

# **BIOMARK DIAGNOSTICS INC.**

**Form 51-102F1**

***Management's Discussion & Analysis***

***Quarterly Report***

***For the Quarter Ended December 31, 2023***

## **About This Management's Discussion & Analysis**

All references in this management's discussion and analysis, or MD&A, to "the Company", "BioMark", "we", "us" or "our" refer to BioMark Diagnostics Inc. and the subsidiaries through which it conducts its business, unless otherwise indicated or the context requires otherwise.

This management's discussion and analysis ("MD&A") should be read together with the unaudited consolidated interim financial statements for the nine months ended December 31, 2023, and our annual audited consolidated financial statements and accompanying notes for the year ended March 31, 2023, which have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board, or IASB. Our IFRS accounting policies are set out in Note 3 of our annual audited consolidated financial statements for the year ended March 31, 2023. All amounts are stated in Canadian dollars unless otherwise indicated.

Readers should note that the Company will need to raise additional working capital through the sale of common shares, the issuance of debt or by entering into license or collaboration agreements to fund its operation, clinical research and commercialization activities. As disclosed in the financial statements, these factors indicate the existence of material uncertainty that may raise significant doubt about the Company's ability to continue as a going concern.

## **Cautionary Statement About Forward-Looking Statements**

This MD&A includes forward-looking statements within the meaning of applicable securities laws. All statements contained herein that are not clearly historical in nature are forward-looking, and the words such as "anticipate", "believe", "plan", "estimate", "expect", "may", "project", "predict", "potential", "could", "might", "should", "leading", "intend", "contemplate", "shall" and other similar expressions are generally intended to identify forward-looking statements. Forward-looking statements in this MD&A include, but are not limited to, statements with respect to:

- our expected future loss and accumulated deficit levels
- our projected financial position and estimated cash burn rate
- our expectations about the timing of achieving milestones and the cost of our development programs
- our requirements for, and the ability to obtain, future funding on favorable terms or at all
- our projections for the development of the technology platform and progress of each of technologies, particularly with respect to the timely and successful completion of studies and trials and availability of results from such studies and trials

- our expectations regarding the progress, and the successful and timely completion, of the various stages of the regulatory approval process
- our ability to secure strategic partnerships with larger pharmaceutical and biotechnology companies
- our expectations regarding the acceptance of our technologies by the market
- our inability to accelerate developments due to external shocks such as pandemics or supply chain limitations
- our ability to retain and access appropriate staff, management, and expert advisers
- our expectations with respect to existing and future corporate alliances and licensing transactions with third parties, and the receipt and timing of any payments to be made by us or to us in respect of such arrangements; and
- our strategy with respect to the protection of our intellectual property.

All forward-looking statements reflect our beliefs and assumptions based on information available at the time the assumption was made. These forward-looking statements are not based on historical facts but rather on management's expectations regarding future activities, results of operations, performance, future capital and other expenditures (including the amount, nature and sources of funding thereof), competitive advantages, business prospects and opportunities.

By its nature, forward-looking information involves numerous assumptions, inherent risks, and uncertainties, both general and specific, known and unknown, that contribute to the possibility that the predictions, forecasts, projections or other forward-looking statements will not occur. In evaluating forward-looking statements, readers should specifically consider various factors, including the risks outlined under the heading "Risk Factors" in this MD&A. Some of these risks and assumptions include, among others:

- substantial fluctuation of losses from quarter to quarter and year to year due to numerous external risk factors, and anticipation that we will continue to incur significant losses in the future
- uncertainty as to our ability to raise additional funding to support operations
- our ability to commercialize our technologies without additional funding
- the risks associated with the development of technologies which are at clinical trial and at pre-clinical study stage
- reliance on the third parties to plan, conduct and monitor our clinical trials and pre-clinical studies
- our technologies may fail to demonstrate efficacy to the satisfaction of regulatory authorities or may not otherwise produce positive results
- risks related to filing applications to commence clinical trials and to continue clinical trials, if approved
- the risks of delays and inability to complete clinical trials due to difficulties enrolling patients
- risks related to obtain approval from regulatory authority to commercialization of technologies
- competitions from other biotechnology and pharmaceutical companies
- our reliance on the capabilities and experience of our key executives and scientists and the resulting loss of any those individuals

- our ability to adequately protect our intellectual property and trade secrets
- our ability to source and maintain licenses from third-party owners; and
- the risk of patent-related litigation,
- all as more fully described under the heading “Risk Factors” in this MD&A

Although the Company believes the expectations expressed in such forward-looking statements are based on reasonable assumptions, such statements are not guaranteeing of future performance and actual results, or developments may differ materially from those in the forward-looking statements. Factors that could cause actual results to differ materially from those in forward-looking statements include market prices, continued availability of capital and financing and general economic, market or business conditions. Investors are cautioned that any such statements are not guarantees of future performance and actual results or developments may differ materially from those projected in the forward-looking statements.

Any forward-looking statements represent our estimates only as of the date of this MD&A and should not be relied upon as representing our estimates as of any subsequent date. We undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or reflect the occurrence of unanticipated events, except as may be required by securities legislation.

## **1.1 Date of Report: February 29, 2024**

## **1.2 Overall Performance**

BioMark Diagnostics Inc. was incorporated under the Business Corporation Act of British Columbia on June 19, 2014. The head office of the Company is located at 130 – 3851 Shell Rd, Richmond, British Columbia, V6X 2W2.

BioMark is a Canadian-based company that is developing its advanced-stage cancer diagnostic business. BioMark’s cancer diagnostics technology platform leverages "Omics" and machine learning with a focus on cancers that are hard to detect and treat. BioMark Diagnostics is currently focused on bringing its blood-based cancer diagnostic solution to commercialization standards starting with its early lung cancer assay. The Company is currently listed for trading on the Canadian Securities Exchange under the symbol “BUX”, OTC Market under the symbol “BMKDF” and Frankfurt Stock Exchange under the symbol “20B”.

