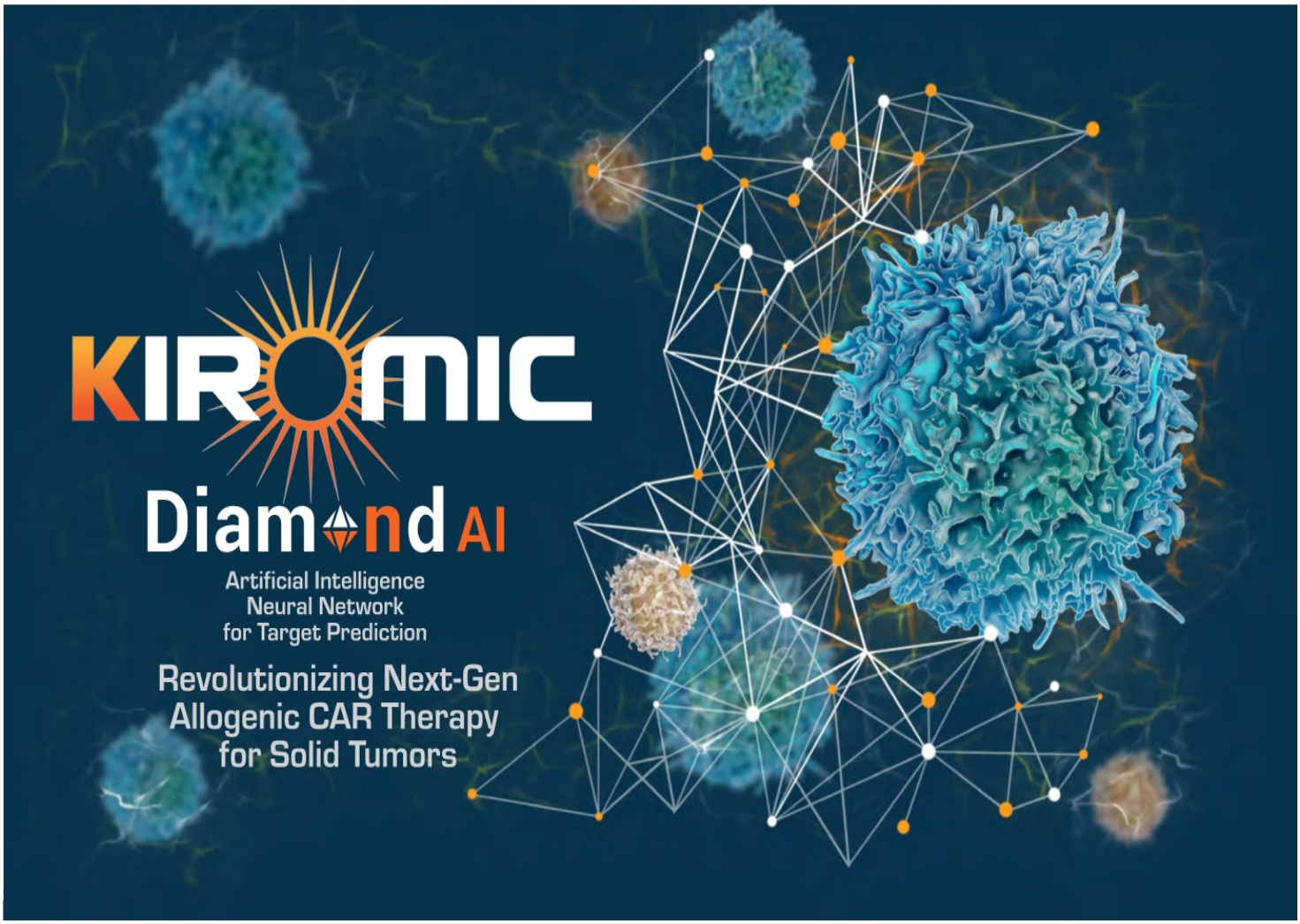
Filed pursuant to Rule 433 of the Securities Act of 1933
Issuer Free Writing Prospectus dated June 25, 2021
Relating to the Preliminary Prospectus dated June 25, 2021
Registration Statement File No. 333-257427



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Free Writing Prospectus

This presentation highlights basic information about us and the proposed offering. Because it is a summary, it does not contain all of the information that you should consider before investing. We have filed a registration statement (including a prospectus) with the SEC for the offering to which this presentation relates. The registration statement has not yet become effective. Before you invest, you should read the prospectus in the registration statement (including the risk factors described therein) and other documents we have filed with the SEC for more complete information about us and the offering.

You may access these documents for free by visiting EDGAR on the SEC Web site at http://www.sec.gov. Alternatively, we or any underwriter participating in the offering will arrange to send you the prospectus if you contact ThinkEquity, a division of Fordham Financial Management, Inc., Prospectus Department, 17 State Street, 22nd Floor, New York, New York 10004, telephone: (877) 436-3673 or e-mail: prospectus@think-equity.com.

This presentation shall not constitute an offer to sell, or the solicitation of an offer to buy, nor will there be any sale of these securities in any state or other jurisdiction in which such offer, solicitation or sale would be unlawful prior to the registration or qualification under the securities laws of such state or jurisdiction. The offering will only be made by means of a prospectus pursuant to a registration statement that is filed with the SEC after such registration statement becomes effective.

Offering Summary

Issuer	Kiromic Biopharma, Inc.
Listing Symbol	NASDAQ / KRBP
Offering Size	~$50,000,000 of Common Stock
Over-Allotment Option	15% (100% primary)
Use of Proceeds	ALEXIS-ISO-1 / ALEXIS-PRO-1 GMP Facility Expansion IP Protection and Reinforcement IND Applications / IND Enabling Trials General Working Capital
Sole Book-Running Manager	ThinkEquity, a division of Fordham Financial Management, Inc.

