



**RAKOVINA THERAPEUTICS INC.**

**MANAGEMENT'S DISCUSSION AND ANALYSIS**

**FOR THE THREE AND NINE MONTHS ENDED  
SEPTEMBER 30, 2022**

## **RAKOVINA THERAPEUTICS INC.**

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

The following management's discussion and analysis ("MD&A") for the three and nine months ended September 30, 2022 should be read in conjunction with the unaudited interim condensed consolidated financial statements of Rakovina Therapeutics Inc. ("Rakovina" or the "Company") for the three and nine months ended September 30, 2022 and the annual audited consolidated financial statements and accompanying notes for the year ended December 31, 2021 (the "Annual Financial Statements"), which have been prepared by management in accordance with International Financial Reporting Standards ("IFRS") as issued by the International Accounting Standards Board ("IASB"). Our IFRS accounting policies are set out in note 2 of the Annual Financial Statements and all dollar amounts are expressed in Canadian dollars unless otherwise noted.

This MD&A is dated November 16, 2022.

### **FORWARD-LOOKING STATEMENTS**

Certain statements and information in this MD&A contain forward-looking statements or forward-looking information under applicable Canadian securities legislation that may not be based on historical fact, including, without limitation, statements containing the words "believe", "may", "plan", "will", "estimate", "continue", "anticipate", "intend", "expect", "predict", "project", "potential", "ongoing", "could", "would", "seek", "target" or the negative of these terms or other comparable terminology, although not all forward-looking statements contain these words and similar expressions.

Forward-looking statements are necessarily based on estimates and assumptions made by us in light of our experience and perception of historical trends, current conditions and expected future developments, as well as factors that we believe are appropriate. Forward-looking statements in this MD&A include, but are not limited to, statements relating to:

- the initiation, timing, cost, progress and success of our research and development programs;
- our ability to safely dose, re-dose, formulate and develop drug candidates;
- our ability and our current and potential future partners' ability to advance product candidates into, and successfully complete, clinical trials;
- the expected therapeutic benefits, effectiveness and safety of our product candidates, including our belief that our approach may reduce the risk, time and cost of developing therapeutics by avoiding some of the uncertainty associated with certain research and pre-clinical stages of drug development;
- our ability to obtain funding for our operations, including funding for research and commercial activities;
- our ability to obtain marketing approval for any of our products and to achieve profitability;
- our ability to establish and maintain relationships with collaborators with acceptable development, regulatory and commercialization expertise and the benefits to be derived from such collaborative efforts;
- our ability to enter into agreements or partnerships with pharmaceutical or biotechnology companies that have sales and marketing capabilities, which will enable us to increase our returns from our product candidates or to further accelerate development of our product candidates;
- the manufacturing capacity of third-party manufacturers for our product candidates;
- the implementation of our business model and strategic plans;
- our ability to protect our intellectual property and operate our business without infringing upon the intellectual property rights of others;
- our expectations regarding federal, provincial and foreign regulatory requirements;
- the timing of, and our ability and our collaborator's ability, and the costs of obtaining and maintaining, regulatory approvals in the United States, Canada and other jurisdictions for our product candidates;
- the rate and degree of market acceptance and clinical utility of our future products, if any;
- our expectations regarding market risk, including interest rate changes and foreign currency fluctuations;
- our ability to engage and retain the consultants or employees required to grow our business;
- the compensation that is expected to be paid to consultants or employees of the Company;
- our future financial performance and projected expenditures;
- developments relating to our competitors and our industry, including the success of competing therapies that are or become available;
- our expectations regarding the kt-2000 series, kt-3000 series and kt-4000 series candidates;
- our expectations regarding the size and growth of the cancer therapeutics and PARP-inhibitor markets; and
- estimates of our expenses, future revenue, capital requirements and our needs for additional financing.

Such forward-looking statements reflect our current views with respect to future events, are subject to risks and uncertainties and are necessarily based upon a number of estimates and assumptions that, while considered

## RAKOVINA THERAPEUTICS INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

reasonable by Rakovina as of the date of such statements, are inherently subject to significant medical, scientific, business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause our actual results, performance, achievements, prospects or opportunities to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements. In making the forward-looking statements included in this MD&A, the Company has made various material assumptions, including, but not limited to: (i) obtaining positive results of clinical trials; (ii) obtaining regulatory approvals; (iii) assumptions regarding general business and economic conditions; (iv) assumptions regarding the cost and timing of each study; (v) that the Company's current positive relationships with third parties will be maintained; (vi) the availability of financing on reasonable terms; (vii) the Company's ability to attract and retain skilled consultants; (viii) assumptions regarding market competition; (ix) the products and technology offered by the Company's competitors and (x) the Company's ability to protect patents and proprietary rights.

In evaluating forward-looking statements, current and prospective shareholders should specifically consider various factors, including the risks outlined herein under the heading "*Risk Factors*". Should one or more of these risks or uncertainties, or a risk that is not currently known to us, materialize, or should assumptions underlying those forward-looking statements prove incorrect, actual results may vary materially from those described herein. These forward-looking statements are made as of the date of this MD&A and we do not intend, and do not assume any obligation, to update these forward-looking statements except as required by applicable securities laws. Investors are cautioned that forward-looking statements are not guarantees of future performance and are inherently uncertain. Accordingly, investors are cautioned not to put undue reliance on forward-looking statements.

