



Revolutionizing CAR-T Therapy

JULY 2022

NASDAQ: KRBP
Kiromic.com



Forward Looking Statements

This presentation contains forward-looking statements that involve substantial risks and uncertainties. Kiromic makes looking statements pursuant to the safe harbor provisions of the United States Private Securities Litigation Reform Act, the Securities Exchange Act of 1934, as amended, and other federal securities laws. All statements other than statements of fact are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as: “will,” “could,” “can,” “believe,” “intends,” “continue,” “plans,” “expects,” “anticipates,” “estimates,” “may,” or the negative of other comparable terminology. These forward-looking statements include, but are not limited to, statements regarding current and anticipated IND applications including statements regarding the scope of and timing for submission of an IND for the Deltacel™ product platform; the sponsored research agreement and the data that will be generated as a result of such agreement; the timing for submitting and activating Kiromic’s IND applications; the benefits of utilizing non-genetically engineered C cells as our first in-human study; Kiromic’s ability to achieve its objectives; and the timing for the initiation and successful completion of Kiromic’s clinical trials of its product candidates. These forward-looking statements involve known and unknown risks, uncertainties, and other factors that may cause actual results, levels of activity, performance, or achievements to be materially different from those information expressed or implied by these forward-looking statements. These risks and uncertainties are not limited to, the risks and uncertainties discussed in our Annual Report on Form 10-K for the year ended December 31, 2023, as detailed from time to time in our SEC filings. You should not rely upon forward-looking statements as predictions of future results. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that they will be realized. Future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements may differ or occur. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of the forward-looking statements. Such forward-looking statements relate only to events as of the date of this press release. We undertake to update any forward-looking statements except to the extent required by law.

Free Writing Prospectus

This presentation highlights basic information about us and the proposed offering. Because it is a summary, it does not contain information that you should consider before investing.

We have filed a registration statement (including a preliminary prospectus) with the SEC for the offering to which this relates, which registration statement has not yet been declared effective by the SEC (File No. 333-265860). Before you invest, read the preliminary prospectus and the registration statement (including the risk factors described therein) for more information about us and the offering.

You may access these documents for free by visiting EDGAR on the SEC Website at <http://www.sec.gov>. Alternatively, our underwriter participating in the offering will arrange to send you the prospectus if you contact ThinkEquity LLC, Prospectus, 17 State Street, 41st Floor, New York, New York 10004, telephone: (877) 436-3673 or e-mail: prospectus@think-equity.com

This presentation does not constitute an offer to sell, or the solicitation of an offer to buy, nor will there be any sale of the securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification of the securities laws of such state or jurisdiction. The offering is only being made by means of the prospectus.

Offering Summary

Issuer	Kiromic BioPharma, Inc.
Symbols	Nasdaq: KRBP, KRBPW
Expected Offering Size	Approximately \$25,000,000 + 15% Over-allotment Option
Securities Offered	One common share and one 5-year warrant (or for purchasers who cannot beneficially own more than 4.99% of the outstanding shares of common stock, one common share, one common stock funded warrant and one warrant)
Use of Proceeds	<ul style="list-style-type: none">• Submission and the clinical trial activation of IND #1, which is our Deltacel™ product candidate in standard anti-tumor modality.• IND resubmission of the IND for ALEXIS-PRO-1 and the corresponding trial activation.• Intellectual property protection and reinforcement.• IND applications and IND enabling trials for our other product candidates.• Research and development, and potential acquisitions/investments.• Working capital; personnel expenses, general corporate purposes, including but not limited to legal fees with pending matters.• We may also be required to apply a portion of the net proceeds for:<ul style="list-style-type: none">• Litigation expenses and to pay in connection with a judgment or settlement of private and public litigation against us, including the payment of any government fines or penalties.
Sole Book-Runner	ThinkEquity

Contents



The Kiromic Difference



Diamond AI™ (Artificial Intelligence)



Gamma Delta T-cell (GDT) Therapy:
Mechanism of Action (MOA), Product Pipeline, cGMP Manufa