For more information, please visit the company’s website at [www.biomarkdiagnostics.com](http://www.biomarkdiagnostics.com)

## **Announcements and Highlights during the quarter:**

- Businesses are still facing strong inflationary headwinds with a stiff interest rate, financial system instability due to evolving risk, rapid rise in adoption of systemic AI and automation, geopolitical tensions, and skilled labour shortages, especially in recruiting bioinformatics and laboratory technicians. Challenges in financing biotechnology companies continue but the market seems to be turning around. According to HC Wainright's weekly life sciences deal comps Feb 24 2024 report, life sciences equity and equity-linked deal flow is active across offering types in 2024 to date, representing the busiest start of the year in terms of volume and number of deals since 2021. Specialist healthcare investor appetite persists for data-driven stories (and deals), although opportunistic deals are getting priced in equal measure. In addition, increased consolidation activities in the biotech arena continue. Management is taking measures to counteract any negative impact of these factors by instituting agile strategies with resilient operational and financial systems/processes while also seeking to capitalize on improved financing environment. The company is building a strong AI infrastructure necessary to leverage the power of advanced analytics.
- On October 5th, 2023, BioMark Chief Scientific Officer Jean-François Haince, presented a talk at the Annual Symposium on Disruptive Technologies organized by its partner Phytronix Technologies. The short presentation entitled "Metabolomic Fingerprinting for Early Cancer Detection: From Bench to Clinic" was an exceptional opportunity to showcase BioMark's clinical metabolomics platform to potential clients and industry leaders across Canada.
- On October 19th, 2023, BioMark received a Certificate of Annual Approval under Ethics #: HS15822 (H2012:334) from the University of Manitoba Research Ethics and Compliance office for its ongoing Spermidine/spermine N-acetyltransferase 1 (SSAT1) Gene Expression in Human Cancer studies.
- BioMark participated in "Eureka Investment Readiness Programme - 2023 Online session with Siemens Healthineers" on September 26th, 2023. Siemens Healthineers is a global provider of healthcare solutions and services, with activities in numerous countries around the world. It develops, manufactures, and sells a diverse range of innovative diagnostic and therapeutic products and services to healthcare providers worldwide. During this session, Siemens Healthineers presented how they currently work with startups, presented a challenge, and invited companies to apply and present their solutions for potential collaboration.
- On October 31st, 2023, BioMark obtained a novel patent in Canada, No 2.906.236 titled "DETECTION AND QUANTIFICATION OF ACETYLAMANTADINE IN URINE SAMPLES". This further expands the company's patent estate.

- On November 7th, 2023, BioMark announced that its wholly owned laboratory subsidiary, BioMark Diagnostic Solutions Inc ("BDS"), was awarded non-dilutive funding of CAD \$231,000 from the City of Quebec through its Vision Entrepreneuriale Québec 2026 to accelerate commercialization and market development activities of its proprietary assay for early detection of lung cancer.
- On November 14th, 2023, BioMark announced that Dr. W. Randolph Ford, Ph.D., would be joining BioMark's Advisory team to support to integrate artificial intelligence and machine learning capabilities to support BioMark's commercial drive of its early cancer detection technology platform.
- On November 23rd, 2023, BioMark's CEO, Rashid Ahmed Bux, was interviewed at The Watchlist by Stockhouse to discuss the latest development of BioMark's technology platform. Link to the interview is: <https://stockhouse.com/video/thewatchlist/dbhcg3nf?mediaId=DBHCq3nF>
- The BioMark management team visited its lab operation in Quebec City and had several meetings with strategic advisors and local partners to prepare the next growth phase of the organization once accreditation is secured. Meetings and technology demonstration from its technology development partner Phytronix was held during the visit.
- Conducted and completed quarter filing – Unaudited Financial Statement and MD&A filed in SEDAR+ and Canadian Securities Exchange as required by regulators. On November 28th, 2023, BioMark reported strong operational results from the second quarter ended September 30, 2023. The Company also announced that it intended to extend the warrant exercise term in a continuing effort to improve corporate value for its shareholders.
- On November 29th and 30th, 2023, BioMark Chief Scientific Officer Jean-François Haince, attended and participated in the 17th edition of the Quebec City Healthcare Industry Forum (FISQ2023). The objective of the FISQ is to bring together businesses and players from the Québec healthcare network around the major issues facing the industry. Several constructive discussions were held with pharma partner AstraZeneca and industrial consortium BioQuebec with a mandate to support adoption of BioMark's early lung cancer detection assay once the assay is clinically accredited in Quebec.
- BioMark collaboration with its US-based academic institution (Harrisburg University) which has exceptional capabilities in AI and ML domains has yielded very promising data on its breast cancer studies that the company will present at an upcoming symposium in the United States and also publish. BioMark seeks to leverage the expertise of the group to refine both the previous retrospective and the upcoming large scale prospective lung cancer studies.

- The abstract entitled "Early Detection of Breast Cancer using Targeted Plasma Metabolomic Profiling" was accepted for a poster presentation at the upcoming San Antonio Breast Cancer Symposium (SABCS) taking place December 5-9, 2023, in San Antonio, Texas. The abstract was presented during the Spotlight Poster Session 5 on Friday, December 8, 2023, Time: 12:00 PM - 2:00 PM at the Henry B. Gonzalez Convention Center, San Antonio, Texas. BioMark's management team was present at the event and several industry meetings were scheduled.
- On December 8th, 2023, BioMark Chief Scientific Officer Jean-François Haince presented the poster entitled "Early Detection of Breast Cancer using Targeted Plasma Metabolomic Profiling" during the Spotlight Poster Session 5 at San Antonio Breast Cancer Symposium (SABCS) held in San Antonio, Texas. The poster elicited a strong reception from leading global BioPharma and diagnostics companies.
- On December 8th, 2023, BioMark filed a provisional patent application for "EARLY BREAST CANCER DETECTION USING BLOOD-BASED METABOLOMIC PROFILING" with the United States Patent and Trademark Office. The patent application protects its discovery related to its assay for early detection of breast cancer and the determination of several subtypes.
- On December 19th, 2023, BioMark submitted an application to participate in the competitive Medical Alley's 2023 Cancer X Accelerator Program. Of interest to Cancer X program mandate are companies pushing the boundaries of early cancer detection by incorporating digital platforms. MassChallenge Cancer X is a highly competitive accelerator program offered at Moffit Cancer Centre, and only 8% of the applicants qualify for this 4-month program. Details will be shared with progressive development.
- The company has completed the recruitment of patients enrolled under its measuring response to immunotherapy for the advanced-stage lung cancer trial that is being conducted at IUCPQ with Dr. P. Joubert as the principal investigator. Full results are expected by June/July of 2024. The first samples will be shipped by February 2024. This sponsored research is funded by a grant from the hospital Foundation. Sample analysis will be conducted at BioMark's lab in Quebec. A positive outcome of the studies will further demonstrate BioMark's diagnostic assay speed and efficacy in differentiating patients who respond vs non-responders to immunotherapy treatment, which ultimately leads to better quality-of-life treatment selection for patients and overall cost savings. BioMark's assay is intended to monitor response faster and more accurately.
- The multimodal large early lung cancer patient recruitment conducted at IUCPQ under Dr. Joubert will be concluded by the end of December 2023. Over 50% (3000 samples) have been analyzed at BioMark's Quebec-based labs. Full data readout is expected by the end of June 2024 .
- The Company successfully held its Annual General Meeting on December 22, 2023, at 9:00 am (Vancouver Time) from its head office in Richmond, BC. All the motions were passed.

