

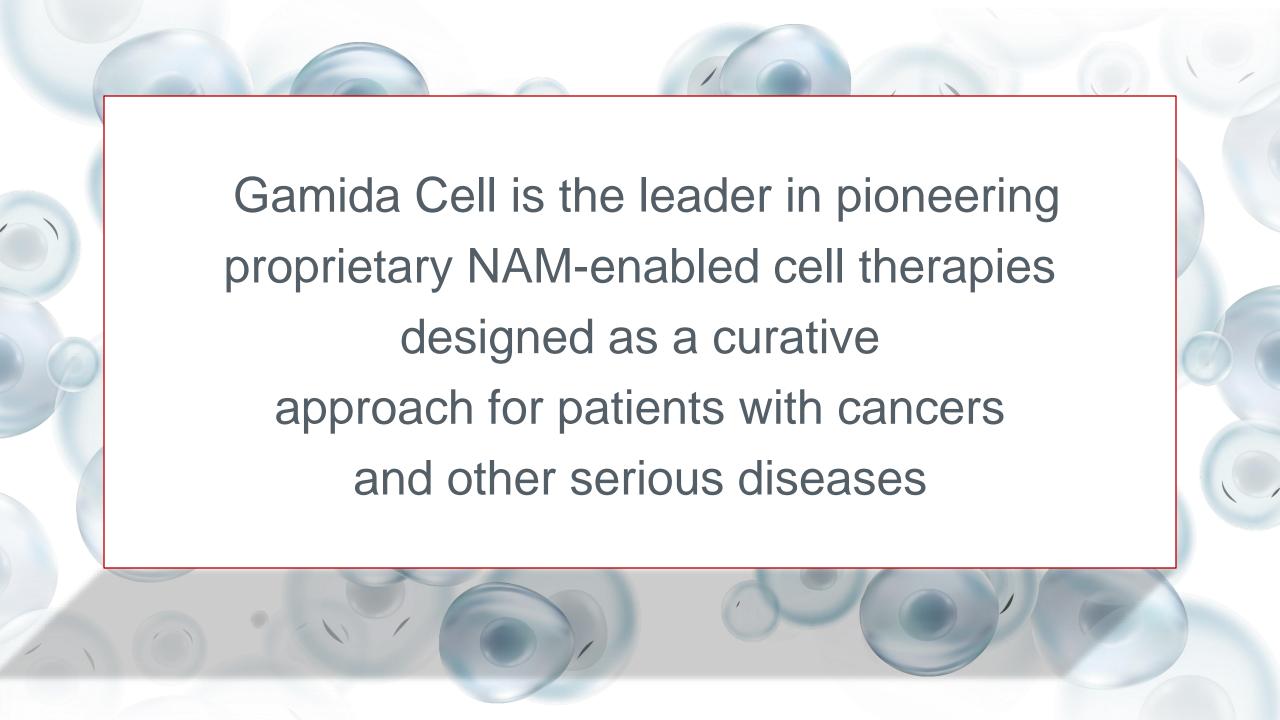
Committed to Cures

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

September 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), actual or anticipated regulatory filings (including the potential timing of the FDA's review of the BLA for omidubicel), 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 statements 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; the process of developing and commercializing product candidates that are safe and effective for use as human therapeutics, and 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 Quarterly Report on Form 10-Q, filed with the Securities and Exchange Commission (SEC) on August 15, 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 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
- BLA accepted with Priority Review
- PDUFA date January 30, 2023

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
- First patient dosed with cryopreserved formulation August 2022

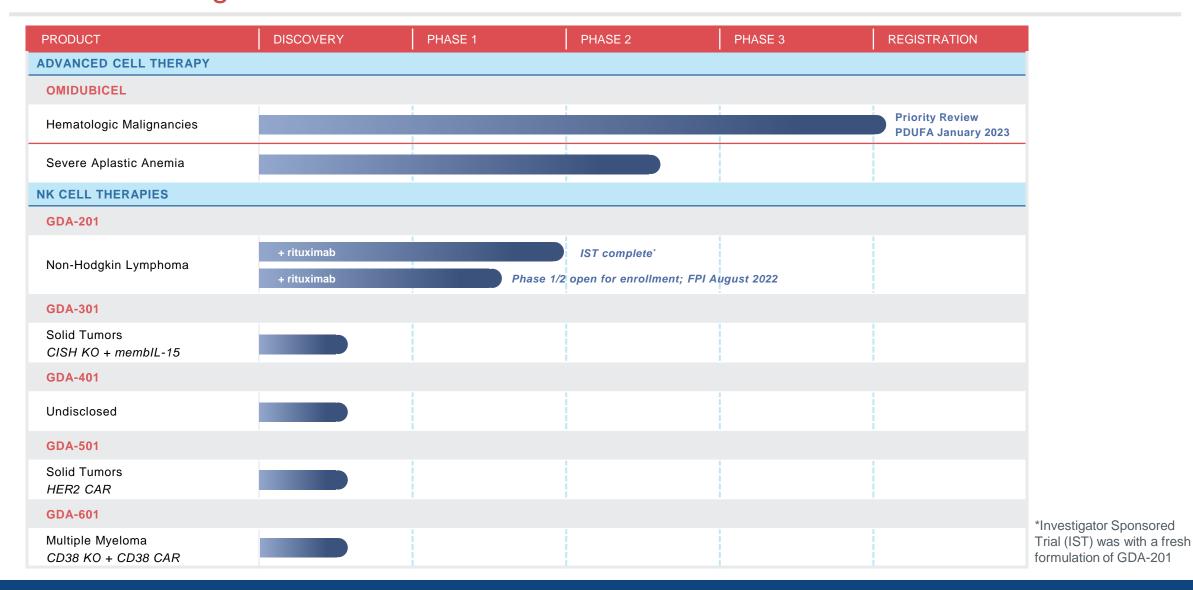
GDA-301/401/501/601

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
- Plan to select one candidate for IND enabling study by the end of 2022



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

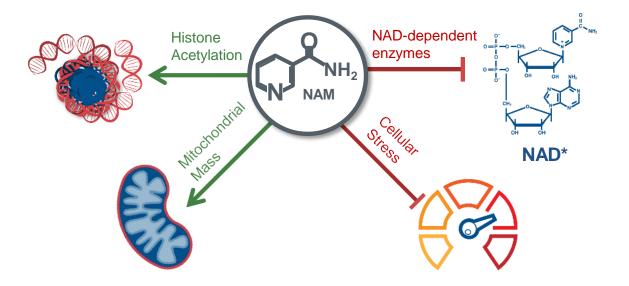




Our proprietary NAM Technology powers our commitment to cures

Gamida Cell NAM Technology

- Enhances cellular functionality and phenotype
- Augments the **number of allogeneic donor cells**
 - Demonstrates potential to multiply any cell type



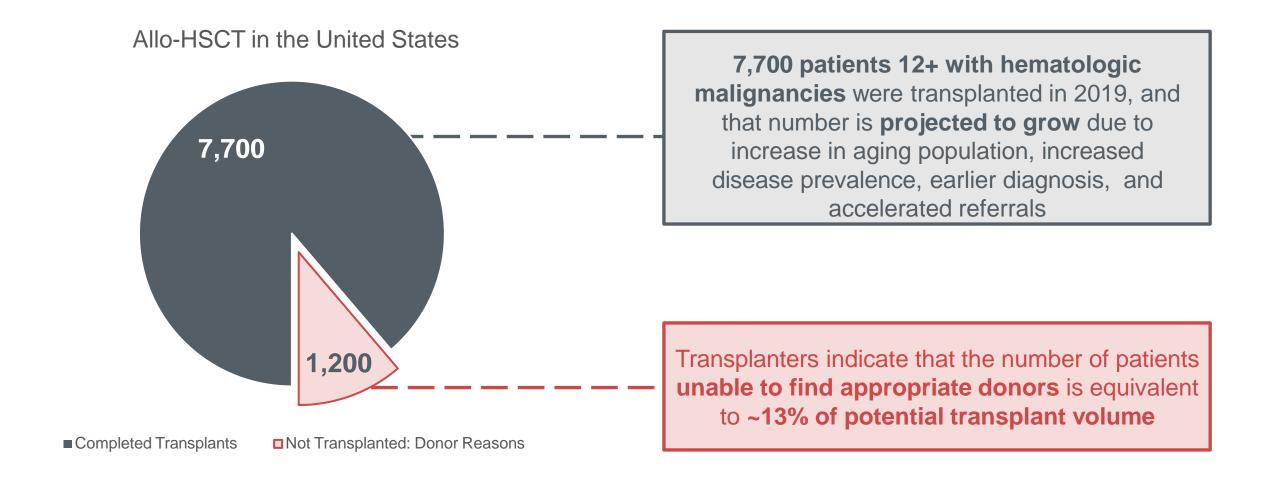
NAM=nicotinamide. The NAM therapeutic platform leverages the unique properties of NAM to enable the enhancement of multiple cell types, including stem cells, with appropriate growth factors to maintain the cells' original phenotype and potency

