



Management's Discussion and Analysis of Financial Condition and Results of Operations

Introduction

This Management's Discussion and Analysis ("MD&A") provides a review of the results of operations, financial condition and cash flows of Aeterna Zentaris Inc. for the three- and six months ended June 30, 2021. In this MD&A, "Aeterna Zentaris", the "Company", "we", "us" and "our" mean Aeterna Zentaris Inc. and its subsidiaries. This discussion should be read in conjunction with the information contained in the Company's unaudited condensed consolidated financial statements and the accompanying notes thereto as at June 30, 2021 and for the three- and six-months ended June 30, 2021 and 2020 and the audited consolidated financial statements and MD&A for the years ended December 31, 2020 and 2019. The unaudited condensed interim consolidated financial statements as at June 30, 2021 and for the three- and six-months ended June 30, 2021 and 2020 were prepared in accordance with International Financial Reporting Standards as issued by the International Accounting Standards Board ("IFRS") applicable to the preparation of interim financial statements, including IAS 34, Interim Financial Reporting. The Company's common shares are listed on both The Nasdaq Capital Market ("Nasdaq") and on the Toronto Stock Exchange under the symbol "AEZS".

All amounts in this MD&A are presented in United States ("U.S.") dollars, except as otherwise noted.

This MD&A was approved by the Company's Board of Directors on August 4, 2021. This MD&A is dated August 4, 2021.

Company Overview

Aeterna Zentaris is a specialty biopharmaceutical company commercializing and developing therapeutics and diagnostic tests. The Company's lead product, Macrilen™ (macimorelin), is the first and only U.S. Food and Drug Administration and European Commission approved oral test indicated for the diagnosis of patients with adult growth hormone deficiency ("AGHD"). Macimorelin is currently marketed in the U.S. under the tradename Macrilen™ through a license agreement with Novo Nordisk Healthcare AG ("Novo Nordisk") under which Aeterna Zentaris receives royalties on net sales. According to a commercialization and supply agreement, MegaPharm Ltd. is seeking regulatory approval and plans to subsequently commercialize macimorelin in Israel and the Palestinian Authority. Additionally, upon receipt of pricing and reimbursement approvals, Aeterna Zentaris expects that macimorelin will be marketed in Europe and the United Kingdom through a recently established license agreement with Consilient Health Ltd. ("Consilient Health") under which Aeterna Zentaris will receive regulatory milestones related to agreed-upon pricing and reimbursement parameters; net sales milestones; and royalties, ranging from 10%-20% of net sales, subject to reduction in certain cases, or sublicense income recorded by Consilient Health. The Company is also leveraging the clinical success and compelling safety profile of macimorelin to develop it for the diagnosis of childhood-onset growth hormone deficiency ("CGHD"), an area of significant unmet need. The Company is actively pursuing business development opportunities for the commercialization of macimorelin in Asia and the rest of the world, in addition to other non-strategic assets, to monetize their value.

Aeterna Zentaris intends to balance risks and secure growth opportunities by re-establishing a diversified, yet focused, development pipeline to which the Company can best leverage its expertise and experience. The Company is focused on opportunistically utilizing its network with universities in Europe and the U.S. which provides, what the Company believes will be, vital access to innovative development candidates in different indications, with a focus on rare or orphan indications and potential for pediatric use. To date, we have signed agreements to establish this growing pipeline across a number of indications, including neuromyelitis optica spectrum disorder (NMOSD), primary hypoparathyroidism and amyotrophic lateral sclerosis (ALS, Lou Gehrig's disease). Additionally, the Company is developing an oral prophylactic bacterial vaccine against SARS-CoV-2, the virus that causes COVID-19.



About Forward-Looking Statements

This document contains statements that may constitute forward-looking statements within the meaning of U.S. and Canadian securities legislation and regulations and such statements are made pursuant to the safe-harbor provision of the U.S. Private Securities Litigation Reform Act of 1995. Forward-looking statements may include, but are not limited to statements preceded by, followed by, or that include the words “will,” “expects,” “believes,” “intends,” “would,” “could,” “may,” “anticipates,” and similar terms that relate to future events, performance, or our results. Forward-looking statements involve known and unknown risks and uncertainties, including those discussed in this MD&A and in our Annual Report on Form 40-F and annual information form, under the caption “Risk Factors” filed with the relevant Canadian securities regulatory authorities and with the U.S. Securities and Exchange Commission (“SEC”). Forward-looking statements in this MD&A include, but are not limited to, those relating to: Aeterna’s expectation with respect to the DETECT trial (as defined below) (including the ability to enroll subjects in the U.S. or elsewhere, and expectations that the DETECT trial will be suitable to support a claim (regulatory approval) for potential stand-alone testing with macimorelin), Aeterna’s expectations with respect to the marketing of macimorelin in Europe and the United Kingdom and with respect to the approvals and commercialization of macimorelin in Israel and the Palestinian Authority, the aims and details of the pre-clinical and potential clinical studies involving the use of macimorelin as potential treatment of ALS (Lou Gehrig’s disease) being conducted by The University of Queensland in Australia (“Queensland University”), the potential of the coronavirus vaccine platform technology licensed from the University of Wuerzburg (and any vaccine candidates using that technology) to be effective as a vaccine against COVID-19 (SARS-CoV-2) or any other coronavirus disease or to offer an alternative to other approved vaccines against COVID-19, the ability to obtain approval to commence any clinical trial or the timeline to develop any potential vaccine and the characteristics of any potential vaccine, plans regarding the delayed clearance PTH (as defined below) fusion polypeptides licensed from The University of Sheffield and the AEZS-150 candidate and the related potential IND filing, plans regarding AIM-Biologicals (as defined below) in-licensed from the University of Wuerzburg in Germany and the potential to treat NMOSD (as defined below), and Aeterna’s intentions with respect to growth opportunities and its business focus, including with respect to its cash position and development pipeline (including the ability to accelerate its development pipeline).