Current Status and Path Forward

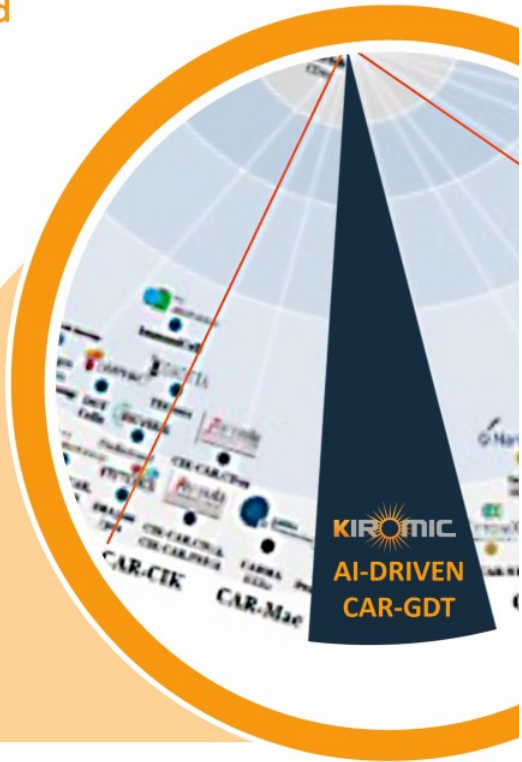
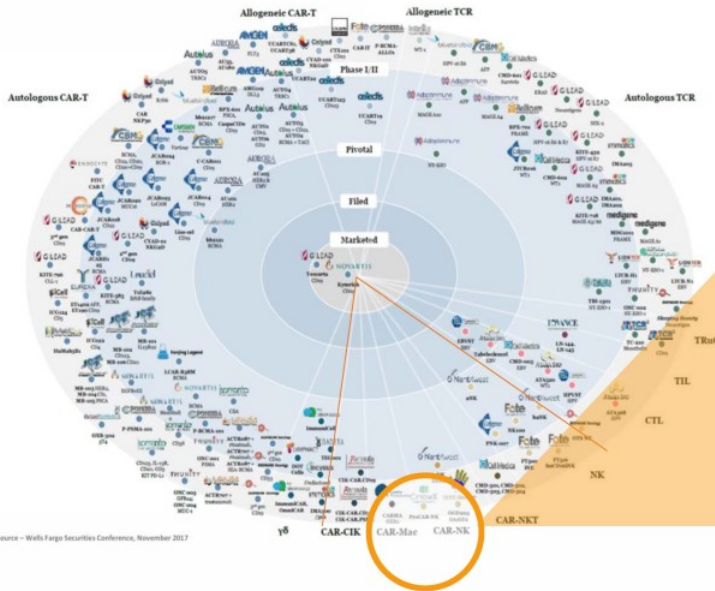
The **Kiromic** Difference

Kiromic BioPharma is the only cell therapy company combining AI-driven genetically edited Gamma Delta T-cells (GDT) with proprietary targeting technology to address solid malignancies.



Strategic Competitive Landscape

6 Known Companies (including Kiomic) in the Gamma Delta T Cell Therapy space.
No Known Competitors with AI-driven Technology Combined with a Gamma Delta CAR-T Delivery Platform.



Source - Wells Fargo Securities Conference, November 2017

Solid Malignancy Market Opportunity

Global CAR-T Cell
Therapy Market
by 2027¹ (USD)

