

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): May 21, 2024

KIROMIC BIOPHARMA, INC.

(Exact name of registrant as specified in its charter)

Delaware	001-39619	46-4762913
(State or other jurisdiction of incorporation)	(Commission File Number)	(IRS Employer Identification No.)
7707 Fannin, Suite 140 Houston, TX, 77054 (Address of principal executive offices) (Zip Code)		

Registrant's telephone number, including area code (832) 968-4888

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, \$0.001 par value	KRBP	The OTC QB Market

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Item 7.01 Regulation FD Disclosure

Kiromic BioPharma, Inc. (the "Company") intends to conduct meetings with third parties in which its corporate slide presentation will be presented. A copy of the presentation materials is attached as Exhibit 99.1 to this Current Report on Form 8-K and is incorporated herein by reference.

The information in this Item 7.01 and the document attached as Exhibit 99.1 is being furnished and shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, as amended (the "Exchange Act"), nor otherwise subject to the liabilities of that section, nor incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as shall be expressly set forth by specific reference in such a filing.

Item 9.01. Financial Statements and Exhibits

(d) Exhibits.

99.1 [Kiromic BioPharma, Inc. Corporate Presentation](#)

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Kiromic BioPharma, Inc.

Date: May 21, 2024

By: /s/ Pietro Bersani
Pietro Bersani
Chief Executive Officer



Revolutionizing CAR T-Cell Therapy

May 2024

OTCQB: KRBP

Kiromic.com



This presentation contains forward-looking statements that involve substantial risks and uncertainties. Kiromic makes such forward-looking statements pursuant to the safe harbor provisions of the United States Private Securities Litigation Reform Act, Section 21E of the Securities Exchange Act of 1934, as amended, and other federal securities laws. All statements other than statements of historical facts are forward-looking statements. In some cases, you can identify forward-looking statements by terms such as: “will,” “potential,” “could,” “can,” “believe,” “intends,” “continue,” “plans,” “expects,” “anticipates,” “estimates,” “may,” or the negative of these terms or other comparable terminology. These forward-looking statements include, but are not limited to, statements regarding: Kiromic’s current and anticipated IND applications including statements regarding the scope of and timing for submission of an IND application; the Deltacel™ product platform; the sponsored research agreement and the data that will be generated as a result of such collaboration; the timing for submitting and activating Kiromic’s IND applications; the benefits of utilizing non-genetically engineered Gamma Delta T 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 the information expressed or implied expressed or implied by these forward-looking statements. These risks and uncertainties include, but are not limited to, the risks and uncertainties discussed in our Annual Report on Form 10-K for the year ended December 31, 2022, and as detailed from time to time in our SEC filings. You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance, or events and circumstances reflected in the forward-looking statements will be achieved 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 no obligation to update any forward-looking statements except to the extent required by law.

Contents

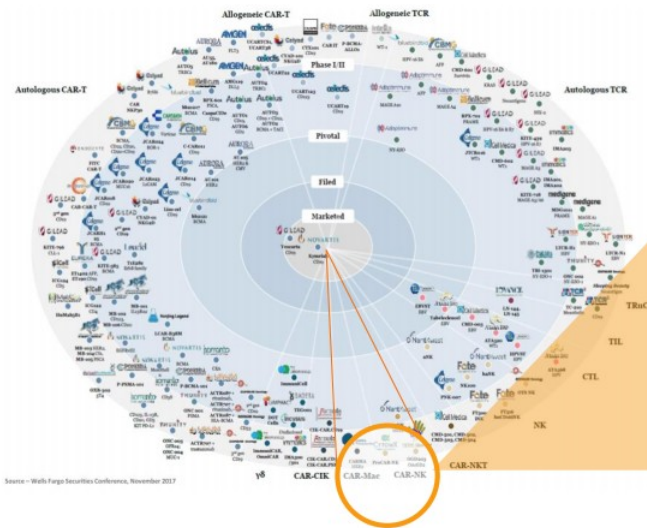
- **The Kiromic Difference and Market Opportunity**
 - Diamond AI™ (Artificial Intelligence)
 - Gamma Delta T-cell (GDT) Therapy:
Mechanism of Action (MOA), Product Pipeline, cGMP Manufacturing
 - Current Status and Path Forward
-