- On December 29th, 2023, BioMark announced that it has closed a financing round to accelerate the commercialization of its liquid biopsy technology. The financing round included a non-brokered private placement for gross proceeds of \$1,900,000 wherein BioMark issued 7,600,000 units at a price of \$ 0.25 per unit. The securities issued under the private placement will be subject to a hold period of four months and one day. Each unit consists of one common share of BioMark and one-full purchase warrant. One whole share purchase warrant will entitle the holder thereof to purchase one common share of BioMark at \$0.45 per share for a period of three years from the closing date of the private placement, subject to an acceleration clause. A debt conversion consisting of 1,032,261 units in settlement of the indebtedness in the aggregate amount of \$ 258,065.25 to pay for Due to the Related Party. No Finders' fees were payable on the private placement.
- Advanced discussions continue with Siemens Healthineers' senior management group following BioMark's participation in the challenging global "Eureka Investment Readiness Programme - 2023 Online session with Siemens Healthineers. The deeper dive into understanding BioMark's technology platform is ongoing after signing a mutually accepted 2-way NDA. The outcome of any advancements will be duly reported as progress is made.
- The management team engaged with 2 new financing group based in Europe to support the company's future capital requirements. The group has access to European banks and family offices.
- BioMark continued to entertain discussions with various financial institutions, individuals, and government agencies to secure non-dilutive funding, favorable loans, and equity investments to accelerate the commercialization of its early lung cancer liquid biopsy franchise, to advance its expansion strategy in the USA and internationally as well as for general corporate purposes.

#### About Eureka:

Eureka is an international network for industrial research and development (R&D) collaboration that includes over 45 economies from Europe, Israel, South Korea, Argentina, Chile, Singapore, and Canada. This unique and powerful platform has made it easier for Canadian small and medium-sized enterprises (SMEs) to accelerate their growth through access to global value chains and collaboration with international partners.

The National Research Council of Canada (NRC) is Canada's National Office for Eureka and provides Canadian companies, researchers, and academics with a first point of contact and access to the expansive global network.

Eureka Investment Readiness Programme - 2023 Online session with Siemens Healthineers" on September 26th, 2023. Siemens Healthineers is a global provider of healthcare solutions and services, with activities in numerous countries around the world. It develops, manufactures, and sells a diverse range of innovative diagnostic and therapeutic products and services to healthcare providers worldwide. During this session,

Siemens Healthineers presented how they currently work with startups, presented a challenge, and invited companies to apply and present their solutions.

### **Risk Factors and Uncertainty**

The Company is highly focused on introducing its advanced tests led by its early lung cancer assay in Quebec and then in other jurisdictions. It has cultivated strong clinical partners that understand the regulatory landscape, lab infrastructure requirements and challenges required to conduct proof of concept studies and accelerate commercialization. This will reduce the associated market development risk and limit capital deployment. The failure to generate planned future revenue stream sales from the Company's main services and products could have a significant and adverse affect on the Company. The delays in commercialization could impact the timing of revenue generation.

The Company is engaged in conducting additional clinical research related to technology positioning and regulatory submissions. Negative clinical trials along with regulatory denials or delays could adversely affect sales, product commercialization and could have a major impact on the Company. Additionally, industry evolution and existing or new market entrants can impact the competitive position of BioMark. New detection and screening technologies in genomics, epigenetics, exosomes, and liquid biopsy incorporating big data can negatively impact BioMark's commercialization efforts. The scale and size of new competitors can impact BioMark's ability to introduce its tests.

BioMark's success will largely depend on certain key personnel. The loss of such key personnel could have a material adverse affect on the Company. The contributions of these individuals to the immediate operations of BioMark are of the utmost importance. In addition, there is no assurance that BioMark will be able to continue to attract and retain all personnel necessary for the development and operation of its business.

Management is continuing efforts to attract additional equity and capital investors, seek non-dilutive financing and implementing cost control measures to maintain adequate levels of working capital. Nevertheless, there can be no assurances provided with respect to the successful outcome of these ongoing actions. If the Company is unable to obtain additional financing on reasonable terms, the Company may be required to curtail or reduce its operations to continue as a going concern.

In addition, the Company's limited working capital could affect the Company's ability to seize upon opportunities requiring investment, or to reinvest in its products in a timely manner.



## **Activity Rebound post COVID-19**

The COVID-19 pandemic had both operational and commercial impact on BioMark over the past three years. With the resumption of research projects, there is marked progress in clinical trial recruitment related to early lung cancer trials at IUCPQ and on measuring response to treatment for advanced-stage lung cancer patients following systemic treatment. Shipment of lab supplies to run assays are now more readily available thereby expediting faster analysis. In addition, there are many more scientific and industry-specific symposiums enabling more meetings and presentation opportunities. Due to covid many screening programs were cancelled or delayed. It is estimated that over 9.5 million patients missed their annual cancer screening. Most screening programs are back and there is a backlog in the system to support the required screening. Interest rates and inflationary pressures continue to impact operating costs across the board.

BioMark's management team has instituted financial, operational and resiliency measures to ensure that its business remains viable over the next 12 months and beyond. Financial measures include cost management initiatives, applying for lines of credit through financial institutions at attractive terms, and tapping into government grants/support programs. In addition, management is in communication with its board on liquidity plans and operational plans to accelerate commercialization and research - initiatives. BioMark ensures that all relevant risks will be disclosed and tailored to the Company's specific situation.

