



Inspired to Cure

Pipeline Deep Dive

Julian Adams, Ph.D.

CEO

December 9, 2020

Disclaimer

This Presentation includes certain projections and forward-looking statements as of the date of this Presentation provided by Gamida Cell Ltd. (the “company”). The information in this Presentation is current only as of its date and may have changed since that date. These projections and forward-looking statements include, but are not limited to, those regarding the company’s future financial position and results of operations, the company’s commercialization, anticipated drug pricing, marketing and manufacturing capabilities and strategy, the company’s intellectual property position, regulatory matters, including prospective FDA approval of omidubicel, market size, market share and opportunity and the company’s estimates regarding expenses, future revenues, capital requirements and needs for additional financing. These projections and forward-looking statements are based on the beliefs of the company’s management as well as assumptions made and information currently available to the company. Such statements reflect the current views of the company with respect to future events and are subject to business, regulatory, economic and competitive risks, uncertainties, contingencies and assumptions about the company and its subsidiaries and investments, including, among other things, the development of its business, trends in the industry, the legal and regulatory framework for the industry and future expenditures. In light of these risks, uncertainties, contingencies and assumptions, the events or circumstances referred to in the forward-looking statements may not occur. None of the future projections, expectations, estimates or prospects in this presentation should be taken as forecasts or promises nor should they be taken as implying any indication, assurance or guarantee that the assumptions on which such future projections, expectations, estimates or prospects have been prepared are correct or exhaustive or, in the case of the assumptions, fully stated in the presentation. The actual results may vary from the anticipated results and the variations may be material.

Agenda

- Gamida Cell introduction
- Omidubicel overview and science of NAM
- Omidubicel Phase 3 HSCT and Phase 2 Severe Aplastic Anemia clinical data
- Bringing omidubicel to patients
 - GDA-201:
An innovation in NK cell therapy
- An omidubicel patient's perspective
- Q&A



We are pioneering new,
potentially curative advanced
cell therapies.

We are developing advanced cell therapies

CANDIDATE	PRECLINICAL	PHASE 1	PHASE 2	PHASE 3	MILESTONES
OMIDUBICEL					
High-Risk Hematologic Malignancies	FDA Breakthrough Designation				<div><div>✓</div>Topline data 2Q20</div> <div><div>✓</div>Detailed data presentation 4Q20</div> <div><div>☐</div>BLA submission 4Q20</div>
Severe Aplastic Anemia*					<div><div>✓</div>Additional data 4Q20</div>
GDA-201					
Non-Hodgkin Lymphoma, Multiple Myeloma					<div><div>✓</div>Additional data 4Q20</div> <div><div>☐</div>IND submission 2021</div>

Omidubice

A Potentially Curative Treatment
For Patients In Need Of A Bone Marrow
Transplant

