

Committed to Cures

Pioneering advanced cell therapy candidates for patients with cancer and other serious diseases

June 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 omidubicel and 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 forwardlooking 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.

Changing the Course of Cancer Care

Gamida Cell is the leader in pioneering proprietary NAM-enabled cell therapy candidates designed as a curative approach for patients with cancers and other serious diseases

Gamida Cell's NAM-enabled cell therapy candidates are demonstrating near-term promise and long-term potential



Omidubicel

Lead candidate for potential U.S. launch 1H2023

- Potential to be first FDA-approved cell therapy for allogeneic hematopoietic stem cell transplant (allo-HSCT)
- Breakthrough Therapy and Orphan Drug status
- Rolling BLA submission completed in June 2022



GDA-201

Advancing Natural Killer (NK) cell clinical program

- NK cell therapy candidate 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
- Open for enrollment, announced June 2022



GDA-301/401/501/601

Expanding pipeline of next generation immunotherapies

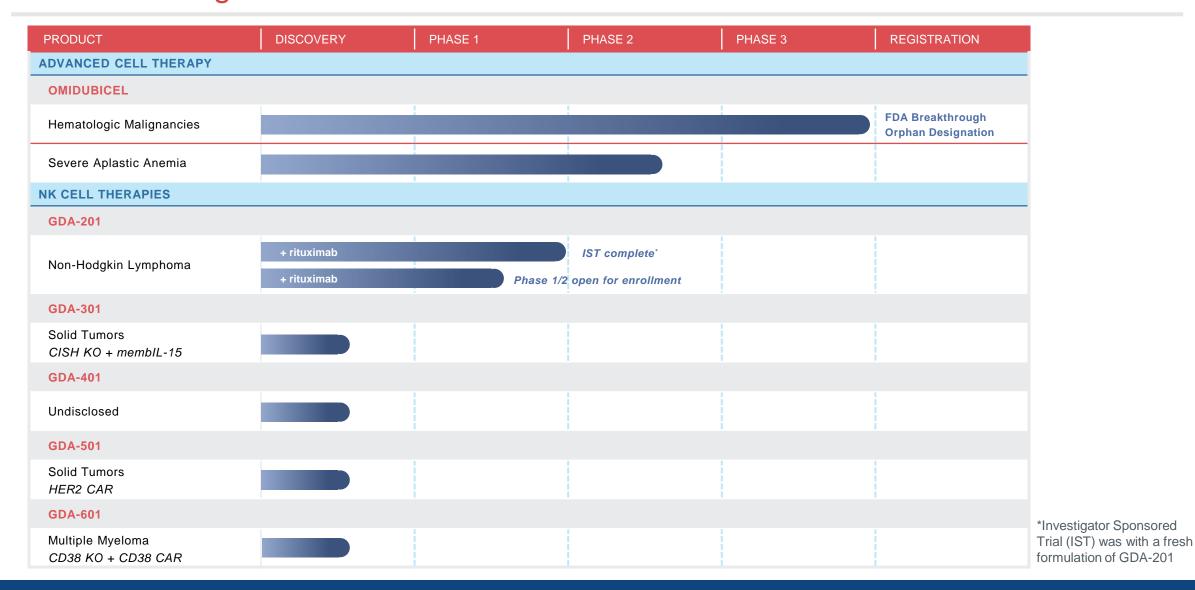
- Proof-of-concept for NK cell genetic engineering modifications, including CAR, membrane bound IL15, and knockouts using multiple approaches including CRISPR
- Evidence of increased cytotoxicity in preclinical studies
- Potential in hematology and solid tumors
- Selecting one candidate for IND enabling study by the end of 2022

Well positioned to execute goals | \$70M Cash* | Cash runway into mid-2023 and through potential omidubicel approval





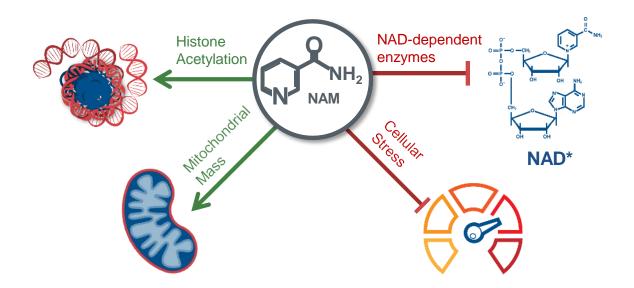
Proprietary pipeline of potential curative therapy candidates for patients with hematologic diseases and solid tumors



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



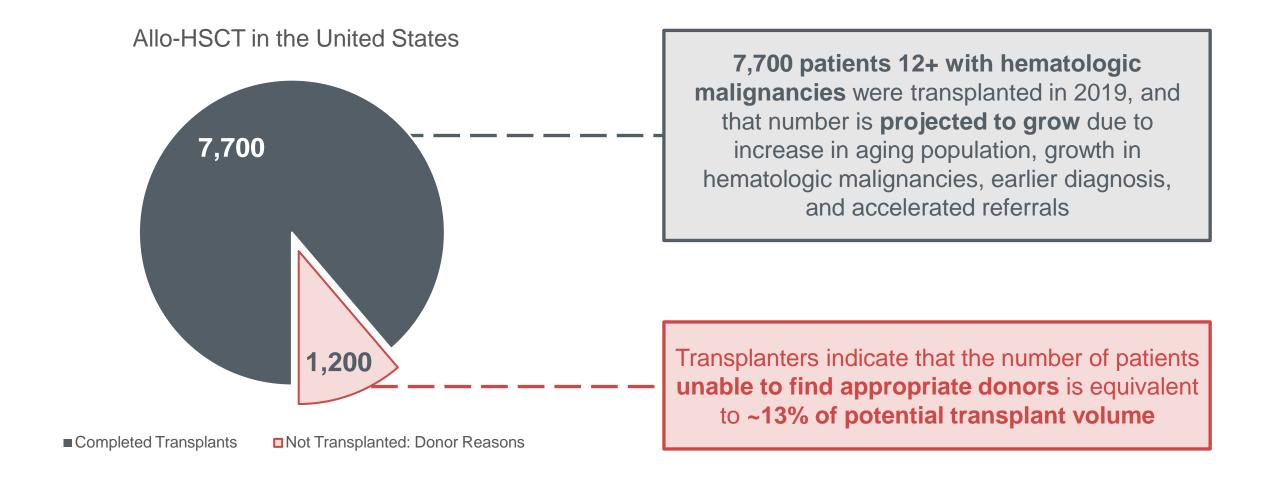
NAM=nicotinamide. The NAM technology leverages the unique properties of NAM to enable the enhancement of multiple cell types, including stem cells, with appropriate growth factors to maintain the cells' original phenotype and potency

