

# BIOMARK DIAGNOSTICS INC.

Form 51-102F1

*Management's Discussion & Analysis*

*Quarterly Report*

*For the Quarter Ended December 31, 2022*

## **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, 2022, and our annual audited consolidated financial statements and accompanying notes for the year ended March 31, 2022, 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, 2022. 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.
- 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 28, 2023**

### **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 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, supply chain bottlenecks and labour shortages especially in bioinformatics and laboratory technician. Management is taking measures to counteract any negative impact of these factors by instituting agile strategies with resilient operational and financial systems/processes.
- BioMark participated in a commercial trade mission in Maryland- The Bio Innovation Conference 2022 that took place on October 3 – 4, 2022 in Bethesda, Maryland. The conference provided a unique opportunity to hear from and connect with researchers, business leaders, academia, venture capitalists, and other industry professionals in life sciences. BioMark delegates were able to have productive meetings with many leaders and representatives, including Secretary of Maryland Department of Commerce Mike Gill and National Institutes of Health (NIH) Associate Deputy Director Tara Schwetz. This trade mission was part of the MOU signed in 2020 between Quebec Government and the State of Maryland to strengthen collaboration and promote trade and innovation in the life sciences and public health sectors.
- BioMark’s team were invited to present at Maryland Club’s monthly business Pulse luncheon event in Baltimore. Over 50 individuals from investment, academic and business communities attended the presentation.
- BioMark team presented the latest developments of its metabolomics powered technology platform in measuring tumour activity and potentially monitor response to treatment in glioblastoma and lung cancer to University of Maryland and John Hopkins to discuss the collaboration opportunities.
- BioMark received confirmation that it’s abstract titled “Metabolomic Profiling for Pulmonary Neuroendocrine Tumors (NETs)” has been accepted for presentation at the annual United States and Canada Academy of Pathology (USCAP) conference to be held in New Orleans from March 11 - 16, 2023. In collaboration with IUCPQ’s research group, we discovered and validated a robust panel comprising of a set of performant biomarkers with an area under curve (AUC) >0.9 (significant clinical robustness) to predict the presence of NETs. We believe that this NET panel could allow the establishment in a near future of a routine screening test with the molecular subtypes and prognosis of NETs, as well aid in the monitoring of the evolution of NETs.
- On October 26, 2022, BioMark Quebec-based wholly owned subsidiary BioMark Diagnostic Solutions Inc. (“BDS”) hosted a seminar on new advancements in mass spectrometry technologies together with the Canadian and US teams from SCIEX and Phenomenex. This was an ideal occasion to showcase BioMark’s robust metabolomics platform that combines the revolutionary sensitivity of the SCIEX 6500+ mass spectrometers with the speed and performance of the LDTD Luxon system from Phytronix. A total of 15 attendees from diverse industries were present and had the chance to learn more about clinical applications that metabolomics platform can offer.

- On October 27, 2022, BioMark announced the publication of a preclinical study demonstrating therapeutic capabilities of its SAT1 cancer marker in glioblastoma (GB) cells using an ionizable lipid nanoparticle. The study published as part of the special issue of Cancers "Novel Techniques and Technology for Treatment of Brain Tumors", reports that Spermidine/spermine N1- acetyltransferase 1 (SAT1) inhibition using an ionizable lipid nanoparticle-based siRNA delivery system appears to provide a safe and effective method to sensitizing GB cells to radiation and chemotherapeutic agents. The outcome of the study will dramatically impact therapeutic intervention associated with this lethal cancer. These results thus far illustrate BioMark's continuous efforts to diversify its product portfolio, expand its clinical application toward personalized medicine and patent portfolio with new discoveries that can impact cancer care management.
- BioMark has changed its auditor from PricewaterhouseCoopers LLP ("Former Auditor") to MNP LLP ("Successor Auditor"). The Former Auditor resigned as the auditor of the Company effective on November 3<sup>rd</sup>, 2022, and the board of directors of the Company appointed the Successor Auditor effective as of the same date, until the next Annual General Meeting of the Company.
- BioMark completed successful discussions with interested Brazilian parties. The parties included head clinicians and lab technicians from the leading hospital that offers advanced diagnostic services. In addition, team from the largest CRO were later engaged to establish the most viable market entry and development plans for the domestic Brazil market. More in depth discussions are still underway.
- On November 22, 2022, BioMark signed a collaborative research agreement between Delhi Institute of Pharmaceutical Sciences and Research (DPSRU) in New Delhi, India, and St. Boniface Research Centre (SBRC) in Winnipeg, Manitoba for potential early lung cancer detection for the population in India. This would be critical for India as lung cancer cases are projected to increase by five- to seven-fold between 2025 to 2030 due to pollution and climate change.
- Conducted and completed quarter filing – Unaudited Financial Statement and MD&A filed in SEDAR and Canadian Securities Exchange as required by regulators. On November 28, 2022, BioMark provided financial results and highlights for the second quarter ended September 30, 2022, and operational updates. The Company also announced that it amended the term of 1,15,579 non-broker warrants (the "Warrants") were scheduled to expire on December 13, 2022. The Warrants extended their term by one year such that the warrants will be exercisable until December 13, 2023, at an exercise price per share of C\$0.45. All other terms of the warrants will remain unchanged.
- BioMark continues its European expansion with the development of a pilot program for early detection of lung cancer in partnership the French group TransDiag and the Hospices Civils de Lyon (HCL). TransDiag has been successful in attracting other well-known clinical institutions such as Institut Curie to partner with BioMark to conduct