Diamond AI

Artificial Intelligence Neural Network

for Target Selection

We are connecting the dots in cancer research by using AI and machine learning to connect silos of informations and arrive at cancer targets which will be more effective vs. classic development, saving man-years and billions in development dollars.

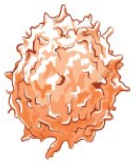
Non-Viral
Genome edit and delivery

Our single-cut gene edits carry a lower mutagenesis risk vs. classic double-cut gene edits.

Our CAR receptors will also have higher safety with an on-demand cut-off switch vs. classic CAR therapies with no off-switch.

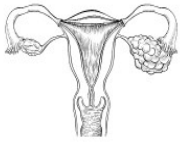
Kiromic at a Glance

Revolutionizing Next-Gen Allogenic CAR Therapy for Solid Tumors



Gamma Delta T-cell
Immune Cell Type

Our CAR Therapy will be using off-the-shelf Gamma-Delta T-cells and will have a higher yield and significantly lower yield variability vs. classic CAR-T therapies.



Solid Tumor

Micro Tumor Environment

Our CAR Therapies will be able to access the micro tumor environment due to our chPD-1 check-point activator vs. classic CAR-T therapies.

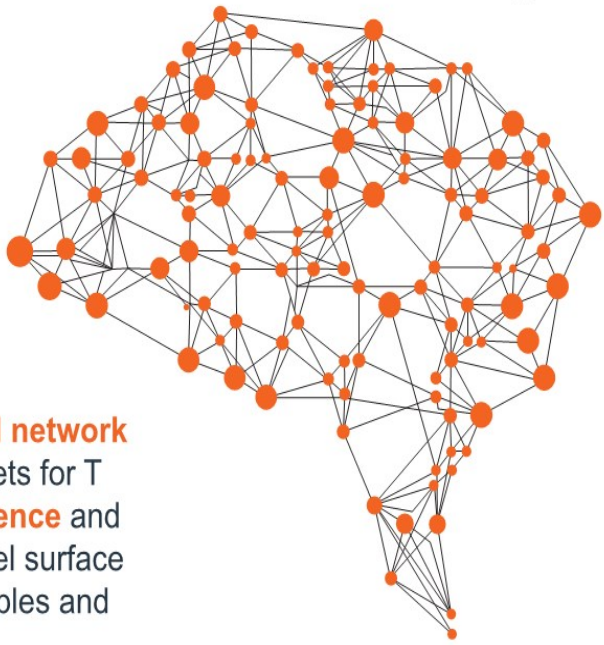
Classic CAR-T are limited to hematologic indications.

KIROMIC

Diamond AI

Artificial Intelligence Neural Network

for Target Selection



Diamond is a computational platform and a **neural network** that can identify new cancer immunological targets for T cells and B cells. Diamond is an **artificial intelligence** and **machine learning** approach that can identify novel surface tumor targets. It uses public and proprietary samples and can expand into the tumor target space.

ADVANCING CAR through A.I.

KIROMIC

Big Data Science

Big Data Science

meets

Target Identification

Manual Target Identification

dramatically compressing

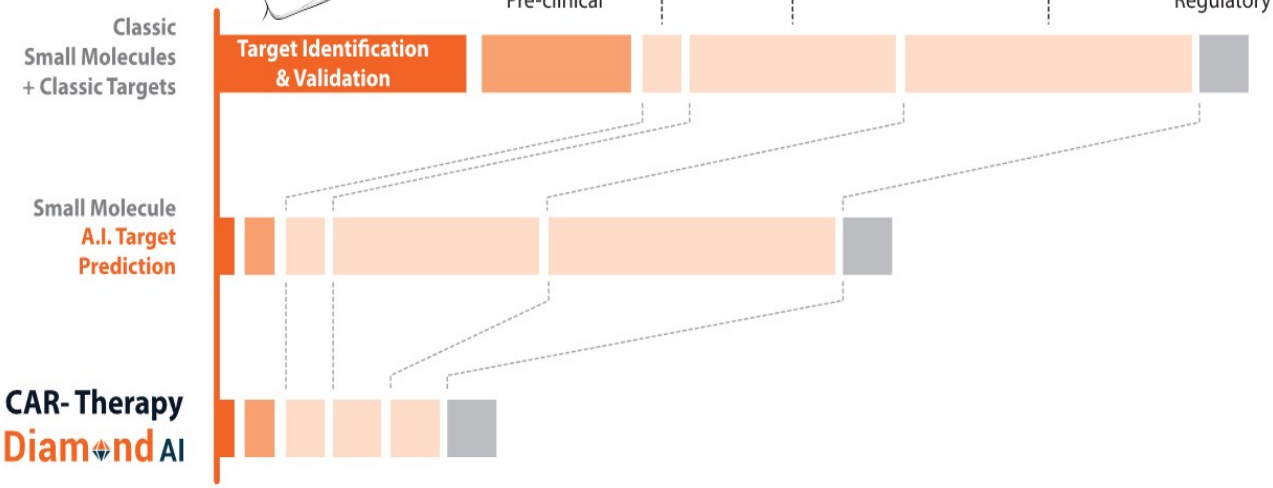
Man-Years and Billions of Drug Development Dollars

to develop a live drug

Artificial Intelligence Engine's

Compression of Time & Costs

for live drug development



ADVANCING CAR through A.I.