Omidubicel

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

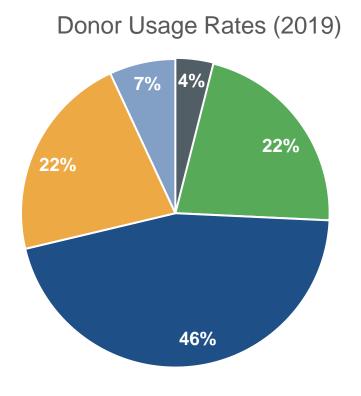


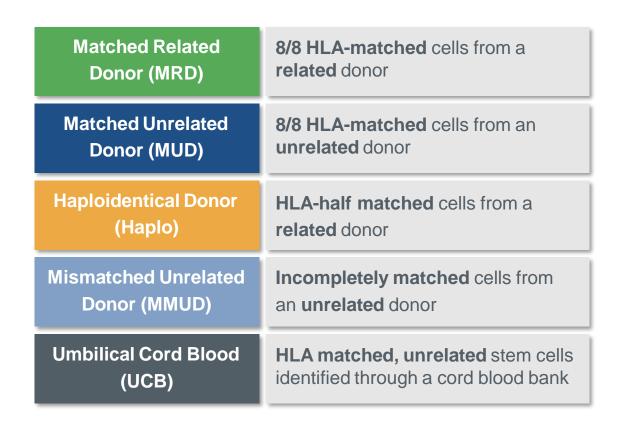
Allo-transplant is a potentially curative treatment option, and while a growing market, it is not without unmet needs



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

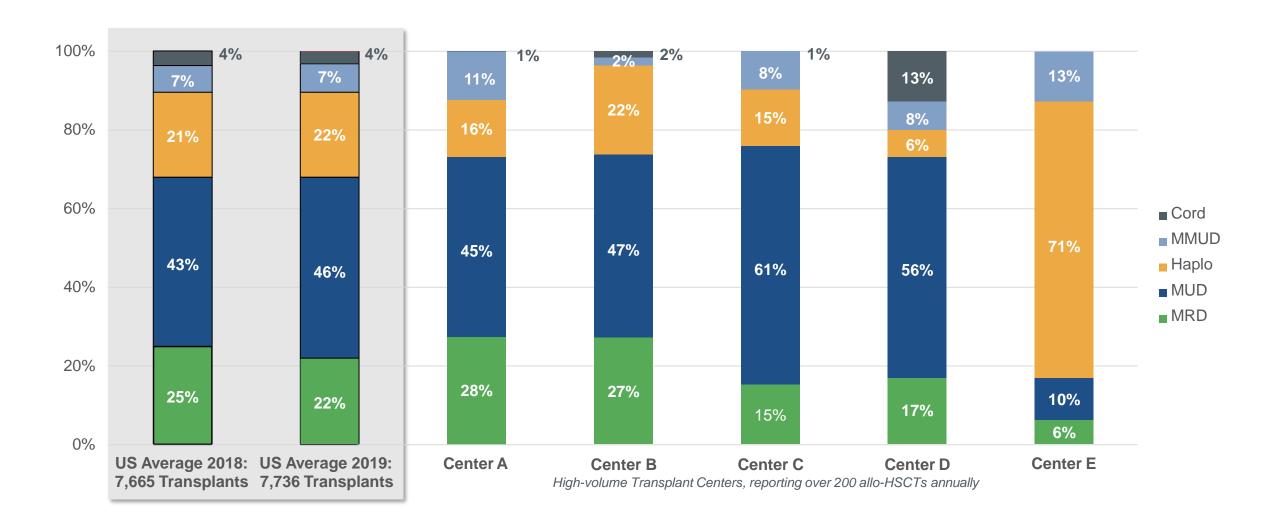




^{*}HLA match refers to the process in which blood or tissue samples are tested for human leukocyte antigens (HLAs) to determine the degree of matching between the donor and transplant recipient.



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

Recognized as the **gold** standard

- 70% of patients will NOT have an MRD
- Requires consideration of donor age, as older donors are associated with reduced overall survival (OS)

Matched Unrelated Donor

Seen as the **next** alternative to MRD

- Likelihood of finding a match is lower for minority groups
- The search process averages 2-3 months, with delayed acquisition significantly impacting patient outcomes

Haploidentical Donor

Extends chance of finding a related donor

- 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

Mismatched Unrelated Donor

Registries provide more options

- The decreased HLA match leads to increased risk of GvHD
- Patients face the same negative consequences as MUD when a delay occurs

Umbilical Cord Blood

Readily available, less stringent matching criteria without the risk of increased GvHD

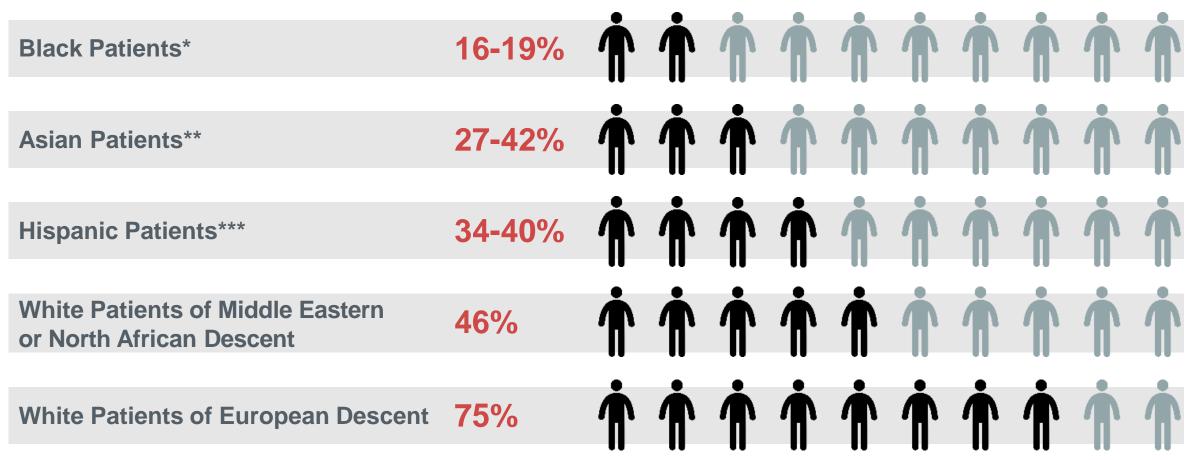
- Engraftment time is delayed due to lower cell count, leading to increased risk of infection
- Patients face additional hospitalization days compared to other donor sources

