

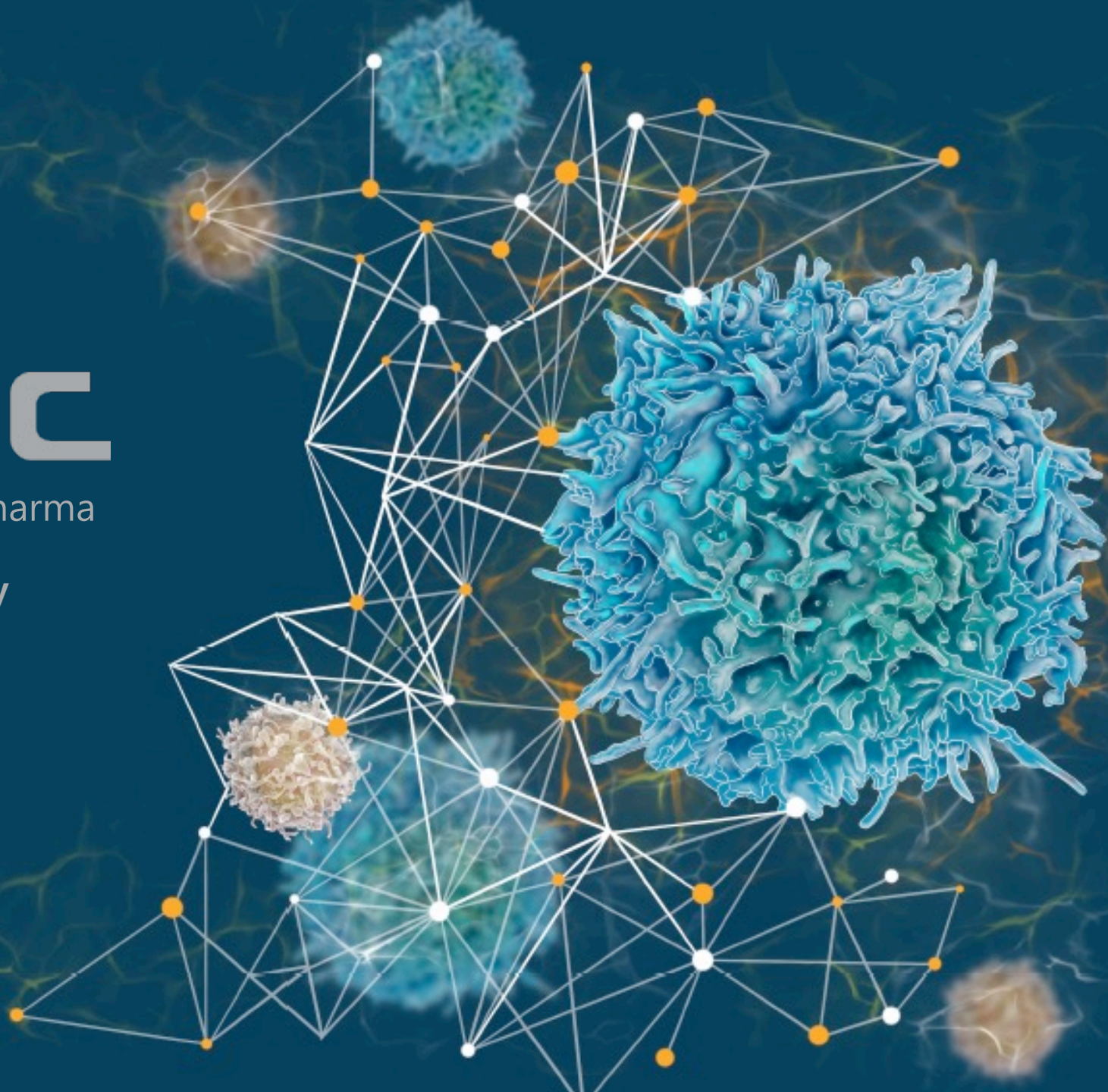


Revolutionizing CAR-T Therapy

June 2022

NASDAQ: KRBP

Kiromic.com



Forward Looking Statements

This presentation contains forward-looking statements that involve substantial risks and uncertainties. We make such forward-looking statements pursuant to the safe harbor provisions of the U.S. 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. These statements relate to future events or to our future financial performance and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements include, but are not limited to, statements about:

- our goals and strategies;
- our future business development, financial condition and results of operations;
- expected changes in our revenue, costs or expenditures;
- our expected timing of human clinical trials and other related milestones
- growth of and competition trends in our industry;
- our expectations regarding demand for, and market acceptance of, our products;
- our expectations regarding our relationships with investors, institutional funding partners and other parties we collaborate with;
- fluctuations in general economic and business conditions in the markets in which we operate; including those fluctuations caused by COVID-19; and
- relevant government policies and regulations relating to our industry; and
- the outcome of any pending or threatened litigation.

In some cases, you can identify forward-looking statements by terms such as “may,” “could,” “will,” “should,” “would,” “expect,” “plan,” “intend,” “anticipate,” “believe,” “estimate,” “predict,” “potential,” “project” or “continue” or the negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under the heading “Risk Factors” included in our Registration Statement on Form S-1 (Registration No. 333-257427) , originally filed with the Securities and Exchange Commission (SEC) on June 25, 2021, as amended, and in our Form 10-K for the fiscal year ended December 31, 2021 filed with the SEC on April 8, 2022 and elsewhere in this presentation. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance.

The forward-looking statements made in this report relate only to events or information as of the date on which the statements are made in this report. Except as expressly required by the federal securities laws, there is no undertaking to publicly update or revise any forward-looking statements, whether as a result of new information, future events, changed circumstances or any other reason.