Forward-looking statements involve known and unknown risks and uncertainties, and other factors which may cause the actual results, performance or achievements stated herein to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such risks and uncertainties include, among others: the completion of the DETECT trial may be delayed, we may be unable to enroll the expected number of subjects in the DETECT trial and the result of the DETECT trial may not support receipt of regulatory approval in CGHD, that the University of Wuerzburg’s coronavirus vaccine platform technology (and any vaccine candidates using that technology) has never been tested in humans and so further pre-clinical or clinical studies of that technology and any vaccine developed using that technology may not be effective as a vaccine against COVID-19 (SARS-CoV-2) or any other coronavirus disease, that such technology or vaccines may not receive the necessary approvals to be studied in human clinical trials, that the timeline to develop a vaccine may be longer than expected, that such technology or vaccines may not be capable of being used orally, may not have the same characteristics (including storage temperatures) as vaccines previously approved using the Salmonella Typhi Ty21a carrier strain, any such vaccine developed using the University of Wuerzburg’s technology may not be efficacious against resistant viral mutants or may not be competitive with vaccines developed by third parties against COVID-19, the risk that the pre-clinical research licensed from our partners, including that done with the University of Wuerzburg for autoimmunity modifying biologicals for the potential treatment of NMOSD, does not lead to clinical trials in humans, our ability to raise capital and obtain financing to continue our currently planned operations, our ability to continue to list our common shares on the Nasdaq, results from ongoing or planned pre-clinical studies of macimorelin by Queensland University or for our other products under development may not be successful or may not support advancing the product to human clinical trials, our ability to raise capital and obtain financing to continue our currently planned operations, our dependence on the success of Macrilen™ (macimorelin) and related out-licensing arrangements and the continued availability of funds and resources to successfully commercialize the product, including our heavy reliance on the success of the License Agreement with Novo Nordisk, the global instability due to the global pandemic of COVID-19, and its unknown potential effect on our planned operations, including studies, our ability to enter into out-licensing, development, manufacturing, marketing and distribution agreements with other pharmaceutical companies and keep such agreements in effect, our reliance on third parties for the manufacturing and commercialization of Macrilen™ (macimorelin), potential disputes with third parties, leading to delays in or termination of the manufacturing, development, out-licensing or commercialization of our product candidates, or resulting in significant litigation or arbitration, uncertainties related to the regulatory process, unforeseen global instability, including the instability due to the global pandemic of the novel coronavirus, our ability to efficiently commercialize or out-license Macrilen™ (macimorelin), our reliance on the success of the pediatric clinical trial in the European Union (“E.U.”) and the U.S. for Macrilen™ (macimorelin), the degree of market acceptance of Macrilen™ (macimorelin), our ability to obtain necessary approvals from the relevant regulatory authorities to enable us to use the desired brand names for our product, our ability to successfully negotiate pricing and reimbursement in key markets in the E.U. for macimorelin, any evaluation of potential strategic alternatives to maximize potential future growth and shareholder value may not result in any such alternative being pursued, and even if pursued, may not result in the anticipated benefits, our ability to take advantage of business opportunities in the pharmaceutical industry, our ability to protect our intellectual property, and the potential of liability arising from shareholder lawsuits and general changes in economic conditions. Investors should consult our quarterly and annual filings with the Canadian and U.S. securities commissions for additional information on risks and uncertainties, including those risks discussed in our Annual Report on Form 40-F and annual information form, under the caption “Risk Factors”. Given these uncertainties and risk factors, readers are cautioned not to place undue reliance on these forward-looking statements. We disclaim any obligation to update any such factors or to publicly announce any revisions to any of the forward-looking statements contained herein to reflect future results, events or developments, unless required to do so by a governmental authority or applicable law.



About Material Information

This MD&A includes information that we believe to be material to investors after considering all circumstances. We consider information and disclosures to be material if they result in, or would reasonably be expected to result in, a significant change in the market price or value of our securities, or where it is likely that a reasonable investor would consider the information and disclosures to be important in making an investment decision.

We are a reporting issuer under the securities legislation of all of the provinces of Canada, and our securities are registered with the SEC. We are therefore required to file or furnish continuous disclosure information, such as interim and annual financial statements, management’s discussion and analysis, proxy or information circulars, annual reports on Form 40-F, material change reports and press releases with the appropriate securities regulatory authorities. Additional information about the Company and copies of these documents may be obtained free of charge upon request from our Corporate Secretary or on the Internet at the following addresses: www.zentaris.com, www.sedar.com and www.sec.gov.

Diagnostic Commercial and Development Pipeline

Diagnostic Commercial and Development Pipeline

	Program	Indication	Preclinica	Phase 1	Phase 2	Phase 3	Commercial	Commercial Rights			
								U.S./Canada	Europe	Israel	ROW
Diagnostics	Macimorelin	Adult Growth Hormone Deficiency (AGHD)	[Progress bar: Preclinica to Commercial]								
	Macimorelin	Childhood-Onset Growth Hormone Deficiency (CGHD)	[Progress bar: Preclinica to Phase 3]								





Macimorelin Commercialization Program

On December 7, 2020, the Company entered into exclusive licensing and supply agreements with Consilient Health for the commercialization in the European Union and the United Kingdom of macimorelin in any diagnostic application. As per the agreements’ terms, the Company received a cash payment of €1 million in January 2021. This cash payment has been recognized in the consolidated statement of financial position as long-term deferred revenue as it will be recognized over the supply of the licensed product that is expected to start in 2023. Effective April 19, 2021 the Company received the European Medicines Agency’s approval to amend the marketing authorization to allow Consilient Health to market macimorelin in the EU and effective May 14, 2021, the Company received similar approvals in the United Kingdom.