similar trials that will be useful in assessing, reviewing, and establishing a lung cancer screening platform in Europe, starting in France. On Nov 29th, 2022 BioMark signed an NDA with Institut Curie. These are all world leading institutions that were impressed by the data presented by the Company during at ESMO in Paris on Sept 9-13th, 2022.

- On December 14, 2022, BioMark’s Quebec-based subsidiary, BioMark Diagnostic Solutions Inc (“BDS”) along with its partner TransDiag in France submitted an application to EUREKA Program for the Development and Validation of Multimodal Screening Approaches in Lung Cancer.
- On December 16, 2022, BioMark’s lab equipment partners, Phytronix, visited two important clinical sites in Brazil that had expressed strong interest for potential collaboration related to BioMark’s blood based early lung cancer screening assay. Follow up meetings are expected later in early 2023.
- On December 20, 2022, BioMark Diagnostics Inc. held its Annual General Meeting in Vancouver, BC at 9:00 a.m. (Vancouver Time). All the motions were passed.
- On December 21, 2022, BioMark’s Quebec-based subsidiary, BioMark Diagnostic Solutions Inc (“BDS”) was approved for financial support under the National Research Council of Canada Industrial Research Assistance Program (NRC IRAP). BDS will receive advisory services and funding of up to CAD \$ 185,900 for the Development of a Quantitative Assay to Measure Drug Metabolites for Cancer Treatment.
- BioMark continued to entertain discussions with various financial institutions and government agencies to secure non-dilutive funding, favourable loans, and equity investments to accelerate the commercialization of its early lung cancer liquid biopsy franchise and to advance its expansion strategy in USA and internationally as well as for general corporate purposes.

### **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.

### **The Impact of COVID-19 Pandemic**

The novel coronavirus pandemic (COVID-19) has caused a global disruption and has significantly impacted businesses across all sectors and the healthcare industry is not spared.

There is an uptick across all our clinical trial activities as Covid-19 enters the endemic phase. There is marked progress in clinical trial recruitment related to early lung cancer trials at IUCPQ and also on measuring response to treatment for advanced stage lung cancer patients following systemic treatment. Shipment of lab supplies to run assays are now more available thereby expediting faster analysis. In addition, there are many more scientific and industry specific symposiums that is enabling more meetings and presentation opportunities.

Bio-Stream Diagnostics is still developing the sensors and readers for its OCET platform. It is currently receiving samples to measure CRP levels. Data will be collected and reviewed for validation prior to regulatory submission and later commence commercialization and deployment through strategic partnership or selective licensing.

BioMark’s management team has instituted financial, operational and recovery measures to ensure that its business remains viable over the next 12 months and beyond. Financial measures include cost cutting initiatives and considering applying for lines of credit through financial institutions at attractive terms, tapping into government grants/support programs. In addition, management is in communications with its board on liquidity plans and operational plans to kick start our research and commercialization 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, 2022, as compared to the three and nine months ended December 31, 2021.

