

ADVANCING CANCER CARE WITH THE PRECISION & POWER OF AI

TSX.V: RKV Investor Presentation | Q1 2025



FORWARD-LOOKING STATEMENTS

This presentation includes forward-looking statements regarding the Company and its respective business, which may include, but is not limited to, statements with respect to the terms of the private placement, the closing of the private placement, the investors who will participate in the private placement, the proposed business plan of the Company; the Company's commitment to advancing new cancer therapies; the ability of the Company to extract value from the Deep Docking AI platform; the Company's ability to execute on its business plans while maintaining high standards of research; the ability of Pharma Inventor Inc. to accurately provide medicinal chemistry support; the projected timeline and effectiveness of the Company's strategy to utilize the Deep Docking AI platform; and the Company's ability to generate shareholder value. Often, but not always, forward-looking statements can be identified by the use of words such as "plans", "is expected", "expects", "scheduled", "intends", "contemplates", "anticipates", "believes", "proposes" or variations (including negative variations) of such words and phrases, or state that certain actions, events, or results "may", "could", "might" or "will" be taken, occur or be achieved. Such statements are based on the current expectations of the management of the Company.

The forward-looking events and circumstances discussed in this release may not occur by certain specified dates or at all and could differ materially as a result of known and unknown risk factors and uncertainties affecting the Company, including risks regarding the medical device industry, economic factors, regulatory factors, the equity markets generally and risks associated with growth and competition.

Although the Company has attempted to identify important factors that could cause actual actions, events, or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events, or results to differ from those anticipated, estimated or intended. No forward-looking statement can be guaranteed. Except as required by applicable securities laws, forward-looking statements speak only as of the date on which they are made and the Company undertakes no obligation to publicly update or revise any forward-looking statement, whether as a result of new information, future events, or otherwise. The reader is referred to the Company's most recent filings on SEDAR for a more complete discussion of all applicable risk factors and their potential effects, copies of which may be accessed through the Company's profile page at www.sedar.com.

ACCELERATING DRUG DISCOVERY TO SAVE LIVES

Our mission has always been about improving the lives of those battling cancer. Now, with a robust Artificial Intelligence (AI) platform on our side, we are moving into a new era of research speed and accuracy.



Using Best in Class Al algorithms, we quickly and efficiently analyze billions of molecular structures to evaluate their potential as targeted cancer drugs.



We then validate their activity using our established R&D infrastructure.



This Innovative Approach will develop therapies targeting DNA-damage response-related vulnerabilities that are common in 75% of cancerous tumors.



\$18B

Annual addressable market by 2030¹

RAKOVINA THERAPEUTICS POWERED BY AI

INVESTMENT THESIS

FOCUSED ON DDR RESPONSE-BASED THERAPIES

Founded in 2021 to focus on the development of **new DNA-damage (DDR) response-based therapies** for the treatment of cancer

EXCLUSIVE ACCESS TO BEST-IN-CLASS AI PLATFORMS

Exclusive access to utilize the **Deep Docking**¹ and **Variational AI Enki**[™] platforms to rapidly screen billions of drug candidates against DNA-damage response targets

PARTNERSHIP WITH THE UNIVERSITY OF BRITISH COLUMBIA

Leveraging robust lead-optimization infrastructure already established in **collaboration with the University of British Columbia**

LED BY A TEAM WITH TRACK RECORD OF SUCCESFUL DRUG LICENSING DEALS

World-renowned leadership with a track-record of success, deep industry ties and a leading, Scientific Advisory Team with multiple successful drug licensing deals with major pharmaceutical companies.

CRITICALLY ACCLAIMED COMPANY

Named a Top 10 Undervalued Biotechnology Industry Stock by The Globe & Mail



EXPERIENCED TEAM WITH A TRACK RECORD OF SUCCESS

Our team has extensive expertise in drug discovery, preclinical and clinical development and partnering to advance breakthrough innovations to become potential life-changing treatments in the oncology field.