Contents

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

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



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

\$33+
Billion

90%

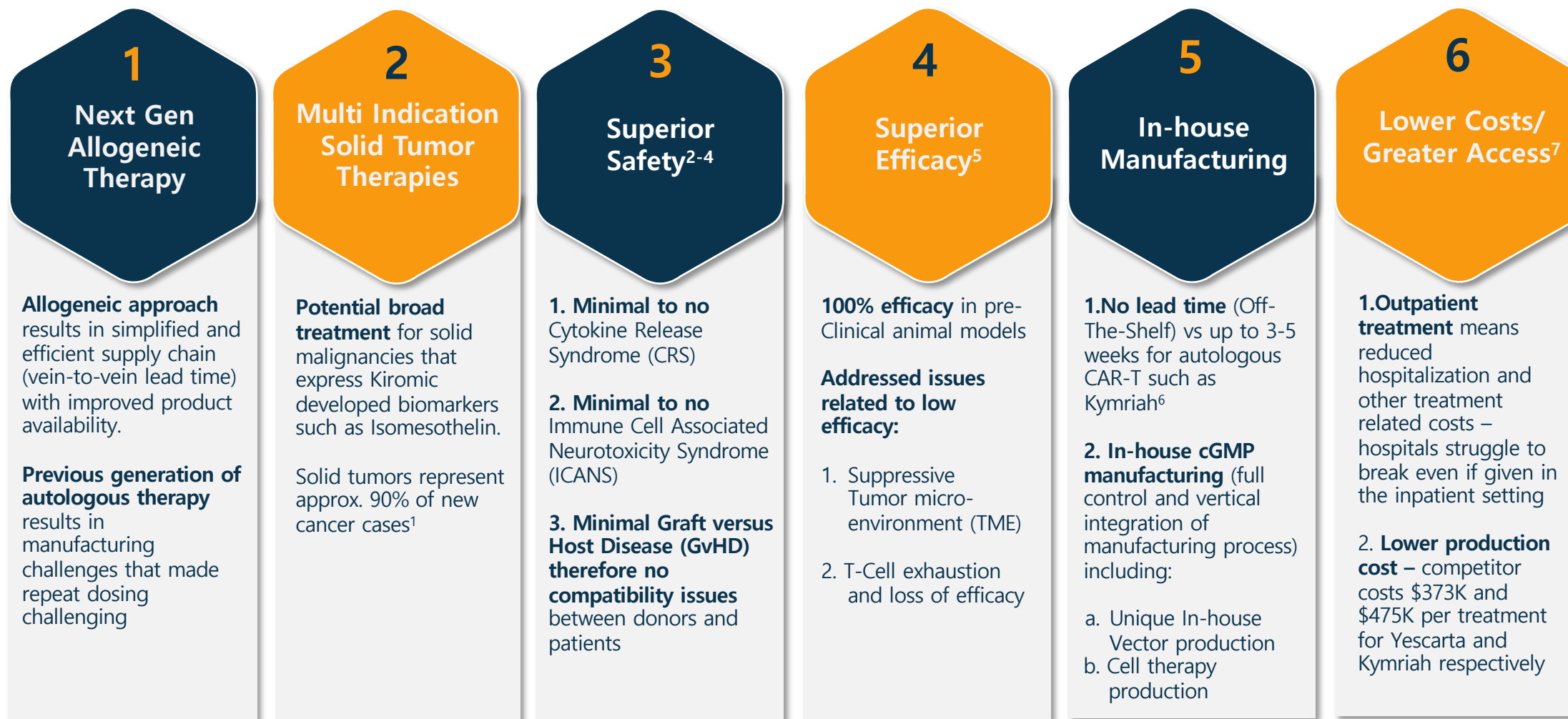
**of Cancers Are
Solid Malignancies²**

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 NIH National Cancer Institute, <https://www.cancer.gov/types/common-cancers>

Competitive Difference

Allogeneic Gamma Delta Based CAR-T Cell Therapies



¹NIH National Cancer Institute, <https://www.cancer.gov/types/common-cancers>

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.

⁵Parriott G, et al. T-cells expressing a chimeric-PD1-Dap10-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, Vetting & Development Platform

Algorithms and Large-Scale Genomics Analysis for Target Prediction

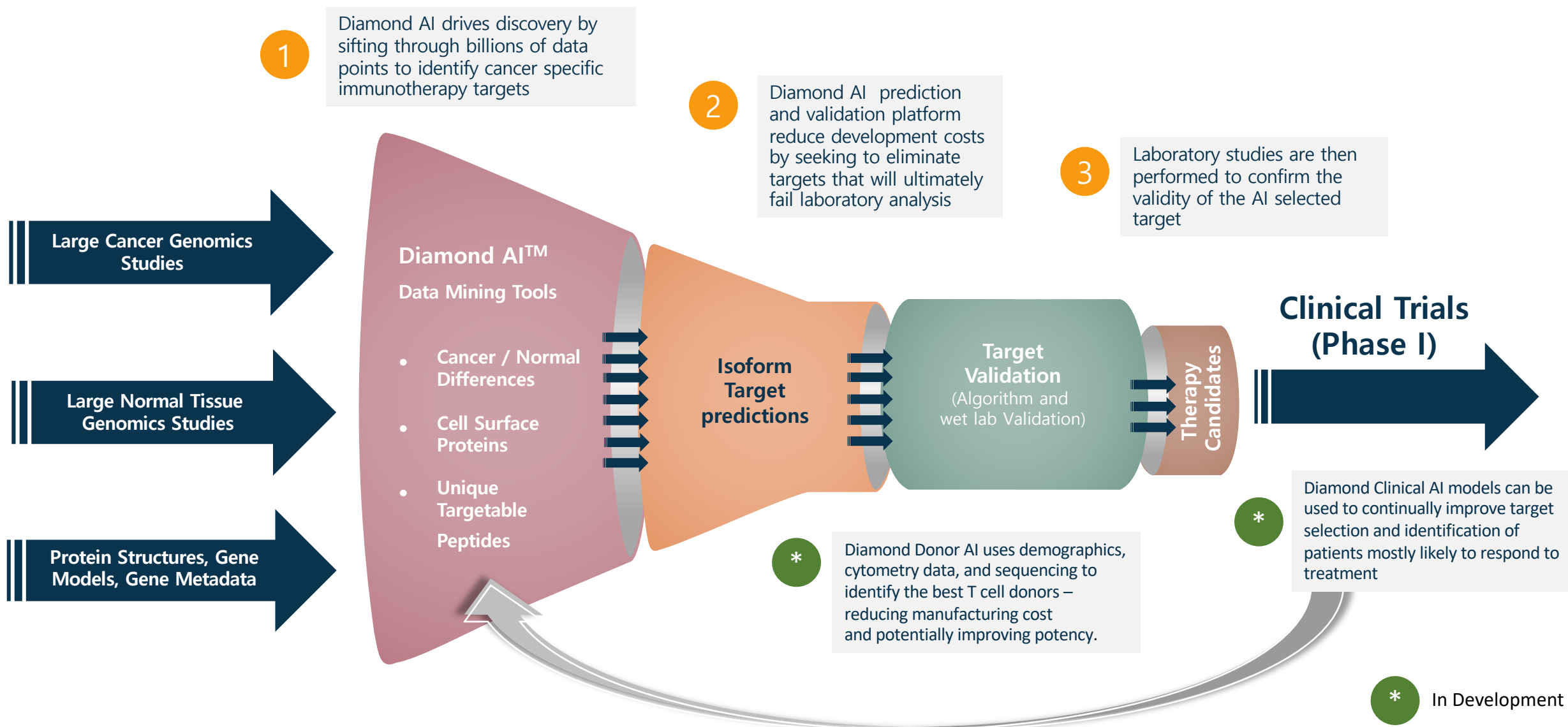
Diamond AITM
Artificial Intelligence Neural Network



Machine and deep learning A.I. integrated with each stage of the Kiromic therapy production lifecycle.