Omidubicel

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

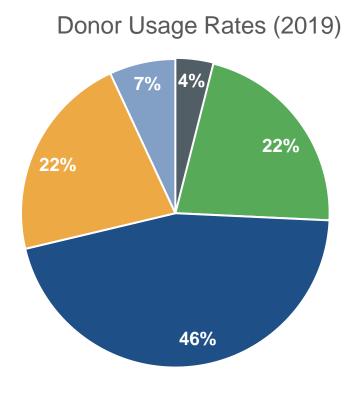


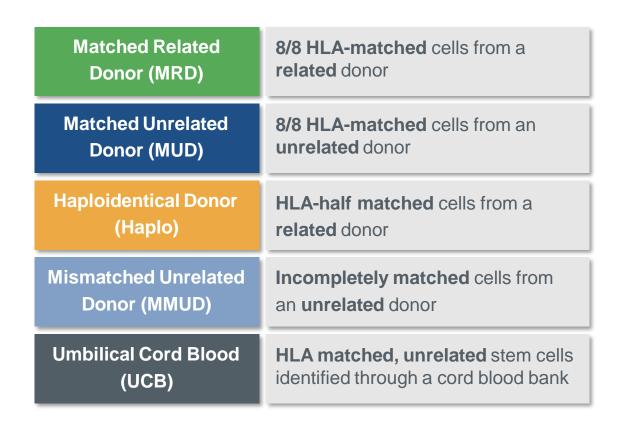
Allo-transplant is a potentially curative treatment option, and while a growing market, it is not without unmet needs



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

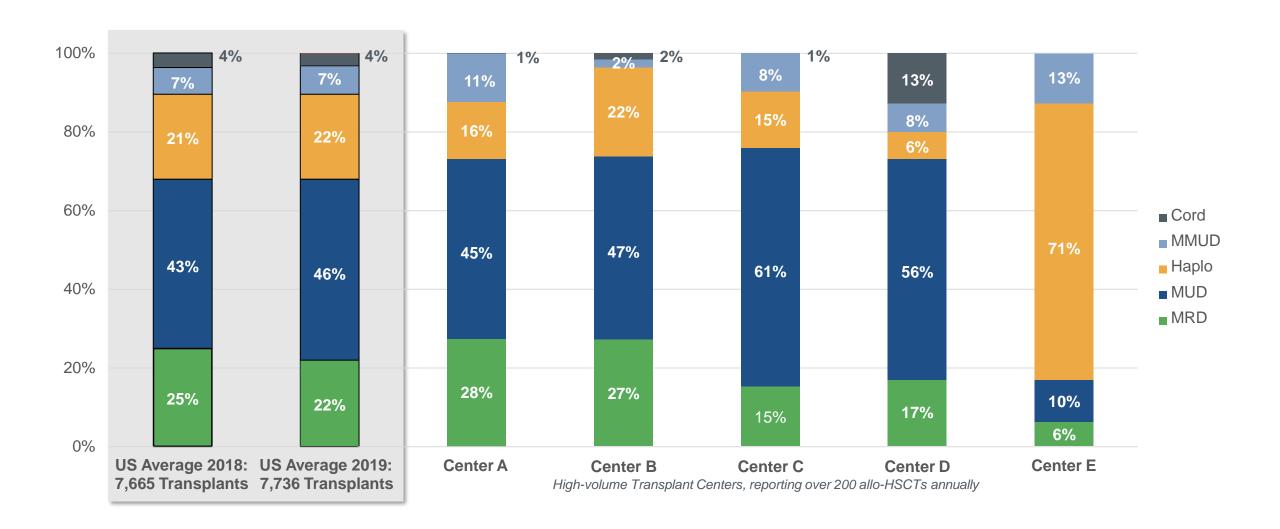




^{*}HLA match refers to the process in which blood or tissue samples are tested for human leukocyte antigens (HLAs) to determine the degree of matching between the donor and transplant recipient.



With no standard of care, transplant centers differ in their use of donor source



Donor source identification and selection is complex, and each source has limitations that omidubicel may address, if approved

Matched Related Donor

Matched **Unrelated Donor**

Haploidentical Donor

Mismatched Umbilical Cord Unrelated Donor Blood¹

Recognized as the gold standard

Seen as the **next** alternative to MRD

Extends chance of finding a related donor

 70% of patients will NOT have an MRD

 Requires consideration of donor age, as older donors are associated with reduced overall survival

(OS)

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

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

Readily available, less stringent matching criteria without the risk of increased GvHD²

- 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

¹Minority patients rely more heavily on UCB than white patients ² GvHD: Graft versus Host Disease

Additional deliverability challenges for unrelated donors

- Only 19-23% of members on the BTM registry go on to donate
- Most transplant centers request a cleared donor within 4 weeks of a formal search, but only 29% of patients have a cleared donor by day 75



70% of patients will not have a MRD and the likelihood of finding a MUD through a registry varies greatly by race

Black Patients*	16-19%	İ	İ	Ť	İ	İ	Ť	İ	1	İ	Ť
Asian Patients**	27-42%	İ	Ť	İ	•	Ť	İ	İ	İ	Ť	Ť
Hispanic Patients***	34-40%	••	•	-	-	•••	•••	•••	•••	•••	1
White Patients of Middle Eastern or North African Descent	46%	İ	Ť	İ	İ	Ť	1	Ť	İ	Ť	Ť
White Patients of European Descent	75 %	İ	Ť	Ť	Ť	Ť	Ť	Ť	Ť	İ	İ

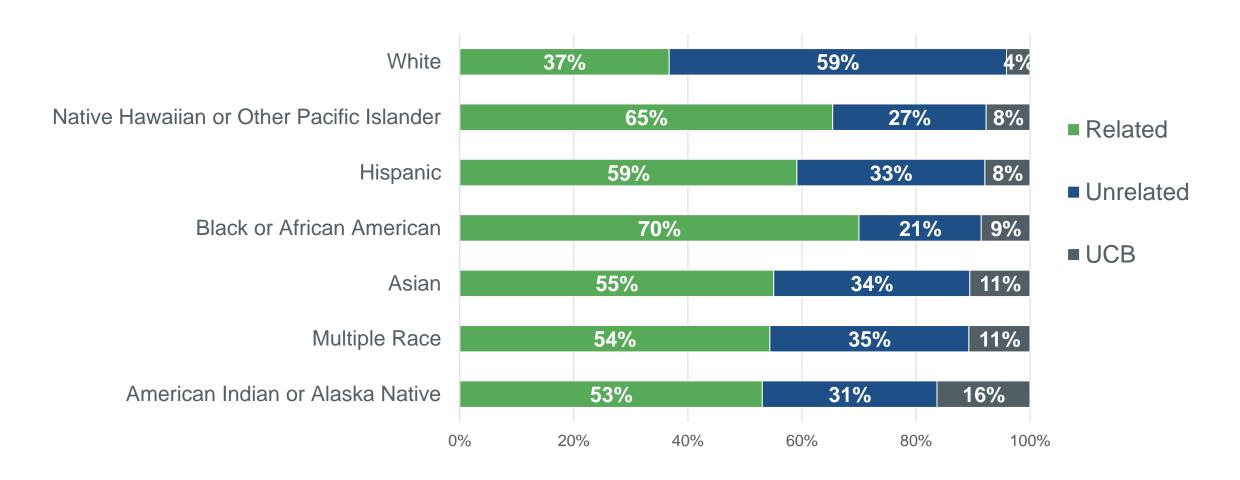
^{*} Includes African American, African, Black South or Central American, and Black Caribbean

