

# **MARVEL BIOSCIENCES CORP.**

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

The following Management's Discussion and Analysis ("MD&A") is dated November 15, 2021 and should be read in conjunction with the audited consolidated financial statements of Marvel Biotechnology Inc. ("Marvel" or the "Company") for the year ended July 31, 2021 and the comparative year ended July 31, 2020. Marvel prepares its audited consolidated financial statements in accordance with International Financial Reporting Standards ("IFRS"), as set out in Part 1 of the Handbook of the Canadian Institute of Chartered Professional Accountants.

### **FORWARD-LOOKING INFORMATION**

Certain statements in this MD&A that are not based on historical facts constitute forward-looking information. Forward-looking information is not a promise or guarantee of future performance but is only a prediction that relates to future events, conditions or circumstances or the Company's future results, performance, achievements or developments and is subject to substantial known and unknown risks, assumptions, uncertainties and other factors that could cause the Company's actual results, performance, achievements or developments in its business or industry to differ materially from those expressed, anticipated or implied by such forward-looking information. Forward-looking statements include statements regarding the outlook for the Company's future operations, plans and timing for the introduction or enhancement of its services and products, statements concerning strategies or developments, statements about future market conditions, supply conditions, end customer demand conditions, channel inventory and sell through, revenue, gross margin, operating expenses, profits, forecasts of future costs and expenditures, and other expectations, intentions and plans that are not historical fact. The forward-looking statements in this MD&A are based on certain factors and assumptions regarding expected growth, results of operations, performance and business prospects and opportunities. Specifically, management has assumed that the Company's performance will meet management's internal projections. While management considers these assumptions to be reasonable based on information currently available to it, they may prove to be incorrect.

Readers are cautioned not to place undue reliance upon any such forward-looking statements, which speak only as of the date they are made. Readers are also advised to consider such forward-looking statements in light of the risk factors and uncertainties that may affect the Company's actual results, performance, achievements or developments.

The Company disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except to the extent required by applicable law. Further information concerning risks and uncertainties associated with these forward-looking statements and the Company's business may be found in the Company's other filings.

### **OVERVIEW**

Marvel Biosciences Corp. ("Marvel" or the "Company") (formerly "Alphanco Ventures Corp.") is a biotechnology company that was incorporated on August 1, 2018 under the laws of the Province of British Columbia. The Company continued from British Columbia to Alberta on June 14, 2021. The Company's head office is 420, 505 8<sup>th</sup> Ave SW, Calgary, Alberta T2P 1G2 and the registered office is 3<sup>rd</sup> Floor, 14505 Bannister Road SE, Calgary Alberta T2X 3J3. On March 18, 2021,

Alphanco Venture Corp. ("AVC") was a capital pool company listed on the TSX Venture Exchange (the "TSXV") that received conditional approval from the TSXV for its acquisition of all of the outstanding shares of Marvel Biotechnology Inc. as its proposed "Qualifying Transaction" as defined under TSXV policies. The Transaction was pursuant to a reverse take-over ("RTO") by AVC which acquired all of the issued and outstanding shares of Marvel Biotechnology Inc. by amalgamation agreement in exchange for common

shares in the capital of AVC. On December 4, 2020, the AVC, Marvel Biotechnology Inc. and 2306696 Alberta Ltd., a wholly-owned Alberta subsidiary of AVC, entered into the Amalgamation Agreement. Other than the issuance of the Common Shares, there was no other consideration payable by Alphanco to acquire Marvel Biotechnology Inc. As a result of the Transaction, Marvel Biotechnology Inc. became a wholly-owned subsidiary of Marvel Bioscience Corp. (formerly Alphanco Venture Corp.).

In connection with closing of the Qualifying Transaction which occurred June 14, 2021, AVC changed its name to Marvel Bioscience Corp. and commenced trading on the TSXV under the symbol “MRVL” approximately July 12, 2021. The Company is classified as a Tier 2 issuer pursuant to TSXV policies and a reporting issuer in each of the Provinces of British Columbia, Alberta, and Ontario.

The accompanying consolidated financial statements have been prepared as at July 31, 2021 after giving effect to the reverse takeover of Marvel Biosciences Corp. (formerly “Alphanco Ventures Corp.”) by Marvel Biotechnologies Inc.

The Company is currently a pre-clinical stage pharmaceutical development biotechnology company that utilizes a “drug redevelopment” approach to drug development. Historically, when a new class of drug is developed, it is optimized for a particular target, but typically only approved for a specific disease. Often, a new disease is identified which involves the same target, however, pending the remaining patent life, the originally approved drug may not have sufficient time left for it to be commercially viable to be developed for the new disease indication. Marvel develops new synthetic chemical derivatives of the original approved drug for the new disease indication. Patent protection is sought as the new potential asset is developed by the Company. The Company believes the business model results in significantly less risk, cost and time to develop its assets compared to traditional biotechnology companies.

The Company has currently developed several new chemical entities, using synthetic chemical derivatives of known, off-patent drugs, that inhibit the A2a adenosine receptor with application to neurological diseases (depression & anxiety, Alzheimer’s, ADHD), and the non-neurological conditions of cancer and non-alcoholic steatohepatitis. Marvel is also exploring additional undisclosed targets to expand its asset pipeline.