Macimorelin Clinical Program

As previously disclosed, Aeterna Zentaris, in collaboration with Novo Nordisk, is currently developing the expanded use of macimorelin for the diagnosis of CGHD, an area of significant unmet need. In late 2020, Aeterna Zentaris entered into the start-up phase for the clinical safety and efficacy study, AEZS-130-P02 (the “DETECT” trial), evaluating macimorelin for the diagnosis of CGHD. The DETECT trial is an open-label, single dose, multicenter and multinational pivotal study evaluating safety and efficacy of macimorelin for the diagnosis of CGHD. Children and adolescents from two to less than 18 years of age with suspected GHD are to be included. The study is expected to include approximately 100 subjects worldwide, with at least 40 subjects in pre-pubertal and 40 subjects in pubertal status. Macimorelin growth hormone stimulation test (GHST) will be performed twice for repeatability data and two standard GHSTs will be used as controls: arginine (i.v.) and clonidine (p.o.). On April 22, 2021, the U.S. FDA Investigational New Drug Application associated with this clinical trial became active, see: <https://clinicaltrials.gov/ct2/show/NCT04786873>. On May 13, 2021, we announced the opening of the first clinical site in the U.S..

Therapeutic and Vaccine Development Pipeline

Therapeutic and Vaccine Development Pipeline

	Program	Indication	Preclinical	Phase 1	Phase 2	Phase 3	Program Highlights	
Therapeutics	AIM Biologicals	Neuromyelitis Optica Spectrum Disorder (NMOSD)	█				In-licensed program in January 2021	
	Macimorelin	Amyotrophic Lateral Sclerosis (ALS, Lou Gehrig's disease)	█				Entered material transfer agreement and option to in-license in January 2021	
	AEZS-150 (Delayed clearance parathyroid hormone)	Primary Hypoparathyroidism	█				In-licensed program in March 2021	
Vaccine	Oral Coronavirus Vaccine Platform	COVID-19 (SARS-CoV-2)	█				In-licensed program in March 2021	





Key Developments

AIM Biologicals

On January 28, 2021, the Company announced that it had licensed the exclusive worldwide rights to develop, manufacture and commercialize targeted, highly specific, autoimmunity modifying proteins (“AIM-Biologicals”), currently in early preclinical development, for the potential treatment of neuromyelitis optica spectrum disorder (“NMOSD”) from the University of Wuerzburg and made a payment of €100,000 to the University of Wuerzburg. The Company expects to conduct further preclinical research to identify and characterize an AIM Biologicals-based development candidate for the treatment of NMOSD and develop manufacturing process for the selected candidate. On June 7, 2021, we engaged neuroimmunologist, Michael Levy, MD, PhD, Research Director of the Division of Neuroimmunology & Neuroinfectious Disease at Massachusetts General Hospital as a scientific consultant to support the development of the Company’s AIM Biologicals for the potential treatment of NMOSD. Dr. Levy will provide scientific support and advice to Aeterna Zentaris in the field of inflammatory central nervous system disorders, autoimmune diseases of the nervous system, and NMOSD. In 2021, we expect to continue conducting further preclinical research to identify and characterize an AIM Biologicals-based development candidate for the treatment of NMOSD and developing the manufacturing process for the selected candidate.

Macimorelin Pre-clinical Program

On January 13, 2021, we entered into a material transfer agreement with Queensland University to provide macimorelin for the conduct of preclinical and clinical studies evaluating macimorelin as a therapeutic for the treatment of amyotrophic lateral sclerosis (“ALS” and commonly known as Lou Gehrig’s disease). Queensland University researchers have filed funding applications to dedicated organizations in Australia to finance parts of the abbreviated preclinical development program and to conduct a subsequent investigator-initiated clinical trial to evaluate the safety, tolerability and efficacy of macimorelin as a potential new treatment option for ALS patients. The Company expects to continue work with Queensland University to conduct proof-of-concept studies with macimorelin in disease specific animal models, assess alternative formulations and formalize a preclinical development plan. Our next steps include working with Queensland University to conduct proof-of-concept studies with macimorelin in disease-specific animal models, assess alternative formulations and formalize our pre-clinical development plan.

AEZS- 150 (Delayed clearance parathyroid hormone)

On March 11, 2021, the Company announced that it had received an exclusive license from The University of Sheffield, United Kingdom, for the intellectual property relating to parathyroid hormone (“PTH”) fusion polypeptides covering the field of human use which will initially be studied by Aeterna Zentaris for the potential therapeutic treatment of primary hypoparathyroidism and made a cash payment of £100,000 to the University of Sheffield. Under the terms of the exclusive patent and know-how license agreement entered into with The University of Sheffield, Aeterna Zentaris obtained worldwide rights to develop, manufacture and commercialize PTH fusion polypeptides covered by the licensed patents for all human uses for an up-front cash payment and milestone payments to be paid upon the achievement of certain development, regulatory and sales milestones, as well as low single digit royalty payments on net sales of those products and certain fees payable in connection with sublicensing. Aeterna Zentaris is responsible for the further development, manufacturing, approval and commercialization of the licensed products. Aeterna Zentaris has also engaged The University of Sheffield under a research contract to conduct certain research activities to be funded by Aeterna Zentaris, the results of which will be included within the scope of the license granted to Aeterna Zentaris. On May 6, 2021, Aeterna Zentaris selected AEZS-150 as the lead candidate in the Company’s delayed clearance parathyroid hormone fusion polypeptides (DC-PTH) program. Aeterna Zentaris will now start the formal preclinical development of AEZS-150 in preparation for a potential IND filing for conducting the first in-human clinical study of AEZS-150. The Company expects to work with The University of Sheffield to conduct in depth characterization of the development candidate (*in-vitro* and *in-vivo*), in addition to developing the manufacturing process.

