RAKOVINA THERAPEUTICS INC.

MANAGEMENT'S DISCUSSION AND ANALYSIS

FOR THE THREE AND NINE MONTHS ENDED

SEPTEMBER 30, 2024

The following management's discussion and analysis ("MD&A") for the three and nine months ended September 30, 2024 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, 2024 and the annual audited consolidated financial statements and accompanying notes for the year ended December 31, 2023 (the "Annual Financial Statements"), which have been prepared by management in accordance IFRS Standards as issued by the International Accounting Standards Board ("IFRS"). All dollar amounts are expressed in Canadian dollars unless otherwise noted.

This MD&A is dated November 29, 2024.

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", "continue", "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 our product candidates;
- our expectations regarding the timing and results of our artificial-intelligence (AI) driven drug discovery and development research;
- our expectations regarding the size and growth of the cancer therapeutics and DNA-damage response-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 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 preclinical research and 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.

The Company, through its wholly owned subsidiary Rakovina Research Ltd., is primarily focused on the research and development of innovative cancer treatments that target DNA-damage response (DDR) systems.

DDR mechanisms such as homologous repair (HR), base excision repair (BER), non-homologous end joining (NHEJ) and mismatch repair (MMR) play a crucial role in detecting and repairing DNA damage within cells. Their coordinated action is crucial for cellular survival and the prevention of diseases, including cancer.

Approximately three-in-four solid tumors harbor defects in one or more DDR systems. Such defects allow cancerous mutations to evade detection, leading to tumor formation. However, when this occurs, the cancerous cells lose the function of the compromised system and become heavily reliant on alternative DDR pathways for survival. This dependency presents a promising opportunity for the development of targeted pharmaceutical therapies.

We utilize proprietary AI platforms to rapidly screen and evaluate billions of potential drug candidates against DDR drug targets to significantly reduce the time, risk and cost required to identify and validate lead candidates. Our AI strategy is aimed at condensing the drug discovery and lead optimization process from years to months at a significantly reduced cost. This Deep Docking™ algorithm has previously identified drug candidates that have progressed to human clinical trials. The Enki™ Platform is a proprietary machine learning small-molecule drug discovery engine specifically trained on kinase targets. Rakovina Therapeutics holds exclusive rights to utilize these platforms for select DDR-related targets.

Key targets in DDR include:

ATM (Ataxia-Telangiectasia Mutated): A kinase activated by double-strand breaks (DSBs), which phosphorylates various substrates to initiate DNA repair, cell cycle arrest, and apoptosis.

ATR (Ataxia Telangiectasia and Rad3-related protein): A kinase primarily activated by single-stranded DNA, playing a key role in the response to replication stress and stabilizing replication forks.

CHK1/CHK2 (Checkpoint Kinases 1 and 2): Kinases that function downstream of ATM/ATR to pause the cell cycle, providing time for DNA repair before cell division proceeds.

PARP (Poly ADP-Ribose Polymerase): A family of enzymes involved in repairing single-strand breaks (SSBs); PARP inhibition can lead to the accumulation of DNA damage, especially in cells with deficiencies in other repair pathways, such as BRCA-mutated cells.

BRCA1/BRCA2 (Breast Cancer 1 and 2): Proteins essential for repairing DSBs through homologous recombination, ensuring accurate DNA repair and preventing genomic instability.

DNA-PK (DNA-Dependent Protein Kinase): A critical kinase in the non-homologous end joining (NHEJ) pathway, responsible for repairing DSBs. DNA-PK plays a significant role in maintaining genomic stability, particularly in cells undergoing rapid division.

FDA approved PARP inhibitors (PARPi) targeting a subset of PARP enzyme family members are the first FDA-approved DDR therapies targeting cancers with a defect in the HR system. PARPi have become an important component of standard treatment in certain breast, ovarian and prostate cancers that harbor BRCA mutations. In 2023, aggregate sales for the four FDA-approved first-generation PARP inhibitors were reported to approximate $3.5 billion worldwide.

