closed the fourth tranche of the December 2024 Offering and issued 100 January 2025 Debenture Units for aggregate gross process of C$100,000. On March 25,2025, the investor converted this Debenture into an aggregate of 25,257 Class B Subordinate Voting Shares. In addition, the Company announced it may complete additional tranches of the December 2024 Offering, adjusting each convertible debenture units (each, a "**March 2025 Debenture Unit**") to include 76 warrants, with an increased conversion price of C$6.60 (the "**March 2025 Debenture**") and an increased exercise price per warrant of C$7.00 (the "**January 2025 Warrants**"). In addition the March 2025 Debenture removed the VWAP Default, the Prepayment Penalty and the Conversion Bonus.

March 7, 2025: the Company cancelled an aggregate of 7,692 warrants to purchase Class B Subordinate Voting Shares which were previously granted to Mr. Zapolin. The Company and Mr. Zapolin entered into a warrant cancellation agreement, pursuant to which Mr. Zapolin agreed to cancel the warrants. Management had reviewed Mr. Zapolin's outstanding warrants and determined that the warrants granted to Mr. Zapolin under the Equity Incentive Plan no longer represented a realistic incentive to motivate Mr. Zapolin. Concurrently, the Company granted an aggregate of 7,692 Options to Mr. Zapolin to acquire Class B Subordinate Voting Shares (each, a " **Zapolin Option**") pursuant to the Equity Incentive Plan, with an exercise price of C$6.60 per Class B Subordinate Voting Share. Each Zapolin Option granted vested immediately, and the expiry date of the Zapolin Options are on March 7, 2027. If Mr. Zapolin ceases to be a participant under the Equity Incentive Plan for any reason, the expiry date of the Zapolin Options shall be 90 days following the date Mr. Zapolin ceases to be a participant under the Equity Incentive Plan.

March 20, 2025: The Company increased its cryptocurrency holdings with the purchase of an additional US$1,500,000 worth of Bitcoin and other cryptocurrencies.

March 26, 2025: Celly U.S. released unbuzzd™ "On-the-Go Powder Stick Packs" in an 8-pack display box, facilitating the sale of unbuzzd™ in convenience, liquor, and drug stores across the United States. The 8-pack display box is available for direct sale to consumers on both amazon.com and unbuzzd.com.

March 26, 2025: the Company retained the services of LWM to enhance its market awareness. This engagement is for a period of 45 days, for $55,000.

March 27, 2025: the Company appointed Terry Lynch to the Board to replace Dr. Sanjiv Chopra.

LEGAL PROCEEDINGS

The Company is engaged in certain legal proceedings, as further described below. Litigation has been, and is expected to be, costly and time-consuming and could divert the attention of management and key personnel from our business operations. Although we intend to vigorously defend ourselves against any pending claims, and future claims that may occur, we cannot assure that we will succeed in defending any of these claims and that the judgments will not be upheld against us. If we are unsuccessful in our defense of these claims or unable to settle the claims in a manner satisfactory to us, we may be faced with outcomes that could have a material adverse effect on the Company and its financial condition. Except as otherwise disclosed below, there are no material outstanding legal proceedings or regulatory actions to which the Company is party, nor, to Company's knowledge, are there any such proceedings or actions contemplated.

GBB Drink Lab Litigation

On May 12, 2023, the Company announced receipt of a lawsuit filed in S.D. Fla. by GBB against the Company, alleging breach of a mutual non-disclosure agreement and misappropriation of trade secrets. GBB claims that its assets were, as of August 30, 2022 (prior to the misappropriation and material breach) valued at US$53,047,000. The Company believes the allegations are without merit and continues to defend itself in the lawsuit.

On June 23, 2023, the Company filed a motion to dismiss the complaint. On July 3, 2023, GBB responded in opposition to the Company's motion to dismiss the complaint. The Motion to Dismiss the Amended Complaint filed on June 23, 2023, has been fully briefed and is awaiting adjudication by S.D. Fla. In the meantime, on August 24, 2023, the parties filed a proposed joint scheduling report with the S.D. Fla., which set forth various deadlines that would govern this action. Under the proposed joint schedule, the case was supposed to be trial-ready by November 30, 2024. On January 8, 2024, the S.D. Fla. Dismissed the Company's request for a motion to dismiss the lawsuit.

On January 22, 2024, the Company filed a third-party complaint against Joseph Romano (a former director of the Company), and a counterclaim against GBB. The Company alleges that Mr. Romano breached his fiduciary duty by providing or fabricating confidential information to GBB, and that GBB aided and abetted this breach. On October 9, 2024, Judge Melissa Damian denied Mr. Romano's motion to dismiss, finding that the Company plausibly alleged Romano breached fiduciary duties, including his duties of loyalty, confidentiality, and to act in the company's best interests. GBB and Romano have denied the allegations in their respective answers.

As of March 27, 2025, the parties are finalizing documents to be used in discovery in advance of a May 1, 2025, deadline. Under the proposed schedule, the parties are required to participate in a mediation process by June 18, 2025. The case is expected to be trial-ready by September 2025.

Dr. Raza Bokhari

Following the contested meetings scheduled to be held on June 29, 2021, the former CEO, Dr. Raza Bokhari commenced five actions against the Company and management, which resulted in counterclaims and additional unexpected legal and operating expenses. As at the date of the Annual Report, the status of the matters is as follows:

Wrongful Dismissal Arbitration

On July 15, 2021, the Company's former CEO, Dr. Raza Bokhari, filed an arbitration notice seeking C$30.2 million for breach of contract, severance, and damages, along with C$500,000 for punitive damages and legal fees. Dr. Bokhari had been placed on administrative leave after the May 14, 2021, shareholder meeting and was terminated for cause on July 27, 2021, following an investigation by a special committee of the Board. The Company defended the arbitration and counterclaimed against Dr. Bokhari for reimbursement of expenses he directed the Company to pay himself, as well as losses the Company sustained as a result of Dr. Bokhari's decision to authorize a series of dilutive share issuances.

The arbitration concluded in August 2022. In its 174 page Merit Award, the Justice Cunningham dismissed Dr. Bokhari's claims in their entirety. Justice Cunningham also ordered Dr. Bokhari to repay certain monies to the Company in respect of the Company's counterclaim, while also awarding the Company its costs of the arbitration which he subsequently fixed at approximately C$2.8 million, plus interest. The Merits Award is available at the following link: https://fsdpharma.com/wp-content/uploads/2023/05/2023-03-01-Application-Record-Applicant-FSD-Pharma-Inc.pdf.

On December 9, 2022, Dr. Bokhari sought to set aside the award, citing unfair treatment and inadequate reasoning. On October 4, 2023, the Company announced that the ONSC had dismissed Dr. Bokhari's motion to set aside the arbitration award. Dr. Bokhari was required to put up C$150,000 as security for costs before the motion was heard, which he has forfeited. In addition, Dr. Bokhari was ordered to pay C$175,000 to cover the Company's legal costs for his failed set aside motion.

On October 13, 2023, Dr. Bokhari served notices of motion on the Company for leave to appeal the set aside and enforcement orders issued by the ONSC on October 4, 2023. On December 1, 2023, the Company filed a petition to confirm the arbitration award in the United States District Court for Eastern District of Pennsylvania. On December 15, 2023, the Company submitted a responding party's factum to the ONCA. On February 6, 2024, the Company announced that the ONSC affirmed judgment and awarded an additional C$5,000 in costs in light of Dr. Bokhari's failed motion for leave to appeal. On June 27, 2024, the United States District Court for Eastern District of Pennsylvania granted judgement in favor of the Company in its case against Dr. Bokhari. On January 24, 2025, the Company sought a court order from the ONSC declaring Dr. Bokhari to be a vexatious litigant. As of the date hereof, the litigation is ongoing.

Restraining Order and Class B Subordinate Voting Share Cancellation Application

On January 21, 2021, and February 10, 2021, the Board authorized the issuance of an aggregate of 1,349,765 Class B Subordinate Voting Shares as share based awards to certain directors and officers of the Company, including Dr. Bokhari. Upon determining that 1,198,146 of these Class B Subordinate Voting Shares (the "**Contested Shares**") had been inappropriately issued contrary to applicable laws, the Board resolved to cancel the Contested Shares on June 1, 2021, and later directed the Company's transfer agent to cancel and return the Contested Shares to treasury. On July 2, 2021, Dr. Bokhari, filed an action against the Company seeking to prevent the Company from cancelling his portion of the Contested States. The motion was heard and denied on July 27, 2021. On July 21, 2021, the Company commenced a legal proceeding against Dr. Bokhari, former members of the Board, including James Datin, Robert Ciaruffoli, Stephen Buyer and Gerald Goldberg, Dr. Bokhari's brokerages' Haywood Securities Inc. and Haywood Securities (US) Inc., and the Company's transfer agent. The Company made an application before the ONSC stating that the Contested Shares were issued contrary to section 23(2) of the OBCA and validly cancelled by resolution of the Board passed on June 1, 2021. The Company was able to reach an agreement with all of the former directors other than Dr. Bokhari under which they did not oppose the Company's application and agreed to be bound by the decision in the application, and the Company agreed not to seek costs against them. Neither the Company's transfer agent nor any of Dr. Bokhari's brokerages took any position on the application. On March 8, 2022, the court issued a mixed decision in the application, permitting the Contested Share grant to Dr. Bokhari until the date of his termination but cancelling 504,888 Contested Shares relating to services that were to be provided after the date of termination.

Bokhari v. FSD Pharma Inc. Et al.

On July 2, 2021, Dr Bokhari filed an action against the Company, FSD BioSciences, Anthony Durkacz and Zeeshan Saeed. The case was placed in civil suspense pending resolution of arbitration. Therefore, no further activity will occur in this case unless and until the aforementioned arbitration concludes. As of the date hereof, the litigation is ongoing.

Bokhari Wrongful Means Action

In June 2023, Dr. Bokhari commenced an action against the Company and FSD Biosciences by way of notice of action issued out of the ONSC. He subsequently filed a statement of claim, of July 7, 2023 and served the notice of action and statement of claim on a former director of the Company on December 19, 2023. The action seeks USD $1.5 million in damages for intentional interference with economic relations, misrepresentation, negligence, and other causes of action to be specified in a statement of claim. We delivered a notice of intent to defend in the action on January 5, 2024, but thus far not been required to provide a statement of defense. We believe these claims are without merit.

Bokhari Employment Claim

By way of notice of action issued on May 11, 2023, Dr. Bokhari commenced an action for damages for breach of contract against the Company in the ONSC. He subsequently filed a statement of claim in which he specified the claim as a claim for USD $30.2 million in damages on the basis that the Company breached his employment agreement by not providing him notice of default before terminating his employment. On November 10, 2023, the last day on which he could do so, Dr. Bokhari served the notice of action and statement of claim on an FSD director. We served a notice of intent to defend this action on November 22, 2023 but have not been required to serve a statement of defense. We note that to the extent he wished to advance this claim, it is a claim that Dr. Bokhari should have advanced in the employment arbitration, but did not do so As such, and bearing in mind the decision the arbitrator reached in that proceeding in our view, we believe that this claim has no merit.

