



Committed to Cures

Pioneering advanced cell therapies for
patients with cancer and other serious diseases



May 2022

Cautionary Note Regarding Forward Looking Statements

This presentation contains forward-looking statements as that term is defined in the Private Securities Litigation Reform Act of 1995, including with respect to timing of initiation and progress of, and data reported from, the clinical trials of Gamida Cell's product candidates (including GDA-201), anticipated regulatory filings (including the submission of the BLA for omidubicel to the FDA), and the potentially life-saving or curative therapeutic and commercial potential of its product candidates. Any statement describing Gamida Cell's goals, expectations, financial or other projections, intentions or beliefs is a forward-looking statement and should be considered an at-risk statement. Such statements are subject to a number of risks, uncertainties and assumptions, including those related to the impact that the COVID-19 pandemic could have on our business, and including the scope, progress and expansion of Gamida Cell's clinical trials and ramifications for the cost thereof; clinical, scientific, regulatory and technical developments; and those inherent in the process of developing and commercializing product candidates that are safe and effective for use as human therapeutics, and in the endeavor of building a business around such product candidates. In light of these risks and uncertainties, and other risks and uncertainties that are described in the Risk Factors section and other sections of Gamida Cell's Annual Report on Form 10-K, filed with the Securities and Exchange Commission (SEC) on March 24, 2022 and other filings that Gamida Cell makes with the SEC from time to time (which are available at <http://www.sec.gov>), the events and circumstances discussed in such forward-looking statements may not occur, and Gamida Cell's actual results could differ materially and adversely from those anticipated or implied thereby. Although Gamida Cell's forward-looking statements reflect the good faith judgment of its management, these statements are based only on facts and factors currently known by Gamida Cell. As a result, you are cautioned not to rely on these forward-looking statements.

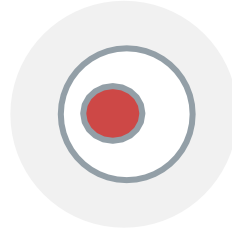
Gamida Cell's advanced cell therapy programs are demonstrating near-term promise and long-term potential



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
- Initiated the BLA rolling submission process; on track to complete the submission in Q2 2022



GDA-201

Progressing clinical program in NK cells

- NK cell product with positive Phase 1 data using fresh product
- Received FDA clearance for an IND for a Phase 1/2 trial in NHL with an allogeneic readily available cryopreserved formulation
- Study start date in 2022



GDA-301/401/501/601

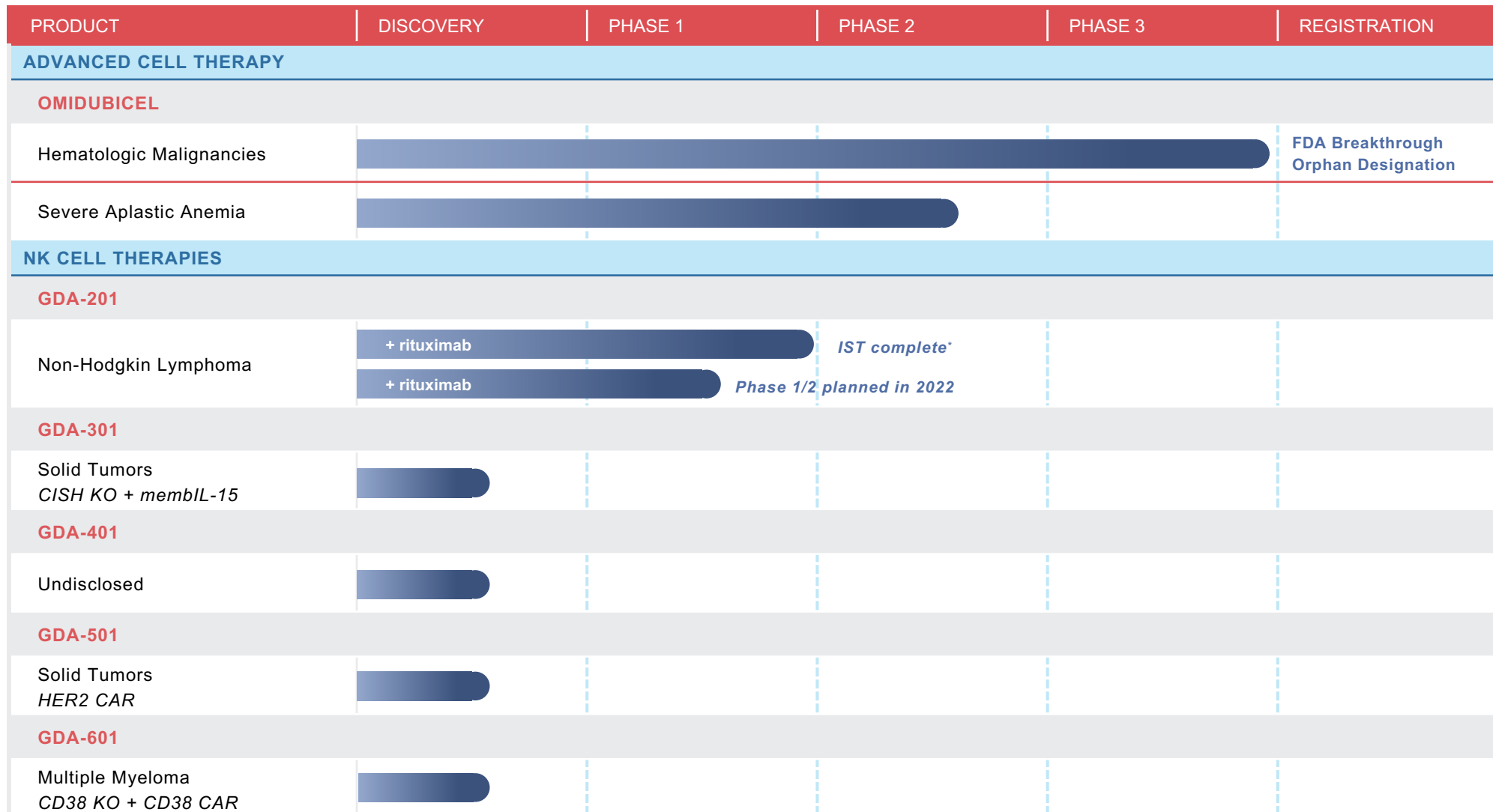
Opening new frontiers in cancer immunotherapy

- 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 | \$70M Cash* | Cash runway into mid-2023 and through potential omidubicel approval

*As of March 31, 2022

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

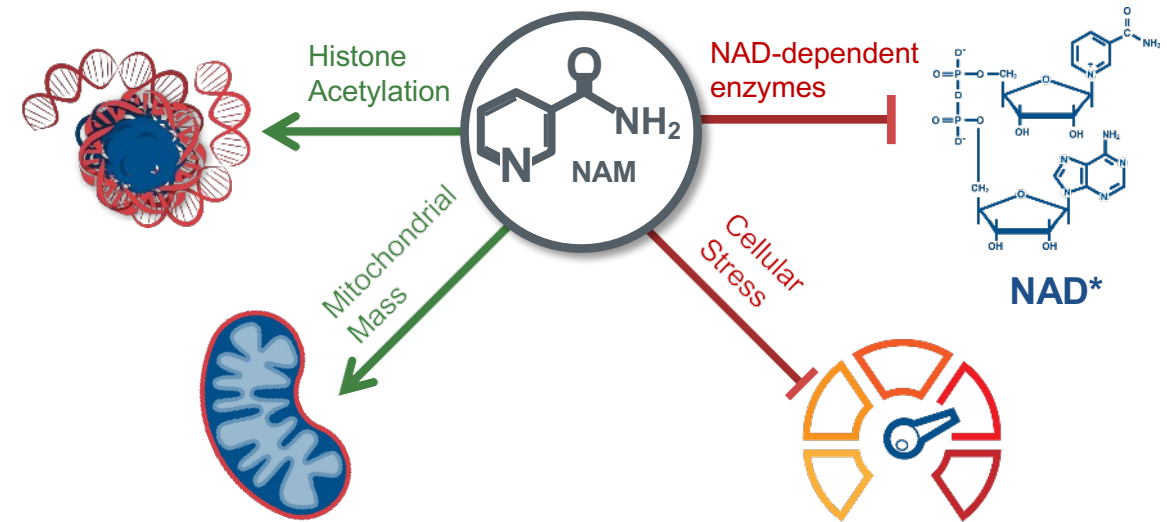
Our proprietary NAM Technology powers our commitment to cures