While PARP inhibitors have significantly enhanced treatment outcomes for patients with HR-deficient cancers, their limitations have also become evident. These include challenges in combining with other therapies due to toxicity, limited penetration of the central nervous system (CNS) for treating CNS metastases, the emergence of treatment resistance, and limited efficacy in cancers lacking homologous recombination (HR) defects. Current research is focused on developing next-generation DDR therapy to overcome these limitations and further improve treatment outcomes.

Rakovina Therapeutics is utilizing proprietary AI platforms to screen billions of drug candidates targeting DNA-damage response (DDR) pathways, with predictions for safety, efficacy, and pharmaceutical properties. This large-scale approach to drug discovery is beyond the reach of traditional medicinal chemistry methods. We believe the extensive scope of the Deep Docking platform significantly enhances the likelihood of identifying novel, best-in-class drug candidates, which will then be validated within our established laboratory infrastructure at the University of British Columbia (UBC).

Since its inception, Rakovina Therapeutics has engaged in lead optimization and preclinical research in collaboration with UBC under a research collaboration agreement (the "UBC Collaboration Agreement"). This agreement provides a robust platform for the rapid and efficient validation of drug candidates, leveraging the world-class research infrastructure at the Jack Bell Research Centre and Robert Ho Research Centre in Vancouver, British Columbia. These centers offer advanced capabilities in molecular pathology, cell imaging, mass spectrometry, protein production, biophysics, and access to a vivarium for in vivo pharmacology and toxicology studies. Additionally, an associated clinical trial unit at UBC is equipped to conduct Phase 1 through Phase 3 human clinical trials.

As we advance promising drug candidates toward clinical development, we plan to collaborate with pharmaceutical companies through various partnership models, including licensing agreements, joint ventures, and co-development opportunities. These collaborations will be crucial in driving our innovative therapies from the lab to the clinic, potentially expediting the delivery of new treatments to patients worldwide.

Rakovina therapeutics was established around rights to three distinct series of novel DDRi targeted therapies: kt-2000, kt-3000 and kt-4000. Historically, our lead-optimization research was conducted using traditional methods and focused primarily on the identification and optimization of a lead drug candidate from our kt-3000 series. Utilizing the proprietary deep docking platform, we will identify and optimize the next lead candidates in 9-12 months vs. the anticipated 4-6 years using conventional laboratory methods. The primary goal of our lead optimization research programs are realized by selecting one or more lead clinical candidates for advancement to human clinical trials in collaboration with pharmaceutical partners by achieving the following milestones:

1. Identification of one or more lead drug candidates that meet the proprietary benchmark target product profile demonstrating potential superiority to first-generation DDRi to address significant unmet medical needs in the treatment of cancer; and
2. Demonstration of an acceptable safety, biodistribution and pharmacokinetic profile to support advancement of a lead drug candidate to pivot human clinical trials.

kt-2000 Series

The kt-2000 series candidates are a patented class of next-generation oral, small molecule PARP inhibitors with established *in vitro* and *in vivo* proof of concept. 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.

We are employing the Deep Docking™ platform to with the goal of identifying a best-in-class kt-2000 series drug candidate. The kt-2000 lead candidates are 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 the current standard of care.

Deep Docking™ AI integration and 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 preclinical models with the goal of identifying lead candidates for advancement to clinical trials in collaboration with pharmaceutical company partners.

The kt-2000 series candidates are a patented class of next-generation oral, small molecule PARP inhibitors with established *in vitro* and *in vivo* proof of concept. 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.

We recently received the initial output from the Deep Docking platform in the form of a short list of recommended small molecule drug candidates based on an *in silico* evaluation of billions of molecular structures. The most promising candidates are being synthesized and evaluated for *in vitro* and *in vivo* validation. We anticipate presenting a summary of our research results at a peer-reviewed scientific meetings in 2025. The most promising lead candidates will be advanced into our ongoing discussions with potential pharmaceutical development partners.

kt-3000 Series

The kt-3000 series drug candidates represent a novel, patented class of bi-functional targeted small molecules designed to inhibit both PARP and histone deacetylase (HDAC), an enzyme critical in DNA replication and the initiation of DNA damage response mechanisms. FDA-approved HDAC inhibitors (HDACis) are currently used in the treatment of certain blood cancers.