Oral Coronavirus Vaccine Platform

On February 2, 2021, the Company announced that it had entered into an exclusive option agreement (the “Option Agreement”) to evaluate a preclinical potential COVID-19 vaccine developed at the University of Wuerzburg and made a payment of €110,000 to the University of Wuerzburg. The vaccine technology developed at the University of Wuerzburg uses a typhoid fever vaccine as a carrier strain and has the potential to be an orally active COVID-19 (SARS-CoV-2) live-attenuated bacterial vaccine. Under the Option Agreement entered into with the University of Wuerzburg, we have the right to negotiate an exclusive worldwide license to develop this technology for the prevention of coronavirus diseases, including COVID-19. We believe that, if it is determined that there is sufficient data to advance into human clinical trials, the development program for this particular COVID-19 vaccine is expected to be abbreviated because extensive clinical safety data is already available for the underlying vaccine strain, Salmonella Typhi Ty21a.



On March 14, 2021, the Company exercised the option under the Option Agreement and entered into a License Agreement with the University of Wuerzburg (the “Wuerzburg License Agreement”). Pursuant to the terms of the Wuerzburg License Agreement, the Company has been granted an exclusive, world-wide, license to certain patents and know-how owned by the University of Wuerzburg to research and develop, manufacture, and sell a potential COVID-19 vaccine using the University of Wuerzburg’s bacterial vaccine platform technology (the “Licensed Rights”). The Company paid an up-front payment under the Wuerzburg License Agreement of €140,000 and has agreed to make certain milestones payments to be paid upon the achievement of certain development, and regulatory and sales milestones as well as a percentage of any sub-licensing revenue received by the Company and royalty payments on net sales of the licensed vaccine products (including by the Company or its sub-licensees). The Wuerzburg License Agreement will expire upon the latter of (i) the existence of a valid patent claim of a Licensed Right or (ii) 10 years after the first commercial sale of a product that was developed, manufactured, marketed, and sold using a least one Licensed Right. The Wuerzburg License Agreement may be terminated by the Company by providing six months’ notice to the University of Wuerzburg. Pursuant to the Wuerzburg License Agreement, the University of Wuerzburg has also granted the Company an exclusive option for the exclusive use of the Licensed Rights in an undisclosed field. The Company has six months from the date of the Wuerzburg License Agreement to exercise this option. Additionally, the Company has entered into a Research Agreement under which the Company has engaged the University of Wuerzburg on a fee-for-service basis to conduct supplementary research activities and preclinical development studies on the potential vaccine. Our next steps include conducting in-vivo immunology experiments with antigen variant candidates, initiating challenge experiments in immunized transgenic animals as proof of concept, selecting a development candidate for initiation of the formal preclinical toxicology and safety studies and starting the manufacturing process assessment and development.

Financing activities

During the period between January 1, 2021 and June 30, 2021, holders have exercised certain of our outstanding warrants to purchase 35,011,187 of our common shares for gross proceeds of approximately \$20.0 million (such exercises, the “Warrant Exercises”).

On February 19, 2021, the Company closed a public offering of 20,509,746 common shares at a price to the public of \$1.45 per common share, for gross proceeds of \$29.7 million, before deducting underwriting discounts, commissions and offering expenses payable by the Company, in the amount of \$2.8 million. Aeterna also granted the underwriter, which was also the placement agent, a 30-day overallotment option (the “Underwriter Option”) to purchase up to 3,076,461 additional common shares at the public offering price, less underwriting discounts and commissions, and 1,435,682 placement agent warrants with an exercise price of \$1.8125 and expiring on February 17, 2026. The net cash proceeds to the Company from the offering totaled \$26.9 million. On February 22, 2021, the underwriter exercised the Underwriter Option in full and received 3,076,461 common shares for gross proceeds to the Company of \$4.5 million. In connection with the public offering and the exercise of the Underwriter Option, the Company paid commissions and other expenses of \$0.4 million and issued 215,352 placement agent warrants priced at \$1.8125 and expiring on February 17, 2026. Collectively, this financing is referred to as the “February 2021 Financing”.

Nasdaq Letters

On July 28, 2021, we received a letter from the Listing Qualifications Staff of the Nasdaq, notifying us that for the last 30 consecutive business days prior to the date of the letter, the closing bid price of our common shares was below \$1.00 per share and, therefore, we did not meet the requirement for continued listing on Nasdaq as required by Nasdaq Listing Rule 5550(a)(2) (the “Bid Price Rule”). In accordance with Nasdaq Listing Rule 5810(c)(3)(A), we were granted a grace period of 180 calendar days, through January 24, 2022.



Changes in personnel

On May 3, 2021, the Company announced the addition of Michael Teifel, Ph.D. as Senior Vice President, Non-Clinical Development and Chief Scientific Officer to drive forward our pre-clinical research initiatives. On May 5, 2021, Mr. Dennis Turpin (CPA, CA) joined the Board and replaced Mr. Pierre-Yves Desbiens (CPA, CA, MBA) as Chair of the Audit Committee. On June 7, 2021, Dr. Michael Levy, MD, PhD was engaged by the Company as a scientific consultant to support the development of the AIM Biologicals.

Securities class action lawsuit

On March 9, 2020, the Company settled the previously disclosed class-action lawsuit against it pending in the U.S. District Court for the District of New Jersey. This settlement was approved by the U.S. District Court for the District of New Jersey on June 3, 2021. The settlement payment will be funded entirely by Aeterna Zentaris's insurers. As no appeals were filed within the 30-day appeal period, this matter is fully and finally settled.