The Kiromic **Difference** - **Diamond AI™** Target Discovery Platform

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

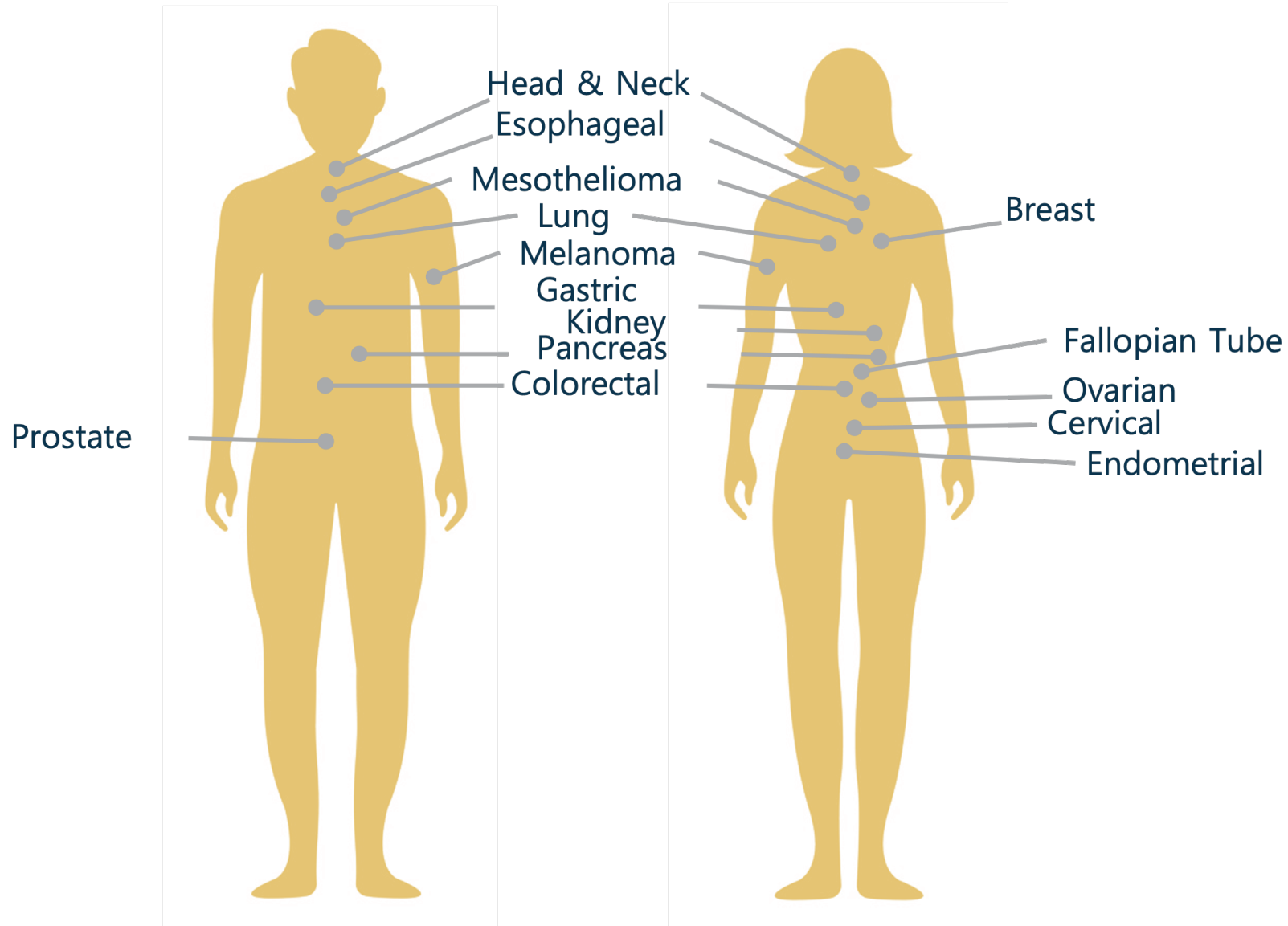


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- **GDT Cell Therapy: MOA, Product Pipeline**
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Kiromic GDT Cell Therapy (Deltacel™, Procel™ and Isocel™)