Cunningham Assessment Application

By notice of application dated September 26, 2023, Dr. Bokhari applied to the ONSC for an order directing an assessment of the accounts/billing rendered by Justice Cunningham in the Wrongful Dismissal Arbitration noted above. In late January 2024, Dr. Bokhari served Arbitrator Cunningham with the notice of application and a supporting affidavit sworn January 24, 2024. Under the terms of the retainer agreement between FSD, Dr. Bokhari and Justice Cunningham, FSD is jointly and severally liable for any costs Justice Cunningham might incur as a result of this proceeding. The liability exposure that FSD could have in this matter is approximately C$182,777.50, which represents half of the arbitration fees, plus any costs in defending the arbitrator To protect its interest, the Company has instructed its legal counsel to move to have the Company joined to the proceeding. We believe this claim is without merit.

As of May 7, 2024, Mr. Bokhari decided to abandon his application to have his accounts assessed.

At a hearing on November 28, 2024, the ONSC awarded the Company C$13,000 for costs. This award was released February 10, 2025, and the amount is currently outstanding. The Company appeared before the registrar on March 12, 2025, to address the collection of the award.

Bokhari Indemnification Application

On November 12, 2021, Dr. Bokhari commenced an application in the ONSC seeking an order appointing an arbitrator to arbitrate his claim to be entitled to indemnification of his legal expenses associated with the litigation he commenced against FSD or in which he was named as a party by FSD. FSD denied the validity of the underlying indemnification agreement and therefore opposed the application. In April 2022, the parties agreed to allow Dr. Bokhari to adjourn the application indefinitely. Last year, Dr. Bokhari retained new counsel who indicated that it intended to pursue the application. To date that new counsel has taken no steps to do so. We believe this claim is without merit.

On April 6, 2022, Dr. Bokhari commenced an application in the Superior Court seeking an order appointing an arbitrator to arbitrate his claim to be entitled to indemnification of his legal expenses associated with the litigation he has commenced against the Company or in which he has been named as a defendant against the Company. The Company denied the validity of the underlying indemnification agreement and opposed the application. In April 2022, the parties agreed to adjourn the application without setting a new hearing date. As of the date hereof, the litigation is ongoing.

The Company's Petition against Raza Bokhari to Confirm Arbitration Award

On December 1, 2023, the Company filed a Petition to Confirm Arbitration (the "**Petition**"), in the Eastern District of Pennsylvania, which seeks to (a) confirm the four awards entered in an arbitration in Ontario, Canada, in favor of the Company and against former CEO Raza Bokhari and (b) enter final judgment against Bokhari in an amount in excess of C$3,000,000. The petition was filed in the U.S. District Court for the Eastern District of Pennsylvania. Dr. Bokhari filed a response on February 9, 2024. The Company filed a response and the litigation is ongoing.

On March 31, 2024, Mr. Bokhari requested a week-long extension, which pushed the Company's deadline of February 23, 2024, by a week. The Company filed a response on March 1, 2024.

As of May 31, 2024, the Company won the petition to confirm the arbitration awards against Dr. Raza Bokhari. As a result, on June 27, 2024, the U.S. District Court for the Eastern District of Pennsylvania confirmed the Company's motion for entry of judgement and granted judgement in favor of the Company of approximately US$3,000,000. As of the date of this Annual Report, the Company has yet to receive payment by Dr. Bokhari.

Parkway Clinical Laboratories

On July 8, 2021, Parkway Clinical Laboratories, a company wholly owned by Dr. Bokhari, filed an action against the Company, which was subsequently settled following a conference between the parties on October 20, 2021.

On July 20, 2021, a shareholder of the Company filed a claim in the Delaware Chancery Court against the Company and its directors and officers seeking to remedy harm they believe the directors and officers of the Company have caused by their actions. The shareholder has filed the claim on count of breach of fiduciary duties and corporate waste against the directors and officers with no dollar amount being claimed. On September 13, 2021, the Company filed a motion to dismiss in its entirety and the motion was heard on February 8, 2022. The claim was dismissed by the court May 6, 2022.

Lawsuit against CIBC World Markets, RBC Dominion Securities, and John Does 1-10

On October 20, 2024, the Company filed a complaint in the U.S. District Court for the Southern District of New York against CIBC World Markets, Inc., RBC Dominion Securities Inc., and John Does 1-10. The complaint alleges market manipulation through spoofing activities between January 1, 2020, and August 15, 2024. The Company is seeking damages of more than US$700 million.

The complaint alleges that between January 1, 2020, and August 15, 2024, the defendants engaged in "spoofing," an unlawful trading practice, to manipulate the market price of Quantum's shares. The complaint details that the defendants placed thousands of spoofing orders to sell, creating the illusion that Quantum's share price was declining. This practice allegedly "tricked" other investors into selling their shares at lower prices, driving the company's share price downward. The defendants then purchased shares at artificially depressed prices, positioning themselves to profit when the market price rebounded. The Company claims to have suffered significant damage and seeks to recover more than USD 700 million. It alleges that it sold approximately 90 million shares of its stock on U.S. and Canadian exchanges during the relevant period at artificially depressed prices due to the defendants' spoofing activities. The complaint names CIBC World Markets, Inc., RBC Dominion Securities Inc., and John Does 1 through 10 as defendants. It asserts three claims for relief: violation of Section 10(b) of the Securities Exchange Act of 1934 and Rule 10b-5(a) and (c), violation of Section 9(a)(2) of the Securities Exchange Act of 1934, and New York Common Law Fraud.

Additional Regulatory Matters

In response to OSC inquiries regarding our securities trading activity, the Company has maintained an active investigation into potential market irregularities. Below we provide historical context regarding this ongoing matter, which represents an important element of our regulatory compliance efforts:

Quantum Response to OSC Inquiry

On August 11, 2023, external legal counsel sent a letter to the Ontario Securities Commission ("OSC"). This letter was in response to a comment letter from the OSC regarding the Company's Preliminary Short Form Base Shelf Prospectus filed on July 11, 2023. The letter addressed inquiries from the OSC about the Company's investigation into possible naked short selling and market manipulation of the Company's securities.

Key points of the letter:

- The Company's external counsel and Christian Attar (collectively referred to as "Law Firms") were jointly representing Quantum in the matter concerning possible naked short selling and market manipulation of the Company's securities.
- Quantum had first suspected share price manipulation in 2021 when it discovered imbalances between reported shares held by brokers and authorized shares on deposit in both Canadian and U.S. exchanges.
- The Board of Directors discussed naked short selling and market manipulation in a meeting on June 29, 2023, and decided to retain Christian Attar.
- Other than an information package submitted to the OSC on June 23, 2023, Quantum had not been in contact with other regulatory bodies regarding this matter.
- The investigation was ongoing at the time, with the Law Firms reviewing documents, trading data, and interviewing witnesses.
- The Company had an Insider Trading and Blackout Period policy, but the disclosure of the possible naked short selling and market manipulation did not trigger a blackout period.
- The letter emphasized the preliminary nature of the investigation and its ongoing status. It stated that it was premature to identify any parties or individuals who might be implicated in the matter. Furthermore, the Law Firms were unable to provide an accurate timeline for the completion of their investigations at that point.
- The letter also noted that any decision regarding potential litigation against third parties would depend on the investigation's findings and could not be determined until the inquiry was concluded.

SELECTED FINANCIAL HIGHLIGHTS

The following table presents selected financial information for the three months and years ended December 31, 2024, and 2023:

	Three months ended December 31,		Years ended December 31,	
	2024	2023	**2024**	2023
	$	$	**$**	$
Expenses				
General and administrative	**1,930,572**	1,373,300	**9,410,097**	9,032,724
External research and development fees	**4,280,330**	(29,961)	**6,083,378**	3,859,178
Share-based payments	**(82,477)**	99,384	**152,214**	3,835,475
Depreciation and amortization	**112,803**	122,217	**490,571**	2,506,316
Impairment loss	**-**	236,186	—	4,555,805
Total operating expenses	**6,241,228**	1,801,126	**16,136,260**	23,789,498
Loss from operations	**(6,241,228)**	(1,801,126)	**(16,136,260)**	(23,789,498)
Net loss from operations	**(5,456,278)**	(1,651,566)	**(14,915,529)**	(18,230,588)

The following table presents selected financial information for the three months and years ended December 31, 2023, and 2022:

	Three months ended December 31,		Years ended December 31,	
	2023	2022	**2023**	2022
	$	$	**$**	$
Expenses				
General and administrative	**1,373,300**	2,300,502	**9,032,724**	14,450,094
External research and development fees	**(29,961)**	2,694,955	**3,859,178**	6,910,844
Share-based payments	**99,384**	506,583	**3,835,475**	1,531,258
Depreciation and amortization	**122,217**	1,157,735	**2,506,316**	4,537,415
Impairment loss	**236,186**	—	**4,555,805**	—
Total operating expenses	**1,801,126**	6,659,775	**23,789,498**	27,429,611
Net loss from continuing operations	**(1,651,566)**	(6,148,441)	**(18,230,588)**	(26,703,662)
Net income from discontinued operations	**—**	—	**—**	3,096,834
Net loss from operations	**(1,651,566)**	(6,148,441)	**(18,230,588)**	(23,606,828)

RESULTS OF OPERATIONS 2024

The following table outlines our consolidated statements of loss for the three months and years ended December 31, 2024, and 2023:

	For the three months ended December 31,			
	2024	2023		
	$	$	Change	%
Expenses				
General and administrative	**1,930,572**	1,373,300	557,272	41%
External research and development fees	**4,280,330**	(29,961)	4,310,291	-14386%
Share-based payments	**(82,477)**	99,384	(181,861)	-183%
Depreciation and amortization	**112,803**	122,217	(9,414)	-8%
Impairment loss	**—**	236,186	(236,186)	-100%
Total operating expenses	**6,241,228**	1,801,126	4,440,102	247%
Loss from operations	**(6,241,228)**	(1,801,126)	(4,440,102)	247%
Interest income	**(132,075)**	(153,791)	21,716	-14%
Other income	**(3,989)**	—	(3,989)	-100%
Finance expense, net	**1,875**	12	1,863	15525%
Accretion expense	**14,560**	—	14,560	100%
Gain on settlement of debt	**(737,573)**	—	(737,573)	100%
Gain on measurement of financial liability	**—**	—	—	100%
Gain on change in fair value of derivative liabilities and warrant liability	**(73,220)**	(99,045)	25,825	-26%
Unrealized loss on change in fair value of digital assets	**141,770**	—	141,770	100%
Loss on changes in fair value of investments	**3,702**	103,264	(99,562)	-96%
Net loss from operations	**(5,456,278)**	(1,651,566)	(3,804,712)	230%
Other comprehensive loss				
Items that may be subsequently reclassified to loss:				
Exchange gain (loss) on translation of foreign operations	**(782,266)**	(285,119)	(497,147)	174%
Comprehensive loss	**(6,238,544)**	(1,936,685)	(4,301,859)	222%

