## ASEP MEDICAL HOLDINGS INC

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

For the year ended December 31, 2022

Date of Report: May 1, 2023

## INTRODUCTION

This Management's Discussion and Analysis ("MD&A") provides a review of the performance of the operations of Asep Medical Holdings Inc. (collectively, with its subsidiaries, "Asep" or the "Company") for the year ended December 31, 2022 ("Fiscal 2022") compared to the period from date of incorporation (January 20, 2021) to December 31, 2021 ("Fiscal 2021"). This MD&A has been prepared in compliance with National Instrument 51-102 F1 – Continuous Disclosure Obligations. This MD&A has been prepared on the basis of available information up to April 26, 2023 and should be read in conjunction with the Company's consolidated financial statements for the year ended December 31, 2022 and the corresponding notes to the financial statements which have been prepared in accordance with International Financial Reporting Standards ("IFRS"). These documents are available on SEDAR at www.sedar.com. All dollar amounts are expressed in Canadian dollars ("CAD") except where indicated otherwise.

Additional information on the Company is available on the SEDAR website at 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. 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;
- global financial conditions related to Covid-19 which have adversely affected the companies in which the Company has invested and the duration of which is undetermined at this time; 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. (formerly Trenchant Life Sciences Investment Corp.) (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". On April 19, 2022, the Company commenced trading on the OTCQB under the trading symbol "SEPSF". On November 10, 2022, the Company commenced trading 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:

			Percentage
	Principal Activity	Location	Owned
SafeCoat Medical Inc. ("SafeCoat")	Life Sciences	Canada	100%
Asep Medical Inc.	Life Sciences	Canada	100%
ABT Innovations Inc. ("ABT")	Life Sciences	Canada	50.1%
Sepset Biosciences Inc. ("Sepset")	Life Sciences	Canada	50.1%

# ASEP MEDICAL HOLDINGS INC Management's Discussion and Analysis December 31, 2022 - Page 3

The Company's subsidiary, ABT, owns 100% of ABT Peptides Inc, an inactive company incorporated in British Columbia, Canada.

# 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-licenced 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.

# 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, earnose 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.

# CORPORATE UPDATES

- On January 25, 2022, the Company announced new additions to its advisory board, IR team and Digital marketing programs;
- On February 2, 2022, the Company announced the exclusive Licensing Arrangement for a patented and novel AI-Driven Sepsis Diagnosis Technology developed at the University of British Columbia;
- On February 19, 2022, the Company announced its Antiobiofilm/Anti-inflammatory peptide technology is advanced development for wound dressing with US Army funding;
- On July 19, 2022, the Company announced the appointment of Dr. Robert E. W. Hancock as CEO;
- On September 19, 2022, the Company announced its support of World Sepsis Day and an update on its development of a test kit to identify severe sepsis;
- On October 4, 2022, the Company announced the appointment of Dr. Richard Heinzl to the Board of Directors;
- On October 5, 2022, the Company announced the appointment of Jacqueline M. Tucker as CFO;
- On October 13, 2022, the Company announced the signing of Letter of Intent with Bohai Biomedical Development Co., Ltd. to establish the feasibility of peptide oral rinse for the Chinese market;
- On November 7, 2022, the Company announced that it had been granted patent approval for its Sepsis Diagnostic Technology in 13 European countries and Australia;
- On November 21, 2022, the Company announced the listing of its common shares on the Frankfurt Stock Exchange;

- On November 23, 2022, the Company announced its shares had been listed and commenced trading on the Frankfurt Exchange;
- On November 24, 2022, the Company announced the grant of stock options;
- On December 2, 2022, the Company announced it had entered into an agreement to acquire SafeCoat Medical Inc.;
- On December 22, 2022, the Company announced completion of a non-brokered private placement of \$330,000 unsecured convertible debenture;
- On December 24, 2022, the Company announced significant milestones addressing antibiotic failure through proprietary diagnostic & therapeutic technologies (clarification news release December 28, 2022);
- On January 6, 2023, the Company announced that it had signed a Letter of Intent for a joint venture with Bahrain-based Seaspring W.L.L. for regulatory approval and commercialization of sepsis diagnosis technology in the Kingdom of Bahrain, Middle East and North Africa;
- On January 20, 2023, the Company announced the adoption of a Long-Term Performance Incentive Plan and the grant of stock options;
- On January 27, 2023, the Company announced it had signed a term sheet to form a joint venture with a leading Chinese medical diagnostic company, Sansure Biotech Inc. for the commercialization of the SepsetER diagnostic test in China; and,
- On March 6, 2023, the Company announced the appointments of General Wesley Clark (Ret), David Johnson,
  J. Bernard Rice, Dr. Islam Mohamed and Thomas O'Shaughnessy to its Advisory Board and Dr. Rob Stenstrom, as Medical Director.