### COVID-19 Update

In March 2020, the World Health Organization declared the COVID-19 outbreak a global pandemic and the Company continues to evaluate the COVID-19 situation and monitor any impacts or any potential impacts to the business. Rakovina has implemented health and safety measures in accordance with health officials and guidance from local government authorities. While the pandemic has had a limited impact on the Company's operations to date, future research activities could be impacted as a result of the pandemic. As the COVID-19 health crisis continues, the Company will continue to rely on guidance and recommendations from local health authorities, Health Canada and the Centers for Disease Control and Prevention to update the Company's policies.

### COMPANY OVERVIEW

Rakovina was incorporated under the *Business Corporations Act* (British Columbia) on May 6, 2019 under the name "Vincero Capital Corp." Prior to completing its qualifying transaction on March 25, 2021, the Company listed its shares on February 7, 2020 on the TSX Venture Exchange ("TSX-V") as a capital pool company ("CPC") (as defined in the TSX-V Policy 2.4 – *Capital Pool Companies*). As a CPC, the Company had no assets other than cash and did not carry on any operations.

On March 25, 2021, the Company announced that, pursuant to a business combination agreement dated August 28, 2020, as amended from time to time (the "Business Combination Agreement"), between the Company and NewGen Therapeutics, Inc. ("NewGen"), the Company had completed its qualifying transaction (the "Qualifying Transaction" or "QT"). The Qualifying Transaction was effected by way of a "three-cornered" amalgamation, in which: (a) a subsidiary of NewGen (the "Subco") was to amalgamate with a wholly-owned subsidiary of the Company ("Vincero Subco") to form an amalgamated company ("Amalco"); (b) all issued and outstanding shares of the Subco were exchanged for shares of the Company on a 1:1 basis; (c) all issued and outstanding warrants of the Subco were replaced by warrants of the Company on the same terms; and (d) Amalco became a wholly-owned subsidiary of the Company under the name "Rakovina Research Ltd.". The Qualifying Transaction was a reverse-takeover of the Company and upon completion thereof, the Company changed its name to "Rakovina Therapeutics Inc.". On April 1, 2021, following the completion of the Qualifying Transaction, the common shares of the Company (the "Common Shares") resumed trading on the TSX-V under the symbol "RKV". The Company's first financial year-end subsequent to the completion of the Qualifying Transaction was December 31, 2021. A Notice of Change in Corporate Structure was filed by the Company on March 31, 2021. For more information on the Qualifying Transaction, please refer to the filing statement of the Company dated March 17, 2021 available under the Company's profile on SEDAR at [www.sedar.com](http://www.sedar.com).

Following completion of the Qualifying Transaction, the Company continued to conduct the biotechnology business previously conducted by Subco until March 23, 2021, when Subco and a subsidiary of the Company were amalgamated, with Amalco being the successor entity. The Company's head office and registered and records office is located at Suite 105, 1008 Beach Avenue, Vancouver, British Columbia, V6E1T7.

## **RAKOVINA THERAPEUTICS INC.**

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

The Company, through its wholly owned subsidiary Rakovina Research Ltd., is principally engaged in the development of new cancer treatments based on novel DNA-damage response inhibitor ("DDRi") technologies. The Company's initial research activities are focused around the kt-2000 series of PARP-inhibitors which were acquired by Rakovina from NewGen Therapeutics Inc. as part of the QT. The Company has also been granted an exclusive option to the kt-3000 and kt-4000 series which are additional DDRi technologies with novel and unique attributes.

The DNA-damage response ("DDR") field has become an important area of research in the cancer field. DDR systems are responsible for detecting and repairing damage to the DNA within our cells. Such damage can occur naturally due to errors during DNA replication or can be caused by exposure to mutagens such as ultraviolet light or toxins within the environment. The DDR systems within our cells are essential for cellular survival.

Certain types of cancer are known to take advantage of a defect in one or more of the DDR systems, which can allow a mutation to avoid detection and become entrenched in the cell leading to the formation of a tumor. When this occurs, the cancerous cell loses the function of a critical DDR system and becomes highly reliant on alternative DDR pathways or survival.

There are currently four "first-generation" FDA approved DDR-targeting drugs known as PARP inhibitors, which target an enzyme called poly ADP-ribose polymerase ("PARP"), which is a key component of a DDR pathway called base excision repair ("BER"). First-generation PARP inhibitors have become standard-of-care in the treatment of certain types of breast, ovarian and prostate cancer that harbor a mutation in the BRCA gene. BRCA mutations result in a defect in a cells homologous repair ("HR") system and put a person at an elevated risk of developing these cancers. Cells with HR-defects become heavily reliant on the BER system for survival, and thus are uniquely susceptible to treatment with a targeted therapy such as a PARP-inhibitor which blocks or suppresses BER.

While PARP-inhibitors have greatly improved treatment outcomes for patients whose tumors harbor a BRCA mutation, scientists and clinicians have also gained an understanding of their limitations. Such limitations include a limited ability to enter the brain to treat central nervous system ("CNS") metastases, the emergence of resistance to treatment and limited utility in cancers not harboring a HR-defect. Recent research in the field is focused on the development of next-generation DDRi to address these limitations and further improve treatment outcomes.

