

## **ASEP MEDICAL HOLDINGS INC**

### **MANAGEMENT'S DISCUSSION AND ANALYSIS**

For the three month period ended March 31, 2024

**Date of Report:** May 30, 2024

#### **INTRODUCTION**

Management's discussion and analysis ("MD&A") is prepared as of May 30, 2024 and provides a review of the performance of ASEP Medical Holdings Inc. ("Asep" or the "Company") and should be read in conjunction with the Company's condensed interim consolidated financial statements for the three month period ended March 31, 2024, the audited consolidated financial statements for the year ended December 31, 2023 ("Annual Financial Statements"), and the corresponding notes to the Annual Financial Statements, which are prepared in accordance with International Financial Reporting Standards ("IFRS"). This report contains discussion and analysis, which includes forward-looking statements that may differ materially from actual results achieved. All of the financial data herein has been prepared in accordance with IFRS and all figures are stated in Canadian dollars.

Additional information on the Company is available on the SEDAR website at [www.sedar.com](http://www.sedar.com).

#### **FORWARD-LOOKING STATEMENTS**

Certain statements contained in this MD&A constitute "forward-looking statements". When used in this MD&A, the words "may", "would", "could", "will", "intend", "plan", "propose", "anticipate", "believe", "forecast", "estimate", "expect" and similar expressions, as they relate to the Company or its management, are intended to identify forward-looking statements. Such statements reflect the Company's current views with respect to future events and are subject to certain risks, uncertainties and assumptions. Many factors could cause the Company's actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. By their nature, forward-looking statements involve numerous assumptions, and known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other forward-looking information will not be realized.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in the forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that any forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated. The reader is cautioned not to place undue reliance on any forward-looking statements contained in this MD&A. Such forward-looking statements are presented for the purpose of assisting investors in understanding the Company's expected financial and operating performance and the Company's plans and objectives in making an investment decision and may not be appropriate for other purposes. All forward-looking statements contained herein are expressly qualified in their entirety by this cautionary statement. The Company disclaims any obligation to update any forward-looking statements to reflect events or circumstances after the date of such statements, or to reflect the occurrence of anticipated or unanticipated events, except as required by applicable laws.

## RISKS AND UNCERTAINTIES

Risk factors applicable to the Company and its business include:

- risks related to the Company's investments in private issuers and illiquid securities, and the potential concentration of the Company's investments;
- that the Company may be unable to identify sources of income to generate material cash flow and revenue, and even if identified, such sources of income may be unavailable to the Company;
- that the Company is heavily reliant on its directors and management, and they only devote part of their time and efforts to the affairs of the Company;
- risks related to the Company's investment approach, objectives and strategy;
- the ability of the Company to identify other potential investment opportunities on satisfactory terms or at all;
- risks relating to available investment opportunities and competition for investments;
- the ability of the Company to obtain future financing on acceptable terms or at all; and,
- other risks that may arise from time to time that are beyond the knowledge and/or control of the Company.

## INTRODUCTION

ASEP Medical Holdings Inc. (the "Company" or "ASEP") was incorporated under the British Columbia Business Corporations Act on January 20, 2021. On November 22, 2021, the Company commenced trading on the Canadian Securities Exchange (the "CSE") as a life sciences issuer under the trading symbol "ASEP". Additionally, the Company trades on the OTC Pink operated by the OTC Market Group Inc. under the trading symbol "SEPSF" and on the Frankfurt Exchange under the trading symbol "FSX:JJ8.

The Company's head office is located at Unit 420, 730 View Street, Victoria, BC V8W 3Y7.

## DESCRIPTION OF THE BUSINESS

ASEP is in the business of acquiring research and development assets, technologies and/or businesses in the area of life sciences and medical diagnostics.

As of the date of filing this MD&A, the Company has the following subsidiaries:

	<b>Principal Activity</b>	<b>Location</b>	<b>Percentage ownership</b>
Asep Medical Inc. ("ASEP Medical")	Life Sciences	Canada	100%
ABT Innovations Inc. ("ABT")	Life Sciences	Canada	50.10%
Sepset Biosciences Inc. ("Sepset")	Life Sciences	Canada	50.10%
OHP Innovations Inc. ("OHP")	Life Sciences	Canada	100%
SafeCoat Medical Inc. ("SafeCoat")	Life Sciences	Canada	88%

*ABT Innovations Inc.*

ABT was incorporated on July 3, 2015 pursuant to the provisions of the BCBCA under the name "ABT Innovations Inc." for the purpose of ensuring the commercialization of the broad peptide technology developed by its founder, Dr. Robert E.W. Hancock. This peptide technology covers a broad range of therapeutic applications including bacterial biofilm infections (medical device infections, chronic infections, lung, bladder, wound, dental, skin, ear-nose and throat, sinusitis, orthopedic, etc.), representing two thirds of all infections, anti-inflammatories, anti-infective immune-modulators and vaccine adjuvants.

*Sepset Biosciences Inc.*

Sepset was incorporated on April 23, 2015 pursuant to the provisions of the BCBCA under the name "Sepset Biosciences Inc." for the purpose of ensuring the commercialization of a diagnostic kit for predicting the onset of severe sepsis and organ failure that was developed by its founder Dr. Robert E.W. Hancock. Its diagnostic technology involves a patient gene expression signature that is identified in the blood and assessable by nucleic acid amplification technologies. Sepset's diagnostic technology differs from current diagnostic tests in enabling diagnosis of severe sepsis within 1-2 hours of first clinical presentation (i.e., in the emergency room), while other diagnostics only provide diagnosis after 24-48 hours. Sepset believes this will enable critical early decisions to be made by physicians regarding appropriate therapies and reduces mortality and morbidity.