^{**} 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



If approved, omidubicel may address key unmet needs not addressed by today's donor source options

Unmet Needs Omidubicel Offering of patients will have an ~30% ~93% of omidubicel patients were able to find a suitable donor adequately matched Match in the Phase 3 trial due to less stringent matching requirements related donor of African Americans find a If approved, omidubicel may expand access to previously ~20% matched unrelated donor in the **Availability** underserved populations, and minority patients represented registry database ~40% of patients in the Phase 3 trial years old increases risk of Omidubicel combines the naivety of cord blood with sufficient >30 **Donor Age** complications and reduced OS cell quantity that leads to improved clinical outcomes Omidubicel offers rapid availability and a reliable process, with **Timing** months from preliminary 2-3+ a personalized product delivered in 30 days from selection of search to transplant **Urgency** a cord blood unit

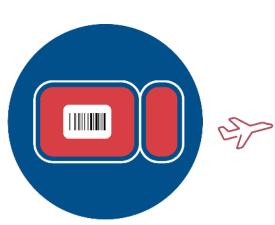


Omidubicel

The latest data demonstrating the potential for cure



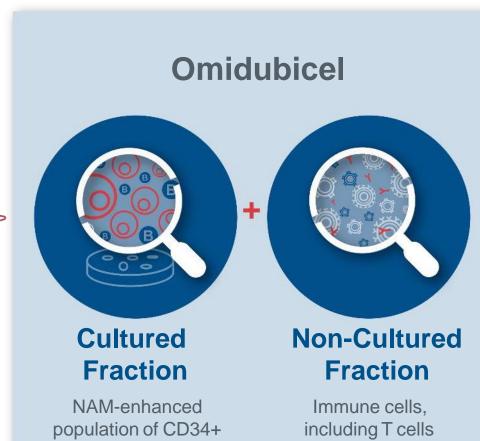
Omidubicel is a personalized advanced cell therapy candidate consisting of a cultured and non-cultured fraction from a single umbilical cord blood unit



CBU selected by physician from US public cord blood bank

Cord Blood Unit

(CBU) Selected



hematopoietic

stem cells



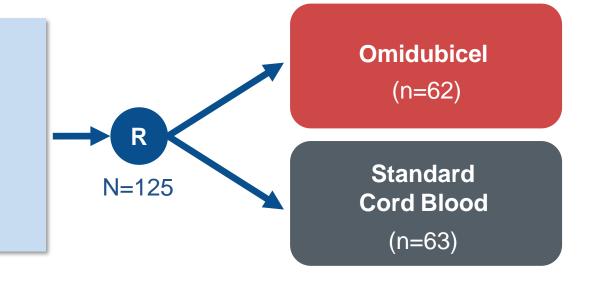
Omidubicel Infusion

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)

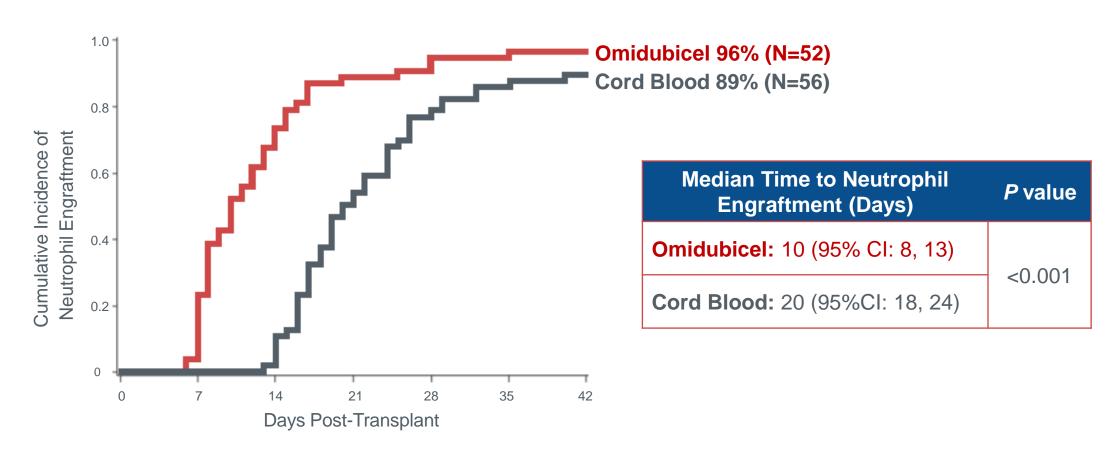
Intent-to-treat	Median Time to Neutrophil Engraftment (Days) ^a	95% CI	<i>P</i> Value
Omidubicel (N=62)	12.0	(10.0, 14.0)	.0.004h
Cord Blood (N=63)	22.0	(19.0, 25.0)	<0.001 ^b

Engraftment is a key milestone in recovery

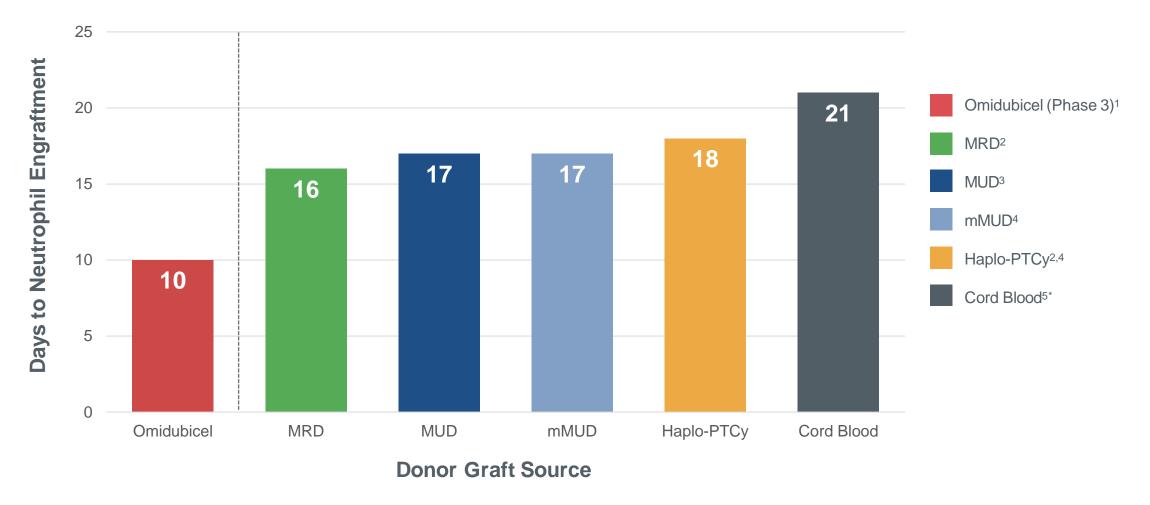
Rapid engraftment is associated with fewer infections and shorter hospitalizations¹