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, 2022	December 31, 2021	December 31, 2022	December 31, 2021
<b>Revenue</b>		<b>\$ 36 889</b>	\$ 19 818	<b>\$ 113 746</b>	\$ 19 818
<b>Expenses</b>					
Consulting fees	3	<b>85 050</b>	85 050	<b>281 650</b>	255 150
Depreciation on right-of-use asset	6	<b>86 933</b>	41 069	<b>273 539</b>	46 242
Depreciation of property and equipment	5	<b>3 313</b>	3 074	<b>9 914</b>	3 074
Research and development		<b>59 876</b>	66 119	<b>280 794</b>	131 576
Professional fees		<b>43 167</b>	28 869	<b>164 400</b>	70 915
Office and miscellaneous		<b>22 390</b>	18 033	<b>73 361</b>	46 015
Interest and bank charges		<b>22 283</b>	9 652	<b>80 543</b>	13 349
Filing and transfer agent fees		<b>24 462</b>	32 229	<b>70 466</b>	189 542
Travel		<b>5 011</b>	997	<b>26 561</b>	3 970
Share-based compensation	9	<b>122 709</b>	-	<b>323 422</b>	-
<b>Total operating expenses</b>		<b>475 194</b>	285 092	<b>1 584 650</b>	759 833
<b>Other expenses (income)</b>					
Foreign exchange loss		-	668	-	579
Government grants		<b>(44 607)</b>	(9 063)	<b>(130 182)</b>	(16 563)
<b>Total other expenses (income)</b>		<b>(44 607)</b>	(8 395)	<b>(130 182)</b>	(15 984)
<b>Net loss and comprehensive loss</b>		<b>\$ (393 698)</b>	\$ (256 879)	<b>\$ (1 340 722)</b>	\$ (724 031)

For discussion of information refer to sections 1.4 and 1.6.



## 1.4 Discussion of Operations

### **Three months ended December 31, 2022, compared to three months ended December 31, 2021**

The Company generated revenue of \$36,889 for the quarter ended December 31, 2022, compared to \$19,818 for the same period of the last year. BioMark Diagnostics Inc. wholly owned subsidiary BioMark Diagnostic Solutions Inc. ("BDS") entered into research and collaboration agreements with certain biotech companies and generated revenue to finance the research activities of the company. Three agreements were signed during the year whereby BDS agreed to offer laboratory and bioanalytical services as well as provide biotech companies with access to designated spaces within the premises that BDS has leased.

The net loss increased by \$136,819 from \$256,879 (December 31, 2021) to \$393,698 for the quarter ended December 31, 2022, which was largely due to share-based compensation and the increased operating expenses related to lab operations in Quebec City. The total operating expense increased by \$190,102 from \$285,092 (December 31, 2021) to \$475,194 (December 31, 2022), mainly due to the increased operating expense related to depreciation of right-of-use asset, professional fees, and share-based compensation. Consulting service fees remains the same compared to the same period of last year. There has been no significant change to the compensation for key management. The Company engaged required services on a consulting basis.

The Deprecation of right-of-use assets increased by \$45,864 due to the Company's acquisitions of laboratory and signing of a two-year lease to accommodate its lab space in Quebec. The Company is also committed to an office lease for its office in Richmond, British Columbia for a three - year term expiring on October 31, 2023. The details of accounting standard and the calculation of depreciation on asset, 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. The office lease includes both the office spaces in Richmond BC and the lab facility in Quebec.

Research and development slightly decreased by \$6,234 from \$66,119 for the quarter ended December 31, 2021, to \$59,876 for the quarter ended December 31, 2022. With resumption of research projects and facility expansion in Quebec, the Company hired and trained highly qualified lab staff members. As normality begins and postponed research projects and clinical trials resume, 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 USA.

Professional fees for the quarter ended December 31, 2022, were \$43,167 compared to \$28,869 for the quarter ended December 31, 2021, an increase of \$14,298, due to the timing of the required professional services related to the accounting service and the legal counsel for patent application and filings. The Company anticipates spending a higher amount in the next quarter due to timing and stage of the patent applications and filings. The Company continues to build its patent portfolio applications/filings and advancing its patent registration in different geographic jurisdictions. These investments are important intangible assets for a biotechnology company, yet the value has not reported or captured in the current balance sheet.