### **1.3 Selected Quarter Information**

The following information is a summary of the three months and nine months ended December 31, 2023, as compared to the three months and nine months ended December 31, 2022.

The information is presented on the same basis as the consolidated financial statements and should be read in conjunction with the statements and accompanying notes.

	Note	For the three-month period ended		For the nine-month period ended	
		December 31, 2023	December 31, 2022	December 31, 2023	December 31, 2022
<b>Revenue</b>		<b>\$ 41,543</b>	<b>\$ 36,889</b>	<b>\$ 123,415</b>	<b>\$ 113,746</b>
<b>Expenses</b>					
Consulting fees	3	100,050	85,050	295,135	283,255
Depreciation on right-of-use asset	6	95,888	86,933	282,225	273,539
Depreciation of property and equipment	5	3,418	3,313	10,096	9,914
Research and development		185,105	59,876	439,246	280,794
Professional fees		25,015	43,167	152,783	162,795
Office and miscellaneous		22,379	22,390	73,820	73,361
Interest and bank charges		20,071	22,283	67,261	80,543
Filing and transfer agent fees		23,083	24,462	69,432	70,466
Travel		11,620	5,011	26,129	26,561
Share-based compensation	9	15,795	122,709	84,010	323,422
<b>Total operating expenses</b>		<b>502,424</b>	<b>475,194</b>	<b>1,500,137</b>	<b>1,584,650</b>
<b>Other expenses (income)</b>					
Foreign exchange (gain) loss		41	-	(605)	-
Tax Credit income		-	-	(193,490)	-
Government grants		(54,161)	(44,607)	(143,010)	(130,182)
Interest Income		-	-	(3,538)	-
<b>Total other expenses (income)</b>		<b>(54,120)</b>	<b>(44,607)</b>	<b>(340,643)</b>	<b>(130,182)</b>
<b>Net loss and comprehensive loss</b>		<b>\$ (406,761)</b>	<b>\$ (393,698)</b>	<b>\$ (1,036,079)</b>	<b>\$ (1,340,722)</b>

For discussion of information refer to sections 1.4 and 1.6.

## 1.4 Discussion of Operations

### Three months ended December 31, 2023, compared to three months ended December 31, 2022

The Company generated revenue of \$41,543 for the quarter ended December 31, 2023, compared to \$36,889 for the same period of last year. The net loss increased by \$13,063 from \$393,698 (December 31, 2022) to \$406,761 for the quarter ended December 31, 2023, which was largely due to increased expenses for research and development.

BioMark Diagnostics Inc. wholly owned subsidiary BioMark Diagnostic Solutions Inc. ("BDS") entered into research and collaboration agreements with certain biotech companies. The purpose of entering into these agreements is for BDS to generate revenue and cashflow to finance the research activities of the company. Four agreements were signed during the quarter, BDS provided biotech companies with access to designated spaces within the premises BDS's leased as well as agreed to offer laboratory and bioanalytical basic service as requested. Management elected to present lease payments received under operating leases as Revenue.

The total operating expense increased by \$27,230 from \$475,194 (December 31, 2022) to \$502,424 (December 31, 2023), mainly due to increase in research and development. Consulting service fees increased by \$15,000 compared to the same period of last year, due to service rendered by a third party for business development and international collaborations. There has been no significant change to the compensation for key management. The Company engaged in required services on a consulting basis.

The Depreciation of right-of-use assets increased by \$8,955 due to the Company's renewed lease agreements for the office in Richmond BC and the lab space in Quebec City, QC. The details of accounting standards and the calculation of depreciation on assets, Right-of-use Asset and Lease Liability are discussed respectively on Note 3, Note 5, and Note 6 in the Interim Financial Statement. Under Note 5, computers are recorded at cost and amortized over three years; laboratory equipment is recorded at cost and amortized over five years. Under Note 6, the equipment is related to the newly acquired instruments via the third-party leasing company and is amortized over five years.

Research and development increased by \$125,229 from \$59,876 for the quarter ended December 31, 2022, to \$185,105 for the quarter ended December 31, 2023. With the resumption of research projects and facility expansion in Quebec, the Company expects higher research and other related expenses in the coming quarters. The management team will actively seek additional government non-dilutive funding to support the projected increase in research expenses. The major expenses will be related to the recruitment of more highly qualified personnel, assay verification and validation, lab supplies, lab certification, sample acquisition and analysis, publication costs, and other research/business development-related activities, especially in the USA.

Professional fees for the quarter ended December 31, 2023, were \$25,015 compared to \$43,167 for the quarter ended December 31, 2022, a decrease of \$18,152, due to the timing of the required professional services related to the annual audit, accounting and the legal counsel for patent application and filings. The Company anticipates spending a higher amount in the next quarter due to the timing and stage of the patent applications and filings. The Company continues to build its patent portfolio applications/filings and advance its patent registration in different geographic jurisdictions. These investments are important intangible assets for a biotechnology company, yet the value has not been reported or captured in the current balance sheet.

Office and miscellaneous during the period remained at a similar level to the previous year. Interest and bank charges and filing and transfer agent fees slightly decreased by \$2,212 and \$1,379 respectively.

Travel expenses increased by \$6,609 compared to the same period of the previous year, mainly due to the costs incurred for attending the international conference, presenting at symposiums and business development-related activities. With the resumption of research and business development-related activities, the Company anticipates spending a higher amount in the coming quarters on business development and collaborative research.

The share-based compensation of \$15,795 was reported for the quarter ended December 31, 2023, which decreased by \$106,914 from \$122,709 on December 31, 2022. The Company used the Black-Scholes option pricing model with weighted average assumptions and resulting values for the granted options. The details of the share-based compensation are discussed on Note 9 in the Interim Statement. The share-based compensation is designed to help the Company obtain the required consulting service from domain experts and preserve the cash for operating purposes.

The Company had its other income of \$54,161 for the quarter ended December 31, 2023, compared to the total other income of \$44,607 for the quarter ended December 31, 2022, an increase of \$9,554, mainly due to the increase of government grants under the Company's Quebec-based subsidiary, "BDS" from the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP) which supports research and development of its liquid biopsy assay for the early detection and screening of lung cancer.