*SafeCoat Medical Inc.*

SafeCoat was incorporated on November 7, 2022 pursuant to the provisions of the BCBCA under the name "SafeCoat Medical Inc." for the purpose of ensuring the commercialization of medical devices with a proprietary anti-microbial, antifouling coating. Its novel coating that is being in-licensed from the University of British Columbia is characterized by superior broad-spectrum antifouling and antibiofilm activity demonstrated in animal models, proven biocompatibility, applicability to a broad range of surfaces and materials to prevent infection, resilience and stability, long-term activity due to its unique structure, and ability to repel proteins, bacteria and other fouling agents. This coating can be applied to diverse substrates including medical devices such as prosthetics, catheters, contact lenses etc. that can lead to a high rate of infections due to bacterial biofilms that can coat and compromise these devices.

**CORPORATE UPDATES**

- On January 26, 2024, the Issuer announced a non-brokered private placement financing (the "Offering") of up to 7,500,000 units (each, a "Unit") at a price of \$0.20 per Unit for gross proceeds of up to \$1,500,000. Each Unit consists of one common share of the Company (each, a "Share") and one share purchase warrant (each, a "Warrant"). Each Warrant entitles the holder thereof to purchase one additional Share of the Company at a price of \$0.26 per Share for a period of two years from closing of the Offering.
- On February 27, 2024, the Issuer announced that its proprietary gene expression signature for sepsis can provide an improved assessment of the severity of appendicitis in children.
- On March 13, 2024, the Issuer's CEO, Dr. Bob Hancock announced how the ground-breaking use of artificial intelligence (AI) has allowed the development of new and improved treatments for biofilm infections.
- On March 18, 2024, the Company announced that it was holding an online webinar on March 22, 2024, at 4:00 pm EST to provide significant updates on the Company's latest milestones.
- On April 5, 2024, the Company announced that its joint venture company with leading Chinese biotech company Sansure Biotech Inc. ("Sansure"), Hunan Sanway SepSMART Ltd. ("SepSMART"), which is based in Changsha, China, has obtained its business license and is now formally registered in China, which marks the final step for completion of the definitive joint venture agreement (the "JV Agreement") signed on October 27, 2023. Formal registration of SepSMART with the applicable regulatory body in China was a condition precedent of the JV Agreement and triggers the issuance of 3,000,000 performance warrants (the "Performance Warrants") to Sansure or its designated nominees pursuant to the warrant purchase agreement, subject to the required approvals and compliance with applicable securities laws and stock exchange policies. Each Performance Warrant is exercisable into one common share of Asep at an exercise price of \$1.00 per common share for a period of one year from date of issuance. The Performance Warrants and underlying common shares are subject to a hold period expiring four months and one day from the date of issuance.

## KEY OPERATING MILESTONES

In parallel to the continued advancements of the Company's subsidiaries, ABT Innovations Inc. ("ABT"), Sepset Biosciences Inc. ("Sepset") and SafeCoat Medical Inc. ("SafeCoat"), the Business Development Team of ASEP is continuing a focused outreach program to identify potential clinical, manufacturing and commercialization relationships. We have identified a targeted list of companies that can potentially help us achieve our business goals as well as the ones that would have synergistic benefits from our technologies.

Our focus continued to be on potential partnerships for the Sepset<sup>ER</sup> technology but also included potential partnerships for the peptide technologies, specifically in areas that will not be directly targeted by Asep such as oral health. As such, we have initiated discussions that thus far have contemplated stages of involvement and key territories including the USA, EU and Asia.

On October 27, 2023, Sepset entered into a definitive joint venture agreement (the "JV Agreement") with Sansure Biotech Inc's subsidiary Hunan Xiang Jiang Sansure Biotech Fund, L.P. (the "Sansure Fund"). Under the JV Agreement, a registered joint venture entity is to be formed, Hunan Sanway SepSMART Ltd. ("SepSMART"), whereby the Sansure Fund will subscribe for RMB 37,500,000 (CAD \$7,125,000) of the registered capital (75%) and Sepset will be deemed to subscribe for RMB 12,500,000 (CAD \$2,375,000) of the registered capital (25%) through the contribution of certain patent rights to Sepset's first generation rapid sepsis test, Sepset<sup>ER</sup> pursuant to technology license and collaborative agreement entered into concurrently with SepSMART. On December 5, 2023, the business license was approved and SepSMART was formally registered in China effective that date. SepSMART, in collaboration with Sepset scientists, is moving ahead with the development of the Sepset<sup>ER</sup> test for the Chinese market and is focused on initiating a clinical study to demonstrate the performance of the test in China.

The License Agreement grants SepSMART the exclusive right to commercialize Sepset<sup>ER</sup> in Mainland China, the Hong Kong Special Administrative Region, the Macao Special Administrative Region and the Taiwan area for a period of eight (8) years and requires SepSMART to pay periodic royalty payments to Sepset on a performance basis.

We are also working on identifying potential companies that would be interested in our therapeutics technology in order to start cultivating these relationships as we move forward throughout the balance of the year.