	For the years ended December 31,			
	2024	2023		
	$	$	Change	%
Expenses				
General and administrative	**9,410,097**	9,032,724	377,373	4%
External research and development fees	**6,083,378**	3,859,178	2,224,200	58%
Share-based payments	**152,214**	3,835,475	(3,683,261)	-96%
Depreciation and amortization	**490,571**	2,506,316	(2,015,745)	-80%
Impairment loss	**—**	4,555,805	(4,555,805)	-100%
Total operating expenses	**16,136,260**	23,789,498	(7,653,238)	-32%
Loss from operations	**(16,136,260)**	(23,789,498)	7,653,238	-32%
Interest income	**(572,891)**	(786,363)	213,472	-27%
Other income	**(3,989)**	—	(3,989)	100%
Finance expense, net	**33,017**	299	32,718	10942%
Gain on settlement of debt	**(732,417)**	—	(732,417)	100%
Gain on measurement of financial liability	**—**	(4,939,015)	4,939,015	-100%
Gain on change in fair value of derivative liabilities and warrant liability	**(104,483)**	(212,256)	107,773	-51%
Unrealized loss on change in fair value of digital assets	**141,770**	—	141,770	100%
Loss on changes in fair value of investments	**3,702**	378,425	(374,723)	-99%
Net loss from operations	**(14,915,529)**	(18,230,588)	3,315,059	-18%
Other comprehensive loss				
Items that may be subsequently reclassified to loss:				
Exchange gain (loss) on translation of foreign operations	**(366,546)**	(235,260)	(131,286)	56%
Comprehensive loss	**(15,282,075)**	(18,465,848)	3,183,773	-17%

REVIEW OF OPERATIONS FOR THE THREE MONTHS AND YEARS ENDED DECEMBER 31, 2024, AND 2023

General and administrative

General and administrative expenses for the three months and years ended December 31, 2024, and 2023 are comprised of:

	For the three months ended December 31,				For the years ended December 31.			
	2024	2023	**Change**	**Change**	**2024**	2023	**Change**	**Change**
	$	**$**	**$**	**%**	**$**	**$**	**$**	**%**
Professional fees	**638,424**	861,831	(223,407)	-26%	**3,074,130**	3,248,233	(174,103)	-5%
Investor relations	**371,699**	70,159	301,540	430%	**1,748,242**	665,915	1,082,327	163%
Salaries, wages and benefits	**432,408**	406,905	25,503	6%	**2,658,364**	1,855,087	803,277	43%
Consulting fees	**93,084**	232,021	(138,937)	-60%	**797,863**	1,305,434	(507,571)	-39%
Office and general administrative	**240,541**	246,912	(6,371)	-3%	**879,272**	2,294,476	(1,415,204)	-62%
Foreign exchange loss (gain)	**154,416**	(444,528)	598,944	-135%	**252,226**	(336,421)	588,647	-175%
	1,930,572	**1,373,300**	557,272	41%	**9,410,097**	9,032,724	377,373	4%

Professional fees

Professional fees decreased from $861,831 to $638,424 or 26% and decreased from $3,248,233 to $3,074,130 or 5% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. Professional fees exhibited significant fluctuations throughout the year, driven by substantial legal and audit-related expenditures, with notable peaks in Q1 and Q3 due to large accruals, settlements, and adjustments.

Investor relations

Insurance, shareholders and public company costs increased from $70,159 to $371,699 or 430% and increased from $665,915 to $1,748,242 or 163% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. The significant increase in investor relations and related expenses for the year ended December 31, 2024, was driven by expenditures in media and promotional activities, with a notable concentration of spending in Q2 and Q3. The year also saw a mix of high-value, one-time payments and recurring operational costs, reflecting heightened activity in investor engagement and brand promotion.

Salaries, wages and benefits

Salaries, wages, and benefits expenses increased from $406,905 to $432,408 or 6% and increased from $1,855,087 to $2,658,364, or 43% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. Base compensation amounted to $1.3M for the year ended December 31, 2024, while an executive bonus of $1,017,456 was awarded in August 2024.

Consulting fees

Consulting fees decreased from $232,021 to $93,084 or 60% and decreased from $1,305,434 to $797,863 or 39% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. The consulting fees include historical expenses from a consulting firm no longer engaged by the Company. The Company now maintains ongoing relationships for specialized consulting needs with a few new firms. Approximately 25% of consulting fees were associated with director fee.

General office, insurance, and administration expenditures

General office, insurance, and administration expenditures for the three months and years ended December 31, 2024, and 2023 are comprised of the following:

	For the three months ended December 31,				For the years ended December 31,			
	2024	2023	**Change**	**Change**	**2024**	2023	**Change**	**Change**
	$	**$**	**$**	**%**	**$**	**$**	**$**	**%**
Insurance, shareholders and public company costs	**74,240**	154,751	(80,511)	-52%	**339,103**	689,187	(350,084)	-51%
Travel, meals and entertainment	**87,614**	31,968	55,646	174%	**202,403**	154,124	48,279	31%
Office and general administrative	**78,687**	60,193	18,494	31%	**337,766**	1,451,165	(1,113,399)	-77%
Total	**240,541**	246,912	(6,371)	-3%	**879,272**	2,294,476	(1,415,204)	-62%

Insurance, shareholders, and public company costs

Insurance, shareholders and public company costs decreased from $154,751 to $74,240 or 52% and decreased from $689,187 to $339,103 or 51% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. Expenses mainly consisted of ongoing D&O insurance premiums, stock exchange listing fees (CSE and NASDAQ), shareholder communication costs, filing fees, and regulatory expenses.

Travel, meals and entertainment

Travel, meals and entertainment expenses increased from $31,968 to $87,614 or 174% and increased from $154,124 to $202,403 or 31% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. Travel, meals and entertainment expenses fluctuate from period to period based on the nature of the transactions the Company undertakes.

Office and general administrative

Office and general administrative expenses increased from $60,193 to $78,687 or 31% and decreased from $1,451,165 to $337,766 or 77% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. This decrease primarily reflects a change in accounting treatment for unbuzzd™ product development costs. In 2023, when unbuzzd™ was in its conceptual phase, approximately $1.3 million of development costs were recorded as general and administrative expenses, comprising approximately $877,000 in medical and scientific development costs through the entity Lucid and $500,000 in commercial viability assessment costs through Quantum. As the product advanced beyond the conceptual phase in 2024, these costs were classified under research and development expenses, resulting in the significant reduction in general and administrative expenses.

Foreign exchange (gain) loss

Foreign exchange gain decreased from $444,528 to a foreign exchange loss of $154,416 or -135% and from a gain of $336,421 to a loss of $252,226 or -175% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. The primary reason for the change in foreign exchange was the change in the Canadian dollar relative to the US dollar and its impact on financial instruments denominated in the Canadian dollar. The strong appreciation of the US dollar versus the Canadian dollar in 2024 negatively impacted returns on the Company's Canadian dollar investments and cash and cash equivalents holdings.

External research and development fees

External research and development expenses increased from a recovery of $29,961 to an expense of $4,280,330 or 14,386% and increased from an expense of $3,859,178 to $6,083,378 or 58% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. During fiscal year of 2024, approximately 60% and 25% of the research costs were incurred through the Huge Biopharma and FSD Australia entities, respectively. The major remaining costs were recorded under the Quantum entity, specifically relating to clinical trials conducted by ASPI Select to assess the efficacy of the unbuzzd™ product.

Share-based payments

Share-based payments decreased from $99,384 to a reversal of $82,477 and decreased from $3,835,475 to $152,214 or 96% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. Share-based payments expense changes based on the variability in the number of options granted, vesting periods of the options, the number of Performance Share Units ("PSUs") granted, the number of RSUs granted, vesting periods of the PSUs and RSUs, number of warrants granted, vesting periods of the warrants, the grant date fair values of share-based awards, and share-based bonuses issued. During fiscal year 2024, smaller number of options were granted compared to fiscal year 2023.The majority of options granted in 2023 were canceled during the first nine months of the fiscal year 2024.

Depreciation and amortization

Depreciation and amortization decreased from $122,217 to $112,803 or 8% and decreased from $2,506,316 to $490,571 or 80% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. Depreciation and amortization in the current period related to the amortization of intellectual property and right-of-use assets. The decrease from prior year periods is due to the impairment of FSD-PEA and the Innovet license, resulting in lower amortization expense, as these assets were fully impaired during 2023.

Impairment loss

For the three months and year ended December 31, 2024, there was no impairment loss recognized.

For the three months ended December 31, 2023, the Company recognized an impairment loss of $236,186 related to the note receivable as the likelihood of repayment of the note was considered remote. For the year ended December 31, 2023, the Company recognized an impairment loss of $4,555,805 related to the impairment of the Prismic intangible assets following the decision to terminate the clinical trials of FSD-PEA and impairment of the Innovet intangible asset following the decision to no longer purse the development of the ultra-micro PEA for veterinary purposes.

Interest income

Interest income decreased from $153,791 to $132,075 or 14% and decreased from $786,363 to $572,891 or 27% for the three months and year ended December 31, 2024, respectively, compared to the equivalent periods in the prior year. Interest income is primarily consisted of interest earned from the residential property investments through the FSD Strategic Investment entity.

Other income

Other income includes proceeds from the sale of excess inventory from research activities conducted by Celly Nu. Other income was $3,989 for the three months and year ended December 31, 2024, respectively, compared $Nil in the equivalent periods in the prior year.

(Gain) loss on settlement of debt

During the three months and year ended December 31, 2024, the Company incurred a gain on settlement of debt of $737,573 and $732,417, respectively, related to cash-settlement of debt transactions with arms-length creditors.

Gain on remeasurement of financial liability

For the three months and year ended December 31, 2024, the Company did not recognize a gain on remeasurement of financial liabilities.

For the three months and year ended December 31, 2023, the Company recognized a gain on remeasurement of financial liabilities of $nil and $4,939,015, respectively. For the year ended December 31, 2023, the gain is related to settlement reached with a Contract Research Organization.

Loss (gain) on change in fair value of derivative liability

In August 2020, the Company issued 42,499 Class B Subordinate Voting Shares and 21,249 warrants to purchase Class B Subordinate Voting Shares for total cash proceeds of $9,999,997. Each warrant is exercisable to purchase one Class B Subordinate Voting Share of the Company at an exercise price of $276.90 per share and expires five years from the date of issuance.

The fair value of the warrants liability as at December 31, 2024, was $2, resulting in a gain on change in fair value of $73 and gain of $31,336 for the three months and year ended December 31, 2024, respectively.