### **The nine months ended December 31, 2023, compared to the nine months ended December 31, 2022**

The Company generated revenue of \$123,415 for the nine months ended December 31, 2023, and has recorded a net loss of \$1,036,079. The net loss decreased by \$304,643 compared to the nine months ended December 31, 2022, which is the combination of the decreased operating expenses related to share-based compensation and increased other incomes from tax credit income.

Research and development increased by \$158,452 from \$280,794 for the nine months ended December 31, 2022, to \$439,246 for the nine months ended December 31, 2023. The increased expense is mainly due to the occurred costs with resumed research projects and expansion projects in Quebec. A slight decrease of \$10,012 for professional fees was mainly due to the timing and stage of the patent filings and the required legal services. Office and miscellaneous, filing and transfer agent fees and travel expenses remained at the same level compared to the nine months ended December 31, 2023.

Consulting service fees increased by \$11,880 compared to the same period of last year, due to the consulting service rendered by the third party for business development and international collaborations. There has been no significant change to the compensation for key management. The Company engaged in required services on a consulting basis. The share-based compensation decreased by \$239,412 compared to \$323,422 as reported for the nine months ended December 31, 2022, due to the issued options in July and August in the last fiscal year for services rendered by scientific advisors and consultants as consulting services to support scientific and research development activities over the past few years, which keeps the Company operated in a limited funding resource.

The other income increased by \$210,461 from \$ 130,182 as of December 31, 2022, to \$340,643 as of December 31, 2023, mainly due to the increased tax credit income under the Company's Quebec-based subsidiary, BDS. The grants from the National Research

Council of Canada Industrial Research Assistance Program (NRC IRAP) to support research and development of its liquid biopsy assay for the early detection and screening of lung cancer remains at the same level.

### **Upcoming Potential Operational Objectives**

In the coming quarters, BioMark will continue to evolve its business operations to help further leverage its expertise in cancer detection, monitoring, and assessment. The Company will be devoting additional resources towards expediting the commercialization and revenue generation of its most advanced-stage early lung cancer blood-based liquid assay.

- Continue to seek and actively raise capital, especially from new strategic investors and institutional funds. Develop a better US story where valuations can be more compelling and in line with other companies in our space given the achievements of critical milestones over the past 12 months. Maintain discussions with strategic investors, family funds, and institutional investors given the heightened interest in diagnostics and the Company's new therapeutic target for GBM. The Company will also explore engaging with IR firms specialized in the biotech arena in the US who can help increase the exposure of BioMark to select investment communities and have access to institutional desks.
- Complete trials at IUCPQ following the approval from Health Canada for its late-stage lung cancer response to treatment application related to SSAT1 assay and distinct biomarkers. The response to treatment will also include immunotherapy. The latest response to immunotherapy trials are being conducted at IUCPQ under Dr. Joubert through a Fondation support grant. Results are expected by May/June 2024.
- Looking to receive the full set of plasma samples from its collaborating partner - the University of Brescia in Italy led by Dr. Paolo Bossi as principal investigator for the study titled "IDENTIFICATION OF CIRCULATING MARKERS TO CUSTOMIZE THE FOLLOW-UP OF HEAD AND NECK CANCER PATIENTS FOR EARLY IDENTIFICATION OF RECURRENCES/SECOND TUMORS". The analysis will be performed at The Metabolomics Innovation Centre using a special mega panel for this important discovery and validation phase of the study. Later BioMark's lab in Quebec will revalidate the assay. The first readout is expected by the end of Aug/Sept 2024.
- Apply for additional non-dilutive funding from Mitacs, NRC, NSERC, Alberta Cancer Early Prevention and Detection Program, Research Manitoba, Genome BC Gensolve and GAPP programs, Alliance grants, Can Export, Eureka Canada, CIIP and other federal and or provincial funding grants. In the US apply for grants such as ARPA and NIH (RO1). Europe – Integrated Health Initiatives through Europe horizon program
- Continue to submit clinical results in peer review publications and expand patent portfolio – Target to publish at least 6 peer-reviewed manuscripts, especially following results of the larger lung cancer trial in Quebec, response to treatment for late-stage lung cancer, early breast cancer on 280 samples from US patient cohort, glioblastoma

research clinical work being conducted at the University of Manitoba. It is important to keep science and discovery relevant to the scientific and biopharma communities. Relevant patents will be filed as needed to protect key discoveries and expand the company's patent estate.

- Advance the discovery study in breast cancer and further refine the metabolites selection using the latest advancement in machine learning algorithms.
- Build a stronger base and infrastructure in both US and Quebec – Expand physical presence, clinical partnerships, and research support at existing partner sites. Seek two or more additional institutions to partner with BioMark, especially in the USA. Apply for state, provincial, or Department of Defence (DoD) grants and seek foundation support where applicable.
- Select key market awareness programs and coverage to help improve corporate visibility, attract capital, and address the valuation gap versus existing peer group.
- Increase staff size in Quebec to help in lab operation, secure lab accreditation, accelerate commercialization, expand expertise in machine learning/analytics and business development. Add a clinical technologist to expedite the retrospective study for early lung cancer detection that was funded under the Medteq program, and the 4000-patient trial funded under the CqDM SynergiQ program.
- Continue to develop deeper partnerships/relationships with large biopharma for early lung cancer screening programs, Triple Negative breast cancer, and glioblastoma in both Canada and the US. BioMark management team intends to participate in several high-profile conferences such as ASCO, USCAP, AACR, ASMS, IASLC, and the San Antonio Breast Cancer Symposium.
- Continue the glioblastoma (GBM) study at CancerCare Manitoba and potentially expand to 2 additional institutions in the USA. Key indications for GBM would include ideas to optimize the system for gliomas; discriminate or correlate with specific mutations, grading of tumors, differentiate progression from pseudo progression and measuring disease burden/volume. Results from this study are expected to enable the principal researchers to obtain funding and collaboration from important agencies such as CIHR, Canada Brain Foundation, National Institute of Health (NIH). Furthermore, an orphan status can be granted by the FDA should our test demonstrate efficacy over existing diagnostic measurement standards. There is a possibility of filing for a breakthrough designation with the FDA using our assay. The Company intends to conduct in vivo studies by July /August 2024 to demonstrate the efficacy of its new therapeutic target and delivery mechanism related to Glioblastoma treatment if it secures funding. The company is reaching out to 2 prominent US institutions that have strong capabilities in neuro-oncology that can expedite the development of its GBM asset.
- Understand and formulate a US reimbursement strategy with experts in private payors as the company introduces its early lung cancer assay in select markets.