Research has shown that inhibiting HDAC can restore sensitivity to tumors that fail to respond or have become resistant to treatment with PARP inhibitors by suppressing BRCA gene activity. While the combination of PARP and HDAC inhibitors has demonstrated promise in the lab, it has proven highly toxic in clinical settings

By targeting these dual mechanisms within a single molecule, we believe that the kt-3000 series drug candidates have the potential to overcome clinical resistance that often develops with PARP inhibitor treatment, without the toxicity associated with combining two separate treatments.

Our recent manuscript published in the Journal of Clinical Cancer Research details our lead pre-clinical candidate from the kt-3000 series, kt-3283. The data demonstrate kt-3283's potential to treat cancers resistant to FDA-approved first-generation PARP inhibitors, achieving higher efficacy than single-agent PARP or HDAC inhibitors in pre-clinical models.

Our data show that kt-3283's dual activity is 10 times more potent than an FDA-approved PARP inhibitor in targeting BRCA-mutant (HR-deficient) cancer cells in vitro. In HR-proficient cancer cell lines, kt-3283 demonstrated 30 to 80 times greater potency than an FDA-approved PARP inhibitor, and 30 to 60 times more potency than an FDA-approved HDAC inhibitor.

In an animal model, kt-3283 effectively inhibited the growth and metastasis of aggressive HR-proficient Ewing sarcoma cells in the lungs of mice (**Fig. 1**). In contrast, FDA-approved PARP inhibitor Lynparza® and FDA-approved HDAC inhibitor Zolinza® failed to inhibit tumor growth in an animal model (**Fig. 2**).

We are evaluating formulation options to support further development of kt-3283. The goal of this research is to develop a suitable formulation to allow advancement into human clinical trials in collaboration with pharmaceutical partners.