ABT continued to make progress advancing the synthetic antibiofilm and immunomodulatory peptide technology towards clinical trials. ABT scientists have expanded their list of antibiotics that work in synergy with their proprietary peptide technology that could be combined in an aqueous solution and applied as an ointment to wound sites. Moreover, the presence of the peptides in combination with the antibiotics prevented the development of resistance, which addresses concerns related to the growing problem of antibiotic resistance. In addition, the company has examined the antimicrobial activity of their proprietary peptide technology against a wide range of clinically relevant bacteria to establish their activity against an assortment of Gram positive and Gram negative bacteria as well as fungal pathogens. ABT has also been engaged in detailed in vivo toxicity studies in mice to characterize the mechanisms of action underlying the toxic effects of the peptides (if any) that occur at high concentrations. Work also progressed on a NanoMedicines Innovation Network (NMIN) grant funded project to researchers at the University of British Columbia, in partnership with ABT Innovations, to identify an optimal nanoparticle formulation for the peptide technology and carry out important pre-clinical studies and establish pharmacokinetic and pharmacodynamic properties of the peptides when delivered intranasally. This information will be essential to inform future clinical studies and will reveal the optimal delivery vehicle for the peptides to achieve peak activity and lowest toxicity for the peptide indication related to treatment of chronic rhinosinusitis. Lastly, a new peptide patent was filed with UBC that contains numerous optimized antibiofilm peptide sequences with excellent broad-spectrum activity, both in vitro and in vivo. Subsequently, ABT licensed in this new patent on November 7, 2023 to enable the commercialization of this enhanced peptide technology to treat various biofilm-related infections.

Beyond clinical applications, ABT is exploring opportunities to commercialize their proprietary peptide technology to address other areas where biofilms are of concern. To that end, ABT has identified oral health as an area of opportunity as dental plaque is a well known and ubiquitous natural biofilm that can contribute to infections within the oral cavity. Importantly, few products on the market can adequately address issues related to plaque biofilms and most strategies involve physical removal and scraping of the plaque from the tooth surface. Previous collaboration with dental researchers at the University of British Columbia have demonstrated excellent anti-biofilm activity for the peptides against oral plaque bacteria cultures and demonstrated the potential to develop this technology as oral rinses, exhibiting better activity compared to commercially available products such as chlorhexidine. ABT has made significant progress in this area by identifying an optimal peptide molecule with the desired activity profile based on laboratory testing and has recently entered into an agreement with Bohai Biomedical to perform a feasibility study to test the efficacy of a peptide containing oral rinse on preventing plaque biofilm growth in humans. While Bohai and ABT are in process of designing the study protocol jointly, the peptide has been produced in a GMP-certified facility and provided to Bohai for formulation into a mouthwash and use in the study.

Sepset continued to make progress on their first generation in vitro diagnostic test for sepsis named Sepset<sup>ER</sup>. The machine learning algorithm underlying Sepset<sup>ER</sup> was refined and has been optimized for use in patient samples collected within the emergency room. This is a critical distinction compared to other sepsis tests on the market as many of them target patients who are entering the ICU and whose condition is already quite advanced. The Company has optimized a rapid RNA isolation protocol that reduces the time for the critical RNA extraction step to under 20 minutes and have worked out the protocol that will be incorporated into the final kit design. The RNA extraction protocol employs a simple magnetic bead-based separation methodology that can be performed with readily available lab instrumentation and represents a dramatic improvement in processing time that is required for other approved RNA isolation methods (~20 minutes vs. ~3.5 hrs). A prototype of the Sepset<sup>ER</sup> test kit has been prepared and its ability to quantify the gene expression levels from RNA samples isolated from healthy donors has been established through repeated testing. In addition, the company received ethics approval for a pilot clinical study using blood samples from sepsis patients to evaluate the performance of the diagnostic test and underlying classification algorithm on representative patient samples. Finally, Sepset has established various performance criteria for the diagnostic kit and the new RNA isolation procedure including examining test precision, reproducibility, kit storage conditions, sample requirements, detection limits, etc. All testing and validation are being performed on the 7500 Fast Dx RT-qPCR Instrument from Applied Biosystems, which is a widely used diagnostic platform found in many clinical diagnostic labs.

In anticipation of engaging with the FDA for a pre-submission meeting as well as initiating a prospective clinical trial to evaluate the performance of Sepset<sup>ER</sup> in a clinical setting, a contract research organization (CRO) was engaged to develop a clinical study synopsis that outlines the planned clinical study that will be used to evaluate the performance of the Sepset<sup>ER</sup> test in a clinical setting. The Company used this synopsis document to solicit bids from leading CROs who specialize in supporting development of medical devices to run the clinical study to evaluate the clinical performance of the Sepset<sup>ER</sup> test in accordance with its intended use. A suitable CRO was identified with the necessary expertise and experience in running sepsis clinical studies and the Company agreed to a final timeline and budget for the project. Finally, Sepset continues to implement their electronic quality management system (eQMS) to ensure compliance with the regulatory requirements for medical devices. These activities are key steps to ensuring compliance with regulatory requirements, as the Sepset<sup>ER</sup> test approaches its pivotal clinical trial to evaluate clinical performance of the Sepset<sup>ER</sup> test.

SafeCoat is exploring commercialization and partnership opportunities to advance their ground-breaking medical device coating technology. The technology incorporates self-assembling biocompatible polymers that can be combined with conjugated antimicrobial peptides and applied to virtually any surface as a stable antimicrobial and/or anti-fouling coating. Of particular interest is the application of this versatile antimicrobial coating to various medical devices and implants that are often the source of biofilm-associated infection.

The Company has identified several firms that may be interested in the biocompatible anti-fouling technology and is in discussions to establish some strategic partnerships that can help with the commercialization of this technology.

#### **FINANCIAL POSITION**

##### Total assets

Total assets at March 31, 2024 were \$25,231,632 compared to \$25,612,686 at December 31, 2023. The change in total assets relates to the decrease in cash, decrease in property, plant and equipment (current period's amortization charge) and decrease in intangible assets (current period's amortization charge) and pickup up of the Company's share of loss of Hunan Sanway SepSMART Ltd. offset by the addition to trademarks.