Our Therapeutic Products

Allogenic CAR

Immuno CAR-GD-T Therapy

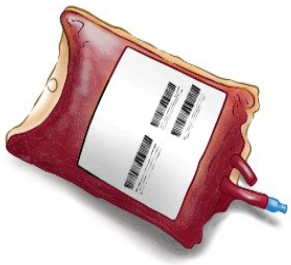
in solid tumors

Allogenic Engineered Immune Therapy

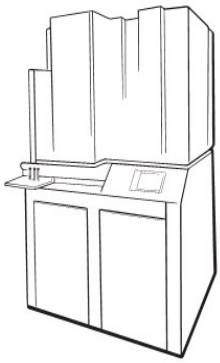
Step 01: Fractionation

Healthy Donor

Screening shows donor has healthy Gamma-Delta T cells



Whole Blood



Fractionation

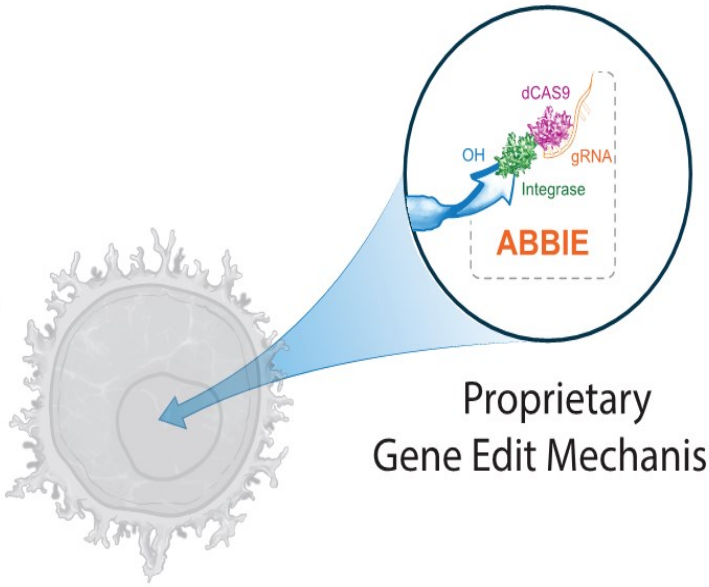
Gamma-Delta T cells extracted

Allogenic Engineered Immune Therapy

Step 02: Genome Edit

Genome Edit

Gamma-Delta T cells



Proprietary
Gene Edit Mechanism

Our Pipeline

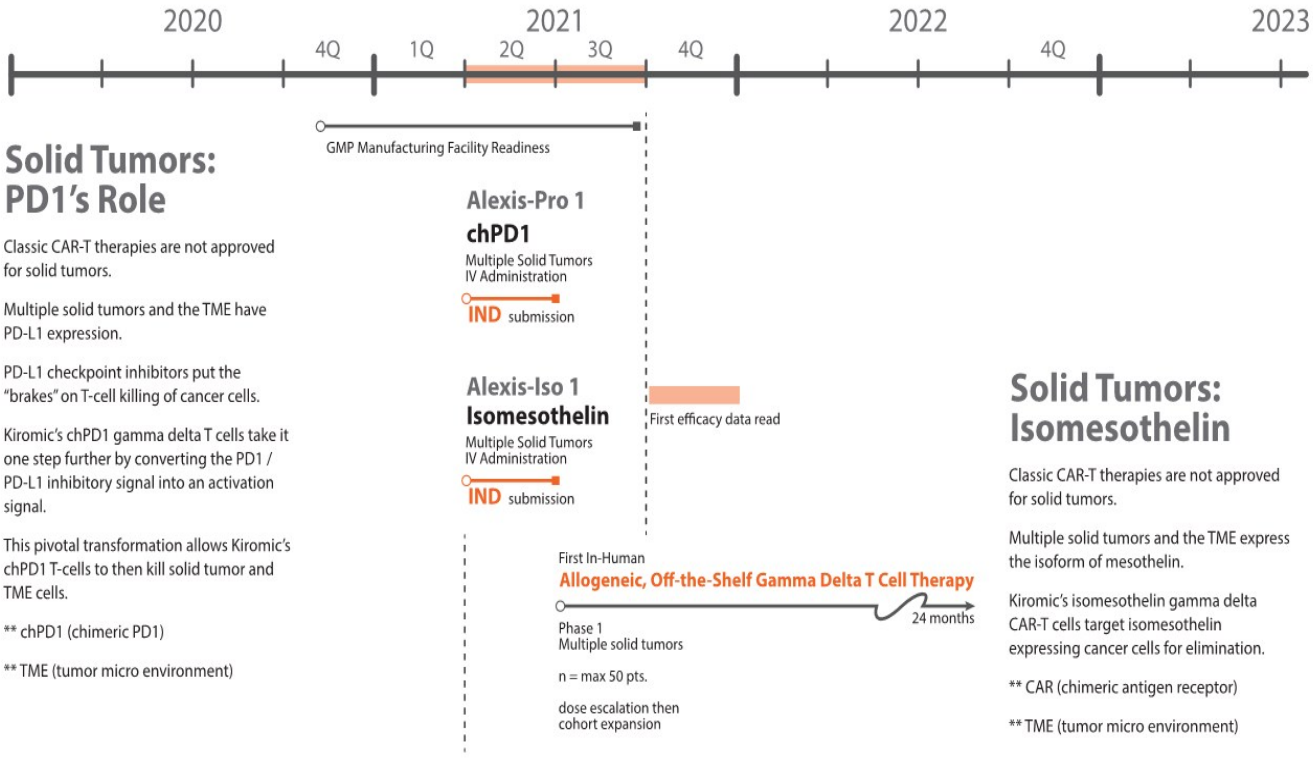
	In vitro validation	Pre clinical	IND	Phase 1	Phase 2	Phase 3
Alexis - Pro 1 Allogenic, Off-the-Shelf γδ chimeric T cells Multiple solid tumors						
Alexis - ISO 1 Allogenic, Off-the-Shelf γδ CAR-T cells Multiple solid tumors						

Cohort Expansion

Kiromic plans to perform a dose-escalation schema in multiple eligible solid tumors to determine the optimal biologic dose (OBD).