- Seek academic institutions that have relationships with community hospitals across the US to help leverage the value of the company’s early lung cancer assay that includes – accessibility, accuracy, and affordability.
- Recruit high-powered board members and advisors who can help the company expand its commercial footprint and access financing in the US and internationally.

Bio-Stream Diagnostics Inc.

Bio-Stream Diagnostics is developing the sensors and readers for its OCET platform. The product line is working well, which includes the traxReader, traxBiosensors and traxInsight software. Based on the success of C-Reactive Protein tests, the company expanded its traxPlatform testing to chemistry (biotin and streptavidin and to diabetes (Cystatin-C and Glycated Albumin etc.) The company is looking to engage with multiple companies who have expressed interest in Bio-Streams platform.

Based on its current progress the company is applying for non-dilutive ‘Validation’ funding via the Alberta and Federal Government and currently has application portals open to us with other non-dilutive funding applications in various stages.

## 1.5 Summary of Quarterly Results

The following information is a summary of the Company’s financial results for the eight most recently completed quarters.

	December 31, 2023	September 30, 2023	June 30, 2023	March 31, 2023
	\$	\$	\$	\$
Total Revenue	41,543	42,126	39,746	39,746
Expenses	502,424	498,297	499,416	611,395
Net Loss	(406,761)	(210,463)	(418,855)	(501,506)
Loss per Share	(0.02)	(0.00)	(0.00)	(0.00)

  

	December 31, 2022	September 30, 2022	June 30, 2022	March 31, 2022
	\$	\$	\$	\$
Total Revenue	36,889	40,957	35,900	24,115
Expenses	475,194	628,833	480,624	831,104
Net Loss	(393,698)	(527,884)	(419,141)	(729,872)
Loss per Share	(0.00)	(0.00)	(0.00)	(0.00)

For the detailed discussion refer to sections 1.4 and 1.6.

## 1.6 Liquidity

<b>ASSETS</b>		
	December 31, 2023	March 31, 2023
	\$	\$
Current		
Cash and cash equivalents	313,032	72,037
Amounts receivable	47,456	34,373
Prepaid expenses	19,852	19,852
	380,340	126,262
Pre-paid expense	14,303	14,303
Long-term investment	3,200	3,200
Property and equipment	38,161	45,100
Right-of-use asset	913,240	543,427
	1,349,244	732,292

<b>LIABILITIES</b>		
	December 31, 2023	March 31, 2023
	\$	\$
Current		
Accounts payable and accrued liabilities	81,831	220,195
Client Deposit	8,344	10,367
Current portion of lease liability	841,103	281,434
Due to related parties	735,276	827,434
Short-term loan	95,951	229,050
Government loans	100,000	96,303
	1,362,505	1,664,452
Lease liability	546,510	217,415
	1,909,015	1,881,867

The Company has total assets of \$1,349,244 as of December 31, 2023, compared to \$884,597 reported on December 31, 2022, and has a negative working capital of \$982,165. The increase in assets is mainly due to the increase in cash and cash equivalents and right-of-use assets.

On December 31, 2023, the Company had cash and cash equivalents of \$313,032 (December 31, 2022 – \$133,900). The working capital deficit decreased by \$236,317 from December 31, 2022 (\$1,218,482) mainly due to the increase in cash and cash equivalents and the reduced amount of short-term loans. Working capital is defined as current assets less current liabilities. Total liabilities increased by \$154,119 from \$1,754,896 as of December 31, 2022, to \$1,909,015 as of December 31, 2023, which is mainly due to the increase of the long-term lease liability related to the renewed office lease in Richmond



BC, and the renewed lab space lease in Quebec. The accounts payable and accrued liabilities increased by \$14,383 from \$67,448 (December 31, 2022) to \$81,831 (December 31, 2023). Due to the related parties decreased by \$34,856 from \$770,132 (December 31, 2022) to \$735,276 (December 31, 2023) mainly due to the debt settlement during the private placement for the related party. The long-term Lease liability decreased by \$ 295,347 for the same period of the previous year due to the renewed lease agreements for the office space in BC and lab space in Quebec. The details of accounting standards and the calculation of depreciation on asset, Right-of-use Asset and Lease Liability are discussed respectively on Note 5 and Note 6 in the unaudited consolidated interim financial statements for the nine months ended December 31, 2023.

The Company entered into two agreements to fund operations and project costs of the business with the Government of Canada under the Regional Relief and Recovery Fund (RRRF) and the Canada Emergency Business Account (CEBA). Both government loans are interest free and are discounted to their fair value at the inception of the loan. The discounted portion is accounted for as other income in the current year. Interest on the loan is charged using the effective interest rate method and recorded as interest accretion. The details of long-term loans are discussed on Note 8 in the Interim Financial Statement.

On February 8, 2022, BDS entered into a term loan agreement with R & D Capital Inc. (the "Lender"), a corporation duly incorporated under the Business Corporations Act (Québec). The Lender grants BDS a term loan, at a fixed rate, in a principal amount not to exceed \$235,000 (the "Loan"), for the financing of the tax credits i) scientific research and experimental development and ii) investment and innovation (C3i); the fiscal years ending March 31, 2022, and March 31, 2023. (Hereinafter the "Tax Credits"). The Agreement was automatically renewed for another 12 months.

The first disbursement of \$150,000 out of the proceeds of the Loan, minus the financing fees of \$5,950, was obtained on March 1, 2022. The Loan bears interest at a monthly rate of 1.40%, corresponding to a yearly rate of 16.80%, for a term of 12 months calculated as of the date of the first disbursement. The second disbursement of \$85,000, minus the financing fees of \$2,041, was obtained on September 7th, 2022, with the same conditions. During the year ended March 31, 2023, the Company has recorded interest expenses of \$33,530 (2022 - \$2,100) in interest and bank charges on the condensed consolidated interim statements of loss and comprehensive loss. As of December 31, 2023, the interest payable was \$Nil (2022 - \$Nil), and the outstanding balance of loan principal is \$95,951 (2022 - \$229,050).