Tracey Lodie, Ph.D.
Chief Scientific Officer

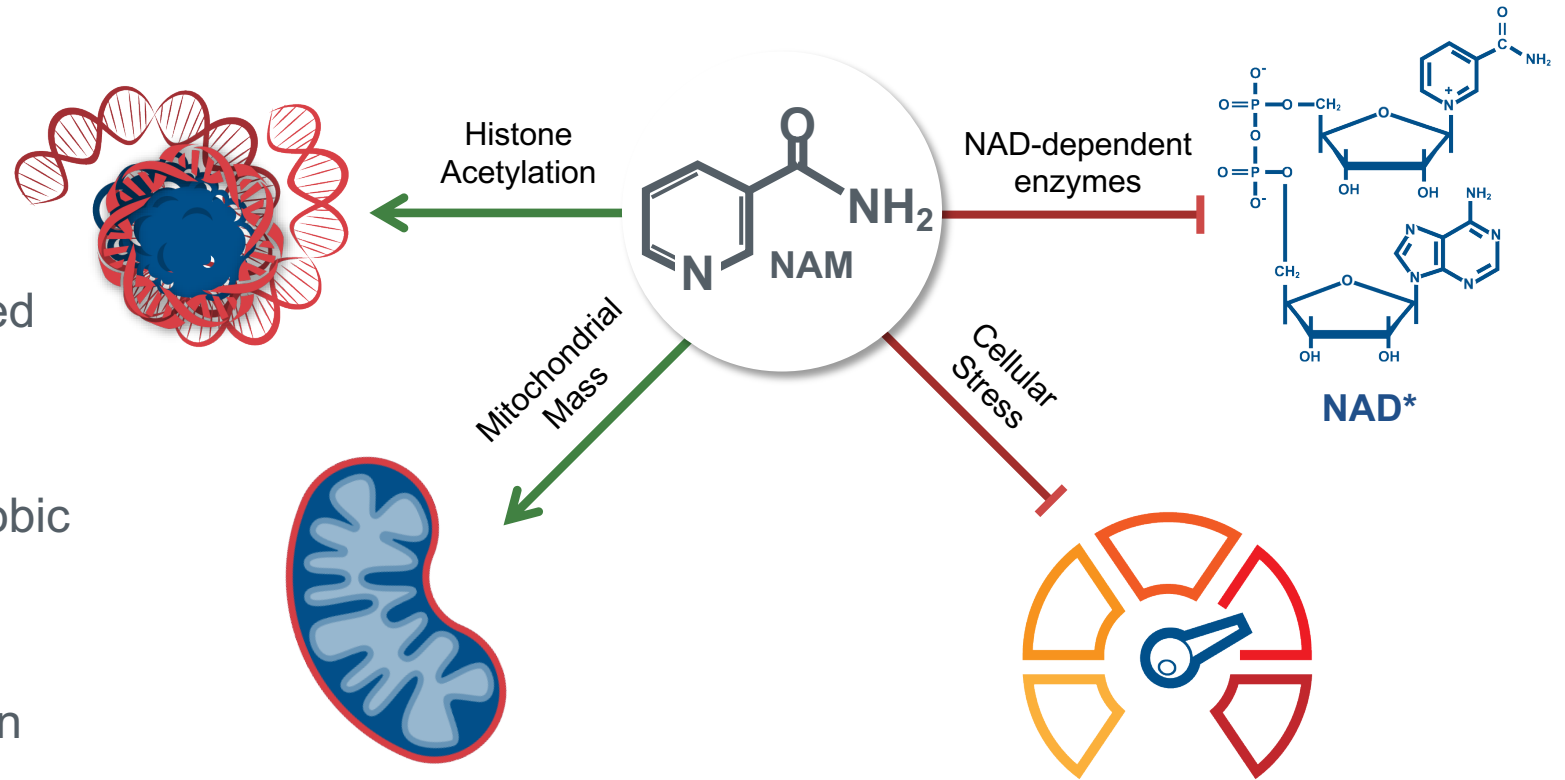
gamida ell

Mechanism of action: Nicotinamide (NAM) platform used to fight cancer

NAM can expand any cell type, including stem cells, progenitor cells and natural killer (NK) cells

Importance of NAM

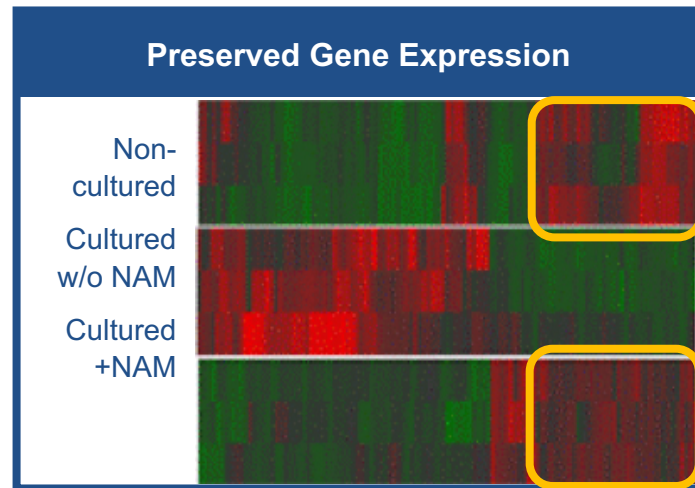
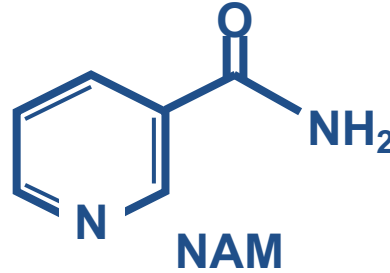
- Inhibits NAD-related signaling pathways
- Attenuates genes/pathways involved in stress, reactive oxygen species production, and inflammation
- Switches cell metabolism to anaerobic glycolysis during expansion
- Preserves cellular functionality and phenotype during ex vivo expansion