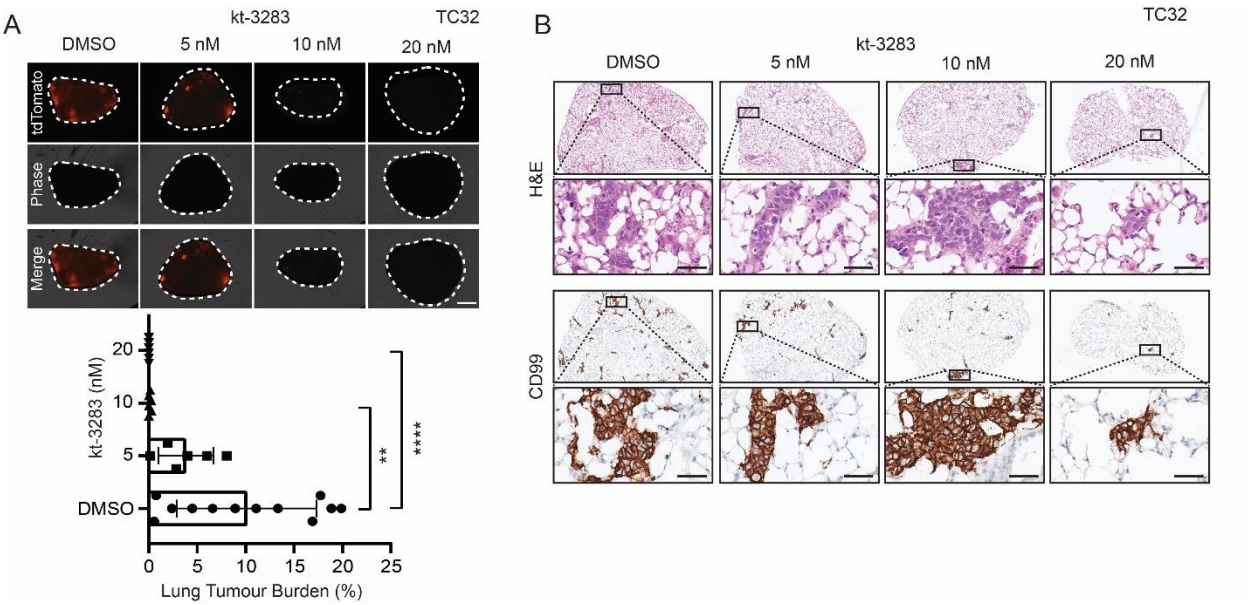

Fig. 1 In an animal model of cancer metastases, kt-3283 inhibits the metastasis and growth of TC32 cancer cells in mouse lungs at a dose of 10 nM after 14 days of treatment. **(A)** Cancer cells are labelled with red fluorescence (upper left) and the fluorescence was quantified to determine percentage lung tumor burden (lower left). Statistical significance on the graph is indicated by **p<0.01 and ****p<0.0001. **(B)** The presence and identity of cancer cells was confirmed by hematoxylin and eosinstaining (upper right) and CD99 staining (lower right).

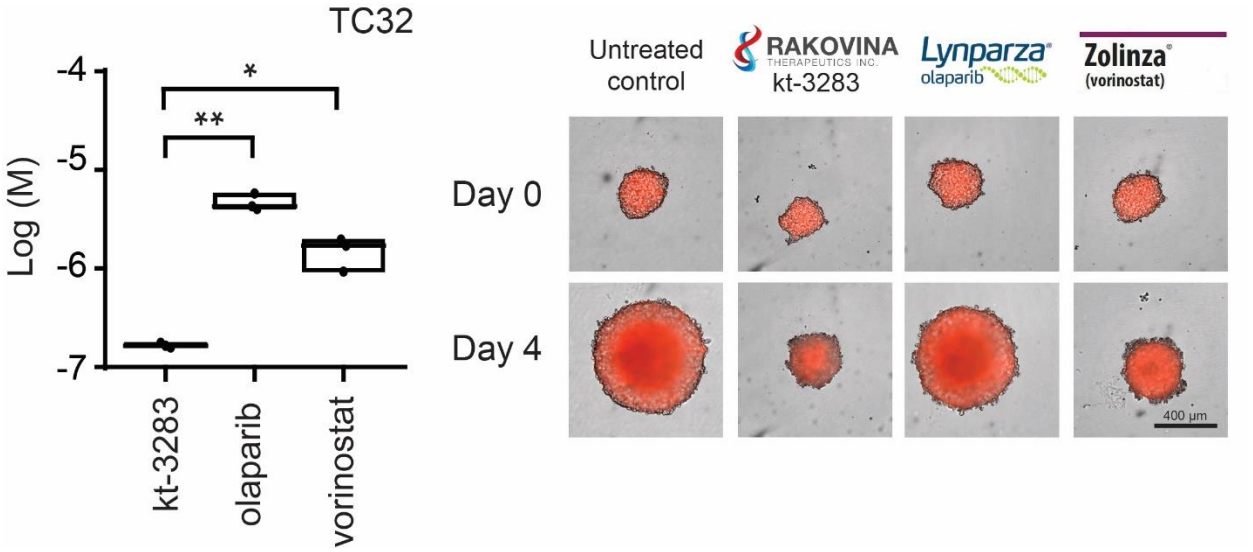

Fig. 2
Treatment of a 3D spheroid model shows a significant decrease in tumor growth with kt-3283 compared to an FDA-approved PARP inhibitor (olaparib) or and FDA-approved HDAC inhibitor (vorinostat). Cancer cells were treated with equal concentrations of kt-3283, olaparib or vorinostat for 4-day.Representative images (right) are shown for day 0 and day 4 of treatment. Statistical significance on the graph (left) is indicated by *p<0.05 and **p<0.01.

In HR-proficient cell cycle assays, kt-3283 induces potent S/G2M arrest leading to cancer cell death, suggesting its potential superiority over single-agent Lynparza® or Zolinza®, as well as the combination of Lynparza and Zolinza.