JEFFREY BACHA, BSC, MBA Executive Chairman/Director

- 25 years of experience as founder and executive of multiple companies across the health sector such as Kintara Therapeutics (NASDAQ: KTRA), XBiotech, Inc. (NASDAQ: XBIT), Inimex Pharmaceuticals and Inflazyme Corp.
- Member of the National Brain Tumor Society Research Roundtable and the Board of the Leukemia Lymphoma Society of Canada



MADS DAUGAARD, PHD

President & Chief Scientific Officer

- Cancer biologist with >20 years of expertise in translational cancer research, DNA-damage response mechanisms, and therapeutics targeting DNA integrity
- Senior Research Scientist at Vancouver Prostate Centre, Associate Professor at University of British Columbia, Department of Urologic Sciences and Co-founder of VAR2 Pharmaceuticals (2012) and VarCT Diagnostics (2017)



DAVID HYMAN, CPA

Chief Financial Officer

- Chartered Accountant and Chartered Business Valuator with over 25 years of financial experience spanning public practice, capital markets, private equity, and industry
- Currently a Partner with Tandem Accounting Group, providing fractional CFO services to small and medium-sized businesses including multiple life science companies
- Vice President at Camcor Energy Partners, an energy-focused private equity manager
- Senior Analyst at Raymond James



ARTEM CHERKASOV, PHD

SAB/Senior AI & Medicinal Chemistry Advisor

- Professor at UBC's Department of Urologic Sciences and Senior Scientist at Vancouver Prostate Centre
- Co-authored 200+ research papers, filed 80+ patents, and licensed 8 drug candidates to major companies as well as utilized AI-based platform, Deep Docking, to identify potential COVID-19 treatments, sharing findings with the scientific community



JOHN LANGLANDS, PHD

- Chief Operating Officer
- 25+ years of experience in the preclinical and clinical development of new pharmaceuticals at Naegis Pharmaceuticals, Kintara Pharmaceuticals (NASDAQ: KTRA) and Inflazyme Pharmaceuticals
- Previously Program Authority and Senior Lecturer for postgraduate training in Pharmaceutical Medicine & Drug Development UNSW in Sydney, Australia



MICHELLE SELTENRICH, BSC, MBA

Director of Corporate Development

- 23+ years accomplished executive in publicly-traded biotech finance, operations and business development.
- Former Director of FP&A at Zymeworks, led the FP&A team, developed and maintained optimized processes and SOX compliance.
- Former VP of Operations at Sirona Biochem, negotiated key AbbVie deal, boosting share price by 48%.



SCIENTIFIC ADVISORY BOARD



DENNIS BROWN, PHD

Chair, Scientific Advisory Board (SAB)/Director

- Involved in cancer drug discovery and development for 35+ years and currently serves as a member of the National Brain Tumor Society Research Roundtable
- Founded or co-founded multiple companies including Matrix Pharmaceutical, Inc., Mountain View Pharmaceuticals, ChemGenex Pharmaceuticals and Kintara Pharmaceuticals (NASDAQ: KTRA)



PETRA HAMERLIK, PHD

SAB/Senior Drug Development Advisor

- Professor, Chair of Translational Neuro-Oncology, University of Manchester, UK
- Former director and principal scientist, AstraZeneca, DNA-damage response program
- Highly regarded researcher, author and lecturer in neuro oncology



WANG SHEN, PHD

SAB/Senior Medicinal Chemistry Advisor

- Inventor of the kt-2000, kt-3000 and kt-4000 families of drug candidates under development by Rakovina Therapeutics co-author of over 40 peer-reviewed publications and co-inventor of over 40 patents
- 20+ years of drug discovery and project management at large pharmaceutical companies and founder of Viva Vision Biotech

ARTEM CHERKASOV, PHD

SAB/Senior AI & Medicinal Chemistry Advisor

- Professor at UBC's Department of Urologic Sciences and Senior Scientist at Vancouver
 Prostate Centre
- Co-authored 200+ research papers, filed 80+ patents, and licensed 8 drug candidates to major companies as well as utilized AI-based platform, Deep Docking, to identify potential COVID-19 treatments, sharing findings with the scientific community



LEONARD POST, PHD

SAB/Senior Drug Development Advisor

- 35+ years of drug development and leadership experience in the pharmaceutical and biotechnology industry spanning companies of all sizes
- Previously chief scientific officer of BioMarin, senior vice president of research and development for Onyx Pharmaceuticals and vice president of discovery research for Parke-Davis Pharmaceuticals



NEIL SANKAR, MD SAB/Executive Medical Director

- Held Clinical development positions within leading Biotech/Pharma including Genentech, Medimmune, Pharmacyclis, Fiveprime, Otsuka,Portola, CBT Pharmaceuticals, LSK biopharma and Rhizen Pharmaceuticals
- Extensive experience in the application of US Food and Drug Administration regulations

INDEPENDENT DIRECTORS

AL DELUCREZIA

Vice Chairman/ Director

- Was CEO, CFO, President and Director of Manera Capital Corp. (now GT Gold Corp.)
- Founded Califfi Capital Corp., and has been its CEO since 2017, as well as Vincero Capital Corp, also serving as its CEO since 2019

MICHAEL LIGGETT, CPA Director, Audit Committee Chair

- 30 years of experience at public and private companies including Ico Therapeutics, Naegis Pharmaceuticals and Inflazyme Pharmaceuticals
- Has completed more than \$300 million in equity and debt financings and closed more than \$200 million in acquisition transactions



RAKOVINA THERAPEUTICS AI POWERED DRUG DEVELOPMENT

Patients can not wait years to get the treatment they need today and tomorrow.