The Company is currently conducting lead-optimization and preclinical research in the development of next-generation DDRi at the University of British Columbia ("UBC") pursuant to a research collaboration agreement signed with the university (the "UBC Collaboration Agreement"). The UBC Collaboration Agreement provides us with access to a world class research infrastructure at the Jack Bell Research Center and Robert Ho Research Center in Vancouver, British Columbia including capabilities in molecular pathology, cell imaging, mass spectrometry, protein production and biophysics as well as a vivarium for the conduct of *in vivo* pharmacology and toxicology research. In addition, an associated clinical trial unit has capability and experience in running Phase 1 thru Phase 3 human clinical trials in the cancer field. The research is led by the Company's president, Mads Daugaard, who is also a professor at UBC. The Company's goal is to advance one or more drug candidates into human clinical trials and obtain marketing approval for new cancer therapeutics from Health Canada, the United States Food and Drug Administration and similar international regulatory agencies.

Lead-optimization research conducted in collaboration with UBC evaluates three novel series drug candidates (kt-2000, kt-3000, and kt-4000) against proprietary benchmark target product profiles established for each series of drug candidates. The aim of our research is to demonstrate potential superiority to first-generation DDRi to address significant unmet medical needs in the treatment of cancer.

The primary goal of our lead optimization research program will be realized by selecting one or more lead clinical candidates from the kt-2000, kt-3000 and/or kt-4000 series by achieving the following milestones:

1. Identification of one or more lead drug candidates that meet the proprietary benchmark target product profile; and
2. Demonstration of an acceptable safety, biodistribution and pharmacokinetic profile to support advancement of a lead drug candidate to pivotal toxicology studies and human clinical trials.

### **kt-2000 Series**

The kt-2000 series candidates are a patented class of next-generation oral targeted small molecule PARP inhibitors. Based on research completed to date, the kt-2000 series lead candidates demonstrate potency comparable to FDA approved PARP-inhibitors and potent anti-cancer activity in preclinical animal models.

## **RAKOVINA THERAPEUTICS INC.**

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

The kt-2000 lead candidates are being optimized around potential differentiating factors and competitive advantages, including PARP-1 selectivity and the ability to cross the blood brain barrier. Current FDA-approved PARP inhibitors have limited ability to treat cancer that metastasizes to the brain and exhibit toxicity that has been associated with PARP-2 inhibition. We believe a potent PARP-1 selective, brain-penetrating kt-2000 series drug candidate may provide a significant improvement over current standard of care.

Research and development activity over the next 12 months will focus on investigation and optimization of multiple lead candidates from the kt-2000 series in in vivo models and pilot toxicology and pharmacology studies. Additional kt-2000 series analogues will also be synthesized and evaluated as potential lead candidates.

### **kt-3000 Series**

The kt-3000 series drug candidates are a patented, novel class of bi-functional small-molecule drug candidates designed to potently inhibit PARP and histone deacetylase (HDAC). Our pre-clinical research demonstrates that kt-3000 drug candidates have the potential to overcome acquired treatment resistance to FDA-approved PARP-inhibitors.

Published research demonstrates that inhibiting HDAC restores sensitivity to PARP inhibitors by preventing BRCA activity. The combination of a PARP-inhibitor and an HDAC inhibitor has shown promise in the laboratory but has been highly toxic in the clinical setting. By targeting dual mechanisms in a single molecule, we believe that kt-3000 series drug candidates have the potential to overcome clinical resistance that arises in response to PARP inhibitor treatment without the toxicity observed when combining two separate treatments.

We have presented preclinical in vitro data at peer reviewed scientific meetings demonstrating that select kt-3000 candidates retain anti-cancer activity despite the activation of resistance genes compared to an FDA-approved PARP-inhibitor, which loses potency upon re-establishment of BRCA activity. We recently published a manuscript demonstrating that a kt-3000 lead candidate achieves higher efficacy than treatment with single-agent PARP or HDAC inhibitors in pre-clinical models. These data indicate the dual activity of kt-3283 is 30- to 80-times more potent in Ewing sarcoma models than an FDA-approved PARP inhibitor, and 30- to 60-times more potent than an FDA-approved HDAC inhibitor. In an Ewing sarcoma metastasis model, kt-3283 prevented metastatic cancer growth in the lungs of mice inoculated with an aggressive Ewing sarcoma cell line.

We believe that our research provides proof-of-concept to support advancement of kt-3000 lead candidates based on their potential to address unmet medical needs in the treatment of Ewing sarcoma and potentially other cancers including leukemia, breast cancer, liver cancer, glioblastoma, prostate cancer and anaplastic thyroid cancer.

Select kt-3000 series drug candidates have been advanced to pilot toxicology and pharmacology studies. Lead candidates are being evaluated in in vivo models to support future regulatory filings to allow initiation of human clinical trials. Additional kt-3000 series analogues will also be synthesized and evaluated as potential lead candidates.

### **kt-4000 Series**

The kt-4000 drug candidates are a patented rationally designed class of small-molecule drug candidates that have been engineered to cause targeted DNA-damage to a tumor cell's DNA while simultaneously inhibiting the tumor's DNA damage response. The kt-4000 series DDR inhibitors molecular structure includes a potent moiety which cause targeted breaks in a tumor cell's DNA strands while also inhibiting DNA-damage repair mechanisms leading to cancer cell death.

