



Committed to Cures

Pioneering next-generation cell therapies for patients with cancer and other serious diseases

January 2022

Disclaimer

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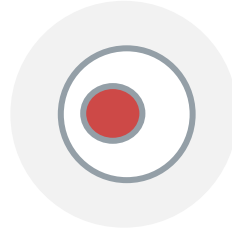
Gamida Cell's advanced cell therapy programs are demonstrating **near-term promise** and **long-term potential**



Omidubicel

Lead therapy poised to address unmet needs

- Potential to be first FDA-approved cell therapy for allogeneic hematopoietic stem cell transplant (allo-HSCT)
- Breakthrough Therapy and Orphan Drug status
- Preparing for BLA submission in 1H22



GDA-201

Progressing clinical program in NK cells

- NK cell product with positive Phase 1 data using fresh product
- Submitted IND for a Phase 1/2 trial in NHL with an allogeneic readily available cryopreserved formulation
- Ongoing discussion with the FDA to advance the IND



GDA-301/401/501/601

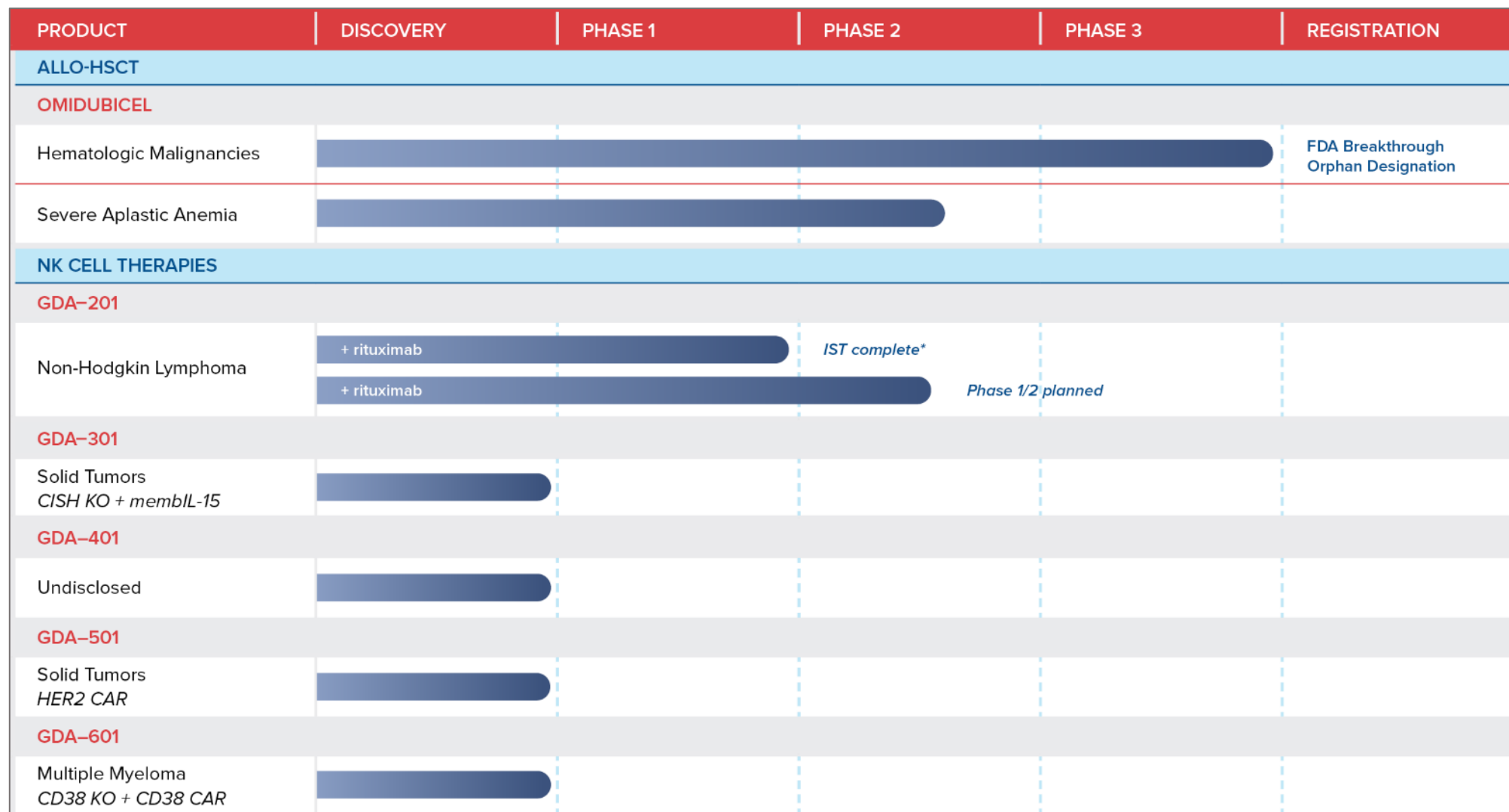
Opening new frontiers in cancer immunotherapy

- Proof-of-concept for genetic engineering modifications, including CAR, membrane bound IL15, and knockouts using multiple approaches including CRISPR
- Evidence of increased cytotoxicity in preclinical studies
- Potential in hematologic cancers and solid tumors

Well positioned to execute goals | \$96M Cash* | Cash runway into mid-2023 and through potential omidubicel approval

*As of December 31, 2021, unaudited

Our pipeline reflects our commitment to developing **curative therapies** for patients with **hematologic diseases and solid tumors**



*Investigator Sponsored Trial (IST) was with a fresh formulation of GDA-201

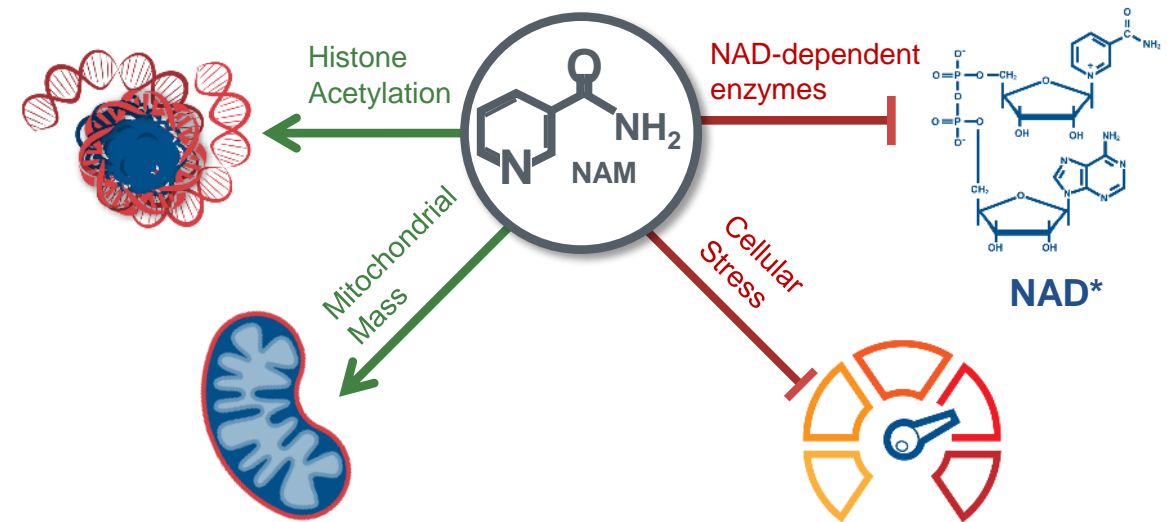
Our proprietary NAM Platform powers our commitment to cures

Gamida Cell NAM Platform

Enhances cellular **functionality and phenotype**

Augments the **number of allogeneic donor cells**

Demonstrates potential to **multiply any cell type**



NAM=nicotinamide. The NAM therapeutic platform leverages the unique properties of NAM to enable the expansion of multiple cell types, including stem cells, with appropriate growth factors to maintain the cells' original phenotype and potency

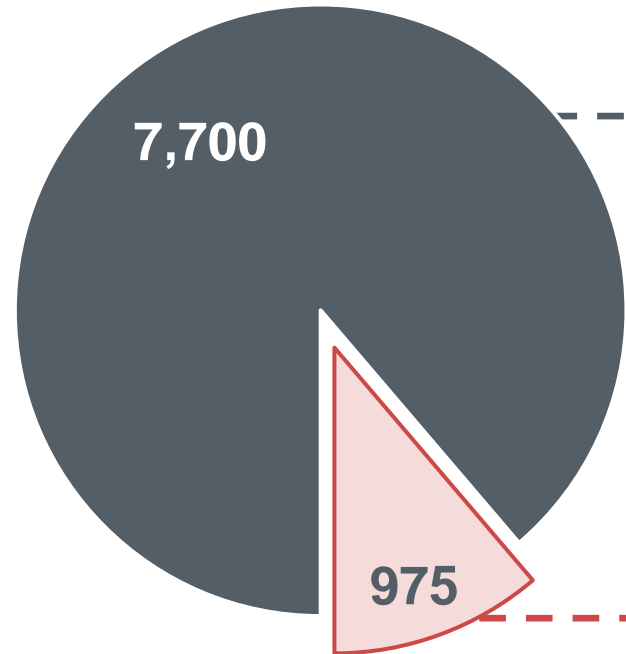
Omidubicel

A potentially curative treatment for patients with hematologic malignancies in need of an allogeneic stem cell transplant

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Allo-transplant is a **potentially curative treatment option**, and while a **growing market**, it is not without **unmet needs**