Once we reach the OBD, the trial will have a cohort expansion followed by a Phase 2 trial for a specific tumor.

Clinical Programs



Solid Tumors: PD1's Role

Classic CAR-T therapies are not approved for solid tumors.

Multiple solid tumors and the TME have PD-L1 expression.

PD-L1 checkpoint inhibitors put the "brakes" on T-cell killing of cancer cells.

Kiromic's chPD1 gamma delta T cells take it one step further by converting the PD1 / PD-L1 inhibitory signal into an activation signal.

This pivotal transformation allows Kiromic's chPD1 T-cells to then kill solid tumor and TME cells.

** chPD1 (chimeric PD1)

** TME (tumor micro environment)

Solid Tumors: Isomesothelin

Classic CAR-T therapies are not approved for solid tumors.

Multiple solid tumors and the TME express the isoform of mesothelin.

Kiromic's isomesothelin gamma delta CAR-T cells target isomesothelin expressing cancer cells for elimination.

** CAR (chimeric antigen receptor)

** TME (tumor micro environment)

Recent Developments

chPD1 Licensing

In-licensed chPD1 from Longwood University

CAR-T chPD1 addresses the Micro Tumor Environment in Solid Tumors

AACR

6 posters presented at AACR 2021

Showcased Kiromic's
-- AI Engine
-- AI Target validation
-- Gamma Delta T-cell Manufacturing

IND Submission

Submitted two expanded INDs for Off-the-Shelf, Allogenic CAR-T for Solid Tumors

Targets: chPD1, Iso-msln

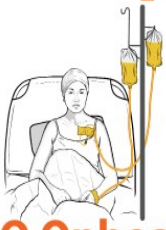
Mode of Admin: IV

Recent Developments (Cont')

Manufacturing

GMP Manufacturing facility certification, expansion

Appointed manufacturing veterant from Novartis who had manufactured for Kymriah (CAR-T)



CRO Onboard

IQVIA engaged as CRO to:

-- ID clinical sites
-- Select patient pool
-- Select PI at sites

Presentations

-- Gamma Delta T Summit to showcase latest off-the-shelf allogenic CAR-T manufacturing

-- Next-Gen Immuno Oncology Annual Congress to showcase latest AI Targets and Validation

-- Cell Immuno Therapies for Solid Tumors Summit

Milestones

3Q-2021	cGMP, multiple-room facility certified, staffed, and stocked
3Q-2021	First-in-Human dosing with Off-the-Shelf, Alexis-Pro1 (chPD1) CAR-T for Solid Tumors
3Q-2021	First-in-Human dosing with Off-the-Shelf, Alexis-ISO1 (Iso-Mesothelin) CAR-T for Solid Tumors
4Q-2021	Early safety and efficacy data from Alexis-Pro1 (chPD1)
4Q-2021	Early safety and efficacy data from Alexis-Iso1 (Iso-Mesothelin)
2H-2022	Termination of Phase 1 (Data: Safety, Efficacy)
2Q-2023	Beginning of Phase 2 / 3

The Road Ahead

GMP
Redundancy

AI Algorithm
Reinforced
InSilico AI
Yale AI Bioinformatics

Clinical
Taskforce

CMC
Taskforce

Regulatory
Taskforce
Phase 2 planning

Vertical Integration
Key vendors are brought in-house to improve response time

Comparables

A.I. Targets + Small Molecules

SCHRÖDINGER	**$5.37 B** *IPO Feb 2020*
BLACK DIAMOND THERAPEUTICS	**$440 M** *IPO Jan 2020*
bioxcel therapeutics	**$920 M** *IPO Mar 2018*
Lantern Pharma	**$162 M** *IPO Jun 2020*

CAR-T and CAR-NK

Fate THERAPEUTICS	**$7.61 B** *Public (Phase 1, solids)*
CODIAK	**$493 M** *Public (IND)*
Kite Pharma	*hematologic* **$11.9 B** *GILD acqui. post approval*
JUNO THERAPEUTICS	*hematologic* **$9.0 B** *BMS acqui. end Phase 2*

NASDAQ: KRBP *Market data as of 06/22/2021, Yahoo Finance intraday*

Capitalization

	As of June 25, 2021
Common Stock	7,387,500
Options ($8.90 WAEP)	558,435
Warrants ($15.00 per share)	62,500
Restricted Stock Units	1,100,281
Fully Diluted	9,108,716

Management

CEO Director

Maurizio Chiriva-Internati, PhD

Mr. Chiriva-Internati is an associate professor at MD Anderson Cancer Center. He has spent the past 28 years studying cancer targets and is the founder of Kiromic Artificial Intelligence Neural Network. He has published +160 articles (+peer reviews) on cancer targeting and on the use of AI to expedite the search for these targets. He holds PhD in immunology (U of Nottingham), PhD in morphological science (Milan), and a Certificate in Artificial Intelligence - M.I.T.

CFO Director

Tony Tontat

Mr. Tontat brings to Kiromic over 2 decades of business experience from public (NASDAQ: SRNE, NK) and privately held biotechs. He had been healthcare analysts at specialist healthcare investment funds in New York, and Connecticut. He was also an investment banker at HSBC Securities in their New York, London, and Paris offices. Bachelor of Arts in Economics - Harvard University.