## **The Company’s Assets, Science and Developments**

### **New Derivatives of KW-6002 Resulting in Marvel’s Lead Molecule MB-204:**

#### *Background on Istradefylline:*

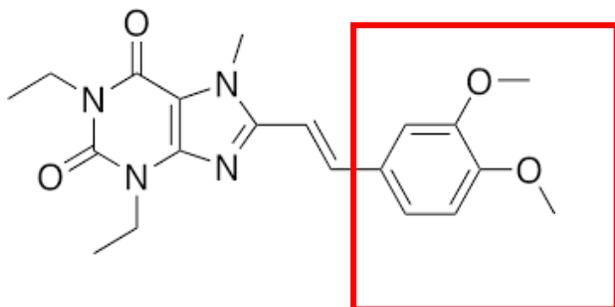
Currently, Istradefylline (aka KW-6002, Nourianz) is the only approved selective adenosine A2A receptor antagonist. The drug was developed by Kyowa Kirin and first approved in Japan in 2013 and by the FDA in 2019. Approval was based on its success in 4 clinical studies which lasted 12 weeks and included more than 1100 participants in which statistically significant decreases from baseline in daily off time compared to placebo were observed. The most common adverse reactions observed in patients taking Nourianz were involuntary muscle movement (dyskinesia), dizziness, constipation, nausea, hallucination and sleeplessness (insomnia). Istradefylline has a favourable pharmacokinetic (“PK”) profile and is currently dosed orally, once daily. This is an important consideration for patient compliance.

#### *Development of MB-204 (aka Target 1b):*

Although there are many different pharmacophores (a part of a molecular structure that is responsible for a particular biological or pharmacological interaction that it undergoes) possessing A2A receptor antagonist activity, head- to-head studies of six prototypic structures found Istradefylline exhibited the best characteristics for a central nervous system (“CNS”) targeted drug. By virtue of being approved, the drug also has a known toxicity profile, however the entire class is believed to be relatively safe.

The Company has designed synthetically accessible derivatives of KW-6002. The derivatives or new chemical entities developed by significantly enhance certain compounds that results in a new novel and patentable assets for a new disease indication. A patentability and freedom to operate opinion has been obtained from a top Canadian patent firm specializing on pharmaceutical new chemical entities.

A composition of matter patent was filed in Q1 of 2020 on a number of new chemical compounds developed including the Company's lead target 1b referred to as MB 204.



The modifications leading to the identification of lead molecule Target 1b (MB-204) were inspired by previous research involving fluorination of the methoxy ether groups on the cinnamic acid moiety of the Japanese anti-allergy drug Tranilast. This was part of an effort to generate compounds for kidney disease with improved PK profile. Fluorination yielded bis mono/di-fluoromethoxy ether compounds with significantly longer half lives than Tranilast itself and with no emergent new toxicity issues.

*Synthesis* of lead MB-204 (Target 1b) has been successfully synthesized at gram scale using a comparatively simple five step synthetic pathway with an overall yield of 26%.

The Company has conducted successful *In vitro*, *screening for binding activity, and pharmacokinetics* (“PK”) studies for MB-204 *and* Istradefylline. and have determined have similar or better results at this stage of development compared to Istradefylline. PK refers to the movement of drugs through the body and the body's biological response to drugs. PK describes a drug's exposure by characterizing absorption, distribution, bioavailability, metabolism, and excretion as a function of time.

The Company has further delineated the activity of Target 1b in additional non-Alzheimer Disease (“AD”) related models with tests such as the open-field test (locomotor activity) and elevated plus maze (anxiety) and maximum tolerated dose studies focused on behavioural changes and rotorod co-ordination. A study on *in vivo* pharmacodynamics was also undertaken with receptor occupancy studies. These experiments were completed in Q3 2021. The compounds are also being tested both *in vitro* and *in vivo* for its effect on NASH/fatty liver disease.

#### *Business Strategy*

Marvel's business strategy is to develop and market new chemical entities (lead MB-204) in an effective and timely manner. Marvel intends to achieve its business strategy by focusing on three key areas:

- Develop the therapeutic and has initiated toxicology and manufacturing programs and bring the product into a clinical setting to assess its safety and efficacy in human subjects.
- Establish and has commenced collaborations with experts to assist Marvel with scientific and clinical developments of a new pharmaceutical product.

- Implement strategic alliances with selected pharmaceutical and biotechnology companies where such alliances may complement and expand Marvel's research and development efforts on the product and provide sales and marketing capabilities.

Marvel's business strategy is based on attaining a number of commercial objectives which in turn are supported by a number of product development goals. The development of new products presently being conducted by Marvel is primarily of a research and development nature. In the context of this document, statements of Marvel's "belief" are based upon Marvel's results derived to date from its research and development program and upon which Marvel believes that it has a reasonable scientific basis to expect the particular results to occur. There are no assurances that the particular result expected by Marvel will occur.

At this time Marvel does not intend to become a fully integrated pharmaceutical company with substantial in-house research and development, marketing or manufacturing capabilities. Marvel is pursuing a strategy of establishing relationships with larger companies as strategic partners. Marvel intends to partner or joint venture with larger pharmaceutical companies that have existing and relevant marketing capability for its products. It is anticipated that future clinical development of Marvel's product outside Canada would generally occur in conjunction with a strategic partner or partners, who would contribute expertise and financial assistance to the development. In exchange for certain product rights and commitments to market Marvel's product, the strategic partners would be expected to share in gross proceeds from the sale of Marvel's product. The proceeds generated from partnering or joint venturing projects are expected to be distributed on the basis of relative risk taken and resources contributed by each party or the partnership or joint venture.

#### *Product Marketing Strategy*

The markets for all product being developed by Marvel may be large and will require substantial sales and marketing capability. Upon successful completion of the pre-clinical efficacy studies, Marvel intends to enter into one or more strategic partnerships or other collaborative arrangements with a pharmaceutical company or other company with marketing and distribution expertise to address this need. If necessary, Marvel will establish arrangements with various partners for different geographical areas. Marvel's management has extensive experience with the partnering process.