Multiple Potential Indications



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

Allogeneic
Healthy Donors

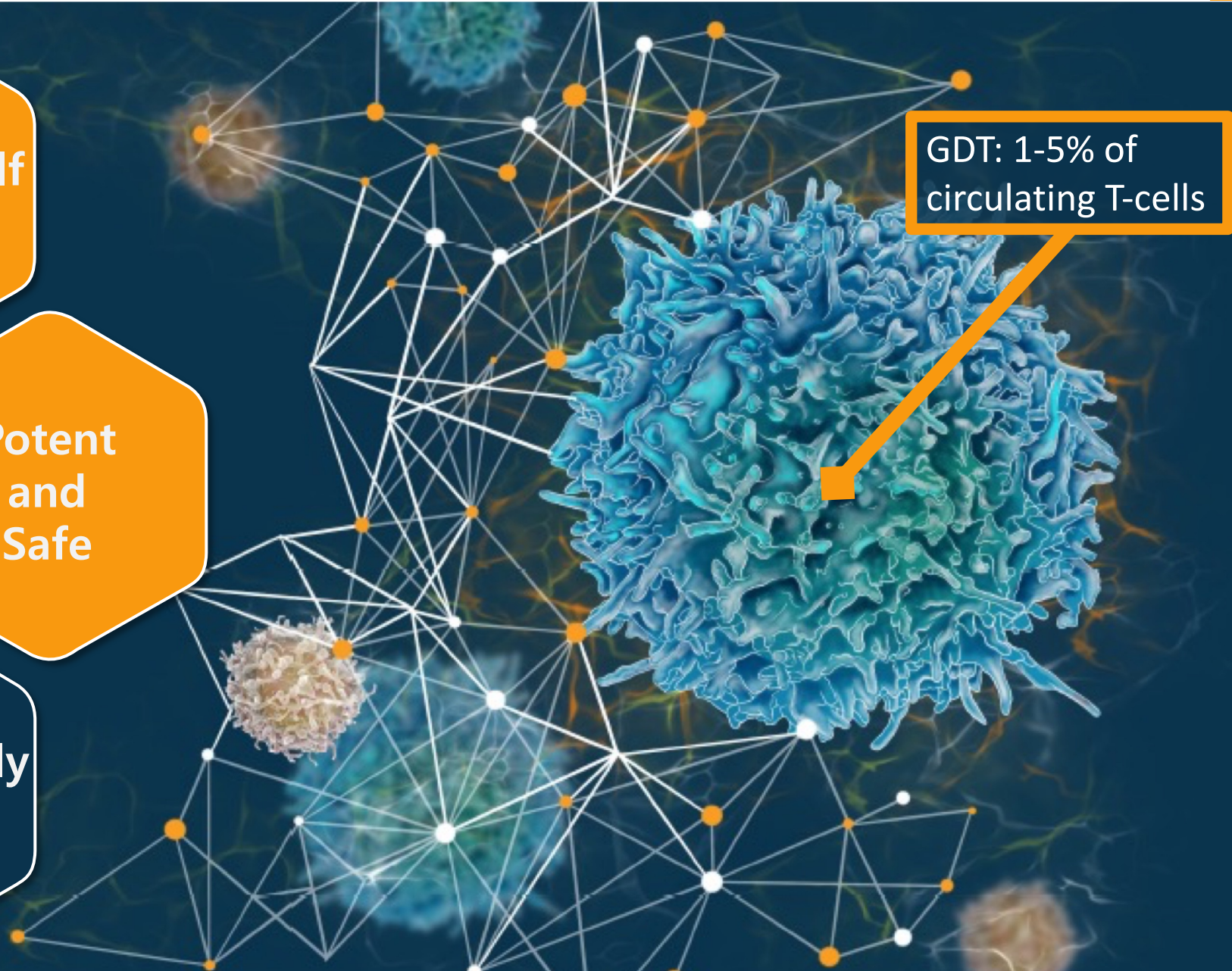
Off-the-Shelf
Cryopreserved

Innate
Rapid Acting

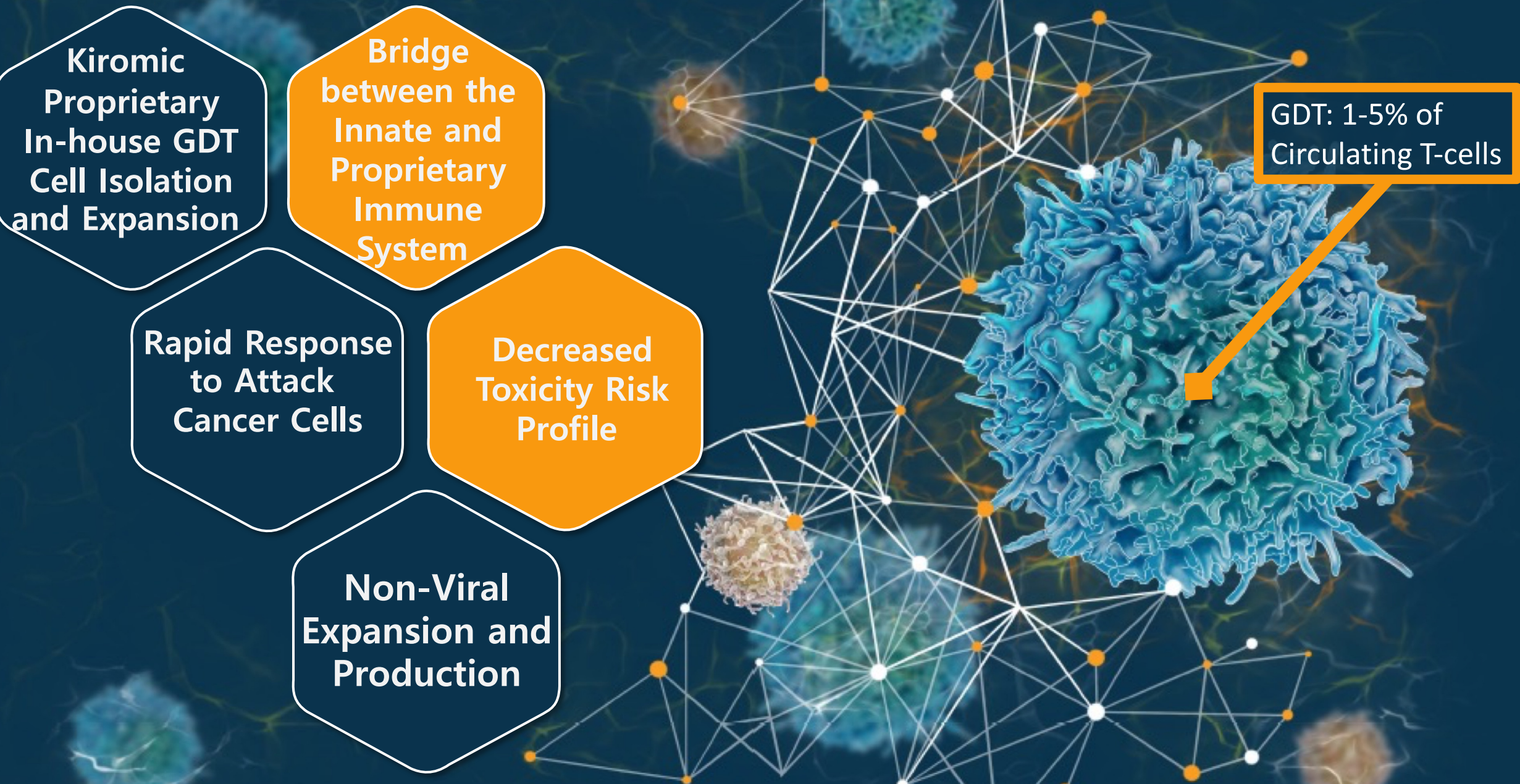