CSIO Director

Gianluca Rotino

Mr. Rotino held CEO and Chairman roles in several Italian companies specializing in high-tech, and corporate consulting. He also worked at law firms in Milan where he specialized in M&A, intellectual property prosecution and corporate law. He holds a business development degree and bachelor of science (electronics). Mr. Rotino also has earned a certificate in Essential Epidemiologic Tools for Public Heath Practice from Johns Hopkins University, a certificate in the Artificial Intelligence Programme from Said Business School at the University of Oxford, and a certificate in Leadership and Innovation from M.I.T.

CMO Scott Dalhbeck, MD, PharmD

Dr. Dalhbeck was a radiation oncologist and was an adjunct professor of internal medicine, pathology, and urology at Texas Tech. He has also patented, manufactured, and commercialized IP and has more than a decade of experience in medical and oncology commerce. He holds an MD - Texas Health Science Center, and a PharmD - U of Nebraska. His residency was at Kaiser Permanente of Los Angeles.

COMO Ignacio Núñez MSCHE, MBB

Mr. Núñez has over 20 years of global experience in corporate functions including manufacturing, research, operational excellence and strategy. He has held senior leadership positions in companies including General Electric, Johnson & Johnson and Novartis. Most recently, he was the Executive Director of Manufacturing at the Gene Therapy Program of the University of Pennsylvania. Before that, he was the Head of Manufacturing Strategy and Operations Excellence at Novartis, where he was charged with transforming manufacturing operations in support of the ramp up of Kymriah, the first FDA-approved CAR-T cell therapy, which was developed at the University of Pennsylvania. Mr. Núñez holds an MSC in Chemical Engineering from the University of Granada.

Value Drivers

Revolutionizing Next-Gen Allogenic CAR Therapy for Solid Tumors

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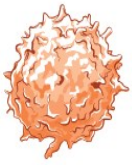
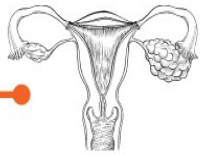


Gamma Delta T-cell
Immune Cell Type



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THANK YOU

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Houston, Texas 77054
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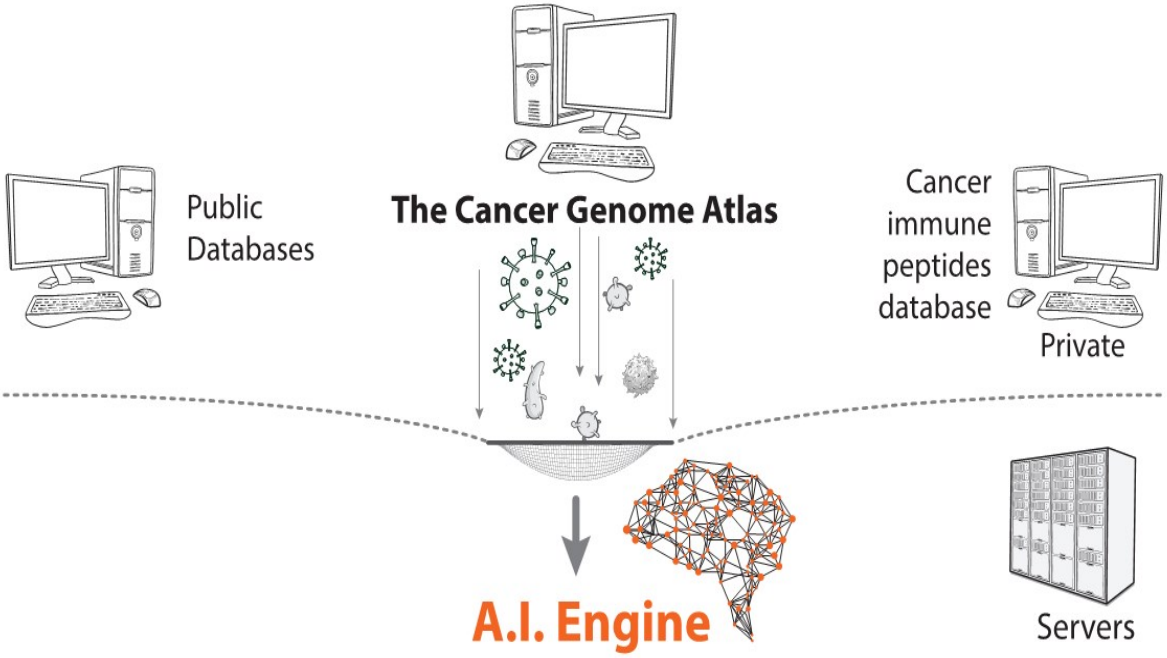
ttontat@kiromic.com