##### Total liabilities

At March 31, 2024, the Company's total liabilities (trade payables and accruals, loans, due to related parties and deferred revenue) were \$3,478,392 compared to \$3,051,861 (trade payables and accruals, loans and deferred revenue) at December 31, 2023. The increase in liabilities relates to the increase in accounts payable and accrued liabilities and the advances from related parties.

##### Total equity

The decrease in equity attributable to shareholders of \$11,975,839 at March 31, 2024 from \$12,611,990 at December 31, 2023, is primarily due to the loss attributable to shareholders incurred during the three month period ended March 31, 2024 of \$762,068, offset by share-based compensation recognised on stock options and RSUs that vested during the period (\$80,877).

## Results of Operations

### Three month period ended March 31, 2024 compared to three month period ended March 31, 2023

*(Information extracted from the audited consolidated financial statements)*

Expressed in Canadian dollars

	For the three month period ended March 31,	
	2024	2023
Revenue	\$ 73,990	\$ -
	73,990	-
Expenses		
Amortization	327,253	320,607
Board advisory fees	65,325	30,523
Compensation	198,118	203,100
Consulting	91,501	83,525
General & administrative	57,828	39,133
Investor relations	55,538	312,349
Patent fees	6,157	6,817
Professional fees	89,493	102,822
Research & development costs	(11,598)	195,887
Share-based compensation	80,877	330,423
Transfer agent & filing fees	30,410	31,697
	990,902	1,656,883
Operating loss	(916,912)	(1,656,883)
Other income (expenses)		
Borrowing costs	(611)	(8,138)
Foreign exchange gain (loss)	(1,569)	(2,994)
SafeCoat Medical Inc. acquisition expense	-	(570,000)
Share of loss of Hunan Sanway Sepsmart Ltd.	(14,370)	-
Loss and comprehensive loss for period	\$ (933,462)	\$ (2,238,015)
Net loss and comprehensive loss attributable to:		
Shareholders	\$ (762,028)	\$ (1,942,010)
Non-controlling interest	(171,434)	(296,005)
	\$ (933,462)	\$ (2,238,015)

The net loss attributable to the shareholders for the period ended March 31, 2024 amounted to \$762,028 compared to a net loss attributable to the shareholders for the comparative period of \$1,942,010. Current period end results included borrowing costs of \$611 (2023: \$8,138), a foreign exchange loss of \$1,569 (2023: \$2,994), SafeCoat Medical Inc. acquisition costs of \$Nil (2023: \$570,000) and the Company's share of loss of Hunan Sanway Sepsmart Ltd. of \$14,370 (2023: \$Nil).

#### Revenue

The Company recorded an investment in SepSMART of \$2,375,000 on the vend in of certain patents licensed to the associate. The revenue from the license is being recognized over the license term of 8 years that commenced December 5, 2023. In the current period, revenue of \$73,990 has been recorded (2023: \$Nil) and the balance of the unearned revenues of \$2,279,870 at March 31, 2024 (December 31, 2023: \$2,353,860) is recorded as deferred revenue on the condensed interim consolidated statement of financial statements and will be recognized over the remaining term of the license.

#### Operating expenses

Operating expenses totalled \$990,902 for the period ended March 31, 2024 compared to \$1,656,883 for the comparative prior period.

Significant factors that contributed to the variances are discussed below:

The Company recorded amortization of \$327,253 for the period ended March 31, 2024 (2023: \$320,607) on intangible assets, lab equipment and computer equipment.

The Company incurred board advisory fees of \$65,325 for the period ended March 31, 2024 (2023: \$30,523). In the prior comparative period, the Company had one board advisor who was receiving monthly compensation of US\$5,000. In March 2023, the Company appointed new members to the advisory board, three of whom are receiving monthly compensation of \$5,000 for their services, which are being settled through the issue of shares on a quarterly basis.

The Company recorded compensation expense of \$198,118 for 2 employees of Asep, 2 employees of ASEP Medical Inc. and 2 employees of Sepset for the period ended March 31, 2024 (2023: \$203,100). In the prior comparative period, Asep Medical Inc. had an additional part time employee providing administrative support services.

The Company incurred consulting costs of \$91,501 (2023: \$83,525) for the period ended March 31, 2024, which is related to the services provided by the Company's COO, CFO, Medical Director and external consultants for regulatory advisory services.

The Company incurred \$57,828 of general & administrative costs during the period ended March 31, 2024 compared to \$39,133 for the period ended March 31, 2023. The current period's expense includes travel, occupancy, IT support services and insurance costs. In the prior comparative period, external IT support services commenced the end of February 2023 and insurance costs were expensed in 2022 when policy was paid in full.

For the period ended March 31, 2024, the Company has incurred investor relations costs of \$55,538 (2023: \$312,349). In the current quarter, investor relations activities have been minimal due to cash flow constraints. In the prior comparative period, the Company had engaged the services of numerous consultants to assist in

- i. managing communication between Asep's corporate management and current and potential investors; and,
- ii. development of an investor relations program.

The Company incurred \$89,493 in professional fees for the period ended March 31, 2024, which included legal, audit and accounting fees. Professional fees for the prior comparative period totalled \$102,822.

The Company incurred research & development costs of \$(11,598) for the period ended March 31, 2024 (2023: \$195,887) related to the collaborative research agreements with the University of British Columbia (UBC). The current period expense is net of a SR&ED refund of \$33,031 received by Sepset for the claim made for the period



from January 1, 2021 to November 9, 2021 and minimal activities have been performed by UBC under the collaborative research agreements.