The interest and bank charge increased by \$12,631 from \$9,652 for the quarter ended December 31, 2021, to \$22,283 for the quarter ended December 31, 2022 due to the interest accretion on lease liability, short term loan and long-term government loan. The details of accounting standard and the calculation of interest on Right-of-use Asset and Lease Liability, short-term loan and long-term loans are discussed respectively on Note 6, Note 7 and Note 8 in the Interim Financial Statement.

The share-based compensation increased by \$122,709 compared to \$nil for the same period of last year, mainly due to services rendered by scientific advisors and consultants as consulting services to support scientific and research development activities over the past few years. 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.

Office and miscellaneous during the period remained at a similar level to the previous year with a slight increase of \$4,357. Filing and transfer agent fees slightly decreased by \$7,767 from \$32,229 for the quarter ended December 31, 2021, to \$24,462 for the quarter ended December 31, 2022. Travel expenses increased by \$4,014 compared to the same period of the previous year, with the resumption of research and business development related activities, the Company anticipates spending a higher amount for travel and office and miscellaneous in the coming quarters for business development and collaborative research.

The Company had its other income of \$44,607 for the quarter ended December 31, 2022, compared to the total other income of \$8,395 for the quarter ended December 31, 2021, an increase of \$36,212, mainly due to the increase from government grants. The Company's Quebec-based subsidiary, "BDS" entered into an agreement to receive advisory services and funding of up to \$169,550 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. Under this program, NRC IRAP will reimburse up to 80% of eligible project salaries and 50% of eligible contractor costs. The Company qualified to receive \$82,550 for this fiscal year.

**The nine months ended December 31, 2022, compared to nine months ended December 31, 2021**

The Company generated revenue of \$113,746 for the nine months ended December 31, 2022, and has recorded a net loss of \$1,340,722. The net loss increased by \$616,691 compared to the nine months ended December 31, 2021. This was due to the increased operating expense related to depreciation of right-of-use asset, research and development, professional fees and share-based compensation.

Research and other increased by \$155,461 from \$131,576 for the nine months ended December 31, 2021, to \$280,794 for the nine months ended December 31, 2022. The increased expense is mainly due to the occurred costs with resumed research projects and expansion projects in Quebec. Office and miscellaneous and interest and bank charge increased by \$ 27,346 and \$67,193 respectively due to the interest accretion on long term government loan and purchased instruments in Quebec City and the additional operation costs for the lab. Consulting service fees increased by \$26,500 compared to the same period of last year, due to the consulting service rendered from the third party for business development and international collaborations. There has been no significant change to the compensation for key management. The Company engaged required services on a consulting basis.

The increase of \$93,485 for Professional fees mainly due to the timing and stage of the patent filings and required legal services and the company anticipates spending a higher amount in the coming quarters. The share-based compensation increased by \$323,422 compared to \$nil as reported for the six months ended December 31, 2021, due to the issued options in July and August 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.

Filing and transfer agent fees decreased by \$111,309 from \$189,542 for the nine months ended December 31, 2021, to \$70,466 for the nine months ended December 31, 2022, mainly due to the limited marketing awareness and communication programs compared to the same period of last year. Travel expenses increased by \$22,591 compared to the nine months ended December 31, 2021, due to the costs occurred for attending the international conference and the resumption of research and business development related activities.

The other income increased by \$114,198 from \$ 15,984 as of December 31, 2021, to \$130,182 as of December 31, 2022, mainly due to 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 by the Company's Quebec-based subsidiary, "BDS".

## **Upcoming Potential Operational Objectives**

In the coming quarters, BioMark will continue to evolve its business operations of developing proprietary, non-invasive, and accurate cancer diagnostic solutions which can help detect, monitor, and assess treatment for cancer early, accurately and cost effectively. The Company continues to allocate additional resources towards commercialization related to its liquid biopsy assays especially related to lung cancer screening and measuring response to treatment.