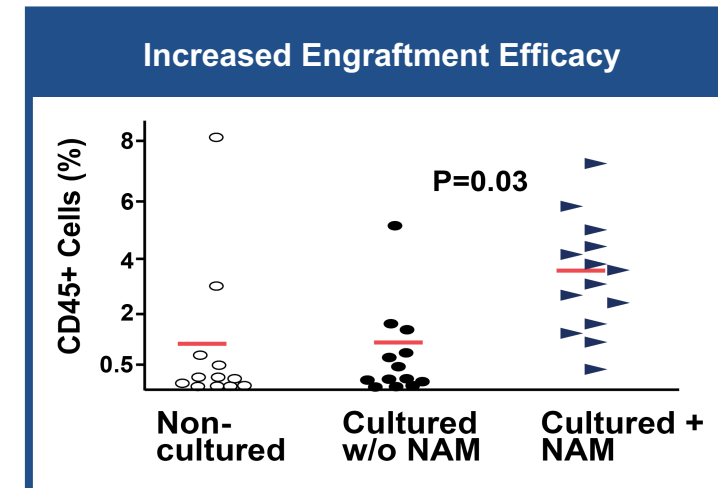
*NAD: nicotinamide adenine dinucleotide.

NAM technology: mechanism of action

NAM leads to a preserved gene signature during ex vivo cell expansion which preserves stemness and increases in vivo engraftment