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

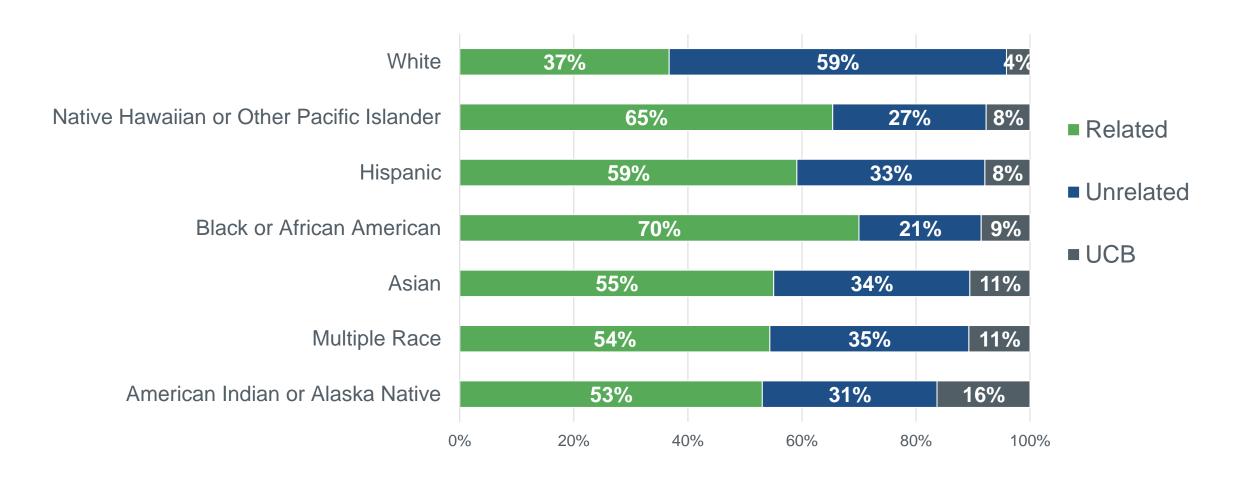
Likelihood of finding a donor match through a registry varies greatly by race



* 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 candidate option that addresses today's unmet needs

Unmet Needs		Inmet 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

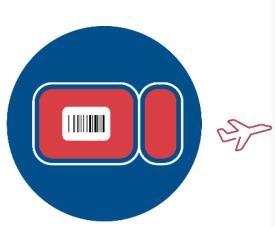


Omidubicel

The latest data demonstrating the potential for cure

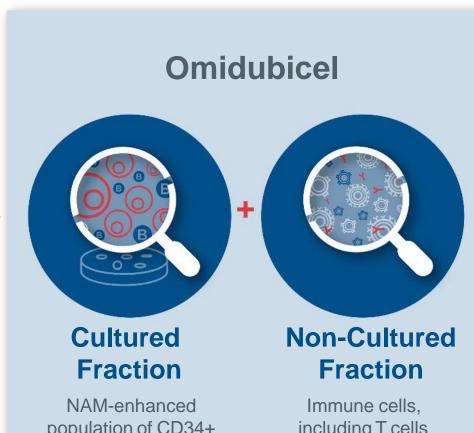


Omidubicel is a personalized advanced cell therapy candidate consisting of a cultured and non-cultured fraction from a single umbilical cord blood unit



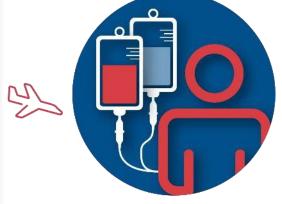
Cord Blood Unit (CBU) Selected

CBU selected by physician from US public cord blood bank



population of CD34+ hematopoietic stem cells

including T cells



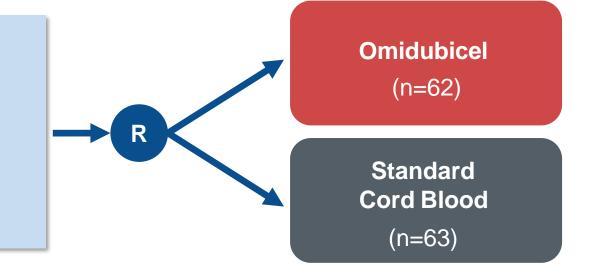
Omidubicel Infusion

Reliable delivery in 30 days from order

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*

- Age 12-65
- High-risk hematologic malignancies
- Eligible for allo-HSCT
- No readily available matched donor



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





PRIMARY ENDPOINT: Time to Neutrophil Engraftment (ITT)

Intent-to-treat	Median Time to Neutrophil Engraftment (Days) ^a	95% CI	<i>P</i> Value	
Omidubicel (N=62)	12.0	(10.0, 14.0)	.0.004h	
Cord Blood (N=63)	22.0	(19.0, 25.0)	<0.001 ^b	

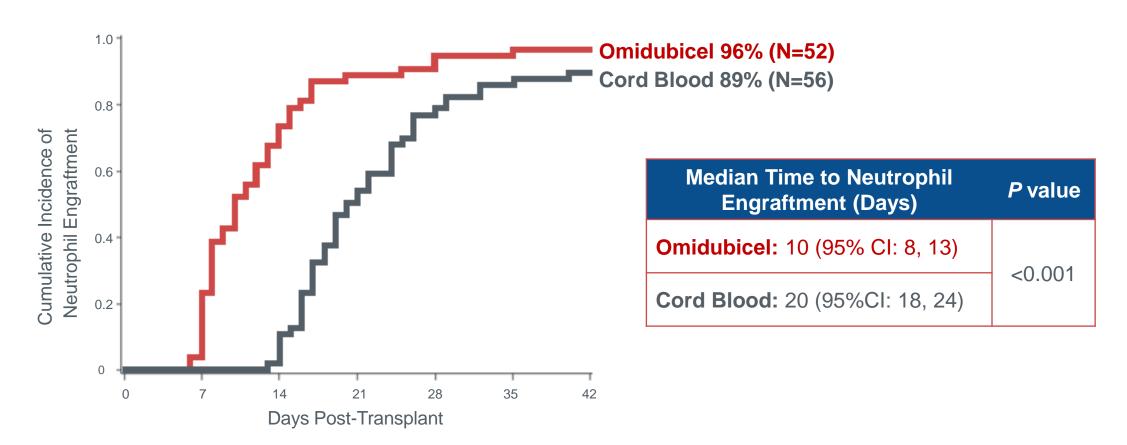
Engraftment is a key milestone in recovery

Rapid engraftment is associated with fewer infections and shorter hospitalizations¹