Allo-HSCT in the United States



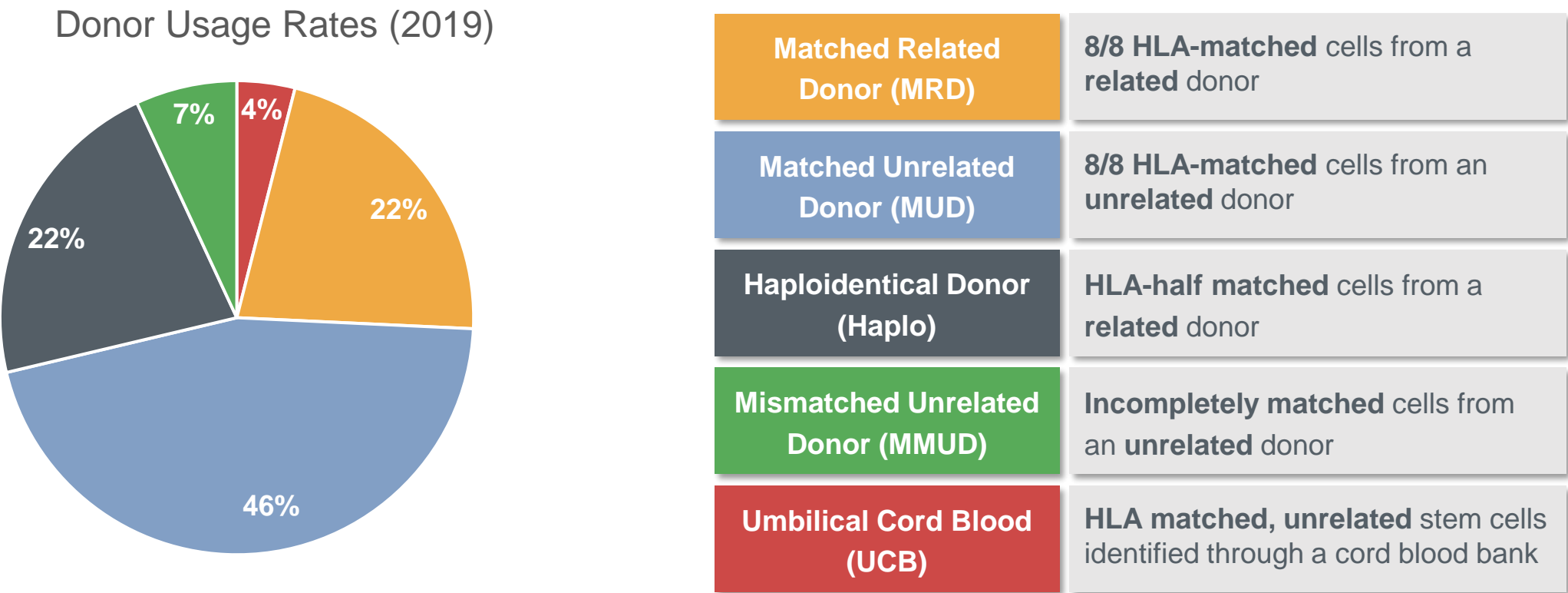
7,700 patients 12+ with hematologic malignancies were transplanted in 2019, and that number is **projected to grow** due to increase in aging population, growth in hematologic malignancies, earlier diagnosis, and accelerated referrals

Transplanters indicate that the number of patients **unable to find appropriate donors** is equivalent to **~14% of potential transplant volume**

■ Completed Transplants ■ Not Transplanted: Donor Reasons

Each patient who receives an allo-HSCT must be **uniquely paired with a donor source**, and currently there is **no standard of care**

Donor source usage rates are driven by HLA match*, availability, donor age, and timing



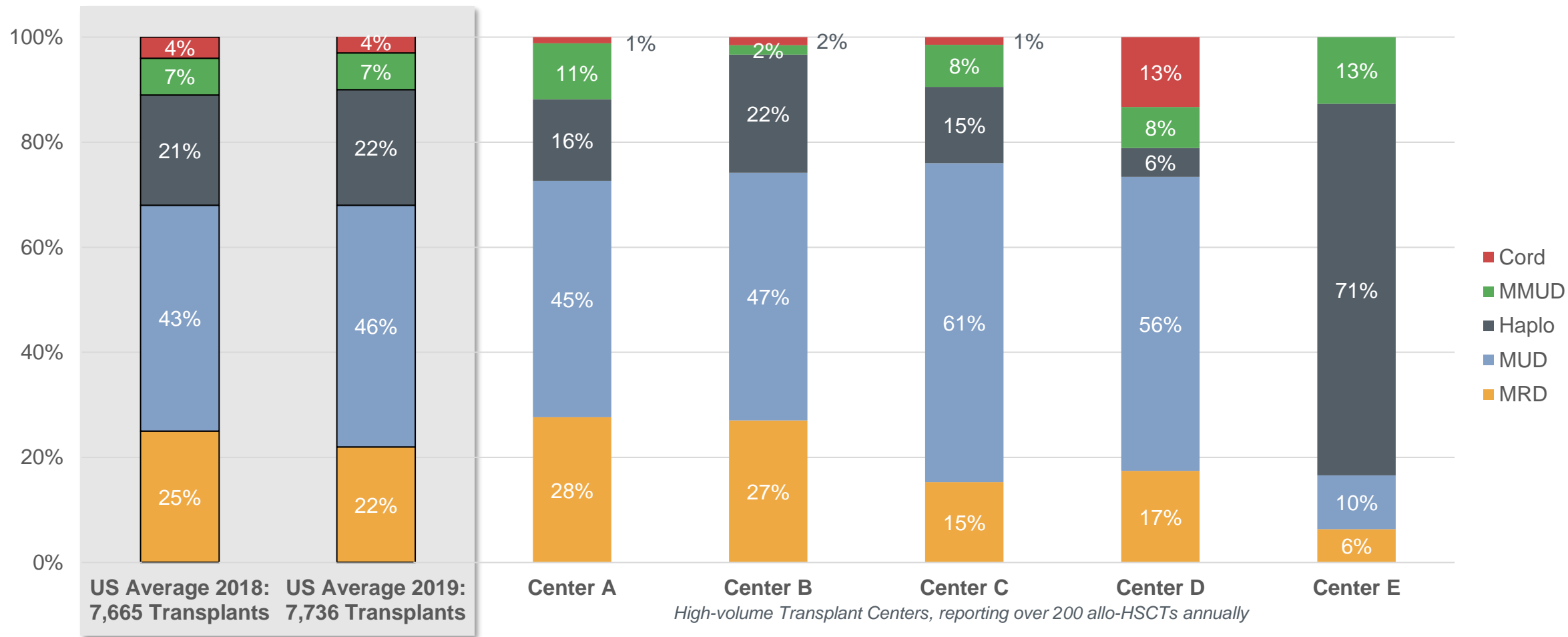
*HLA match refers to the process in which blood or tissue samples are tested for **human leukocyte antigens** (HLAs) to determine the **degree of matching** between the **donor and transplant recipient**.

Donor source identification and selection is complex, and each source has limitations

Matched Related Donor	Matched Unrelated Donor	Haploidentical Donor	Mismatched Unrelated Donor	Umbilical Cord Blood
Recognized as the gold standard	Seen as the next alternative to MRD	Extends chance of finding a related donor	Registries provide more options	Readily available, less stringent matching criteria without the risk of increased GvHD
<ul style="list-style-type: none">• 70% of patients will NOT have an MRD• Requires consideration of donor age, as older donors are associated with reduced overall survival (OS)	<ul style="list-style-type: none">• Likelihood of finding a match is lower for minority groups• The search process averages 2-3 months, with delayed acquisition significantly impacting patient outcomes	<ul style="list-style-type: none">• Use of PTCy reduces GvHD, but leads to increased incidence of infection and risk of cardiotoxicity• Potential for older donor age also negatively impacts outcomes	<ul style="list-style-type: none">• The decreased HLA match increases risk of infections for patients• Patients face the same negative consequences as MUD when a significant delay occurs	<ul style="list-style-type: none">• Engraftment time is delayed due to lower cell count, leading to increased risk of infection• Patients face additional hospitalization days compared to other donor sources

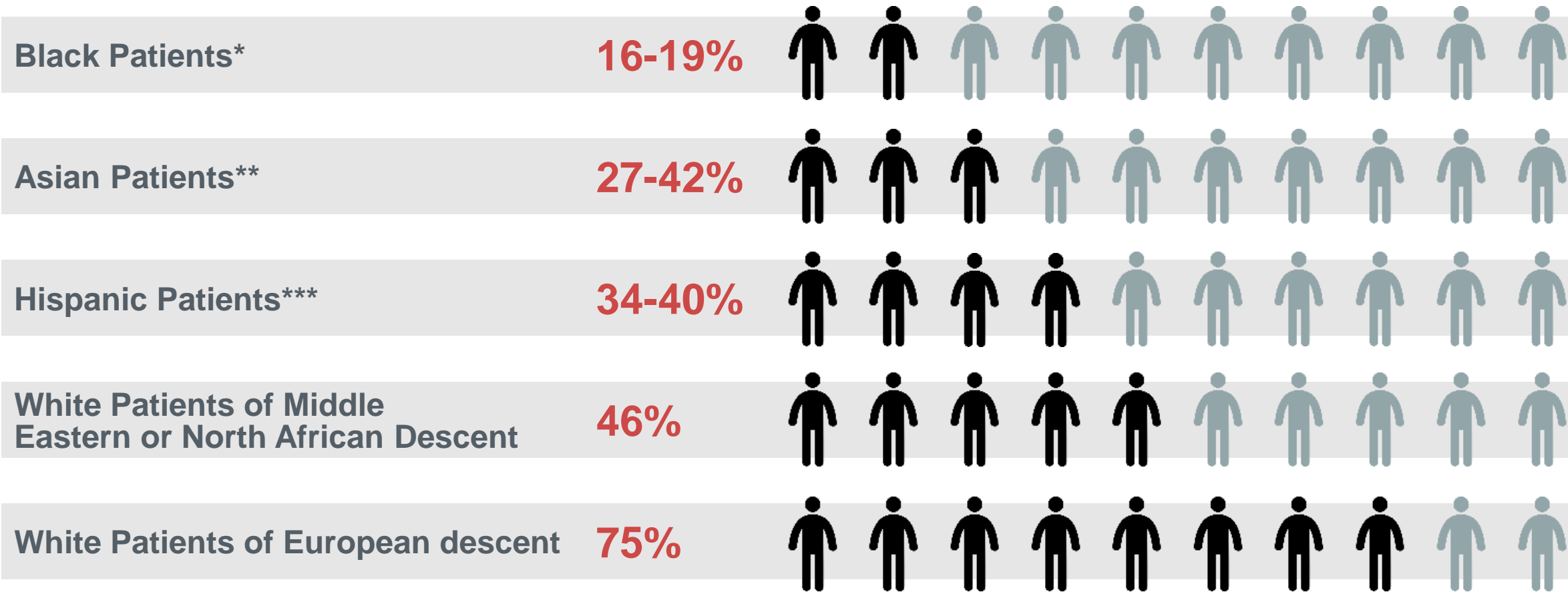
GvHD: Graft versus Host Disease

Additionally, Transplant Centers differ in their use of donor source



There is a **particularly urgent unmet need** for patients within **minority groups**, as these patients comprise **only ~30% of transplants today**

Likelihood of finding a donor match through a registry varies greatly by race



* Includes African American, African, Black South or Central American, and Black Caribbean
** Includes Chinese, Korean, South Asian, Japanese, Filipino, Southeast Asian, and Vietnamese
*** Includes Mexican, Hispanic South or Central American, and Hispanic Caribbean

Omidubicel is the **advanced cell therapy** option that addresses today's **unmet needs**

	Unmet Needs	Omidubicel Offering
Match	70% of patients will not have an adequately matched related donor	~ 93% of patients were able to find a suitable donor in the Phase 3 trial due to less stringent matching requirements
Availability	80% of African Americans will not find a matched unrelated donor in the registry database	Omidubicel expands access to previously underserved populations, and minority patients represented ~ 40% of patients in the Phase 3 trial
Donor Age	17% Excess risk for OS for every additional decade of donor age >30 years	Omidubicel combines the naivety of cord blood with sufficient cell quantity for robust immune reconstitution
Timing Urgency	2-3+ Months from preliminary search to transplant	Omidubicel offers rapid availability and a reliable process, with a personalized product delivered in 4 weeks from selection of a cord blood unit