Exposure to epidemic or pandemic outbreak

As of August 4, 2021, coronavirus or COVID-19, a contagious disease that was characterized by the World Health Organization as a pandemic in early 2020, continues to affect the global community and is also adversely affecting our business operations. To date, the Company has not experienced significant business disruption from COVID-19. Given this rapidly evolving situation, the duration, scope and impact on our business operations, clinical studies and financial results cannot at this time be fully determined or quantified. Aeterna Zentaris has developed protocols and procedures should they be required to deal with any potential epidemics and pandemics and has implemented these protocols and procedures to address the current COVID-19 pandemic. Despite appropriate steps being taken to mitigate such risks, there can be no assurance that existing policies and procedures will ensure that the Company's operations will not be further adversely affected. The COVID-19 pandemic has resulted in a widespread health crisis that has adversely affected the economies and financial markets of many regions and countries. There can be no assurance that a disruption in financial markets, regional economies and the world economy would not negatively affect Aeterna Zentaris' access to capital or its financial performance.

Uncertain factors, including the duration of the outbreak, the severity of the disease and the actions to contain or treat its impact, could impair our operations including, among other things, employee mobility and productivity, availability of our facilities, conduct of our clinical trials and the availability and the productivity of third-party product and service suppliers. Please see the Risk Factor entitled "The economic effects of a pandemic, epidemic or outbreak of an infectious disease could adversely affect our operations or the market price of our common shares" in our Annual Report on Form 40-F for the year ended December 31, 2020.



Condensed Interim Consolidated Statements of Comprehensive (Loss) Income Data

(in thousands, except share and per share data)

	Three months ended June 30		Six months ended June 30	
	2021 \$	2020 \$	2021 \$	2020 \$
Revenues				
Royalty income	19	10	27	24
Product sales	—	—	—	1,016
Supply chain	43	40	84	81
Licensing revenue	537	18	1,074	37
Total revenues	599	68	1,185	1,158
Operating expenses				
Cost of sales	12	12	41	874
Research and development costs	738	189	1,101	508
General and administrative expenses	1,645	1,141	2,909	2,265
Selling expenses	318	199	564	447
Gain on modification of building lease	—	(34)	—	(219)
Total operating expenses	2,713	1,507	4,615	3,875
Loss from operations	(2,114)	(1,439)	(3,430)	(2,717)
Gain (loss) due to changes in foreign currency exchange rates	82	130	(166)	26
Change in fair value of warrant liability	—	(2,139)	—	331
Other finance costs	(7)	(2)	(17)	(311)
Net finance income (costs)	75	(2,011)	(183)	46
Loss before income taxes	(2,039)	(3,450)	(3,613)	(2,671)
Income tax recovery	—	—	129	—
Net loss	(2,039)	(3,450)	(3,484)	(2,671)
Other comprehensive loss:				
Items that may be reclassified subsequently to profit or loss:				
Foreign currency translation adjustments	(126)	(209)	421	1
Items that will not be reclassified to profit or loss:				
Actuarial gain (loss) on defined benefit plans	(968)	(1,418)	(86)	(30)
Comprehensive loss	(3,133)	(5,077)	(3,149)	(2,700)
Net loss per share [basic and diluted]	(0.02)	(0.15)	(0.03)	(0.12)
Weighted average number of shares outstanding:				
Basic	121,203,227	23,515,579	108,395,537	22,519,497
Diluted	121,203,227	23,515,579	108,395,537	22,519,497



Condensed Interim Consolidated Statements of Financial Position Data

<i>(in thousands)</i>	As at June 30, 2021	As at December 31, 2020
	\$	\$
Cash and cash equivalents	69,868	24,271
Trade and other receivables and other current assets	4,801	3,594
Inventory	59	21
Restricted cash equivalents	328	338
Property, plant and equipment	38	22
Right of use assets	102	157
Other non-current assets	9,156	8,874
Total assets	84,352	37,277
Payables and accrued liabilities and income taxes payable	2,231	2,594
Current portion of provisions	85	92
Current portion of deferred revenues	2,125	2,193
Lease liabilities	118	184
Non-financial non-current liabilities ⁽¹⁾	18,446	19,003
Total liabilities	23,005	24,066
Shareholders' equity	61,347	13,211
Total liabilities and shareholders' equity	84,352	37,277

(1) Comprised mainly of employee future benefits, provisions and non-current portion of deferred revenues.

Critical Accounting Policies, Estimates and Judgments

The preparation of condensed interim consolidated financial statements in accordance with IFRS requires management to make judgments, estimates and assumptions that affect the reported amounts of the Company's assets, liabilities, revenues, expenses and related disclosures. Judgments, estimates and assumptions are based on historical experience, expectations, current trends and other factors that management believes to be relevant at the time at which the Company's condensed interim consolidated financial statements are prepared.

Management reviews, on a regular basis, the Company's accounting policies, assumptions, estimates and judgments in order to ensure that the consolidated financial statements are presented fairly and in accordance with IFRS applicable to interim financial statements. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

Critical accounting estimates and assumptions, as well as critical judgments used in applying accounting policies in the preparation of the Company's condensed interim consolidated financial statements, were the same as those applied to the Company's annual consolidated financial statements as of December 31, 2020 and 2019 and for the years then ended except for the following:

Intangible assets

Separately acquired intangible assets are recognized at the price paid in cash, less amortization and impairments. All intangible assets are tested for impairment when there are indications that the carrying value may not be recoverable, or, at a minimum, annually. The recoverable amount is determined as the higher of value in use or fair value less costs to sell using a discounted cash flow calculation, where the products' expected cash flows are risk-adjusted over their estimated remaining useful economic life. Any impairment losses are recognized immediately in the consolidated statements of comprehensive (loss) income. Intangible assets relating to products which fail during development (or for which development ceases for other reasons) are also tested for impairment and are written down to their recoverable amount (which is usually nil). If, subsequent to an impairment loss being recognized, development restarts or other facts and circumstances change indicating that the impairment is less or no longer exists, the value of the asset is re-estimated and its carrying value is increased to the recoverable amount, but not exceeding the original value, by recognizing an impairment reversal in the consolidated statements of comprehensive (loss) income. Amortization of such intangible assets begins once such assets are ready for their intended use.