During the year ended December 31, 2024, the Company issued convertible debentures which was treated as a hybrid financial instrument with derivative liability components. The Company issued 80,000 warrants pursuant to the convertible debenture. The fair value of the warrant liability as at December 13, 2024, the date of issuance was $245,147. The fair value of the warrants as of December 31, 2024, was $212,000 resulting in a gain on change in fair value of $33,147. The fair value of the derivative liability (conversion feature) as at December 13, 2024, the date of issuance was $320,000. The fair value of the derivative liability (conversion feature) as of December 31, 2024, was $280,000 resulting in a gain on change in fair value of $40,000.

Unrealized loss on change in fair value of digital assets

The Company's investments in digital assets are accounted for at fair value through profit or loss, resulting in loss or gain recognition as the fair value fluctuates.

Loss on changes in fair value of investments

The Company's various investments are accounted for at fair value through profit or loss, resulting in loss or gain recognition as the fair value fluctuates. The Company incurred loss on changes in fair value of $3,702 for the year ended December 31, 2024. The following tables outline changes in investments during the years:

Entity	Instrument	Note	Balance at December 31, 2023 $	Additions $	Redemptions	Change in fair value through profit or loss $	Effects of foreign exchange $	Balance at December 31, 2024 $
A2ZCryptoCap Inc.	Shares	(i)	6,049	—	—	(3,702)	(123)	2,224
Royal Bank of Canada	GIC	(ii)	756,100	—	(738,000)	—	(18,100)	—
Royal Bank of Canada	GIC	(iii)	—	2,955,610	(2,934,760)	—	—	20,850
Bank of Montreal	GIC	(iv)	—	500,000	(500,000)	—	—	—
Meridian	GIC	(v)	—	3,234,026	(2,016,317)	—	(36,210)	1,181,499
			762,149	**6,689,636**	**(6,189,077)**	**(3,702)**	**(54,433)**	**1,204,573**
							Current	**1,202,349**
							Non-Current	**2,224**
								1,204,573

RESULTS OF OPERATIONS 2023

The following table outlines our consolidated statements of loss for the three months and years ended December 31, 2023, and 2022:

	For three months ended December 31,				For the year ended December 31,			
	2023 $	2022 $	Change $	Change %	2023 $	2022 $	Change $	Change %
Expenses								
General and administrative	**1,373,300**	2,300,502	(927,202)	-40%	**9,032,724**	14,450,094	(5,417,370)	-37%
External research and development fees	**(29,961)**	2,694,955	(2,724,916)	-101%	**3,859,178**	6,910,844	(3,051,666)	-44%
Share-based payments	**99,384**	506,583	(407,199)	-80%	**3,835,475**	1,531,258	2,304,217	150%
Depreciation and amortization	**122,217**	1,157,735	(1,035,518)	-89%	**2,506,316**	4,537,415	(2,031,099)	-45%
Impairment loss	**236,186**	—	236,186	100%	**4,555,805**	—	4,555,805	100%
Total operating expenses	**1,801,126**	6,659,775	(4,858,649)	-73%	**23,789,498**	27,429,611	(3,640,113)	-13%
Loss from continuing operations	**(1,801,126)**	(6,659,775)	4,858,649	-73%	**(23,789,498)**	(27,429,611)	3,640,113	-13%
Interest income	**(153,791)**	(300,018)	146,227	-49%	**(786,363)**	(367,735)	(418,628)	114%
Finance expense, net	**12**	135	(123)	-91%	**299**	48,822	(48,523)	-99%
Gain on remeasurement of financial liability	—	506	(506)	-100%	**(4,939,015)**	(119,453)	(4,819,562)	4035%
Gain on change in fair value of derivative liability	**(99,045)**	(144,887)	45,842	-32%	**(212,256)**	(521,809)	309,553	-59%
Loss on changes in fair value of investments	**103,264**	(67,070)	170,334	254%	**378,425**	234,226	144,199	62%
Net loss from continuing operations	**(1,651,566)**	(6,148,441)	4,496,875	(0.73)	**(18,230,588)**	(26,703,662)	8,473,074	-32%
Net income (loss) from discontinued operations	—	-	-	100%	—	3,096,834	(3,096,834)	-100%
Net loss	**(1,651,566)**	(6,148,441)	4,496,875	-73%	**(18,230,588)**	(23,606,828)	5,376,240	-23%
Other comprehensive loss								
Items that may be subsequently reclassified to loss:								
Exchange (loss) gain on translation of foreign operations	**(285,119)**	40,601	(325,720)	-802%	**(235,260)**	412,989	(648,249)	-157%
Comprehensive loss	**(1,936,685)**	(6,107,840)	4,171,155	-68%	**(18,465,848)**	(23,193,839)	4,727,991	-20%
Net loss attributable to:								
Equity owners of the Company	**(1,490,273)**	(6,148,441)	4,658,168	-76%	**(17,902,179)**	(23,606,828)	5,704,649	-24%
Non-controlling interests	**(257,047)**	—	(257,047)	-100%	**(328,409)**	—	(328,409)	-100%
	(1,747,320)	(6,148,441)	4,401,121	72%	**(18,230,588)**	(23,606,828)	5,376,240	-23%

REVIEW OF OPERATIONS FOR THE THREE MONTHS AND YEARS ENDED DECEMBER 31, 2023 AND 2022

General and administrative

General and administrative expenses for the three months and years ended December 31, 2023, and 2022 are comprised of:

	For the three months ended December 31,				For the year months ended December 31,			
	2023	2022	**Change**	**Change**	**2023**	2022	**Change**	**Change**
	$	**$**	**$**	**%**	**$**	**$**	**$**	**%**
Professional fees	**861,831**	708,888	152,943	22%	**3,248,233**	5,208,356	(1,960,123)	-38%
Investor relations	**70,159**	102,742	(32,583)	-32%	**665,915**	1,495,695	(829,780)	-55%
Salaries, wages and benefits	**406,905**	622,988	(216,083)	-35%	**1,855,087**	2,798,074	(942,987)	-34%
Consulting fees	**232,021**	431,171	(199,150)	-46%	**1,305,434**	1,452,070	(146,636)	-10%
Office and general administrative	**246,912**	568,834	(321,922)	-57%	**2,294,476**	2,838,303	(543,827)	-19%
Building and facility costs	**-**	-	-	-	**-**	519,954	(519,954)	-100%
Foreign exchange loss	**(444,528)**	(134,121)	(310,407)	231%	**(336,421)**	1,323,242	(1,659,663)	-125%
	1,373,300	2,300,502	(927,202)	-40%	**9,032,724**	15,635,694	(6,602,970)	-42%
Allocated to:								
Continuing operations	**1,373,300**	2,300,502	(927,202)	-40%	**9,032,724**	14,450,094	(5,417,370)	-37%
Discontinued operations	**-**	-	-	-	**-**	1,185,600	(1,185,600)	-100%

Professional fees

Professional fees increased from $708,888 to $861,831 or 22% and decreased from $5,208,356 to $3,248,233 or 38% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. The Company incurred approximately $515,000 of legal fees directly related to non-recurring ligation expenses during the year ended December 31, 2023, compared to approximately $1,700,000 for the year ended December 31, 2022. Professional fees fluctuate from period to period based on the nature of the transactions the Company undertakes.

Investor relations

Investor relations expenses decreased from $102,742 to $70,159 or 32% and decreased from $1,495,695 to $665,915 or 55% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. Investor relations expenses fluctuate from period to period based on the Company's business strategy. For the three months and year ended December 31, 2022, the Company incurred significant one-time costs related to investor relations and marketing activities undertaken.

Salaries, wages and benefits

Salaries, wages and benefits expenses decreased from $622,988 to $406,905 or 35% and decreased from $2,798,074 to $1,855,087 or 34% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. The decrease is primarily due to a decrease in headcount for the three months and year ended December 31, 2023, compared to the equivalent periods in the prior year. The decrease in headcount was primarily attributable to the decision to terminate the research and development activities related to FSD-PEA.

Consulting fees

Consulting fees decreased from $431,171 to $232,021 or 46% and decreased from $1,452,070 to $1,305,434 or 10% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. Consulting fees include fees paid to individuals and professional firms who provide advisory services to the Company and fluctuate from period to period based on the nature of the transactions the Company undertakes.

Office and general administrative

General office, insurance, and administration expenditures for the three months and years ended December 31, 2023, and 2022 are comprised of the following:

	For the three months ended December 31,				For the years ended December 31,			
	2023	2022	**Change**	**Change**	**2023**	2022	**Change**	**Change**
	$	**$**	**$**	**%**	**$**	**$**	$	**%**
Insurance, shareholders and public company costs	**154,751**	137,088	17,663	13%	**689,187**	1,200,835	-511,648	-43%
Travel, meals and entertainment	**31,968**	74,698	-42,730	-57%	**154,124**	277,863	-123,739	-45%
Office and general administrative	**60,193**	357,048	-296,855	-83%	**1,451,165**	1,359,605	91,560	7%
Total	**246,912**	568,834	-321,922	-57%	**2,294,476**	2,838,303	-543,827	-19%

Insurance, shareholders and public company costs

Insurance, shareholders and public company costs increased from $137,088 to $154,751 or 13% and decreased from $1,200,835 to $689,187 or 43% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. These costs primarily consist of insurance and other related expenditures associated with being a publicly listed Company on the NASDAQ. For the year ended December 31, 2023, the Company was able to reduce overall insurance expenses by separately purchasing insurance policies for directors and officers from clinical trial liability insurance.

Travel, meals and entertainment

Travel, meals and entertainment expenses decreased from $74,698 to $31,968 or 57% and decreased from $277,863 to $154,124 or 45% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. Travel, meals and entertainment expenses fluctuate from period to period based on the nature of the transactions the Company undertakes.

Office and general administrative

Office and general administrative expenses decreased from $357,048 to $60,193 or 83% and increased from $1,359,605 to $1,451,165 or 7% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. Office and general administrative expenses may vary from period to period based on operational activities.

Building and facility costs

Building and facility costs decreased from $519,954 to $nil or 100% for the year ended December 31, 2023, compared to the equivalent period in the prior year. Such costs include property taxes, security services, repairs and maintenance expenditures and utilities. All costs related to the FV Pharma Facility and the Facility Property that were sold during the year ended December 31, 2022.

Foreign exchange (gain) loss

Foreign exchange gain increased from $134,121 to $444,528 or 231% and from a loss of $1,323,242 to gain of $336,421 or 125% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. The primary reason for the foreign exchange change was due to the change of the Canadian dollar relative to the US dollar and its impact on financial instruments denominated in the Canadian dollar.

External research and development fees

External research and development fees decreased from $2,694,955 to a recovery of $29,961 or 101% and decreased from $6,910,844 to $3,859,178 or 44% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. The decrease for the three months and year ended December 31, 2023, was primarily due to the Company terminating R&D activities relating to FSD-PEA and putting on hold R&D activities of Lucid-PSYCH. The Company recognized a recovery of external research and development fees of $29,961 for the three months ended December 31, 2023, as a result of credits received from contract research organizations that can be applied against future services.