\$33+
Billion

90%

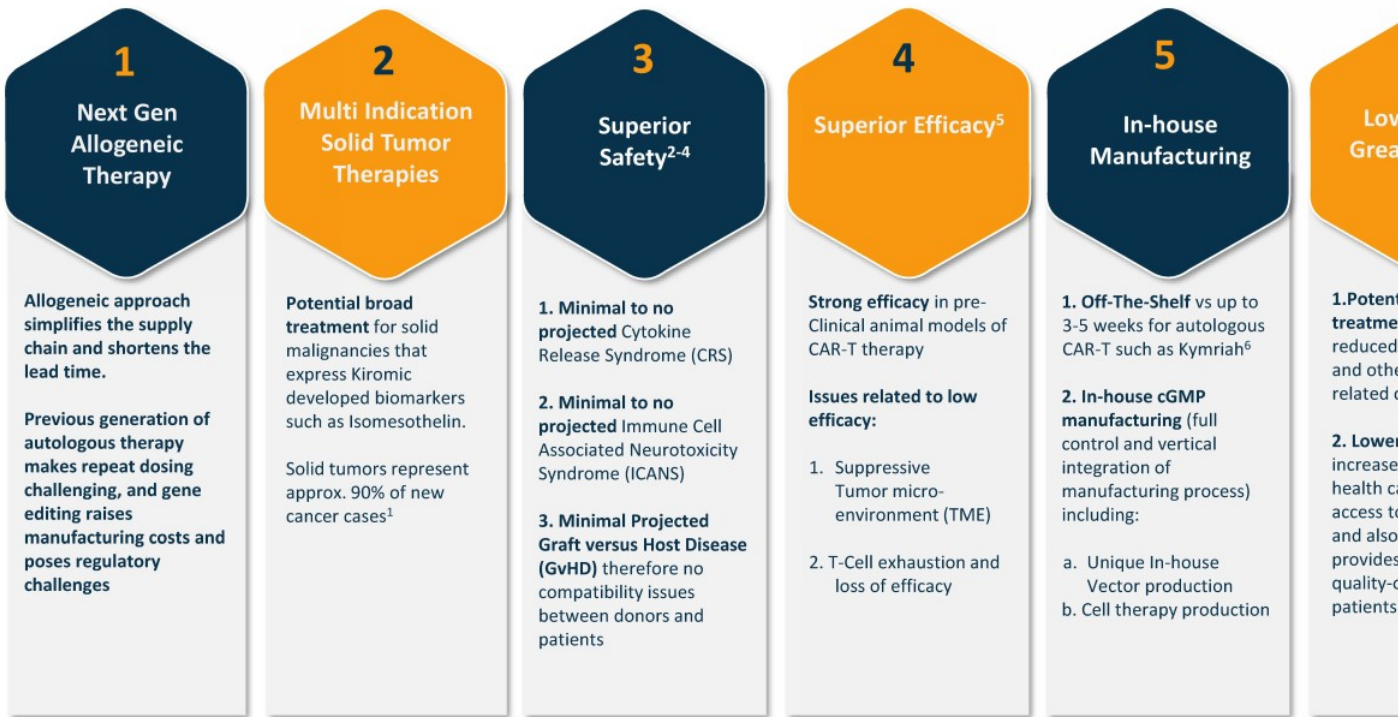
of Cancers Are
Solid Malignancies²

¹ Global CAR-T Cell Therapy Market, By Product Type, By Tumor Type, By Indication, By Treatment Type, By Targeted Antigen, By End User, By Region, Competition, Forecast and Opportunities, 2017-2027 (ReportLinker)

² American Cancer Society, Cancer Facts & Figures, 2022. <https://www.cancer.org/research/cancer-facts-statistics.html>

Competitive Difference

Allogeneic Gamma Delta Based T Cell Therapies



¹American Cancer Society, Cancer Facts & Figures, 2022. <https://www.cancer.org/research/cancer-facts-statistics.html>

²Wang X, et al. Mesothelin isoform 2 is a novel target for allogeneic CAR gamma delta T cell therapy in solid tumors. AACR 2021; Abstract No. 1534

³Barber A, et al. Gamma delta T cells engineered with a chimeric PD-1 receptor effectively controls PD-L1 positive tumors in vitro and in vivo with minimal toxicities. AACR 2021; Abstract No. LB148

⁴Xu Y, et al. Allogeneic Vgamma9Vdelta2 T-cell immunotherapy exhibits promising clinical safety and prolongs the survival of patients with late-stage lung or liver cancer. Cell Mol Immunol 18(2):427-439.

⁵Farrington G, et al. T-cells expressing a chimeric-PD1-Dpp10-CD3zeta receptor reduce tumour burden in multiple murine syngeneic models of solid cancer. Immunology 160(3):280-294.

⁶NPS Medicine; Consumer Medicine Information; epub

⁷Maziarz RT. CAR T-cell therapy total cost can exceed \$1.5M per treatment. Cell Therapy Next; May 29, 2019.

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Artificial Intelligence and Bioinformatic Analytic Discovery & Development Platform

Algorithms and Large-Scale Genomics Analysis for Target Prediction

Diamond AI[™]
Artificial Intelligence Neural Network



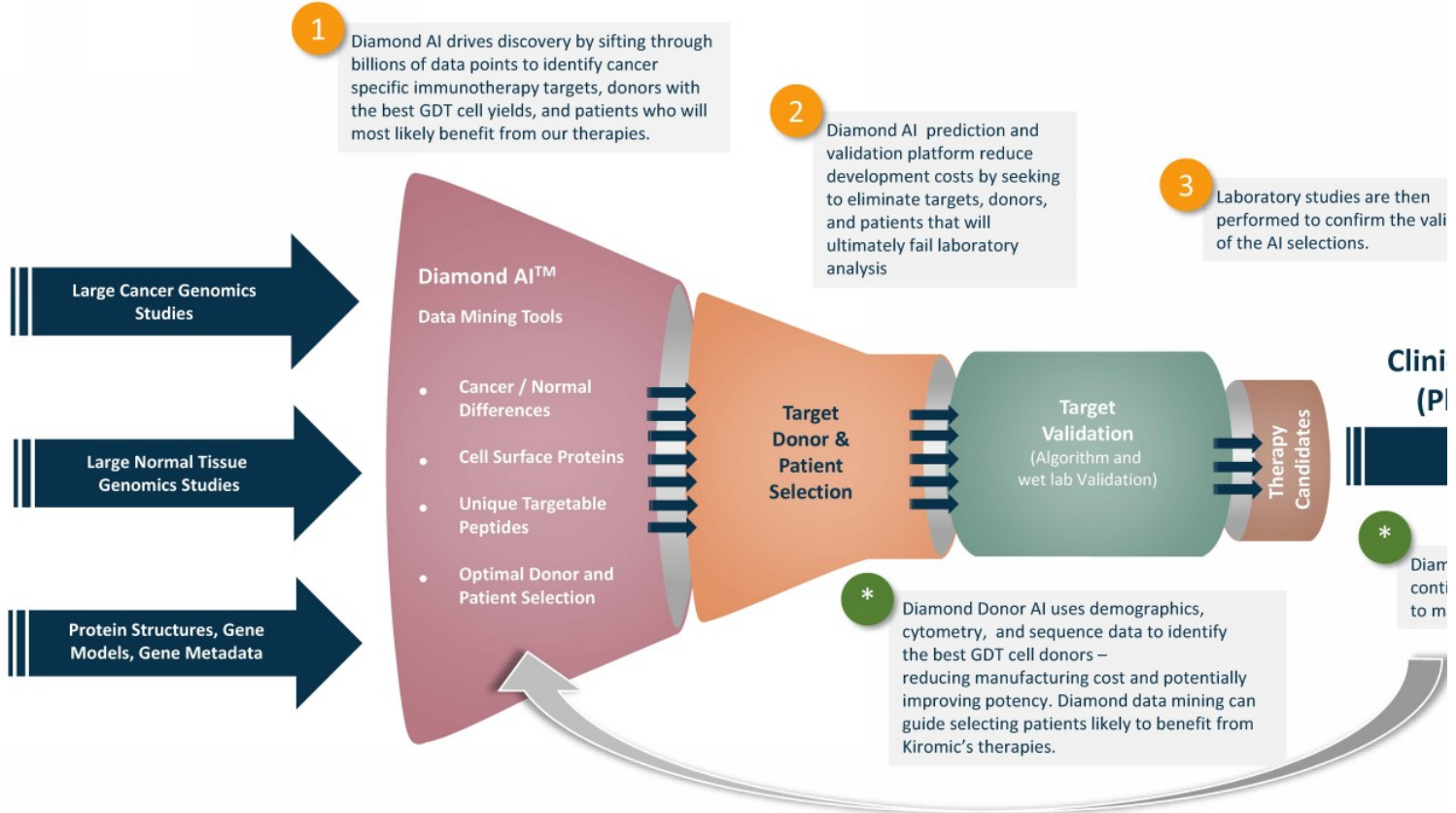
A.I. integrated with each stage of the Kiromic therapy production lifecycle