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



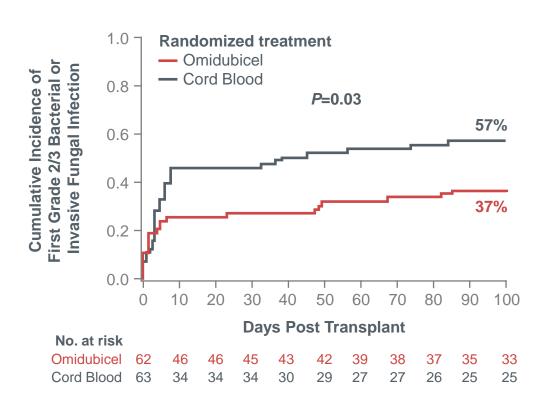
SECONDARY ENDPOINT: Platelet Engraftment (ITT)

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

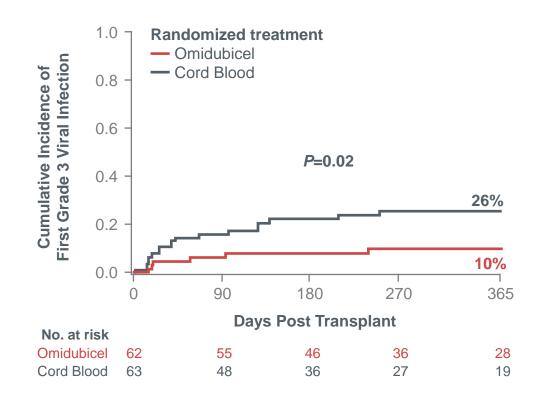
Intent-to-treat	Day 42 Cumulative Incidence	Difference in Cumulative Incidence (95% CI)	<i>P</i> Value
Omidubicel (N=62)	0.55	0.2 (0.03,0.35)	0.028
Cord Blood (N=63)	0.35		

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)**

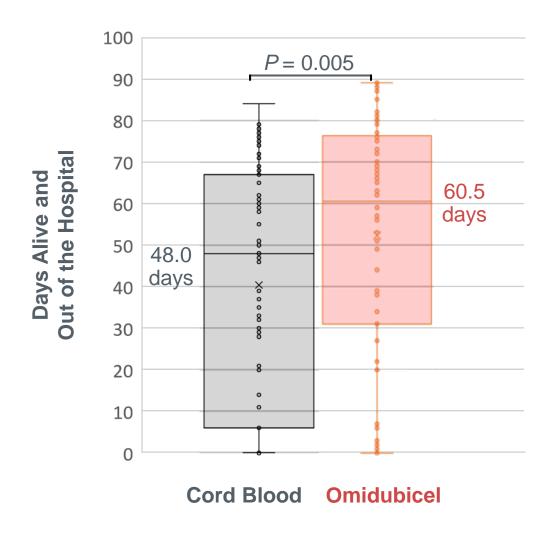


Incidence of First Grade 3 Viral Infection in ITT (N=125)



SECONDARY ENDPOINT:

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



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

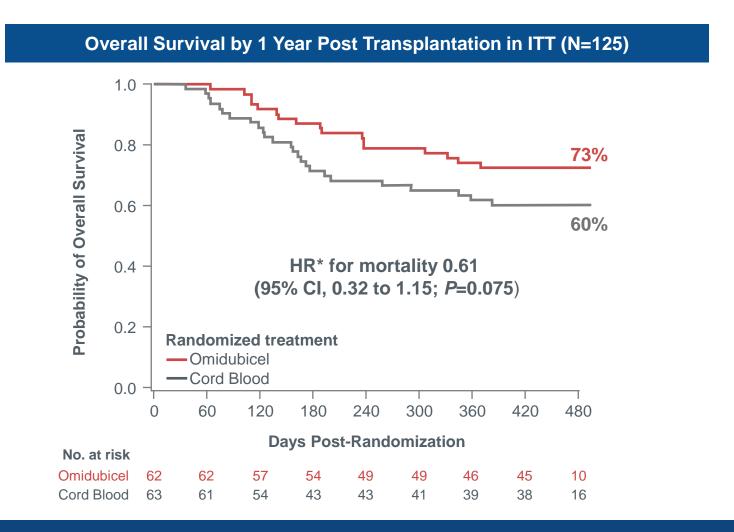
	Omidubicel (n=52)	Cord Blood (n=56)	P-value
Incidence of acute GvHD	15%	20%	0.563
Mean total number of inpatient days during primary hospitalization (transplant to discharge)	27.7	39.8	<0.001
Mean total number of inpatient days (includes readmissions)	41.2	50.8	0.027
Mean total days alive and not hospitalized	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	0.005
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

BLA Accepted for Priority Review, PDFUA date January 30, 2023

Omidubicel

Preparing for potential commercial launch



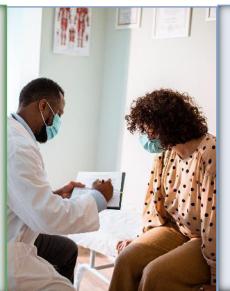
If approved, omidubicel may provide transplanters the opportunity to offer a potential cure to patients in need



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...

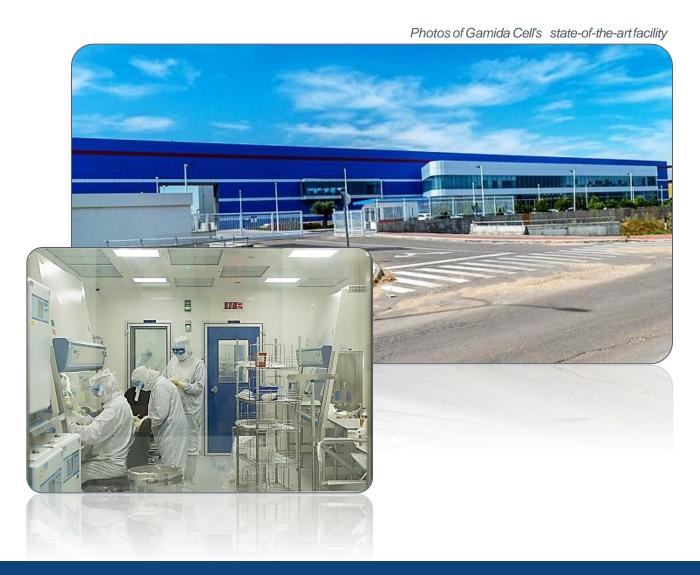
Published data supports that ~100% of U.S. payers anticipate covering one-time therapies with curative intent

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

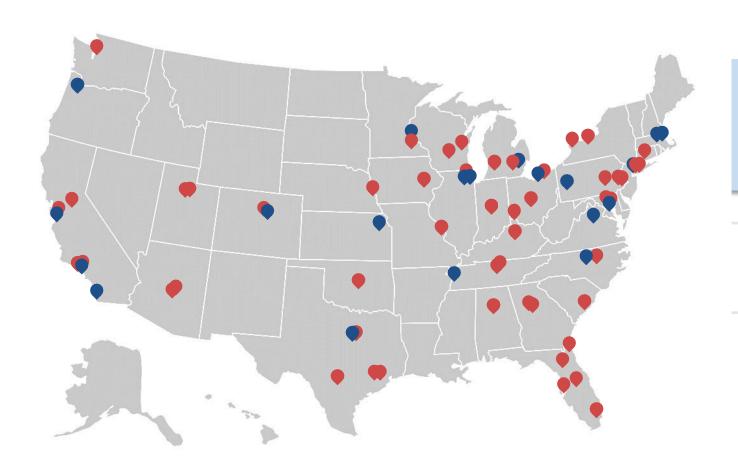
...and a pathway to reimbursement

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 may improve outcomes and increase access for patients

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

If approved, omidubicel may:

Improve outcomes across all current donor sources

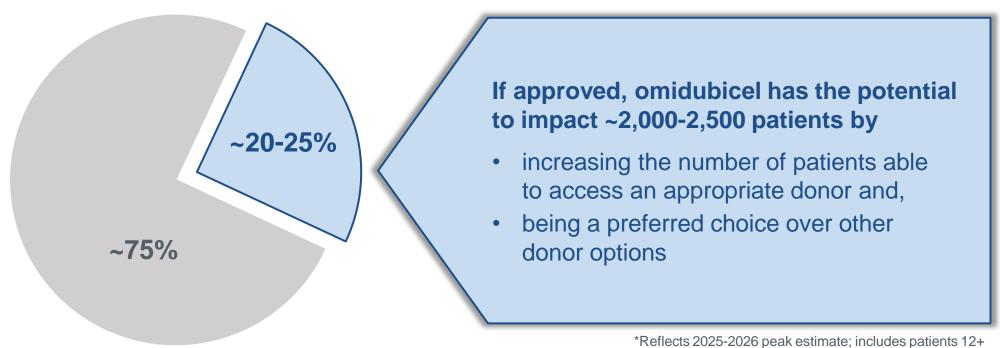
- Positive clinical outcomes
- Removed concern of advanced donor age
- Personalized product delivered within 30 days

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

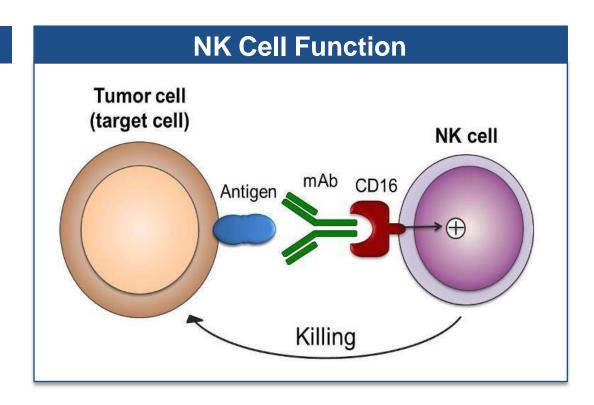
NAM-enabled NK cell candidate to treat Non-Hodgkin Lymphoma



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

Promise of NK Cells

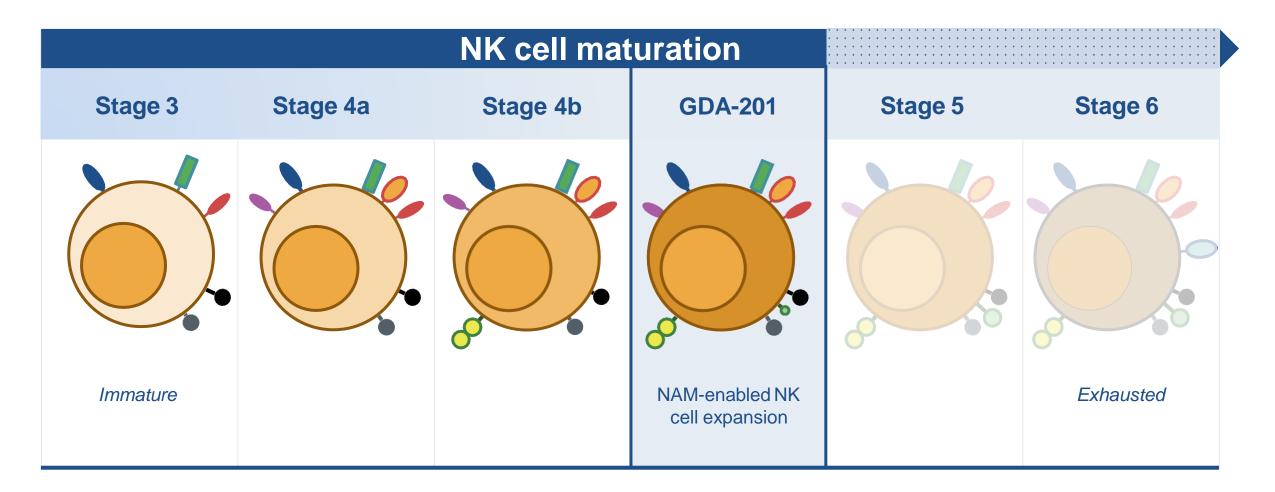
- Fully allogeneic product (no HLA matching required)
- ✓ Synergy with antibodies
- **✓** Potential to stimulate adaptive immunity
- **✓** Potential for readily available therapy



Cell expansion is necessary to obtain clinically meaningful doses with optimized cell function

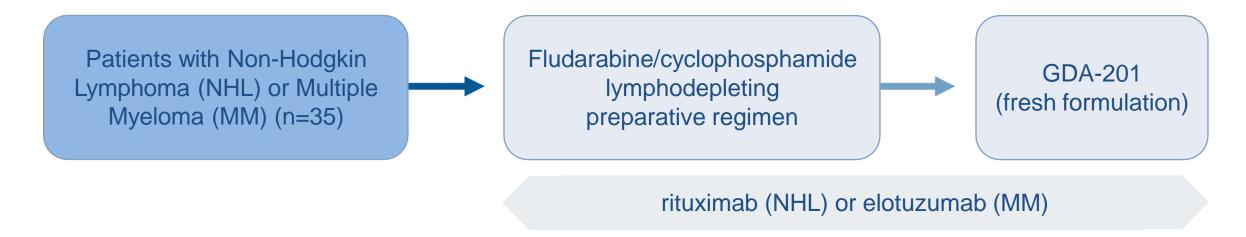
We are putting NK cells to work using our NAM Platform

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



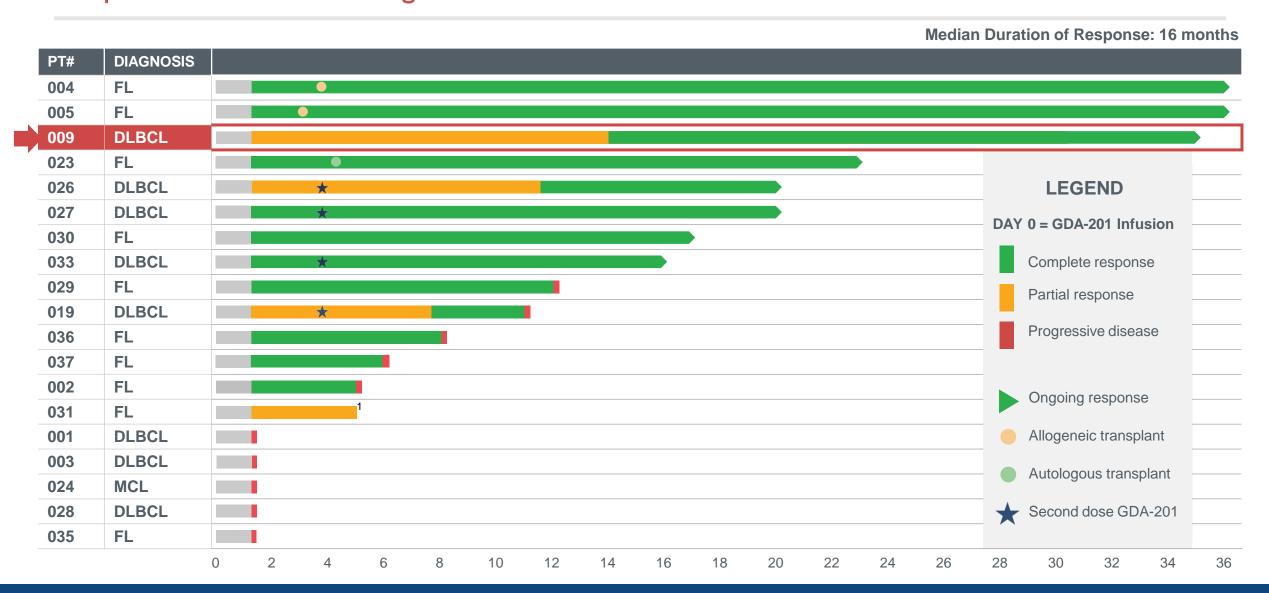
- Primary endpoint: Maximum tolerated dose of GDA-201
- **Secondary endpoints:** Overall response, toxicity