DDR-Kinase Target Drug Discovery

Through our collaboration with Variational AI, we are employing the proprietary Enki™ drug discovery platform to identify novel drug candidates against select DDR kinase targets. We anticipate having initial output in the form of a

short-list of recommended molecular structures against a specific target product profile in the first quarter of 2025. The most promising candidates will be synthesized for *in vitro* and *in vivo* validation in our laboratories at the University of British Columbia with the goal of identifying lead candidates for advancement to clinical trials in collaboration with pharmaceutical company partners.

kt-4000 Series

The kt-4000 drug candidates are a patented, rationally designed class of small molecules engineered to induce targeted DNA damage in tumor cells while simultaneously inhibiting the tumor's DNA damage response. The molecular structure of the kt-4000 series DDR inhibitors includes a potent moiety that causes precise breaks in a tumor cell's DNA strands while also blocking DNA repair mechanisms, ultimately leading to cancer cell death.

We have presented preclinical data at a peer-reviewed scientific meeting showing 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 PARP inhibitors. We believe the kt-4000 series has the potential to broaden the utility of DDR inhibitors, particularly in treating tumors that have developed resistance or are inherently resistant to first-generation DDR inhibitors.

RECENT ACHIEVEMENTS & HIGHLIGHTS

- On November 27, 2024 the Company announced a non-brokered private placement offering (the "Offering) of up to $1.25 million with initial commitments totalling over $800,000 from strategic investors. On November 28, 2024 the Company announced that the Offering will be increased to $2.5 million to accommodate investor demand. The Offering is structured as units priced at $0.06 each, with each unit consisting of one common share and one warrant to purchase a common share. Each warrant entitles the holder to purchase one additional common share at a price of $0.10 per share, exercisable for a period of 24 months. Rakovina retains the right to accelerate the warrant exercise period if the 20-day volume-weighted average price of its shares exceeds $0.30 cents.
- On November 22, 2024 we delivered a poster presentation highlighting initial results of our Deep Docking and generative Artificial Intelligence (AI) PARP-inhibitor program at the Neuro-Oncology Annual Meeting in Houston, Texas.
- On October 25, 2024 we presented our research on kt-3283, our lead small-molecule bifunctional inhibitor of PARP and HDAC enzymes at the 36th EORTC-NCI-AARC Symposium in Barcelona, Spain.
- On October 23, 2024 we announced the receipt of initial results from the Company's Deep Docking AI partnership following the evaluation of billions of molecular structures. This process resulted in a short-list of drug candidates that have been optimized to a specific target-product profile.
- On September 17, 2024 we announced a research collaboration with Variational AI to employ the proprietary Enki™ AI platform to identify and develop novel small-molecule therapies against select DDR kinase targets for the treatment of cancer.
- On July 26, 2024 we announced the final closing of an over-subscribed non-brokered private placement financing of units priced at $0.10 per unit with each unit consisting of one common share and one common share purchase warrant with an exercise price of $0.20 per warrant and a term of three years for gross proceeds to the Company of $2 million (the "2024 Private Placement"). Each Warrant entitles the holder thereof to subscribe for and purchase one Common Share at a purchase price of $0.20 for a period of three years from the date of issuance. If the closing price for the Common Shares on the TSX Venture Exchange is $0.25 or greater for five consecutive trading days, the Company will have the right to accelerate the expiry date of the Warrants, upon written notice to the holder, to the date that is 30 days following such notice.
- On May 8, 2024 we announced the expansion of our collaborations with the University of British Columbia ("UBC") and our medicinal chemistry partner, Pharma Inventor Inc. to support the Company's AI drug discovery initiatives.
- On April 9, 2024 we announced the presentation at the annual meeting of the American Association of Cancer Research entitled "Pharmacological Synthetic Lethality by Co-inhibition of PARP and HDAC Enzymes demonstrating the combination of PARP and HDAC inhibition in our kt-3000 series lead candidate showed strong anti-tumor activity in DNA repair-proficient cells where first-generation FDA approved PARP inhibitors have limited effects.
- On March 27, 2024 we announced a collaboration agreement with Dr. Artem Cherkasov granting Rakovina with exclusive access to the proprietary Deep Docking™ AI Platform for DNA-damage response targets. We are using the Deep Docking platform to quickly analyze billions of molecular structures to evaluate their potential as targeted cancer drugs.