Discovering New Multi-tumor Targets

Identifying Optimal Donors and Patients to Maximize the Therapy Success

The Kiromic Difference - Diamond AI™ Target Discovery Platform

Diamond AI™ target discovery platform powers innovation and significantly reduces development time and cost.



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Kiromic GDT Cell Therapy (Deltacel™, Procel™, and Isocel™)

Multiple Potential Indications

Deltacel™

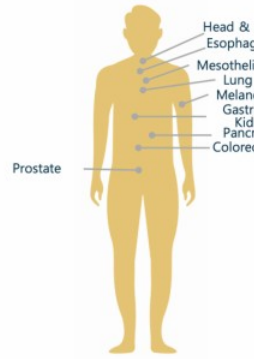
Non-viral, non-engineered, off-the-shelf product candidate targeting stress ligands on cancer cells

Procel™

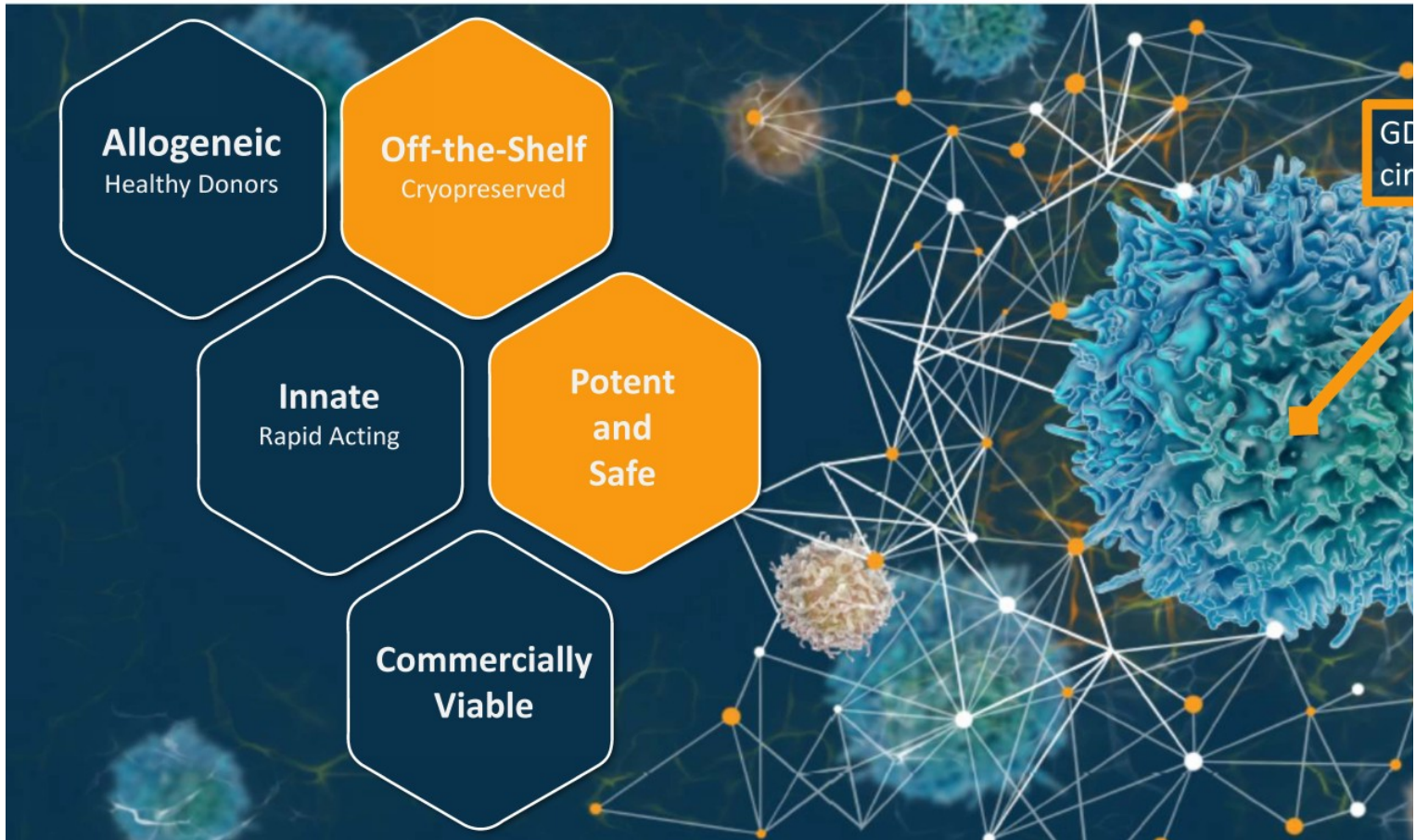
Genetically-engineered off-the-shelf product candidate targeting PD-L1+ tumors