**Potent
and
Safe**

**Commercially
Viable**

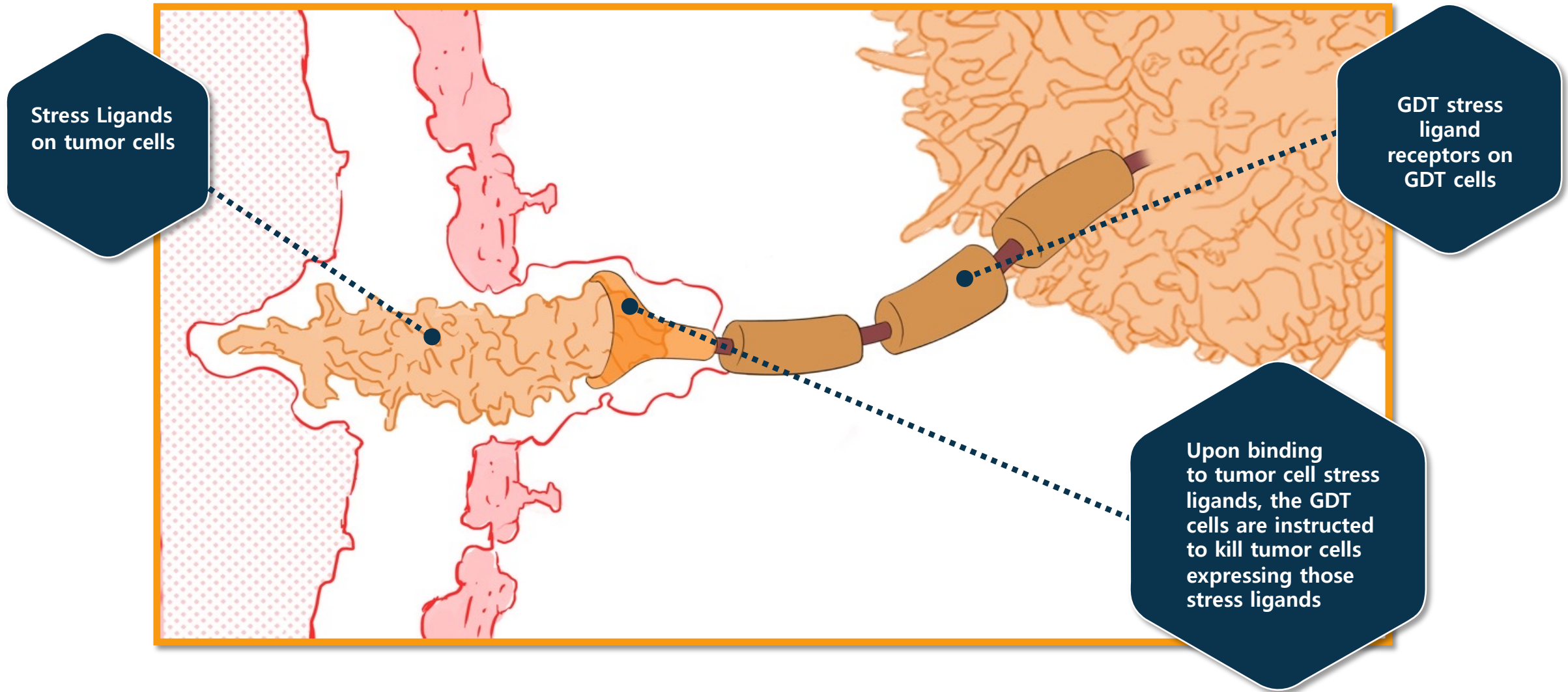
GDT: 1-5% of
circulating T-cells



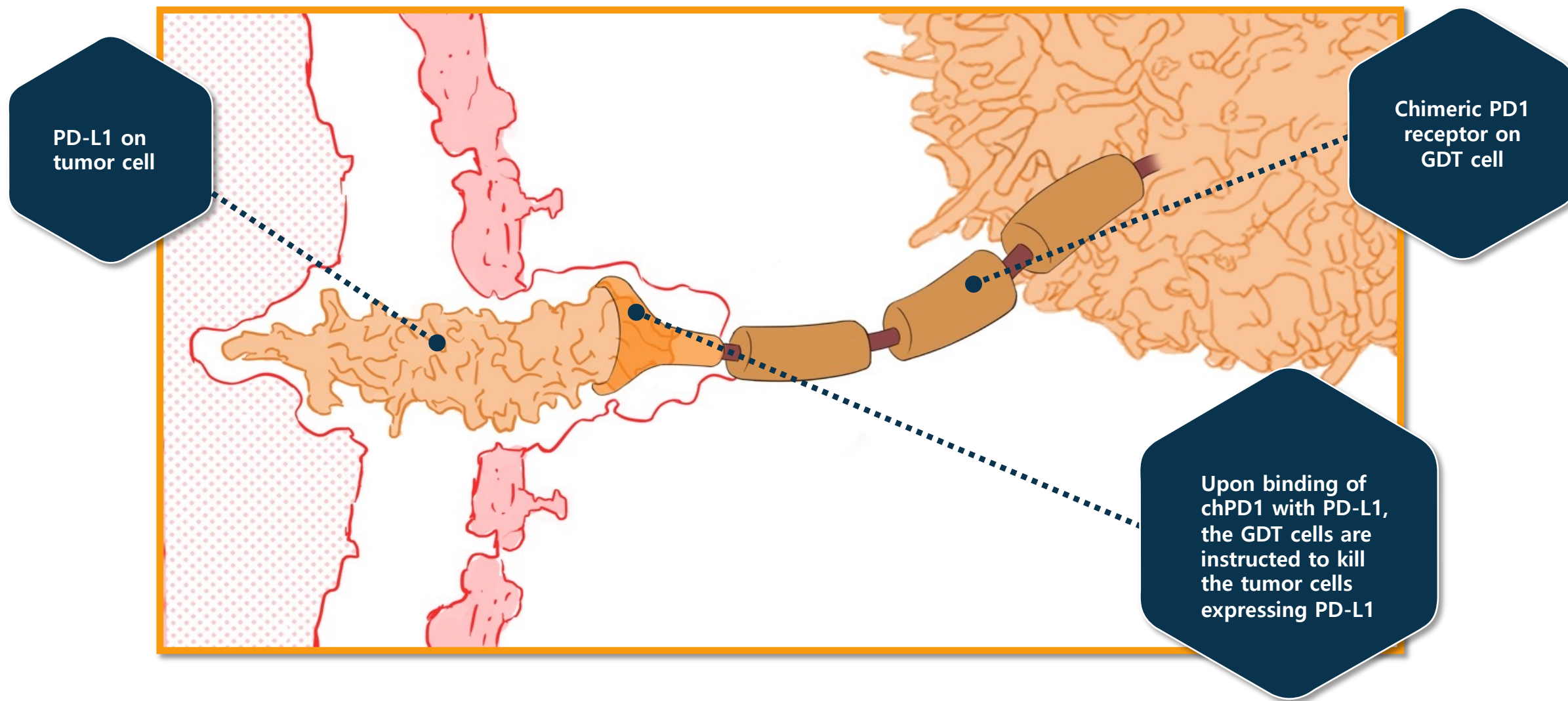
Deltacel: Non-Viral Gamma Delta T-Cell Development