The Company recognized share-based compensation of \$80,877 (2023: \$330,423) related to stock options and RSUs that vested during the period ended March 31, 2024. In the current period, the Company did not grant any options or RSUs.

The Company incurred transfer agent & filing fees of \$30,410 for the period ended March 31, 2024 (2023: \$31,697). Current period includes transfer agent fees, CSE monthly maintenance fees and OTC fees.

### Summary of Quarterly Results – Unaudited

The following table details the Company's quarterly results:

Quarter Ended	Net revenues	Net income (loss) attributable to shareholders	Net income (loss) attributable to non-controlling interest	Net income (loss)	Income (loss) per share - basic & fully diluted
	\$'s	\$'s	\$'s	\$'s	\$'s
31-Mar-24	73,990	(762,028)	(171,434)	(933,462)	(0.01)
31-Dec-23	21,140	(2,487,683)	(259,968)	(2,747,651)	(0.04)
30-Sep-23	-	(1,315,498)	(323,222)	(1,638,720)	(0.02)
30-Jun-23	-	(2,482,137)	(323,990)	(2,806,127)	(0.04)
31-Mar-23	-	(1,942,010)	(296,005)	(2,238,015)	(0.03)
31-Dec-22	-	(1,218,249)	(324,234)	(1,542,483)	(0.02)
30-Sep-22	-	(751,861)	(395,089)	(1,146,950)	(0.03)
30-Jun-22	-	(1,153,033)	(354,069)	(1,507,102)	(0.03)

There are no meaningful trends evident from analysis of the summary of quarterly financial information.

Factors that can cause significant fluctuations in the Company's quarterly results include professional fees and share-based compensation:

Quarter Ended	Professional fees	Share-based compensation
	\$'s	\$'s
31-Mar-24	89,493	80,877
31-Dec-23	397,650	691,592
30-Sep-23	63,011	428,809
30-Jun-23	196,523	501,231
31-Mar-23	102,822	330,423
31-Dec-22	20,148	169,332
30-Sep-22	65,377	184,803
30-Jun-22	118,625	278,584

### Liquidity and Going Concern

As at March 31, 2024, the Company had cash of \$18,664, other current assets of \$192,659 and current liabilities of \$1,422,118 compared to cash of \$64,721, other current assets of \$186,222 and current liabilities of \$995,587 as at December 31, 2023.

As of March 31, 2024, Asep had working capital deficit of \$1,210,794 (December 31, 2023 –working capital deficit of \$744,645). The Company estimates that it does not have available funds to meet requirements for the coming twelve months based on current estimated expenditures for operations and development of its technologies. These uncertainties cast significant doubt on the ability of the Company to continue as a going concern. As at March 31, 2024, the financial statements were prepared on a going concern basis which contemplates the realization of assets and the settlement of liabilities in the normal course of operations. Management is working with its financial advisors to determine the best manner of raising capital over the next number of months. Management is considering an equity raise as well as, in the right circumstances and the right terms, a debt financing.

The ability of the Company to carry out its planned business objectives is dependent on its ability to raise adequate capital funds including and not limited to grants, strategic alliances, debt financing and equity financing. If adequate financing is not available, the Company may be required to delay, reduce the scope of, or eliminate one or more development activities. There is no assurance that Asep will be able to obtain financing in the future or that such financing will be on terms acceptable to Asep.

### CAPITAL RESOURCES

The Company has met its development and corporate capital requirements through receipt of grants, debt and equity financing and may be impacted by continued poor North American market conditions. Trends affecting the Company's liquidity may be dictated by the demands on financial resources created by the advancing nature of Asep's development of technologies, the pursuit of a growth strategy that targets acquisitions and the Company's ability to access the financial resources required to meet these demands. As the technologies advance through development, they typically require more capital-intensive programs that apply pressure to the Company's financial resources.

It is estimated that the monthly operating costs are approximately \$150,000-\$175,000 per month; which includes, board advisory fees, compensation, consulting, internal investor relations, patent maintenance costs and general and administrative. Professional fees are estimated to be \$250,000 - \$500,000 per annum. These estimates do not include the UBC collaborative agreement funding and the estimated costs of the clinical trial for SepsetER.

The Company's contractual obligations at March 31, 2024 are as follows:

	Less than 1 year	Between 1 year and 5 years	More than 5 years	Total
Accounts payable and accrued liabilities	\$ 1,082,841	\$ -	\$ -	\$ 1,082,841
Loan payable	20,881	-	-	20,881
	\$ 1,103,722	\$ -	\$ -	\$ 1,103,722

### Classification of financial instruments

Financial assets included in the statement of financial position are as follows:

	March 31, 2024	December 31, 2023
Financial assets at FVTPL:		
Cash	\$ 18,664	\$ 64,721

Financial liabilities included in the statement of financial position are as follows:

	March 31, 2024	December 31, 2023
Financial liabilities at amortized cost:		
Accounts payable and accrued liabilities	\$ 1,082,841	\$ 677,731
Loan payable	20,881	20,270.26
	<u>\$ 1,103,722</u>	<u>\$ 698,001</u>

*Fair value*

The fair value of the Company's financial assets and liabilities approximates the carrying amount.

Financial instruments measured at fair value are classified into one of three levels in the fair value hierarchy according to the relative reliability of the inputs used to estimate the fair values. The three levels of the fair value hierarchy are:

- 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 or indirectly; and
- Level 3 – Inputs that are not based on observable market data.