Kiromic BioPharma is an allogeneic Gamma Delta T-cell company featuring unique, proprietary, end-to-end bioinformatic, AI-targeting and manufacturing technologies to treat solid tumors

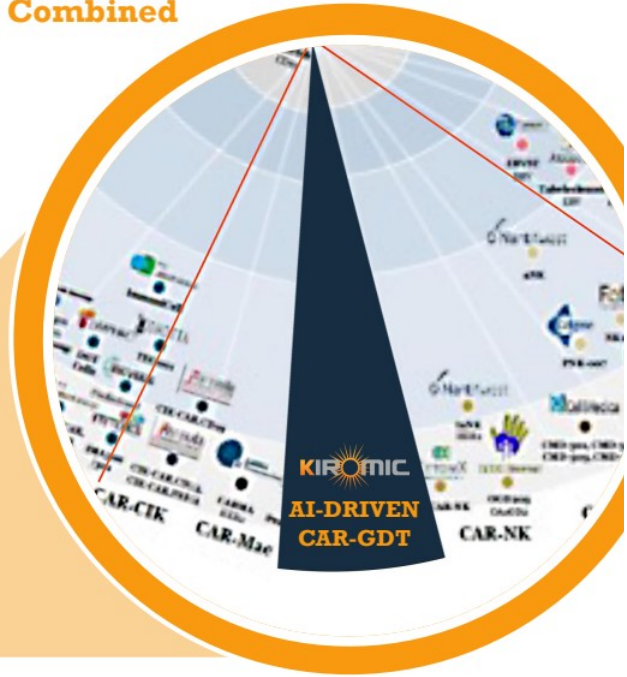


Competitive Landscape

8 Known Companies Working 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



Global CAR T-Cell
Therapy Market
by 2027¹

\$33+
Billion

90%

**of Cancers Are
Solid Tumors²**

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

Superior Specificity for Multiple Solid Tumors

- **Potential broad treatment** for solid malignancies that express Kiromic-developed biomarkers such as Iso-mesothelin.
- Solid tumors represent ~90% of new cancer diagnoses but finding specific targets to treat them has been challenging.
- Kiromic tackles the issue by identifying new cancer-specific targets.

Vertical Integration

- In-house **cGMP manufacturing**
- In-house **QC/EM lab**
- In-house **product and process development** (R&D and MSAT)

Superior Efficacy from $\gamma\delta$ T Cells

- **Strong efficacy** demonstrated in preclinical animal models.
- In solid tumors, the benefit of infiltrating conventional T cells may vary.
- In contrast, $\gamma\delta$ T cells are the infiltrating immune cells most likely to be associated with positive outcomes, as shown in an analysis of 18,000 tumors from 39 indications¹

Lower Costs/ Greater Access²

1. **Outpatient treatment** means reduced hospitalization and other treatment-related costs.
2. **Lower projected cost** increases patient and health care professional access to these therapies, and potentially provides important quality-of-life benefits to patients as well.

1. Gentles AJ, Newman AM, Liu CL, *et al.* The prognostic landscape of genes and infiltrating immune cells across human cancers. *Nat Med.* 2015 Aug;21(8):938-945.