#### *Competitive Conditions*

There are no known direct competitors for Marvel's developed compound assets for the disease targets selected which allows for Marvel to positioning to partner with larger pharmaceutical companies for specific assets developed. Development of the Company's lead compound MB-204 Through Phase 1 Clinical Trials:

1. *cGMP API Synthesis* - This program began in September 2021. It is estimated that the engineering batch will be available for the non-GLP toxicology studies after approximately 3 months. The cGMP kilogram scale batch is expected after approximately 5 months.
2. *non-GLP Toxicology* - The engineering run API will be sent to the Contract Research Organization ("CRO") to complete the pilot toxicology tests, specifically PK, maximum tolerated dose and dose ranging findings. This is expected to take approximately 12 weeks.
3. *GLP Toxicology* - Once feedback from the FDA has been received, the IND enabling one-month pre-clinical GLP toxicology studies in rats and dogs will proceed and is expected to take 16 weeks to complete upon study start.
4. *Pre-IND meeting* - Once the non-GLP toxicology experiments have been completed, the company intends to request a Type B pre-IND meeting with the FDA to discuss its GLP toxicology studies and

planned Phase 1 study. The process is expected to take approximately 60 days to initiate.

5. *Formulation and cGMP Finished Product Manufacturing* - This project will occur in parallel with the GLP toxicology studies. The finished product and a minimum once month stability (ambient and forced degradation) will be timed to ensure completion along side the GLP toxicology to begin the Phase 1 studies. A matching placebo will also be produced within 4-5 months.
6. *Phase 1 in Australia* - The initial Phase 1 is expected to be conducted in Australia where there is a 43% tax credit available. The total time and costs are expected to be 9 months. Pending positive data in the pre-clinical animal attention/ADHD efficacy experiments, an end point of attention could be considered using a standard psychomotor vigilance test.

### **Future Pipeline Products**

In order to reduce risk and diversify its asset pipeline, the Company intends to pursue additional targets related to sleep, depression and protein misfolding. The latter represents a diverse group of neurodegenerative disease including: Alzheimer's disease, Parkinson's Disease, Multiple Sclerosis, and Amyotrophic lateral sclerosis.

### **OVERALL PERFORMANCE**

#### **Highlights and Notable Events**

On October 1, 2019, the Company issued 5,000,000 common shares to a private company owned and controlled by the President and Chief Executive Officer at \$0.025 per common share for settlement of related party debt of \$125,000.

On November 29, 2019, the Company issued 600,000 common shares, of which 450,000 were to the Corporate Secretary and Chief Financial Officer, at \$0.025 per common share for settlement of related party debt of \$15,000.

On January 14, 2020, the Company closed a private placement of 2,800,000 units of the Company for gross proceeds of \$280,000. Each unit consists of one common share of the Company and one common share purchase warrant, which entitles the holder to purchase one common share of the Company at \$0.25 per common share. These warrants expire 3 years from the date of closing. No value was assigned to the warrants on this issuance.

On February 25, 2020, the Company closed a private placement of 2,900,000 units of the Company for gross proceeds of \$290,000. Each unit consists of one common share of the Company and one common share purchase warrant, which entitles the holder to purchase one common share of the Company at \$0.25 per common share. These warrants expire 3 years from the date of closing. There was no residual value to allocate to the warrants. The Chief Financial Officer participated in the private placement and subscribed to 250,000 units for \$25,000.

On July 15, 2020, the Company closed a private placement of 665,000 units of the Company for gross proceeds of \$199,500. Each unit consists of one common share of the Company and one common share purchase warrant, which entitles the holder to purchase one common share of the Company at \$0.50 per common share. These warrants expire 2 years from the date of closing. There was no residual value to allocate to the warrants.

On August 27, 2020, the Company closed a private placement of 1,145,000 units of the Company for gross proceeds of \$343,500. Each unit consists of one common share of the Company and one common share purchase warrant, which entitles the holder to purchase one common share of the Company at \$0.50 per

common share. These warrants expire 2 years from the date of closing. There was no residual value to allocate to the warrants.

On October 15, 2020, the Company closed a private placement of 353,333 units of the Company for gross proceeds of \$106,000. Each unit consists of one common share of the Company and one common share purchase warrant, which entitles the holder to purchase one common share of the Company at \$0.50 per common share. These warrants expire 2 years from the date of closing. There was no residual value to allocate to the warrants.

On November 13, 2020, the Company closed a private placement of 550,000 units of the Company for gross proceeds of \$165,000. Each unit consists of one common share of the Company and one common share purchase warrant, which entitles the holder to purchase one common share of the Company at \$0.50 per common share. These warrants expire 2 years from the date of closing. There was no residual value to allocate to the warrants.

On November 13, 2020, 2,000,000 share-purchase performance warrants were exercised for gross proceeds of \$50,000.

On April 13, 2020, 3,000,000 share-purchase performance warrants were exercised for gross proceeds of \$75,000.

On June 10, 2021, the Company closed a private placement of 6,540,000 common shares of the Company for gross proceeds of \$2,616,000.

On June 14, 2021, the Company issued 19,013,431 common shares at a deemed price of \$0.40 per common share to effect the reverse takeover transaction (“RTO”) for total valuation of \$2,095,525 in connection of the acquisition of Marvel Biosciences Corp. The Company had 7,032,800 shares outstanding prior to the RTO, On consolidation, the Company eliminated the pre-RTO Marvel common shares and the corresponding Company pre-RTO share value.

### Key Performance Indicators

	2021	2020	2019
Revenue	\$ -	\$ -	\$ -
Net loss	\$ (3,039,345)	\$ (955,657)	\$ (208,413)
Loss per share	\$ (0.17)	\$ (0.13)	\$ (2,126,66)
Total assets	\$ 2,468,152	\$ 295,987	\$ 921
Purchases of property and equipment	\$ -	\$ -	\$ 1,034

Net loss increased by \$2,083,689 to \$3,039,345 for the year ended July 31, 2021 from \$955,657 for the year ended July 31, 2020. The increase in the loss for the year is mainly attributed to the transaction costs of \$1,911,351 related to the RTO transaction with Alphanco. In addition, management consulting fees and general and administrative expenses increased due to the full year of the Management Services Agreement, an increase in the amounts spent on clinical studies due to various studies conducted to advance the compounds, an increase in professional fees related to legal and accounting services due to general business and increase in regulatory filings, and a one-time charge for the fee related to the cancelation of the Management Services Agreement. These were offset by the increase in Government SR&ED received and a reduction of share-based compensation as no additional share-purchase warrants were issued in 2021. Total assets increased \$2,172,165, resulting from the issuance of shares offset by the cash operating losses. In 2019, the Company purchased computer equipment for \$1,034. No acquisitions were made in 2021 or 2020.