*Expected Objectives: Revenue Generation, Licensing, Commercialization, Focussed Clinical Application, develop deeper Industry Collaboration, seek sponsored research, hiring technical staff to run lab facility.*

- Continue to seek and actively raise capital especially within existing shareholders but also new strategic investors and institutional funds. Continue to build a better US story where valuations can be more 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 related to glioblastoma. The Company will also explore to engage with IR firms specialized in biotech arena in US who can increase the exposure of BioMark to select investment community.
- Commence testing of clinical samples from CancerCare Manitoba and expand trial to IUCPQ following the approval from Health Canada for its late-stage lung cancer response to treatment application related to SSAT1 assay. The response to treatment will also include immunotherapy. Most of the response to immunotherapy trials will be conducted at IUCPQ under Dr. Joubert. Trials are scheduled to begin in early 2023.
- Apply for additional non-dilutive funding from Mitacs, NRC, NSERC Alliance grants, CIHR Society, Can Export, Eureka Program, BSP, EDC, City of Quebec and other federal and or provincial funding grants.
- Patients have been recruited and biological samples are being collected for breast cancer patient trial with our Chinese partner at 2 recognized tumour hospitals designed on Canadian Health standards. After trials are completed, results will be analyzed and submitted to CFDA for a larger scale trial. BioMark and its partner intend to publish papers and present key findings from the trials if the results are successful. This study has been delayed several times due to and Chinese government's zero tolerance policy and on and off Covid 19 resurgence.
- Continue to submit clinical results in peer review publications and expand patent portfolio – Target to publish 2-4 peer reviewed manuscripts especially following results of the larger lung cancer trial in Quebec, discovery related to neuroendocrine tumours, new insights on specialized glioblastoma research clinical work being conducted at University of Manitoba and at the University of British Columbia. It is important to keep our science and discovery relevant to the scientific and the biopharma

communities. Relevant patents will be filed as needed to protect key discoveries. Company is in the process of filing new patents to support its patent portfolio.

- Build stronger base and infrastructure in 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 or provincial grants and seek foundation support where applicable. Apply for state or provincial grants and seek foundation support where applicable.
- Increase market awareness programs and coverage to help improve corporate visibility, attract capital and address valuation gap versus existing peer group.
- Increase staff size in Quebec to help in lab operation, accelerate commercialization, expand expertise in machine learning/analytics and business development. In addition, add clinical research support in Quebec to expedite the retrospective study for early lung cancer detection that was funded under the Medteq program, and the 4000-patient trial funded under CQDM SynergiQ program. Post docs are being interviewed to help in clinical trail management and principal investigators support.
- Seek and continue to develop deeper partnership / relationships with large biopharma for early lung cancer screening program both in Canada and US. BioMark management team will seek to participate in several high-profile conferences. In addition, the Company intends to participate in other high-profile conferences such as ASMS, IASLC, USCAP and ASCO as new data is captured.
- Continue the glioblastoma (GBM) study at CancerCare Manitoba and potentially expand to other additional institutions in 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 from important agencies such as CIHR, Canada Brain Foundation and National Institute of Health (NIH). Furthermore, an orphan status can be granted by FDA should our test demonstrate efficacy over existing diagnostic measurement standards. There is a possibility of filing for a breakthrough designation with FDA using our assay. The Company intends to conduct in vivo studies by early 2023 to demonstrate the efficacy of its new therapeutic target related to Glioblastoma treatment. Researchers will be submitting protocols to be reviewed and approved by ethics review board.
- Accelerating commercialization efforts of its early lung cancer lab developed test (LDT) following promising interim data presented at European Society of Medical Oncology in Paris France on Sept 10<sup>th</sup>, 2022. The data was derived on an independent large scale retrospective study with expanded control. The results were statistically significant and generated interest from leading institutions across Europe, India and South America. BioMark intends to sign several MOUs as due diligence process is completed in the next several quarters.

- Explore collaboration with First Nation and Indigenous communities to be included in BioMark existing 4000 patient trial for lung cancer screening program. Discussions have commenced and both parties will develop a pragmatic framework to advance this potential collaboration.
- Preparation for lab certification and accreditation to meet ISO 15891 and CLIA standards to provide lab services
- Engage with USA medical institutions, insurance companies (payers) regulatory experts and bio-pharma partners as it's early lung cancer LDT commercialization efforts gather momentum. US market is strategic due to its large addressable lung cancer screening market for at risk population (Over 16 million annually)
- Seek additional non-dilutive funding resources for the lab operations certification of its clinical lab, U.S. expansion and clinical studies.

#### Bio-Stream Diagnostics Inc - COVID-19 and a broader Pathogen Platform

- Multi centre collaborations – Qatar University; University of Alberta, Access Lab, Alberta Precision Lab – Continue the co development venture to expedite development and commercialization of the COVID-19 rapid and cost-effective antigen-based test. Leverage resources, sample preparation, access to samples from hospitals, invite virologists, gain access to addition ML capacity, demonstrate repeatability of our tests at different sites.
- The new biosensors technology is being tested and new patents will be filed. This OCET based biosensor platform offers multiple applications that can be leveraged for other respiratory pathogens and disease states.
- Publish key data in peer reviewed journals
- Seek strategic investment or license the technology for different point of care applications.