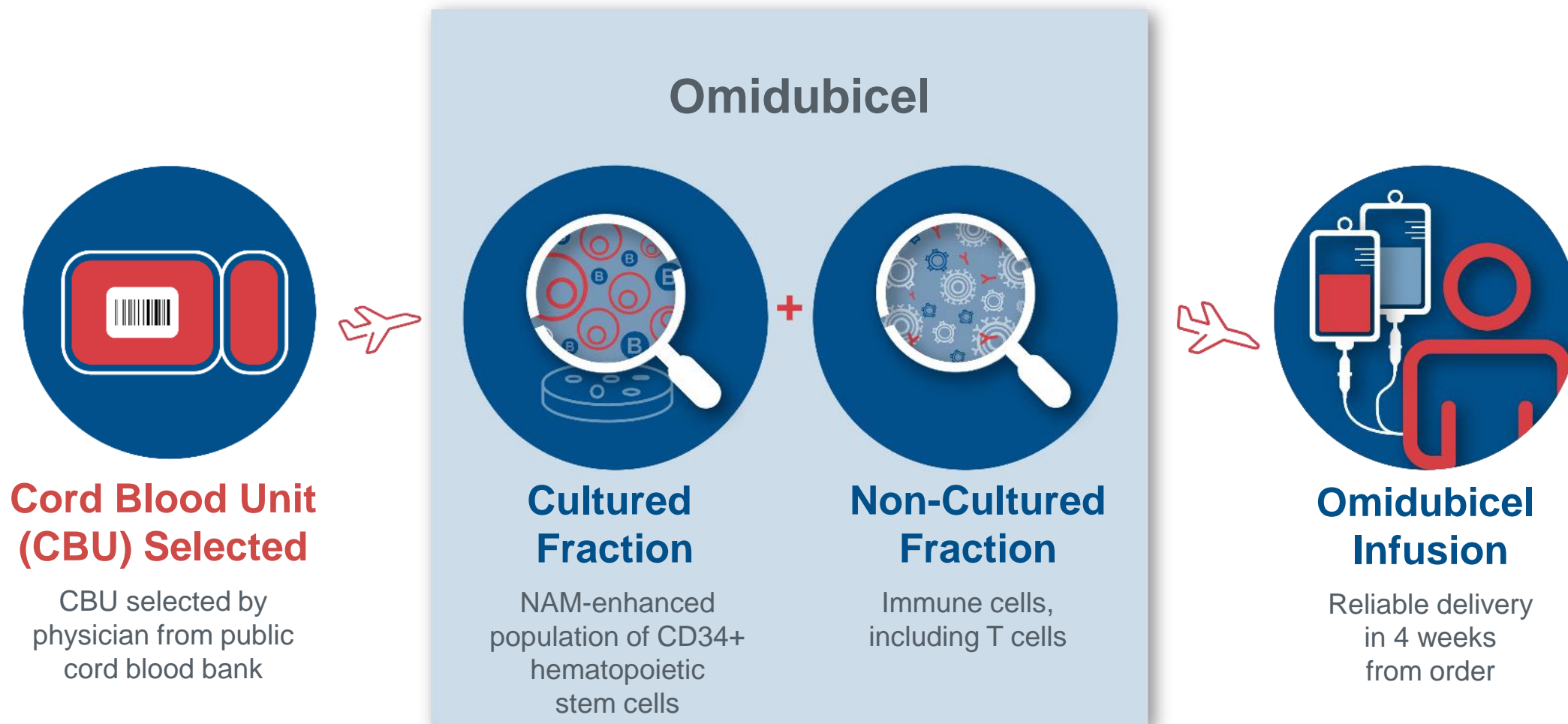
Omidubicel data demonstrates **positive clinical outcomes** for patients with hematologic malignancies

Omidubice

The latest data demonstrating the potential for cure

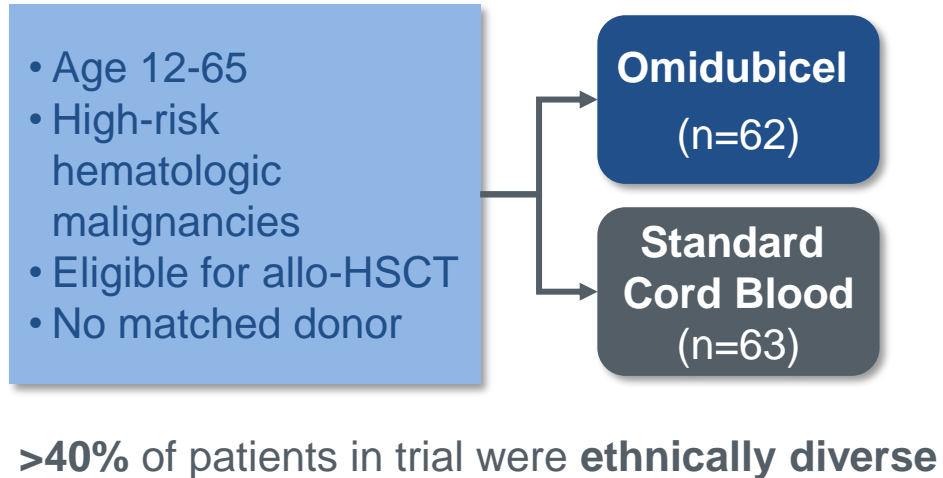
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Omidubicel is a **personalized manufactured** stem cell product consisting of a **cultured** and **non-cultured** fraction from a single umbilical cord blood unit



Our Phase 3 trial results highlight the **compelling potential of omidubicel**

Randomized, Controlled, Multi-center, Global Phase 3 Registration Trial*



- Achieved primary endpoint with **unprecedented time to neutrophil engraftment**
- Achieved secondary endpoints with **reduced hospitalization time, decreased risk of infection, and shorter time to platelet engraftment**
- Demonstrated **13% difference in overall survival** (73% omidubicel vs. 60% control)
- **Reduced cumulative incidence of non-relapse mortality** by ~50%

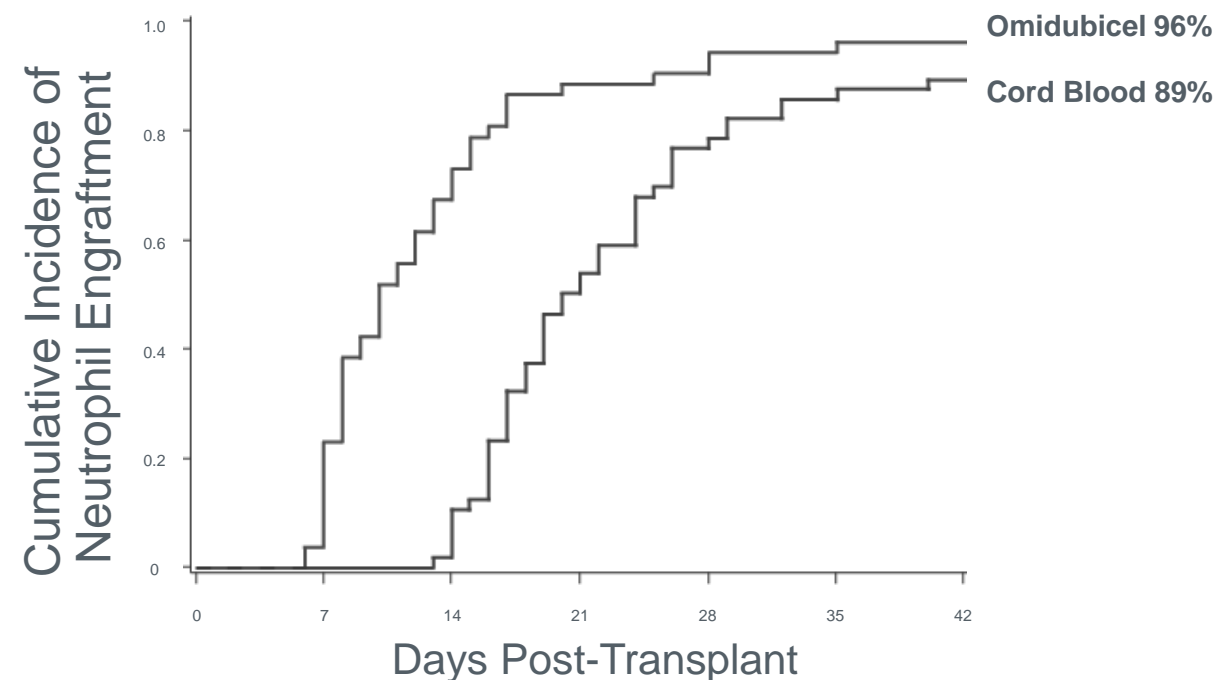
*Trial Schema reviewed with FDA

Omidubicel patients demonstrated **rapid time to neutrophil engraftment**, a critical milestone for their recovery

Median Time to
Neutrophil Engraftment (days)*

10.0
Omidubicel (n=52)
vs.
20.5
Cord Blood (n=56)

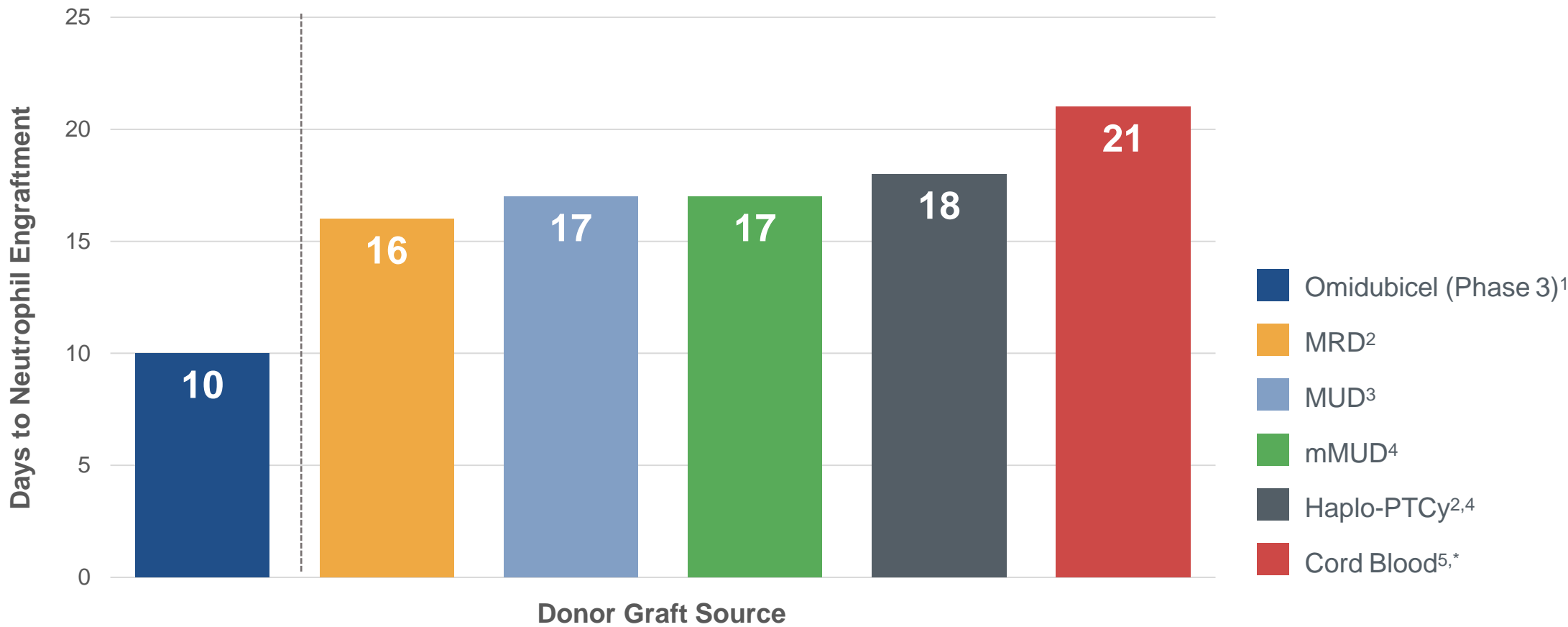
Cumulative Incidence of
Neutrophil Engraftment*



The advantages of **early engraftment and lower infections** with omidubicel translate to **long-term benefits** in the first year post-transplant

*Per protocol population, n=108

The time to neutrophil engraftment demonstrated by omidubicel is shorter than published results for all other allo-HSCT donor sources



Omidubicel is investigational and safety and efficacy have not been established by any agency.