# KEY OPERATING MILESTONES

In parallel to the continued advancements of the Company's subsidiaries, ABT Innovations Inc. ("ABT") and Sepset Biosciences Inc. ("Sepset"), 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. Given that molecular diagnostics have a shorter development cycle and may result in clear overall saving (as illustrated by the RTI study mentioned above), our focus has been on potential partnerships for the Sepset<sup>ER</sup> technology. As such, we have initiated contacts with a number of companies in the space. Our discussions thus far have contemplated stages of involvement and key territories including the USA, EU and Asia. As a result, we have signed a joint venture term sheet with a leading Chinese medical diagnostic company, Sansure Biotech. Negotiations of the specific collaboration terms in order to enter into a definitive agreement are currently in process. We also signed a Letter of Intent (LOI) for a joint venture (JV) between Asep and Seaspring W.L.L. (Seaspring), a Bahrain-based international investment consultancy firm. As per the terms of the LOI, Seaspring will contribute the capital required by the joint venture to conduct its business operations while Asep will provide the licensing rights for use of the technology in the Kingdom of Bahrain and the Middle East and North Africa (MENA) region. A definitive agreement is being negotiated. 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.

The Company has also filed for a new provisional patent based on the recent discovery that sepsis patients can be further divided into different mechanistic groups, called endotypes. This discovery will serve as the basis for our next generation sepsis diagnostic test that will enable a personalized medicine approach for sepsis patients by providing doctors with important information regarding optimal treatment regimens. Furthermore, the Company received official approvals for the European and Australian versions of the patent underlying the Sepset<sup>ER</sup> diagnostic test on May 11, 2022 and June 16, 2022, respectively. With regards to the European patent, Asep has elected to validate the patent in Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Netherlands, Norway, Spain, Sweden, Switzerland and the UK, providing a wide range of markets where the test may be sold once it receives regulatory approval.

ABT continued to make progress advancing the synthetic antibiofilm and immunomodulatory peptide technology towards clinical trials. ABT continued their collaboration with iFyber LLC, a US based biochemistry lab that the Company has been working with for the last several years, to develop peptide loaded wound dressings and are particularly engaged in identifying biocompatible and resorbable materials that facilitate sustained peptide release and potent antibiofilm activity. Prototype dressings have been evaluated in mouse and pig models for efficacy, demonstrating better antimicrobial activity than other commercially available wound care products. In addition, ABT scientists have identified 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 prevented the development of resistance which addresses concerns related to the growing problem of antibiotic resistance. ABT has also been engaged in detailed 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. These efforts are ongoing and it is anticipated that the final results will be ready by the end of the year. This information will be essential to inform future formulation studies and will reveal the optimal route of delivery for the peptides to achieve peak activity and lowest toxicity.

Beyond clinical applications, ABT is exploring other 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.

Sepset made progress on the design and development of their first generation in vitro diagnostic test for sepsis named Sepset<sup>ER</sup>. The machine learning algorithm underlying Sepset<sup>ER</sup> was further refined and has been optimized for use in patient samples collected within the emergency room. This is a critical distinction compared to other sepsis diagnostic tests on the market as many of them target patients who are entering the ICU and whose condition is already quite advanced. 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 was assessed. In addition, the company is actively working on ethics approval for a pilot clinical study using blood samples from sepsis patients to evaluate the performance of the diagnostic test on representative patient samples. Additionally, the Company has identified an optimal RNA isolation procedure from blood samples which provides high-quality RNA to serve as the input for the gene expression test. Moreover, the Company is continuing to evaluate additional RNA isolation protocols that may further reduce the time for this critical step within the workflow of the Sepset<sup>ER</sup> test. Finally, Sepset has been working on establishing various performance criteria for the diagnostic kit including examining test precision, reproducibility, kit storage conditions, sample requirements and detection limits. All testing and validation is 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 regulatory strategy assessment of Sepset<sup>ER</sup> development progress was performed by a leading contract research organization (CRO) that specializes in regulatory approval of medical devices. Following this assessment, Sepset engaged the same CRO to prepare a pre-submission package for the FDA as well as write a clinical study protocol that will evaluate the performance of the Sepset<sup>ER</sup> test in a real-world situation. In addition, Sepset is actively working on implementing their recently acquired electronic quality management system (eQMS) to ensure compliance with the regulatory requirements for medical

ASEP MEDICAL HOLDINGS INC Management's Discussion and Analysis December 31, 2022 - Page 6

devices. These two activities are key steps to ensuring compliance with regulatory requirements, as the Sepset<sup>ER</sup> test approaches its pivotal clinical trial for validation.