Isocel™

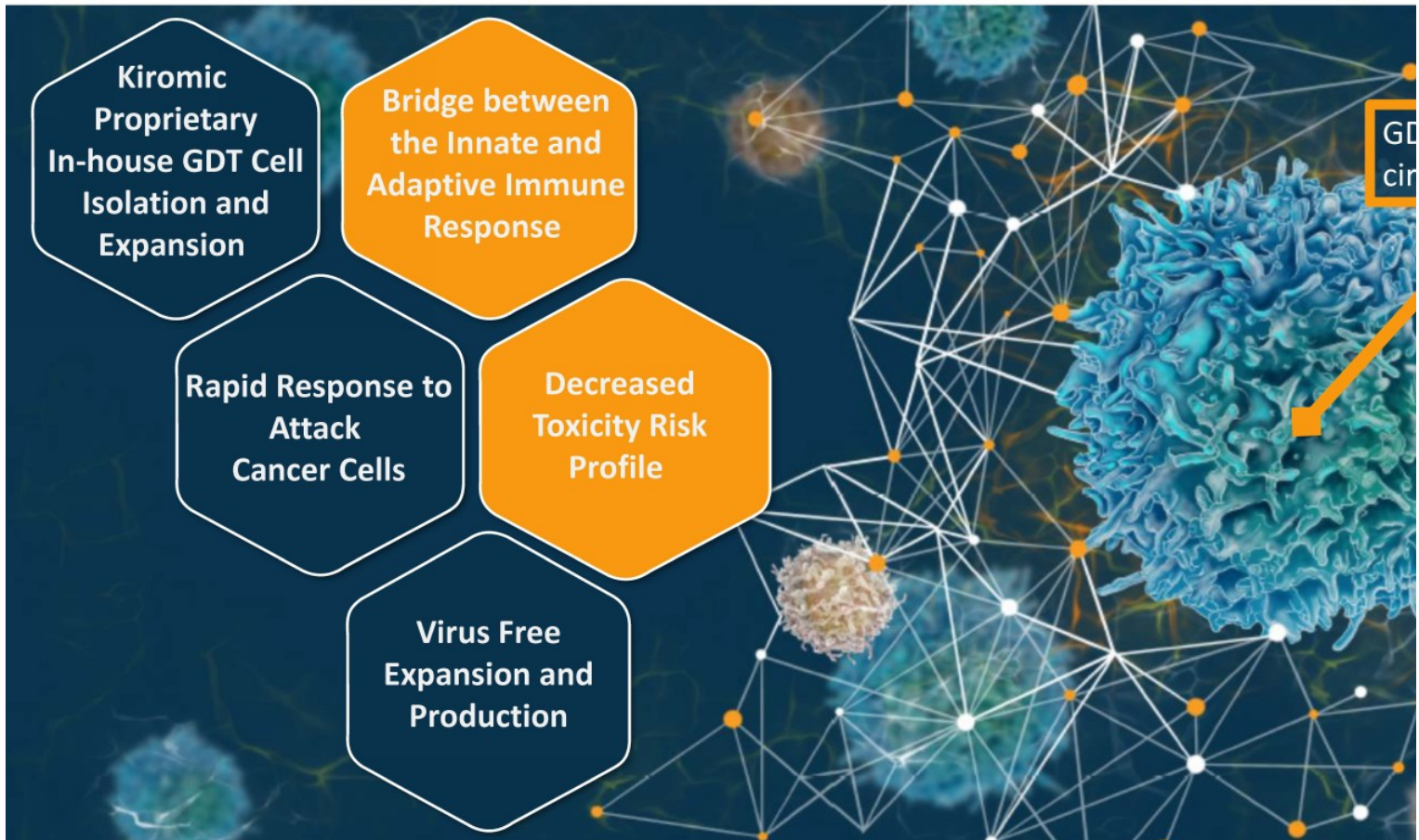
Genetically-engineered off-the-shelf product candidate targeting mesothelin isoform 2+ tumors