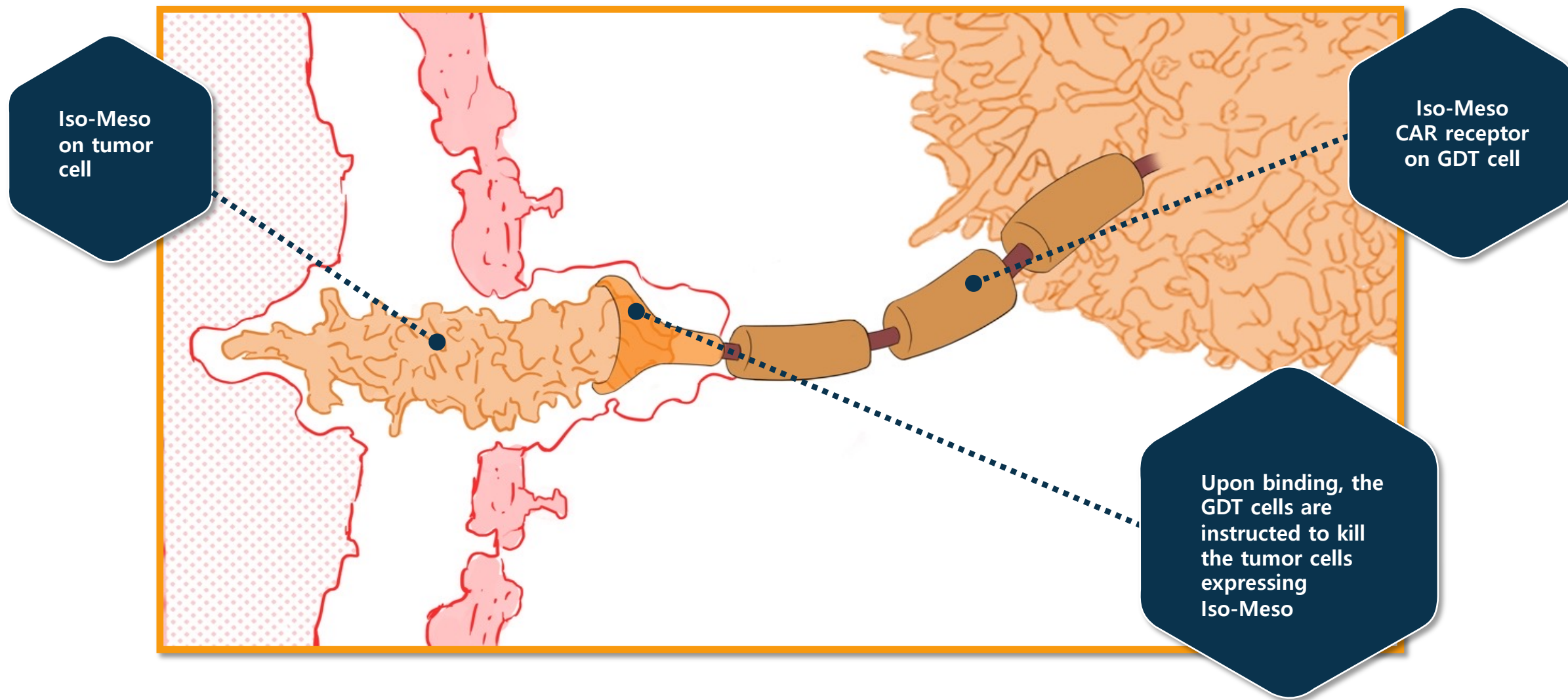
GDT Cell Therapy (Deltacel) Mechanism of Action: Targeting Stress Ligand **Expression** In Tumor Tissues



GDT Chimeric T Cell Therapy (Procel) Mechanism of Action: Targeting PD-L1 Expression In Tumor Tissues



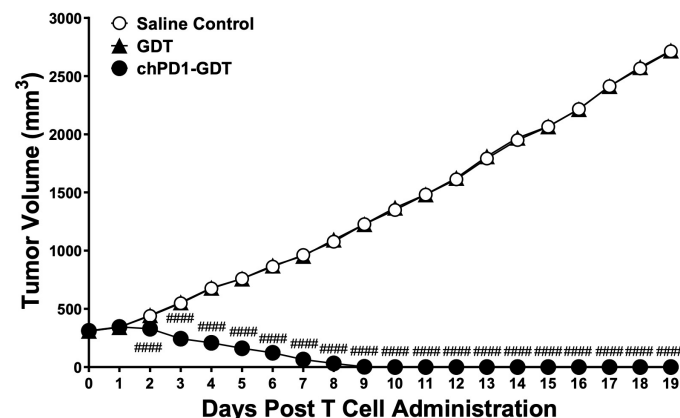
GDT CAR-T Cell Therapy (Isocel) Mechanism of Action: Targeting Isomer of Mesothelin (**Iso-Meso**) Expression In Tumor Tissues



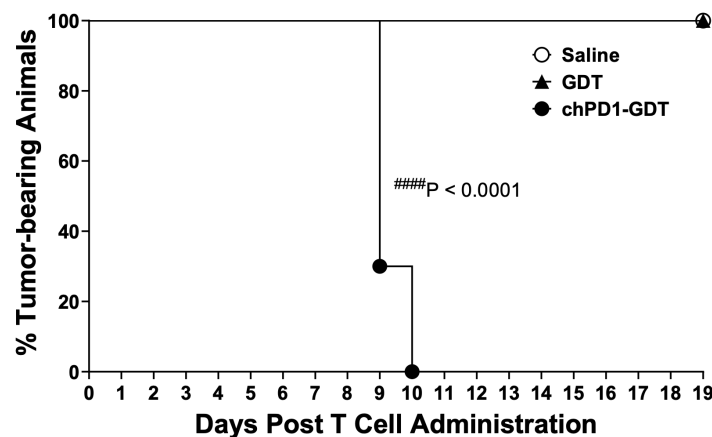
GDT chPD1 T Cell Therapy (Procel™)* Strong Efficacy