2. Maziarz 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™

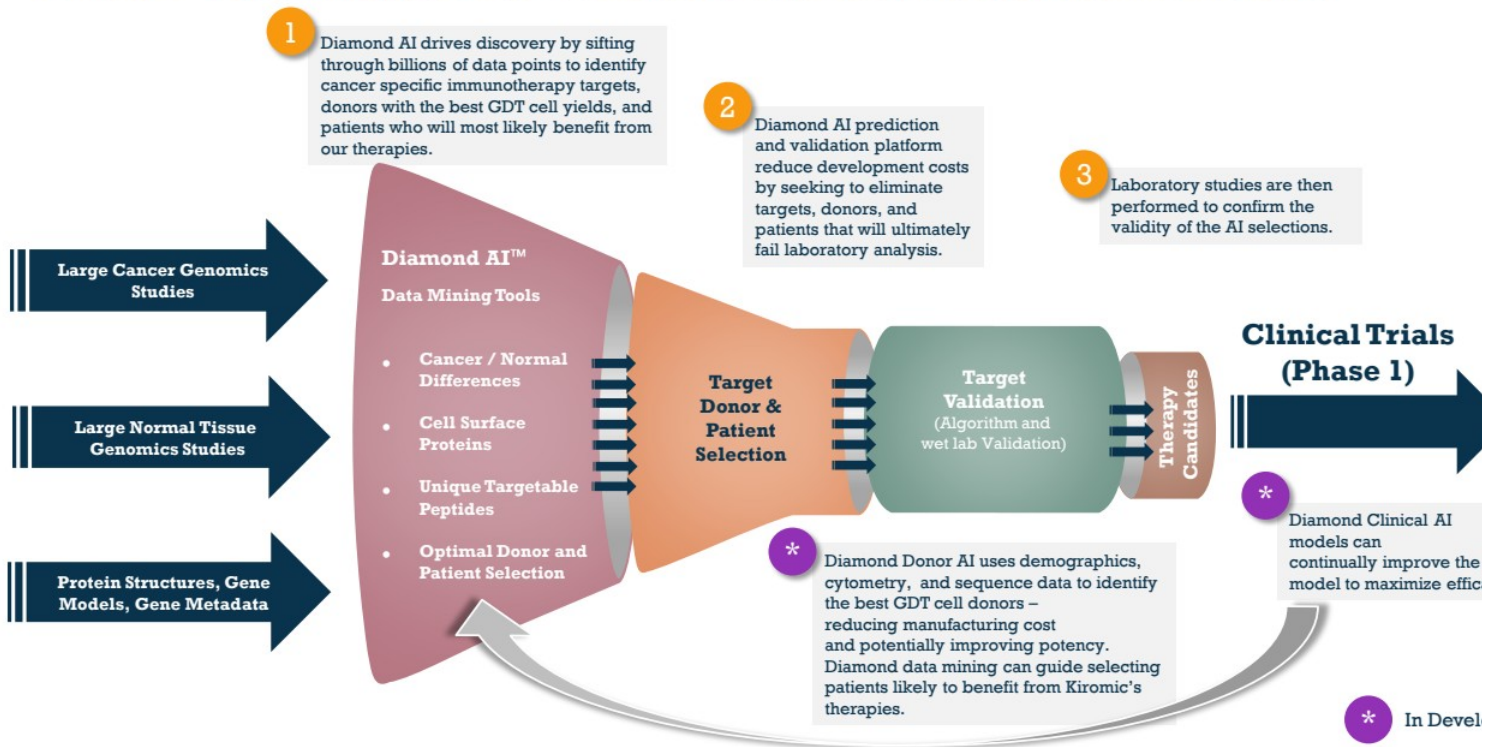
Artificial Intelligence Neural Network



- ✓ **AI 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 Pipeline

Multiple Indications



Deltacel™

Unmodified, off-the-shelf product candidate targeting stress ligands on cancer cells