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

Safety Results

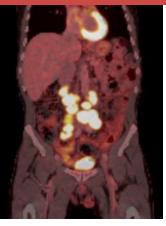
- 35 patients treated (19 NHL, 16 MM)
- No dose-limiting toxicities
- Most common grade 3/4 adverse events:
 - Thrombocytopenia (n=9)
 - Hypertension (n=5)
 - Neutropenia (n=4)
 - Febrile neutropenia (n=4)
 - Anemia (n=3)
- No neurotoxic events, graft versus host disease (GvHD), or confirmed cytokine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

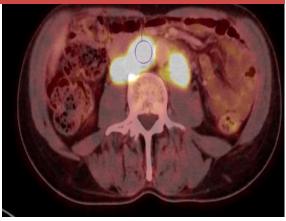
Multiple patients treated with GDA-201 and rituximab had durable complete responses demonstrating an ORR of 74% and CR rate of 68%



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

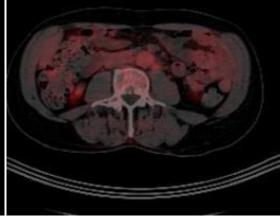
Pt 009: Baseline





Pt 009: 6-month post GDA-201



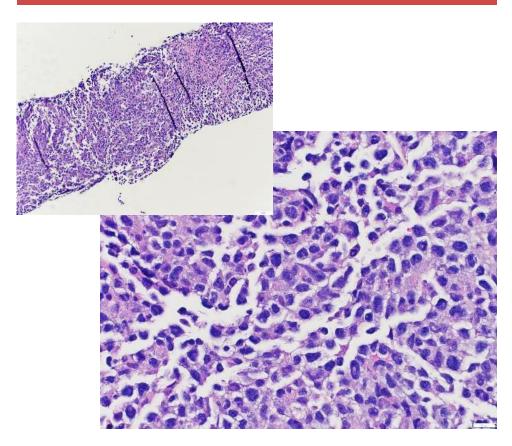


- 57-year-old man with history of CLL and Richter's transformation-large cell lymphoma, measurable retroperitoneal lymph nodes at baseline
- Prior therapy: FCR-light, Rituximab/Bendamustine
 Ibrutinib/lenalidomide, R-CHOP, Venetoclax/Rituximab
- Allogeneic HSCT (matched sibling)
- Relapse at 6 months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

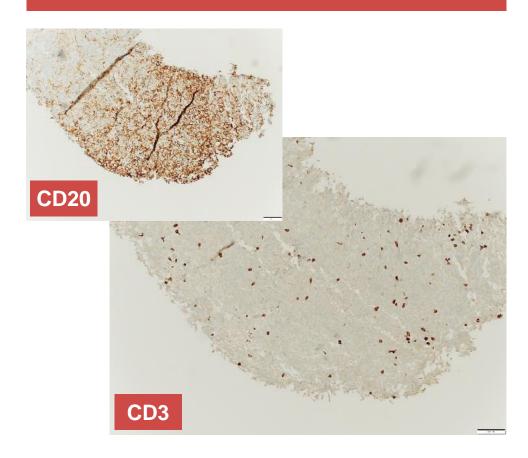
"Whether it has been work, or my various hobbies and past times, whether that be traveling on motorcycle or enjoying life to its fullest, it really has been a noticeable improvement compared to how things were prior to going through the trial."- Patient 009

Patient 009: Pre-treatment tumor biopsy

Histology Consistent with Non-Hodgkin Lymphoma

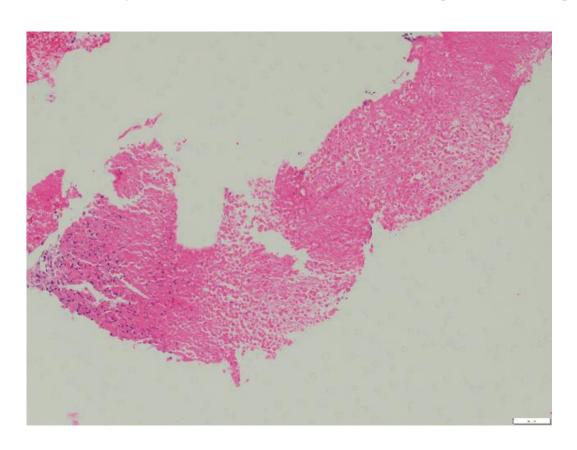


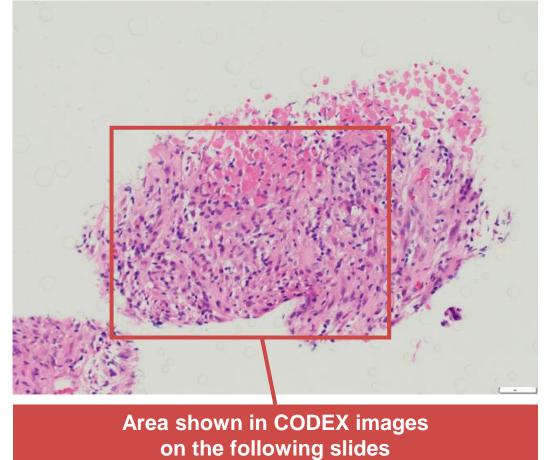
CD20+ B-cell Lymphoma



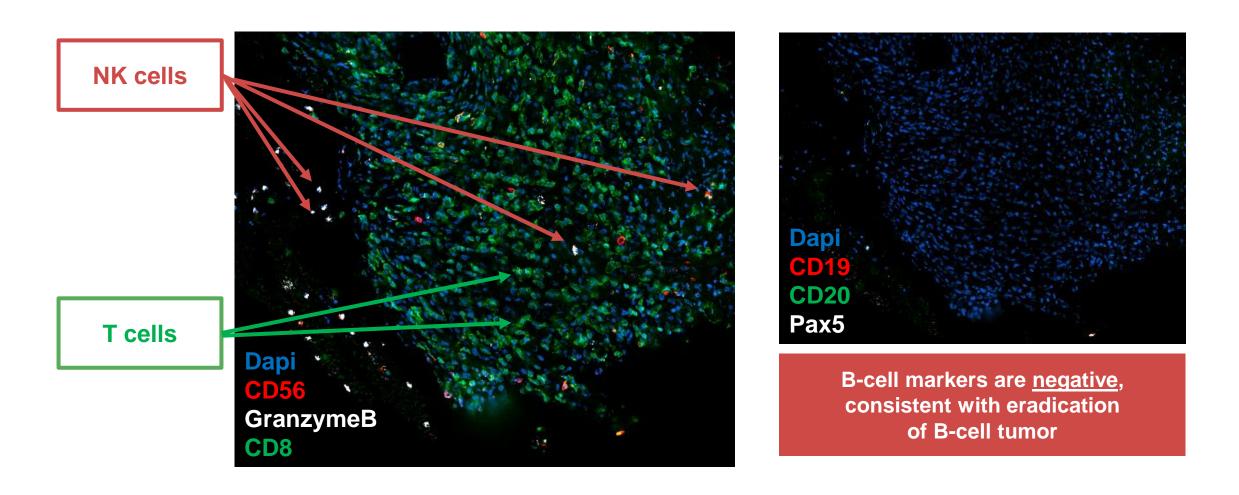
Patient 009: Post-treatment day 16 biopsy

Necrotic lymphoma cells with ensuing tissue organization and fibrosis with inflammatory infiltrates