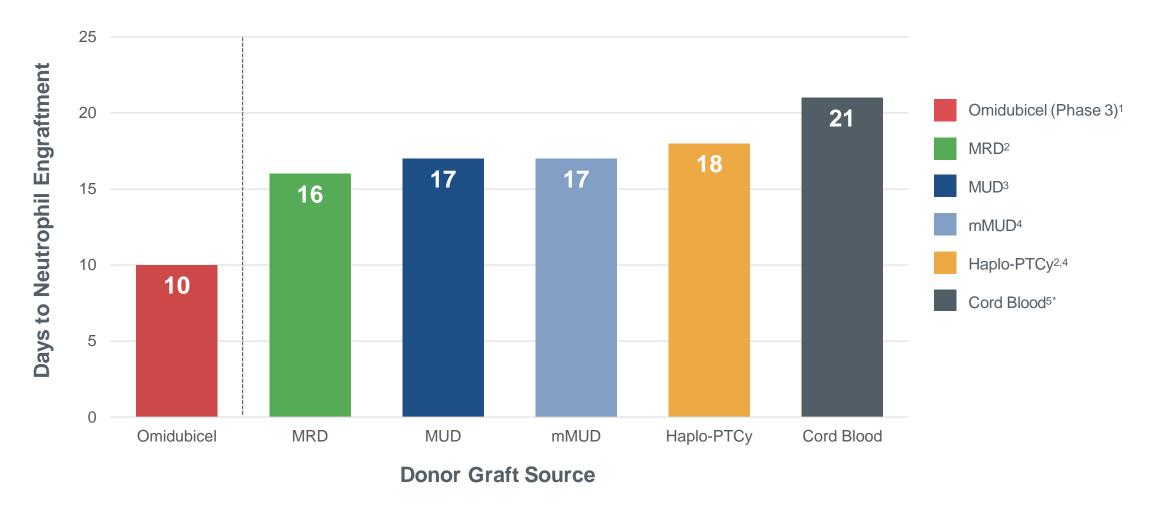


Significantly faster time to neutrophil engraftment in as-treated population

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



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



^{*} Results represent double-cord transplants



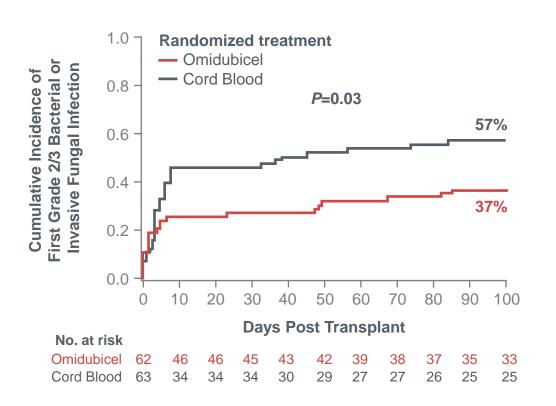
SECONDARY ENDPOINT: Platelet Engraftment (ITT)

Platelet Engraftment by Day 42 (ITT; N=125)

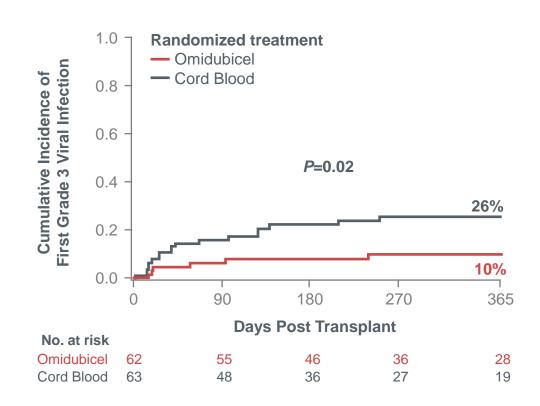
Intent-to-treat	Day 42 Cumulative Incidence	Difference in Cumulative Incidence (95% CI)	<i>P</i> Value
Omidubicel (N=62)	0.55	0.2 (0.03,0.35)	0.028
Cord Blood (N=63)	0.35		

Transplant With Omidubicel: Reduced Risk of Bacterial, Fungal, and Viral Infections

Incidence of First Grade 2/3 Bacterial or Invasive Fungal Infections in ITT (N=125)



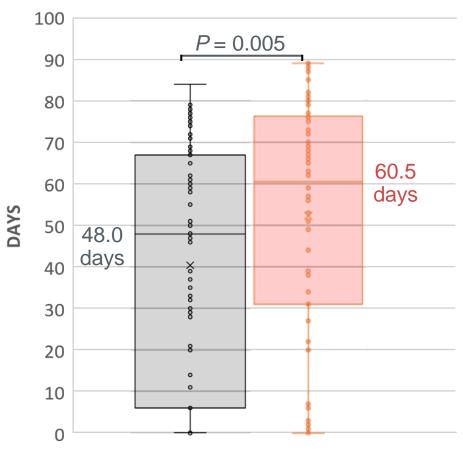
Incidence of First Grade 3 Viral Infection in ITT (N=125)



Rates of acute and chronic GvHD were similar in both groups



SECONDARY ENDPOINT: Omidubicel significantly reduced total hospitalization in first 100 days (ITT)



Treatment Received	Median Time From Transplant to First Discharge	<i>P</i> Value
Omidubicel	25	-0.004
Cord Blood	33	<0.001

Cord Blood Omidubicel

Robust immune reconstitution was demonstrated across multiple innate immune cells: Selected as a Best Abstract TCT 2022

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



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)	P-value
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

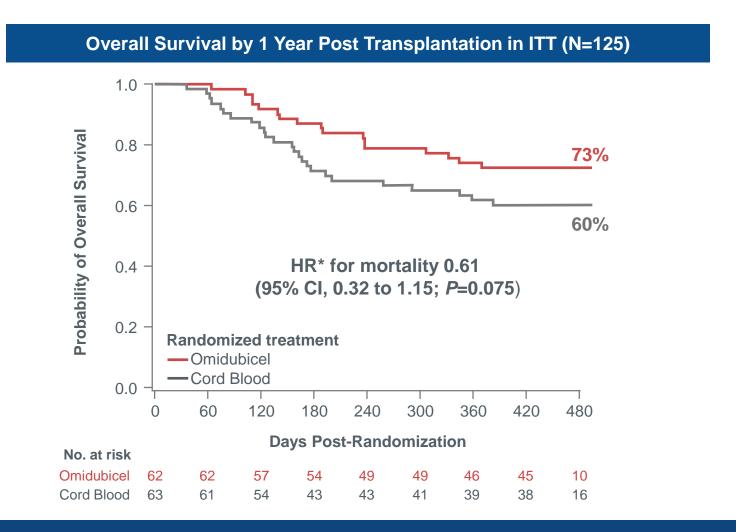
^{*} AT Population: N=108



^{**} e.g. ID, dermatology, GI, cardiology, neurology, surgery

Overall Survival of 73% after one year of follow-up post-transplantation

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



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

Rolling BLA submission completed in June 2022



Omidubicel

Preparing for potential commercial launch



If approved, omidubicel may provide transplanters the opportunity to offer a potential cure to patients in need