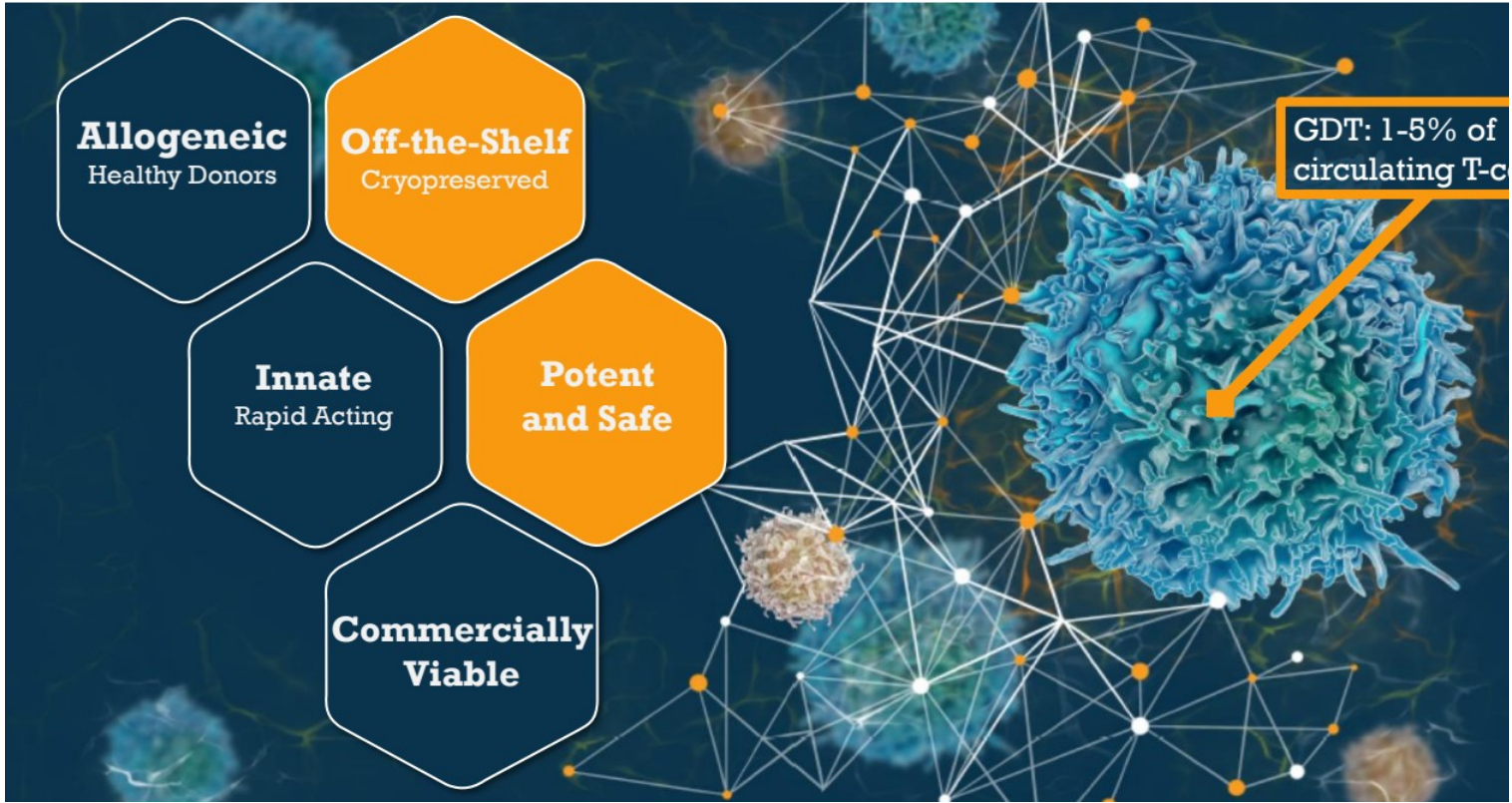
Initial indication: NSCLC in combination with targeted, low-dose radiation

Isocel™

Engineered off-the-shelf product candidate targeting a tumor-specific variant of mesothelin in ovarian cancer, mesothelioma and pancreatic cancer

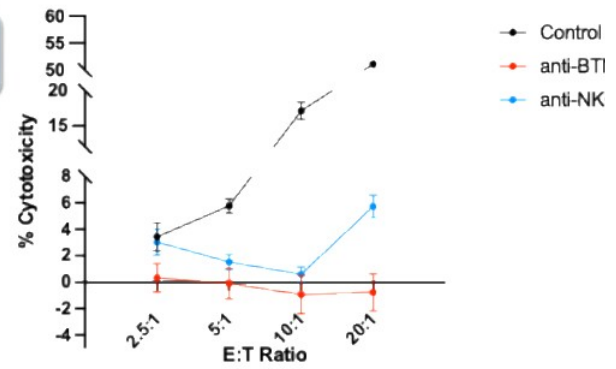
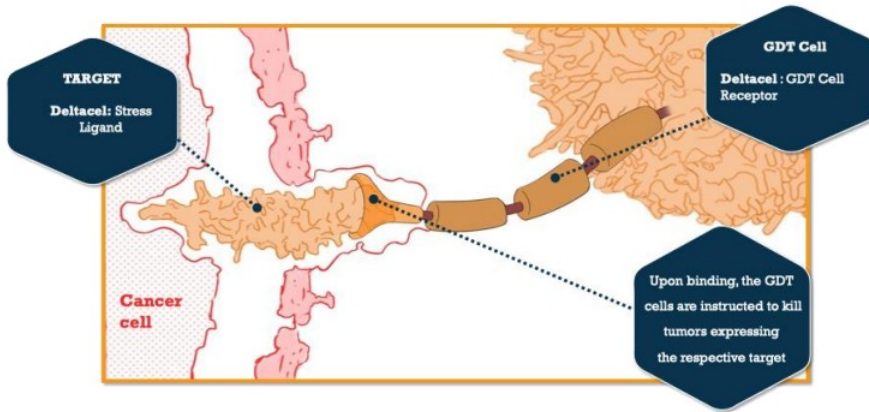
Procel™