We have presented data at a peer-reviewed scientific meeting demonstrating that select kt-4000 drug candidates cause double-strand DNA breaks while inhibiting PARP-mediated repair resulting in cell-cycle arrest and cancer cell death in a manner distinct from first-generation PARPi.

We believe that kt-4000 series drug candidates have the potential to expand the general utility of DDR-inhibitors to treat tumors that have become or are inherently resistant to first-generation DDRi. During the next 12 months, suitable candidates will be further evaluated in preclinical models.

In general, milestones in lead-optimization and drug discovery research include establishing superiority of kt-2000, kt-3000 and kt-4000 series compounds benchmarked against select FDA-approved anti-cancer therapeutics in relevant in vitro and in vivo models and confirming preclinical safety, biodistribution and pharmacokinetic profiles within acceptable parameters for medicines in the oncology field. The superiority of kt-2000, kt-3000 and kt-4000 series drug

## RAKOVINA THERAPEUTICS INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

candidates may be established based upon improved efficacy in treatment-resistant tumors and tumors of the central nervous system, improved safety or improved pharmacokinetics and biodistribution compared to FDA-approved PARP inhibitors and other FDA-approved cancer therapeutics.

### RECENT ACHIEVEMENTS & HIGHLIGHTS

- On January 27th, 2022 Rakovina Therapeutics' president and chief scientific officer participated as an expert panelist at the 5th Annual DDR, ATR and PARP Inhibitors Summit along side senior scientists from AstraZeneca and the National Brain Tumor Society to discuss insights and future directions for DDRi in the treatment of Cancer. The DDR, ATR and PARP Inhibitors Summit brought together industry and academic experts focused on advancing new and novel next-generation DNA-damage repair inhibitors.
- On April 11, 2022 we presented preclinical data supporting potential broad anti cancer activity of our novel kt-4000 series drug candidates at the American Association of Cancer Research (AACR) annual meeting.
- On May 11, 2022 we presented preclinical data on our kt-3000 series lead candidate demonstrating novel bi-functional mechanism as a potential treatment for Ewing sarcoma and other soft-tissue tumors at the 2022 AACR Special Conference on Sarcomas.
- On June 23, 2022 we announced the results of our annual general meeting at which all four members of the Company's board of directors were re-elected by the shareholders of the company. Additional result from the meeting included the approval of the company's appointed auditor, approval of our amended and restated omnibus equity incentive plan and disinterested shareholders approved certain amendments to our existing escrow agreement dated June 5, 2019.
- On October 28, 2022 we presented the kt-3000 series at the 34th EORTC-NCI-AACR on Molecular Targets and Cancer Therapeutics in Barcelona, Spain.
- On November, 14 2022 we announced the publication of a manuscript entitled "A bi-functional PARP-HDAC inhibitor with activity in Ewing sarcoma". We believe data presented in the manuscript provides proof-of-concept to support advancement of kt-3000 lead candidates based on their potential to address unmet medical needs in the treatment of Ewing sarcoma and potentially other cancers including leukemia, breast cancer, liver cancer, glioblastoma, prostate cancer and anaplastic thyroid cancer.
- Upcoming conferences include the DDR Inhibitors Summit 2023 (Jan 24-26, 2023), the EACR-AACR Basic and Translational Research Conference: Immune Responses and DNA Repair (March 15-17, 2023), and the AACR Annual Meeting (April 14-19, 2023).

### SELECTED FINANCIAL INFORMATION

The selected statements of net loss and comprehensive loss data for the periods presented and the selected statement of financial position data as of the dates presented are derived from the unaudited interim condensed consolidated financial statements.

#### Statements of financial position data:

	As at September 30, 2022	As at December 31, 2021
	\$	\$
Cash and cash equivalents	1,346,760	2,811,541
Working capital	1,432,620	2,956,994
Intangible assets	5,186,289	5,587,269
Total assets	6,865,680	8,658,242
Total liabilities	246,771	113,979
Deficit	7,664,960	5,521,152
Total equity	6,618,909	8,544,263

## RAKOVINA THERAPEUTICS INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

### Statements of net loss and comprehensive loss data:

	Three months ended September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
	\$	\$	\$	\$
Research and development	541,447	509,995	1,427,949	1,028,640
General and administrative	185,903	229,281	736,671	693,984
Listing costs and transaction fees	-	-	-	3,051,607
Finance income	10,474	2,867	21,082	5,703
Foreign exchange gain (loss)	996	(912)	(270)	(1,258)
Net loss and comprehensive loss	715,880	737,352	2,143,808	4,769,786
Basic and diluted loss per share	(0.01)	(0.01)	(0.03)	(0.11)
Weighted average shares outstanding (basic and diluted)	69,829,500	69,808,000	69,828,555	48,252,608

### RESULTS OF OPERATIONS

#### Research and development expenses

	Three months ended September 30, 2022	Three months ended September 30, 2021	Nine months ended September 30, 2022	Nine months ended September 30, 2021
	\$	\$	\$	\$
Contract research - UBC Agreement	152,250	152,250	456,750	304,500
Amortization	135,129	135,129	400,980	277,602
Consulting	68,325	91,271	225,682	198,422
Chemistry and manufacturing	112,206	-	130,754	-
Share-based payments	42,889	89,960	146,234	179,920
Patent and legal fees	30,648	41,385	67,549	68,196
	541,447	509,995	1,427,949	1,028,640

Research and development expenses of \$541,447 and \$1,427,949 were incurred during the three and nine months ended September 30, 2022, compared with \$509,995 and \$1,028,640 million incurred in the three and nine months ended September 30, 2021.