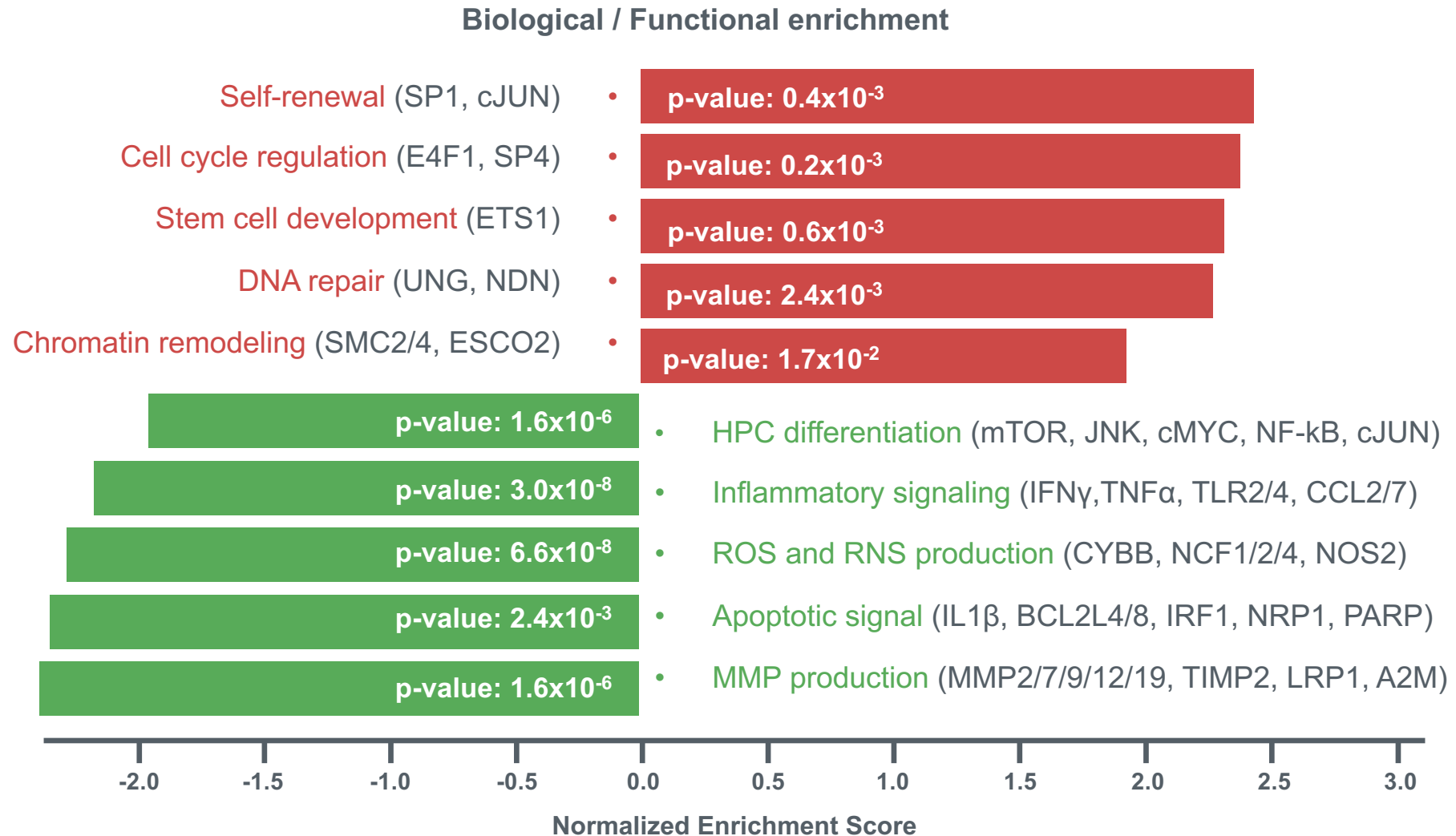


Preserved gene signature of CD34⁺ cells cultured with NAM and non-cultured CD34⁺ cells



NAM cultured CD34⁺ cells show improved in vivo engraftment