Engineered off-the-shelf product candidate targeting PDL-1+ tumors





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



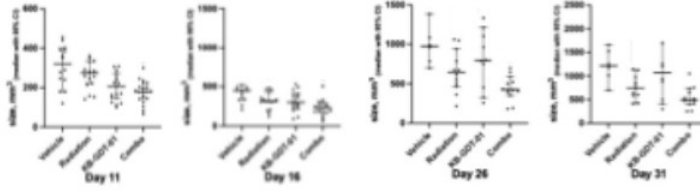
KB-GDT-01 T-Cell Therapy (Deltacel) Strong Efficacy

KB-GDT-01 T-Cell Therapy (Deltacel) Strong Safety

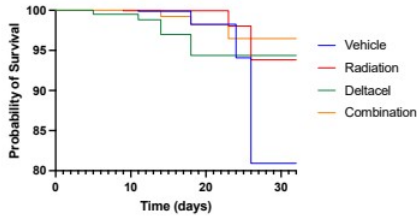
Deltacel™ effectively controls established A549 NSCLC tumors in immunocompromised mice when combined with a low-dose radiation

Deltacel™ does not cause any macroscopic or microscopic toxicity even when given at over 8x the maximum dose that will be tested in the clinical trial

Tumor Size

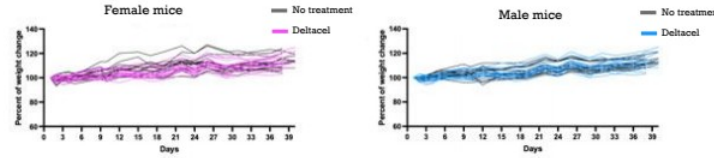


Survival

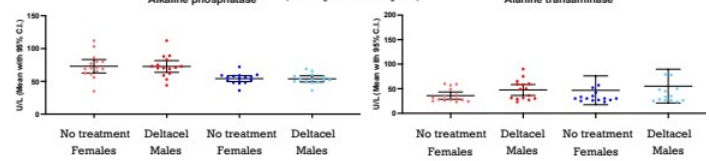


1. Deltacel did not impact body weights, food consumption, or macroscopic evaluations at necropsy.
2. Microscopic histopathological evaluations showed no evidence of toxicity.
3. Blood chemistry tests showed no impact on organ functions.
4. Plasma cytokine analysis showed that Deltacel administration did not result in the overproduction of inflammatory cytokines, commonly associated to cytokine release syndrome.

Percent body weight



Blood chemistry (excerpt of the report)



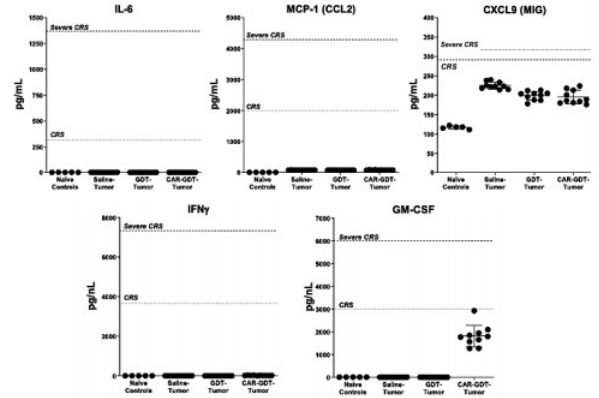
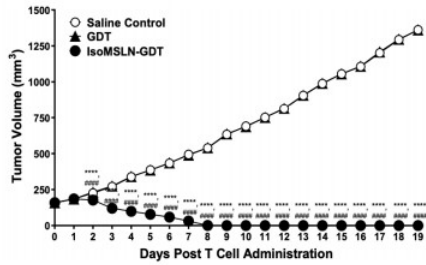
GDT CAR T-Cell Therapy (Isocel)* Strong Efficacy

GDT CAR T-Cell Therapy (Isocel)* Strong Safety

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

Isocel does not lead to cytokine level increases modeled to cause severe CRS or CRS, with circulating cell numbers regulated by objective response.