Gamida Cell NAM Technology

Enhances cellular **functionality and phenotype**

Augments the **number of allogeneic donor cells**

Demonstrates potential to **multiply any cell type**



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

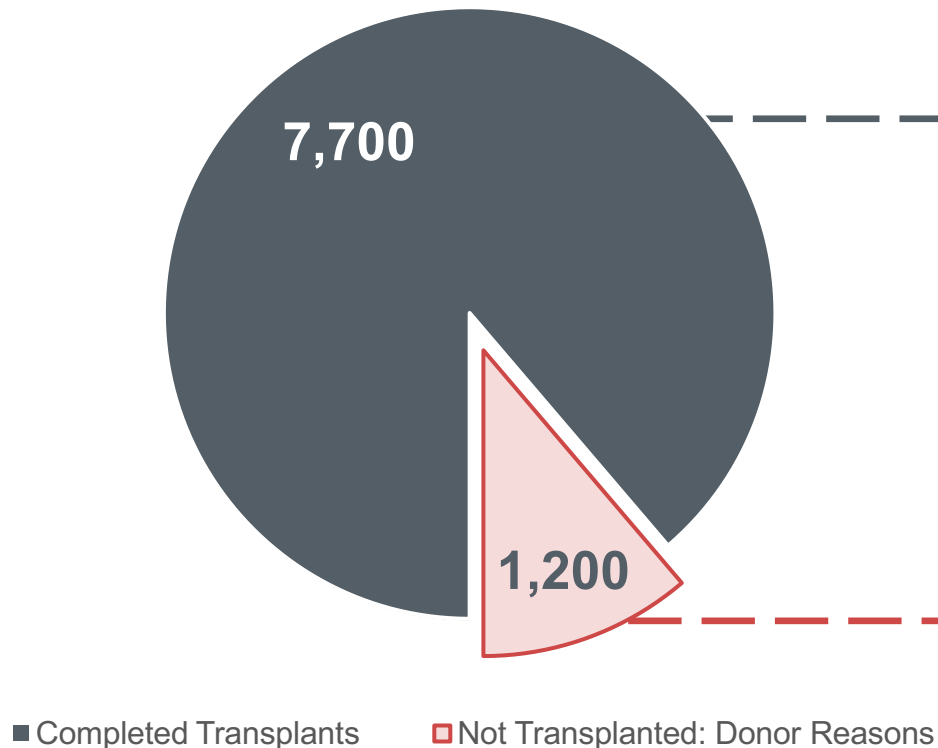
Omidubice^l

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

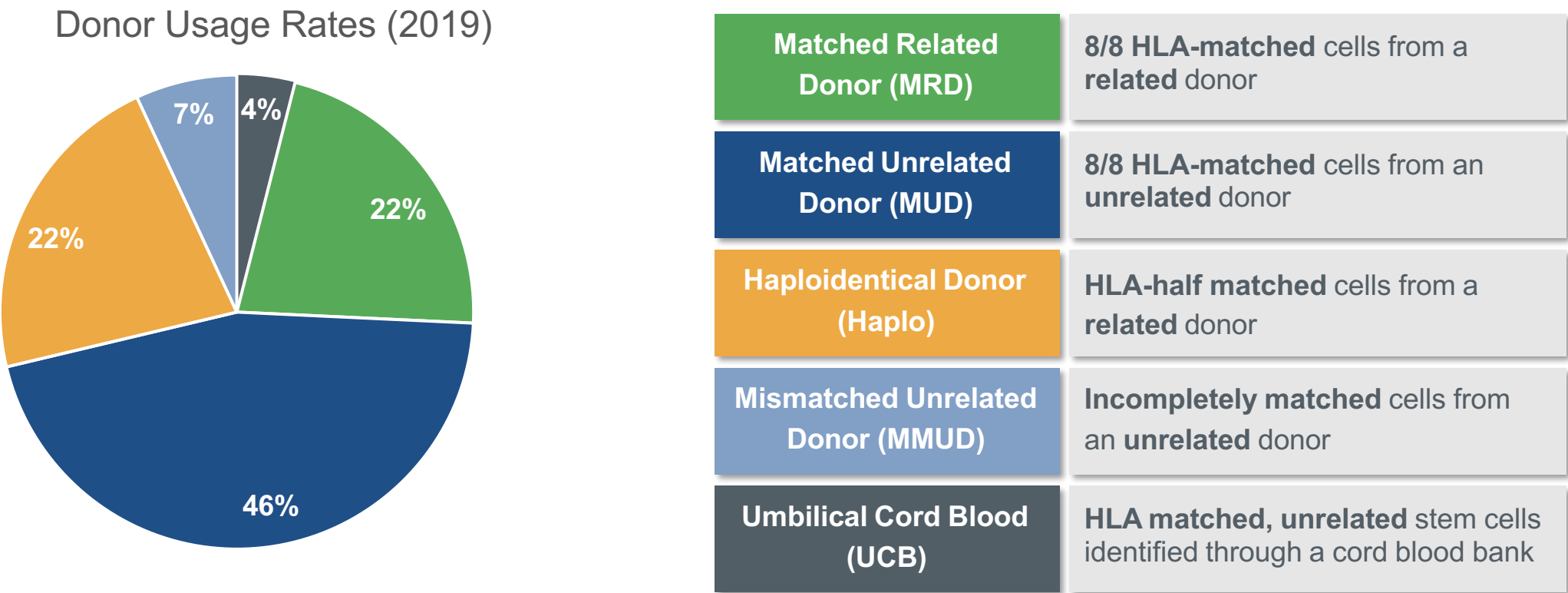


7,700 patients 12+ with hematologic malignancies were transplanted in 2019, and that number is **projected to grow** due to increase in aging population, growth in hematologic malignancies, earlier diagnosis, and accelerated referrals

Transplanters indicate that the number of patients **unable to find appropriate donors** is equivalent to **~13% of potential transplant volume**

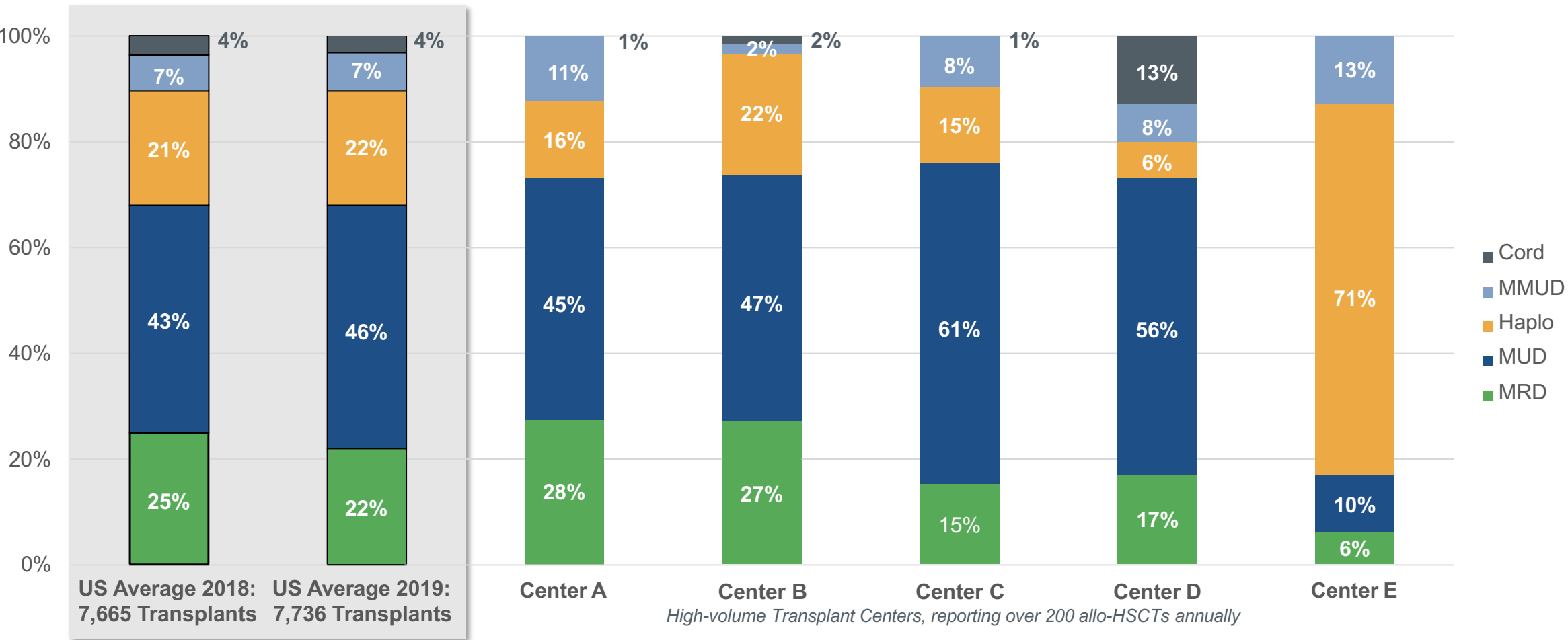
Each patient who receives an allo-HSCT must be uniquely paired with a donor source, and currently there is no standard of care

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.

Additionally, Transplant Centers differ in their use of donor source



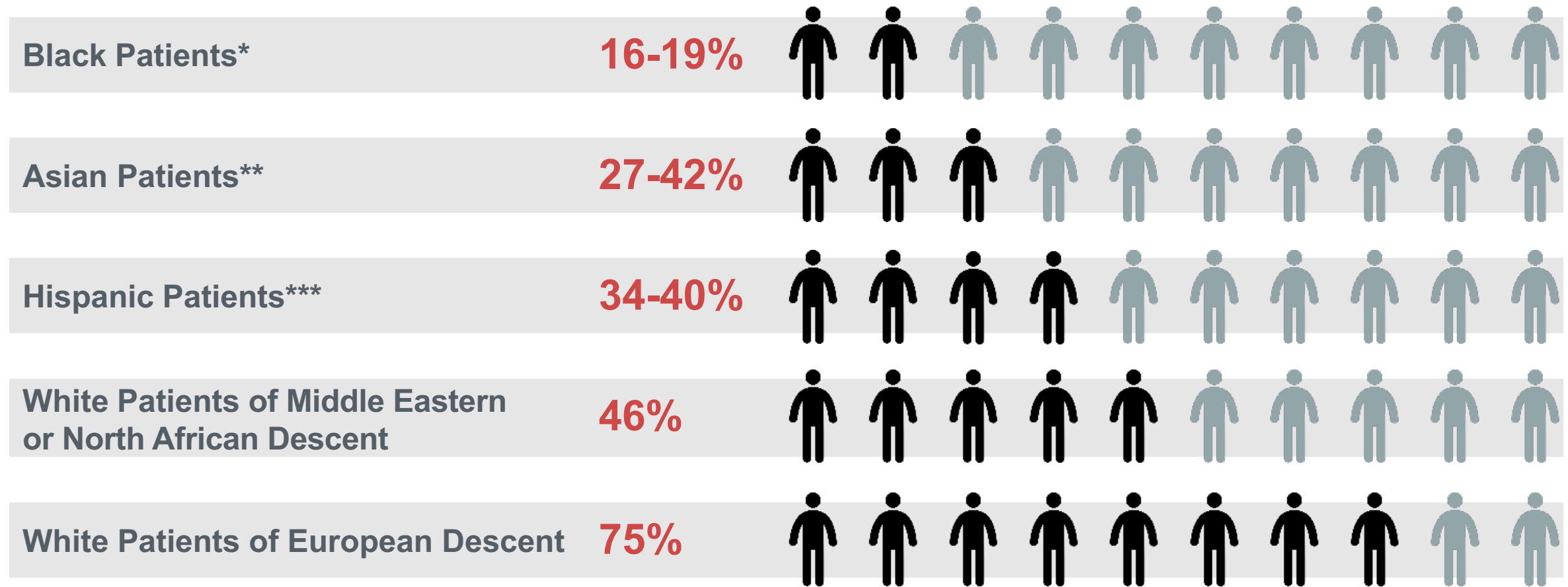
Donor source identification and selection is complex, and each source has limitations

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 leads to increased risk of GvHD• Patients face the same negative consequences as MUD when a 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