The net increase in R&D expenses during the three months ended September 30, 2022 relative to the three months ended September 30, 2021 is primarily due to the following:

- A decrease in consulting expense from \$91,271 for the three months ended September 30, 2021 to \$68,325 for the three months ended September 2022. The decrease is primarily due to the receipt of \$21,765 in IRAP funding during the quarter which is netted against consulting expense (\$nil funding received in the prior year).
- An increase in chemistry and manufacturing from \$nil for the three months ended September 30, 2021 to \$112,206 for the three months ended September 2022. The increase is related to medicinal chemistry consulting and manufacturing costs related to lead optimization activities conducted by the company during the quarter.
- A decrease in Share-based payment expense from \$89,960 for the three months ended September 30, 2021 to \$42,421 for the three months ended September 2022. The decrease is due to the amortization of the fair value of stock options granted to officers, directors and advisors that are directly involved with the research and development activities of the Company which decreases over time as options vest.
- A decrease in patent and legal fees from \$41,385 for the three months ended September 30, 2021 to \$30,648 for the three months ended September 2022. The decrease is related to the timing of patent filings and related work which does not occur evenly throughout the year.

## RAKOVINA THERAPEUTICS INC.

### Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

The increase in R&D expenses during the nine months ended September 30, 2022 relative to the nine months ended September 30, 2021 is primarily due to the following:

- An increase in chemistry and manufacturing from \$nil for the nine months ended September 30, 2021 to \$130,754 for the nine months ended September 2022. The increase is related to medicinal chemistry consulting and manufacturing costs related to lead optimization activities conducted by the company in the current period.
- The Company's operations commenced in April 2021 resulting in fewer months of operations during the comparable period.

#### General and administrative expenses

	<b>Three months ended September 30, 2022</b>	Three months ended September 30, 2021	<b>Nine months ended September 30, 2022</b>	Nine months ended September 30, 2021
	\$	\$	\$	\$
Legal and professional	<b>36,811</b>	34,859	<b>250,387</b>	242,133
Corporate communications	<b>18,610</b>	40,571	<b>90,824</b>	146,635
Share-based payments	<b>19,870</b>	51,245	<b>70,070</b>	102,490
Consulting	<b>39,000</b>	39,000	<b>117,020</b>	81,000
Director fees	<b>30,186</b>	43,676	<b>95,099</b>	82,566
Rent	<b>10,500</b>	10,000	<b>28,000</b>	20,000
Other expenses	<b>30,926</b>	9,930	<b>85,271</b>	19,160
	<b>185,903</b>	229,281	<b>736,671</b>	693,984

General and administrative expenses of \$185,903 and \$736,671 were incurred during the three and nine months ended September 30, 2022, compared with \$229,281 and \$693,984 incurred in the three and nine months ended September 30, 2021.

The net decrease general and administrative expenses during the three months ended September 30, 2022 relative to the three months ended September 30, 2021 is primarily due to the following:

- A decrease in corporate communications expense from \$40,571 for the three months ended September 30, 2021 to \$18,610 for the three months ended September 2022. The decrease is primarily due to the expiry of the Company's 12-month contract with a marketing and communications firm during the second quarter of 2022.
- A decrease in share-based payment expense from \$51,245 for the three months ended September 30, 2021 to \$19,870 for the three months ended September 2022. The decrease is due to the amortization of the fair value of stock options granted to officers, directors and advisors that are not directly involved with the research and development activities of the Company which decreases over time as options vest.
- A decrease in directors fees from \$43,676 for the three months ended September 30, 2021 to \$30,186 for the three months ended September 2022. The decrease is due to there being five directors during the three months ended September 30, 2021 versus four directors during the three months ended September 30, 2022.
- An increase in other expenses from \$9,930 for the three months ended September 30, 2021 to \$30,926 for the three months ended September 2022. The increase is primarily related to travel and conference fees as the Company was more active at industry events and investor meetings due to the relaxation of COVID related restrictions that were in place during the comparable period which restricted travel and lead to the postponement and/or cancelation of industry events.

The net increase in general and administrative expenses during the nine months ended September 30, 2022 relative to the nine months ended September 30, 2021 is primarily due to the following:

- A decrease in corporate communications expense from \$146,635 for the nine months ended September 30, 2021 to \$90,824 for the nine months ended September 2022. The decrease is primarily due to the expiry of

## RAKOVINA THERAPEUTICS INC.

### Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

the Company's 12-month contract with a marketing and communications firm during the second quarter of 2022.

- An increase in other expenses from \$19,160 for the nine months ended September 30, 2021 to \$85,271 for the nine months ended September 2022. The increase is primarily related to travel and conference fees as the Company was more active at industry events and investor meetings due to the relaxation of COVID related restrictions that were in place during the comparable period which restricted travel and lead to the postponement and/or cancelation of industry events.
- The Company's operations commenced in April 2021 resulting in fewer months of operations during the comparable period.