Finally, we entered into an Earn-In and Option Agreement with SafeCoat Medical Inc. and the securityholders of SafeCoat. Pursuant to the Agreement, the Company will earn a 50.1% of the voting equity securities of SafeCoat in consideration for services the Company provides to SafeCoat in connection with the grant of a term sheet by the University of British Columbia to SafeCoat for the use, development and commercialization of a peptide 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.

## Changes in Management, Board of Directors and Advisory Board

In January 2022, the Company appointed two new additions to its advisory board, Dr. Christopher Mow, Associate Chief of Staff and Clinical Professor of Orthopedic Surgery at Stanford University Medical Centre and Mr. Patrick McBride, an investment banker, who holds a H.BSc. in neuroscience from the University of Toronto. (Refer to News Release January 25, 2022)

On July 5, 2022, the Company appointed Dr. Robert E. W. Hancock as the CEO and Chairman of the Board. Dr. Hancock replaced Rudy Mazzocchi, the former CEO and Chairman, who stepped down due to health reasons. Dr. Hancock is a world-leading expert in infectious diseases. In recognition of his research work, Dr. Hancock has received numerous awards and honours including the Prix Galien (highest award for Canadian pharmaceutical research and innovation), the Killam Prize (Canada Council's prize for health research), Michael Smith CIHR Researcher of the Year, the ICAAC Aventis Antimicrobial Research Award (leading award worldwide for antimicrobial research) and in 2001 he was inducted as an Officer of the Order of Canada (Canada's second highest honour). Dr. Hancock stepped down as COO and was replaced by Timothy Murphy, a current member of the Company's board of directors. Mr. Murphy is an experienced business lawyer and executive with a strong background in mergers and acquisitions, intellectual property and technology licensing.

On September 29, 2022, Dr. Richard Heinzl was appointed to the Board of Directors. Dr. Heinzl is a physician, humanitarian, entrepreneur and author whose current focus is genomics, artificial intelligence and healthcare worldwide. Based in New York and Toronto, he is currently CEO of My Next Health Inc., a next-generation functional genomics company.

On October 1, 2022, Jacqueline Tucker was appointed CFO. Ms. Tucker is a seasoned professional that brings decades of public market and accounting experience to the management team. Concurrently, Jen Gretchen stepped down as CFO.

On March 1, 2023, General Wesley Clark (Ret.), David Johnson, J. Bernard Rice, Dr. Islam Mohamed and Thomas O'Shaughnessy were appointed as members to the Company's advisory board and Dr. Rob Stenstrom was engaged in a consulting capacity as Asep's Medical Director. (Refer to News Release March 6, 2023)

## SELECTED ANNUAL INFORMATION

(Information extracted from the Company's audited financial statements) Expressed in Canadian dollars

		For the period from
		date of
		incorporation
	For the year ended	(January 20, 2021)
	December 31,	to December 31,
	2022	2021
	\$'s	\$'s
Revenues	-	-
Net income (loss) attributable to:		
Shareholders	(4,524,981)	(2,200,086)
Non-controlling interest	(1,232,305)	(143,477)
Net income (loss)	(5,757,286)	(2,343,563)
Net income (loss) per share - basic and diluted	(0.08)	(0.10)
Cash dividends	-	-
Total assets	27,078,589	30,716,132
Long term liabilities	-	-
Shareholders' equity		
Share capital	19,842,132	19,467,132
Other components of equity	2,352,934	992,148
Deficit	(6,725,067)	(2,200,086)
	15,469,998	18,259,194
Non-controlling interest	11,080,429	12,312,734
Shareholders' equity	26,550,427	30,571,928

#### **FINANCIAL POSITION**

## Total assets

Total assets at December 31, 2022 were \$27,078,589 compared to \$30,716,132 at December 31, 2021. The change in total assets relates to the decrease in cash and cash equivalents, decrease in property, plant and equipment (current year's amortization charge) and decrease in intangible assets (current year's amortization charge) offset by the increase in deposits and prepaid expenses (UBC collaborative research funding and investor relations program).