## Results of Operations

	2021	2020
Clinical study expense	\$ 613,099	\$ 265,200

During the year ended July 31, 2021, the Company incurred \$613,099 of clinical study expenses compared to \$265,200 for the year ended July 31, 2020, representing an increase of \$347,899. The increase is related to increase in fees from related party consultants of \$100,000 and increase in third party lab fees of \$247,899 relating the completion of studies completed to determine on the validity of and activity in the compounds.

	2021	2020
Share-based compensation	\$ -	\$ 384,442

During the year ended July 31, 2020, the Company issued 6,600,000 performance warrants, which entitles the holders to purchase one common share at an average exercise price of \$0.07. As a result of this issuance, the Company has recognized share-based compensation expense of \$384,442. Performance warrants were not issued for the year ended July 31, 2021, as a result there has been no expense recognized.

	2021	2020
Management consulting fees	\$ 495,114	\$ 286,843

In 2020, the Company executed a management consulting services agreement with a related party to provide executive management, financial administrative staff and services, including office space and general and administrative services. As a result, the Company incurred expenses of \$495,114 for 2021 and \$286,843 for 2020 resulting from the management services portion of the agreement. The management consulting services agreement with the related party was terminated effective July 31, 2021.

	2021	2020
Professional fees	\$ 86,562	\$ 43,809

During the year ended July 31, 2021, the Company incurred professional fees of \$86,562 compared to \$43,809 for the comparative period. The increase in the expense is the result of the increase in accounting and audit fees related to the annual filings and the increase in legal fees for patent and general corporate matters.

	2021	2020
General and administrative expenses	\$ 52,639	\$ 35,808

General and administrative expenses increased by \$16,831 to \$52,639 in 2021 compared to \$35,808 for 2020. The increase is attributed to the increase in office rent, office supplies, and telephone expenses resulting from the execution of the management services agreement as described above.

	2021	2020
Transaction costs	\$ 1,911,351	\$ -

Transaction costs were \$1,911,351 in 2021 compared to nil for 2020. The increase is attributed to the RTO transaction that closed on June 14, 2021. The transaction costs consist of \$2,095,525 valuation assigned to the shareholders of Alphanco, \$163,150 of legal expenses associated with the transaction, offset by \$347,324 of net assets acquired.

	2021	2020
Contract termination settlement	\$ 35,000	\$ -

The contract termination settlement costs were \$35,000 in 2021 compared to nil for 2020. These costs are the agreement upon termination fee of the Management Services Agreement effective July 31, 2021.

	2020	2020
Government SR&ED tax credits	\$ 151,810	\$ 63,523

In 2021, the Company received \$181,725 and \$20,664 (2020 - \$64,156 and \$20,367) of federal, Alberta and Manitoba government SR&ED tax credits respectively. These credits were the clinical study expenses incurred in the 2020 and 2019 fiscal year. These amounts have been reduced by \$50,597 (2020 - \$21,000) for the costs of the preparation of the SR&ED application. Management believes that the Company is eligible for SR&ED tax credits on eligible expenditures incurred in fiscal 2021. The Company has applied for Government SR&ED refundable tax credits related to the July 31, 2021 fiscal year end totaling \$287,747 and non-refundable tax credits totaling \$22,408 offset by \$74,746, for the preparation of the SR&ED applications, for a net refundable receivable of \$213,001. The amount will be received on the successful processing of the SR&ED applications.

## LIQUIDITY AND CAPITAL RESOURCES

### Liquidity

Management has determined that cash flows for operating, clinical study expenses, and general and administrative expenses will be funded by Marvel's existing cash on hand. Any expected short fall of cash required for these expenses will be funded by the issuance of common shares through private placements.

During the year ended July 31, 2021, the Company issued 8,588,333 (2020 - 5,700,000) units of the Company for gross proceeds of \$3,230,500 (2020 - \$570,000). Each unit consists of one common share and one common share purchase warrant entitling the holder to purchase once common share at \$0.50 per common share for a three-year period.

In addition, the Company issued 5,000,000 common shares of the Company for gross proceeds of \$125,000 from the exercise of share-purchase warrants.

### Cash Flow Summary

	2021	2020
Cash on hand, August 1	\$ 224,810	\$ 171
Cash flow used in operations	(1,370,575)	(538,535)
Cash flow from investing activities	381,573	-
Cash flow from financing activities	3,157,336	763,174
Available for investments	2,393,144	224,810
Cash flow used in investing activities	-	-
Net liquidity available, July 31	\$ 2,393,144	\$ 224,810

Cash flow used in operations in 2021 was \$1,370,575, increased by \$832,040 from cash used in operations of \$538,535 in 2020. The increase in cash used in operations is primarily due to the increase in the operating loss for the year. The increase in the loss is the result from the full year of the management services agreement, increase in professional fees for accounting and legal services, clinical study expenses, and an increase in general and administrative expenses. This was offset by the increase in the Government SR&ED received. In addition, fluctuations from working capital resulted in cash outflow of \$114,616 for the year ended July 31, 2021 compared to an inflow of \$32,267 for the year ended July 31, 2020.

During 2021, Marvel's cashflow from investing was \$381,573 compared to \$nil for 2020. The inflows were for cash acquired in the reverse takeover transaction.

During 2021, Marvel's cash flow from financing was \$3,157,336 compared to \$763,174 for 2020. The inflows were the results of issuance of common shares of \$3,180,692 (2020 – \$758,422) and the repayment of related party borrowings for \$23,356 (2020 – proceeds from \$4,752).