* Results represent double-cord transplants

Omidubicel patients also demonstrated **robust immune reconstitution**, as reported during an oral presentation at ASH 2021

Sub-study of the Phase 3 trial (n=37): 17 omidubicel, 20 standard cord blood

Robust early recovery observed
for T cell, B cell, NK cell, and
dendritic cell subsets (Day 0-28)

Durability of recovery observed
for up to 1 year post-transplant
(Day 100-365)

The data suggests a **facilitator effect** of omidubicel on in vivo expansion

Outcomes suggest potential for **significant reductions in healthcare resource utilization** in the first 100 days post-transplant with omidubicel

Comparative results in first 100 days post-transplant

	Omidubicel (n=52)	Cord Blood (n=56)	<i>P-value</i>
Incidence of acute GvHD	15%	20%	0.563
Mean total number of inpatient days during primary hospitalization (transplant to discharge)	27.7	39.8	<0.001
Mean total number of inpatient days (includes readmissions)	41.2	50.8	0.027
Mean total days alive and not hospitalized	55.8	43.7	0.023
Mean total number of days in the ICU	0.4	4.7	0.028

The **totality of the omidubicel data** powers our **commitment to cures**

- ✓ Ability to identify matches for patients of racial minorities
- ✓ Shortest neutrophil engraftment time compared to published results for other donor sources
- ✓ Shorter time to platelet engraftment
- ✓ Reduced cumulative incidence of infection
- ✓ Reduced hospitalization time for patients
- ✓ Trend to improved overall survival

BLA rolling submission in Q1 2022; full submission in 1H 2022

Omidubice

Preparing for commercial launch

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Allo-transplanters can offer a **new standard of care** and the **potential for cure** to **even more patients** via omidubicel



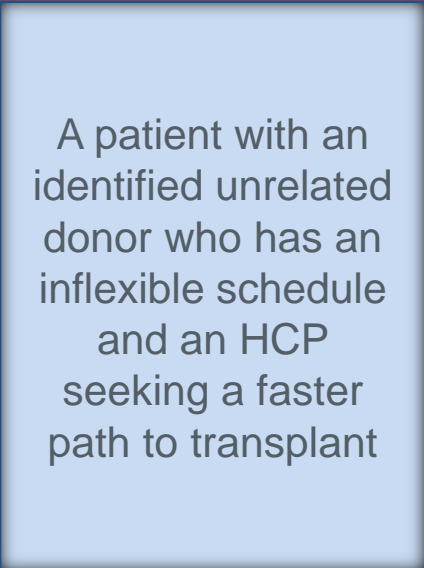
A minority patient with no timely MRD, MUD, or haplo option



A patient with matched siblings who are of advanced age and only mismatched donors identified in the registry



A patient with an MRD available, but social barriers present dangerous risk of delay



A patient with a CBU identified and an HCP concerned about engraftment time and infection risk



A patient with a haploidentical sibling and an HCP concerned about infection risk



We are actively navigating reimbursement dynamics and payer coverage considerations

Gamida Cell is proactively educating payers that account for 90% of U.S. covered lives

We anticipate coverage at the time of approval...

Published data supports that ~100% of U.S. payers anticipate covering one-time therapies with curative intent

Gamida has a strong understanding of the reimbursement approach that payers will take upon omidubicel FDA approval

...and a pathway to reimbursement

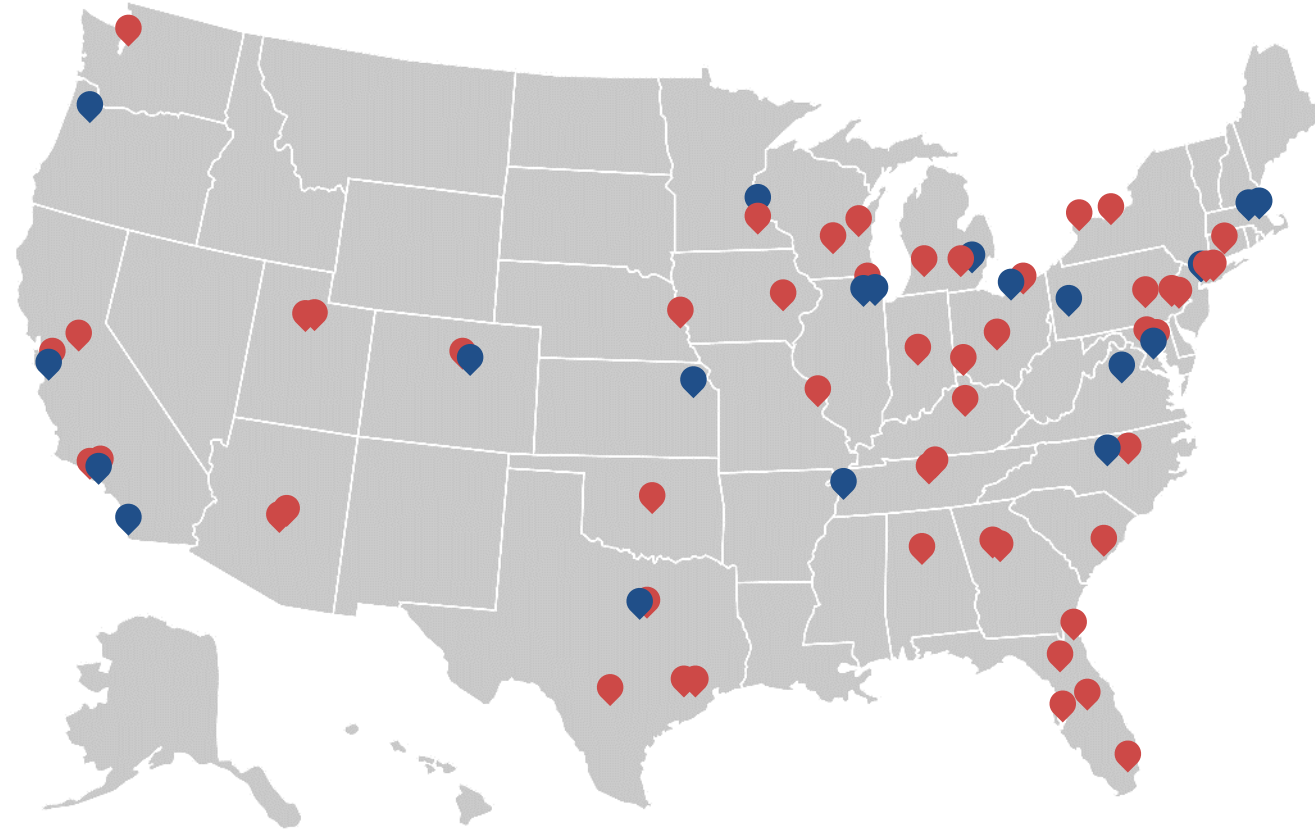
Our commercial manufacturing facility will ensure **consistent and reliable product supply**

- ✓ State-of-the art facility in Israel
- ✓ Modular facility with capability to add capacity
- ✓ Personalized product delivered within 4 weeks of selection of cord blood unit
- ✓ Qualification for BLA filing underway



Photos of Gamida Cell's state-of-the-art facility

We have initiated partnerships to educate and onboard Transplant Centers across the United States



Approximately 70 Transplant Centers account for ~80% of allo-HSCTs performed in U.S.

- Transplant Centers
- Omidubicel Clinical Trial Sites

Market research has confirmed the **omidubicel commercial opportunity**

A quantitative demand study of primary market research was conducted with 109 transplant physicians geographically distributed across the US

Research determined that omidubicel has the opportunity to:

Improve outcomes across all current donor sources

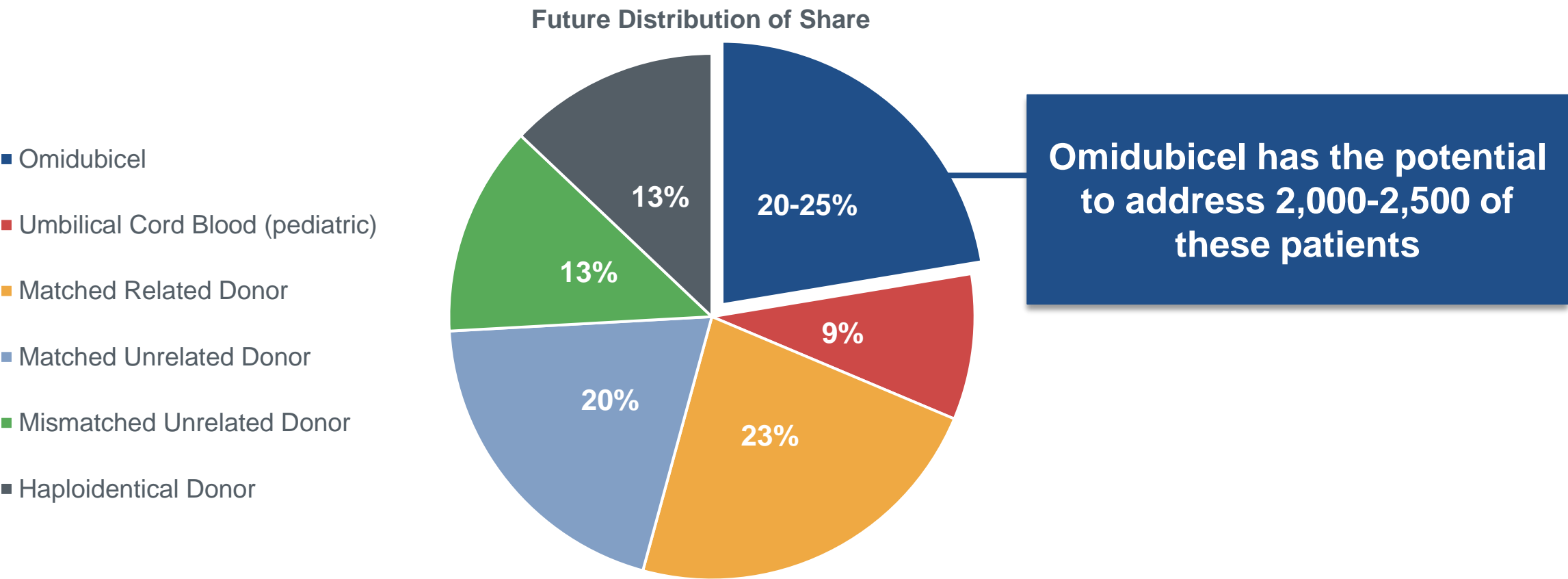
- Positive clinical outcomes
- Removed concern of advanced Donor age
- Personalized product delivered within 4 weeks