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



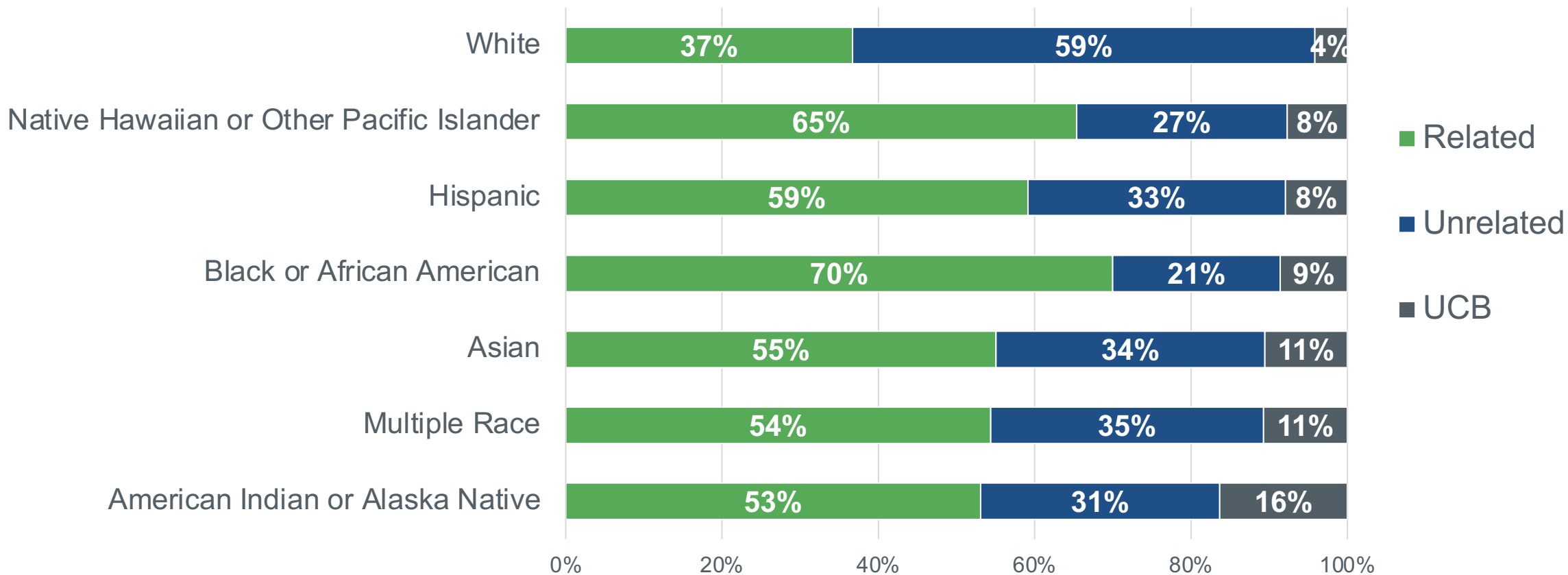
* Includes African American, African, Black South or Central American, and Black Caribbean

** Includes Chinese, Korean, South Asian, Japanese, Filipino, Southeast Asian, and Vietnamese

*** Includes Mexican, Hispanic South or Central American, and Hispanic Caribbean

Minority patients leverage **MUD** and **MMUD** less often, and **UCB** more often than white patients

2019 Allo Transplant by Ethnicity



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

	Unmet Needs	Omidubicel Offering
Match	~30% of patients will have an adequately matched related donor	~93% of omidubicel patients were able to find a suitable donor in the Phase 3 trial due to less stringent matching requirements
Availability	~20% of African Americans 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	> 30 years old increases risk of complications and reduced OS	Omidubicel combines the naivety of cord blood with sufficient cell quantity that leads to improved clinical outcomes
Timing Urgency	2-3+ months from preliminary search to transplant	Omidubicel offers rapid availability and a reliable process, with a personalized product delivered in 30 days from selection of a cord blood unit

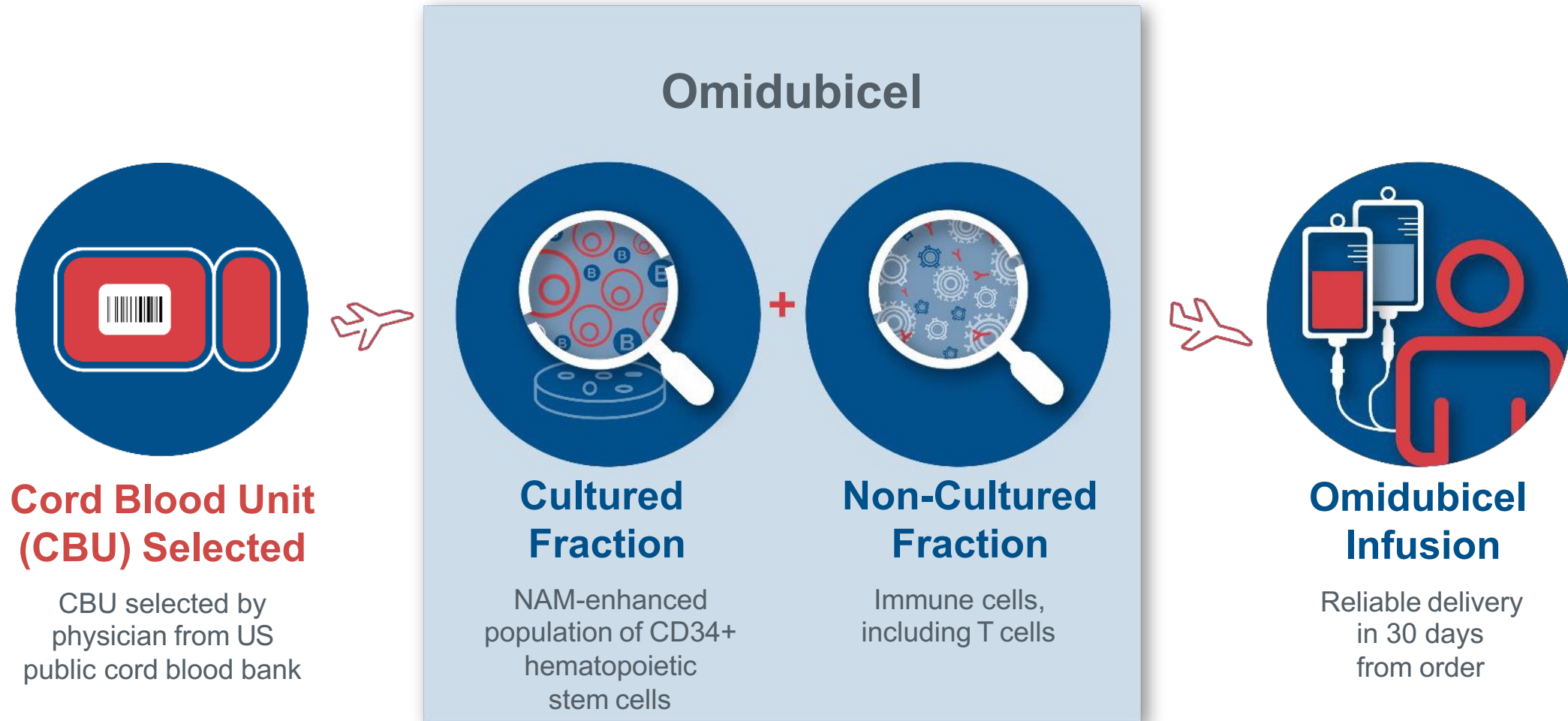
Omidubicel data demonstrates **positive clinical outcomes** for patients with hematologic malignancies

Omidubice

The latest data demonstrating
the potential for cure

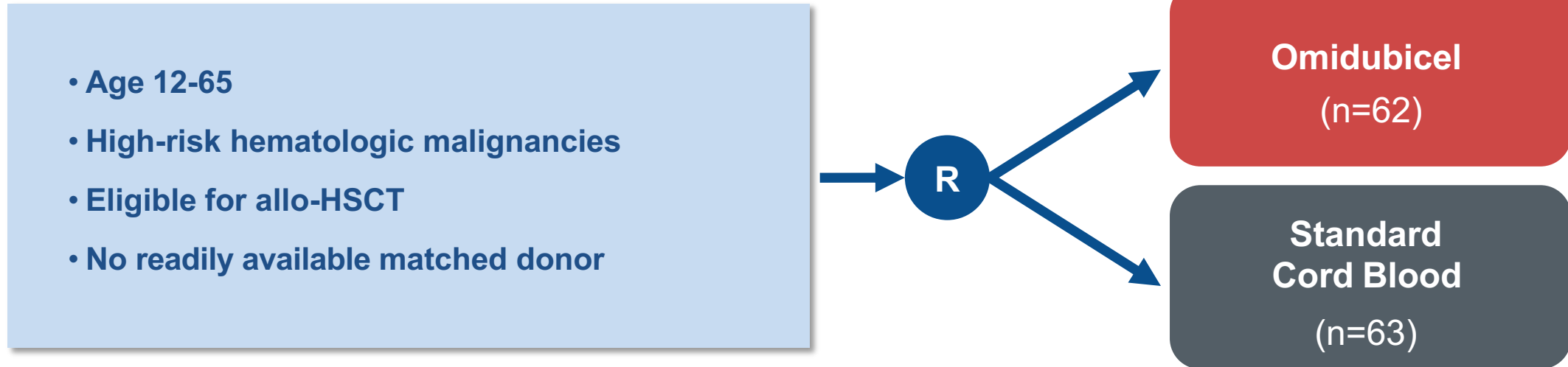
gamida ell

Omidubicel is a personalized advanced cell therapy consisting of a cultured and non-cultured fraction from a single umbilical cord blood unit



Phase 3 global randomized study to evaluate the efficacy of omidubicel compared to standard cord blood

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



Primary endpoint: Time to neutrophil engraftment

Secondary endpoints: Platelet engraftment, infections, hospitalizations

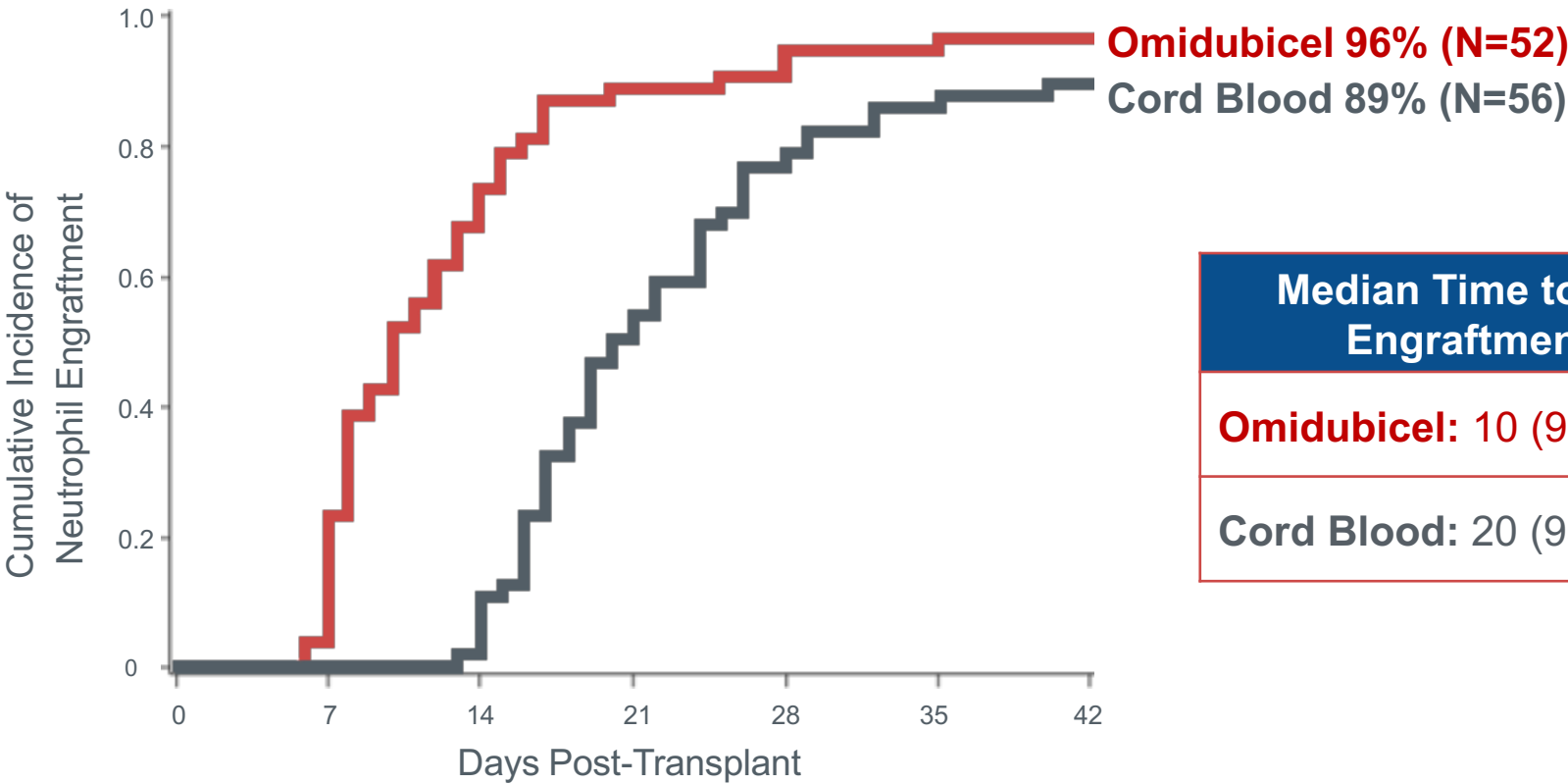
Additional endpoints: Adverse events, acute GvHD, chronic GvHD, non-relapse mortality, disease-free survival, overall survival