Step 1

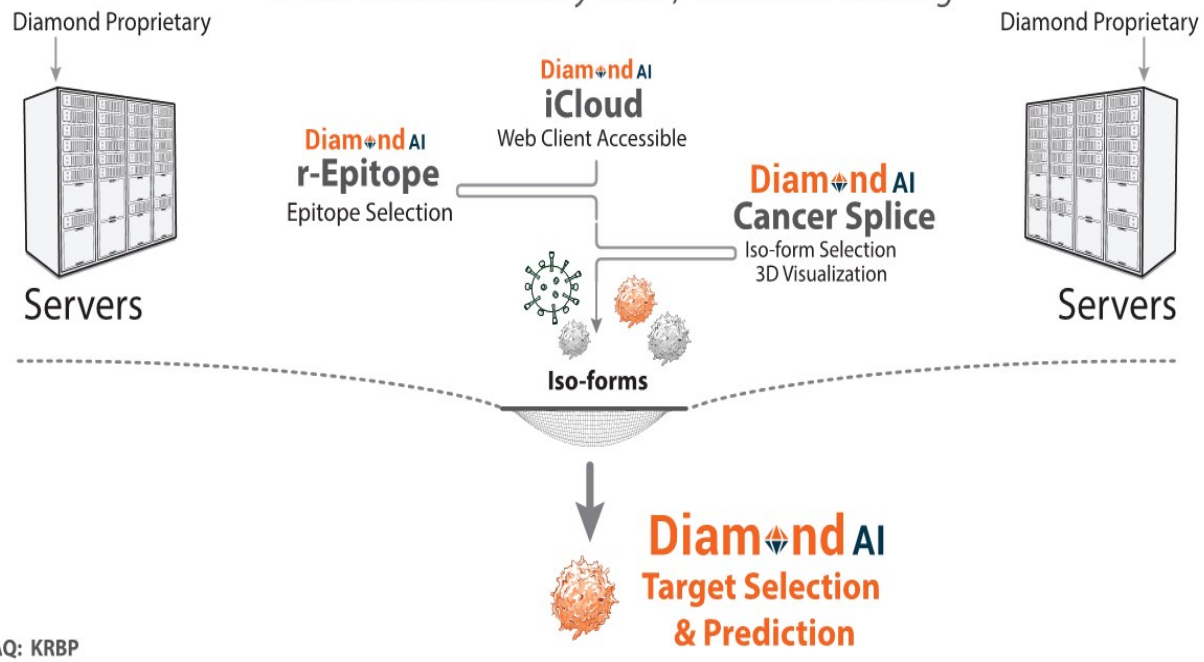
Big Databases



Step 2

Artificial Intelligence Engine

+histo-aminochemistry filters, +machine learning

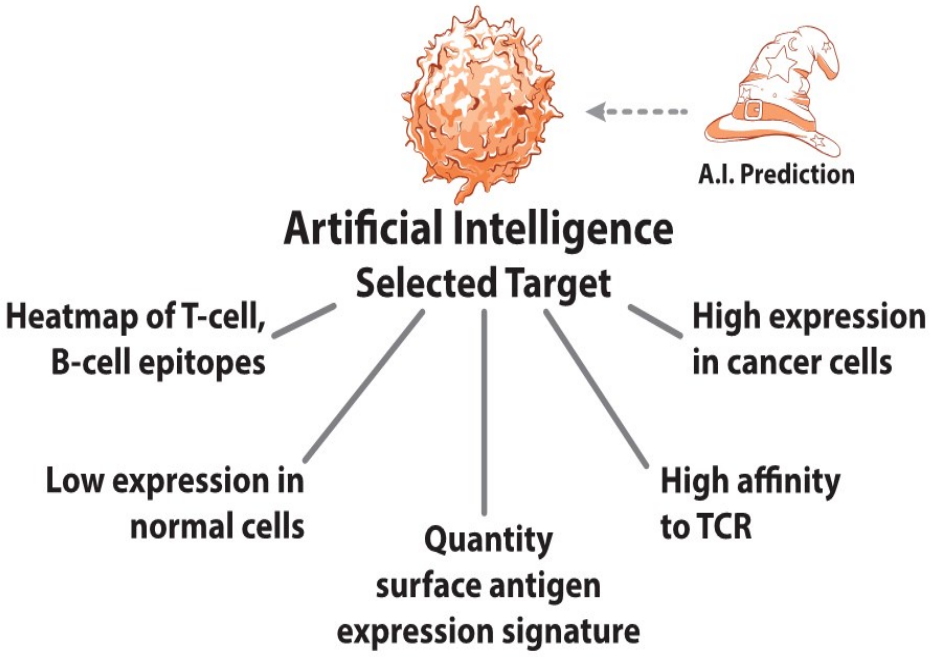


Diamond AI
Target Selection & Prediction

Step 3

Diamond AI

Prediction



Step 4

Target Validation

We rigorously validate all targets from our A.I. Prediction Engine
Internal validations and then external validation

Algorithm Validation

InSilico Solutions

Wet Lab Validation

MD ANDERSON CANCER CENTER

Baylor University
University of Rome
Humanitas Research Hospital (Milan)

Diamond AI Processes

non-exhaustive list of functions being applied by A.I. Engine

Prioritizing T and B Cell Targets

Diamond generates a prioritized list of cancer immunological targets for T cells and B cells.

These targets can be used to create therapies such as antibody therapies, T cell therapies, T cell receptor therapies, CAR T cell therapies and vaccine therapies.

Identify Highly Expressed Genes

Diamond's cognitive and deep learning capabilities extract information from our extensive digital library consisting of clinical studies, genomic and proteomic datasets.

Diamond harmonizes all the raw data and creates datasets which allows us to screen for cancer targets.

Diamond will identify and prioritize lists of genes (biomarkers, wild type, mutant, isoform, neoepitope, etc.) that are highly and specifically expressed in the disease of interest while providing its distribution and methylation status across the entire patient population.

It also maps out the exact portion of the gene that will elicit an immune response.

Perform Meta Analysis

Diamond performs meta-analysis and convolution studies while standardizing and normalizing data across multiple and variable experimental platforms, then allows for the visualization of consistent and accurate results in a user-friendly fashion.

Predict Isoform Targets

Cancer cells will down regulate or shed targets in order to avoid detection and destruction by T cells (the immune system).

These variations are known as isoforms.

CancerSplice also shows a box plot by tissue of expression of the isoform in normal cancer genome atlas tissues and a box plot of the matching isoform in genotype-tissue expression program normal data.

The sequence of amino acids that are specific for the selected cancer isoforms are then directly fed to Diamond's artificial neural capsule network for peptide design and prioritization.

Diamond AI CancerSplice ™

A key A.I. Engine

Target isoforms are protein variants of the same targets that occur during the normal processing of immature gene transcripts to the mature form.

Target isoforms include variations in their primary amino acid sequence that can change both the final folded form of the target plus their ability to be recognized by modified T cells (autologous/allogeneic) and other cells, such as NK or invariant NKT cells (often used in the allogeneic setting).