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

Tumor eradication



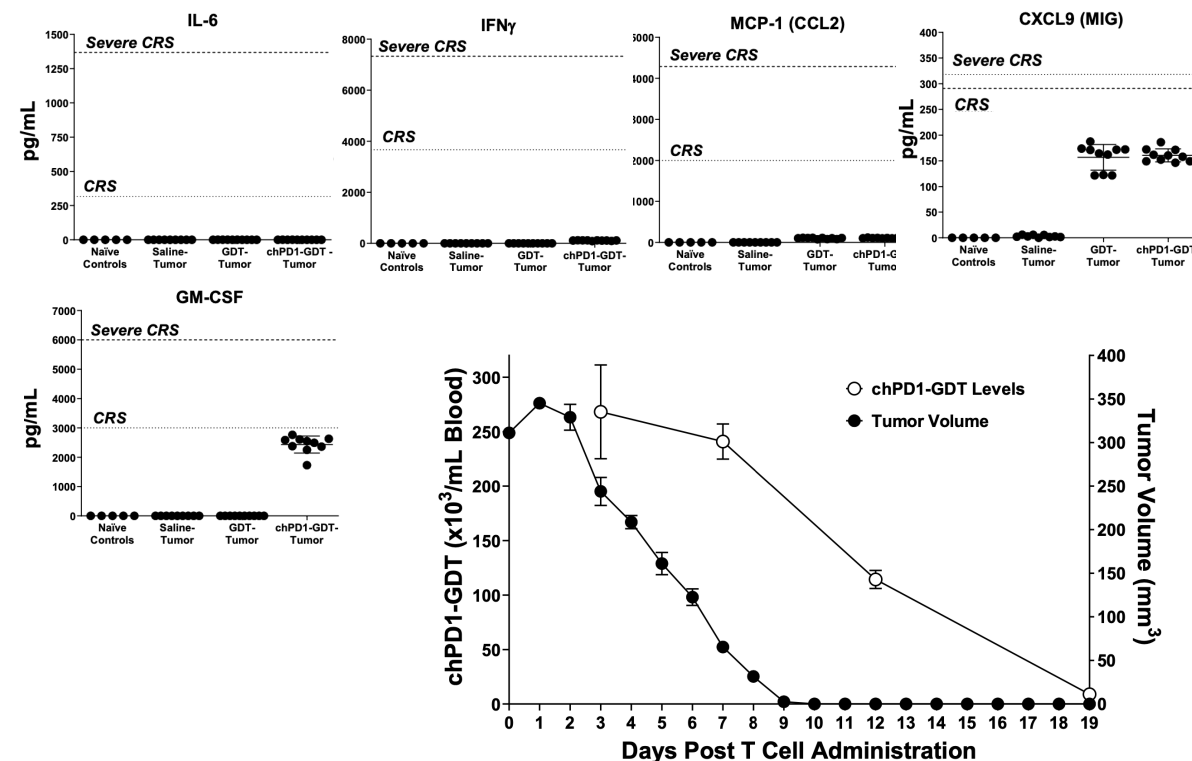
Overall Survival



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

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

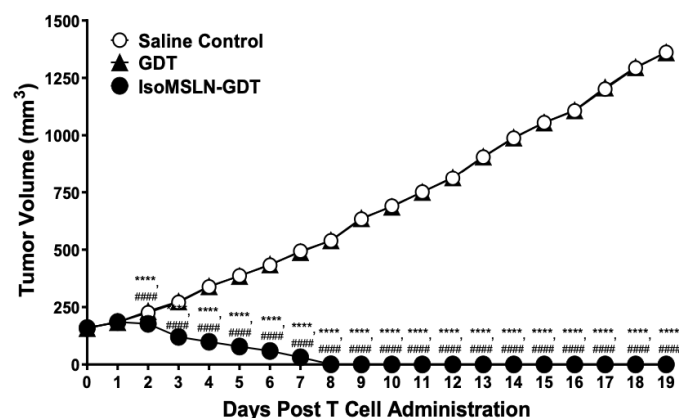
Procel™ does not lead to cytokine level increases modeled to cause severe CRS or CRS, with circulating cell numbers regulated by objective response.



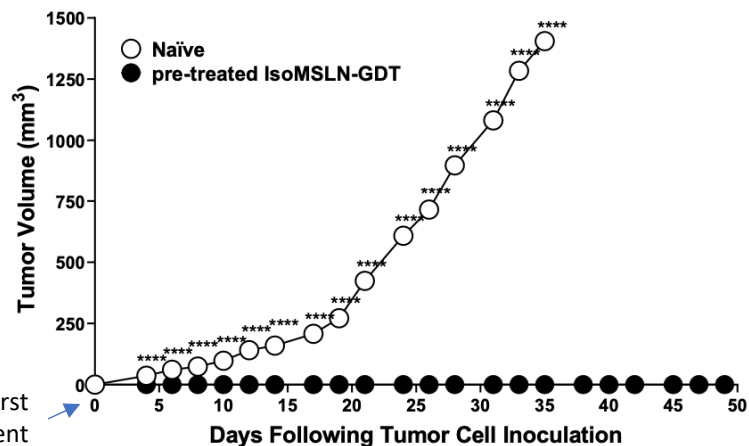
GDT CAR-T Cell Therapy (Isocel™)* Strong Efficacy