>40% of patients in the trial were ethnically diverse

*Trial Schema reviewed with FDA

Time to Neutrophil Engraftment in as-treated population

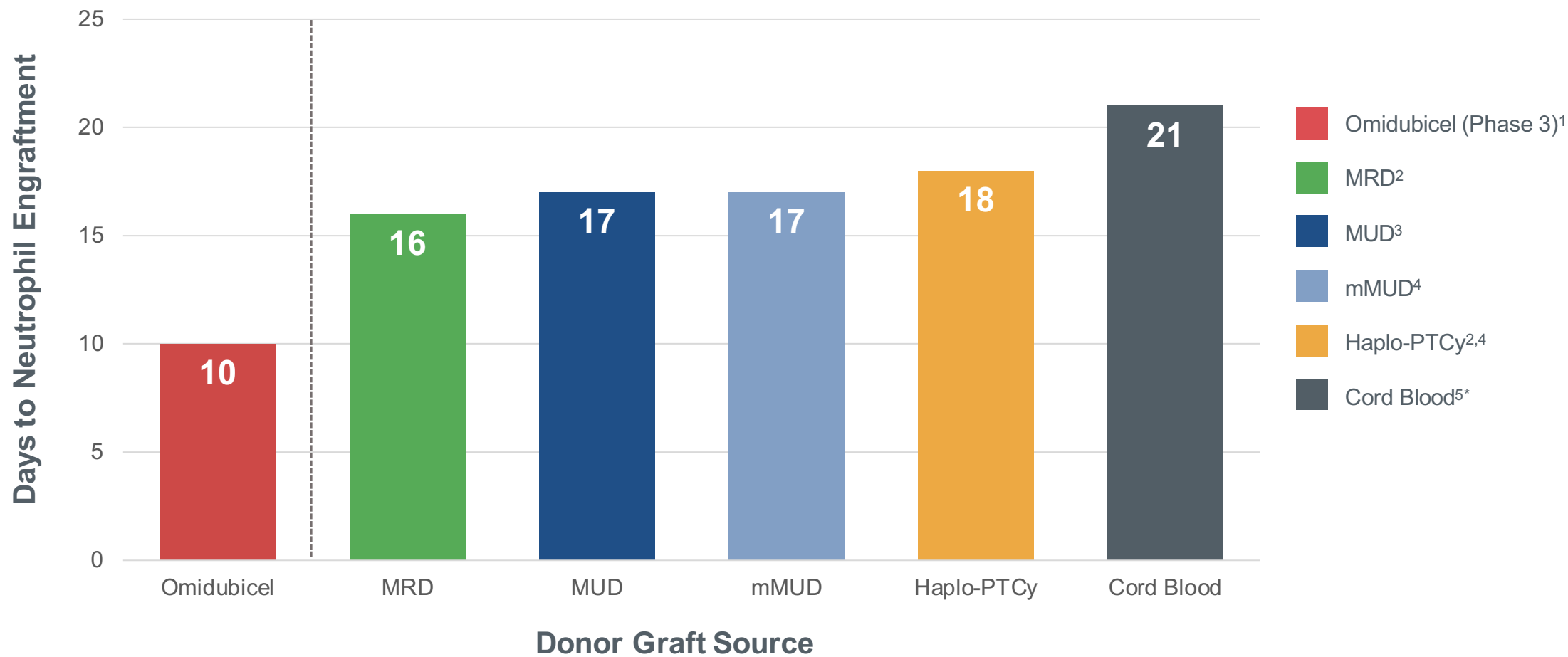
Day 42 Neutrophil Engraftment
(AT Population; N=108)



Median Time to Neutrophil Engraftment (Days)	P value
Omidubicel: 10 (95% CI: 8, 13)	<0.001
Cord Blood: 20 (95%CI: 18, 24)	

AT, as treated.

Omidubichel has the shortest neutrophil engraftment time compared to published results for other HSCT donor sources



* Results represent double-cord transplants

1. Horwitz, et al, Blood 138:1429-1440, 2021 ; 2. Salvatore D, et al. Haematologica. 2018; 103(8):1317-28; 3. Mary M. Horowitz, MD, MS. Haploidentical Transplantation: The Answer to our Donor Problems? CIBMTR, Medical College of Wisconsin. January 2017; 4. McCurdy SR, et al. Adv Hematol. 2015; 1-9.; 5. Horwitz ME, et al. J Clin Oncol. 2018; 37(5):367-74. Omidubichel is investigational and safety and efficacy have not been established by any agency.

Omidubicel patients 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

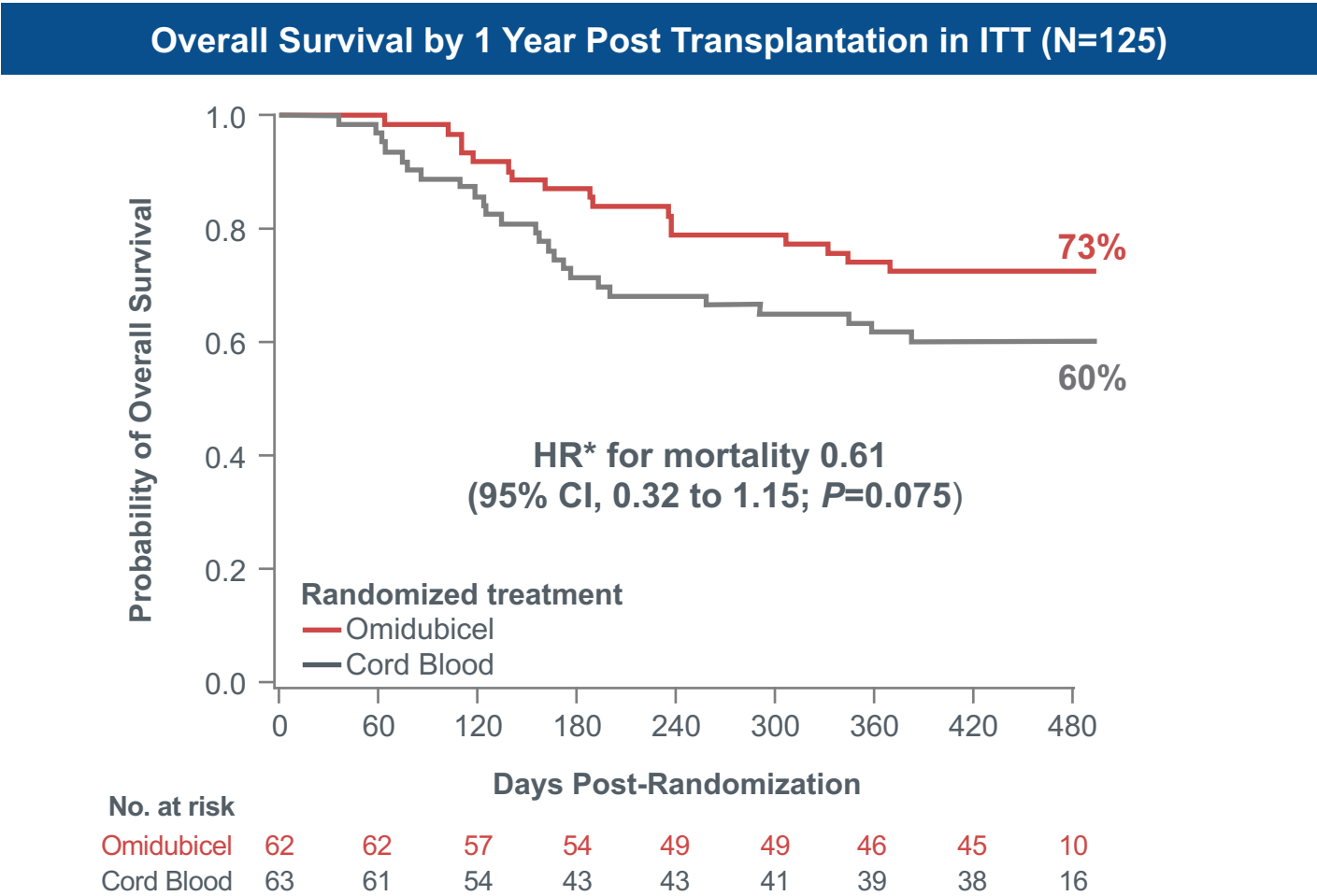
Robust early recovery observed
for T cell, B cell, NK cell, and
dendritic cell subsets
(Day 0-28)

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

**Potential mechanistic support for the lower rates of severe infection
observed in patients treated with omidubicel**

One Year Update: Overall Survival

At 1 year post transplantation, a 13% increase in OS with omidubicel (95% CI: -5% to 28%; P=0.13)



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
Average number of transfusions per patient	24.8	35.4	0.0005
Average number of consultant visits*	6.8	20.1	0.015

*e.g. ID, dermatology, GI, cardiology, neurology, surgery

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

Initiated the BLA rolling submission; on track to complete in Q2 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



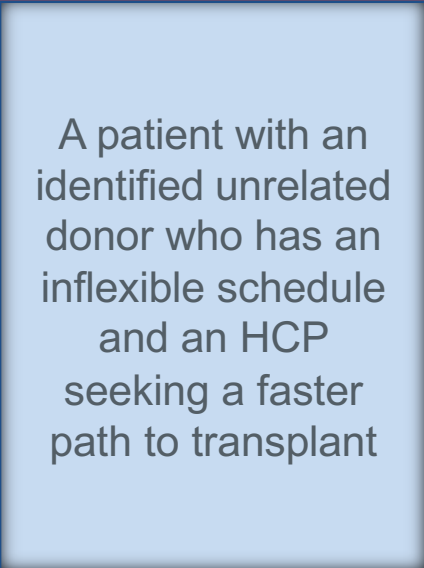
A minority patient with no timely MRD, MUD, or haplo option