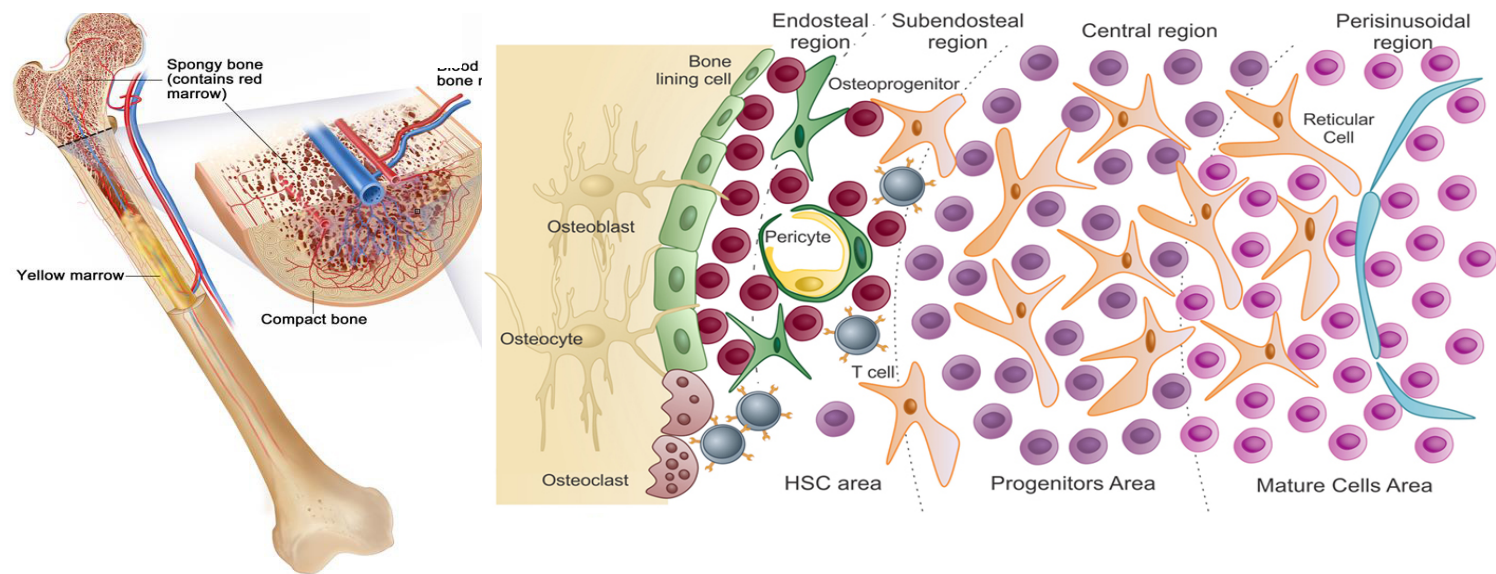
NAM up-regulates key TF's responsible for stem cell renewal and DNA repair while down-regulating TF's that activate cell differentiation, inflammation, and apoptosis