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

Tumor eradication



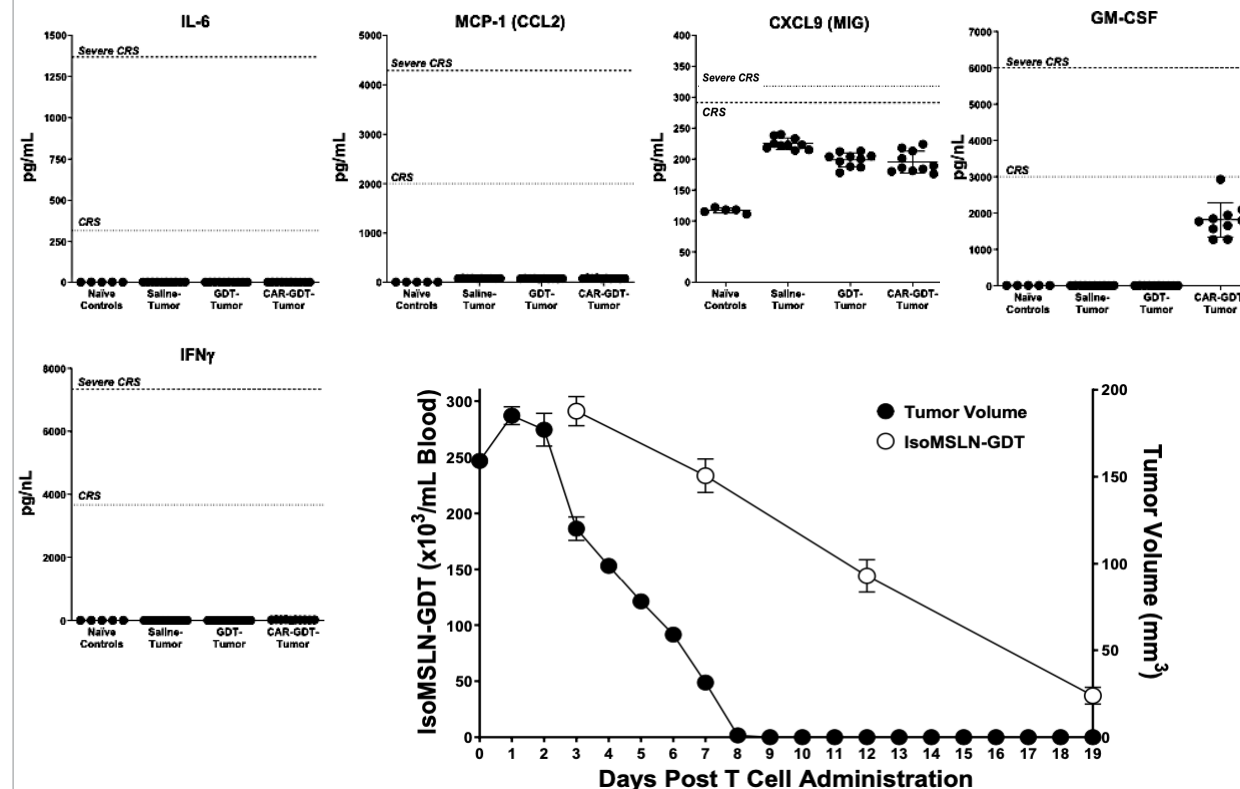
Control of recurrence (persistence)








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



Clinical Trial Candidate	MD Anderson SRA	Target	Pre-Clinical	Phase I
New IND #1 Deltacel™ In combination with standard antitumor modality Allogeneic, Non-Viral, Non-engineered off-the-shelf GDT therapy	Yes	Universal Non-Engineered		Q4 2022 Expected Beginning of Activation Process for New IND #1 Clinical Trial
New IND #2 Procel™ in combination with standard antitumor modality Allogeneic, off-the-shelf, GDT CAR-T therapy	Yes	PD-L1		Q2 2023 Expected Beginning of Activation Process for New IND #2 Clinical Trial
ALEXIS - PRO-1 Procel™ Allogeneic, off-the-shelf, GDT CAR-T therapy	No	PD-L1		Q2 2023 Expected Beginning of Activation Process for ALEXIS-PRO-1 Clinical Trial
New IND #3 Isocel™ in combination with standard antitumor modality Allogeneic, off-the-shelf, GDT CAR-T therapy	Yes	Isoform of Mesothelin		Q4 2023 Expected Beginning of Activation Process for New IND #3 Clinical Trial
ALEXIS - ISO-1 Isocel™ Allogeneic, off-the-shelf, GDT CAR-T therapy	No	Isoform of Mesothelin		Q4 2023 Expected Beginning of Activation Process for ALEXIS-ISO-1 Clinical Trial

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**Flexible Cellular
Therapy Suites**

**Flexible Viral
Vector Suites**

**Dedicated
cGMP
Microbiology
Lab**

**Dedicated
cGMP QC Lab**

**12,000 sq ft
R&D Labs and
Manufacturing**

**CRF9 Compliant
Vivarium and
Laboratory**

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

- 1** **Completion of cGMP Construction**
 - End of Q2 2022
- 2** **Submission of New IND #1 (Deltacel in combination with standard antitumor modality)**
 - H2 2022
- 3** **Expected Activation for New IND #1 (Deltacel in combination with standard antitumor modality) 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 Activation for ALEXIS-PRO-1 and New IND #2 (Procel in combination with standard antitumor modality) Clinical Trials**
 - 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.

Value Proposition Summary



¹American Cancer Society 2020 Cancer Facts & Figures; Leading sites of new cancer cases and deaths; epub.

Leadership Team

**Pietro
Bersani**
CPA, CGMA

CEO

**Scott
Dahlbeck**
MD, PharmD

COS

**Dan
Clark**
CPA, MBA

CFO

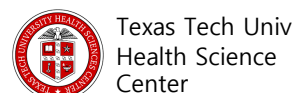
**Michael
Ryan**
PhD

CBRCO



Deloitte.

ARTHUR
ANDERSEN



aurora



Board of Directors

**Michael
Nagel**

Chairperson

**Pietro
Bersani**
CPA, CGMA

Director

**Americo
Cicchetti**

**Independent
Director**

**Frank
Tirelli**

**Independent
Director**

**Karen
Reeves**
MD

**Independent
Director**



neomend



Fuel Systems Solutions

Deloitte.

ARTHUR
ANDERSEN



alliantgroup



Deloitte.



Balance Sheet Summary

As of December 31, 2021

Cash
\$25,353,900

Total Assets
\$30,729,600

Total Liabilities
\$3,409,800

Stockholders' Equity
\$27,319,800

Capitalization Table (in shares, unless otherwise stated)

As of March 31, 2022

Shares of Common Stock
15,585,587

Representative Warrants Outstanding*
400,000 Exercise price of \$6.25
62,500 Exercise Price of \$15.00

Stock Options Outstanding
367,244
Weighted Average Exercise Price of \$8.49

Restricted Stock Units Outstanding
398,087
Grant Date Fair Value of \$7.67



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