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 an identified unrelated donor who has an inflexible schedule and an HCP seeking a faster path to transplant



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

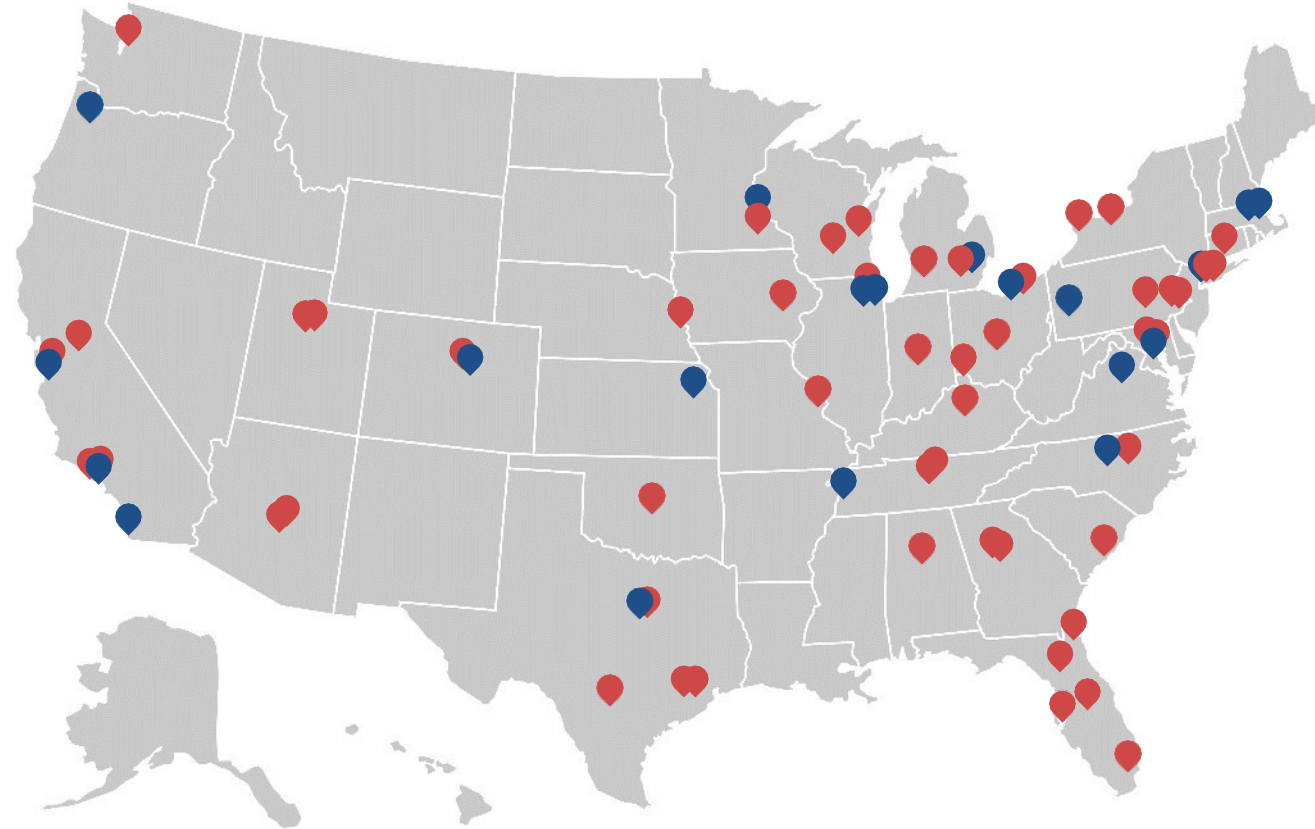
Our commercial manufacturing facility will ensure consistent and reliable product supply

- ✓ State-of-the art facility in Israel
- ✓ Modular facility with capability to add capacity
- ✓ Personalized product delivered within 30 days 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

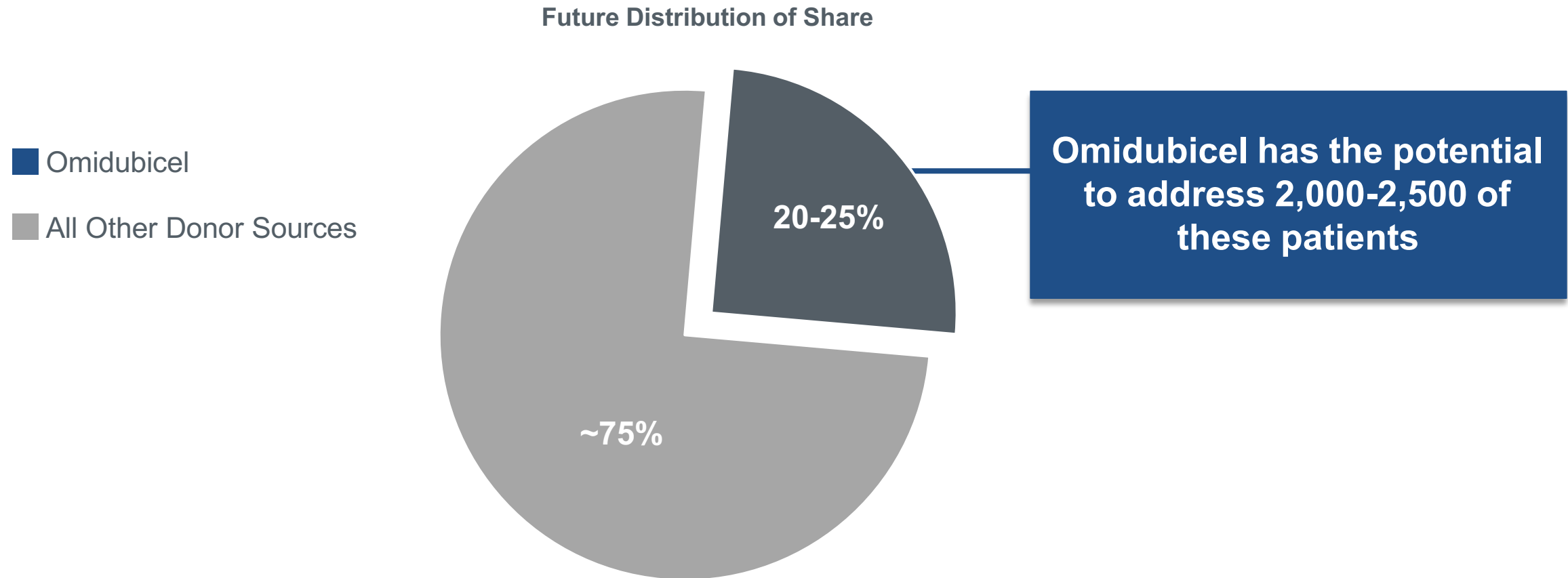
- Positive clinical outcomes
- Removed concern of advanced Donor age
- Personalized product delivered within 30 days

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

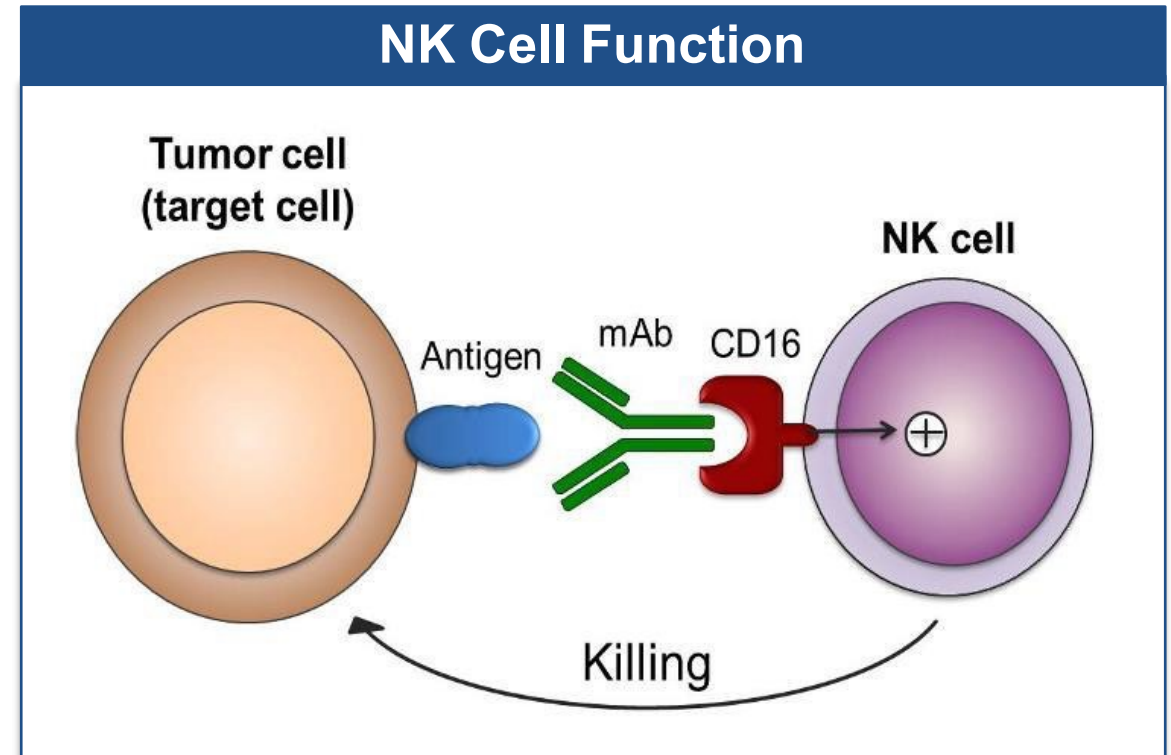
NAM-enabled NK cells to treat
Non-Hodgkin Lymphoma