Tumor eradication



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

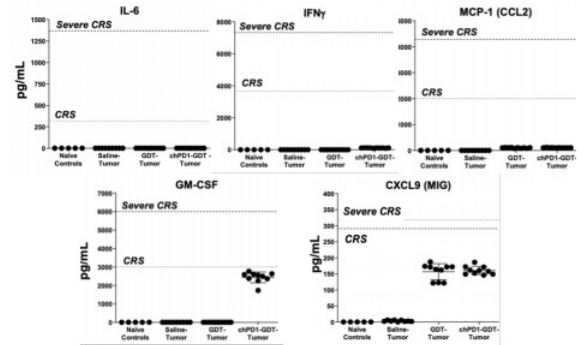
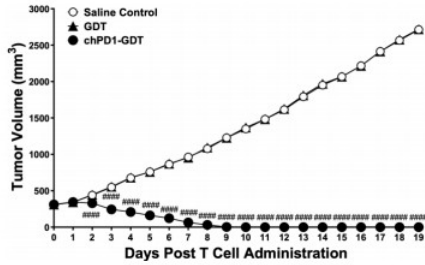
GDT chPD1 T-Cell Therapy (Procel)* Strong Efficacy

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 to cause severe CRS or CRS, with circulating cell numbers regulated by objective response.

Tumor eradication



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

				Preclinical	Phase 1
Deltacel-01 Deltacel in combination with Low-Dose Radiation Allogeneic, Non-Viral, Non-engineered off-the-shelf GDT therapy	 THE UNIVERSITY OF TEXAS MDAnderson Cancer Center	Universal Non-Engineered	NSCLC		 Started Nov 2023
Isocel Alone or in combination with Low-Dose Radiation* Allogeneic, off-the-shelf, Viral vector-free GDT CAR-T therapy	 THE UNIVERSITY OF TEXAS MDAnderson Cancer Center	Mesothelin Isoform <i>KRBP proprietary target</i>	OC, MPM, PAAC		2025
Procel Alone or in combination with Low-Dose Radiation* Allogeneic, off-the-shelf, GDT CAR-T therapy	 LONGWOOD UNIVERSITY THE UNIVERSITY OF TEXAS MDAnderson Cancer Center	PDL-1	Multi-indication, PDL-1+ tumors		2025

* This program may result in two clinical trials, one with and one without low-dose radiation, depending on the pre-clinical evidence.



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Deltacel-01 Phase 1 Clinical Trial



Evaluating Deltacel in Stage 4 Metastatic Non-small Cell Lung Cancer (NSCLC)

- Open-label, multicenter trial enrolling up to 48 patients
- Patients receive two IV Deltacel infusions with four courses of low-dose, localized radiation over a 10-day period
- **Primary objective:**
 - Safety of Deltacel in combination with low-dose radiation
- **Secondary outcome measures:**
 - Objective response, progression-free survival, overall survival, time to progression, time to treatment response and disease control rates

Early Results

Patient	Safety	Six Weeks Post-treatment	Two Months Post-treatment	Four Months Post-treatment
1	✓ No dose limiting toxicities	✓ Stable disease	✓ Tumor size reduction by 6.6%* ✓ Tumor metabolism reduction by 20%**	✓ Stable disease (compared with month follow-up)
2	✓ No dose limiting toxicities	✓ Stable disease ✓ Complete resolution of brain lesions	✓ Stable disease ✓ Confirmed clean brain imaging ✓ No new brain lesions	□ Expected in June 2024
3	✓ No dose limiting toxicities	✓ Stable disease	✓ Stable disease	□ Expected in June 2024