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

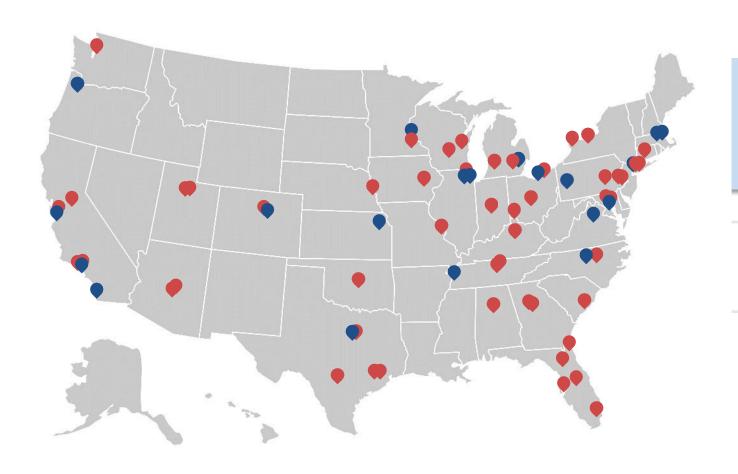
...and a pathway to reimbursement

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



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**

If approved, omidubicel has the opportunity to improve outcomes and increase access for patients

A quantitative demand study was conducted with 109 transplant physicians across the U.S.

Omidubicel has the opportunity to:

Improve outcomes across all current donor sources

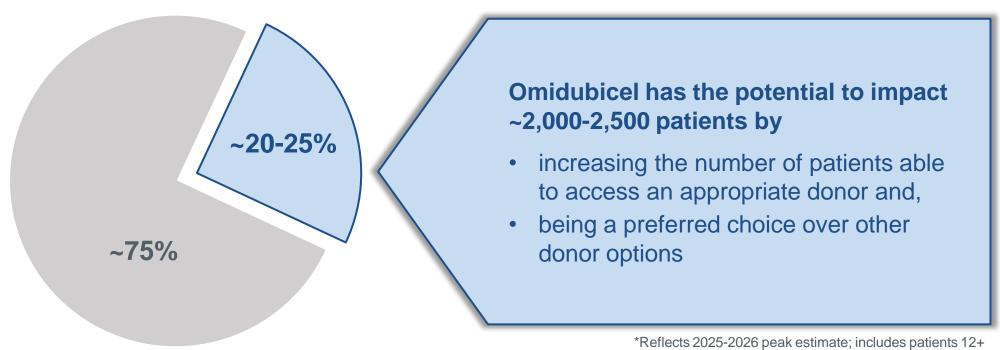
- Positive clinical outcomes
- Removed concern of advanced donor age
- Personalized product delivered within 30 days

Increase access for those patients not transplanted today

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

If approved, omidubicel may achieve ~20-25% of the market at peak

~11,000 patients with hematologic malignancies are expected to receive allo-HSCT in 2026*







GDA-201

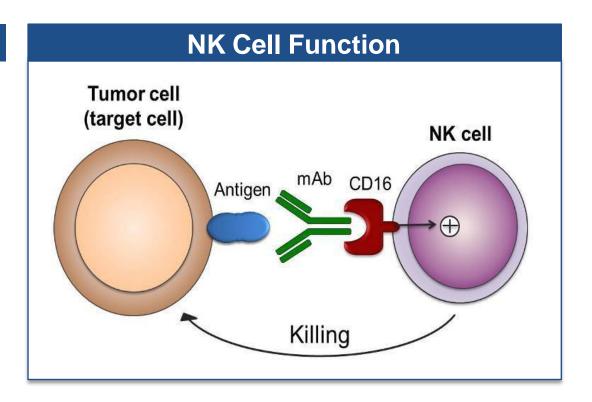
NAM-enabled NK cell candidate to treat Non-Hodgkin Lymphoma



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

Promise of NK Cells

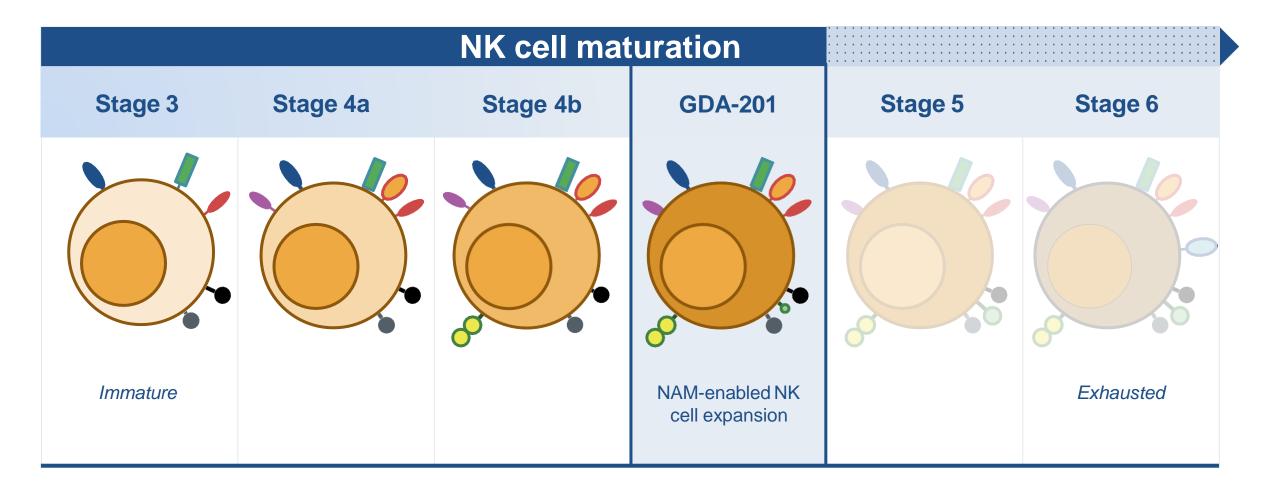
- Fully allogeneic product (no HLA matching required)
- ✓ Synergy with antibodies
- **✓** Potential to stimulate adaptive immunity
- **✓** Potential for readily available therapy



Cell expansion 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: A first-in-class NAM-enabled NK cell therapy candidate