Contingent payments

The Company accounts for contingent variable payments for separately acquired intangible assets with the cost accumulation approach. Contingent consideration is not considered on initial recognition of the asset but is added to the cost of the asset initially recorded, when incurred.

Recent accounting pronouncements issued but not yet effective

The recent accounting pronouncements issued but not yet effective included in note 4 to the Company's annual audited consolidated financial statements as at December 31, 2020 and 2019 and for the years then ended are unchanged.

Financial Risk Factors and Other Instruments

The nature and extent of our exposure to risks arising from financial instruments, including credit risk, liquidity risk and market risk and how we manage those risks are described in note 25 to the Company's annual audited consolidated financial statements as at December 31, 2020 and 2019 and for the years then ended. There were no significant changes in the six months of 2021 as compared with the December 31, 2020 disclosure.



Results of operations for the three-month period ended June 30, 2021

For the three-month period ended June 30, 2021, we reported a consolidated net loss of \$2.0 million, or \$0.02 loss per common share (basic), as compared with a consolidated net loss of \$3.5 million, or \$0.15 loss per common share (basic) for the three-month period ended June 30, 2020. The \$1.5 million improvement in net loss is primarily from an increase in net finance income of \$2.1 million and an increase of \$0.5 million in total revenues, partially offset by an increase of \$1.2 million in total operating expenses.

Revenues

Our total revenue for the three-month period ended June 30, 2021 was \$0.60 million as compared with \$0.07 million for the same period in 2020, representing an increase of \$0.53 million. The 2021 revenue was comprised of \$0.5 million in licensing revenue (2020 - \$0.02 million), \$0.04 million in supply chain revenue (2020 - \$0.04 million) and \$0.02 million in royalty income (2020 - \$0.01 million). The licensing revenue was earned from the recognition of a portion of the deferred €5 million payment from Novo Nordisk received with the amendment to the Novo License agreement in the fourth quarter of 2020.

Operating expenses

Our total operating expenses for the three-month period ended June 30, 2021 was \$2.7 million as compared with \$1.5 million for the same period in 2020, representing an increase of \$1.2 million. This increase arose primarily from a \$0.5 million increase in research and development costs and \$0.5 million increases in general and administrative expenses and an increase of \$0.1 million in selling expenses. This increase in total operating expense is due to the initiation of research and development projects as announced in the first quarter of 2021, higher public company costs incurred holding our annual shareholders meeting in May 2021, subsequent to our issuance of common shares in the February 2021 financing and the 2021 warrant exercises, in addition to higher auditor fees mostly related to F-3 warrant registration filings.

Net finance income (costs)

Our net finance income for the three-month period ended June 30, 2021 was \$0.1 million as compared with net finance costs of (\$2.0 million) for the same period in 2020, representing an increase in net finance income of \$2.1 million. This is primarily due to the \$2.1 million decrease in change in fair value of warrants. Unlike as at June 30, 2020, the Company did not account for its warrants as liabilities as at June 30, 2021. As at June 30, 2020, the fair value of such liabilities was classified as a finance cost in the consolidated statements of loss and comprehensive loss.

Results of operations for the six-month period ended June 30, 2021

For the six-month period ended June 30, 2021, we reported a consolidated net loss of \$3.5 million, or \$0.03 loss per common share (basic), as compared with a consolidated net loss of \$2.7 million, or \$0.12 loss per common share (basic) for the six-month period ended June 30, 2020. The \$0.8 million increase in net loss is primarily from an increase in total operating expenses of \$0.7 million and an increase of \$0.2 million in net finance costs, partially offset by an increase of \$0.1 million in income tax recovery.

Revenues

Our total revenue for the six-month period ended June 30, 2021 was unchanged at \$1.2 million as compared with the same period in 2020. The 2021 revenue was comprised of \$1.1 million in licensing revenue (2020 - \$0.04 million), \$0.1 million in supply chain revenue (2020 - \$0.1 million), \$0.03 million in royalty income (2020 - \$0.02 million) and \$nil in product sales (2020 - \$1.0 million). The main driver of revenue in the first six months of 2021 was the licensing revenue earned primarily from the recognition of a portion of the deferred €5 million payment from Novo Nordisk received with the amendment to the Novo License agreement in the fourth quarter of 2020 while product sales to Novo Nordisk drove the revenue earned in the first six months of 2020.



Operating expenses

Our total operating expenses for the six-month period ended June 30, 2021 was \$4.6 million as compared with \$3.9 million for the same period in 2020, representing an increase of \$0.7 million. This increase arose primarily from a \$0.6 million increase in research and development costs and \$0.6 million increase in general and administrative expenses and \$0.1 million increase in selling expenses and a \$0.2 million in one-time gain on modification of a lease that was incurred in 2020 only, offset by a decrease of \$0.8 million in cost of sales, as there have been no product sales in 2021. As described previously, this increase in total operating expenses is due to the initiation of research and development projects as announced in the first quarter of 2021, and higher public company costs incurred holding our annual shareholders meeting in May 2021, subsequent to our issuance of common shares in the February 2021 financing and the 2021 warrant exercises, in addition to higher auditor fees mostly related to F-3 warrant registration filings.

Selected quarterly financial data

	Three months ended			
	June 30, 2021	March 31, 2021	December 31, 2020	September 30, 2020
<i>(in thousands, except for per share data)</i>		\$	\$	\$
Revenues	599	586	2,366	128
Net loss	(2,039)	(1,445)	(1,311)	(1,136)
Net loss per share [basic and diluted]*	(0.02)	(0.02)	(0.02)	(0.02)

	Three months ended			
	June 30, 2020	March 31, 2020	December 31, 2019	September 30, 2019
<i>(in thousands, except for per share data)</i>		\$	\$	\$
Revenues	68	1,090	18	283
Net (loss) income	(3,450)	779	(1,006)	(331)
Net (loss) income per share [basic and diluted] *	(0.15)	0.04	(0.05)	(0.02)

* Net loss per share is based on the weighted average number of shares outstanding during each reporting period, which may differ on a quarter-to-quarter basis. As such, the sum of the quarterly net loss per share amounts may not equal full-year net loss per share.