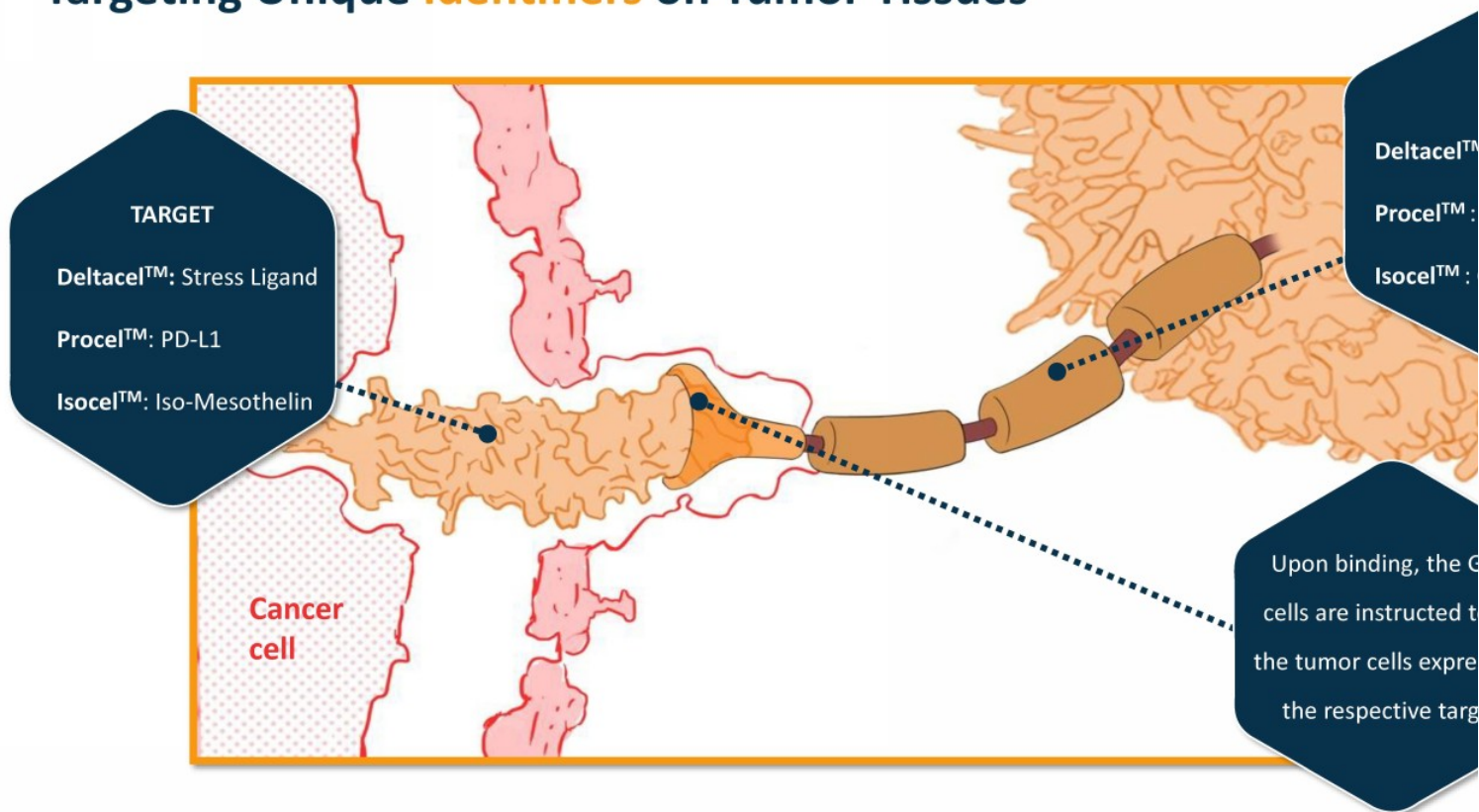
Gamma Delta T-Cells (GDT): Guardians of the Immune System



Deltacel™: Non-Viral Gamma Delta T-Cell Development



GDT Cell Therapy Mechanism of Action: Targeting Unique **Identifiers** on Tumor Tissues



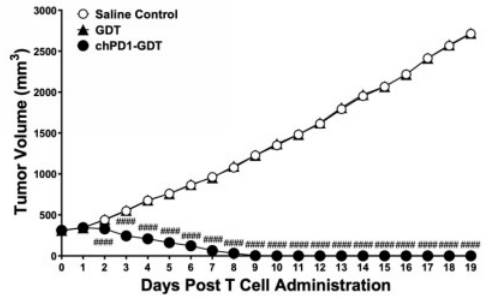
GDT chPD1 T Cell Therapy (Procel™)* Strong Efficacy