## 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, 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)

  

	December 31, 2021	September 30, 2021	June 30, 2021	March 31, 2021
	\$	\$	\$	\$
Total Revenue	19,818	-	-	-
Expenses	285,092	179,799	294,942	584,904
Net Loss	(276,697)	(178,394)	(288,758)	(583,977)
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

### ASSETS

	Note	December 31, 2022	March 31, 2022
<b>Assets</b>			
<b>Current</b>			
Cash and cash equivalents		\$ 133,900	\$ 382,711
Amount receivable		22,073	82,130
Prepaid expenses		34,155	34,155
		<b>190,128</b>	498,996
<b>Long-term investments</b>	4	<b>3,200</b>	3,200
<b>Property and equipment</b>	5	<b>48,438</b>	53,054
<b>Right-of-use asset</b>	6	<b>642,831</b>	916,370
		<b>\$ 884,579</b>	\$ 1,471,620

## LIABILITIES

	Note	December 31, 2022	March 31, 2022
<b>Liabilities</b>			
<b>Current</b>			
Accounts payable and accrued liabilities		\$ 67,448	\$ 128,339
Client deposit		9,018	12,352
Current portion of lease liability	6	332,962	299,316
Due to related parties	3	770,132	917,224
Short-term loan	7	229,050	144,050
		1,408,610	1,501,281
<b>Lease liability</b>	6	<b>251,163</b>	509,728
<b>Government loans</b>	8	<b>95,123</b>	96,303
		<b>\$ 1,754,896</b>	<b>\$ 2,107,312</b>

The Company has total assets of \$884,597 as of December 31, 2022, compared to \$1,391,071 reported on December 31, 2021, and has a negative working capital of \$1,218,482. The decrease of asset is mainly due to the decrease of right-of-use asset.

On December 31, 2022, the Company had cash and cash equivalents of \$133,900 (December 31, 2021 – \$179,299). Working capital deficit increased by \$323,368 from December 31, 2021 (\$895,114) mainly due to the increase of current portion of lease liability and short-term loan. Working capital is defined as current assets less current liabilities. The current liabilities increased by \$225,355 from \$1,183,255 as of December 31, 2021 to \$1,408,610 as of December 31, 2022 which is mainly due to the increase of accounts payable and accrued liabilities, current portion of lease liabilities and short-term loan related to the purchased lab equipment and expanded lab operation in Quebec City. The accounts payable and accrued liabilities increased by \$37,328 from \$30,120 (December 31, 2021) to \$67,448 (December 31, 2022). Due to the related parties decreased by \$91,789 from \$861,921 (December 31, 2021) to \$770,132 (December 31, 2022) mainly occurred by the unpaid compensations for key management personnel. The long-term Lease liability decreased by \$ 332,324 for the same period of the previous year due to the accumulated repayment of lease liability for the acquisitions of laboratory and the remaining terms of the lease agreement. The details of accounting standard and the calculation of accounting standard and the calculation of depreciation on asset, Right-of-use Asset and Lease Liability are discussed respectively on Note 3, Note 5 and Note 6 in the Interim Financial Statement. The long-term government loan includes \$60,000 of government CEBA loan under BioMark Cancer Systems Inc. and \$40,000 of government RRRF loan under BioMark Diagnostics Inc. The details of long-term loans are discussed on Note 8 in unaudited consolidated interim financial statement for nine months ended December 31, 2022.



On February 8, 2022, the Company's Quebec based subsidiary, "BDS" entered 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); for said Fiscal Year (hereinafter the "Tax Credits").

The first disbursement of \$150,000 out of the proceeds of the Loan, minus the financing fees of \$5,950, was obtained during the year ended March 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 out of the proceeds of the Loan was obtained during the period ended September 2022 with the same conditions.

Cash utilized in operating activities for the nine months ended December 31, 2022, was \$739,195 compared to \$723,031 at December 31, 2021, an increase of \$16,164 for the same period of the last year, due to the combination of the increased business activities in Quebec and increased items not affecting cash, such as share-based compensation.