Historical quarterly results of operations and net (loss) income cannot be taken as reflective of recurring revenue or expenditure patterns of predictable trends, largely given the non-recurring nature of certain components of our historical revenues, the impact of costs associated with launching a number of significant preclinical research and development programs in 2021, and of foreign exchange gains and losses. In addition, we cannot predict what the revenues from royalties will be earned from the License Agreement.



Use of cash and cash equivalents

We began 2021 with \$24.3 million in cash and cash equivalents. During the six-month period ended June 30, 2021, our operating activities consumed \$4.7 million, our financing activities provided \$51.0 million and our investing activities used \$0.5 million. As at June 30, 2021 we had \$69.9 million of cash and cash equivalents.

Liquidity and capital reserves

Our operations and capital expenditures have generally been financed through certain transactions impacting our cash flows from operating activities, public equity offerings, registered direct offerings and issuances under various “at-the-market” offering programs. A portion of the Company’s cash is held in AEZS Germany, which is the counter-party to various license and distribution agreements for the Company’s only approved product. In September 2019 and February, July and August of 2020 the Company completed financings resulting in total funding (net of transaction costs) of \$24.9 million. The Company also completed the February 2021 Financing resulting in additional net cash proceeds of \$31.0 million which were deposited in the Canadian parent company accounts and such funds can be provided to AEZS Germany, if and when needed. During 2020, AEZS Germany signed agreements with Novo Nordisk and Consilient Health whereby AEZS Germany received cash payments of €5 million (\$6.1 million) in fiscal 2020 and €1 million (\$1.2 million) in January 2021, respectively, and expects to use this cash to fund its operations directly.

<i>(in thousands)</i>	Six months ended June 30,	
	2021	2020
Cash and cash equivalents - Beginning of period	24,271	7,838
Cash used in operating activities	(4,680)	(4,854)
Cash flows provided by financing activities	50,957	3,690
Cash flows provided by (used in) investing activities	(509)	56
Effect of exchange rate changes on cash and cash equivalents	(171)	13
Cash and cash equivalents - End of period	69,868	6,743

Operating Activities

Cash used by operating activities totaled \$4.7 million for the six months ended June 30, 2021, as compared to \$4.9 million in the same period in 2020. This \$0.2 million improvement in operating activities is attributed primarily to the net change in operating assets which included the receipt of the cash payment of €1 million in January 2021 from Consilient Health and recognized as deferred revenue.

Financing Activities

Cash provided by financing activities totaled \$51.0 million for the six months ended June 30, 2021, as compared with cash provided by financing activities of \$3.7 million in the same period in 2020. On February 21, 2021, the Company completed the February 2021 Financing with net cash proceeds of \$31.0 million and, throughout the first six months of 2021, the Warrant Exercises contributed cash of approximately \$20.0 million. In February 2020, the Company also completed a financing with net proceeds of \$3.9 million.

Investing Activities

Cash used by investing activities totaled \$0.5 million for the six months ended June 30, 2021, as compared to cash provided by investing activities of \$0.06 in the same period in 2020. During the first half of 2021, the Company executed various agreements including in-licensing and similar arrangements with development partners with \$0.5 million reflecting the purchase of separately acquired intangible assets.



Capital stock

As at August 4, 2021, we had 121,297,007 common shares issued and outstanding, as well as 506,400 stock options, 423,000 deferred share units and 11,541,213 warrants outstanding.

During the first six months of 2021, holders have exercised certain of our outstanding warrants, as follows:

	Number Exercised	Exercise Price	Cash Receipts
September 2019 Investor warrants	2,000,000	\$ 1.65	\$ 3,300,000
February 2020 Investor warrants	1,739,130	\$ 1.20	\$ 2,086,956
July 2020 Investor warrants	20,945,555	\$ 0.45	\$ 9,425,500
July 2020 Placement Agent warrants	1,866,667	\$ 0.5625	\$ 1,050,000
August 2020 Investor warrants	7,589,883	\$ 0.47	\$ 3,567,245
August 2020 Placement Agent warrants	869,952	\$ 0.7040625	\$ 612,501
	<u>35,011,187</u>		<u>\$ 20,042,202</u>

Adequacy of financial resources

Since inception, the Company has incurred significant expenses in its efforts to develop and co-promote products. Our current business focus is to: investigate further therapeutic uses of Macrilen™ (macimorelin), expand pipeline development activities, further expand the commercialization of macimorelin in available territories and potentially fund the pediatric clinical trial in the E.U. and U.S. for macimorelin if such trials exceed €9 million. Consequently, the Company has incurred operating losses and negative cash flow from operations historically and in each of the last several years except for the year ended December 31, 2018 when the Company earned revenue from the sale of a license for the adult indication of Macrilen™ (macimorelin) in the U.S. and Canada. As at June 30, 2021, the Company had an accumulated deficit of \$325.3 million. The Company also had a net loss of \$3.5 million for the six months ended June 30, 2021, and negative cash flow from operations of \$4.7 million.

Between January 1, 2021 and August 4, 2021, the Company raised net proceeds of \$31.0 million from the February 2021 Financing and \$20.0 million from the Warrant Exercises.