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

Promise of NK Cells

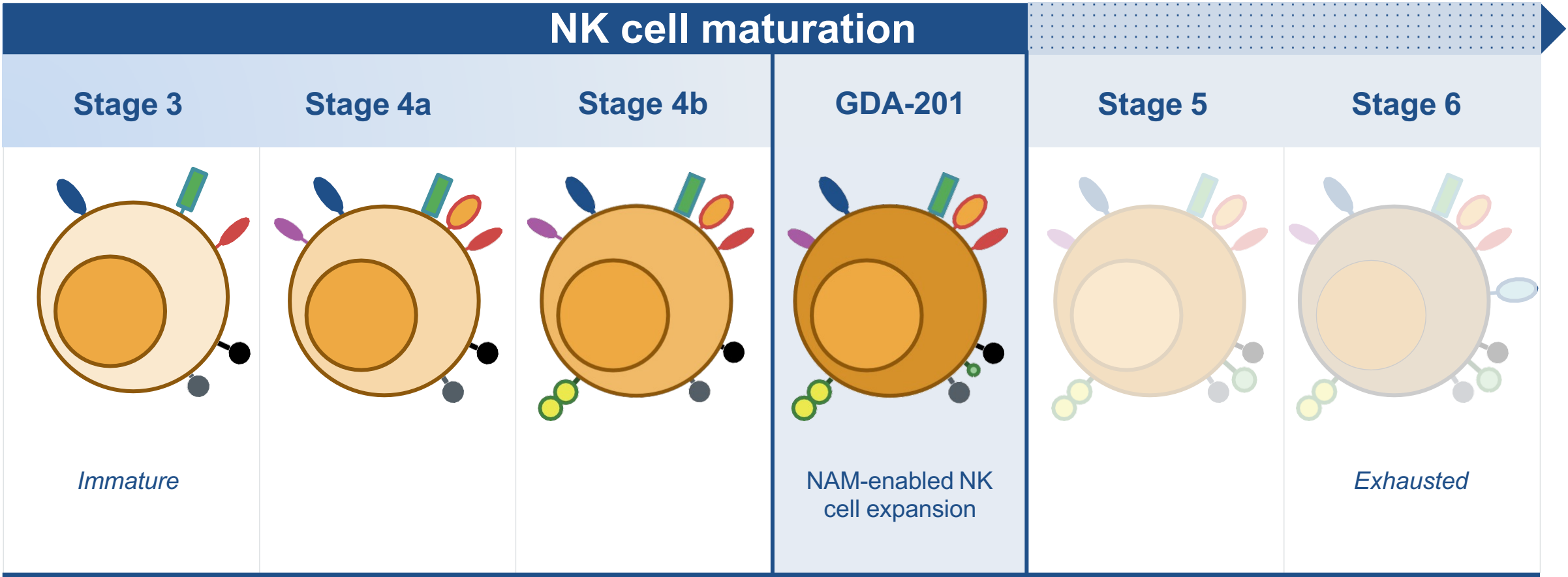
- ✓ Fully allogeneic product (no HLA matching required)
- ✓ Synergy with antibodies
- ✓ Potential to stimulate adaptive immunity
- ✓ Potential for readily available therapy



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

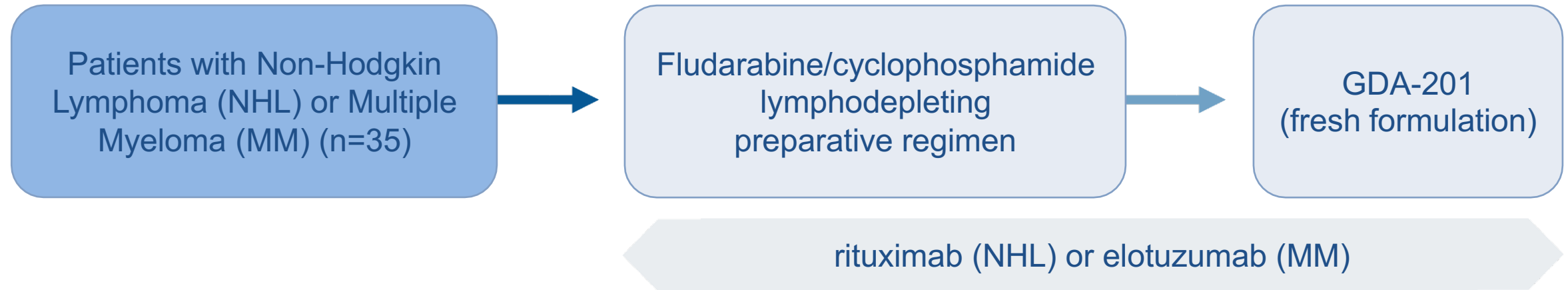
We are putting NK cells to work using our NAM Platform

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

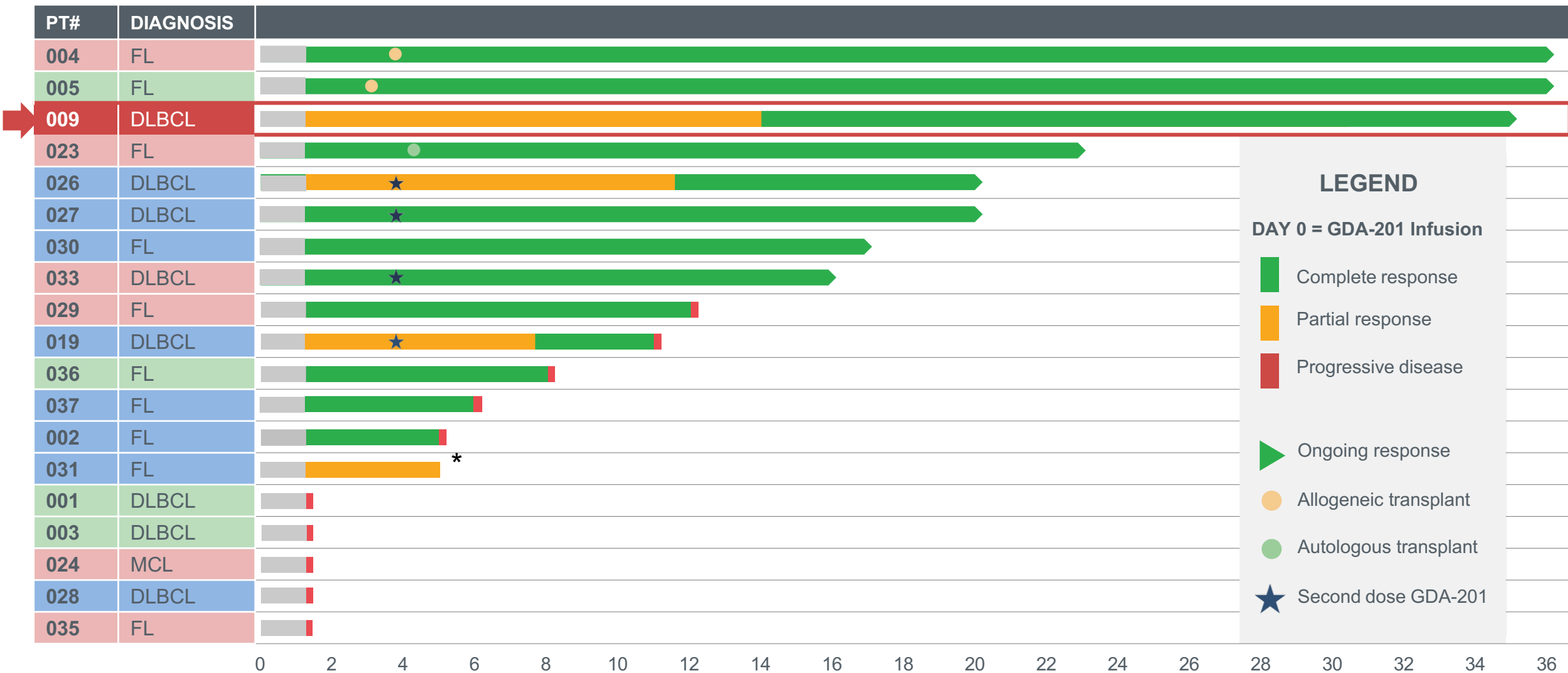
Phase 1 experience with GDA-201 and rituximab demonstrated a positive safety profile

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

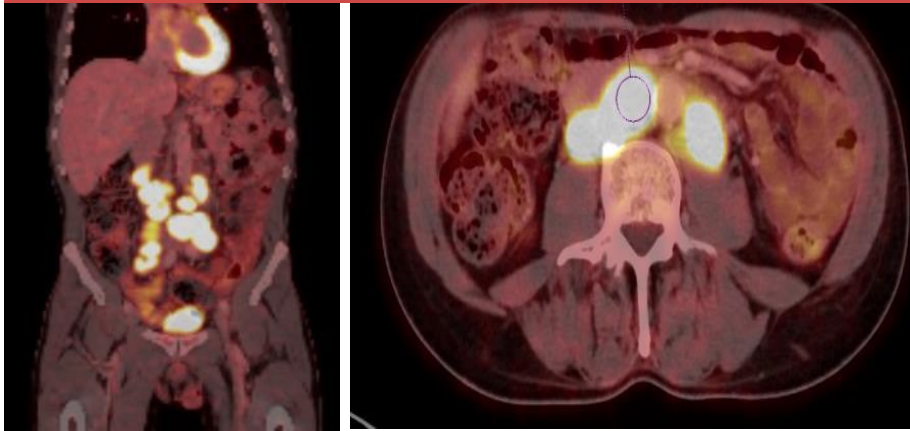
Multiple patients treated with GDA-201 and rituximab had durable complete responses demonstrating an ORR of 74% and CR rate of 68%

Median Duration of Response: **16 months**

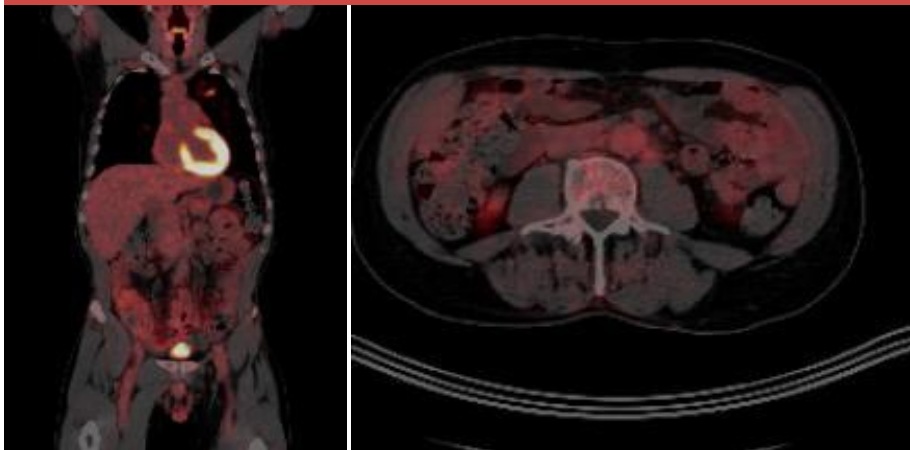


Additionally, in a heavily pretreated lymphoma patient, complete responses were demonstrated