Share-based payments

Share-based payments decreased from $506,583 to $99,384 or 80% and increased from $1,531,258 to $3,835,475 or 150% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. Share-based payments expense changes based on the variability in the number of options granted, vesting periods of the options, the number of Performance Share Units ("PSUs") granted, vesting periods of the PSUs, number of warrants granted, vesting periods of the warrants, the grant date fair values of share-based awards, and share-based bonuses issued. The increase for the year ended December 31, 2023, is primarily related to approximately $1.9M of share options issued and vested during the period and approximately $1.3M related to warrants issued for services.

Depreciation and amortization

Depreciation and amortization decreased from $1,157,735 to $122,217 or 89% and decreased from $4,537,415 to $2,506,316 or 45% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. Depreciation and amortization is primarily related to the amortization of intellectual property. For the three months and year ended December 31, 2023, the decrease is due to the impairment of FSD-PEA and the Innovet license, resulting in lower amortization expense, as these assets were fully impaired during the year.

Impairment loss

For the three months ended December 31, 2023, the Company recognized an impairment loss of $236,186 related to the note receivable as the likelihood of repayment of the note was considered remote. For the year ended December 31, 2023, the Company recognized an impairment loss of $4,319,619 related to the impairment of the Prismic intangible assets following the decision to terminate the clinical trials of FSD-PEA and impairment of the Innovet intangible asset following the decision to no longer purse the development of the ultra-micro PEA for veterinary purposes.

Interest income

Interest income decreased from $300,018 to $153,791 or 49% and increased from $367,735 to $786,363 or 114% for the three months and year ended December 31, 2023, respectively, compared to the equivalent periods in the prior year. Interest income is primarily comprised of user fees earned on finance receivables and interest earned on Guaranteed Investment Certificates ("GICs"). For the three months ended December 31, 2023, interest income is lower compared to the prior year due to lower interest income earned related to GICs in the prior year. For the year ended December 31, 2023, interest income is higher compared to the prior year due to interest income earned finance receivables.

(Gain) loss on remeasurement of financial liability

For the three months and year ended December 31, 2023, the Company recognized a gain on remeasurement of financial liabilities of $nil and $4,939,015 compared to a loss of $506 and gain of $119,953, for the three months and year ended December 31, 2022, respectively. For the year ended December 31, 2023, the gain is related to settlement reached with a Contract Research Organization. For the year ended December 31, 2022, the gain is related to settlement of outstanding accounts payable.

Gain on change in fair value of derivative liability

In August 2020, the Company issued 2,762,430 Class B shares and 1,381,215 warrants to purchase Class B shares for total cash proceeds of $9,999,997. Each warrant is exercisable to purchase one Class B share of the Company at an exercise price of $4.26 per share and expires five years from the date of issuance.

The fair value of the warrants liability as at December 31, 2023, was $31,338, resulting in a gain on change in fair value of $99,045 and $212,256 for the three months and year ended December 31, 2023.

Loss on changes in fair value of investments

The Company has various investments accounted for at fair value through profit or loss resulting in recognition of loss or gain as the fair value fluctuates.

REVIEW OF DISCONTINUED OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2022

In March 2020, the Company decided to focus its efforts and resources on the pharmaceutical business and initiated the process to exit the medical cannabis industry and sell FV Pharma's facility located at 520 William Street, Cobourg, Ontario, K9A 3A5 (the "Facility") and the 64-acre property on which the Facility is located (the "Facility Property"). On May 6, 2022, the Company closed the sale of the Facility and the Facility Property for total consideration of $12,730,942 (C$16,400,000). The Company recognized a gain of $4,249,582 on the sale of the Facility and the Facility Property and incurred selling expenses of $616,002 for the year ended December 31, 2022.

Results of operations related to the Disposal Group are reported as discontinued operations for the year ended December 31, 2022.

Net income from discontinued operations for the year ended December 31, 2022, is comprised of the following:

	$
Expenses	
General and administrative	1,185,600
Total operating expenses	1,185,600
Loss from discontinued operations	(1,185,600)
Other income	(32,852)
Gain on sale of property and plant	(4,249,582)
Net income (loss) from discontinued operations	3,096,834

SELECTED QUARTERLY INFORMATION

The following table sets forth selected unaudited quarterly statements of operations results for each of the eight quarters commencing January 1, 2023, and ended December 31, 2024. The information for each of these quarters has been prepared on the same basis as the audited annual financial statements for the year ended December 31, 2024. This data should be read in conjunction with the audited annual financial statements for the year ended December 31, 2024. These quarterly operating results are not necessarily indicative of our operating results for a full year or any future period.

	31-Dec-24 $	30-Sep-24 $	30-Jun-24 $	31-Mar-24 $	31-Dec-23 $	30-Sep-23 $	30-Jun-23 $	31-Mar-23 $
Interest income	(132,075)	(163,868)	(104,424)	(172,524)	(153,791)	(174,068)	(186,163)	(272,341)
Net loss for the period	(5,456,278)	(4,015,327)	(3,352,499)	(2,091,425)	(1,651,566)	(1,131,200)	(5,490,293)	(9,957,529)
Net loss per share - basic	(2.89)	(4.37)	(0.08)	(0.05)	(0.04)	(0.03)	(0.14)	(0.26)
Net loss per share - diluted	(2.89)	(4.37)	(0.08)	(0.05)	(0.04)	(0.03)	(0.14)	(0.26)

SEGEMENT INFORMATION

Reportable segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker, with appropriate aggregation. The chief operating decision maker is the CEO who is responsible for allocating resources, assessing the performance of the reportable segment and making key strategic decisions. The Company operates in two segments: Biopharmaceutical and Strategic Investments.

The Company's Biopharmaceutical segment is focused on furthering the research and development of the Company's drug candidates and the development of a treatment for alcohol misuse for application in hospitals and other medical practices. The Biopharmaceutical segment primarily earns interest income on excess cash on hand invested in short-term guaranteed investment certificates.

The Company's Strategic Investments segment is focused on generating returns and cash flow through the issuance of loans secured by residential property, with FSD Strategic Investments having a first or second collateral mortgage on the secured property.

The following tables summarize the Company's interest income, total operating expenses, and net loss for the years ended December 31, 2024, and 2023 on a segmented basis:

	For the years ended December 31, 2024		
	Biopharmaceutical $	Strategic Investments $	Total $
Interest expense (income)	(14,695)	(558,196)	**(572,891)**
Total operating expenses	16,135,899	361	**16,136,260**
Net (loss) income	(15,473,364)	557,835	**(14,915,529)**

	For the years ended December 31, 2023		
	Biopharmaceutical $	Strategic Investments $	Consolidated $
Interest income	(675,731)	(110,632)	(786,363)
Total operating expenses	23,169,675	619,823	23,789,498
Net (loss)	(18,204,886)	(25,702)	(18,230,588)

FINANCIAL POSITION

As at	December 31, 2024 $	December 31, 2023 $	Change $	Change %
ASSETS				
Current assets				
Cash and cash equivalents	**5,995,872**	2,757,040	3,238,832	117%
Other receivables	**374,678**	228,764	145,914	64%
Prepaid expenses and deposits	**69,036**	155,413	(86,377)	-56%
Finance receivables, net	**3,432,340**	7,187,988	(3,755,648)	-52%
Investments	**1,202,349**	756,100	446,249	59%
Inventory	**117,242**	—	117,242	100%
Digital assets	**861,230**	—	861,230	100%
	12,052,747	11,085,305	967,442	9%
Non-current assets				
Equipment, net	**76,894**	87,583	(10,689)	-12%
Investments	**2,224**	6,049	(3,825)	-63%
Right-of-use asset, net	**53,488**	32,838	20,650	63%
Finance receivables, net	—	907,366	(907,366)	-100%
Intangible assets, net	**4,933,871**	5,355,687	(421,816)	-8%
Total assets	**17,119,224**	17,474,828	(355,604)	-2%
LIABILITIES				
Current liabilities				
Trade and other payables	**4,362,068**	4,195,029	167,039	4%
Lease obligations	**53,780**	38,650	15,130	39%
Warrants liability	**212,002**	31,338	180,664	577%
Derivative liabilities	**280,000**	—	280,000	100%
Deferred income	**1,000,000**	—	1,000,000	100%
Notes payable	**619,029**	300,549	318,480	106%
Convertible debentures	**152,113**	—	152,113	100%
	6,678,992	4,565,566	2,113,426	46%
Total liabilities	**6,678,992**	4,565,566	2,113,426	46%
SHAREHOLDERS' EQUITY				
Class A share capital	**151,701**	151,622	79	0%
Class B share capital	**150,318,624**	137,626,863	12,691,761	9%
Warrants	**1,997,759**	2,723,356	(725,597)	-27%
Contributed surplus	**31,072,543**	30,225,741	846,802	3%
Foreign exchange translation reserve	**50,795**	417,341	(366,546)	-88%
Accumulated deficit	**(172,110,884)**	(157,908,160)	(14,202,724)	9%
Equity attributable to shareholders of the Company	**11,480,538**	13,236,763	(1,756,225)	-13%
Non-controlling interests	**(1,040,306)**	(327,501)	(712,805)	218%
	10,440,232	12,909,262	(2,469,030)	-19%
Total liabilities and shareholders' equity	**17,119,224**	17,474,828	(355,604)	-2%

Assets

Cash and cash equivalents increased by $3,238,832, or 117%, primarily due to operating activities, proceeds from Class B Subordinate Voting Share issuances, and private placement offerings.

Other receivables increased by $145,914, or 64%, reflecting improved efficiency in the quarterly sales tax filing process with CRA and Australian authorities, which resulted in accelerated fund collection.

Investments increased by $442,424, or 598%, primarily due to GIC purchases made through the FSD Strategic Investments entity.

Current finance receivables decreased by $3,755,648, or 52%, reflecting various portfolio adjustments, as the Company collected the principal repayments from matured loans and did not renew.

The Company invested in digital assets during the year ended December 31, 2024, with the fair value balance of $861,230.

The right-of-use assets increased by $20,650, or 63%, as all leases were terminated, except for the current office lease at the main office, which has been renewed for a 12-month term.

Intangible assets decreased by $421,816, or 8%, due to amortization expenses for the year ended December 31, 2024.

Liabilities

Trade and other payables increased by $167,039, or 4%, reflecting the Company's ongoing operational activities and strategic investments.

The fair value of the warrants liability from the August 2020 issuance was $2 as at December 31, 2024 (December 31, 2023 – $31,338). The fair value of the warrant liability from the convertible debenture was $212,000 as of December 31, 2024.

The fair value of the derivatives liabilities as of December 31, 2024, was $280,000. This stems from the conversion feature valuation from the December private placement offering.

The Company received $1,000,000 in proceeds related to a prepaid forward contract, which resulted in an increase in deferred revenue of $1,000,00 for the year ended December 31, 2024.

The convertible debt resulting from the December 2024 private placement offering, was valued at $152,113.