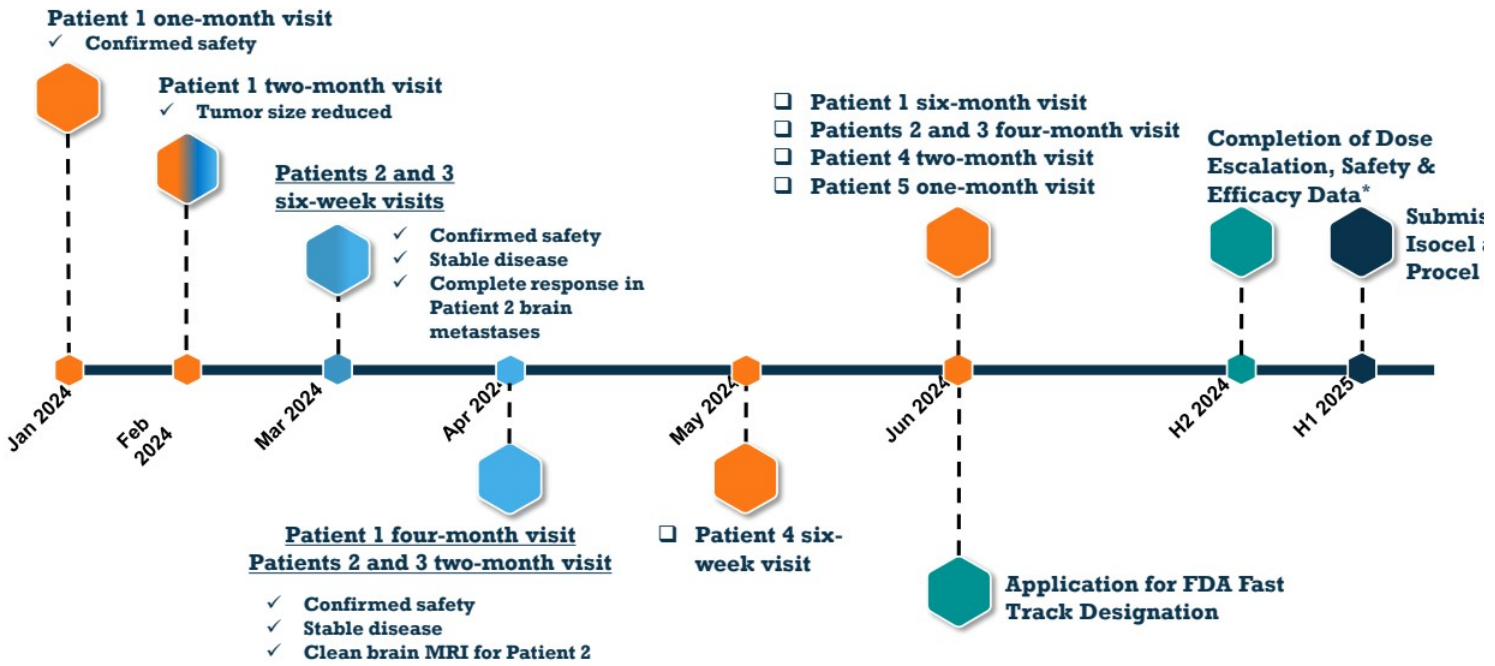
Kiromic's Fast-Track Designation Application (to be filed in June 2024) will be based on these safety and efficacy results.

* As assessed by PET/CT

** As assessed by FDG uptake

- Patient 4 was enrolled in April 2024
- Patient 5 is expected to be enrolled in May 2024
- Patient 6 is expected to be enrolled in June 2024

Recent and Upcoming Milestones



* The milestones and timing of completion are based on the company's current expectations in consultation with its partners and vendors.
 ** Subject to obtaining sufficient financing to support the progression of the development of those additional clinical trial candidates.

Leadership Team

Pietro Bersani
CPA, CGMA

CEO

Leonardo Mirandola
Ph.D.

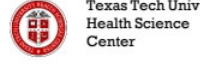
CSO/INTERIM COO

Scott Dahlbeck
M.D., Pharm.D.