## **Total liabilities**

At December 31, 2022, the Company's total liabilities are comprised of trade payables and accruals. The increase in total liabilities from \$144,204 at December 31, 2021 to \$528,161 at December 31, 2021 relates to an increase in accounts payable of approximately \$54,000 from prior comparative period due to increased corporate activity and accrual of \$329,500 for compensation to an employee, a contractor and investor relations consultants.

## Total equity

The decrease of equity attributable to shareholders of \$15,469,998 at December 31, 2022 from \$18,259,194 at December 31, 2021, is primarily due to the loss attributable to shareholders incurred during the year of \$4,524,981 offset by the convertible debenture financing completed in December 2022 classified as equity (\$240,900 (\$330,000 less deferred tax liability of \$89,100)) and issue of shares to acquire SafeCoat (\$375,000).

# **Results of Operations**

## Year ended December 31, 2022 compared to period from January 20, 2021 (incorporation) to December 31, 2021

(Information extacted from the audited consolidated financial statements)

Expressed in Canadian dollars

	For the constant of the	Janu	e period from Jary 20, 2021
	For the year ended		provention) to
	December 31, 2022		December 31,
	2022		2021
Expenses			
Accretion	\$ -	\$	76,389
Amortization	1,282,394		177,177
Compensation	556,550		81,961
Consulting	246,946		191,205
General & administrative	336,693		64,756
Investor relations	845 <i>,</i> 950		47,250
Patent fees	155,401		7,117
Professional fees	284,606		378,333
Research & development costs	615,040		73,599
Share-based compensation	1,119,072		956,227
	5,442,653		2,054,014
Operating loss	(5,442,653)		(2,054,014)
Other income (expenses)			
Borrowing costs	(814)		(25,610)
Foreign exchange income (loss)	(2,399)		(1,238)
Loss on derivative liability	-		(262,701)
SafeCoat Medical Inc. acquisition expense	(400,521)		-
Loss before deferred tax recovery	(5,846,386)		(2,343,563)
Deferred tax recovery	89,100		-
Loss and comprehensive loss for period	\$ (5,757,286)	\$	(2,343,563)
Net loss and comprehensive loss attributable to:			
Shareholders	\$ (4,524,981)	\$	(2,200,086)
Non-controlling interest	(1,232,305) \$ (5,757,286)		(143,477)
	\$ (5,757,286)	\$	(2,343,563)
Loss per share - basic and fully diluted	\$ (0.08)	\$	(0.10)
Waighted average number of common shares			
Weighted average number of common shares basic and fully diluted	56,196,097		21,357,895

The net loss attributable to the shareholders for the year ended December 31, 2022 amounted to \$4,524,981 compared to a net loss for the comparative period of \$2,200,086. Current year results included borrowing costs of \$814 (2021: \$25,610), a foreign exchange loss of \$2,399 (2021: \$1,238), SafeCoat Medical Inc. acquisition expense of \$400,521 (2021: \$Nil) and a deferred tax recovery of \$89,100 (2021: \$Nil).

Details of the SafeCoat acquisition expense are as follows:

Consideration given:	
Common shares	\$ 375,000
Services	150,752
	525,752
Net (assets) liabilites acquired	(125,231)
SafeCoat acquisition expense	\$ 400,521

## Operating expenses

Operating expenses totalled \$5,442,653 for the year ended December 31, 2022 compared to \$2,054,014 for the comparative prior period.

Significant factors that contributed to the variances are discussed below:

The Company incurred amortization of \$1,282,394 for the year ended December 31, 2022 on intangible assets, lab equipment and computer equipment. This increased from \$177,177 incurred for the period from January 20, 2021 (incorporation) to December 31, 2021 mainly due to the Company recognizing intangible assets related to the acquisition of Asep Medical Inc. in November 2021 with further increases due to acquisitions of lab and computer equipment.

The Company recorded compensation expense of \$556,550 for 1 employee of Asep, 3 employees of ASEP Medical Inc. and 1 employee of Sepset for the year ended December 31, 2022 (2021: \$81,961).