Yackoubov et al., ASH 2019 Annual Meeting.

Ex vivo expansion with NAM mimics the hypoxic conditions in the bone marrow niche

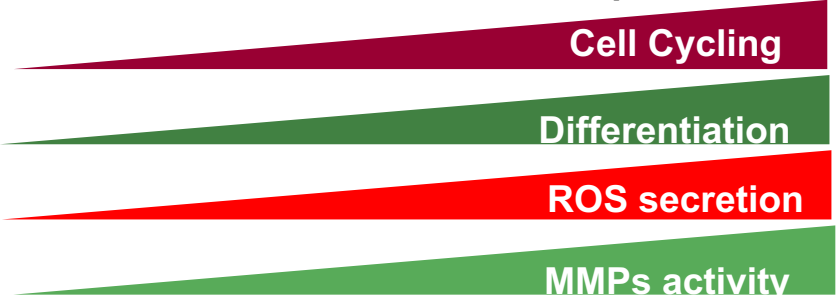
Characteristics of the bone marrow niche that preserve HSCs function



BM niche area

Stem cell mobilization/ex vivo expansion

- Quiescent environment
- Undifferentiated stem cells
- Low O₂, High ROS scavenging
- Dense Extracellular Matrix



Ex vivo culture with NAM decreases activity

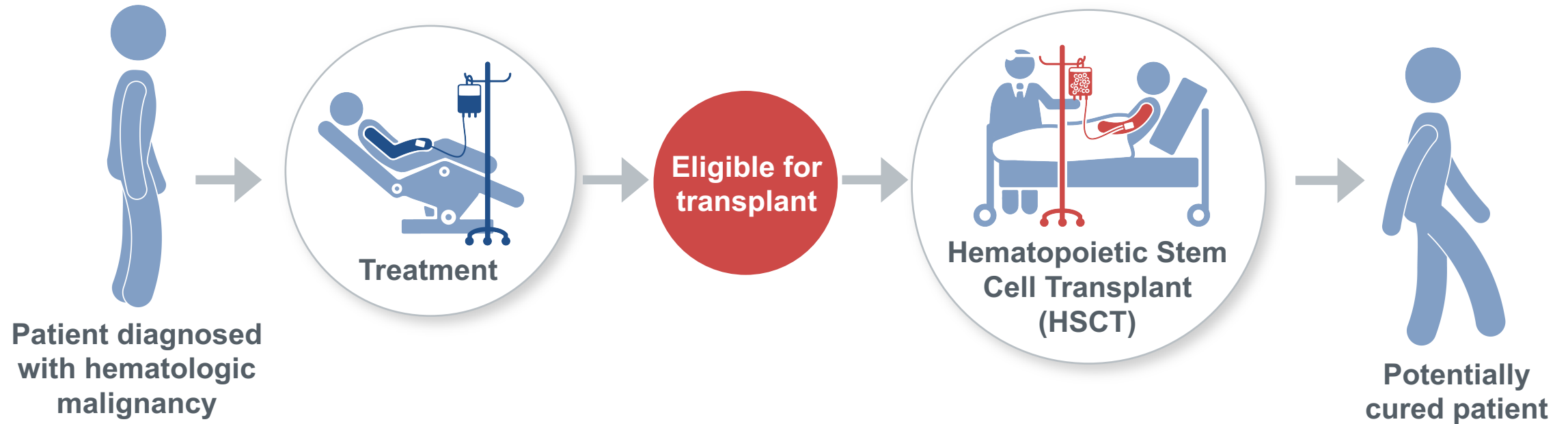
Omidubice

A Potentially Curative Treatment
For Patients In Need Of A Bone Marrow
Transplant