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

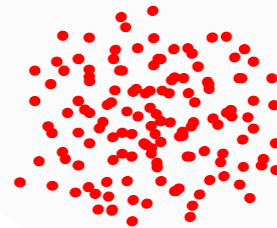
Seed CD3⁻ cells



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

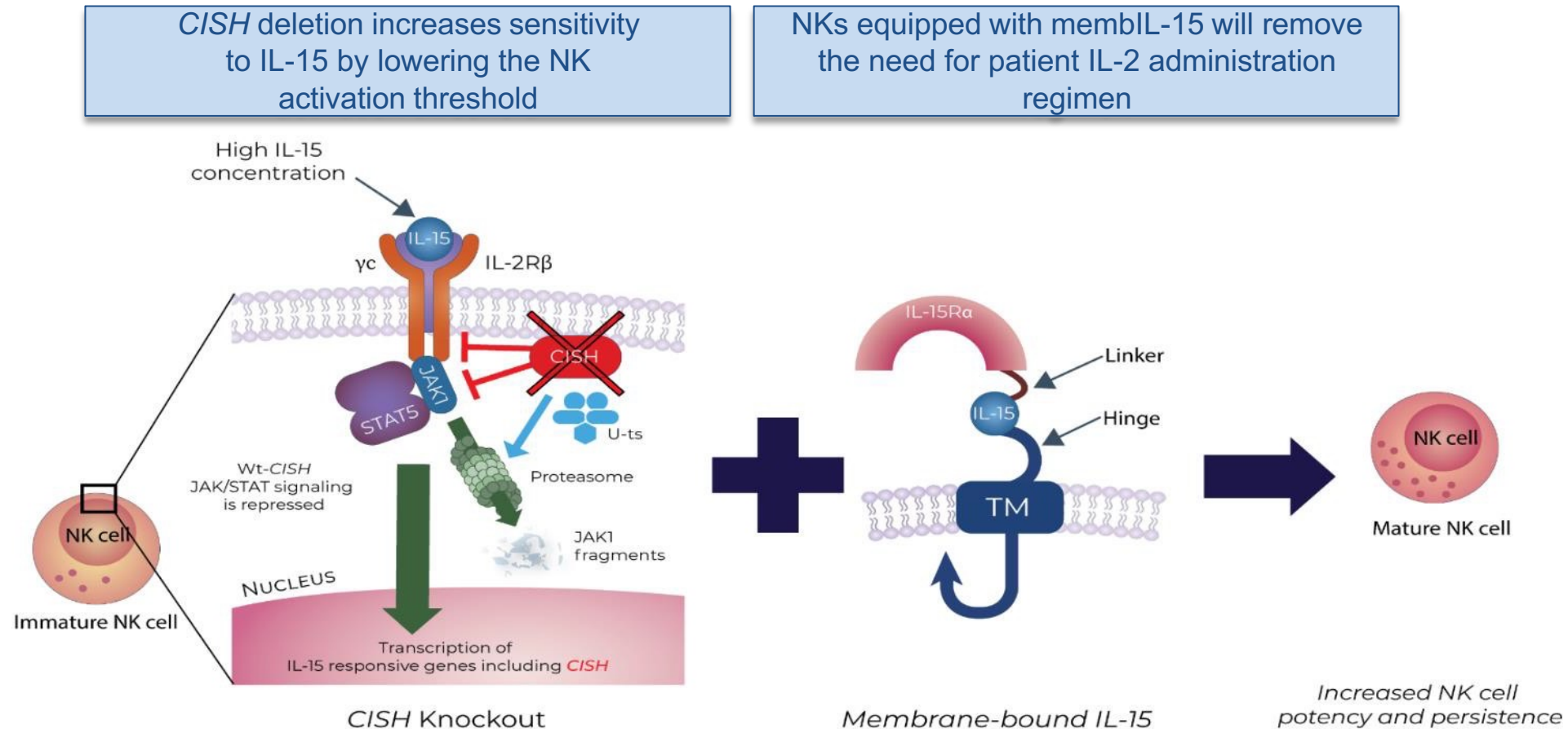
gamida Cell

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

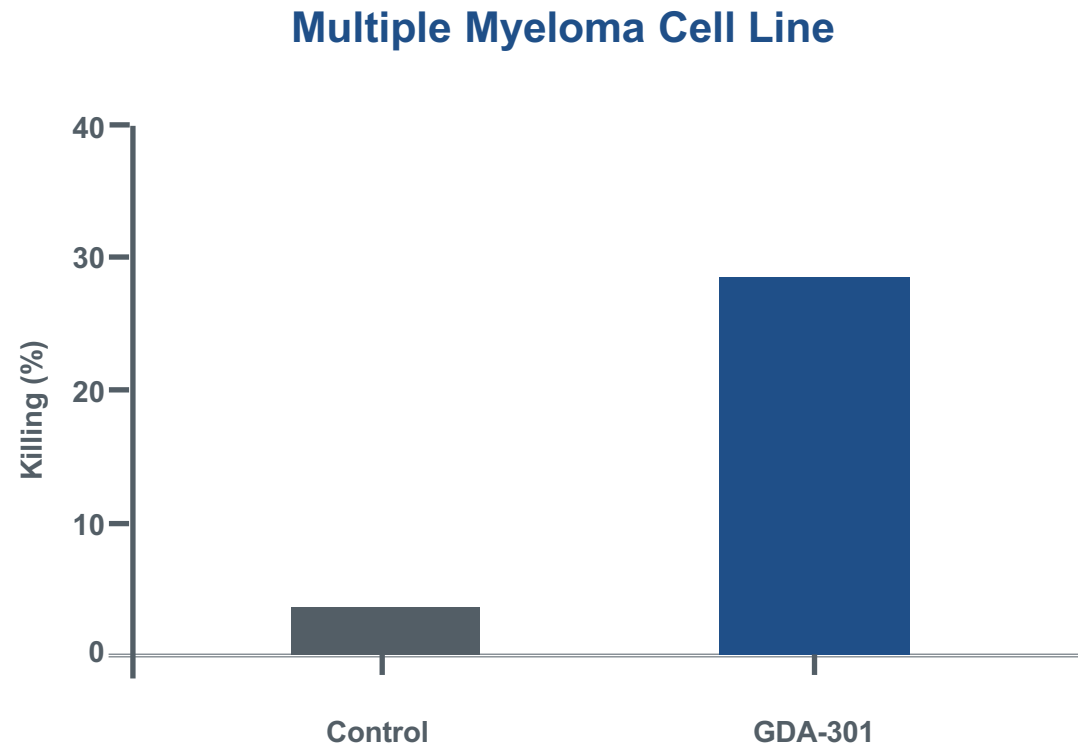
GDA-301: Enhancing NK potency and persistence

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

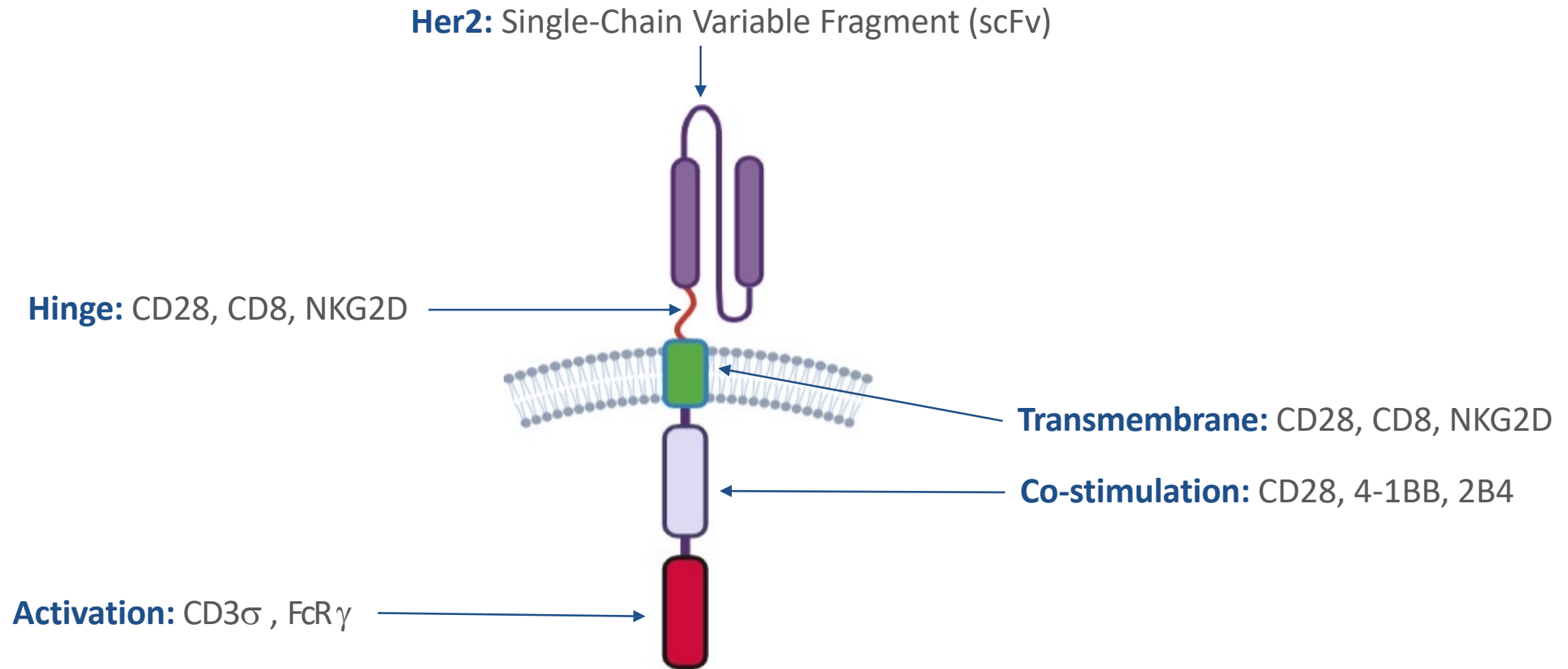
GDA-301 shows enhanced cytotoxic activity in multiple myeloma cell line (RPMI)



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

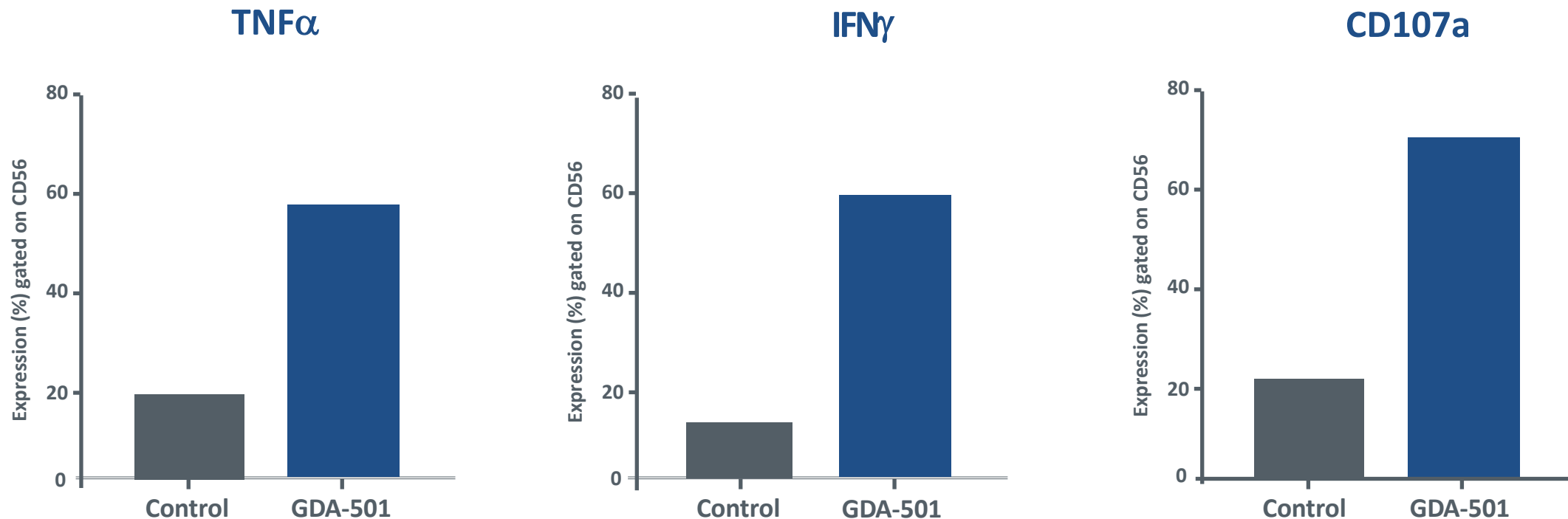
GDA-501: Developed to optimize targeting and NK activation against HER2+ tumors