COSO

Brian Hungerford
CPA, CGMA

CFO



Board of Directors

**Michael
Nagel**

Chairperson

**Pietro
Bersani**
CPA, CGMA

Director

**Pam
Misajon**

**Independent
Director**

**Michael
Catlin**

**Independent
Director**



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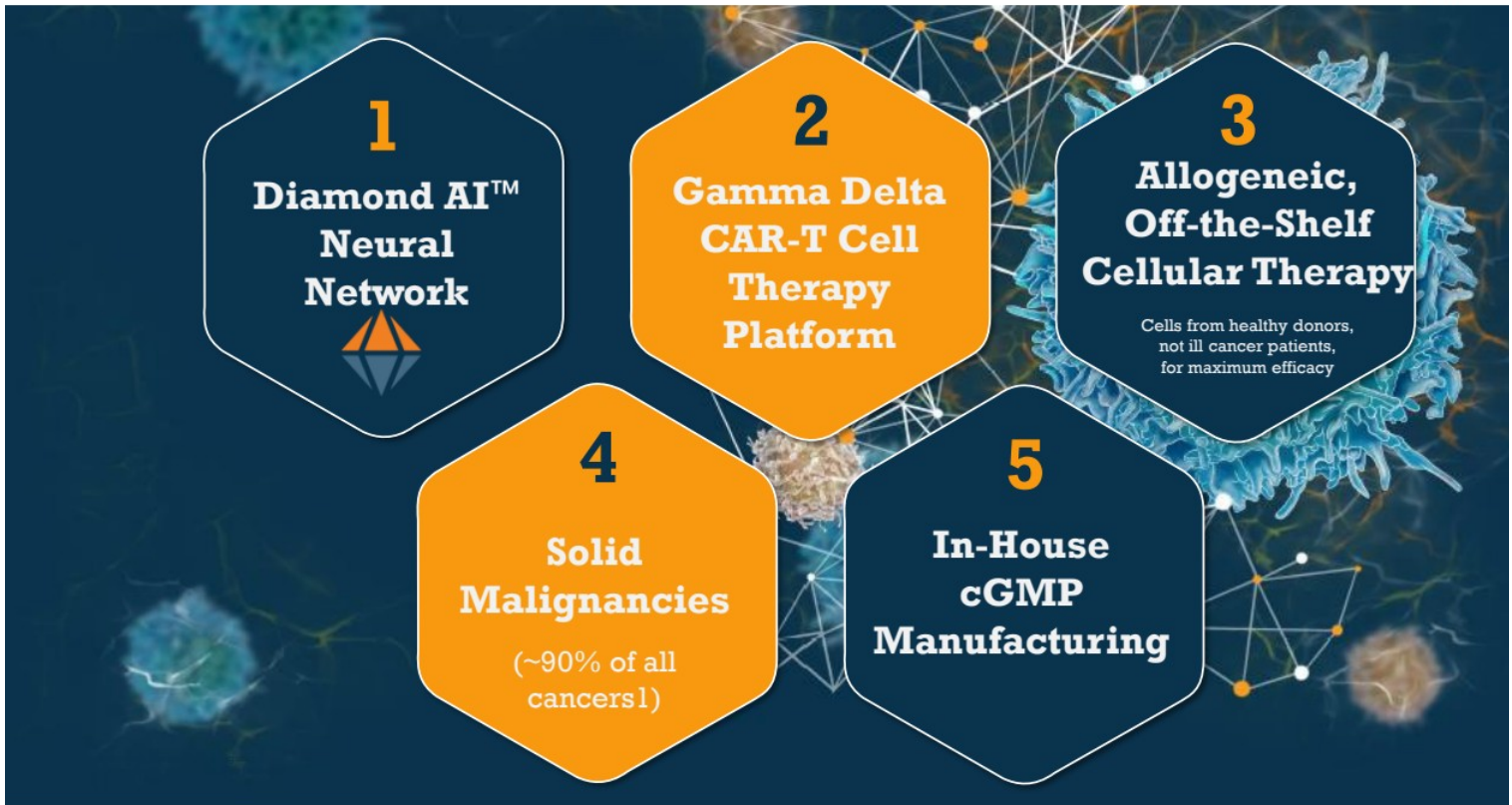


Summary Balance Sheet & Cap Table



Balance Sheet Data (As of March 31, 2024)	As Reported (In Thousands)
Cash and Cash Equivalents	\$3,676
Working Capital	(\$13,525)
Total Assets	\$12,628
Total Stockholders' Deficit	(\$7,212)

Cap Table (As of March 31, 2024)	Common Stock Equivalents
Common Stock	1,288,235
Restricted Stock Units (\$3.19 Weighted average grant date fair value)	440
Options (\$101.04 Weighted average exercise price)	18,093
Warrants	15,416
Convertible Preferred Share Shares (\$14MM principal & \$6.50 share conversion) (\$8MM principal & \$2.50 share conversion)	5,833,973
Convertible Notes (\$4.8MM principal & \$6.50 share conversion) (\$4.8MM principal & \$5.00 share conversion) (\$2.4MM principal & \$2.50 share conversion)	3,025,431
Fully Diluted Common Shares	10,181,588





Revolutionizing CAR T-Cell Therapy

May 2024

OTCQB: KRBP

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