## SHAREHOLDERS' DEFICIENCY

	December 31, 2023	March 31, 2023
	\$	\$
Share capital	10,176,811	8,238,812
Share subscriptions received	-	358,126
Contributed surplus	2,322,540	2,231,756
Deficit	(13,059,122)	(11,978,269)
	(559,771)	(1,149,575)

On December 31, 2023, the share capital was \$10,176,811 comprising 90,886,229 issued and outstanding common shares (December 31, 2022, it was \$8,238,812 comprising 83,286,229 issued and outstanding common shares). Contributed Surplus on December 31, 2023, is \$2,322,540 (December 31, 2022 - \$2,225,653), the increase is the result of the combination of the warrants extension and the contributed surplus that has been allocated to the options issued in the quarter ended December 31, 2023, by using the Black Scholes option pricing model with weighted average assumptions and resulting values for grants. As a result of the net loss for the nine months ended December 31, 2023, of \$1,036,079 (December 31, 2022 – \$1,340,722) the deficit on December 31, 2023, increased to \$13,059,122 compared to \$11,476,762 on December 31, 2022.

At present, the Company's operations do not generate cash inflow from the commercialization of its assays. Revenue consists primarily of income generated on the lab research and development services rendered to the third parties, and its financial success after December 31, 2023, is dependent on management's ability to continue to obtain sufficient funding to sustain operations through the development stage and successfully bring the Company's technologies to the point that they may be out licensed so that the Company achieves profitable operations. The research and development process can take many years and is subject to factors that are beyond the Company's control. Valuable patents have been granted and filed that came from research activities conducted by the Company. Some of these patents could be licensed based on the application. Several of the Company's diagnostic assays are near commercialization pending regulatory approval and lab certification.

In order to finance the Company's future research and development and to cover administrative and overhead expenses in the coming years the Company may raise money through equity sales. Many factors influence the Company's ability to raise funds, including the Company's record of accomplishment, and the experience and caliber of its management. Actual funding requirements may vary from those planned due to various factors, including the progress of research activities. Management believes it will be able to raise equity capital as required in the long term but recognizes there will be risks involved that may be beyond its control. Should those risks fully materialize, it may not be able to raise adequate funds to continue its operations.

Since the Company will not be able to generate cash from its operations in the foreseeable future, the Company will have to rely on funding through future equity issuances and through short-term borrowing in order to finance ongoing operations. The ability of the Company to raise capital will depend on market conditions and it may not be possible for the Company to issue shares on acceptable terms or at all.

## **1.7 Capital Resources**

The Company does not have any other commitments for material capital expenditures. The Company is not a party to any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future material effect on the Company's financial condition, changes in financial condition, revenues, expenses, results of operations, liquidity, capital expenditures or capital resources.

## **1.8 Off-Balance Sheet Arrangements**

There is no off-balance sheet arrangements to which the Company is committed.

## **1.9 Transactions Between Related Parties**

During the quarter ended December 31, 2023, the Company entered into the following transactions with related parties:

- a) For the quarter ended December 31, 2023, directors and officers of the company provided consulting services to the company of \$85,050. These charges are included in consulting fees. Consulting fees from the CEO was \$60,000 and the Interim CFO who also performed duties as Project Director was \$25,050 for the quarter ended December 31, 2023. As of December 31, 2023, the Company has \$542,881 due to CEO (2022 - \$637,446). The balance owing to the interim CFO as of December 31, 2023, is \$100,848 (2022 - \$41,138). The balances due to related parties are unsecured, non-interest bearing, and without fixed repayment terms.
- b) For the quarter ended December 31, 2023, the Company recognized \$9,448 (2022 - \$54,079) of share-based compensation for stock options held by directors and officers.
- c) For the quarter ended December 31, 2023, the Company has a balance of \$91,548 owed to BioMark Technologies Inc. BioMark Technologies Inc. which holds approximately 45.12% of the common shares of the Company as of December 31, 2023 (2022 – 49.23%). The CEO owns more than 10% interest in the Company.
- d) Additionally, on April 1, 2021, the Company entered into an Independent Contractor Agreement (the "Agreement") with the CEO of the Company. According to the Agreement, the Company shall pay the CEO \$20,000 with applicable tax per calendar month, to be paid monthly or in such other installments and at such other times as the Consultant and the Company may mutually agree in writing. The Company shall pay all reasonable business and out-of-pocket expenses actually and properly incurred by the CEO from time to time in furtherance of or in connection with the Services

including, but not limited to, all reasonable travel and other business expenses. The CEO will be entitled to a cash bonus in the amount of \$250,000 upon the Company achieving a market capitalization of at least \$75 million USD over a period of 30 trading days. According to the Agreement, the Company engaged CEO service to provide important services that include develop and direct the corporate strategy, resource allocation, review acquisitions or partnerships, drive or generate revenue growth, hire, and retain staff as necessary, support in capital raise rounds, manage past relationships and build business and collaborations. The Company has not compensated the CEO with a cash bonus based on these trading price calculations.

**1.10 Fourth Quarter**

N/A

**1.11 Proposed Transactions**

N/A

**1.12 Critical Accounting Estimates**

The preparation of these consolidated financial statements in accordance with IFRS requires the Company to make estimates and assumptions concerning the future. The Company's management reviews these estimates and underlying assumptions on an ongoing basis, based on experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances. Revisions to estimates are adjusted for prospectively in the period in which the estimates are revised. However, actual outcomes can differ from these estimates. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected. The more significant areas are as follows:

- the estimates and assumptions used in the warrants extension and share-based compensation

The preparation of consolidated financial statements in accordance with IFRS requires the Company to make judgments, apart from those involving estimates, in applying accounting policies. Actual results may differ from these estimates. Significant areas where management's judgment has been applied include:

- The assessment of the Company's ability to continue as a going concern, which is described in Note 1.