### Listing costs and transaction fees

The company recorded total listing costs and transaction fees of nil and \$3,051,607 for three and nine months ended September 30, 2021, respectively, related to the QT transaction which closed on March 25, 2021. Total listing costs were calculated as follows:

Consideration comprised of non-cash consideration of:	\$
Fair value of Subco shares (16,728,500 shares at \$0.20 per share)	3,345,700
Fair value of agent's options assumed	30,304
Total consideration paid	3,376,004
Consideration paid	3,376,004
Less: net assets of Vincero (cash)	(800,000)
Direct listing costs	2,576,004
Transaction costs related to the QT	475,603
Total listing costs and transaction fees	3,051,607

Transaction costs of \$475,603 relating to professional and consulting fees incurred in connection with the QT were expensed during the nine months ended September 30, 2021.

### SUMMARY OF QUARTERLY RESULTS

	Sep 30, 2022	Jun 30, 2022	Mar 31, 2022	Dec 31, 2021	Sep 30, 2021	Jun 30, 2021	Mar 31, 2021	Dec 31, 2020 <sup>(1)</sup>
	\$		\$	\$	\$	\$	\$	\$
Net Loss	(715,880)	(715,975)	(711,953)	(751,353)	(737,352)	(835,062)	(3,197,372)	(13)
Basic and diluted loss per share	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.69)	(13)

(1) From the period of incorporation on September 25, 2020 to December 31 2020.

During the three and nine months ended September 30, 2022, the Company reported a net loss of \$715,880 and \$2,143,808, respectively, versus a net loss of \$737,352 and \$4,769,786 for the three and nine months ended September 30, 2021, respectively. The Company was incorporated on September 25, 2020 for the purpose of structuring the QT transaction with Vincero on March 25, 2021 and the results for the nine months ended September 30, 2021 reflect the listing costs and transaction fees related to the QT.

The net loss of \$715,880 incurred during the three months ended September 30, 2022 is consistent with the prior five quarters and is primarily attributable to research and development expenses of \$541,447 and general and administrative expenses of \$185,903.

### LIQUIDITY AND CAPITAL RESOURCES

#### Liquidity and Capital Resources

The Company's capital currently consists of equity and working capital. Its principal source of cash is from the issuance of common shares and warrants. The Company's capital management objectives are to safeguard its ability to continue as a going concern and to have sufficient capital to be able to further its research and development activities.

## RAKOVINA THERAPEUTICS INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

The Company does not have any externally imposed capital requirements to which it is subject. The Company manages the capital structure and makes adjustments to it in light of changes in economic conditions and the risk characteristics of the underlying assets. To maintain or adjust the capital structure, the Company may attempt to issue new shares.

The Company's capital needs are for funds to support its scientific research and development activities, including staffing, lead compound optimization, general and administrative expenses and for working capital. The Company expects that its existing cash and cash equivalents as of September 30, 2022 will enable it to fund operating requirements for approximately nine months and the Company will require additional funds to develop and commercialize its technologies. While the Company has been successful in arranging financing in the past, the success of such initiatives cannot be assured.

The process of drug development can be costly and the timing and outcomes of research related activities is uncertain. The assumptions upon which we have based our estimates are routinely evaluated and may be subject to change. The actual amount of our expenditures will vary depending upon a number of factors including but not limited to the design, timing and duration of lead optimization studies, the progress of our research and development programs, and the level of financial resources available. These factors may cast significant doubt upon the Company's ability to continue as a going concern.

### Cash Flows

The following table provides information regarding our cash flows for the nine months ended September 30, 2022 and 2021:

	<b>September 30, 2022</b>	September 30, 2021
	<b>\$</b>	\$
Cash used in operating activities	(1,466,931)	(1,859,570)
Cash provided by financing activities	2,150	4,319,717
Cash provided by investing activities	-	800,000
<b>Net (decrease) / increase in cash and cash equivalents</b>	<b>(1,464,781)</b>	<b>3,260,147</b>

The Company realized a net cash outflow of \$1,464,781 for the nine months ended September 30, 2022, compared to a net cash inflow of \$3,260,147 for the nine months ended September 30, 2021. The variances in the cash flow for the nine months ended September 30, 2022, compared to September 30, 2021 were as follows:

#### *Cash Flows From Operating Activities*

Net cash used in operating activities was \$1,466,931 during the nine months ended September 30, 2022 compared to \$1,859,570 for the nine months ended September 30, 2021. The decrease in cash used in the current period is primarily due to non-recurring cash expenses incurred during the comparable period related to the QT transaction.

#### *Cash Flows From Financing Activities*

Net cash provided by financing activities was \$2,150 during the nine months ended September 30, 2022 compared to \$4,319,717 for the nine months ended September 30, 2021. Cash provided from financing activities of \$2,150 during the nine months ended September 30, 2022 was due to the exercise of 21,500 agent options. Cash provided from financing activities during the nine months ended September 30, 2021 was related to the issuance of common shares pursuant to the Financing for gross proceeds of \$4,565,900 less share issuance costs of \$271,183 and the exercise of 250,000 agent options for proceeds of \$25,000.