In 2020, the COVID-19 pandemic began causing significant financial market declines and social dislocation. To date, the Company has not experienced significant business disruption from COVID-19. The situation is dynamic with various cities and countries around the world responding in different ways to address the outbreak. The spread of COVID-19 may impact our operations, including the potential interruption of our clinical trial activities and our supply chain, or that of our licensee. For example, the COVID-19 outbreak may delay enrollment in our clinical trial due to prioritization of hospital resources toward the outbreak, and some patients may be unwilling to be enrolled in our trials or be unable to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services, which would delay our ability to conduct clinical trials or release clinical trial results and could delay our ability to obtain regulatory approval and commercialize our product candidates. The pandemic may also impact the ability of our suppliers to deliver components or raw materials on a timely basis or at all. In addition, hospitals may reduce staffing and reduce or postpone certain treatments in response to the spread of an infectious disease. Sales activities for Macrilen™ in the US by Novo Nordisk may be impacted due to significant delays of diagnostic activities on AGHD in the U.S.



Contractual obligations and commitments as at June 30, 2021

<i>(in thousands)</i>	Service and manufacturing	R&D contracts	TOTAL
	\$	\$	\$
Less than 1 year	660	1,109	1,769
1 - 3 years	584	724	1,308
4 - 5 years	—	—	—
More than 5 years	—	—	—
Total	1,244	1,833	3,077

During the first quarter of 2021, the Company executed various agreements including in-licensing and similar arrangements with development partners with \$0.5 million in additions of separately acquired intangible assets recognized in the condensed interim consolidated statements of financial position. Such agreements may require the Company to make payments on achievement of stages of development, launch or revenue milestones, although the Company generally has the right to terminate these agreements at no penalty. The Company recognizes research and development milestones as an intangible asset once it is committed to the payment, which is generally when the Company reaches a set point in the development cycle.

Based on the closing exchange rates at June 30, 2021, the Company expects to pay \$1.8 million, including \$1.6 million [EUR 1.5 million], and \$0.2 million [GBP 0.2 million], in R&D contracts and up to \$4.8 million, including \$3.2 million [EUR 2.7 million] and \$1.6 million [GBP 1.2 million], in R&D milestone payments and up to \$7.7 million, including \$6.0 million [EUR 5.1 million] and \$1.7 million [GBP 1.3 million], in revenue related milestone payments. The table below contains all potential R&D and revenue-related milestone payments that the Company may be required to make under such agreements:

<i>(in thousands)</i>	Future potential R&D milestone payments	Future potential revenue milestone payments	TOTAL
	\$	\$	\$
Less than 1 year	30	—	30
1 - 3 years	—	—	—
4 - 5 years	435	—	435
More than 5 years	4,305	7,733	12,038
Total	4,770	7,733	12,503

The table excludes any payments already capitalized in the condensed interim consolidated statements of financial position. The future payments that are disclosed represent contract payments and are not discounted and are not risk-adjusted. The development of any pharmaceutical product candidates is a complex and risky process that may fail at any stage in the development process due to a number of factors. The timing of the payments is based on the Company's current best estimate of achievement of the relevant milestone.

Contingencies

In the normal course of operations, the Company may become involved in various claims and legal proceedings related to, for example, contract terminations and employee-related and other matters.



Securities class action lawsuit

On March 9, 2020, the Company settled the previously disclosed class-action lawsuit against it pending in the U.S. District Court for the District of New Jersey. This settlement was approved by the U.S. District Court for the District of New Jersey on June 3, 2021. The settlement payment will be funded entirely by Aeterna Zentaris's insurers. As no appeals were filed within the 30-day appeal period, this matter is fully and finally settled.

Related Party Transactions and Off-Balance Sheet Arrangements

Other than employment agreements and indemnification agreements with our management, there are no related party transactions.

As at June 30, 2021, we did not have any interests in special purpose entities or any other off-balance sheet arrangements.

Risk Factors and Uncertainties

An investment in our securities involves a high degree of risk. In addition to the other information included in this MD&A and in the related consolidated financial statements, investors are urged to carefully consider the risks described under the caption "Risk Factors" in our most recent Annual Report on Form 40-F and annual information form for the year ended December 31, 2020 for a discussion of the various risks that may materially affect our business. The risks and uncertainties not presently known to us or that we currently deem immaterial may also materially harm our business, operating results and financial condition and could result in a complete loss of your investment.

Our most recent Annual Report on Form 40-F and annual information form were filed with the relevant Canadian and U.S. securities' regulatory authorities at www.sedar.com and with the SEC at www.sec.gov. Investors are urged to consult the risk factors in these documents.

Disclosure Controls and Procedures and Internal Control over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting ("ICFR") and disclosure controls and procedures ("DC&P"). ICFR is a framework designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with IFRS. Management has used the Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) in order to assess the effectiveness of the Company's ICFR. DC&P form a broader framework designed to provide reasonable assurance the information required to be disclosed by Aeterna in its annual and interim filings and other reports filed under securities legislation is recorded, processed, summarized and reported within the time frame specified in securities legislation and includes controls and procedures designed to ensure that information required to be disclosed by the Company in its annual and interim filings and other reports submitted under securities legislation is accumulated and communicated to our management to allow timely decisions regarding required disclosure. Together, the ICFR and DC&P frameworks provide internal control over financial reporting and disclosure. We maintain disclosure controls and procedures that are designed to provide reasonable assurance that information, which is required to be disclosed in our annual and interim filings and other reports filed under securities legislation, is accumulated and communicated in a timely fashion. Due to their inherent limitations, Aeterna acknowledges that, no matter how well designed, ICFR and DC&P can provide only reasonable assurance of achieving the desired control objectives and as such may not prevent or detect all misstatements. Further, the effectiveness of ICFR is subject to the risk that controls may become inadequate because of changes in conditions or that the degree of compliance with policies or procedures may change. There have been no significant changes to our disclosure controls nor to our internal controls over financial reporting for the three-month period ended June 30, 2021 that have materially affected, or are reasonably likely to materially affect, the reliability of financial reporting.