The Company incurred consulting costs of \$246,946 for the year ended December 31, 2022, which is related to the services provided by the Company's former CEO, the Company's current COO and external consultants for regulatory

ASEP MEDICAL HOLDINGS INC Management's Discussion and Analysis December 31, 2022 - Page 10

and financial advisory services. This increased from \$191,205 incurred for the period from January 20, 2021 (incorporation) to December 31, 2021. In the prior period, consulting fees consisted of financial advisory services.

The Company incurred \$336,693 of general & administrative costs during the year ended December 31, 2022, which includes travel, occupancy and insurance costs in addition to transfer agent & filing fees. In the prior comparative period, a minimal amount was incurred for general & administrative expenses (\$64,756).

For the year ended December 31, 2022, the Company has incurred investor relations costs of \$845,950 (2021: \$47,250). The Company has 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.

Prior to the acquisition of Asep Medical Inc. and its subsidiary companies, ABT and Sepset in November 2021, no investor relations activities had been undertaken.

The Company incurred \$155,401 in patent fees related to patent filings and maintenance fees incurred by ABT and Sepset. Patent fees in the prior comparative period were \$7,117, as the Company did not complete the acquisition of ABT and Sepset until November 2021.

The Company incurred \$284,606 in professional fees for the year ended December 31, 2022, which included legal, audit and accounting fees. Professional fees for the period from January 20, 2021 (incorporation) to December 31, 2021 totalled \$378,333 were for the formation of the Company and the initial legal work addressing contractual and employment matters.

The Company incurred research & development costs of \$615,040 for the year ended December 31, 2022 (2021: \$73,599) related to the collaborative research agreements with the University of British Columbia (UBC). No research

and development activities were conducted prior to Asep acquiring Asep Medical Inc. and its subsidiary companies in November 2021.

The Company recognized share-based compensation of \$1,119,072 related to 5,420,000 stock options that were granted to certain directors, officers, employees and consultants of the Company on November 18, 2021, September 29, October 1, 2022 and November 24, 2022 and vested during the year. During the year ended December 31, 2022.

## 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-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)
31-Mar-22	-	(1,401,838)	(158,913)	(1,560,751)	(0.03)
31-Dec-21	-	(2,200,086)	(143,477)	(2,343,563)	(0.10)
30-Sep-21	-	(134,386)	-	(134,386)	(0.01)
30-Jun-21	-	(167,000)	-	(167,000)	(0.02)
31-Mar-21	-	(92,059)	-	(92,059)	(0.04)

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 share-based compensation:

Quarter Ended	Share-based compensation
	\$'s
31-Dec-22	169,332
30-Sep-22	184,803
30-Jun-22	278,584
31-Mar-22	486,353
31-Dec-21	956,227
30-Sep-21	-
30-Jun-21	-
31-Mar-21	-

## Liquidity and Going Concern

As at December 31, 2022, the Company had cash and cash equivalents of \$2,130,390, other current assets of \$1,268,255 and current liabilities of \$528,161, compared to cash and cash equivalents of \$5,290,070, other current assets of \$464,159 and current liabilities of \$144,204 as at December 31, 2021.

As of December 31, 2022, Asep had working capital of \$2,870,484 (December 31, 2021 – \$5,610,025). 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 December 31, 2022, 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.

The Company does not have any commitments at December 31, 2022. It is estimated that the monthly operating costs are approximately \$201,000 per month, which does not include the UBC collaborative agreement funding.

The Company's contractual obligations at December 31, 2022 are as follows:

	Less than 1 Between 1 year		Mo	re than 5	Total		
		year	and !	5 years		years	Total
Accounts payable and accrued liabilities	\$	528,161	\$	-	\$	-	\$ 528,161

## Classification of financial instruments

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

	December 31,	December 31,
	2022	2021
Financial assets at FVTPL:		
Cash and cash equivalents	\$ 2,130,390	\$ 5,290,070
Financial assets at amortized cost:		
GST receivable	\$ 114,619	\$ 73,398

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

	De	cember 31,	De	cember 31,
		2022		2021
Financial liabilities at amortized cost:				
Accounts payable and accrued liabilities	\$	528,161	\$	144,204

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 December 31, 2022.

## 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:

	Year ended December 31, 2022
Consulting fees	\$ 267,500
Directors fees	24,000
Management salaries	369,742
Share-based compensation	1,051,798
	\$ 1,713,040

There were no outstanding balances due from or to related parties at December 31, 2022 and 2021.