If they are the predominate form on the cell surface, these isoforms can make it impossible for T cells to outright bind the targets on cancer cells.

No binding or insufficient binding to the isoform results in no killing of cancer cells.

Our CancerSplice accurately predicts the most appropriate isoforms for T cells to bind and destroy cancer cells.

ABBIE Gene Editing Technology

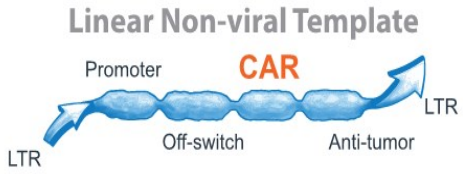


Figure 1. Our ABBIE gene-editing technology begins with the transgene template plasmid. Plasmid DNA is cut with restriction enzyme, ScaI, liberating the transgene template along with the retroviral-derived long-terminal repeats (LTRs), which is purified away from the plasmid DNA and ScaI protein.

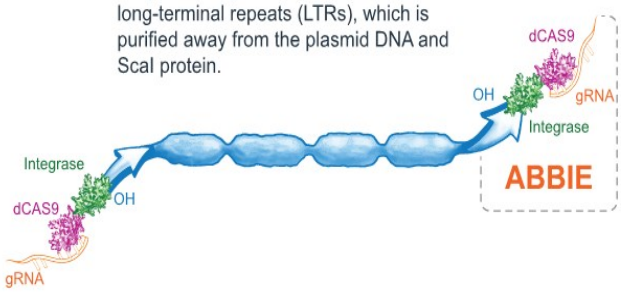


Figure 2. The ABBIE integrase, derived from HIV, is added, which binds to the LTRs and exposes a reactive 3'-OH group on each end.

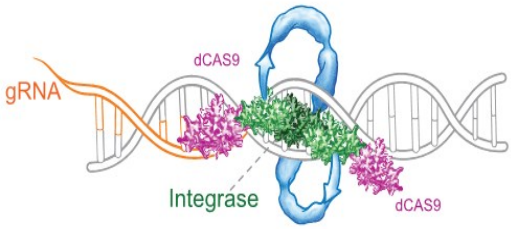


Figure 3. The guide RNA (gRNA) tethers ABBIE-bound template to the target site via DCas9, and Integrase helps to attach the exposed 3'OH groups to the target site on both strands without causing a dsDNA break.

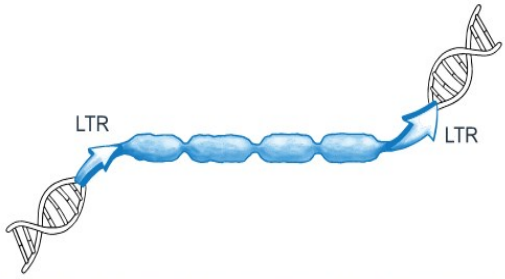
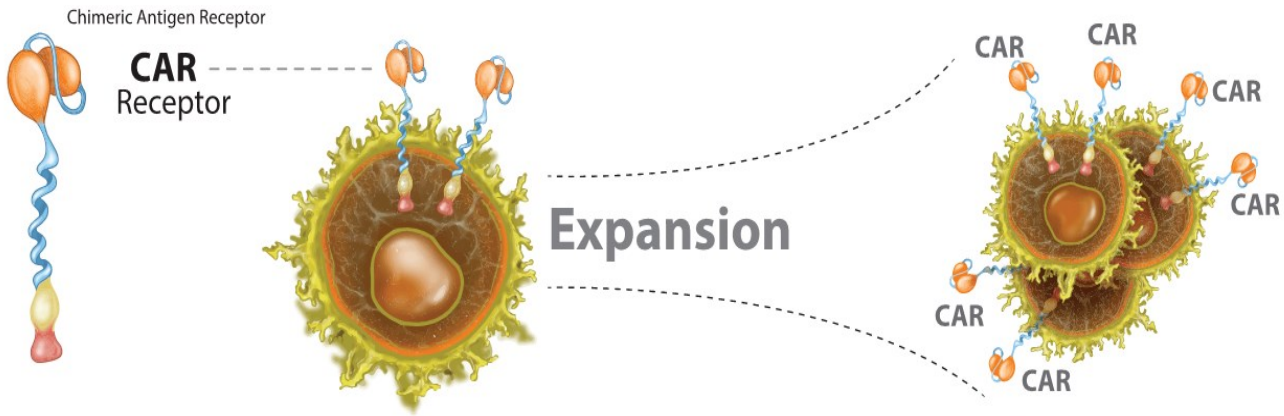


Figure 4. Following stable integration of the template into the target DNA locus, a short DNA duplication is present on each end.