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A NEW ERA WITH DRUG DISCOVERY THROUGH AI COLLABORATIONS

- Exclusive access to Deep Docking¹ Al platform for DNA-damage response targets
- Enki[™] DDR-kinase drug discovery collaboration with Variational AI Inc.
- Rakovina Therapeutics owns rights to all novel drug candidates generated through the collaborations
- Al Programs overseen by Rakovina scientific advisory board member, Dr. Artem Cherkasov

HOW IT WORKS

Deep Docking¹ and Enki[™] are distinct computational modeling techniques to rapidly evaluate billions of compounds to identify novel therapeutic drug candidates.

There is a relationship between the biological activity of a molecule and its chemical structure. This relationship, known as structureactivity relationship (SAR), is used for predicting the biological effect of candidate drug molecules from compounds like never before using the power of our AI Platforms.



DEEP DOCKING¹ AI PLATFORM: REAL-WORLD IMPACT ON COVID-19

The team behind Deep Docking partnered with Nvidia, Dell and UBC Advanced Research Computing (ARC) to identify potential COVID-19 therapeutics from large libraries.

"Even with a supercomputer, it would take years to screen billions of compounds with traditional methods; with Deep Docking¹ we did it in 20 days. It is a paradigm shift." – Art Cherkasov, Scientific Advisory Board²





11 Months



JANUARY 25

COVID 19 first reported in Canada

FEBRUARY 19

1,000 most promising structures published online by UBC

MARCH 11



WHO declares global pandemic Dr. Cherkasov publishes research

DECEMBER 22

PAXLOVID granted emergency use authorization

Source: 1. Gentile F, et al. Deep Docking:

1. Gentile F, et al. Deep Docking: A Deep Learning Platform for Augmentation of Structure Based Drug Discovery. ACS Cent Sci. 2020 Jun 24;6(6):939-949. doi:10.1021/acscentsci.0c00229 2. UBC, https://strategicplan.ubc.ca/ai-technology-enables-screening-of-billions-of-compounds-to-identify-potential-covid-19-drugs



DNA-DAMAGE RESPONSE (DDR)

- DDRs are naturally occurring mechanisms that detect and repair DNA damage within our cells.
- Many cancers harbor a defect in these natural repair mechanisms allowing mutations to accumulate and grow into life-threatening cancer.
- These defects and mutations in DDR mechanisms provide novel targets for new cancer therapies.

\$18B

DDR annual market potential by 2030²

COMBINING AI PLATFORMS WITH RAKOVINA CAPABILITIES FOR RAPID DDR DRUG DEVELOPMENT

COMPOUND SCREENING & LEAD OPTIMIZATION PHASE only 3-4 months from 3 years

COMPOUND SCREENING



DRUG VALIDATION LAB



QUALIFIED CLINICAL LEADS





ULTRA LARGE DATASETS FOR DRUG SCREENING

Ultra large database of **more than 5 billion** drug candidate molecules is screened through Rakovina Therapeutics' AI collaborations for each cancer type being targeted using readily available SAR data.

INTEGRATED PLATFORM FOR DDR DRUG VALIDATION

Rakovina Therapeutics' expertise and established in-house laboratory infrastructure established in partnership with UBC is used to validate compounds for advancement to human clinical trials and pharmaceutical partnerships.

The level of integration between AI computations and the wet lab operation sets Rakovina apart from peers.

ADVANCING DDR DRUG CANDIDATES

Qualified clinical leads are advanced to human trials through potential partnerships with pharma companies. Advancing the goal to provide cancer treatment sooner through accelerated discovery of new drug therapeutics



RAKOVINA THERAPEUTICS' DRUG DEVELOPMENT PORTFOLIO



FIRST AI DDR TARGET: A CNS PENETRANT SELECTIVE INHIBITOR OF PARP-1

- PARP is a type of enzyme that helps repair DNA damage in cells.
- PARP inhibitors are a type of drug that works by preventing certain types of cancer cells from repairing damaged DNA, committing them to die.
- 1st generation PARP-1/2 inhibitors have achieved commercial success in the treatment of certain breast, ovarian and prostate cancers.
- But they are limited by side effects and lack the ability to treat cancers that spread to the brain, giving rise to the need for a PARP-1 selective inhibitor to reduce side effects that can also treat CNS metastases.