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



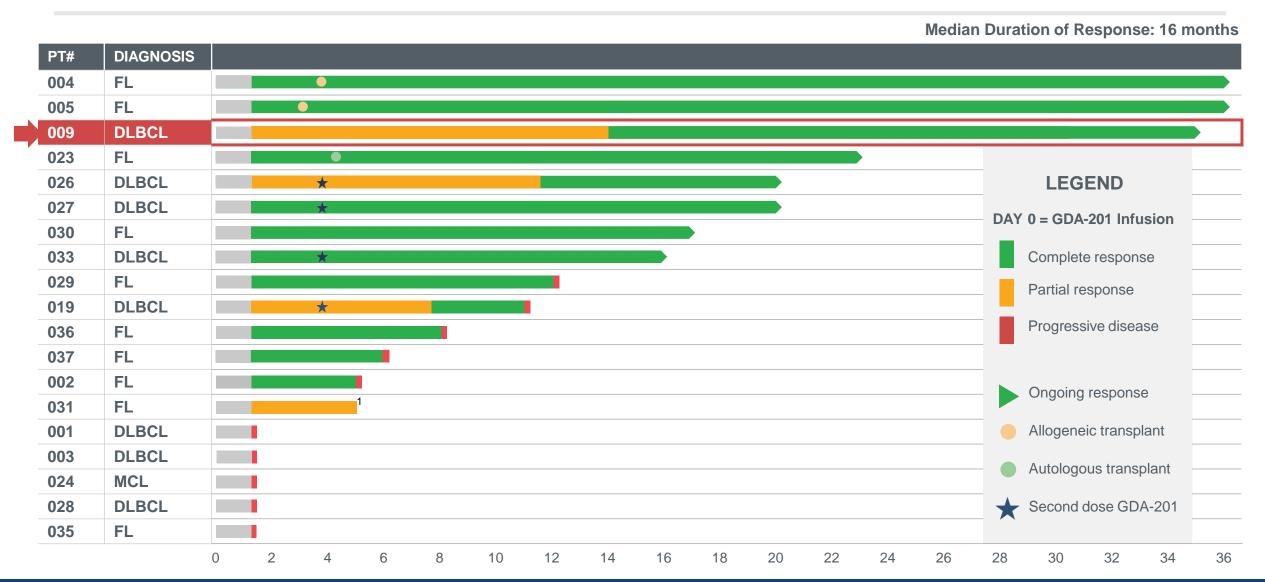
- Primary endpoint: Maximum tolerated dose of GDA-201
- Secondary endpoints: Overall response, toxicity

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
- 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
- One patient died of E. coli sepsis, initially reported as cytokine release syndrome

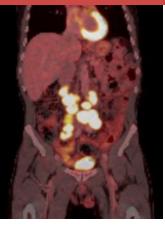
Multiple patients treated with GDA-201 and rituximab had durable complete responses demonstrating an ORR of 74% and CR rate of 68%

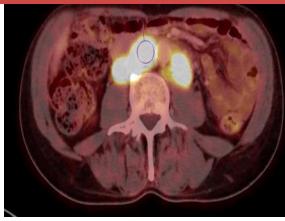




Additionally, in a heavily pretreated lymphoma patient, complete responses were demonstrated

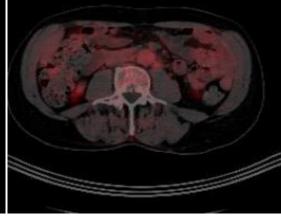
Pt 009: Baseline





Pt 009: 6-month post GDA-201



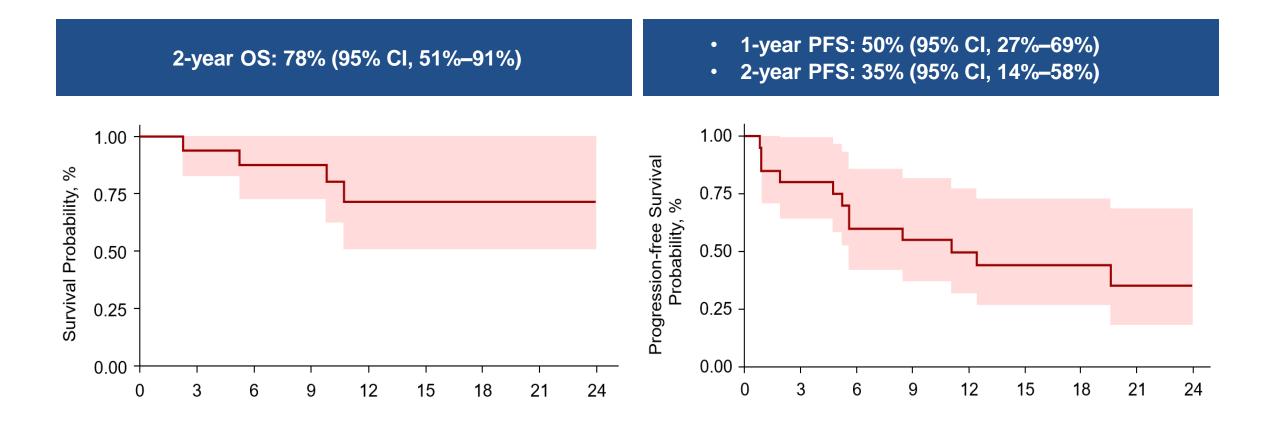


- 57-year-old man with history of CLL and Richter's transformation-large cell lymphoma, measurable retroperitoneal lymph nodes at baseline
- Prior therapy: FCR-light, Rituximab/Bendamustine Ibrutinib/lenalidomide, R-CHOP, Venetoclax/Rituximab
- Allogeneic HSCT (matched sibling)
- Relapse at 6 months
- 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

GDA-201 demonstrated 2-year overall survival of 78%

At a median follow-up of 11 months (range, 1–36)



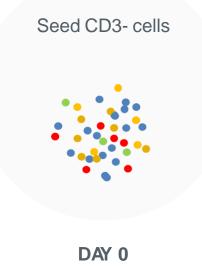
We are leveraging our knowledge of cryopreservation to further advance our NK pipeline

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

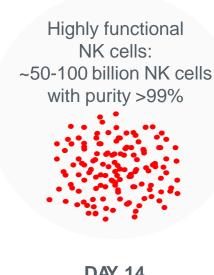
Peripheral bone marrow cells collected by apheresis*