The following table represents the net capital of the Company:

	2021	2020
Shareholders' equity	\$ 2,355,675	\$ 118,804
Less: cash	(2,393,144)	(224,810)
Net capital	\$ (37,469)	\$ (106,006)

Marvel uses net working capital to monitor leverage. The net capital is the result of the issuance of common shares during the year, offset by the increase in deficit resulting from operations of the Company.

### **Working Capital**

The Company has a working capital surplus of \$2,355,523 as at July 31, 2021 compared to \$118,467 as at July 31, 2020 representing an increase of \$2,237,056. The increase in working capital is comprised of an increase in current assets of \$2,172,350 and a decrease in current liabilities of \$64,706.

The increase in current assets was due to an increase of cash of \$2,168,334, resulting from the issuance of common shares offset by the payment of operating expenses, increase in goods and services tax receivable of \$23,266 and a decrease in prepaids and deposits of \$19,250 from the settlement of management services contract of \$35,000 offset by the prepaid marketing campaign of \$15,750.

The decrease in current liabilities is the result of the decrease in accounts payable of \$41,350 resulting from the timing of vendor payments and a decrease in due to related party of \$23,356 from the settlement of the balance.

### **Contractual Obligations**

In the normal course of operations, Marvel assumes various contractual obligations and commitments. The Company had entered into a management services agreement with a related party to provide executive management, financial and administration staff and services. This agreement required the Company to pay a monthly consulting fee of up to \$45,000 and office and equipment rental fee of up to \$4,000 per month. This agreement was cancelled on July 31, 2021 with a \$35,000 contract termination fee.

### **Contingencies**

#### *Contingent liabilities*

The Company does not have any contingent liabilities.

#### *Government SR&ED tax credit*

The Company has applied for Government SR&ED refundable tax credits related to the July 31, 2021 fiscal year end totaling \$287,747 and non-refundable tax credits totaling \$22,408 offset by \$74,746, for the preparation of the SR&ED applications, for a net refundable receivable of \$213,001. The amount will be received on the successful processing of the SR&ED applications.

## SELECTED QUARTERLY FINANCIAL INFORMATION

	Jul 31, 2021	Apr 30, 2021	Jan 31, 2021	Oct 31, 2020
Revenue	\$ -	\$ -	\$ -	\$ -
Net loss	(2,805,051)	(421,837)	(165,885)	(364,168)
Loss per share	(0.15)	(0.01)	(0.02)	(0.03)
Total assets	\$ 2,468,152	\$ 208,743	\$ 375,584	\$ 395,123

	Jul 31, 2020	Apr 30, 2020	Jan 31, 2020	Oct 31, 2019
Revenue	\$ -	\$ -	\$ -	\$ -
Net loss	(251,876)	(581,541)	(116,038)	(6,202)
Loss per share	(0.02)	(0.06)	(0.02)	(0.00)
Total assets	\$ 295,987	\$ 305,686	\$ 279,648	\$ 878

For the three-months ended July 31, 2021, the Company incurred a net loss of \$2,805,051. The loss is attributed to the transaction costs of \$1,911,351, with the remainder of the costs associated with the Management Services Agreement, additional clinical study expenses and the contract termination expense. For the three-months ended April 30, 2021, the Company incurred a net loss of \$421,837. This loss is attributed to \$127,484 for management consulting fees, \$189,452 for clinical study expenses, and \$106,841 for professional fees for the legal costs for the transaction. For the second quarter ended Jan 31, 2021, the Company incurred a loss of \$165,885, related to costs of \$120,699 for the management consulting fees, \$96,196 for clinical study expense, which was offset by a Government SR&ED income of \$136,294. For the three-months ended October 31, 2020, the Company incurred a net loss of \$364,168. The loss is attributed to \$204,190 for the costs of the clinical study expense, \$113,462 for the management consulting fees, \$32,238 for professional fees, and \$12,965 for office expenses. The fourth quarter of 2020, the Company incurred a loss of \$251,876, which included \$90,771 of clinical study expenses, \$109,647 of management and consulting fees, and \$35,272 of professional fees. In the third quarter of 2020, the Company incurred a loss of \$581,541, resulting from clinical study expenses of \$151,715, management consulting fees of \$109,647, share-based compensation of \$349,824 and professional fees of \$17,888. This was offset by the SR&ED tax credit of \$63,523. In the second quarter of 2020, the Company had a loss of \$116,038, resulting from clinical study expenses of \$18,382, management consulting fees of \$67,549 and professional fees of \$11,648. For the quarter ended October 31, 2019, the Company incurred a net loss of \$6,202.

## CRITICAL ACCOUNTING JUDGEMENTS AND ESTIMATES

The preparation of financial statements in conformity with IFRS requires management to make certain estimates, assumptions and judgements, based on its experience, that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. The following outlines the accounting policies and practices involving the use of estimates that are critical in determining the financial results of the Company.

### *Property and equipment*

The Company has acquired property and equipment, which consists of computer equipment, for use in its business activities. Amortization is recognized using the declining-balance basis based upon management's estimate of the useful life.

### *Taxes*

The determination of taxes is inherently complex and requires making certain estimates and assumptions about future events. While income tax filings are subject to audits and reassessments, the Company has adequately provided for all income tax obligations. However, changes in facts and circumstances as a result of income tax audits, reassessments, jurisprudence and any new legislation may result in an increase or

decrease in our provision for taxes. The value of deferred tax assets is evaluated based on the probability of realization; the Company has assessed that it is improbable that such assets will be realized and has accordingly not recognized a value for deferred taxes.

#### *Share-based payments*

Share-based compensation amounts are determined based on compensation plans in effect and are subject to estimated fair values, volatility, expected life, discount rate, forfeiture rates and the Company's share price using the Black-Scholes option pricing model. The Company estimates volatility based on the historical volatility of similar entities following a comparable period in their lives.