Ronit Simantov, M.D.
Chief Medical Officer

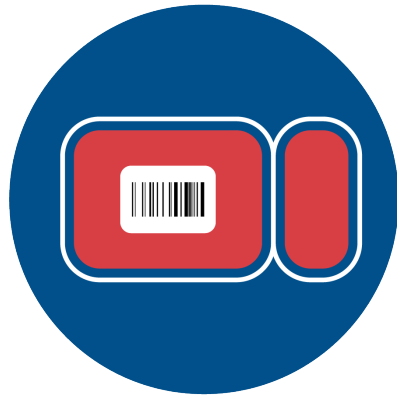
gamida ell

Bone marrow transplant may be curative for certain hematologic malignancies



Omidubicel manufacturing process

Omidubicel



Cord Blood Unit (CBU) Selected

CBU selected by
physician from public
cord blood bank



NAM-Expanded Cells

Stem cells cultured using
proprietary NAM technology



Non-Cultured Fraction

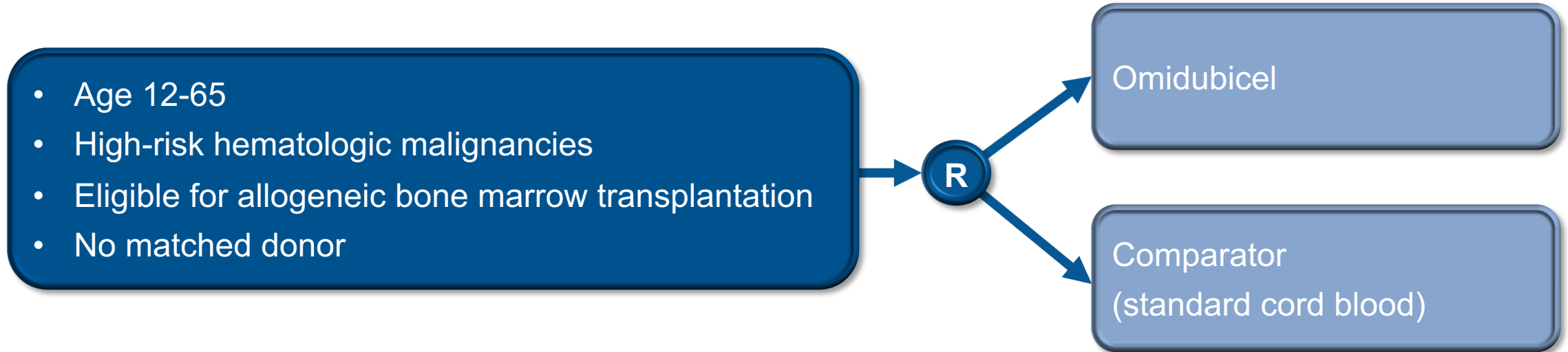
Immune cells,
including T cells



Omidubicel Infusion

Scalable manufacturing and delivery of omidubicel

Phase 3 global, randomized study



Primary endpoint: Time to neutrophil engraftment

Secondary endpoints: Platelet engraftment, infections, hospitalizations

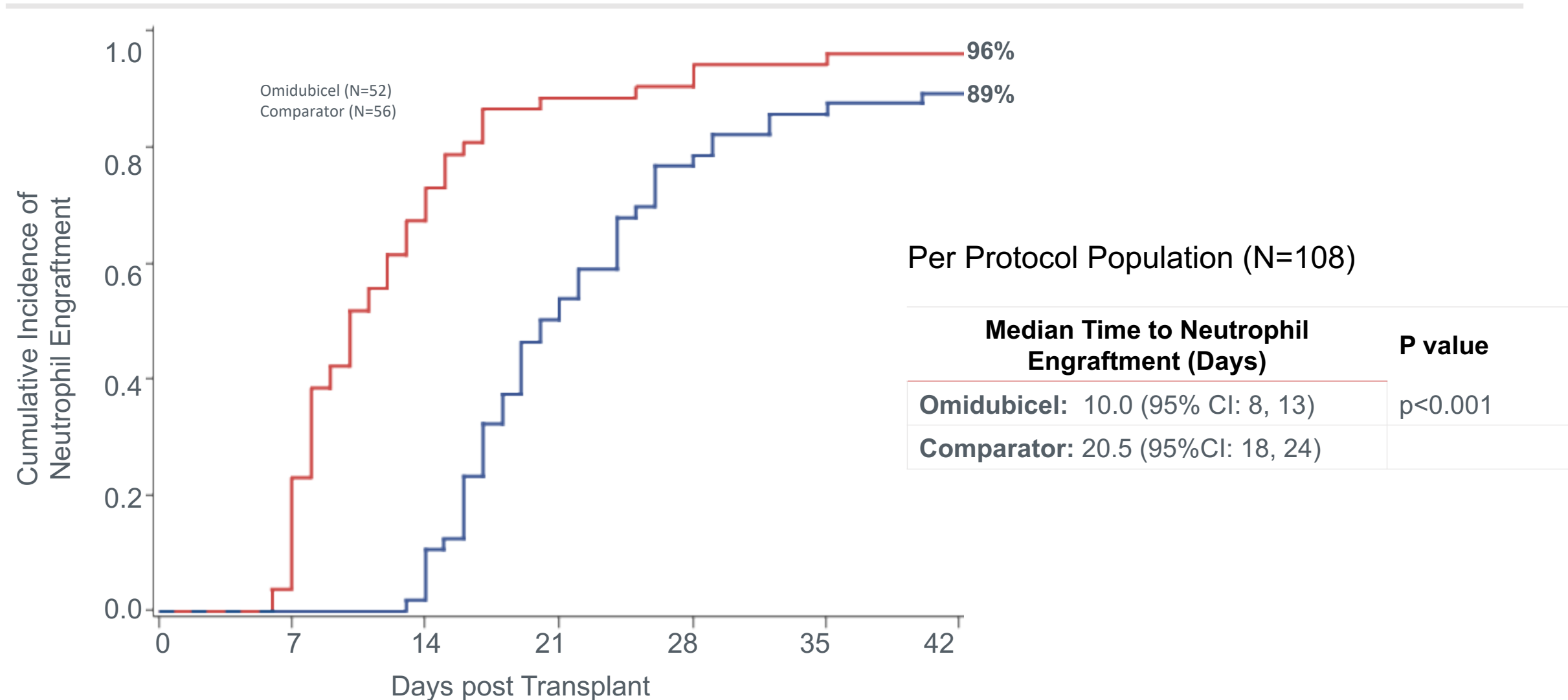
Additional endpoints: Acute GvHD, chronic GvHD, adverse events, non-relapse mortality, disease-free survival, overall survival