### **1.13 Changes in Accounting Policies including Initial Adoption**

#### *New standards and interpretations not yet adopted*

In January 2020, the IASB issued amendments to IAS 1 "Presentation of financial statements" to provide a more general approach to the classification of liabilities under IAS 1 based on the contractual arrangements in place at the reporting date. The amendments to IAS 1 are effective for annual reporting periods beginning on or after January 1, 2023. The Corporation has assessed the impact of amendments to ISA 1, and there will be no impact on the consolidated financial statements of the Company as a result of the adoption of this standard.

The IASB issued amendments to IAS 12, "Income Taxes", on May 7, 2021. The amendments require companies to recognize deferred tax on transactions that, on initial recognition, give rise to equal amounts of taxable and deductible temporary differences. The amendments are effective for annual reporting periods beginning on or after January 1, 2023. The Company has assessed the impact of amendments to IAS 12 and there will be no impact on the consolidated financial statements of the Company as a result of the adoption of this standard.

There are no other standards, interpretations or amendments to existing standards that are not yet effective that are expected to have a material impact on the consolidated financial statements of the Company.

### **1.14 Financial Instruments and Other Instruments**

The Company classifies its fair value measurements in accordance with an established hierarchy that prioritizes the inputs in valuation techniques used to measure fair value as follows:

- Level 1 – Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level 2 – Inputs other than quoted prices that are observable for the asset or liability either directly (i.e. as prices) or indirectly (i.e. derived from prices); and
- Level 3 – Inputs that are not based on observable market data.

No financial assets were measured at fair value in 2023 and 2022.

#### *Credit risk*

Credit risk is the risk of loss due to the counterparty's inability to meet its obligations. The Company's exposure to credit risk is mainly on its cash. Risk associated with cash is managed through the use of major banks which are high credit quality financial institutions as determined by rating agencies.

### *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. Financial assets and liabilities with variable interest rates expose the Company to cash flow interest rate risk. The Company does not hold any financial liabilities with variable interest rates. The Company does maintain bank accounts which earn interest at variable rates but it does not believe it is currently subject to any significant interest rate risk.

### *Liquidity risk*

The Company's ability to continue as a going concern is dependent on management's ability to raise required funding through future equity issuances and through short-term borrowing. The Company manages its liquidity risk by forecasting cash flows from operations and anticipating any investing and financing activities. Management and the Board of Directors are actively involved in the review, planning and approval of significant expenditures and commitments.

The Company intends to meet its current obligations in the following year with funds to be raised through private placements, the issuance of shares for debt, loans and related party loans. See Note 1.

## **1.15 Other MD&A Requirements**

- (a) More information about the Company is on SEDAR+ at [www.sedarplus.ca](http://www.sedarplus.ca)
- (b) Information required in the following sections of National Instrument 51-102, if applicable:
  - (i) Section 5.3 – Additional Disclosure for Venture Issuers without Significant Revenue.

An analysis of material components of the Company's general and administrative expenses is disclosed in the Statement of Comprehensive Loss forming part of the Financial Statements for the period ended December 31, 2023, to which this MD&A relates.

- (ii) Section 5.4 – Disclosure of Outstanding Share Data; and
  - a. Authorized:
    - Unlimited common shares without par value
  - b. Common Shares Issued:

On December 29, 2023, the Company closed a non brokered private placement of 7,600,000 units at a price of \$0.255 per unit for a total gross proceed of a total consideration of \$1,938,000 of which \$38,000

has been allocated to the share purchase warrants using the residual value method and of which \$1,900,000 was received in the fiscal year end March 31, 2023. The securities issued under the private placement will be subject to a hold period of four months and one day. Each unit consists of one common share and one share purchase warrant. One share purchase warrant will entitle the holder thereof to purchase one common share of the Company at \$0.45 per share for a period of two years from the closing date of the private placement, subject to an acceleration clause. Of the 7,600,000 units, 1,032,261 were issued to settle outstanding debt to related party of \$258,065. No Finders' fees were payable on the private placement.

As of December 31, 2023, the Company had 90,886,229 common shares issued and outstanding.

c. Share Purchase Warrants

On November 28, 2023, 1,115,579 warrants due to expire on December 13, 2023, were extended to December 13, 2024. The estimated fair value of the warrant extension is \$44,774 which has been recorded as an increase to contributed surplus with the offsetting entry recorded to deficit. This fair value was estimated using the Black-Scholes model that calculated for the difference between the extended period and the remaining period when the decision was undertaken to extend the warrants. The assumptions used were as follows for the two periods respectively: no expected dividend yield, 69% and 73% expected volatility, 5.01% and 5.07% risk-free interest rate, and 1.05 and 0.04 years warrant expected life.

As of December 31, 2023, the Company had 13,777,579 shareholder warrants issued and outstanding of which 1,115,579 warrants will entitle the holders to acquire one share at a price of \$0.45 per share until December 13, 2024; 5,062,000 warrants will entitle the holders to acquire one share at price of \$0.45 per share until May 4, 2024; and 7,600,000 warrants will entitle the holders to acquire one share at price of \$0.45 per share until December 29, 2026. The weighted average life remaining for these warrants was 1.86 years.

d. Stock options:

The Company's current stock option plan (the "Stock Option Plan (2022)") was last approved by the shareholders on December 20, 2022. Pursuant to the Existing Plan, the maximum number of common shares of the Company which may be authorized for reservation for the grant of options from time to time shall be 15% of the Company's then issued and outstanding common shares. The plan provides for the granting of

options to directors, employees and consultants. The Board of Directors determines the features of the awards, including the exercise price, the term and vesting provisions.

The number of options exercisable as of December 31, 2023, was 5,701,500 (2022 – 6,457,000 options). The weighted average life remaining for these options was 1.22 years and the weighted average exercise price was \$0.33 per option.

- (iii) Section 5.7 – Additional Disclosure for Reporting Issuers with Significant Equity Investees.  
Not Applicable.
  
- (c) Disclosure required by National Instrument 52-109 *Certification of Disclosure in Issuers' Annual and Interim Filings* and, as applicable, Form 52-109F1 *Certification of Annual Filings – Full Certificate*, Form 52-109F1R *Certification of Refiled Annual Filings*, or Form 52-109F1 *AIF Certification of Annual Filings in Connection with Voluntarily Filed AIF*.

Form 52-109FV2 Certification of Interim Filings is filed on SEDAR.