#### *Scientific research and experimental development ("SR&ED")*

The determination of the amount of the Federal and Alberta SR&ED tax credit requires management to make calculations based on its interpretation of eligible expenditures in accordance with the terms of the programs. The reimbursement claims submitted by the Company are subject to review by the relevant government agencies. Although the Company has used its best judgment and understanding of the related program agreements in determining the claim, the Company does not have reoccurring history of claim submission and it is possible that the amounts could increase or decrease by a material amount submitted, dependent on the review and audit by the government agency. Reasonable assurance of collection has not been obtained and therefore the claim is recorded upon cash receipt.

#### *Going concern*

The assessment of the Company's ability to execute its strategy by funding future working capital involves judgment. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstance. There is a material uncertainty regarding the Company's ability to continue as a going concern. The Company's principal source of cash is from private placements. The Company is dependent on raising funds in order to have sufficient capital to be able to identify, evaluate and then acquire an interest in assets or a business.

## **RISK MANAGEMENT AND FINANCIAL INSTRUMENTS**

Risk is inherent in all business activities and cannot be eliminated. However, shareholder value can be maintained and enhanced by identifying, mitigating, and where possible, insuring against these risks. The following section addresses some, but not all, risk factors that could affect Marvel's future results, as well as activities used to mitigate such risks. These risks do not occur in isolation but must be considered in conjunction with each other.

The Board of Directors have overall responsibility for the establishment and oversight of Marvel's risk management framework. The Board is responsible for developing and monitoring Marvel's compliance with risk management policies and procedures.

Marvel's risk management policies are established to identify and analyze the risks faced by Marvel, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and Marvel's activities.

### **Financial risks and financial instruments**

At the date of this MD&A, the Company's financial instruments consists of cash, accounts payable and accrued liabilities and due to related party.

The fair value of a financial instrument is a point in time estimate of the amount of consideration that would be agreed upon in an arm's length transaction between knowledgeable and willing parties who are under no compulsion to act. Marvel faces the risk that fair values of financial instruments will fluctuate or that estimates used regarding fair values will be inaccurate.

The carrying amount of cash, accounts payable and accrued liabilities, and due to related party included in Marvel's statements of financial position approximate their fair values because of the short-term nature of the instruments.

The Company's risk exposures and the impact on the Company's financial instruments are summarized below:

#### *Credit risk*

Credit risk is the risk of potential loss to the Company if the counterparty to a financial instrument fails to meet its contractual obligations. The Company's credit risk is primarily attributable to its liquid financial assets including cash. The Company limits exposure to credit risk on liquid financial assets through maintaining its cash with high-credit quality financial institutions.

#### *Liquidity risk*

The Company's approach to managing liquidity risk is to ensure that it will have sufficient liquidity to meet liabilities when due. As at July 31, 2021, the Company had a cash balance of \$2,393,144 (July 31, 2020 - \$224,810) to settle current liabilities of \$112,477 (July 31, 2020 - \$177,183). All of the Company's accounts payable and accrued liabilities have contractual maturities of 30 days or due on demand and are subject to normal trade terms. To maintain liquidity, the Company is currently investigating financing opportunities.

#### *Market risk*

Market risk is the risk of loss that may arise from changes in market factors such as interest rates, foreign exchange rates, and commodity and equity prices. The Company does not have a practice of trading derivatives.

#### *Interest rate risk*

The Company's financial assets exposed to interest rate risk consist of cash balances. The Company's current policy is to invest excess cash in investment-grade short-term deposit certificates issued by its banking institutions. The Company periodically monitors the investments it makes and is satisfied with the credit ratings of its banks. As at July 31, 2021 and 2020, the Company did not have any investments in investment-grade short-term deposit certificates.

#### *Foreign currency risk*

The Company is exposed to foreign currency risk to the extent expenditures incurred or funds received and balances maintained by the Company are denominated in currencies other than Canadian dollars. As at July 31, 2021, the Company had monetary liabilities of US\$30,600 or \$38,134 (2020 - US\$31,125 or \$47,347) at the Canadian equivalent.

For the year ended July 31, 2021, the Company's sensitivity analysis suggests that a change in the absolute rate of exchange in US dollar by 10% will increase or decrease net loss by approximately \$3,813 (2020 - \$4,734). The Company has not entered into any foreign currency contracts to mitigate this risk. Foreign currency risk is considered low relative to the overall financial operating plan.

#### *Price risk*

Other price risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate due to changes in market prices, other than those arising from interest rate risk or foreign currency risk. The Company is not exposed to significant other price risk.

## **RELATED PARTY TRANSACTIONS**

During the year ended July 31, 2021, the Company paid the Chief Scientific Officer and director \$150,000 (2020 - \$50,000) for consulting services. These amounts are included in Clinical study expense.

During the year ended July 31, 2021, the Company paid to a company wholly-owned by the Chief Financial Officer \$Nil (2020 – \$10,000) for consulting services. These amounts are included in Management Consulting Fees.

As at July 31, 2021 and 2020, no amounts were owed to related parties for the above services.

On November 15, 2019, the Company issued 2,000,000 performance warrants to the Chief Scientific Officer pursuant to the execution of a Consulting Agreement at an exercise price of \$0.025 per share purchase warrant into one common share expiring three years from the date of issuance. As a result of this issuance, the Company has recognized share-based compensation of \$34,618. On November 13, 2020, 2,000,000 share purchase warrants were exercised.

On March 10, 2020, the Company issued a total of 3,000,000 performance warrants to the Chief Scientific Officer pursuant to a Consulting Agreement and meeting certain performance milestones in identifying up to three compounds, subject to conditions of which the consultant would be entitled to each of 1,000,000 performance warrants to be issued at an exercise price of \$0.025 per share purchase warrant into one common share expiring three years from the date of issuance. As a result of this transaction the Company has recognized \$258,701 as share-based compensation. On April 13, 2021, these share purchase warrants were exercised.

On July 31, 2020, the President and Chief Executive Officer, Chief Scientific Officer, Chief Financial Officer, and Corporate Secretary were issued a total of 1,450,000 performance warrants as equity compensation at an exercise price of \$0.20 per performance warrant into one common share expiring three years from the date of issuance. As a result, the Company has recognized \$81,155 as share-based compensation.