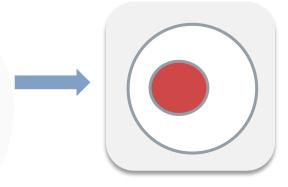




Proprietary co-culture with NAM +IL-15 + autologous irradiated CD3+ feeder cells







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

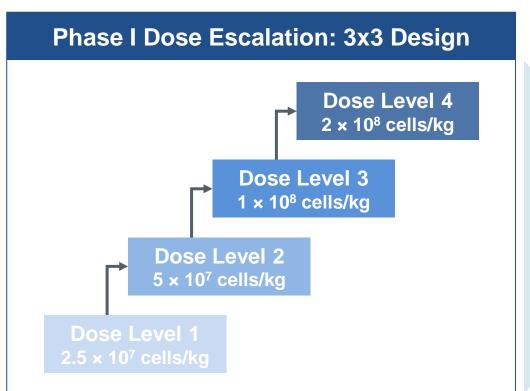
Next Step

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

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

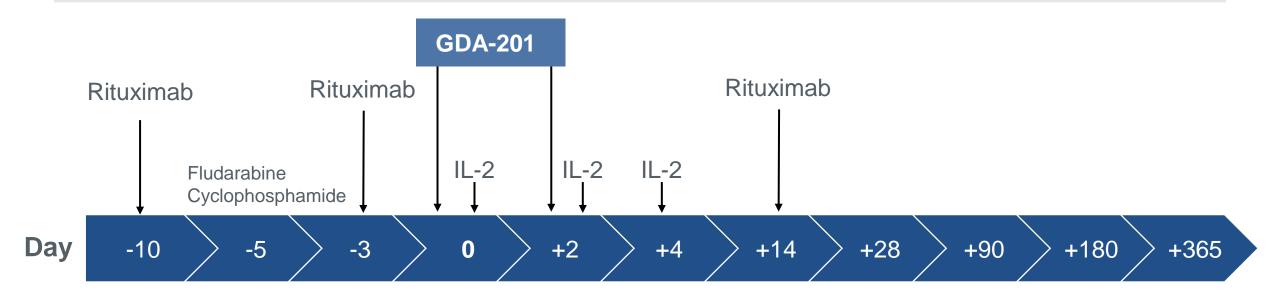
A Phase I/II multicenter study evaluating the safety and efficacy of allogeneic GDA-201 NK cells in patients with r/r B Cell Non-Hodgkin Lymphoma

- **Opening study sites in May 2022**
- Estimated primary completion date July 2024
- Estimated study completion date February 2025





Proposed Treatment Plan



Doses

Rituximab: 375 mg/m²

Fludarabine: 30 mg/m2 IV x 3 days

Cyclophosphamide: 400 mg/m2 IV x 3 days

Interleukin-2 (IL-2): 6 million units SC

Enrollment Criteria

- Age ≥ 18
- Relapsed/refractory B Cell FL or DLBCL
 - Received at least 2 prior lines of therapy (including anti-CD20 antibody)
 - Prior autologous or allogeneic hematopoietic stem cell transplant permitted
 - Prior chimeric antigen receptor modified T-cells (CAR-T) cell therapy permitted
- Measurable disease as defined by Lugano response criteria
- ECOG Performance Status of 0 or 1
- · Adequate organ function, no active infection

Engineered NK Cell Programs

Next-Generation of NAM-enabled NK Cell Therapy Candidates



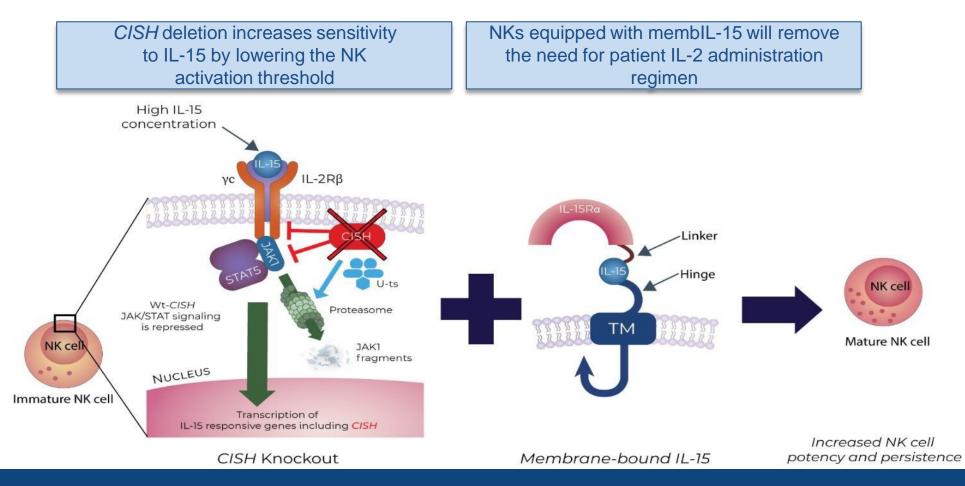
Led by GDA-201 clinical proof of concept, Gamida Cell continues to invest in advancing a diversified NAM-enabled NK cell candidate pipeline

PROGRAM	STRATEGY	GENETIC MODIFICATION	INDICATION(S)
GDA-301	Increased potency and persistence	CISH KO + memblL-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

A genetically modified NK cell therapy candidate will be selected for IND enabling study by the end of 2022

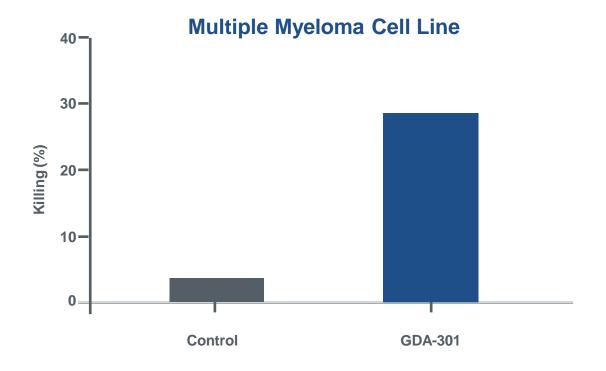
GDA-301: Enhancing NK potency and persistence

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

Deletion of CISH and co-expression of mb-IL15 on NK cells enhances their cytotoxicity activity