Increase access for those patients not transplanted today

- Ability to find a suitable donor
- Improved access for minority patients
- Rapid and reliable availability

We anticipate omidubicel capturing **20-25% of the market at peak**, resulting in improved outcomes and expanded access for **2,000+ patients**

~11,000 patients with hematologic malignancies will receive allo-HSCT in 2026*, representing organic transplant growth and omidubicel-driven market expansion



*Reflects 2025-2026 peak estimate; includes patients 12+

GDA-201

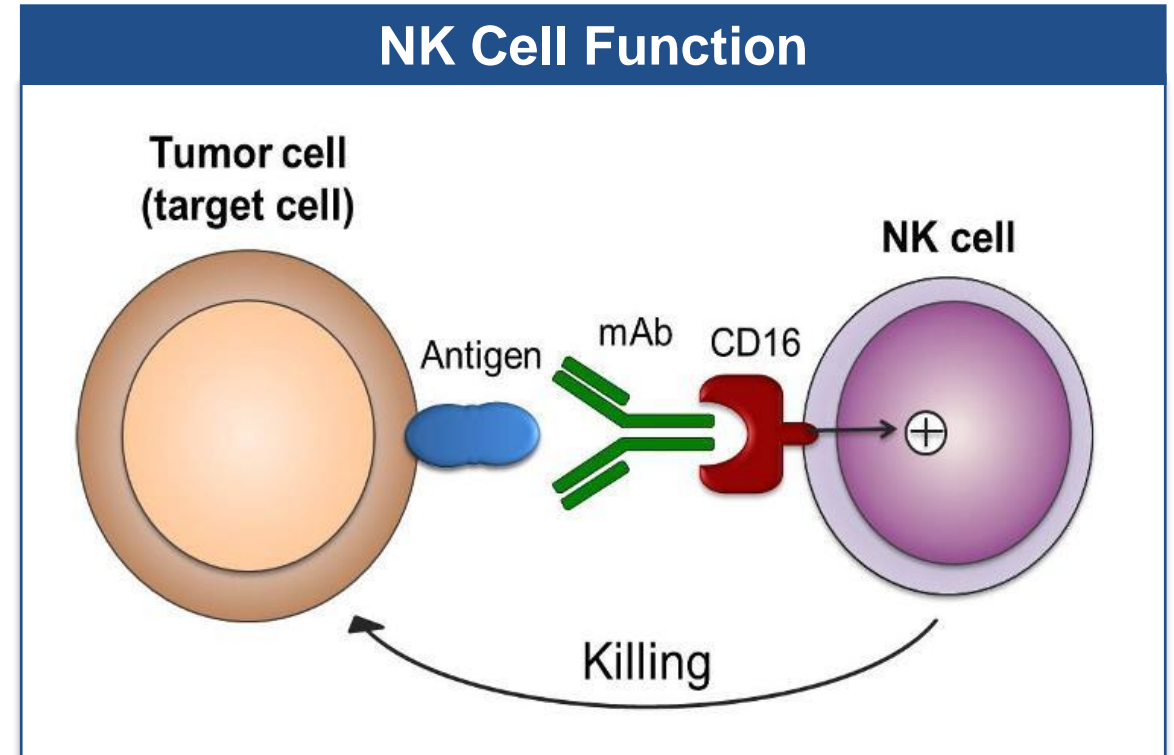
NAM-enabled NK cells to treat
Non-Hodgkin Lymphoma

gamida Cell

Natural Killer (NK) cells are a **promising immune therapy** for cancer

Promise of NK Cells

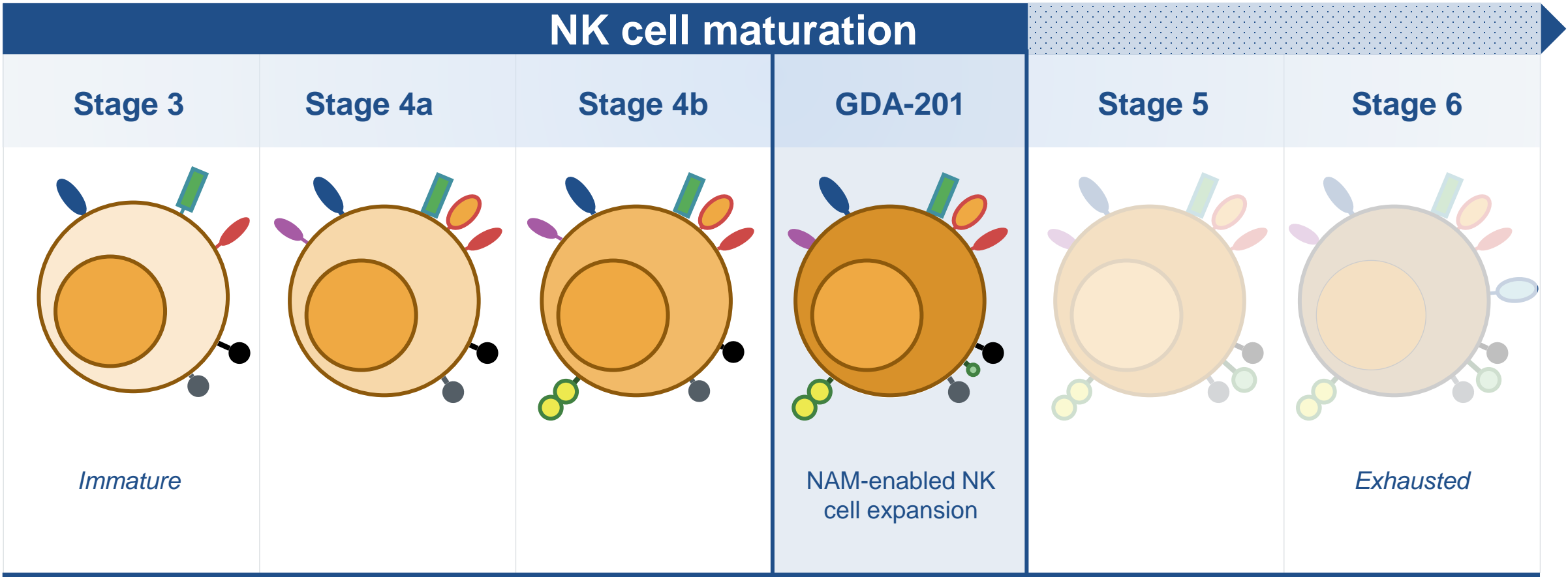
- ✓ Fully allogeneic product (no HLA matching required)
- ✓ Synergy with antibodies
- ✓ Potential to stimulate adaptive immunity
- ✓ Potential for readily available therapy



Manufacturing is necessary to obtain clinically meaningful doses with optimized cell function

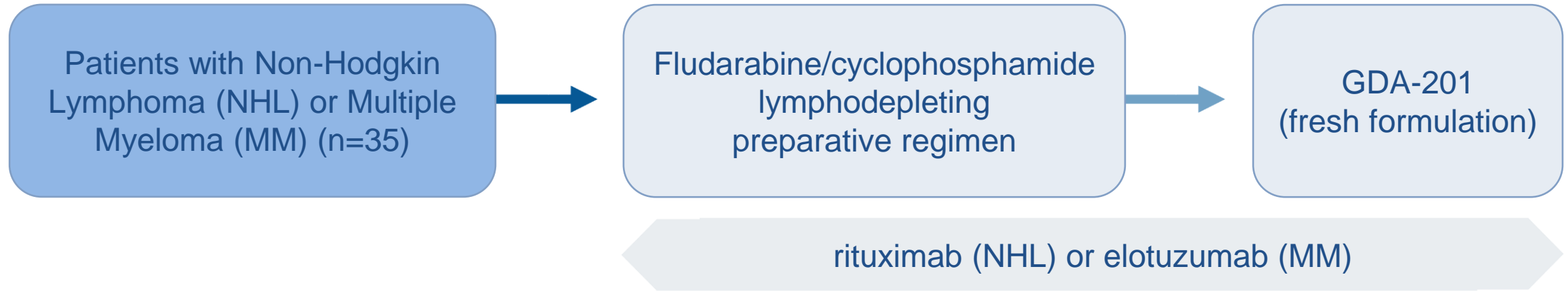
We are putting NK cells to work using our NAM Platform

NAM optimizes NK cell phenotype during manufacturing to ensure product functionality



GDA-201 is the **lead candidate** in our NAM-enabled NK cell therapy pipeline

Investigator-led, Phase 1, proof of concept study for patients with NHL and MM



- **Primary endpoint:** Maximum tolerated dose of GDA-201 (3 doses evaluated)
- **Secondary endpoints:** Overall response, toxicity

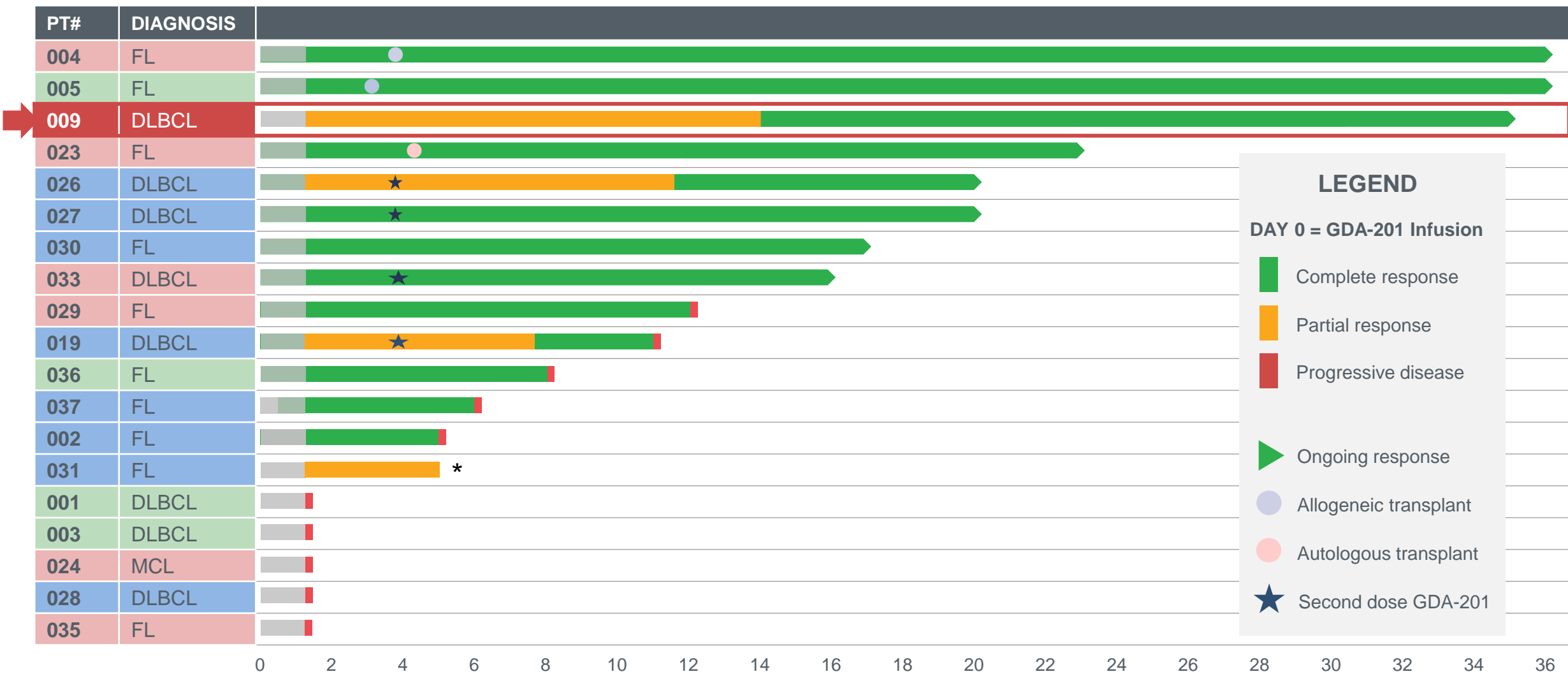
Phase 1 experience with GDA-201 and rituximab demonstrated a **positive safety profile**