GDT chPD1 T Cell Therapy (Procel™)* Strong Safety

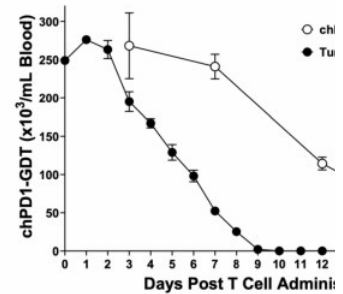
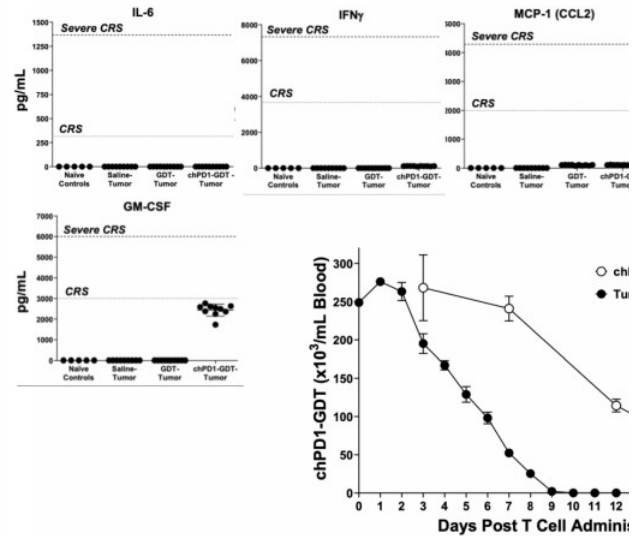
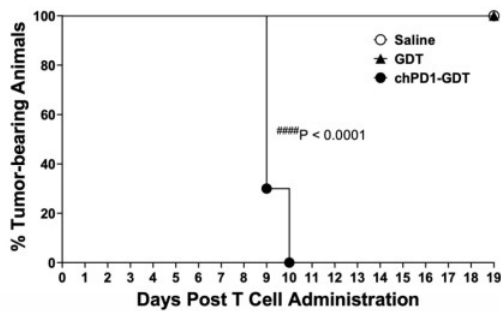
Procel™ eradicates established NCI-H226 pleural epithelioid mesothelioma and extends survival.

Procel™ does not lead to cytokine level increases modeled or CRS, with circulating cell numbers regulated by objective

Tumor eradication



Overall Survival



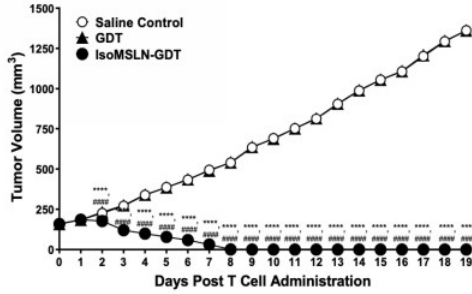
*Preclinical models: nude mice with subcutaneous NCI-H226 cells injections

GDT CAR-T Cell Therapy (Isocel™)*

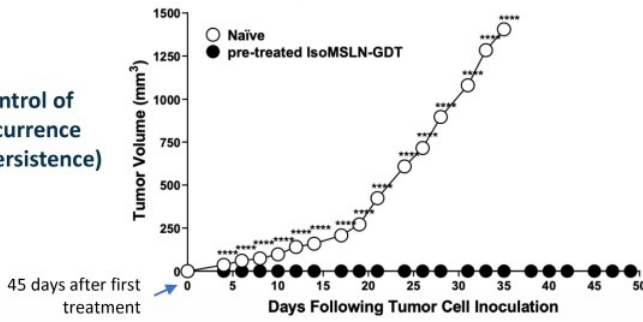
Strong Efficacy

Isocel™ eradicates established NCI-H226 pleural epithelioid mesothelioma and prevents tumor growth in a model of recurrence.

Tumor eradication



Control of recurrence (persistence)

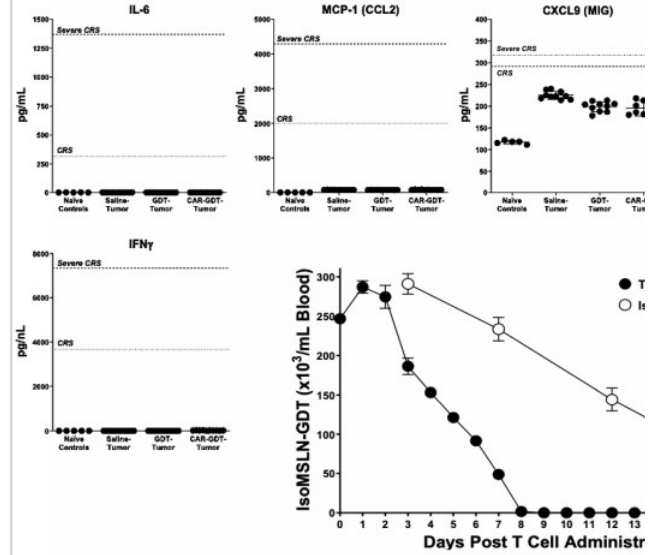


*Preclinical models: nude mice with subcutaneous NCI-H226 cells injections





GDT CAR-T Cell Therapy (Isocel™)

Strong Safety

Isocel™ does not lead to cytokine level increases modeled for CRS, with circulating cell numbers regulated by objective