- On November 27, 2023, we announced the appointment of Prof. Artem Cherkasov, Senior scientist at the Vancouver Prostate Center and Canada Research Chair in Precision Cancer Drug Design to Rakovina Therapeutics' Scientific Advisory Board.
- On November 20, 2023, we announced the appointment of Prof. Petra Hamerlik, Chair of Translational Neuro-Oncology at the University of Manchester and former CNS Cancer Bioscience Lead at AstraZeneca plc, to Rakovina Therapeutics 's Scientific Advisory Board.

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:

Working Capital consists of current assets including cash, prepaid expenses and receivables less current liabilities. As at September 30, 2024, the Company had prepaid and receivable balances totalling $940,530 offset in-part by obligations related to prepaid expenses due during the next 12 months.

	As at September 30, 2024 $	As at December 31, 2023 $
Statements of financial position data:		
Cash and cash equivalents	**255,049**	436,313
Working capital	**358,060**	477,881
Intangible assets	**4,112,602**	4,515,051
Total assets	**5,308,181**	5,147,579
Total liabilities	**2,233,687**	1,487,743
Deficit	**(13,513,941)**	(10,925,311)
Total equity	**3,074,494**	3,659,836

Statements of net loss and comprehensive loss data:

	Three months ended Sept 30, 2024 $	Three months ended Sept 30,2023 $	**Nine months ended Sept 30, 2024 $**	Nine months ended Sept 30, 2023 $
Research and development	**678,299**	426,852	**1,597,067**	1,252,165
General and administrative	**268,909**	163,416	**796,183**	568,496
Interest income	**-**	(7,425)	**(5,819)**	(18,393)
Interest expense	**45,793**	45,793	**136,384**	61,721
Accretion expense	**22,193**	18,313	**63,072**	24,575
Foreign exchange gain (loss)	**473**	19	**1,743**	1,598
Net loss and comprehensive loss	**(1,015,667)**	(646,968)	**(2,588,630)**	1,890,162
Basic and diluted loss per share	**(0.01)**	(0.01)	**(0.03)**	(0.03)
Weighted average shares outstanding (basic and diluted)	**89,667,621**	69,808,000	**76,660,137**	69,829,500

RESULTS OF OPERATIONS

Research and development expenses

	Three months ended Sept 30, 2024 $	Three months ended Sept 30,2022 $	**Nine months ended Sept 30, 2024 $**	Nine months ended Sept 30, 2022 $
Contract research - UBC Agreement	**181,750**	108,500	**472,000**	369,250
Amortization	**135,129**	135,129	**402,449**	400,980
Consulting	**201,125**	84,576	**348,992**	260,076
Chemistry and Manufacturing	**131,665**	83,733	**278,169**	127,721
Share-based payments	**10,073**	12,620	**34,522**	57,994
Patent and legal fees	**18,557**	2,294	**60,935**	36,144
	678,299	426,852	**1,597,067**	1,252,165

Total research and development expenses were $678,299 and $1,597,067 for the three and nine months ended September 30, 2024, versus $426,852 and $1,252,165 incurred during the three and nine months ended September 30, 2023, respectively.

The increase in R&D expenses during the three and nine months ended September 30, 2024 relative to the three and nine months ended September 30, 2023 is primarily due to the following:

- An increase in contract research as the current period reflects the expanded contract renewal with UBC versus the prior period which reflects the cost of the previous agreement. The expanded UBC agreement will support increased research and development activities related to the implementation of the Deep Docking AI Drug Discovery Platform.

- Increased consulting costs related to the investment in additional personnel to support the Company's AI activities and infrastructure. The variance is larger on a percentage basis during the three-month period as the expansion of the Company's AI capabilities has been ramping up throughout the year.

- Increased chemistry and manufacturing costs related to higher activity related to medicinal chemistry consulting and manufacturing during the current quarter relative to the prior comparable period.