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



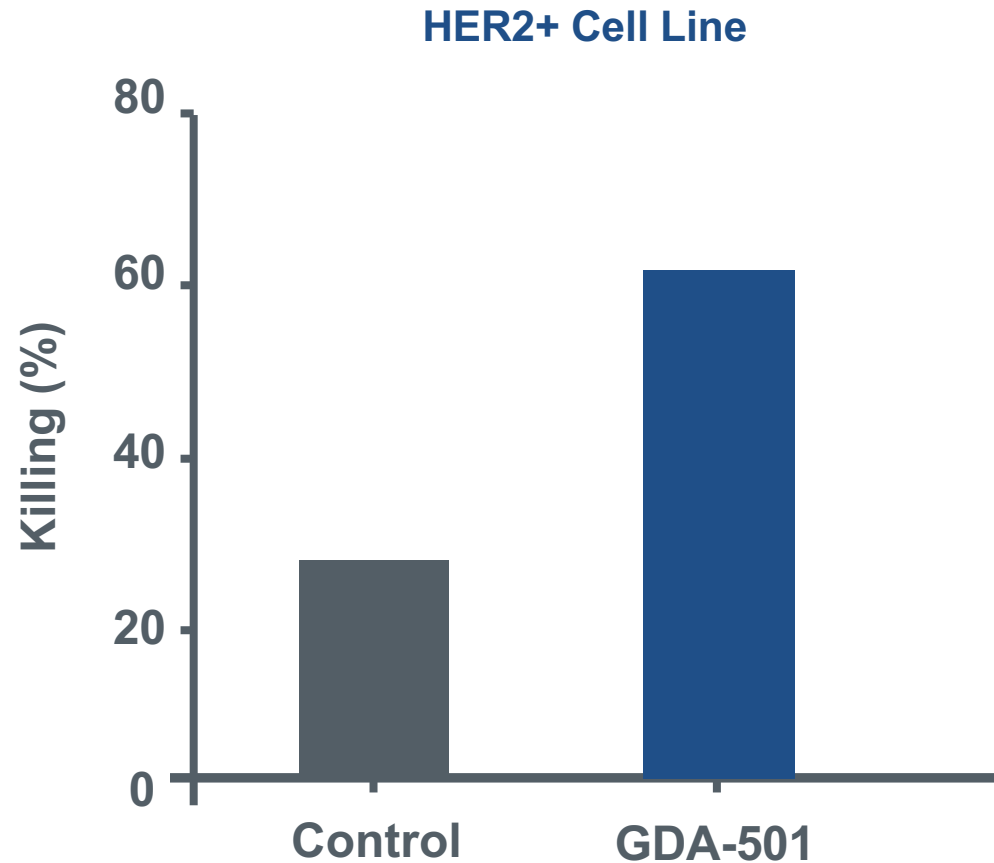
GDA-501: HER2 CAR NK cells enhance activity against HER2+ cell lines

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.

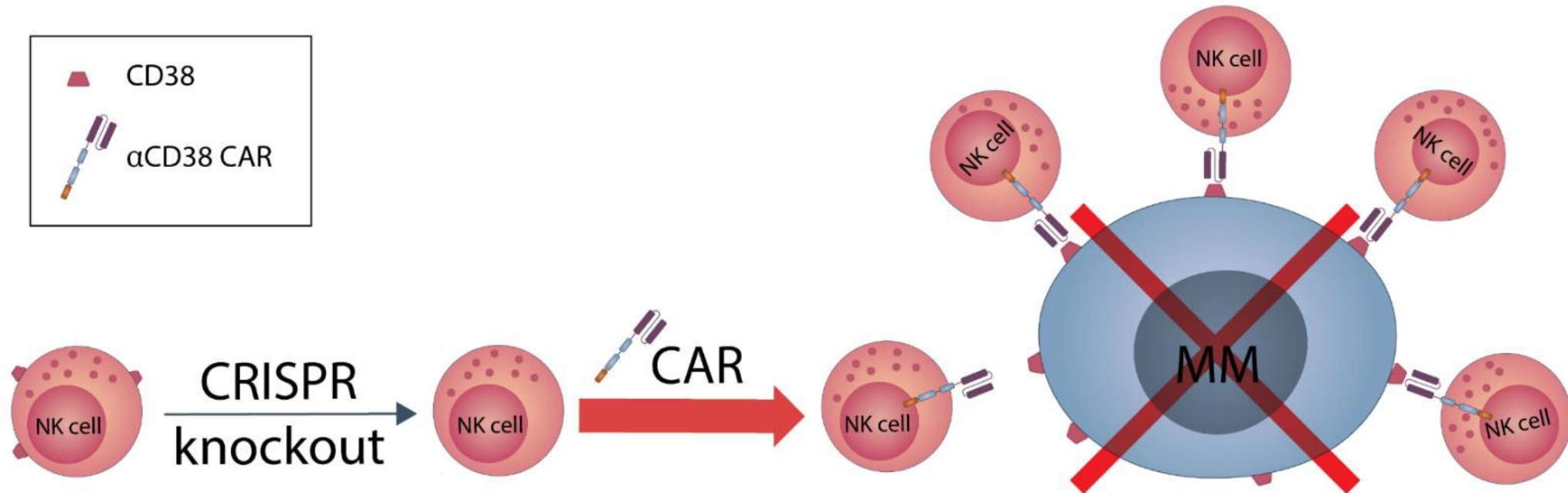
GDA-501: Shows effective in vitro cytotoxicity against HER2+ cell line



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

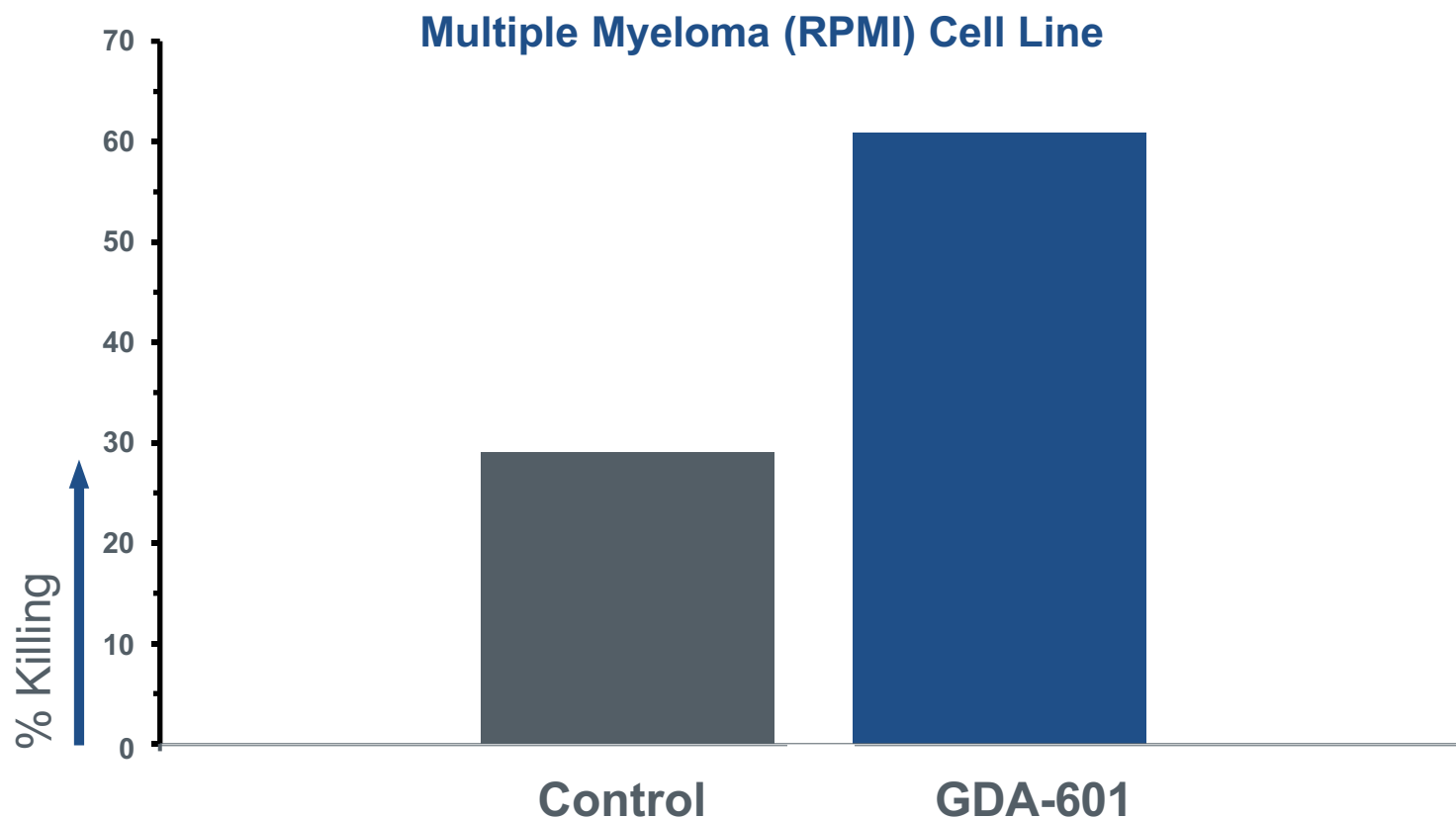
GDA-601: An investigational genetically engineered cell product designed to target multiple myeloma cells

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

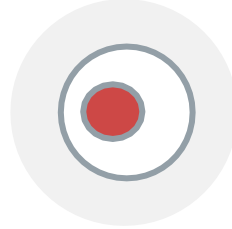
We are committed to cures and developing advanced cell therapies to address urgent unmet needs



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
- Initiated the BLA rolling submission process and on track to complete the submission in Q2 2022



GDA-201

Fighting non-Hodgkin Lymphoma

- NK cell product with positive Phase 1 data using fresh product
- Received FDA clearance for an IND for a Phase 1/2 trial in NHL with an allogeneic readily available cryopreserved formulation
- Study start date in 2022



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 | \$70M Cash* | Cash runway into mid-2023 and through potential omidubicel approval

*As of March 31, 2022

Committed to Cures

Learn more at
gamida-cell.com

gamida ell