Financial instruments classified as level 1 – quoted prices in active markets include cash.

**OFF BALANCE SHEET ARRANGEMENTS**

The Company does not have any off balance sheet arrangements as at March 31, 2024.

**TRANSACTIONS WITH RELATED PARTIES**

*Key management personnel compensation*

Key management personnel include those persons having authority and responsibility for planning, directing and controlling the activities of the Company as a whole. The Company has determined that key management personnel consist of members of the Company's Board of Directors and corporate officers.

The aggregate value of transactions relating to key management personnel and entities over which they have control or significant influence were as follows:

	<b>Three month period ended March 31,</b>	
	<b>2024</b>	<b>2023</b>
Consulting fees	\$ 52,500	\$ 52,500
Directors fees	18,000	18,000
Management salaries	108,375	108,375
Share-based compensation	42,316	215,455
	<u>\$ 221,191</u>	<u>\$ 394,330</u>

**Consulting fees**

Included in consulting fees for the year ended March 31, 2024 is \$30,000 for the services of the Company's Chief Operating Officer, Murphy Enterprises Inc. (Timothy Murphy) and \$22,500 for the services of the Chief Financial Officer, J.M. Tucker Professional Corporation (Jacqueline M. Tucker).

**Directors fees**

Included in directors fees for the year ended March 31, 2024 is \$18,000 for the services of Dr. Richard Heinzl.

**Management salaries**

Included in management salaries for the year ended March 31, 2024 is \$45,000 for the Company's Chief Executive Officer, Bob Hancock, \$45,000 for the Company's Chief Business Development Officer, Fadia Saad and \$18,375 for the Company's Chief Scientific Officer, Evan Haney.

**Share-based compensation**

Share-based compensation consisted of \$1,992 (2023: \$137,835) expensed for stock options and \$40,325 (2023: \$77,621) expensed for RSUs that vested during the period ended March 31, 2024.

**Accounts payable and accrued liabilities**

At March 31, 2024, the Company owed \$270,000 to Robert Hancock for unpaid salaries, \$24,000 to Dr. Richard Heinzl for unpaid salaries, \$20,400 for accrued consulting services provided by J.M. Tucker Professional Corporation, \$31,500 for consulting services provided by Murphy Enterprises Inc and \$30,000 to Fadia Saad for unpaid salaries. These amounts are included in accounts payable and accrued liabilities.

**Due to related parties**

During the three month period ended March 31, 2024, key management personnel advanced \$94,800 for working capital purposes.

**Loan payable**

During the three month period ended March 31, 2024, the Company accrued interest of \$611 on the loan from REWH Consulting Inc., a company controlled by Robert Hancock.

**CRITICAL ACCOUNTING ESTIMATES**

All significant accounting estimates are fully disclosed in note 3 of the Company's audited consolidated financial statements for the year ended December 31, 2023.

**SIGNIFICANT ACCOUNTING POLICIES**

All significant accounting policies are fully disclosed in note 3 of the Company's audited consolidated financial statements for the year ended December 31, 2023.

**RISK FACTORS**

The business of the Company is subject to risks and hazards, some of which are beyond the Company's control. Shareholders must rely on the ability, expertise, judgment, discretion, integrity and good faith of the management of the Company. The following is a summary of some risks and uncertainties that management believes to be material to the Company's business. Additional risk factors are included in the Filing Statement, which is available under the Company's SEDAR profile at [www.sedar.com](http://www.sedar.com).

### ***Dependence on the Performance of Investee Companies***

The Company is, and will be, dependent on the operations, assets and financial health of the investee companies in which it makes investments. The Company's ability to meet its operating expenses in the long term will be largely dependent on the interest and other payments received from investee companies, which are expected to be the sole source of cash flow for the Company. In addition, if the financing position of an investee company declines such that it is unable to make interest payments to the Company, the Company's financial condition and cash flow will be adversely affected.

The Company has conducted, and will conduct, due diligence on each of its investee companies prior to entering into agreements with them. In addition, the Company plans to monitor investee company performance through observer rights at board meetings of investee companies, negotiating rights to appoint one or more directors to the boards of investee companies, and receiving and reviewing regular financial reports from the investee companies. Nonetheless, there is a risk that there may be some liabilities or other matters that are not identified through the Company's due diligence or ongoing monitoring that may have an adverse effect on an investee company's business and, as a result, on the Company.

### ***Financing Risks***

The Company has no history of earnings or material revenue. In addition, the Company's business model may require it to make additional investments in investee companies, for which the Company would have to raise additional capital. While the Company may generate additional working capital through equity or debt offerings, or through the receipt of interest or other payments from investee companies, there is no assurance that such funds will be sufficient to facilitate the development of the Company's business as envisioned or, in the case of equity financings, that such funds will be available on terms acceptable to the Company or at all. If available, future equity financing may result in substantial dilution to the Company's shareholders.

### ***Risks Facing Investee Companies***

As previously noted, the Company's financial condition and results of operations will be affected by the performance of the companies in which it invests. Each investee company will also be subject to risks which will affect their respective financial condition. Given that, other than with respect to the Initial Investment, the Company does not currently know the exact nature of the businesses in which it may make investments, it is impossible to predict exactly what risks investee companies will face. Nonetheless, typical risks which investee companies might be expected to face include the following:

- Investee companies may need to raise capital through equity or debt financing. Failure to obtain such equity or debt, or the terms of such equity or debt that may be available, may impair the ability of investee companies to finance their future operations and capital needs. Flexibility to respond to changing business and economic conditions may therefore be limited.
- The success of investee companies may depend on the talents and efforts of one or two persons or a small group of persons. The death, disability or resignation of one or more of these persons could have a material adverse impact on an investee company.
- Investee companies may require additional working capital to carry out their business activities and to expand their businesses. If such working capital is not available, the financial performance and development of the businesses of the investee companies may be adversely affected.