SECOND AI DDR TARGET: A CNS PENETRANT SELECTIVE INHIBITOR OF ATR

- ATR (ataxia telangiectasia and Rad3-related protein) is a critical kinase that senses and responds to DNA damage by activating repair pathways and orchestrating cell cycle checkpoints.
- Cancer cells, which often have high levels of replication stress and defective DDR mechanisms, rely heavily on ATR for survival. Inhibiting ATR selectively disrupts these cancer-specific dependencies, leading to tumor cell death.
- Several large pharmaceutical companies, including Merck, AstraZeneca, and Bayer, have shown significant interest in DDR-targeting therapies, including ATR inhibitors, as part of their oncology portfolios.





Estimated ATR inhibitor market in 2033¹



H2 2024 / H1 2025 RAKOVINA MILESTONES





Source: 1. Gentile F, et al. Deep Docking: A Deep Learning Platform for Augmentation of Structure Based Drug Discovery. ACS Cent Sci. 2020 Jun 24;6(6):939-949. doi:10.1021/acscentsci.0c00229

INVESTMENTS IN DNA-DAMAGE RESPONSE BY MULTI-NATIONAL PHARMACEUTICAL CORPORATIONS

RECENT DDR TRANSACTIONS



MARKET SUMMARY

EXCHANGE	TSX Venture Exchange (TSXV)
SYMBOL	RKV
SECTOR / INDUSTRY	Biopharmaceuticals / Oncology
52 WEEK RANGE ¹	CAD \$0.05 - 0.205
SHARES OUTSTANDING FULLY DILUTED	140,492,575 237,846,947
WARRANTS ²	76,011,872
MARKET CAPITALIZATION ¹	CAD ~ \$24 million
AUDITORS	Davidson & Company LLP



1) Prices are as of January 8, 2025 (<u>https://money.tmx.com/en/quote/RKV</u>)

2) \$0.13 weighted average exercise price and 2.1 years weighted average remaining life as of December 31, 2024 – consists of 3,028,000 warrants issued with convertible debt (\$0.15, 0.9 years remaining life), 19,950,000 July 2024 Private Placement warrants (\$0.20, 2.5 years remaining life), and 12,000 finders warrants (\$0.20, 2,5 years remaining life, 50,000,000 December 2024 Private Placement warrants (\$0.10, 2.0 years remaining life), and 3,021,872 finders warrants (\$0.10, 2.0 years remaining life)

WHY INVEST IN RAKOVINA THERAPEUTICS

A new paradigm in drug discovery and therapeutic intervention to treat cancer.



\$18B ADDRESSABLE DDR MARKET

Broad cancer application targeting **75% of all solid tumors** that harbor a DNA-Damage response defect.



LEVERAGING REAL-WORLD PROVEN AI PLATFORMS TO ACELERATE DRUG DISCOVERY

- **Deep Docking put to the test during COVID-19**. Successful screening of billions of compounds in just 20 days⁴ and drug approval in 11 months.
- Variational AI's proprietary Enki[™] validated through partnerships with big pharma.



SUCCESSFUL BLUEPRINT

Deep Docking platform developed drug licensed to **Roche Pharma** in 2015 for over \$140M USD up-front in largest IP deal ever done by UBC. <u>LINK</u>



BRING-TO-MARKET MANAGEMENT TEAM

Deep **expertise in drug discovery** research, development, and the approval process to advance breakthrough innovation.



UNMATCHED INTEGRATED DRUG VALIDATION

An integrated DDR drug validation platform leveraging Al **and inhouse laboratory infrastructure and wet lab operations** to rapidly advance to clinical trials and pharma partnerships.

Source: 1. Precedence Research, www.precedenceresearch.com/dna-repair-drugs-market 2. National Institutes of Health, www.ncbi.nlm.nih.gov/pmc/articles/PMC6098043/

3. ACS Publications, https://pubs.acs.org/doi/10.1021/acscentsci.0c00229 4. UBC, https://strategicplan.ubc.ca/ai-technology-enables-screening-of-billions-of-compounds-to-identify-potential-covid-19-drugs





TSX-V: RKV



UNDERVALUED BIOTECHNOLOGY INDUSTRY STOCKS

By the Globe & Mail

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Source: https://www.theglobeandmail.com/investing/markets/stocks/RKV-X/pressreleases/24167118/rakovina-therapeutics-top-10-undervalued-biotechnology-industry-stocks-rkv/



OVER 70% OF PHARMACEUTICAL BREAKTHROUGHS STEM FROM THE EFFORTS OF SMALL BIOTECH COMPANIES LIKE RAKOVINA THERAPEUTICS.





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