General and administrative expenses

	Three months ended Sept 30, 2024 $	Three months ended Sept 30,2022 $	**Nine months ended Sept 30, 2024 $**	Nine months ended Sept 30, 2022 $
Legal and professional	**7,166**	16,356	**106,330**	112,640
Public company expenses	**149,493**	46,994	**383,419**	143,166
Share-based payments	**8,139**	12,848	**34,242**	33,416
Consulting	**39,000**	39,000	**117,000**	117,000
Director fees	**30,234**	25,683	**90,700**	80,620
Rent	**7,939**	10,500	**24,234**	31,500
Other expenses	**26,938**	12,035	**40,258**	50,154
	284,534	163,416	**811,808**	568,496

General and administrative expenses were $284,534 and $811,808 for the three and nine months ended September 30, 2024, versus $163,416 and $568,496 incurred during the three and nine months ended September 30, 2023, respectively.

The increase in G&A expenses during the three and nine months ended September 30, 2024 relative to the three months ended September 30, 2023 is primarily due to an increase in public company expenses during the current period from increased corporate communications related to the Company's expanded AI-related research and development activities, and the utilization of digital market maker in the current period which was not active in the prior comparable period.

Total cash expenses related to research and development and general and administrative expenses were $793,867 and $1,922,037 for the three and nine months ended September 30, 2024, versus $429,671 and $1,328,271 for the prior comparative period.

The net increase in cash expenses relative to the comparative period is primarily due to a period over period increase in public company expenses and medicinal chemistry expenses as described above.

SUMMARY OF QUARTERLY RESULTS

	Sept 30, 2024 $	June 30, 2024	Mar 31, 2024 $	Dec 31, 2023 $	Sept 30, 2023 $	Jun 30, 2023 $	Mar 31, 2023 $	Dec 31, 2022 $
Net Loss	(1,015,667)	(820,580)	(752,383)	(722,733)	(646,968)	(601,404)	(641,790)	(647,426)
Basic and diluted loss per share	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)

During the three months ended September 30, 2024, the Company reported a net loss of $1,015,667. The current quarters net loss is higher than the preceding two quarters primarily due to expanded research and development contracts with UBC and Pharma Inventor to support the Company's AI activities, and increased corporate communications launched in conjunction with Company's expanded R&D capabilities.

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.

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 recently announced a non-brokered private placement offering (the "Offering") of up to $1.25 million with initial commitments totaling over $800,000 from strategic investors. On November 28, 2024 the Company announced that the Offering will be increased to $2.5 million to accommodate investor demand. Proceeds from the Offering, in conjunction with proceeds from the previously completed 2024 Private Placement will support the company's ongoing operations and AI supported R&D activities. However, additional financing will be required in the future. While the Company has been successful in arranging financing in the past, the success of such initiatives cannot be assured. These financial statements do not reflect the adjustments to the carrying values of assets and liabilities and the reported expenses and statement of financial position classifications that would be necessary were the going concern assumption deemed to be inappropriate. These adjustments could be material.

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.

Cash Flows

The following table provides information regarding our cash flows for the nine months ended September, 2024, and 2023:

	September 30, 2024 $	September 30, 2023 $
Cash used in operating activities	(2,095,448)	(1,484,695)
Cash provided by financing activities	1,914,184	1,401,192
Cash provided by investing activities	-	-
Net increase in cash and cash equivalents	**(181,264)**	(83,503)

Cash flows from operating activities

Net cash used in operating activities was $2,095,448 during the nine months ended September 30, 2024. Net cash used in operating activities for the nine months ended September 30, 2024, consisted of a net loss of $2,588,630 less non-cash adjustments of $554,625 and a decrease in changes in non-cash working capital of $61,443. Non-cash adjustments were related to amortization expense of $402,449, share-based payments of $68,674, accretion expense of $63,072 and interest paid in shares of $20,340.

Total cash operating expenses related to research and development and general and administrative expenses were $1,922,037 and $1,328,271 for the nine months ended September 30, 2024 and 2023, respectively.

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 classified 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, accounts payable and accrued liabilities, due to related parties and convertible debt.

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 based on 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 year ended December 31, 2023. The fair values of cash and cash equivalents, amounts receivable, accounts payable and accrued liabilities, due from related parties, and convertible debt approximate the carrying values due to the short-term nature of these instruments.