Shareholders' equity

Shareholder's equity decreased by $1,756,225 primarily due to:

(i) a decrease of $725,597 related to warrants expired and canceled during the year;

(ii) a decrease of $366,546 related to the translation of foreign operations; and

(iii) an increase of $14,915,529 related to net loss for the year; and

(iv) an increase of $12,691,761 related to Class B Subordinate Voting Shares issued, reflecting new shares issued through the ATM facility for capital raising activities and debt settlement agreements.

Non-controlling interests

Through the License Agreement, Quantum acquired 34.66% of Celly on July 31, 2023. As of December 31, 2024, the Company has a 22.95% (December 31, 2023 – 26.15%) ownership interest in Celly through common shares held in Celly. The non-controlling interest represents the common shares of Celly that are not attributable to the Company.

Reconciliation of non-controlling interest is as follows:

	$
Balance, December 31, 2022	—
Initial recognition of non-controlling interests	(24,467)
Share-based payments	16,702
Dividend	8,673
Net loss for the year	(328,409)
Balance, December 31, 2023	(327,501)
Net loss for the year	(712,805)
Balance, December 31, 2024	**(1,040,306)**

LIQUIDITY, CAPITAL RESOURCES AND FINANCING

The general objectives of our capital management strategy are to preserve our capacity to continue operating, provide benefits to our stakeholders and provide an adequate return on investment to our shareholders by continuing to invest in our future that is commensurate with the level of operating risk we assume. We determine the total amount of capital required consistent with risk levels. This capital structure is adjusted on a timely basis depending on changes in the economic environment and risks of the underlying assets. We are not subject to any externally imposed capital requirements.

The financial statements and this MD&A have been prepared on the basis of accounting principles applicable to a going concern, which assumes that the Company will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of operations. In making this assessment, management concluded that it has sufficient working capital as of December 31, 2024, to carry out its planned operations over the next twelve months.

The Company is in the preliminary stages of its planned operations and has not yet determined whether its processes and business plans are economically viable. The continuing operations of the Company are dependent upon the ability of the Company to complete the pharmaceutical research and development programs centered on the Company's development of a treatment for alcohol misuse for application in hospitals and other medical practices and research and development of its lead compound, Lucid-MS.

Cash flows for the years ended December 31, 2024, and 2023

Cash Flows (Used in) Operating Activities

For the year ended December 31, 2024, cash used in operating activities was $6,876,479, compared to $10,827,264 in the prior year. This reduction in cash outflow was primarily driven by the positive working capital changes, specifically from a $4.6 million collection of finance receivables as the Company actively managed its residential mortgage portfolio. The improvement was further supported by a 4.27 million increase in trades and other payables, reflecting extended payment terms negotiated with vendors.

Cash Flows (Used in) Provided by Investing Activities

For the year ended December 31, 2024, investing activities resulted in a net cash outflow of $1,503,559, compared to $269,579 in the same period of 2023. The current year's outflow were primarily due to the purchase of digital assets for $1 million (but reported at fair value on balance sheet) and the acquisition of various GIC investments in Canadian banks, which totaled $6.6 million.

Cash Flows (Used in) Provided by Financing Activities

Financing activities generated positive cash flows of $11,618,870 for the year ended December 31, 2024, compared to cash used of $3,126,589 in the corresponding period of 2023. This significant improvement was primarily driven by successful capital-raising initiatives, with proceeds from the issuance of Class B shares amounting to $10,670,618, proceeds from convertible debentures of $702,700 and proceeds from the Rocking Horse loan of $309,138. The negative cash flow in 2023 was due to share purchases that amounted to $2,957,816.

CONTRACTUAL OBLIGATIONS

We have no significant contractual arrangements other than those noted in our financial statements.

OFF-BALANCE SHEET ARRANGEMENT

We have no off-balance sheet arrangements other than those noted in our financial statements.

USE OF PROCEEDS RECONCILIATION FROM DECEMBER 2023 PROSPECTUSES

Effective December 22, 2023, the Company filed and obtained a receipt for its final short form base shelf prospectus dated December 22, 2023 (the "**December 2023 Canadian Prospectus**", and together with the January 2024 Registration Statement, the "**December 2023 Prospectuses**") to provide the Company with the flexibility to take advantage of financing opportunities and favourable market conditions, if and when needed, during the 25-month period that the December 2023 Canadian Prospectus remains effective (the "**December 2023 Canadian Prospectus Effective Period**"). The December 2023 Canadian Prospectus has been filed in each of the provinces and territories in Canada. The December 2023 Canadian Prospectus enables the Company to offer, issue and sell, from time to time: Class B Subordinate Voting Shares, subscription receipts, warrants and units, or any combination thereof for up to an aggregate offering amount of US$50,000,000, in one or more transactions during the December 2023 Canadian Prospectus Effective Period. Should the Company decide to offer securities during the December 2023 Canadian Prospectus Effective Period, the specific terms, including the use of proceeds from any offering of Securities, will be set forth in one or more related prospectus supplements to the December 2023 Canadian Prospectus.

Effective December 22, 2023, the Company also filed the U.S. Base Prospectus, which was declared effective on January 4, 2024. The January 2024 Registration Statement also qualifies the offer, issue and sale, from time to time of securities up to an aggregate amount of US$50,000,000, subject to limitations, as applicable, under Form F-3. The January 2024 Registration Statement is available for use by the Company until January 4, 2027. The terms of any securities to be offered under the January 2024 U.S. Base Prospectus will be specified in a prospectus supplement, which will be filed with the Securities Exchange Commission in connection with any such offer.

On February 16, 2024, the Company entered into the ATM Agreement and pursuant to the ATM U.S. Prospectus, the Company, at its discretion, may offer and sell, from time to time, through Wainwright as sales agent, Class B Subordinate Voting Shares, having an aggregate offering price of up to US$11,154,232. Pursuant to the ATM U.S. Prospectus, the Company allocated anticipated proceeds (i) to fund our various clinical studies, trials, and development programs, (ii) to fund research and development, and (iii) for general corporate purposes and working capital.

From February 16, 2024, through December 31, 2024, the Company sold an aggregate of 1,384,781 Class B Subordinate Voting Shares on a post-consolidation basis, pursuant to the ATM U.S. Prospectus for gross proceeds of approximately US$11,746,730.

In addition, during the year ended December 31, 2024, the Company completed the August 2024 Class A Multiple Voting Share Private Placement Offering, September 2024 Class A Multiple Voting Share Private Placement Offering and closed an initial and second tranche of the December 2024 Offering for aggregate gross proceeds of US$702,700 (C$1,000,000).

As at December 31, 2024, the Company maintained a positive working capital of approximately US$5.37 million. The Company's current assets were primarily composed of cash and cash equivalents (49.7%) and finance receivables (28.5%), supplemented by smaller holdings and investments (10%), digital assets (7.1%). Trade and other payables (65.3%) were the primary component of current liabilities.

Use of Proceeds with Non-Contingent Financial Resources Reconciliation

Category	Allocated (US$)	Spent to Date (US$)	Reconciliation (+over spent/-under spent) (US$)	Comments
1. MAD Cohorts	326,991	289,265	(37,726)	Expenditures for MAD Cohorts were well-aligned with the projected budget, reflecting efficient management of resources for this initiative.
2. Chronic Toxicity to initiate phase-2 (3-month study)	743,163	633,697	(109,466)	Costs incurred for the chronic toxicity study remained within the expected range
3. Settlement of Accounts Payable	1,710,493	2,280,184	569,691	The variance reflects the accrual of various expenses and liabilities throughout fiscal year 2024, which were settled as part of the Company's financial obligations.
TOTAL:	**2,780,647**	**3,203,146**	**422,499**	

Use of Proceeds with Contingent Financial Resources Reconciliation

Category	Allocated (US$)	Spent to Date (US$)	Reconciliation (+over spent/-under spent) (US$)	Comments
1. Lucid-MS Program				The Company conducted toxicology studies and drug developments tests through Huge Biopharma in Australia.
Non-clinical studies	4,570,451	921,844	(3,648,607)	
Drug Substance and Product Manufacturing	2,080,856	822,969	(1,257,887)	
Clinical Studies	20,288,347	-	(20,288,347)	
Regulatory, licensing and other support costs	3,715,815	579,232	(3,136,583)	
Sub-total	**30,655,469**	**2,324,045**	**(28,331,424)**	
2. Alcohol Misuse Treatments Program: Healthcare Product				The Company has not yet started any trials or activities for the healthcare product related segment.
Non-clinical activities	2,972,652	-	(2,972,652)	
Drug Substance and Product Manufacturing	3,344,232	-	(3,344,232)	
Clinical Studies	2,972,651	-	(2,972,651)	
Regulatory, IP and other support costs	222,949	-	(222,949)	
Marketing and related activities	1,486,326	-	(1,486,326)	
Sub-total	**10,998,810**	**-**	**(10,998,810)**	
3. Alcohol Misuse Treatments Program: clinical efficacy				The Company conducted a trial led by ASPI Select in Florida, USA, to assess safety and efficacy metrics of the unbuzzed beverage.
Clinical efficacy and safety trial	-	356,962	356,962	
4. Operations				The Company incurred higher than
Team members salaries, benefits, external consultants and key opinion leaders	4,087,396	6,701,161	2,613,765	

Information technology, legal, tele/communications, facilities infrastructure, travel, shipping/logistics	2,229,489	2,708,936	479,447	forecasted legal expense for various services related to ongoing litigations and regulatory compliance matters.
Sub-total	**6,316,885**	**9,410,097**	**3,093,212**	
5. Corporate Treasury				The Company invested in cryptocurrencies as part of its new corporate treasury function. The fair value of the holdings are reported on the balance sheet.
Cryptocurrencies	-	861,230	861,230	
6. *FSD201*				FSD Pharma Australia started the drug development with the Australian CRO.
MCAS Study	-	1,583,184	1,583,184	
TOTAL:	**47,971,164**	**14,178,556**	**(33,792,608)**	

TRANSACTIONS WITH RELATED PARTIES

Related parties and related party transactions impacting the accompanying financial statements are summarized below and include transactions with the following individuals or entities:

Transactions with key management and directors comprise the following:

a) Director's compensation for the year ended December 31, 2024, was $161,048 (2023 – $175,140 and 2022 - $215,104).

b) During the year ended December 31, 2024, the Company granted Nil (2023 – 6,154 and 2022 – 43,386) PSUs to independent members of the Board. As at December 31, 2024, the PSUs had fully vested upon the filing of the MS Phase 1 IND on January 6, 2023 and were settled with the issuance of Class B Subordinate Voting Shares.

c) During the year ended December 31, 2024, the Company granted 23,000 options to officers and employees of the Company each with exercise prices ranging from C$5.25 to C$5.60 and expiring two years from date of issuance.

d) During the year ended December 31, 2024, the Company cancelled 30,768 options held by officers and employees of the company. They issued RSU of 30,768 in replacement of the cancelled options.

e) During the year ended December 31, 2024, the Company granted the Co-Chairman of the board, the CEO and the current CFO total shares of 248,160 with a fair value of $1,017,456 as bonus for the year.

f) During the year ended December 31, 2023, the Company granted the previous interim CEO, the current CEO, the Chief Operating Officer ("COO") and the CEO of Lucid, 7,692 share options each with an exercise price of C$84.50 and an expiry date of January 25, 2028. All options were fully vested on grant. Each share option can be exercised to acquire one Class B Subordinate Voting Share.

g) On August 15, 2024, the Company closed a non-brokered private placement and issued 4 Class A Multiple Voting Shares at a price of C$18 per Class A Multiple Voting Share for aggregate gross proceeds of C$72 to Xorax and Fortius, with each entity receiving 2 Class A Multiple Voting Shares.