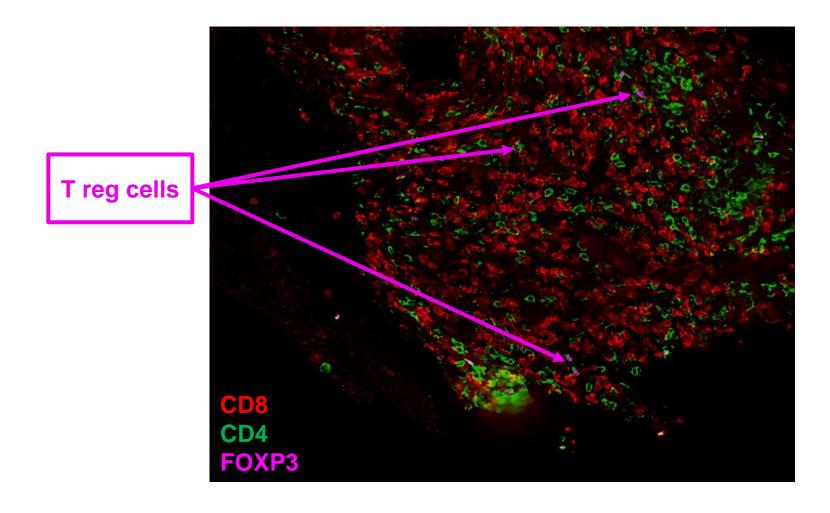




Patient 009: Detection of NK cells in tissues by CODEX after GDA-201



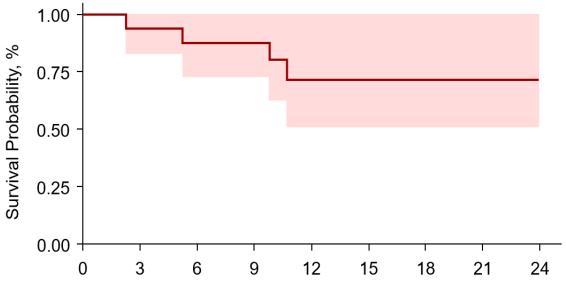
Patient 009: T-cell infiltrate predominates in post-treatment tumor biopsy



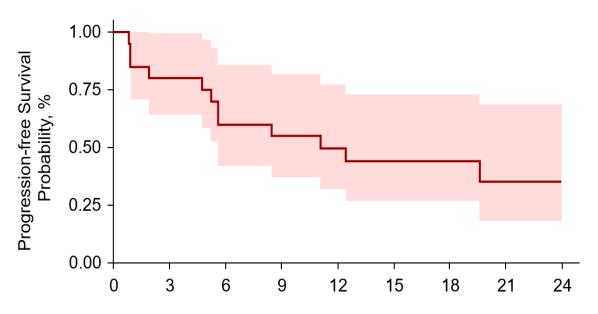
GDA-201 demonstrated 2-year overall survival of 78%

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





- 1-year PFS: 50% (95% CI, 27%–69%)
- 2-year PFS: 35% (95% CI, 14%–58%)



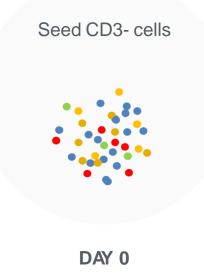
We are leveraging our knowledge of cryopreservation to further advance our NK pipeline

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

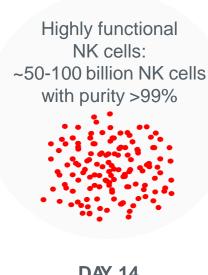
Peripheral bone marrow cells collected by apheresis*



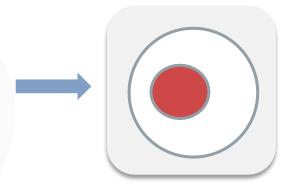




Proprietary co-culture with NAM +IL-15 + autologous irradiated CD3+ feeder cells







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

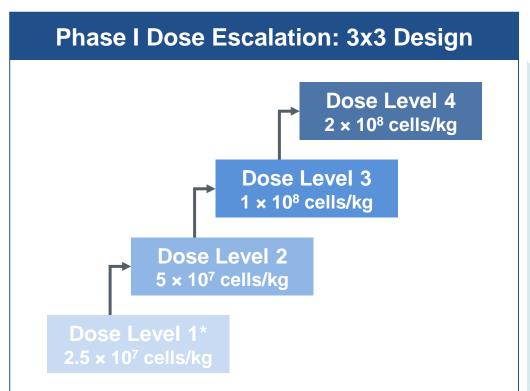
Next Step

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

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

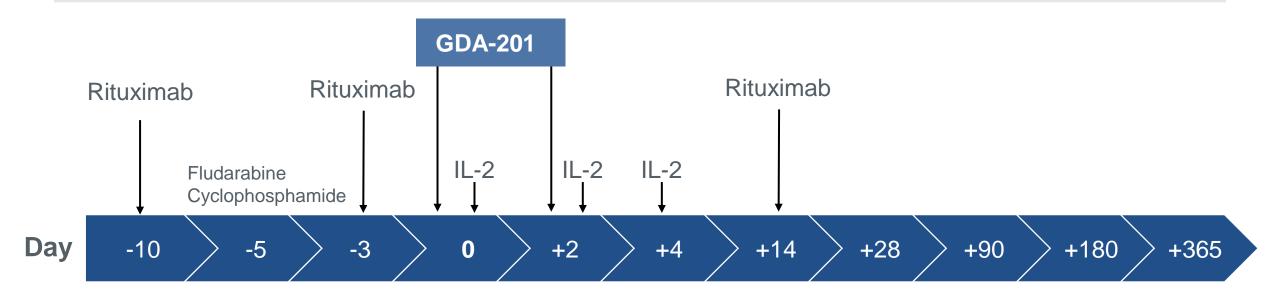
A Phase I/II multicenter study evaluating the safety and efficacy of allogeneic GDA-201 NK cells in patients with r/r B Cell Non-Hodgkin Lymphoma

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





Study 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



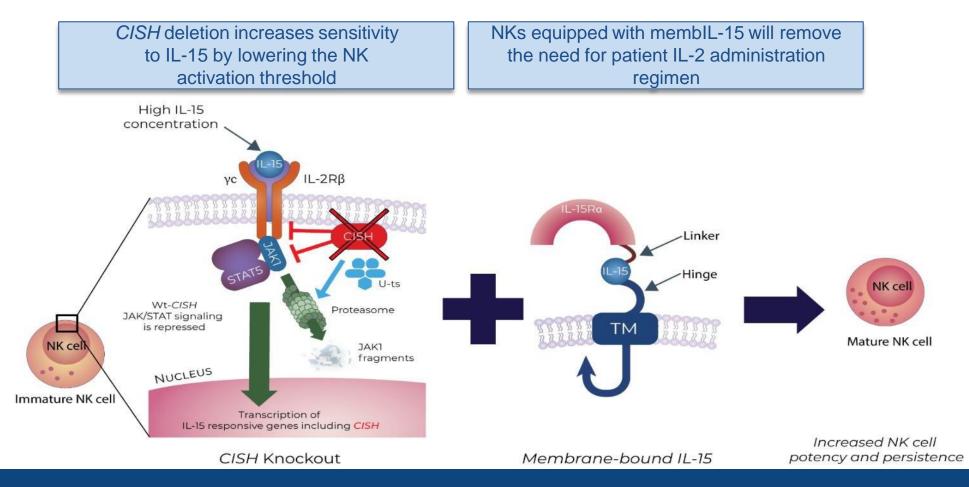
Led by GDA-201 clinical proof of concept, Gamida Cell continues to invest in advancing a diversified NAM-enabled NK cell pipeline

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

We plan to select a genetically modified NK cell therapy candidate for IND enabling study by the end of 2022

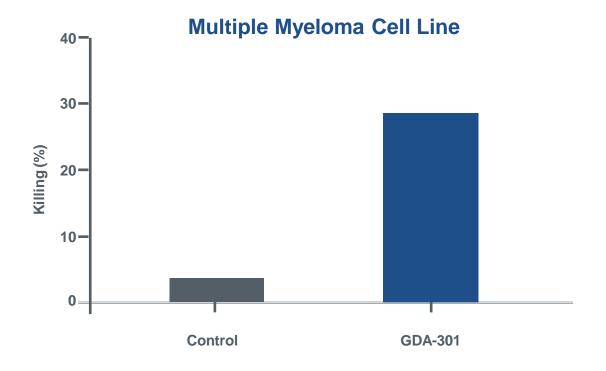
GDA-301: Enhancing NK potency and persistence