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 Canadian bank. The amounts receivable is related to GST receivable from the Government of Canada and accrued interest from a reputable Canadian bank. Management actively reviews the risk of the financial institutions and/or the counterparty to underlying financial instruments failing to meet its obligations and adjusts if and when any undue risk is identified. At September 30, 2024, the Company does not believe it is currently exposed to any significant credit risk.

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 over anticipated needs.

The Company is obligated to the following contractual maturities of undiscounted cash flows at September 30, 2024:

	Amount $	Year 1 $	Year 2 $	Year 3 and over $	Total $
Trade and other payables	837,519	837,519	-	-	837,519
Convertible debt[(1)]	1,514,000	181,680	1,604,840	-	1,786,520
	2,351,519	1,019,199	1,604,840	-	2,624,039

(1) Convertible debt interest may be paid in cash or shares at the option of the holder

Foreign currency risk

The Company is exposed to foreign currency risk on fluctuations in foreign exchange rates for any cash, 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.

There has been no significant change in the credit risk and concentrations, interest rate risk, liquidity risk or foreign currency risk since December 31, 2023.

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, 2024, the Company had amounts due to related parties of $129,880 **(**December 31, 2023 - $74,289) comprised of board fees, management compensation and reimbursable expenses.

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

	Three months ended Sept 30, 2024 $	Three months ended Sept 30, 2023 $	**Nine months ended Sept 30, 2024 $**	Nine months ended Sept 30, 2023 $
Compensation / short term benefits	**127,910**	127,909	**383,730**	383,728
Board fees	**30,234**	25,683	**90,700**	80,602
Share-based payments	**12,381**	28,603	**58,607**	84,179
	170,525	182,195	**533,037**	548,527

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, 2024, Mr. Bacha received $30,000 and $90,000, respectively (2023 - $30,000 and $90,000, respectively) in fees for management services. As of September 30, 2024, the Company has included in its accounts payable and accrued liabilities $23,737 (December 31, 2023 - $12,943) due to Mr. Bacha related to management services plus GST ($15,750) and reimbursable expenses ($7,987).

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, 2024, Mr. Daugaard received $35,910 and $107,100, respectively (2023 - $35,910 and $107,100) in fees for management services. As of September 30, 2024, the Company has included in its accounts payable and accrued liabilities $12,569 (December 31, 2023 - $12,569) due to Mr. Daugaard related to management services plus GST.

The Company entered into a consulting agreement with Langlands & 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, 2024, Mr. Langlands received management fees of $31,998 and $95,994, respectively (2023 - $31,998 and $95,994, respectively) in fees for management services. As of September 30, 2024, the Company has included in its accounts payable and accrued liabilities $11,393 (December 31, 2023 - $11,200) due to Mr. Langlands related to management services plus GST ($11,200) and reimbursable expenses ($193).

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, 2024, Tandem charged fees of $30,000 and $90,000, respectively, (2023 - $30,000 and $90,000, respectively) for CFO services. As of September, 2024, the Company has included in its accounts payable and accrued liabilities $10,500 (December 31, 2023 - $10,500) due to Tandem related to management services plus GST.

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, 2024, the Company has included in its accounts payable $24,549 (December 31, 2023 - $8,137) for Al De Lucrezia, $26,250 (December 31, 2023 - $8,750) for Dennis Brown, and $26,500 (December 31, 2023 - $8,795) 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 29, 2024, the company has the following securities outstanding:

	#
Common shares	90,289,175
Warrants – Convertible debt financing	3,028,000
Warrants – 2024 Private Placement	19,950,000
Finder's warrants	12,000
Stock Options	7,302,500
Total	**120,581,675**

On July 26, 2024 the company announced the final close of the 2024 Private Placement which resulted in the issuance of 19,950,000 common shares, 19,950,000 common share purchase warrants, and 12,000 finders warrants, for gross proceeds of $2 million.

On March 24, 2024, 11,414,750 investor warrants with an exercise price of $0.40 per warrant expired.

On August 28, 2023 the Company issued 1,367,500 stock options to certain directors, officers, and consultants.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

Please refer to the Annual Financial Statements for the year ended December 31, 2023.

There has been no changes to the Company's critical accounting policies and estimates for the nine months ended September 30, 2024.

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.sedarplus.ca. 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.