September 13, 2024, the Company closed a non-brokered private placement and issued 6 Class A Multiple Voting Shares at a price of $6 per Class A Multiple Voting Share for gross proceeds of C$36 to Xorax and Fortius, with each entity receiving 3 Class A Multiple Voting Shares.

h) During the year ended December 31, 2023, the Company entered into a secured loan agreement with the CEO for C$1,200,000, with monthly payments of C$6,000 based on an annual interest rate of 6%. The loan had a maturity date of April 26, 2025, and was part of FSD Strategic Investments' portfolio of finance receivables. During the year ended December 31, 2024, a payment of C$400,000 was made by the CEO, and monthly payments were subsequently reduced to C$4,000. Subsequent to December 31, 2024, the CEO made a payment of C$800,000 towards the loan, thereby settling the total debt outstanding owed to FSD Strategic Investments.

i) During the year ended December 31, 2023, the Company issued 15,385 warrants for consulting services to certain independent members of the Board of Directors with a fair value of $533,206, prior to them joining the Board of Directors. The Company determined the fair value of the services received could not be measured reliably and determined the fair value using the Black-Scholes model.

j) For the year ended December 31, 2023, the Company reimbursed $145,081 to a related party of the CEO, President, and Executive Co-Chairman of the Board for legal expenses.

Key management personnel

Related parties include directors, officers, close family members, certain consultants and enterprises that are controlled by these individuals as well as certain persons performing similar functions.

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Company directly or indirectly, including any directors (executive and non-executive) of the Company.

Key management personnel compensation during the years ended December 31, 2024, 2023, and 2022 is comprised of:

	2024	2023	2022
	$	$	$
Salaries, benefits, bonuses and consulting fees	**908,052**	1,395,096	1,839,441
Share-based payments	**1,085,669**	1,980,732	1,345,952
	1,993,721	3,375,828	3,185,393

As at December 31, 2024, the Company owed an executive officer $Nil (December 31, 2023 - $140,012), for legal fees incurred by the Company and paid by the executive officer on behalf of the Company. The amount owed is recorded within trade and other payables.

As at December 31, 2024, the Company has $Nil owing to related parties included in accounts payable and accrued liabilities (December 31, 2023 - $Nil).

FINANCIAL INSTRUMENTS AND OTHER INSTRUMENTS

Credit risk

Credit risk is the risk of financial loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations and arises principally from deposits with banks and outstanding other receivables and finance receivables. The Company trades only with recognized, creditworthy third parties.

The Company does not hold any collateral as security for its outstanding finance receivables but mitigates this risk by dealing only with, what management believes to be, financially sound counterparties and, accordingly, does not anticipate significant loss for non-performance. The loans are secured by residential properties and the Company is granted a first or second collateral charge mortgage on the properties for a sum equal to the interest payments plus the principal amount. The Company performs assessments on factors such as: timing of payments, loan to value ratios, communications with the borrower and external macro factors such as interest rates and economic conditions to mitigate risks.

Liquidity risk

Liquidity risk is the risk the Company will not be able to meet its financial obligations as they come due. The Company's exposure to liquidity risk is dependent on the Company's ability to raise additional financing to meet its commitments and sustain operations. The Company mitigates liquidity risk by management of working capital, cash flows, the issuance of share capital and if desired, the issuance of debt. The Company's trade and other payables are all due within twelve months from the date of these financial statements.

If unanticipated events occur that impact the Company's ability to carry out the planned clinical trials, the Company may need to take additional measures to increase its liquidity and capital resources, including issuing debt or additional equity financing or strategically altering the business forecast and plan. In this case, there is no guarantee that the Company will obtain satisfactory financing terms or adequate financing. Failure to obtain adequate financing on satisfactory terms could have a material adverse effect on the Company's results of operations or financial condition.

Market risk

Market risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices. Market risk comprises three types of risk: foreign currency risk, interest rate risk and other price risk.

- Foreign currency risk

Foreign currency risk arises on financial instruments that are denominated in a currency other than the functional currency in which they are measured. The Company's primary exposure with respect to foreign currencies is from Canadian dollar denominated cash and trade and other payables. A 1% change in the foreign exchange rates would not result in any significant impact to the financial statements.

- Interest rate risk

Interest rate risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company's finance receivables are at fixed rates and there are no material long-term borrowings outstanding. The Company is not exposed to interest rate risk as at December 31, 2024.

- Other price risk

Other price risk is the risk the fair value or future cash flows of a financial instrument will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk), whether those changes are caused by factors specific to the individual financial instrument or its issuer, or factors affecting all similar financial instruments traded in the market. The Company is not exposed to other price risk as at December 31, 2024.

Fair values

The carrying values of cash, other receivables, trade and other payables and notes payable approximate fair values due to the short-term nature of these items or they are being carried at fair value or, for notes payable, interest payables are close to the current market rates. The risk of material change in fair value is not considered to be significant. The Company does not use derivative financial instruments to manage this risk.

Financial instruments recorded at fair value on the consolidated statement of financial position are classified using a fair value hierarchy that reflects the significance of the inputs used in making the measurements. The Company categorizes its fair value measurements according to a three-level hierarchy. The hierarchy prioritizes the inputs used by the Company's valuation techniques. A level is assigned to each fair value measurement based on the lowest-level input significant to the fair value measurement in its entirety. The three levels of the fair value hierarchy are defined as follows:

- Level 1 – Unadjusted quoted prices as at the measurement date for identical assets or liabilities in active markets.
- Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.
- Level 3 – Significant unobservable inputs that are supported by little or no market activity. The fair value hierarchy also requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value.

The fair value hierarchy requires the use of observable market inputs whenever such inputs exist. A financial instrument is classified to the lowest level of the hierarchy for which a significant input has been considered in measuring fair value.

Private company investments measured at fair value are classified as Level 3 financial instruments. The valuation method and significant assumptions used to determine the fair value of private company investments have been disclosed in the financial statements. The Company did not hold any private company investments as of December 31, 2024. During the year, there were no transfers of amounts between levels.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Refer to Note 2 and Note 3 of the audited consolidated financial statements for the fiscal year ended December 31, 2024, for a full discussion of our critical accounting policies and estimates.

OUTSTANDING SHARE DATA

The Company is authorized to issue an unlimited number of Class A Multiple Voting Shares and an unlimited number of Class B Subordinate Voting Shares, all without par value. All shares are ranked equally with regards to the Company's residual assets.

The Class B Subordinate Voting Shares are "restricted securities" within the meaning of such term under applicable Canadian securities laws, as these securities do not carry equal voting rights as compared with the Class A Multiple Voting Shares.

The holders of Class A Multiple Voting Shares are entitled to 276,660 votes per Class A Multiple Voting Share held. Class A Multiple Voting Shares are held by the CEO, President, Co-Chairman of the Board and the Director, Co-Chairman of the Board.

The Company's outstanding capital was as follows as at the date of this MD&A:

Class A Multiple Voting Shares	12(1)
Class B Subordinate Voting Shares	2,706,319(1)
Share options	42,648
Warrants	194,984

Note:

1. The Class A Multiple Voting Shares represent approximately 59% of the voting rights attached to Quantum's outstanding voting securities.

DISCLOSURE CONTROLS AND PROCEDURES AND INTERNAL CONTROLS OVER FINANCIAL REPORTING

A. Disclosure Controls and Procedures

We maintain disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended, or the Exchange Act, which are designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and that such information is accumulated and communicated to our management, including our CEO and CFO, as appropriate to allow timely decisions regarding required disclosure.

Under the supervision and with the participation of our CEO and CFO, our management has evaluated the effectiveness of our disclosure controls and procedures as of December 31, 2024, the end of the period covered by this report. Based on that evaluation, our CEO and CFO concluded that our disclosure controls and procedures were effective as of December 31, 2024.

The effectiveness of our disclosure controls and procedures and our internal control over financial reporting is subject to various inherent limitations, including cost limitations, judgments used in decision making, assumptions about the likelihood of future events, the soundness of our systems, the possibility of human error, and the risk of fraud. Moreover, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions and the risk that the degree of compliance with policies or procedures may deteriorate over time. Because of these limitations, there can be no assurance that any system of disclosure controls and procedures or internal control over financial reporting will be successful in preventing all errors or fraud or in making all material information known in a timely manner to the appropriate levels of management.

B. Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Our internal control over financial reporting is the process designed by and under the supervision of our CEO and CFO to provide reasonable assurance regarding the reliability of our financial reporting and the preparation of our financial statements for external reporting in accordance with accounting principles generally accepted in the United States of America. Management has evaluated the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control-Integrated Framework (2013).

Under the supervision and with the participation of our CEO and CFO, our management has assessed the effectiveness of our internal control over financial reporting as of December 31, 2024, and concluded that it was effective.

MNP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We have issued our report dated March 27, 2025 with respect to the consolidated financial statements of Quantum Biopharma Ltd. (formerly, FSD Pharma Inc.) and its subsidiaries (the "Company") as of December 31, 2024 and 2023, and for each of the years in the three-year period ended December 31, 2024, included in the Company's Annual Report on Form 20-F of Quantum Biopharma Ltd. for the year ended December 31, 2024, as filed with the United States Securities and Exchange Commission. We consent to the incorporation by reference of the aforementioned report in the Company's Registration Statement on Form F-3 (333-276264), as amended (the "Registration Statement on Form F-3").

We also consent to the reference to our firm under the heading "Experts" and "Transfer Agent, Registrar and Auditor" in the Registration Statement on Form F-3.

MNP LLP

Chartered Professional Accountants
Licensed Public Accountants
Mississauga, Canada
March 27, 2025

EXHIBIT 97.1

QUANTUM BIOPHARMA LTD.
CLAWBACK POLICY

This Quantum BioPharma Ltd. Clawback Policy (this "**Policy**") was approved effective as of November 28, 2023 (the "**Effective Date**") by the Compensation Committee (the "**Committee**") of the Board of Directors (the "**Board**") of Quantum BioPharma Ltd. (the "**Company**"). This Policy is adopted pursuant to and intended to comply with Rule 5608 (Recovery of Erroneously Awarded Compensation) of The Nasdaq Stock Market LLC ("**Nasdaq**") so long as the Company's securities are listed on Nasdaq.