- Damage to the reputation of investee companies' brands could negatively impact consumer opinion of those companies or their related products and services, which could have an adverse effect on their businesses.
- Investee companies may face intense competition, including competition from companies with greater financial and other resources, and more extensive development, manufacturing, marketing and other capabilities. There can be no assurance that investee companies will be able to successfully compete against their competitors or that such competition will not have a material adverse effect on their businesses.
- Investee companies may experience reduced revenues through the loss of a customer representing a high percentage of their revenues.
- Investee companies may experience reduced revenues due to an inability to meet regulatory requirements or may experience losses of revenues due to unforeseeable changes in regulations imposed by various levels of government.
- Investee companies may rely on government or other subsidy programs for revenue or profit generation. Changes to, or elimination of, such programs may have an adverse effect on such companies.
- Investee companies may experience negative financial results based on foreign exchange losses.

#### ***Reliance on Key Personnel***

The success of the Company is dependent on the abilities, experience, efforts and industry knowledge of its senior management and other key personnel. The long-term loss of the services of any key personnel for any reason could have a material adverse effect on the business, financial condition, results of operations or future prospects of the Company. In addition, the growth plans of the Company may require additional personnel, increase demands on management, and produce risks in both productivity and retention levels. The Company may not be able to attract and retain additional qualified management and personnel as needed in the future. There can be no assurance that the Company will be able to effectively manage its growth, and any failure to do so could have a material adverse effect on its business, financial condition, results of operations and future prospects.

#### ***Risks associated with ABT, Sepset, and SafeCoat***

The Company's financial condition and results of operations are affected by the performance of the companies in which it invests. Each investee company will also be subject to risks and uncertainties which will affect their respective financial conditions. While it is impossible to outline every risk or uncertainty that each of ABT, Sepset, and SafeCoat will face, management believes the typical risks which each of ABT, Sepset, and SafeCoat may face include the following:

- a. **Delays and Difficulties with Clinical Trials** - Clinical trials for treatment candidates require identification and enrollment of a large number of volunteers or eligible patients. ABT, Sepset, or SafeCoat may not be able to enroll sufficient volunteers or eligible patients to complete clinical trials in a timely manner or at all. Patient enrollment is a function of many factors, including the following: design of the protocol, size of the patient population, eligibility criteria for the study in question, perceived risks and benefits of the drug under study, availability of competing therapies, efforts to facilitate timely enrollment in clinical trials, patient referral practices of physicians, and availability of clinical trial sites. If ABT, Sepset, or SafeCoat have difficulty enrolling sufficient volunteers or patients to conduct its clinical trials as planned, they may need to delay, forego or terminate ongoing clinical trials. This may have a material adverse effect on ABT, Sepset, or SafeCoat's financial condition or results of operations.

- b. **Adverse Effects** – ABT, Sepset, or SafeCoat's potential product candidates are still in preclinical or clinical development and as such, they have a high risk of failure. If serious adverse or intolerable side effects are identified during the development of the product candidates, ABT, Sepset, or SafeCoat may need to abandon their development or limit development to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk benefit perspective. It is impossible to predict when or if any of ABT, Sepset, or SafeCoat's product candidates will prove effective or safe in humans or will receive regulatory approval. If serious adverse or intolerable side effects are identified post-approval, ABT, Sepset, or SafeCoat may need to recall its products and depending on the serious adverse event or intolerable side effects, ABT, Sepset, or SafeCoat may have to abandon the product completely and could be subject to substantial product liability claims. ABT, Sepset, or SafeCoat may be able to limit sales to certain uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective.
- c. **Clinical Data** - The clinical effectiveness and safety of any of ABT, Sepset, or SafeCoat's developmental products is not yet supported by clinical data and the medical community has not yet developed a large body of peer-reviewed literature that supports the safety and efficacy of ABT, Sepset, or SafeCoat's potential products. If future studies call into question the safety or efficacy of ABT, Sepset, or SafeCoat's potential products, ABT, Sepset, or SafeCoat's business, financial condition, and results of operations could be adversely affected.
- d. **Unproven Market** - The Company believes that the anticipated market for ABT, Sepset, or SafeCoat's potential products and technologies if successfully developed will continue to exist and expand. These assumptions may prove to be incorrect for a variety of reasons, including competition from other products and the degree of commercial viability of the potential product.
- e. **Raw Materials** - Raw materials and supplies are generally available in quantities to meet ABT, Sepset or SafeCoat's needs. ABT, Sepset, or SafeCoat will be dependent on third-party manufacturers for the products that it markets. An inability to obtain raw materials or product supplies could have a material adverse impact on ABT, Sepset, or SafeCoat's business, financial condition and results of operations.
- f. **Key Personnel** - Although ABT, Sepset, or SafeCoat are expected to have experienced senior management and personnel, ABT, Sepset, or SafeCoat will be substantially dependent upon the services of a few key technical personnel, particularly Dr. Robert E.W. Hancock, Dr. Fadia Saad and Dr. Evan Haney as well as certain other medical research professionals engaged for the successful operation of ABT, Sepset, or SafeCoat's businesses. Phase I of ABT, Sepset, or SafeCoat's research and development is planned to be completed by qualified professionals and is expected to concentrate on treatment of bacterial biofilm infections. The loss of the services of any of these personnel could have a material adverse effect on the business of ABT, Sepset, or SafeCoat. ABT, Sepset, or SafeCoat may not be able to attract and retain personnel on acceptable terms given the intense competition for such personnel among high technology enterprises, including biotechnology, and healthcare companies, universities and non-profit research institutions. If ABT, Sepset, or SafeCoat loses any of these persons, or is unable to attract and retain qualified personnel, the business, financial condition and results of operations may be materially and adversely affected.
- g. **Commercialization of Products** – ABT, Sepset, or SafeCoat's ability to generate revenues and achieve profitability depends on ABT, Sepset, or SafeCoat's ability to successfully complete the development of its products, obtain market and regulatory approval and generate significant revenues. The future success of ABT, Sepset, or SafeCoat's business cannot be determined at this time, and the Company