Safety Results

- 35 patients treated (19 NHL, 16 MM)
- No dose-limiting toxicities
- One patient died of *E. coli* sepsis, initially reported as cytokine release syndrome
- Most common grade 3/4 adverse events:
 - Thrombocytopenia (n=9)
 - Hypertension (n=5)
 - Neutropenia (n=4)
 - Febrile neutropenia (n=4)
 - Anemia (n=3)
- No neurotoxic events, graft versus host disease (GvHD), or confirmed cytokine release syndrome

Multiple patients treated with GDA-201 and rituximab had durable complete responses demonstrating an ORR of 74% and CR rate of 68%

Median Duration of Response: 16 months



LEGEND

DAY 0 = GDA-201 Infusion

Complete response

Partial response

Progressive disease

Ongoing response

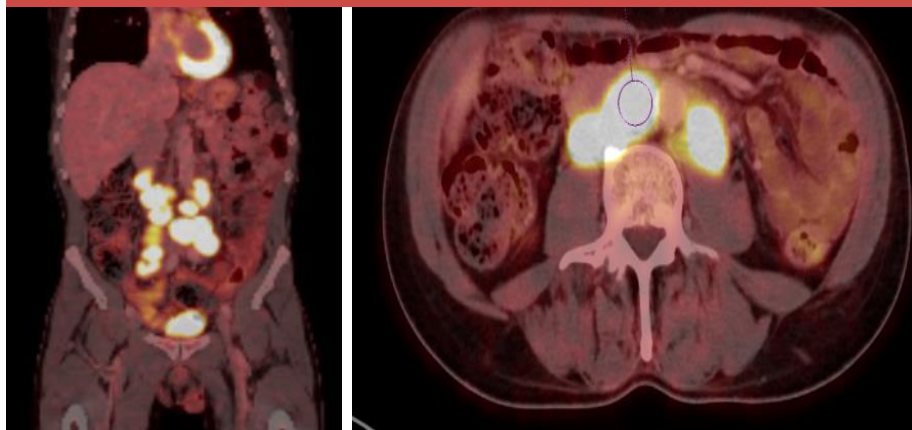
Allogeneic transplant

Autologous transplant

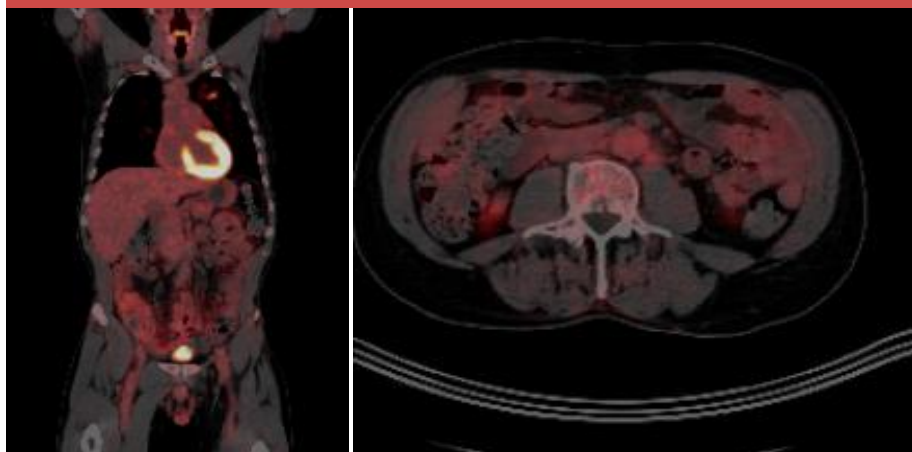
Second dose GDA-201

Additionally, in a **heavily pretreated lymphoma patient, complete responses were demonstrated**

Pt 009: Baseline



Pt 009: 6-month post GDA-201



- 57-year-old man with history of CLL and Richter's transformation-large cell lymphoma, measurable retroperitoneal lymph nodes at baseline
- Prior therapy: FCR-light, Rituximab/Bendamustine
Ibrutinib/lenalidomide, R-CHOP, Venetoclax/Rituximab
- Allogeneic HSCT (matched sibling)
- Relapse at 6 months
- Treated with GDA-201
- 28-day response: tumor shrinkage
- 6 months: PR with continued tumor shrinkage
- Demonstrated PR to CR conversion after 12 months, continued CR at ~3 years
- NK cells cleared within 2 weeks

“Whether it has been work, or my various hobbies and past times, whether that be traveling on motorcycle or enjoying life to its fullest, it really has been a noticeable improvement compared to how things were prior to going through the trial.”- **Patient 009**

We are leveraging our knowledge of **cryopreservation** to further advance our **NK pipeline**

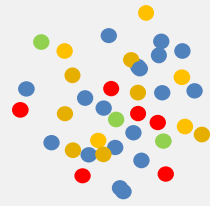
GDA-201 cryopreserved formulation maintains phenotype expression, cytotoxicity function, and enhanced potency

Peripheral bone marrow
cells collected by
apheresis*



**HEALTHY
DONOR**

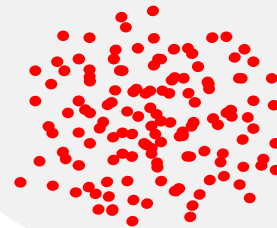
Seed CD3⁻ cells



DAY 0

Proprietary
co-culture with
NAM +IL-15
+ autologous
irradiated CD3⁺
feeder cells

Highly functional
NK cells:
~50-100 billion NK cells
with purity >99%



DAY 14



Proprietary infusion ready
cryopreserved product;
exhibits high viability up
to six months
post-thaw

*One apheresis procedure can provide treatment for 5-10 patients

Encouraging **clinical activity and safety profile** supports **continued development**



Key Accomplishments

- Preclinical proof of principle
- Clinical proof of concept
- Cryopreserved formulation



Next Step

Phase 1/2 multi-center
study in lymphoma for
cryopreserved GDA-201

Engineered NK Cell Programs

Improved product targeting and
persistence in hematologic and solid-
tumor cancers

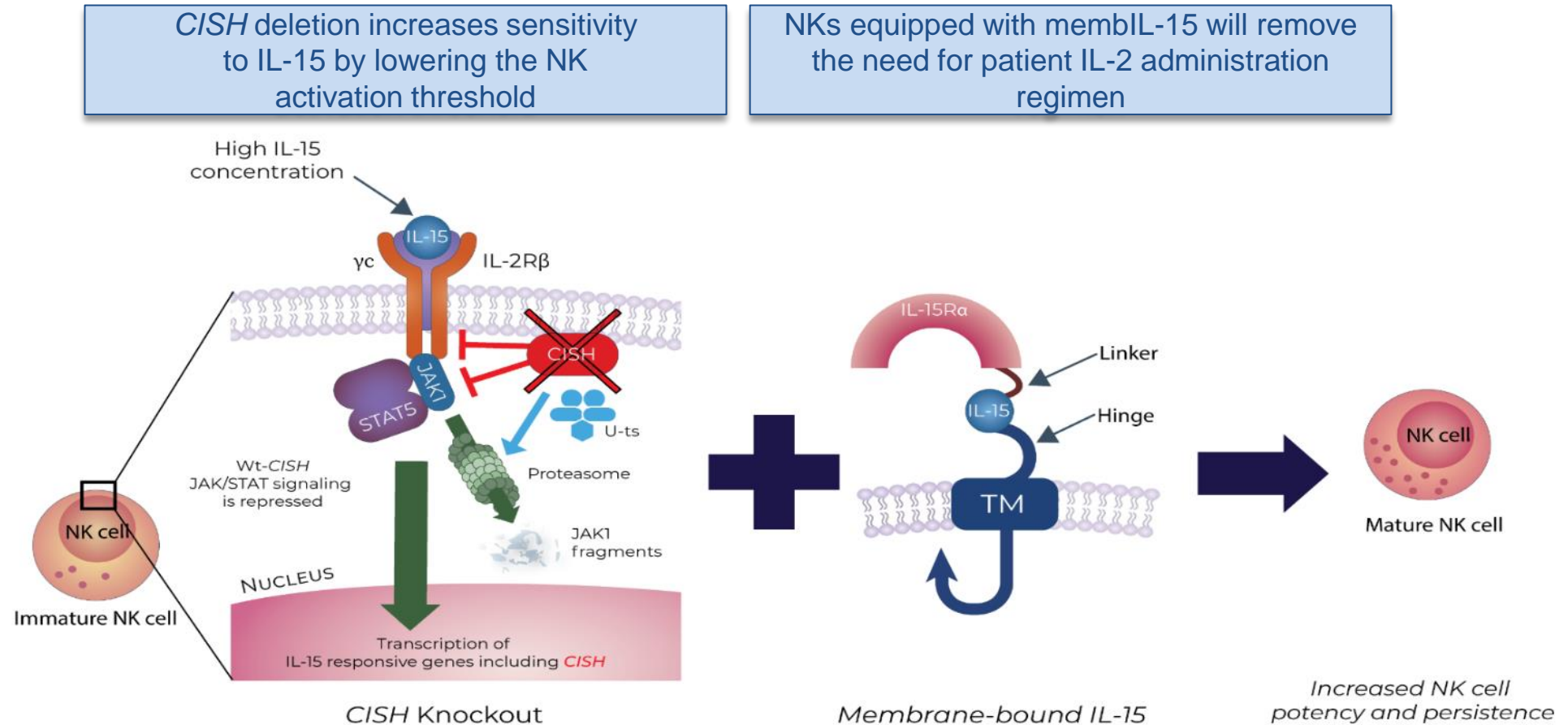
gamida Cell

Led by GDA-201 **clinical proof of concept**, Gamida Cell continues to invest in advancing a **diversified NK pipeline**