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

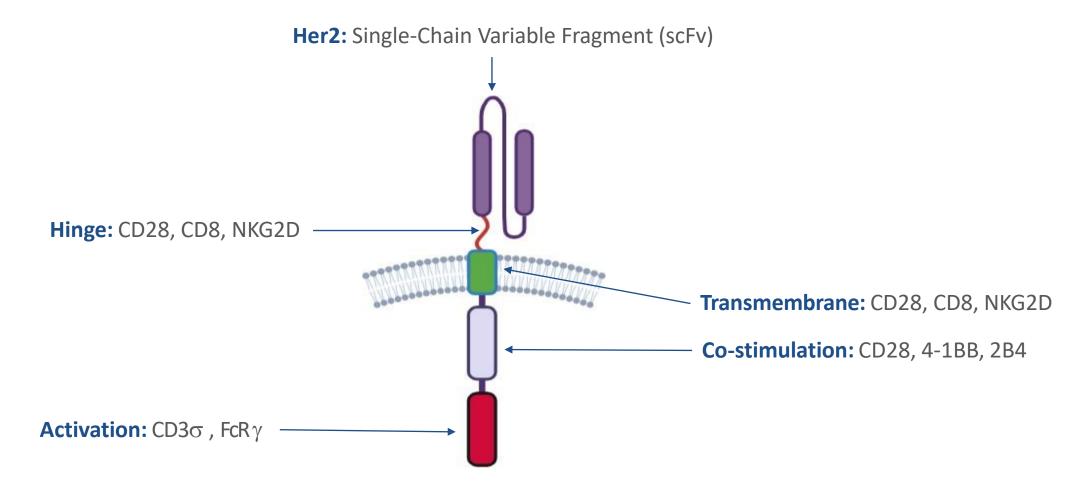
Deletion of CISH and co-expression of mb-IL15 on NK cells enhances their cytotoxicity activity



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

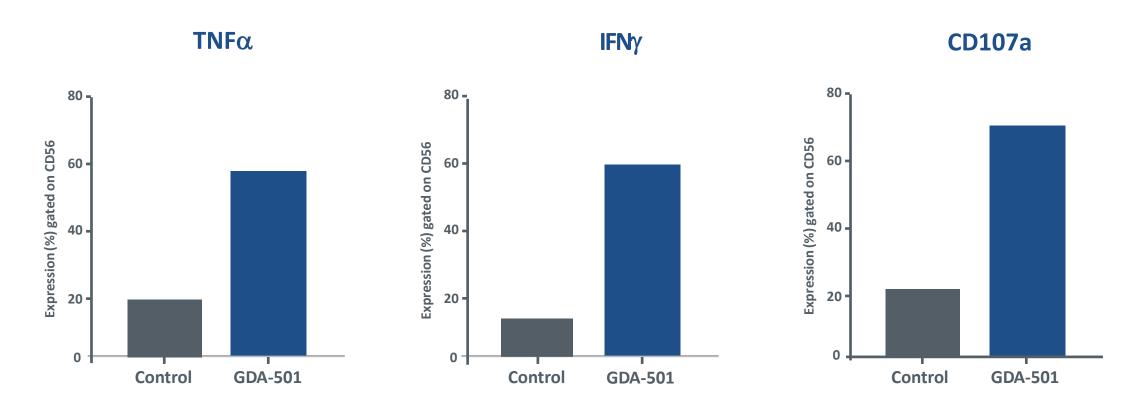
GDA-501: Developed to optimize targeting and NK activation against HER2+ tumors

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



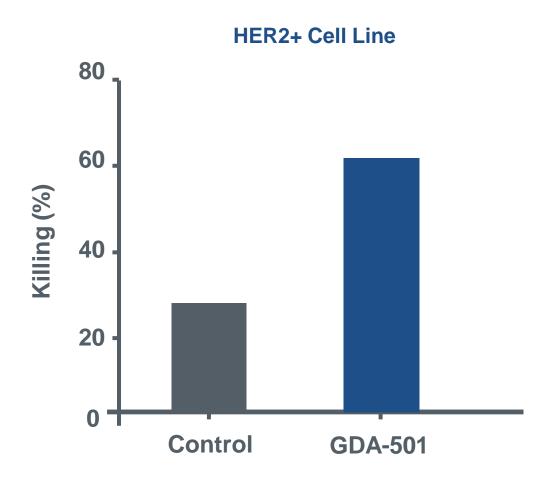
GDA-501: HER2 CAR NK cells enhance activity against HER2+ cell lines

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.

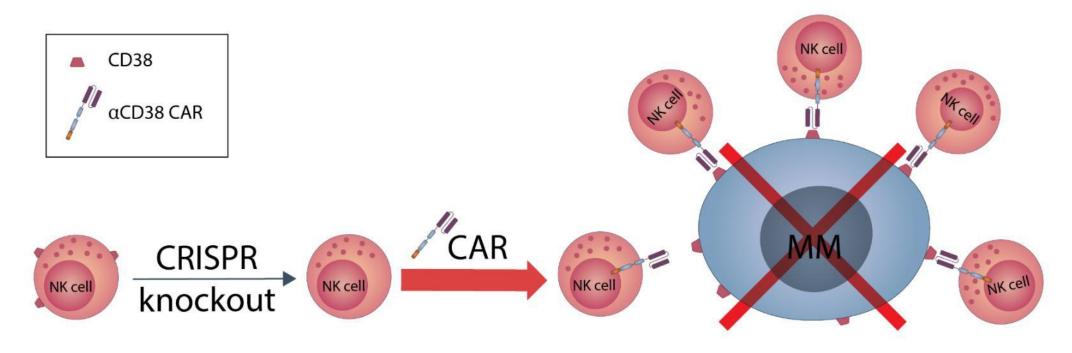
GDA-501: Shows effective in vitro cytotoxicity against HER2+ cell line



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

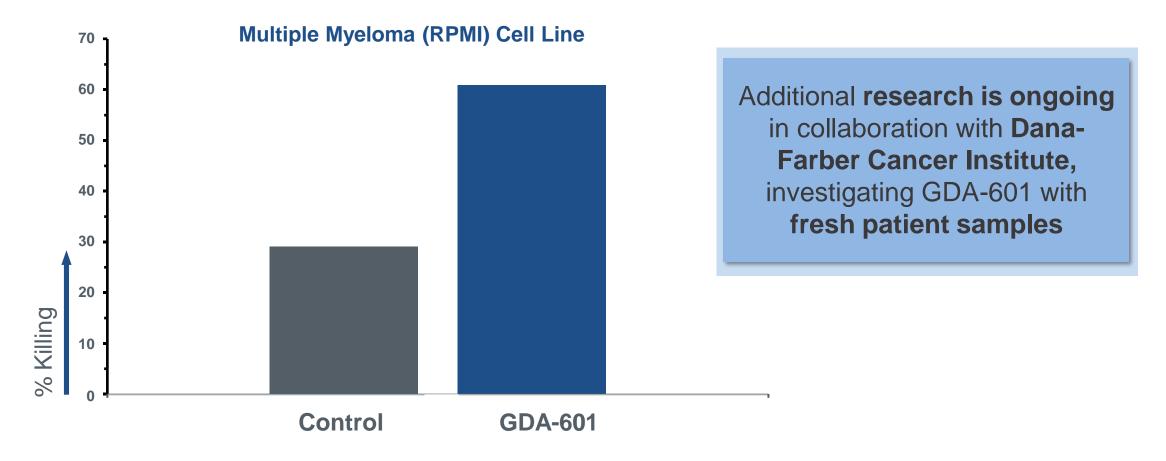
GDA-601: Leverages CRISPR/Cas9 technology to enhance cytotoxic effect against multiple myeloma cells

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 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



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
- BLA accepted for Priority Review
- PDUFA date January 30, 2023



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
- First patient dosed with cryopreserved formulation August 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
- Plan to select one candidate for IND enabling study by the end of 2022



Committed to Cures

Learn more at gamida-cell.com