Transactions with related parties are in the normal course of business and initially recorded at fair value.

As at July 31, 2021, the Company owed \$Nil (2020 - \$23,356) to a director and officer of the Company. The amount was non-interest bearing, unsecured and is due on demand.

## **OTHER INFORMATION**

Outstanding share data:

Issued and outstanding shares at July 31, 2021	32,586,231
Outstanding share purchase warrants at July 31, 2021	8,471,533
Outstanding performance warrants at July 31, 2021	1,600,000
Outstanding stock options granted at July 31, 2021	
Total diluted common shares at July 31, 2021	45,482,764
Total diluted common shares at November 15, 2021	45,482,764

On March 12, 2021, the company received conditional regulatory approval of the 20% fixed stock option plan and grants of 2,425,000 stock options were granted July 14, 2021, and 400,000 stock options granted July 29, 2021 pursuant to and investor relations contract, subject to approval by the Company's disinterested shareholders at the next shareholder meeting prior to vesting or exercise of such options.

## **INDUSTRY RISKS**

### *Key management*

The success of the Company is dependent upon the ability, expertise, judgment, discretion, and good faith of its senior management. While employment agreements are customarily used as a primary method of retaining the services of key employees, these agreements cannot assure the continued services of such

employees. Any loss of the services of such individuals could have a material adverse effect on the Company's business, operating results, or financial condition.

#### *Limited operating history*

The Company has no present prospect of generating revenue from the sale of products. The Company is therefore subject to many of the risks common to early-stage enterprises, including undercapitalization, cash shortages, limitations with respect to personnel, financial, and other resources, and lack of revenues. There is no assurance that the Company will be successful in achieving a return on shareholders' investment and the likelihood of success must be considered considering the early stage of operations.

#### *Ability to Continue as a Going Concern*

The Company's auditors' opinion on its July 31, 2021 financial statements with comparatives as at July 31, 2020 includes an explanatory paragraph in respect of there being substantial doubt about its ability to continue as a going concern.

#### *Biotech Public Market Risks*

Prospects for companies in the biotechnology industry generally may be regarded as uncertain given the nature of the industry and, accordingly, investments in biotechnology companies should be regarded as speculative. Biotechnology research and development involves a significant degree of risk. An investor should carefully consider the risks and uncertainties described below. The risks and uncertainties described below are not an exhaustive list. Additional risks and uncertainties not presently known to Marvel or that Marvel believes to be immaterial may also adversely affect Marvel's business. If any one or more of the following risks occur, Marvel business, financial condition and results of operations could be seriously harmed. Further, if Marvel fails to meet the expectations of the public market in any given period, the market price of Marvel shares could decline.

#### *Early Stage Development and Scientific Uncertainty*

Marvel's products are at an early stage of development. Significant additional investment in research and development, product validation, manufacturing, production scale-up, manufacturing, clinical testing, and regulatory submissions of such product candidates is required prior to commercialization. There can be no assurance that any such products will actually be developed. The development and regulatory processes may require access to raw materials and inputs which may not be available to Marvel in sufficient amounts or in a timely fashion to allow Marvel to complete the development or receive regulatory approval of any product or process. A commitment of substantial time and resources is required to conduct research and clinical trials if Marvel is to complete the development of any product. It is not known whether any of these product or process candidates will meet applicable health regulatory standards and obtain required regulatory approvals, or whether such products can be produced in commercial quantities at reasonable costs and be successfully marketed, or if Marvel's investment in any such products will be recovered through sales or royalties. The Company's technology will require significant research and development and preclinical and clinical testing prior to regulatory approval, if required, being obtained in the Canada or other countries. The Company may not be able to obtain regulatory approvals, if required, to complete necessary clinical trials for its technology, or to commercialize it. The Company's technology may prove to have undesirable and unintended side effects, or other characteristics adversely affecting its safety, efficacy or cost-effectiveness could prevent or limit its use. The Company's technology may fail to provide its intended benefit or achieve benefits equal to or better than its competitor's products at the time of testing or production and, if so, its business may fail.

#### *Additional Financing Requirements and Access to Capital*

Marvel will require substantial additional funds for further research and development, planned clinical testing, regulatory approvals, establishment of manufacturing capabilities and, if necessary, the marketing and sale of its products. Marvel may attempt to raise additional funds for these purposes through public or private equity or debt financing, collaborations with other biopharmaceutical companies and/or from other sources. There can be no assurance that additional funding or partnership will be available on terms acceptable to Marvel and which would foster successful commercialization of Marvel products.

### *Government Regulations*

Biotechnology and pharmaceutical companies operate in a high-risk regulatory environment. The manufacture and sale of human diagnostic and therapeutic products is governed by numerous statutes and regulations in the United States, Canada, and other countries where Marvel intends to market its products. The subject matter of such legislation includes approval of manufacturing facilities, controlled research and testing procedures, review and approval of manufacturing, preclinical and clinical data prior to marketing approval, as well as regulation of marketing activities, notably advertising and labelling.

The process of completing clinical testing and obtaining required approvals is likely to take several years and require the expenditure of substantial resources. Furthermore, there can be no assurance that the regulators will not require modification to any submissions which may result in delays or failure to obtain regulatory approvals. Any delay or failure to obtain regulatory approvals could adversely affect the ability of Marvel to utilize its technology, thereby adversely affecting operations. Further, there can be no assurance that Marvel's product candidates will achieve levels of sensitivity and specificity sufficient for regulatory approval or market acceptance, or that its therapeutic product candidates prove to be safe and effective in clinical trials or receive the requisite regulatory approval. There is no assurance that Marvel will be able to timely and profitably produce its products while complying with all the applicable regulatory requirements. Foreign markets, other than the United States and Canada, generally impose similar restrictions.