PROGRAM	STRATEGY	GENETIC MODIFICATION	INDICATION(S)
GDA-301	Increased potency and persistence	<i>CISH</i> KO + memIL-15	Hematologic + solid tumors
GDA-401	Undisclosed		
GDA-501	HER2 Targeting	HER2 CAR	HER2+ solid tumors
GDA-601	CD38 Targeting	CD38 KO + CD38 CAR	Multiple myeloma

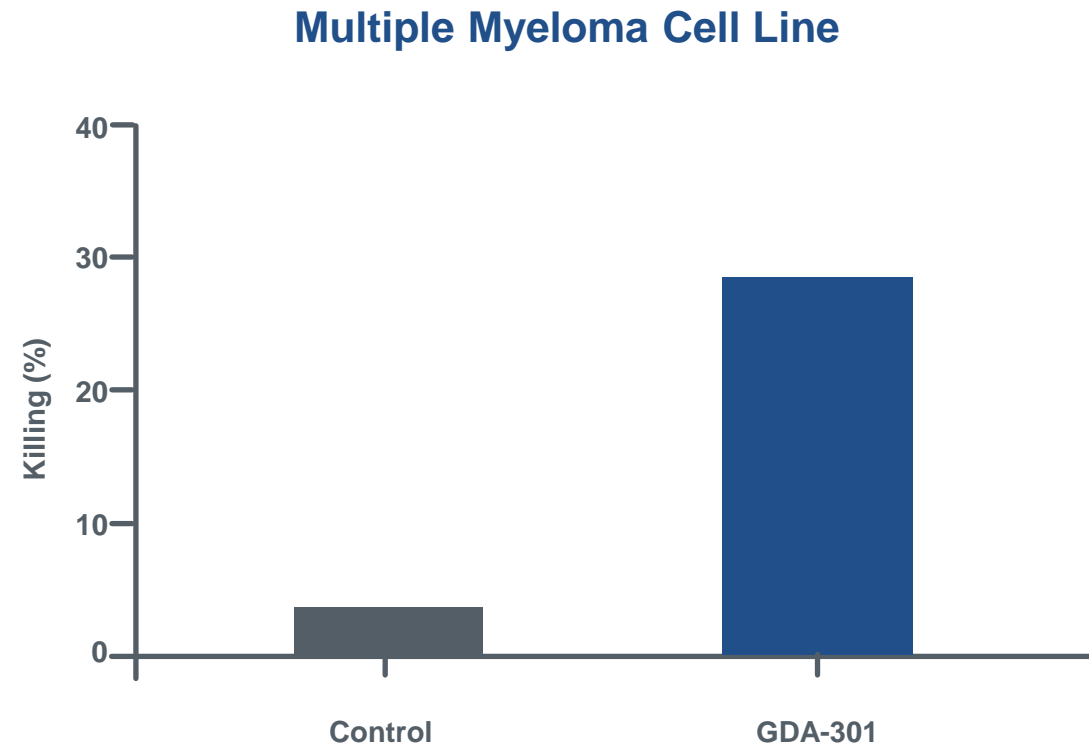
GDA-301: Enhancing NK potency and persistence

The lack of persistence of infused NK cells is a principal limitation of driving adaptive immunotherapy. Combining CISH KO with membrane-bound IL-15 will improve in vivo persistence and killing capacity, without concomitant IL-2 administration.



GDA-301: Drives increased target cell killing in vitro

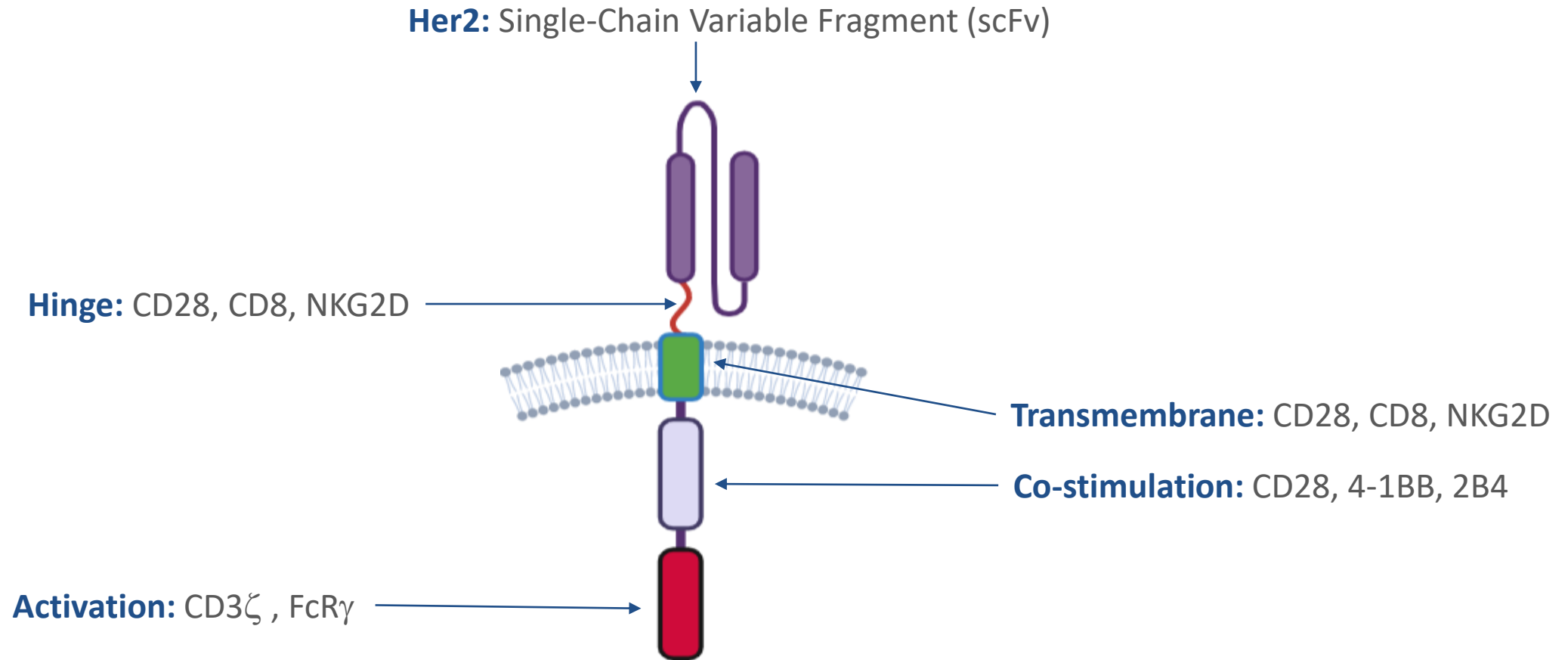
GDA-301 shows enhanced cytotoxic activity in multiple myeloma cell line (RPMI)



Killing assay was performed on CISH knocked cells, 24h after the electroporation of mRNA-mbIL-15 that followed a 6hr co-culture of NK cells with RPMI cell line, Ratio 5:1

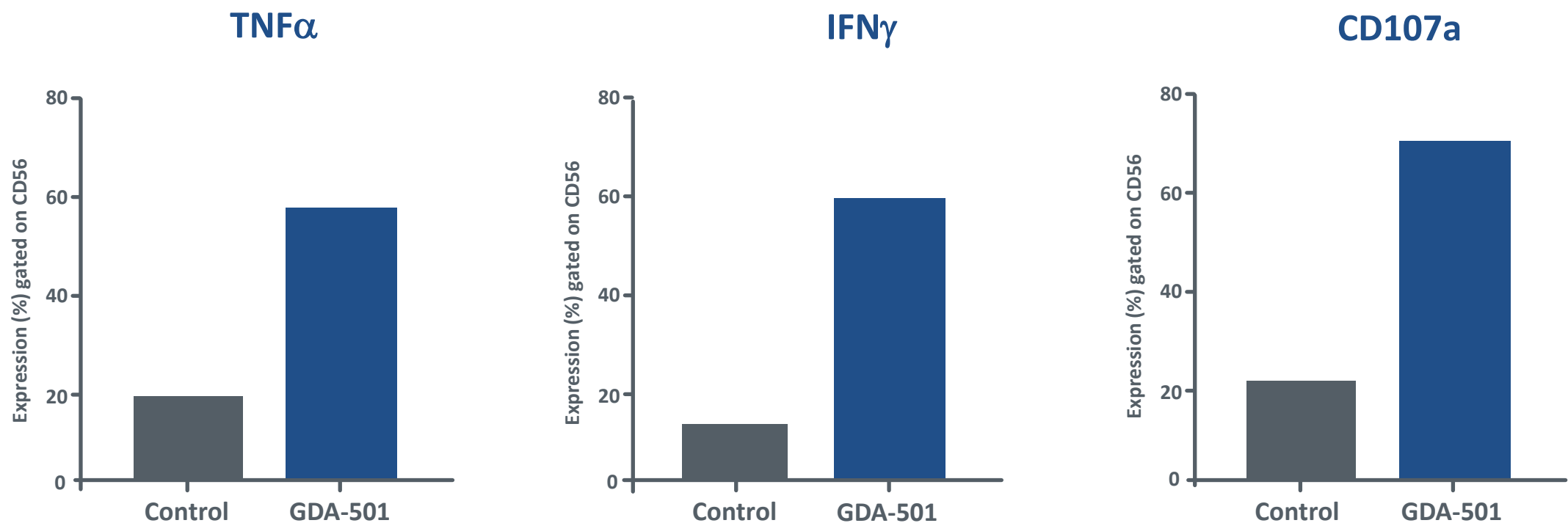
GDA-501: Developed to optimize targeting and NK activation against HER2+ tumors

Multiple tailor-made NK CARs were developed to target and activate NKs against HER2+ tumors