Purpose and Policy Statement

The Company is committed to conducting business with integrity in accordance with high ethical standards and in compliance with all applicable laws, rules, and regulations. This includes the Company's commitment to comply with all laws, rules, and regulations applicable to the presentation of the Company's financial information to the public and to the recovery of erroneously awarded incentive-based compensation.

As a result, the Committee has adopted this Policy to provide that, in the event the Company is required to prepare an accounting restatement due to the material noncompliance of the Company with any financial reporting requirement under the securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period (each, as applicable, a "**Restatement**"), the Company will recover reasonably promptly the amount of any "erroneously awarded compensation" "received" by an "executive officer," in each case as such terms are defined in this Policy, if and to the extent required by any federal or state law, rule or regulation, or rule, regulation, policy or listing standard of the Securities and Exchange Commission ("**SEC**") or any securities exchange on which the Company's securities are listed, including without limitation, Nasdaq Rule 5608 (Recovery of Erroneously Awarded Compensation).

In the event of any change in any federal or state law, rule or regulation, or rule, regulation, policy or listing standard of the SEC or any securities exchange on which the Company's securities are listed after the Effective Date, which requires the Company to recover compensation from an executive officer, the Company will seek recovery under this Policy to the extent required by such laws, rules, regulations or listing standards.

Administration

The Committee has full power, authority, and sole and exclusive discretion to reasonably construe, interpret, and administer this Policy. The Committee will interpret this Policy consistent with Nasdaq Rule 5608 (Recovery of Erroneously Awarded Compensation) and any guidance issued thereunder, the rules and regulations of the SEC, and any other applicable laws, rules or regulations governing the mandatory recovery of compensation, as such laws, rules or regulations may change, be interpreted, or evolve from time to time. All determinations and decisions made by the Committee will be made in its reasonable discretion and will be final, conclusive, and binding on all affected individuals.

The term "**Committee**" as used in this Policy means the Compensation Committee of the Board, or in the absence of such a committee, a majority of the "independent directors" (as defined under Nasdaq Rule 5605(a)(2)) serving on the Board.

Applicability

This Policy applies to all "incentive-based compensation" "received" by a person, in each case as such terms are defined in this Policy:

- After beginning service as an "executive officer," as such term is defined in this Policy, and who served as an executive officer at any time during the performance period for that incentive-based compensation;
- While the Company has a class of securities listed on Nasdaq or another national securities exchange or a national securities association; and
- During the three completed fiscal years immediately preceding the date that the Company is required to prepare the Restatement, plus any transition period (that results from a change in the Company's fiscal year) within or immediately following those three completed fiscal years; provided, however, that a transition period between the last day of the Company's previous fiscal year-end and the first day of its new fiscal year that comprises a period of nine to 12 months would be deemed a completed fiscal year; and provided, further, that the Company's obligation to recover erroneously awarded compensation is not dependent on if or when the restated financial statements are filed.

For purposes of determining the relevant recovery period, the date that the Company is required to prepare a Restatement is the earlier to occur of (i) the date the Company's Board, a committee of the Board, or the officer or officers of the Company authorized to take such action if Board action is not required, concludes, or reasonably should have concluded, that the Company is required to prepare a Restatement; or (ii) the date a court, regulator or other legally authorized body directs the Company to prepare a Restatement.

Executive Officers Covered by Policy

This Policy covers the Company's current and former executive officers who received erroneously awarded compensation regardless of whether the executive officer committed misconduct or contributed to the error.

The term "**executive officer**" as used in this Policy means the Company's:

- president;
- principal financial officer;
- principal accounting officer (or if there is no such accounting officer, the controller);
- any vice-president of the Company in charge of a principal business unit, division, or function (such as sales, administration, or finance);
- any other officer who performs a policy-making function; or
- any other person who performs similar policy-making functions for the Company and executive officers of the Company's parents or subsidiaries if such individuals perform such policy-making functions for the Company.

Policy-making function is not intended to include policy-making functions that are not significant. Identification of an executive officer for purposes of this Policy would include at a minimum executive officers identified by the Company pursuant to Item 401(b) of SEC Regulation S-K.

Authority and Obligation to Recover Erroneously Awarded Compensation; Exceptions

In the event of a Restatement, the Company must reasonably promptly recover any "erroneously awarded compensation," as such term is defined in this Policy, in compliance with this Policy, except to the extent one of the three conditions below is met and the Committee has made a determination that recovery would be impracticable.

1. The direct expense paid to a third party to assist in enforcing this Policy would exceed the amount to be recovered and the Company has made a reasonable attempt to recover any amount of erroneously awarded compensation, has documented such reasonable attempt(s) to recover and provided that documentation to Nasdaq.

2. Recovery would violate home country law where that law was adopted prior to November 28, 2022, and the Company has obtained an opinion of home country counsel, acceptable to Nasdaq, that recovery would result in such a violation and has provided such opinion to Nasdaq.

3. Recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of Section 401(a)(13) or 411(a) of the U.S. Internal Revenue Code and regulations thereunder.

Erroneously Awarded Compensation

The term "**erroneously awarded compensation**" as used in this Policy means that amount of "incentive-based compensation" received that exceeds the amount of "incentive-based compensation" that otherwise would have been received had it been determined based on the restated amounts, and must be computed without regard to any taxes paid.

For incentive-based compensation based on stock price or total shareholder return, where the amount of erroneously awarded compensation is not subject to mathematical recalculation directly from the information in a Restatement:

- the amount must be based on a reasonable estimate of the effect of the Restatement on the stock price or total shareholder return upon which the incentive-based compensation was received; and

- the Company must maintain documentation of the determination of that reasonable estimate and provide such documentation to Nasdaq.

The term "**incentive-based compensation**" as used in this Policy means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a financial reporting measure.

The term "**financial reporting measures**" as used in this Policy means measures that are determined and presented in accordance with the accounting principles used in preparing the Company's financial statements, and any measures that are derived wholly or in part from such measures. Financial reporting measures include, without limitation, stock price and total shareholder return, and may include non-GAAP financial measures. A financial reporting measure need not be presented within the Company's financial statements or included in an SEC filing to constitute a financial reporting measure for this purpose.

Incentive-based compensation is deemed "**received**" as such term is used in this Policy by an executive officer in the Company's fiscal period during which the financial reporting measure specified in the incentive-based compensation award is attained, even if the payment or grant of the incentive-based compensation occurs after the end of that period.

Notwithstanding the generality of the foregoing, "incentive-based compensation" is intended to be interpreted and construed broadly and includes with respect to any plan that takes into account incentive-based compensation (other than a tax-qualified plan) any amount contributed to a notional account based on erroneously awarded compensation and any earnings accrued to date on that notional account. Such plans include without limitation long-term disability plans, life insurance plans, supplemental executive retirement plans and other compensation, if it is based on incentive-based compensation.

For clarity and the avoidance of doubt, "incentive-based compensation" does not include the following:

- base salary (other than any base salary increase earned wholly or in part based on the attainment of a financial reporting measure, which increase is subject to recovery as incentive-based compensation hereunder);
- bonuses paid solely at the discretion of the Committee or Board that are not paid from a "bonus pool" that is determined by satisfying a financial reporting measure performance goal;
- bonuses paid solely upon satisfying one or more subjective standards (e.g. demonstrated leadership) and/or completion of a specified employment period;
- non-equity incentive plan awards earned solely upon satisfying one or more strategic measures (e.g., consummating a merger or divestiture), or operational measures (e.g., completion of a project); and
- equity awards for which the grant is not contingent upon achieving any financial reporting measure performance goal, and vesting is contingent solely upon completion of a specified employment period and/or attaining one or more non-financial reporting measures.

Method of Recovery

The Committee will determine, in its reasonable discretion, the method for recovering incentive-based compensation hereunder, which may include, without limitation, any one or more of the following:

- requiring reimbursement of cash incentive-based compensation previously paid;
- seeking recovery of any gain realized on the vesting, exercise, settlement, sale, transfer, or other disposition of any equity-based awards;
- cancelling or rescinding some or all outstanding vested or unvested equity-based awards;
- adjusting or withholding from unpaid compensation, deferred compensation, or other set-off;
- cancelling or setting-off against planned future grants of equity-based awards; and/or
- any other method required or authorized by applicable law or contract.

Enforceability

In addition to the adoption of this Policy, the Company will take steps to implement an agreement to this Policy by all current and future executive officers. In furtherance of the foregoing, each executive officer subject to this Policy is required to sign and return to the Company the Acknowledgement Form attached hereto as Exhibit A pursuant to which such executive officer will agree to be bound by the terms and comply with this Policy.

Policy Not Exclusive

Any recovery under this Policy is in addition to, and not in lieu of, any other remedies or rights of recovery that may be available to the Company pursuant to the terms of any other clawback or recovery policy or any similar policy in any employment agreement, incentive or equity compensation plan or award or other agreement and any other legal rights or remedies available to the Company.

Notwithstanding the generality of the foregoing, to the extent that the requirements under the provisions of Section 304 of the Sarbanes-Oxley Act of 2002 are broader than the provisions in this Policy, the provisions of such law will apply to the Company's Chief Executive Officer and Chief Financial Officer.

No Indemnification

The Company will not indemnify or agree to indemnify any executive officer or former executive officer against the loss of erroneously awarded compensation nor will the Company pay or agree to pay any insurance premium to cover the loss of erroneously awarded compensation.

Effective Date

This Policy is effective as of the Effective Date and applies to all incentive-based compensation received by the Company's current and former executive officers on or after the Effective Date.

Required Disclosures

The Company will file all disclosures with respect to this Policy in accordance with the requirements of the federal securities laws, including the disclosure required by the applicable SEC filings, and will provide all required SEC and other disclosures regarding this Policy and in the event of a Restatement.

Amendment and Termination

The Committee may amend, modify, or terminate this Policy in whole or in part at any time in its sole discretion and may adopt such rules and procedures that it deems necessary or appropriate to implement this Policy or to comply with Nasdaq Rule 5608 (Recovery of Erroneously Awarded Compensation) and any other applicable laws, rules, and regulations.

Successors

This Policy shall be binding and enforceable against all current and former executive officers of the Company and their respective beneficiaries, heirs, executors, administrators, or other legal representatives.

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QUANTUM BIOPHARMA LTD.
CLAWBACK POLICY
ACKNOWLEDGEMENT FORM

By signing below, the undersigned acknowledges and confirms that the undersigned has received and reviewed a copy of the Clawback Policy (the "**Policy**").

By signing this Acknowledgement Form, the undersigned acknowledges and agrees that the undersigned is and will continue to be subject to the Policy and that the Policy will apply both during and after the undersigned's employment with Quantum BioPharma Ltd., and its direct and indirect subsidiaries.

Further, by signing below, the undersigned agrees to abide by the terms of the Policy, including, without limitation, by returning any erroneously awarded compensation (as defined in the Policy) to Quantum BioPharma Ltd. and its direct and indirect subsidiaries to the extent required by, and in a manner permitted by the Policy.

Signature: _____

Name: _____

Date: _____