Allogenic Engineered Immune Therapy

Step 03: Gamma-Delta T Cells expanded invitro

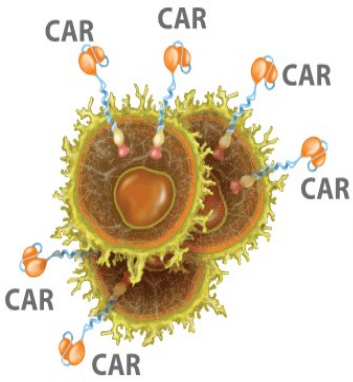


Gamma-Delta T Cells start expressing CAR Receptors

Engineered Gamma-Delta T Cells expanded invitro

Allogenic Engineered Immune Therapy

Step 04: GD-T Cells infused into Patient

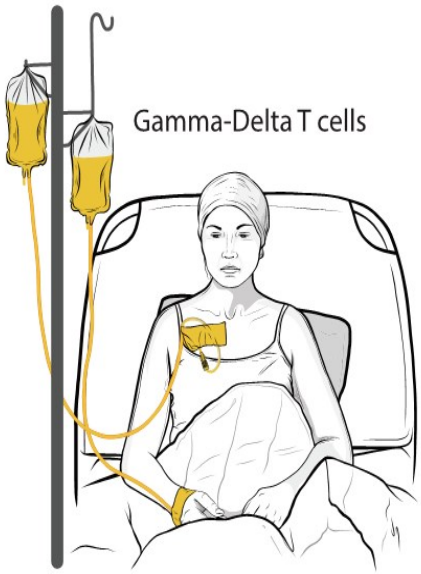


Gamma-Delta T cells

Off-The-Shelf

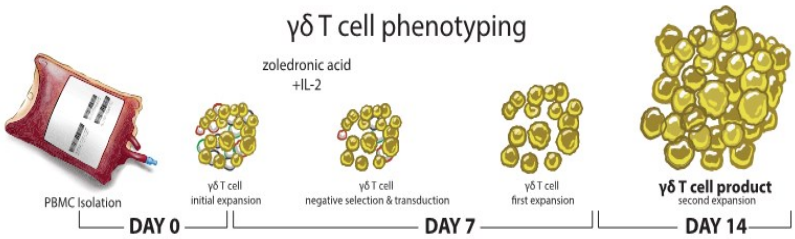
Engineered Immune Cell Therapy

Gamma-Delta T cells

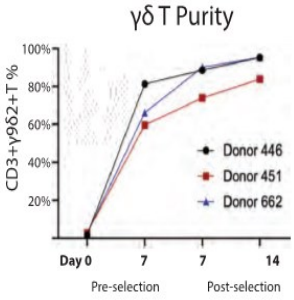


Patient receives engineered Immune Cell Therapy

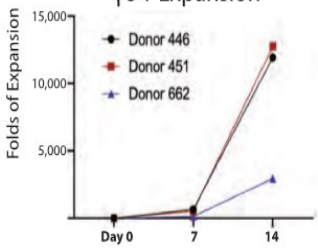
How We Know: GD-T cell Expansion Works



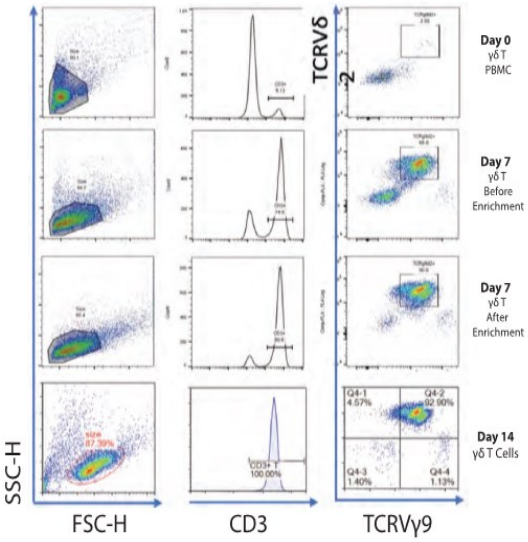
A large fold of expansion of highly pure γδ T cells during in vitro stimulation, culture, isolation and expansion process.



The percentage of CD3+γ9+δ2+ T cells over 14-day culture.



The expansion fold of CD3+γ9+δ 2+ T cells with our method.



CONCLUSION

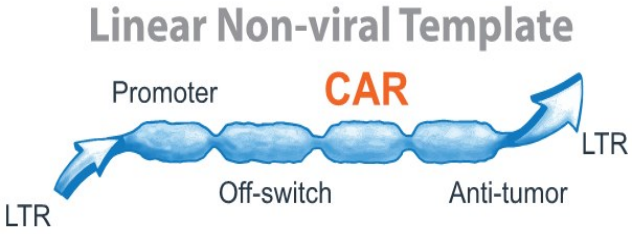
Our method of γδ T expansion yields up to1,000-fold expansion of γδ T cells, which is over 95% purity for positive for CD3, Vγ9, and Vδ2.

This has potential to produce enough number γδ T for clinical use.

Up-Armoring

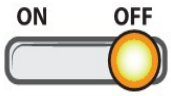
Accessory proteins can "up-armor" cellular therapies

Strategic choice of proteins to improve cellular function and neutralize anti-immune responses



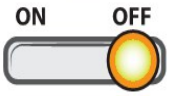
* Activated signaling molecules chosen to enhance cell persistence by stimulating cytokine pathways
* Targeting the immunosuppressive "reactive" stroma can enable tumor targeting by therapeutic cells while increasing anti-tumor efficacy

Switches



ACTIVATION Switch

A rapidly deployed activation switch can provide a survival and proliferation signal to the therapeutic cells to enhance their efficacy and persistence in vivo.

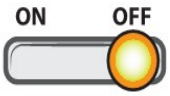


ATTENUATION Switch

A rapidly deployed attenuation switch can intercept activation signals transiently to minimize toxicity following successful anti-tumor interactions. Choice of two non-mutually exclusive Attenuation Switch approaches:

(a) a protein-based switch that rapidly triggers attenuation of target cells in a dose-dependent fashion.

(b) a small molecule-based approach to rapidly and reversibly attenuate cell signaling.



SAFETY Switch

A rapidly deployed, protein-based safety switch can eliminate therapeutic cells in case of acute toxicity. The safety switch is designed to eliminate either:

(a) essentially all active therapeutic cells.
(b) only the most active cells, preserving a cohort of backup therapeutic cells for long-term control of residual relapsing tumor cells.

The Safety Switch will be co-expressed along with the bioactive chimeric activation receptor (CAR), the Activation Switch, and the Attenuation Switch.