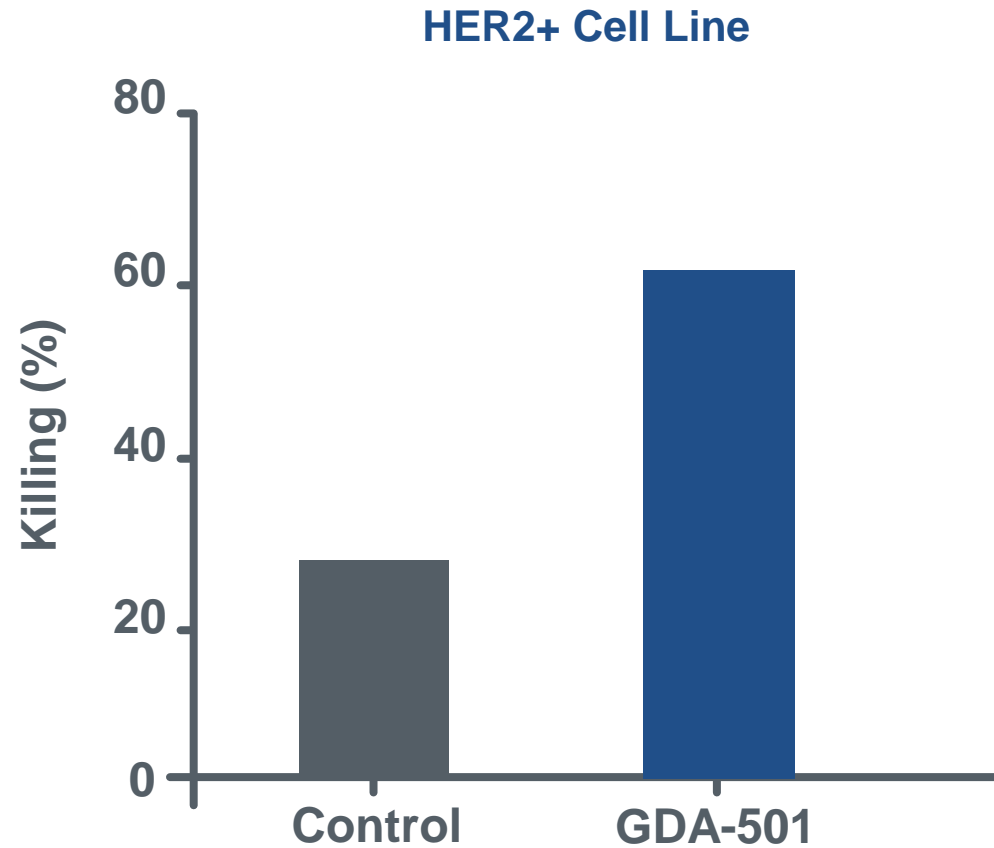
GDA-501: HER2 CAR NK cells enhance activity against HER2+ cell lines

When exposed to HER2+ cell lines, GDA-501 upregulates inflammatory cytokine production and degranulation marker (CD107a) associated with cytotoxicity



Potency analyses assay of 6 h co-cultured Her2-CAR NKs with corresponding target cells: Flow cytometric analysis of CD107a expression, intracellular TNFα and IFN-γ production in control NK cells, or electroporated NK cells with mRNA expressing HER2 CAR constructs.

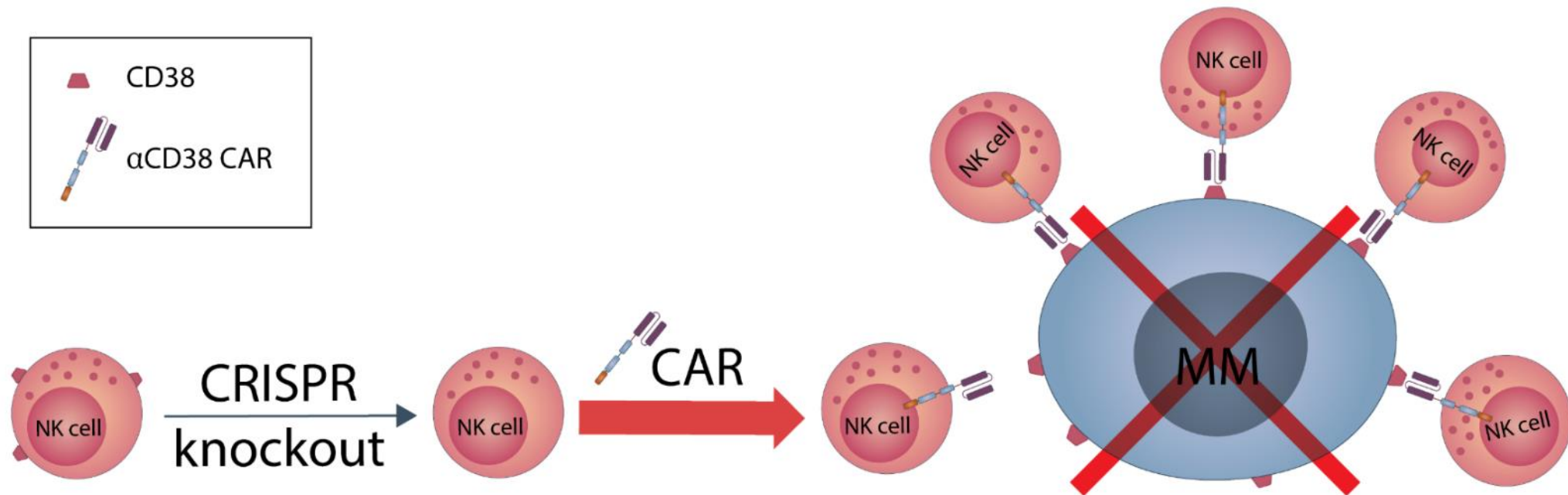
GDA-501: Shows effective in vitro cytotoxicity against HER2+ cell line



Killing activity of electroporated NK cells against target cells: Killing assay performed by flow cytometry analyses demonstrating calculated specific-lysis percentages following a co-culturing (in 5:1 ratio) for 6h with SKOV3 cell line 24h after electroporation

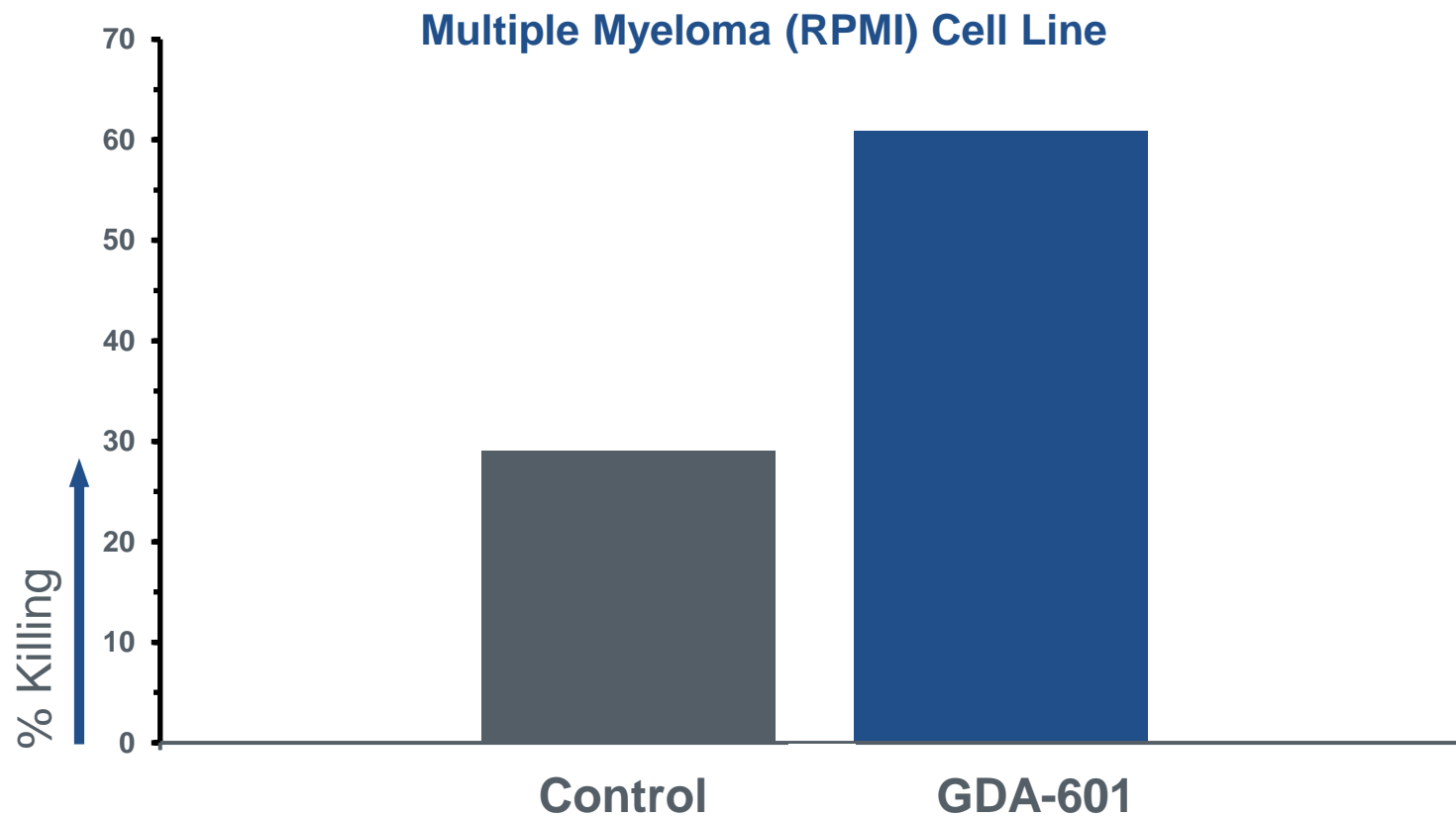
GDA-601: An investigational **genetically engineered cell product** designed to **target multiple myeloma cells**

CD38 in NK cells was knocked out using CRISPR-Cas9 technology, and an enhanced chimeric antigen receptor (CAR) targeting CD38 was introduced using mRNA electroporation. This combined genetic approach allows improved cytotoxic activity directed against CD38-expressing MM cells without self-inflicted lysis by NK cells (fratricide).



Killing activity of electroporated NK cells against target cells: Killing assay performed by flow cytometry analyses demonstrating calculated specific-lysis percentages following a co-culturing (in 5:1 ratio) for 6h with SKOV3 cell line 24h after electroporation

GDA-601: Increased cytotoxicity against multiple myeloma in vitro



Additional **research is ongoing** in collaboration with **Dana-Farber Cancer Institute**, investigating GDA-601 with **fresh patient samples**

Killing assay was performed following a 6 hour co-culture of GDA-601 with RPMI cell line at an Effector to Target ratio of 5:1

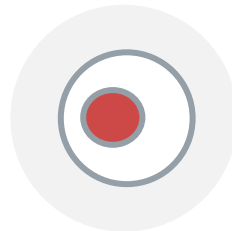
We are committed to cures and developing next-generation therapies to address urgent unmet needs



Omidubicel

Nearing Commercialization

- Potential to be first FDA-approved cell therapy for allogeneic hematopoietic stem cell transplant (allo-HSCT)
- Breakthrough Therapy and Orphan Drug status
- Preparing for BLA submission in 1H22



GDA-201

Fighting non-Hodgkin Lymphoma

- NK cell product with positive Phase 1 data using fresh product
- Submitted IND for a Phase 1/2 trial in NHL with an allogeneic readily available cryopreserved formulation
- Ongoing discussion with the FDA to advance the IND



GDA-301/401/501/601

Opening new frontiers in cancer immunotherapy

- Proof-of-concept for genetic engineering modifications, including CAR, membrane bound IL15, and knockouts using multiple approaches including CRISPR
- Evidence of increased cytotoxicity in preclinical studies
- Potential in hematologic cancers and solid tumors

Well positioned to execute goals | \$96M Cash* | Cash runway into mid-2023 and through potential omidubicel approval

*As of December 31, 2021, unaudited

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