### *Patents and Proprietary Technology*

Marvel's success will depend in part on its ability to obtain, maintain, and enforce patent rights, maintain trade secret protection, and operate without infringing the proprietary rights of third parties. There can be no assurance that pending patent applications will be allowed, that Marvel will develop additional proprietary products that are patentable, that issued patents will provide Marvel with any competitive advantage or will not be challenged by any third parties, or that patents of others will not have an adverse effect on the ability of Marvel to do business.

Furthermore, there can be no assurance that others will not independently develop similar products, duplicate any of the Marvel products, or design around the products patented by Marvel. In addition, Marvel may be required to obtain licenses under patents or other proprietary rights of third parties. No assurance can be given that any licenses required under such patents or proprietary rights will be available on terms acceptable to Marvel. If Marvel does not obtain such licenses it could encounter delays in introducing one or more of its products to the market, while it attempts to design around such patents, or could find that the development, manufacturing or sale of products requiring such licenses could be foreclosed. In addition, Marvel could incur substantial costs in defending itself in suits brought against it on such patents or in suits where it attempts to enforce its own patents against other parties.

Until such time, if ever, that patent applications are filed, the ability of Marvel to maintain the confidentiality of its technology may be crucial to its ultimate possible commercial success. While Marvel has adopted procedures designed to protect the confidentiality of its technology, no assurance can be given that such arrangements will be effective, that third parties will not gain access to Marvel trade secrets or disclose the technology, or that Marvel can meaningfully protect its rights to its trade secrets.

### *Dependence on Collaborative Partners, Licensors and Others*

Marvel activities will or may require it to enter various arrangements with corporate and academic collaborators, licensors, licensees and others for the research, development, clinical testing, manufacturing, marketing, and commercialization of its products. Marvel intends to attract corporate partners and enter additional research collaborations. There can be no assurance, however, that Marvel will be able to establish such additional collaborations on favorable terms, if at all, or that its current or future collaborations will be successful. Failure to attract commercial partners for its products may result in Marvel incurring substantial clinical testing, manufacturing, and commercialization costs prior to realizing any revenue from product sales or result in delays or program discontinuance if funds are not available in sufficient quantities. If any collaborative partner fails to develop, manufacture, or successfully commercialize any product to which it has rights, or any partner's product to which Marvel will have rights, Marvel's business may be

adversely affected. Failure of a collaborative partner to continue to participate in any program could delay or halt the development or commercialization of products generated from such program. In addition, there can be no assurance that the collaborative partners will not pursue other technologies or develop alternative products either alone or in collaboration with others, including Marvel's competitors, as a means for developing treatments for the diseases targeted by Marvel programs.

Furthermore, Marvel will or may hold licenses for certain technologies and there can be no assurance that these licenses will not be terminated, or that they will be renewed on conditions acceptable to Marvel. Marvel intends to negotiate additional licenses in respect of technologies developed by other companies and academic institutions. Terms of license agreements to be negotiated may include, inter alia, a requirement to make milestone payments, which may be substantial. Marvel will also be obligated to make royalty payments on the sales, if any, of products resulting from licensed technology and, in some instances, may be responsible for the costs of filing and prosecuting patent applications. Should any of Marvel licensees breach their regulatory, clinical, operational, or legal requirements this may impact Marvel reputation and/or ability to conduct its business or make progress as anticipated.

#### *Competition*

Technological competition from pharmaceutical companies, biopharmaceutical companies and universities are intense and is expected to increase. Potential competitors of Marvel have or may develop product development capabilities or financial, scientific, marketing, and human resources exceeding those of Marvel. Competitors may develop products before Marvel develops its own products, obtain regulatory approval for such products more rapidly than Marvel, or develop products which are more effective than those which Marvel intends to develop. Research and development by others may render Marvel's proposed technology or products obsolete or non-competitive or produce treatments or cures superior to any therapy developed or to be developed by Marvel, or otherwise preferred to any therapy developed by Marvel.

#### *Potential Product Liability*

Pharmaceutical products involve an inherent risk of product liability claims and associated adverse publicity. Product liability insurance is costly, and availability is limited and may not be available on terms which would be acceptable to Marvel, if at all. An inability to maintain sufficient insurance coverage on reasonable terms or to otherwise protect against potential product liability claims could prevent or inhibit the commercialization of Marvel's products. A product liability claim brought against Marvel, or withdrawal of a product from the market, could have a material adverse effect upon Marvel and its financial condition.

#### *Volatility of Share Price, Absence of Dividends and Fluctuation of Operating Results*

Market prices for the securities of biotechnology companies, including Marvel, have historically been highly volatile. Factors such as fluctuation of Marvel operating results, announcements of technological innovations, patents or new commercial products by Marvel or competitors, results of clinical testing, regulatory actions, or public concern over the safety of biopharmaceutical products and other factors could have a significant effect on the share price or trading volumes for the common shares. Marvel's shares may be subject to significant price and volume fluctuations and may continue to be subject to significant price and volume fluctuations in the future. Marvel has not paid dividends to date and does not expect to pay dividends in the foreseeable future.

#### *Conflict of Interest*

Certain of the directors and senior officers of Marvel may, from time to time, be employed by or affiliated with organizations which have entered into agreements with Marvel. As disputes may arise between these organizations and Marvel, or certain of these organizations may undertake or have undertaken research with competitors of Marvel, there exists the possibility for such persons to be in a position of conflict. Any decision or recommendation made by these persons involving Marvel will be made in accordance with his or her duties and obligations to deal fairly and in good faith with Marvel and such other organizations. In addition, as applicable, such directors and officers will refrain from voting on any matter in which they have a conflict of interest.

### *No Anticipated Dividends*

The Company does not intend to pay dividends on any investment in the shares of stock of the Company. The Company has never paid any cash dividends and currently do not intend to pay any dividends for the foreseeable future. To the extent that the Company requires additional funding currently not provided for in its financing plan, its funding sources may prohibit the payment of a dividend. Because the Company does not intend to declare dividends, any gain on an investment in the Company will need to come through an increase in the stock's price. This may never happen, and investors may lose all their investment in the Company.