#### SHAREHOLDERS' DEFICIENCY

	Note	December 31, 2022	March 31, 2022
<b>Shareholders' Deficiency</b>			
Share capital	9	\$ 8,238,812	\$ 7,121,490
Shares to be issued		141,998	662,305
Contributed surplus	9	2,225,653	1,698,442
Deficit		(11,476,762)	(10,117,929)
		<b>(870,299)</b>	<b>(635,692)</b>

On December 31, 2022, share capital was \$8,238,812 comprising 83,286,229 issued and outstanding common shares (December 31, 2022, it was \$7,121,490 comprising 77,974,229 issued and outstanding common shares). Contributed Surplus on December 31, 2022 is \$2,225,653 (December 31, 2021 - \$1,625,029), 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, 2022 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, 2022, of \$1,340,722 (December 31, 2021 - \$724,031) the deficit on December 31, 2022, increased to \$11,476,762 compared to \$9,314,644 on December 31, 2021.

At present, the Company's operations do not generate cash inflows 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, 2022, 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.

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 their 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, 2022, the Company entered into the following transactions with related parties:

- a) For the quarter ended December 31, 2022, 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, 2022. As of December 31, 2022, the Company has \$637,446 due to CEO (2021 - \$741,946). The balance owing to the interim CFO as of December 31, 2022, is \$41,138 (2021 - \$28,428). The balances due to related parties are unsecured, non-interest bearing and without fixed repayment terms.

- b) For the quarter ended December 31, 2022, the Company recognized \$54,079 of share-based compensation for stock options held by director and officers.
- c) For the quarter ended December 31, 2022, the Company has the balance of \$91,548 owed to BioMark Technologies Inc. BioMark Technologies Inc. which holds approximately 49.23% of the common shares of the Company as of December 31, 2022 (2021 – 52.59%). 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 instalments 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:

- Classifying categories of financial assets and financial liabilities in accordance with IFRS 9, Financial Instruments.
- Evaluating if the criteria for recognition of provisions and contingencies are met in accordance with IAS 37, Provisions, Contingent Liabilities and Contingent Assets; and
- 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 is currently evaluating the impact of this amendment on its consolidated financial statements.

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 2022 and 2021.

### *Credit risk*

The Company is not exposed to credit risk.

### *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.sedar.com](http://www.sedar.com).
- (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, 2022, 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 May 4, 2022, the Company closed a non-brokered private placement of 5,062,000 units at a price of \$0.25 per unit for a total consideration of \$1,265,500 of which \$202,480 has been allocated to the share purchase warrants using the residual value method. 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 5,062,000 units, 1,040,000 were issued to settle outstanding debt to related party of \$260,000. No Finders' fees were payable on the private placement.

On June 14, 2022, 250,000 shares have been issued upon the exercise of the options at a price of \$0.15 per share for gross proceeds of \$37,500.

During the quarter ended December 31, 2022, \$141,998 was received in cash for shares to be issued.

As of December 31, 2022, the Company had 83,286,229 common shares issued and outstanding.

c. Share Purchase Warrants

On November 28, 2022, 1,115,579 warrants due to expire on December 13, 2022, were extended to December 13, 2023. The estimated fair value of the warrant extension is \$18,111, which has been recorded as an increase to share capital 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, 100% and 112% expected volatility, 0.80% and 0.11% risk-free interest rate and 1.05 and 0.05 years warrant expected life.

As of December 31, 2022, the Company had 6,177,579 shareholder warrants issued and outstanding of which 1,115,579 warrant will entitle the holders to acquire one share at a price of \$0.45 per share until December 13, 2023, and 5,062,000 warrants will entitle the holders to acquire one share at price of \$0.45 per share until May 4, 2024. The Company uses the residual value method to allocate proceeds of the unit amongst the common share and the share purchase warrant.

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.

On July 14, 2022, the Company granted 2,410,000 stock options to consultants. These options can be exercised at \$0.40 per share until July 14, 2025. The fair value of the stock options is \$452,617.

On August 3, 2022, the Company granted 212,000 stock options to consultants. These options can be exercised at \$0.40 per share until August 3, 2025. The fair value of the stock options is \$40,794.

The number of options exercisable as of December 31, 2022, was 6,457,000 (2021 – 4,135,000 options).

- (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.