#### *Cash Flows From Investing Activities*

Net cash provided by investing activities was \$nil during the nine months ended September 30, 2022 compared to \$800,000 for the nine months ended September 30, 2021. The net cash provided by investing activities during the nine months ended September 30, 2021 is due to the cash received upon amalgamation with Vincero.

## RAKOVINA THERAPEUTICS INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

### Contractual Obligations

Pursuant to the UBC Collaboration Agreement the Company has committed to payments as follows:

	<b>\$</b>
March 31, 2023	<u>217,000</u>
September 30, 2023	<u>217,000</u>
	<u><b>434,000</b></u>

### OFF-BALANCE SHEET ARRANGEMENTS

As of the date of this MD&A, the Company does not have any off-balance sheet arrangements that have, or are reasonably likely to have, a current or future effect on the results of operations or financial condition of the Company, including, and without limitation to, such considerations as liquidity and capital resources that have not previously been disclosed.

### FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

The Company classifies its financial assets into the following specified categories: "amortized cost"; "fair value through other comprehensive income" ("FVTOCI"); and "fair value through profit or loss" ("FVTPL"). Financial liabilities are designated as FVTPL or classified as loans and borrowings measured at amortized cost. Classification depends on the purpose for which the financial assets and liabilities were acquired or incurred. Management determines the classification of its financial instruments at initial recognition.

Financial instruments consist of cash and cash equivalents, amounts receivable, and accounts payable and accrued liabilities.

#### Fair values

The Company has classified its financial instrument fair values based on the required three level hierarchies:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2: inputs other than quoted prices included in Level 1, but that are observable for the asset or liability, either directly or indirectly; and

Level 3: inputs for the asset or liability that are not based on observable market data.

The fair value hierarchy level at which a fair value measurement is categorized is determined on the basis of the lowest level input that is significant to the fair value measurement in its entirety. The Company records cash and cash equivalents at fair value using level 1 inputs. There were no transfers from levels 1, 2 and 3 during the three and nine months ended September 30, 2022.

The fair values of cash and cash equivalents, amounts receivable, and accounts payable and accrued liabilities approximate the carrying values due to the short-term nature of these instruments.

There has been no significant change in the credit risk and concentrations, interest rate risk or liquidity risk during the three and nine months ended September 30, 2022.

#### Financial risk factors

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 loss associated with the counterparty's inability to fulfill its payment obligations. Financial instruments that potentially subject the Company to concentrations of credit risks consist of cash and cash equivalents and amounts receivable. The Company's cash and cash equivalents consists of funds held in a reputable bank. The amounts receivable is related to GST receivable from the Canada Revenue Agency and accrued interest from a reputable Canadian bank. At September 30, 2022, the Company does not believe it is currently exposed to any significant credit risk.

## RAKOVINA THERAPEUTICS INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

### *Interest rate risk*

Interest rate risk is the risk that changes in market interest rates may have an effect on the cash flows associated with some financial instruments, known as interest rate cash flow risk, or on the fair value of other financial instruments, known as interest rate price risk. The Company is not exposed to any significant interest rate risk.

### *Liquidity risk*

Liquidity risk is the risk that the Company will not be able to meet its financial obligations as they fall due. Liquidity risk is managed by maintaining adequate cash reserves and by closely monitoring forecast and actual cash flows. The Company currently settles its financial obligations out of cash. The ability to do this relies on the Company's ability to raise equity financing in a timely manner and by maintaining sufficient cash in excess of anticipated needs.

### *Foreign currency risk*

The Company is exposed to foreign currency risk on fluctuations in foreign exchange rates for any cash and cash equivalents, amounts receivable, accounts payable and accrued liabilities that are denominated in foreign currencies. The Company's foreign currency risk is primarily related to expenses denominated in United States dollars.

## DIVIDEND POLICY

Since its incorporation, the Company has not paid any dividend on its common shares. Any future determination to pay dividends is at the discretion of the Company's Board of Directors and will depend on the Company's financial condition, results of operations, capital requirements and other such factors as the Board of Directors of the Company may deem relevant.

## RELATED PARTY TRANSACTIONS

The key management personnel of the Company are the Directors, Executive Chairman, President and Chief Scientific Officer, Chief Operating Officer, and Chief Financial Officer. Amounts due to related parties, including amounts due to key management personnel, at the period-end are unsecured, interest free and settlement generally occurs in cash. There have been no guarantees provided or received for any related party receivables or payables.

As at September 30, 2022, the Company had amounts due to related parties of \$74,839 (December 31, 2021 - \$74,315) comprised of board fees, management compensation and reimbursable expenses.

Compensation to key management personnel for the reporting period is as follows:

	<b>Three months ended September 30, 2022</b>	Three months ended September 30, 2021	<b>Nine months ended September 30, 2022</b>	Nine months ended September 30, 2021
	<b>\$</b>	<b>\$</b>	<b>\$</b>	<b>\$</b>
Compensation / short term benefits	<b>130,939</b>	127,910	<b>386,196</b>	274,318
Board fees	<b>30,186</b>	43,676	<b>95,099</b>	82,566
Share-based payments	<b>53,692</b>	141,205	<b>189,237</b>	282,410
	<b>214,817</b>	312,791	<b>670,532</b>	639,294

For the three and nine months ended September 30, 2022, the Company incurred rent expense of \$10,500 and \$28,000, respectively (2021 - \$10,000 and \$20,000, respectively) to Al De Lucrezia, a Director of the Company, pursuant to a short-term lease agreement for office space.