Pipeline

Clinical Trial Candidate	MD Anderson Principal Investigator	Target	Pre-Clinical	
New IND #1 DeltaceTM In combination with standard antitumor modality Allogeneic, Non-Viral, Non-engineered off-the-shelf GDT therapy	SRA Yes	Universal Non-Engineered	 Q4 Expec Proce Trial
New IND #2 ProcelTM in combination with standard antitumor modality Allogeneic, off-the-shelf, GDT CAR-T therapy	Yes	PD-L1	 Q2 Expec Proce Trial
ALEXIS - PRO-1 ProcelTM Allogeneic, off-the-shelf, GDT CAR-T therapy	No	PD-L1	 Q2 Expec Proce Trial
New IND #3 IsocelTM in combination with standard antitumor modality Allogeneic, off-the-shelf, GDT CAR-T therapy	Yes	Isoform of Mesothelin	 Q4 Targe Proce Trial
ALEXIS - ISO-1 IsocelTM Allogeneic, off-the-shelf, GDT CAR-T therapy	No	Isoform of Mesothelin	 Q4 Targe Proce Trial

Use of Proceeds



Facilitate IND submission and Activation of New IND #1
Deltacel™ in combination with standard antitumor modality



Resubmit IND for ALEXIS-PRO-1 and corresponding clinical trial activation



Intellectual Property Protection and Reinforcement



IND Applications and IND-enabling Trials for Other Product Candidates



**Working Capital, Personnel Expenses, General Corporate Purposes, Including but Not Limited to
Associated with Pending Matters**



Research and Development Activities Related to Our Pre-clinical and Discovery programs



**To Acquire or Invest in Complementary Businesses, Products, or Technologies, or to Obtain the
Such Complementary Technologies**



**We may also be required to apply a portion of the net proceeds for litigation expenses and to
connection with a judgment or settlement of private and government claims against us, includ
payment of any government fines or penalties**

In-House Manufacturing Creates De-Risked Value



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Kiromic's Next 12 Months **Upcoming Milestones***

1

ACHIEVED MILESTONE WITH TIMELY COMPLETION OF EXPANDED CGMP MANUFACTURING FOR SUPPORT CELL THERAPY ONCOLOGY PIPELINE

✓ **End of Q2 2022**

2

Submission of New IND #1 (Deltacel in combination with standard antitumor modality)

• H2 2022

3

Expected Beginning of Activation Process for New IND #1 Clinical Trial

• End of Q4 2022

4

Submission of Amended IND for ALEXIS-PRO-1 and New IND #2 (Procel in combination with standard antitumor modality)

• H1 2023

5

Expected Beginning of Activation Process for ALEXIS-PRO-1 and New IND #2 Clinical Trial

• End of Q2 2023

*The milestones and timing of completion are based upon the company's current expectations in consultation with its partners and vendors.

Leadership Team

Pietro Bersani
CPA, CGMA

CEO

Leonardo Mirandola
PhD

CSO

Scott Dahlbeck
MD, PharmD

COS

Michael Ryan
PhD

CBRCO



Fuel Systems Solutions

Deloitte.

ARTHUR ANDERSEN

TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER



UNIVERSITÀ DEGLI STUDI DI MILANO



European School of Molecular Medicine



Texas Tech Univ Health Science Center

aurora



University of TX Health Science Center Houston



University of Nebraska College of Pharmacy



THE UNIVERSITY OF TEXAS MD Anderson Cancer Center

Making Cancer History



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Fuel Systems Solutions

Deloitte.

ARTHUR
ANDERSEN



UNIVERSITÀ
CATTOLICA
del Sacro Cuore



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Deloitte.



Summary Balance Sheet & Cap Table

Balance Sheet Data (As of March 31, 2022)	As Reported	As Adjusted ¹	Pre-Offering Cap Table	
Cash and cash equivalents	\$15,123,100	\$37,638,628	Common Stock	
Working capital	\$12,625,800	\$35,141,328	Restricted Stock Units (\$10.37 Weighted average grant date fair value)	
Total assets	\$25,889,800	\$48,405,328	Options (\$8.49 Weighted average exercise price)	
Total stockholders' equity	\$20,032,100	\$42,547,628	Warrants (\$7.43 Weighted average exercise price)	
			Fully Diluted Common Shares	

1. Gives effect to the sale and issuance by us of 62,500,000 shares of common stock in this offering at an assumed combined offering price of \$0.40 per share of common stock and accompanying assuming no sale of Pre-Funded Warrants and no exercise of the Common Stock Warrants and after deducting estimated underwriting discounts and commissions and estimated offering expenses.

Value Proposition Summary

1

**Diamond A.I.
Neural Network**



2

**Gamma Delta
CAR-T Cell
Therapy Platform**

3

**Allogeneic,
Off-the-shelf
Cellular Therapy**

Cells from healthy donors,
not ill cancer patients,
for maximum efficacy

4

**Solid
Malignancies**

(~90% of all cancers¹)

5

**In-House
cGMP
Manufacturing**

¹American Cancer Society, Cancer Facts & Figures, 2022. <https://www.cancer.org/research/cancer-facts-statistics.html>.



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