does not anticipate ABT, Sepset, or SafeCoat generating revenues from product sales for the foreseeable future. In addition, ABT, Sepset, or SafeCoat will face a number of challenges with respect to its future commercialization efforts, including, among others, that:

- i. ABT, Sepset, SafeCoat may not have adequate financial or other resources to complete the development of its various products or medical therapies, including two stages of clinical development that are necessary in order to commercialize such products or medical therapies;
  - ii. ABT, Sepset, or SafeCoat's may not be able to manufacture its products in commercial quantities, at an adequate quality or at an acceptable cost;
  - iii. ABT, Sepset, or SafeCoat may never receive FDA or Health Canada approval for its intended products or medical therapies;
  - iv. ABT, Sepset, or SafeCoat may not be able to establish adequate sales, marketing and distribution channels;
  - v. healthcare professionals and patients may not accept ABT, Sepset, or SafeCoat's product candidates;
  - vi. technological breakthroughs in sepsis treatment and prevention may reduce the demand for the Sepset's product candidates; and
  - vii. changes in the market for sepsis treatment, new alliances between existing market participants and the entrance of new market participants may interfere with the Sepset's market penetration efforts.
- h. **Proprietary Intellectual Property Rights** – ABT, Sepset, or SafeCoat's ability to compete may depend on the superiority, uniqueness and value of any intellectual property and technology that it may develop. To the extent ABT, Sepset, or SafeCoat is able to do so, to protect any proprietary rights of ABT, Sepset, or SafeCoat, ABT, Sepset, or SafeCoat intends to rely on a combination of patent, trademark, copyright and trade secret laws, confidentiality agreements with its employees and third parties, and protective contractual provisions. Despite these efforts, any of the following occurrences may reduce the value of any of the Company's intellectual property:
- i. issued patents, trademarks and registered copyrights may not provide ABT, Sepset, or SafeCoat with competitive advantages and ABT, Sepset, or SafeCoat's efforts to protect its current intellectual property rights may not be effective in preventing misappropriation of any its products or intellectual property;
  - ii. another party may assert a blocking patent and ABT, Sepset, or SafeCoat would need to either obtain a license or design around the patent in order to continue to offer the contested feature or service in its products; and,
  - iii. the expiration of patent or other intellectual property protections for any assets owned by ABT, Sepset, or SafeCoat could result in significant competition, potentially at any time and without notice, resulting in a significant reduction in sales. The effect of the loss of these protections on ABT, Sepset, or SafeCoat and its financial results will depend, among other things, upon the nature of the market and the position of ABT, Sepset, or SafeCoat's products in the market from time to time, the growth of the market, the complexities and economics of manufacturing a



competitive product and regulatory approval requirements but the impact could be material and adverse.

- i. **Legal Proceedings** - From time to time, ABT, Sepset, or SafeCoat may be a party to legal and regulatory proceedings, including matters involving governmental agencies, entities with whom it does business and other proceedings arising in the ordinary course of business. It is expected that ABT, Sepset, or SafeCoat will evaluate its exposure to these legal and regulatory proceedings and establish reserves for the estimated liabilities in accordance with generally accepted accounting principles. Assessing and predicting the outcome of these matters involves substantial uncertainties. Unexpected outcomes in these legal proceedings, or changes in management's evaluations or predictions and accompanying changes in established reserves, could have an adverse impact on ABT, Sepset, or SafeCoat's financial results.
- j. **Competition** - An increase in other companies competing in the industry could limit the ability of ABT, Sepset, or SafeCoat's potential of expanding its operations. Current and new competitors may have better capitalization, a longer operating history, more expertise and able to develop higher quality equipment or products, at the same or a lower cost. The Company will not be able to provide assurances that ABT, Sepset, or SafeCoat will be able to compete successfully against current and future competitors. Competitive pressures that the ABT, Sepset, or SafeCoat may face could have a material adverse effect on its business, operating results and financial condition.

If ABT, Sepset or SafeCoat are unable to meet any one or more of these challenges successfully, ABT, Sepset, or SafeCoat's ability to effectively commercialize its product candidates could be limited, which in turn could have a material adverse effect on the Company's business, financial condition and results of operations.

#### **DISCLOSURE OF OUTSTANDING SHARE DATA**

The Company is authorized to issue an unlimited number of common shares without par value and an unlimited number of preferred shares without par value.

As at March 31, 2024, the following securities of the Company were outstanding:

Common Shares – 76,059,147

Options – 5,813,034

RSUs – 103,257

Warrants – 6,978,930

As at the date of this MD&A, the following securities of the Company were outstanding:

Common Shares – 76,059,147

Options – 5,813,034

RSUs – 103,257

Warrants – 9,978,930

#### **OTHER INFORMATION AND BOARD APPROVAL**

This MD&A has been reviewed and approved by the Board of Directors of the Company.