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

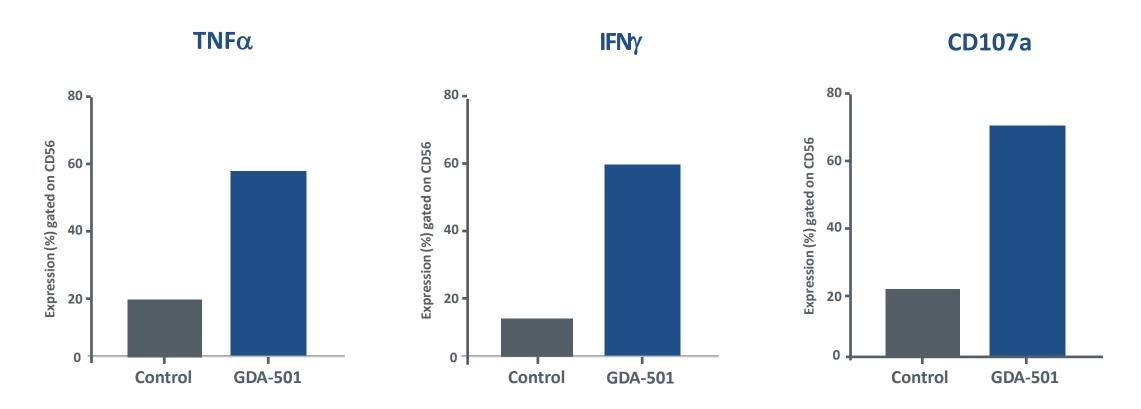
GDA-501: Developed to optimize targeting and NK activation against HER2+ tumors

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

Her2: Single-Chain Variable Fragment (scFv) Hinge: CD28, CD8, NKG2D Transmembrane: CD28, CD8, NKG2D Co-stimulation: CD28, 4-1BB, 2B4 **Activation:** CD3 σ , FcR γ

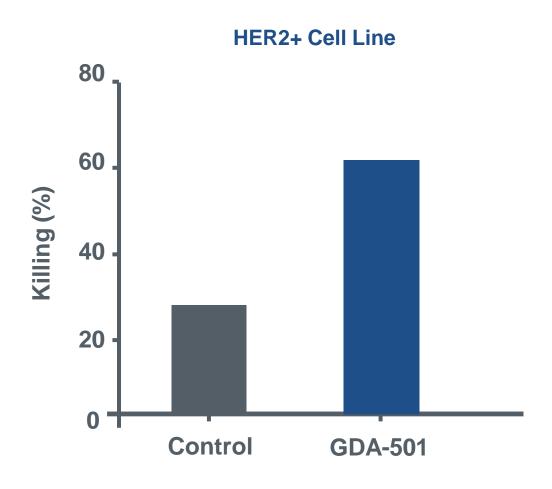
GDA-501: HER2 CAR NK cells enhance activity against HER2+ cell lines

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-y production in control NK cells, or electroporated NK cells with mRNA expressing HER2 CAR constructs.

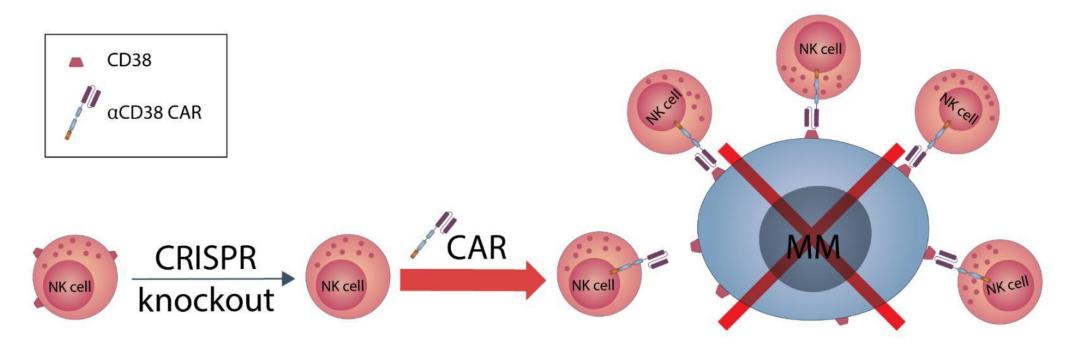
GDA-501: Shows effective in vitro cytotoxicity against HER2+ cell line



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

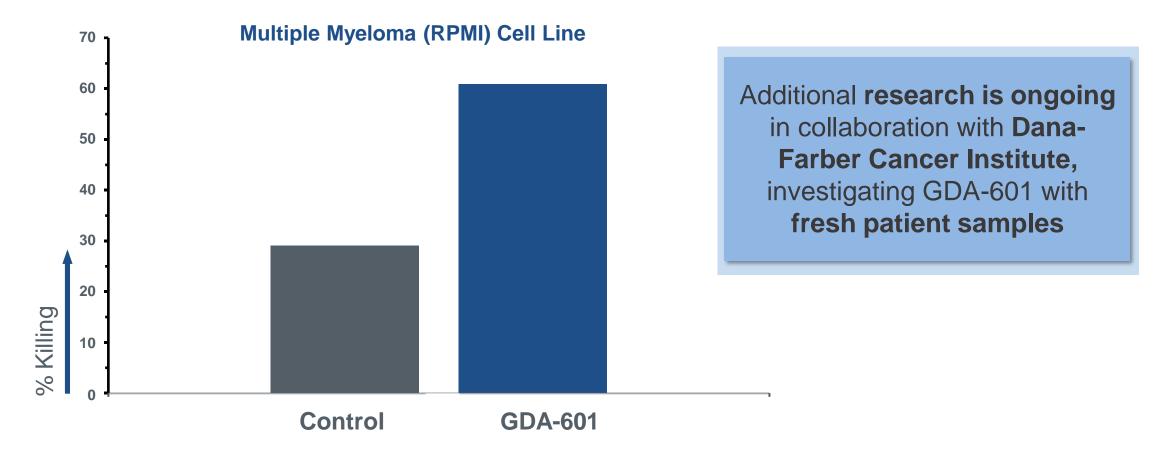
GDA-601: Leverages CRISPR/Cas9 technology to enhance cytotoxic effect against multiple myeloma cells

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 selfinflicted 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



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

The pipeline of NAM-enabled cell therapy candidates position Gamida Cell for near and long-term success





Nearing Potential Commercialization

- Potential to be first FDA-approved cell therapy for allogeneic hematopoietic stem cell transplant (allo-HSCT)
- Breakthrough Therapy and Orphan Drug status
- Rolling BLA submission completed in June 2022
- Potential launch in 1H2023



GDA-201

Leading NK cell innovation in lymphoma

- NK cell therapy candidate with positive Phase 1 data using fresh product; 78% ORR and 64% CR
- Received FDA clearance for an IND for a Phase 1/2 trial in NHL with an allogeneic readily available cryopreserved formulation
- Open for enrollment, announced June 2022



GDA-301/401/501/601

Opening 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 hematology and solid tumors
- Selecting one candidate for IND enabling study by the end of 2022

Well positioned to execute goals | \$70M Cash* | Cash runway into mid-2023 and through potential omidubicel approval



Committed to Cures

Learn more at gamida-cell.com