The Company entered into a consulting agreement with Jeffrey Bacha, the Executive Chairman of the Company. Pursuant to this consulting agreement, Mr. Bacha is compensated at a rate of \$10,000 per month. During the three and nine months ended September 30, 2022, Mr. Bacha received \$30,000 and \$90,000, respectively (2021 - \$30,000 and \$70,000, respectively) in fees for management services. As of September 30, 2022, the Company has included in its accounts payable and accrued liabilities \$12,983 (December 31, 2021 - \$14,396) due to Mr. Bacha related to management services plus GST (\$10,500) and reimbursable expenses (\$2,483).

## RAKOVINA THERAPEUTICS INC.

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

The Company entered into a consulting agreement with Daugaard Consulting and Mads Daugaard, the President and Chief Scientific Officer of the Company. Pursuant to this consulting agreement, Mr. Daugaard is compensated at a rate of \$11,970 per month. During the three and nine months ended September 30, 2022, Mr. Daugaard received \$35,910 and \$107,730 respectively (2021 - \$35,910 and \$83,790, respectively) in fees for management services. As of September 30, 2022, the Company has included in its accounts payable and accrued liabilities \$12,683 (December 31, 2021 - \$12,569) due to Mr. Daugaard related to management services plus GST (\$12,569) and reimbursable expenses (\$114).

The Company entered into a consulting agreement with Longlands & Associates Consulting Inc. and John Langlands, the Chief Operating Officer of the Company. Pursuant to this consulting agreement, Mr. Langlands is compensated at a rate of \$10,666 per month. During the three and nine months ended September 30, 2022, Mr. Langlands received management fees of \$32,000 and \$95,416 respectively (2021 - \$32,000 and \$60,528, respectively) in fees for management services. As of September 30, 2022, the Company has included in its accounts payable and accrued liabilities \$11,200 (December 31, 2021 - \$11,199) due to Mr. Langlands related to management services plus GST.

The Company entered into a consulting agreement with Tandem Innovation Group ("Tandem") and David Hyman, the Chief Financial Officer ("CFO") of the Company. Pursuant to this consulting agreement, Mr. Hyman is compensated at a rate of \$10,000 per month. During the three and nine months ended September 30, 2022, Tandem charged fees of \$30,000 and \$90,000, respectively, (2021 - \$30,000 and \$70,000, respectively) for CFO services. As of September 30, 2022, the Company has included in its accounts payable and accrued liabilities \$12,244 (December 31, 2021 - \$10,500) due to Tandem related to management services plus GST (\$10,500) and to Mr. Hyman (\$1,744) for reimbursable expenses.

The Company pays its independent directors a fixed quarterly fee of \$8,750 plus \$1,875 for the audit committee chair and \$1,000 for audit committee members. As of September 30, 2022, the Company has included in its accounts payable \$8,120 (December 31, 2021 - \$8,210) for Al De Lucrezia, \$8,750 (December 31, 2021 - \$8,750) for Dennis Brown, and \$8,780 (December 31, 2021 - \$8,780) for Michael Liggett related to Director fees.

All related party transactions, whether monetary or non-monetary, are conducted in the normal course of business and are measured at fair value, which is the consideration established and agreed to by the related parties.

### OUTSTANDING SECURITIES

As at November 10, 2022 the company has the following securities outstanding:

	<u>#</u>
Common shares	69,829,500
Warrants	12,733,690
Stock Options	5,780,000
<b>Total</b>	<b><u>88,343,190</u></b>

On May 25, 2022, the Company granted 150,000 incentive stock options to a consultant pursuant to the LTI plan. The stock options are exercisable at \$0.15 per share for a period of five years and vest over three years in equal 1/6 installments every six months.

### Escrow

As at the date of this report 13,837,500 common shares are held in escrow and will be released based on the Company's escrow agreements as follows:

	<u>#</u>
April 1, 2023	4,612,500
October 1, 2023	4,612,500
April 1, 2024	4,612,500
	<b><u>13,837,500</u></b>

The Company received exchange and shareholder approval to amend the CPC Escrow Agreement with the founders of Vincero which resulted in the reduction in the length of the term of the founder's escrow from 36 to 18 months. As a result of the amended escrow agreement, the final tranche of escrowed Vincero shares were released on October 1, 2022.

## **RAKOVINA THERAPEUTICS INC.**

Management's Discussion and Analysis

For the three and nine months ended September 30, 2022

---

### **CRITICAL ACCOUNTING POLICIES AND ESTIMATES**

For a summary of the Company's critical accounting policies and estimates please refer to the Annual Financial Statements for the year ended December 31, 2021.

There has been no changes to the Company's critical accounting policies and estimates for the nine months ended September 30, 2022.

### **RISKS FACTORS**

Investing in our securities involves a high degree of risk. Before deciding to invest in our securities, you should carefully consider the risks described in the Company's Annual Information Form, together with other information included in or incorporated by reference into this MD&A and filed on SEDAR at [www.sedar.com](http://www.sedar.com). If any of the following risks materialize, the business, financial condition, results of operation and future prospects of the Company will likely be materially and adversely affected. This could cause actual future events to differ materially from those described in forward-looking statements and may cause the trading price of our securities to decline.