## **CRITICAL ACCOUNTING ESTIMATES**

All critical accounting estimates are fully disclosed in Note 3 of the Company's audited consolidated financial statements for the year ended December 31, 2022 and period from January 20, 2021 (incorporation) to December 31, 2021.

## SIGNIFICANT ACCOUNTING POLICIES

All significant accounting estimates are fully disclosed in Note 3 of the Company's audited consolidated financial statements for the year ended December 31, 2022 and period from January 20, 2021 (incorporation) to December 31, 2021.

## **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.

## **Global Financial Conditions**

The COVID 19 Pandemic has been responsible for a substantial negative impact on the world economy. Many industries are impacted by global market conditions. Some of the key impacts of financial market turmoil can include contraction in credit markets resulting in a widening of credit risk, devaluations and high volatility in global equity markets, commodity, foreign exchange and precious metal markets, and a lack of market liquidity. A slowdown in the financial markets or other economic conditions, including but not limited to, reduced consumer spending, increased unemployment rates, deteriorating business conditions, inflation, deflation, volatile fuel and energy costs, increased consumer debt levels, lack of available credit, lack of future financing, changes in interest rates and tax rates may adversely affect the Company's operations and business plans. Any of these factors may impact the ability of the Company and its potential partners to obtain equity or debt financing in the future and, if obtained, on favourable terms. Additionally, any such occurrence could cause decreases in asset values that are deemed to be other than temporary, which may result in impairment losses.

## 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 and Sepset

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 Sepset and ABT will face, management believes the typical risks which each of Sepset and ABT 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 or Sepset 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 or Sepset 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 or Sepset's financial condition or results of operations.
- b. Adverse Effects ABT or Sepset'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 or Sepset 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 or Sepset'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 or Sepset's may need to recall its products and depending on the serious adverse event or intolerable side effects, ABT or Sepset may have to abandon the product completely and could be subject to substantial product liability claims. ABT or Sepset 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 or Sepset'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 or Sepset's potential products. If future studies call into question the safety or efficacy of ABT or Sepset's potential products, ABT or Sepset's business, financial condition, and results of operations could be adversely affected.
- d. **Unproven Market** The Company believes that the anticipated market for ABT or Sepset'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 or Sepset's needs. ABT or Sepset 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 or Sepset's business, financial condition and results of operations.

- f. Key Personnel Although ABT or Sepset are expected to have experienced senior management and personnel, ABT or Sepset 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 or Sepset's businesses. Phase I of ABT or Sepset'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 or Sepset. ABT or Sepset 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 or Sepset 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 or Sepset's ability to generate revenues and achieve profitability depends on ABT or Sepset's ability to successfully complete the development of its products, obtain market and regulatory approval and generate significant revenues. The future success of ABT or Sepset's business cannot be determined at this time, and the Company does not anticipate ABT or Sepset generating revenues from product sales for the foreseeable future. In addition, ABT or Sepset will face a number of challenges with respect to its future commercialization efforts, including, among others, that:
  - i. ABT or Sepset 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 or Sepset's may not be able to manufacture its products in commercial quantities, at an adequate quality or at an acceptable cost;
  - iii. ABT or Sepset may never receive FDA or Health Canada approval for its intended products or medical therapies;
  - iv. ABT or Sepset may not be able to establish adequate sales, marketing and distribution channels;
  - v. healthcare professionals and patients may not accept ABT or Sepset'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 or Sepset'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 or Sepset is able to do so, to protect any proprietary rights of ABT or Sepset, ABT or Sepset 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 or Sepset with competitive advantages and ABT or Sepset'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 or Sepset 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 or Sepset 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 or Sepset and its financial results will depend, among other things, upon the nature of the market and the position of ABT or Sepset'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 or Sepset 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 or Sepset 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 or Sepset's financial results.
- j. **Competition** An increase in other companies competing in the industry could limit the ability of ABT or Sepset'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 or Sepset will be able to compete successfully against current and future competitors. Competitive pressures that the ABT or Sepset may face could have a material adverse effect on its business, operating results and financial condition.

If ABT or Sepset are unable to meet any one or more of these challenges successfully, ABT or Sepset'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 December 31, 2022, the following securities of the Company were outstanding:

Common Shares – 62,130,344

Options - 5,420,000

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

Common Shares – 62,130,344

Options - 6,120,000

RSUs – 6,200,000

# OTHER INFORMATION AND BOARD APPROVAL

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