Phase 3 primary endpoint: Omidubicel significantly reduced time to engraftment

- 125 patients were randomized at 33 sites
- Demographics and baseline characteristics were well-balanced in the two arms
- Omidubicel was generally well-tolerated

INTENT-TO-TREAT	MEDIAN TIME TO NEUTROPHIL ENGRAFTMENT (DAYS)	95% CI	p-VALUE
Omidubicel (N = 62)	12.0	(10.0, 15.0)	p<0.001
Comparator (N = 63)	22.0	(19.0, 25.0)	

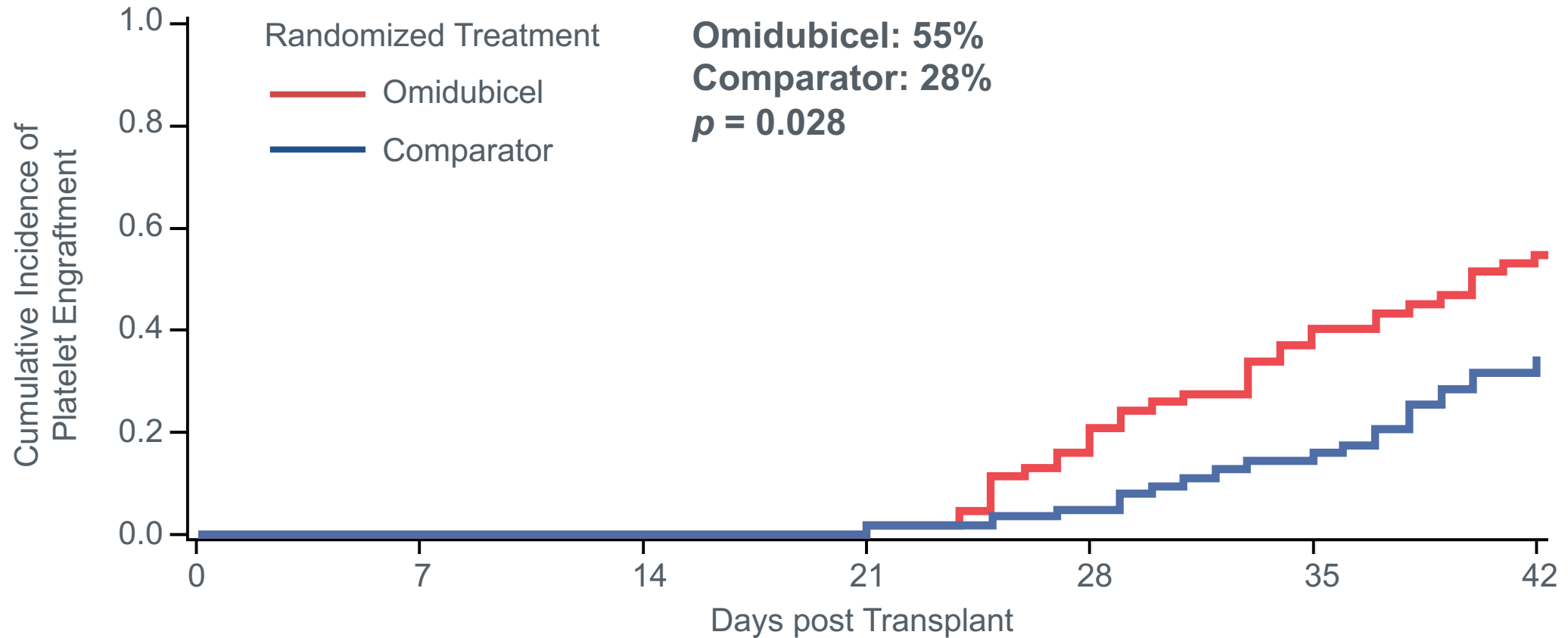
Cumulative incidence of neutrophil engraftment



Per protocol population: received transplantation with omidubicel or comparator per protocol.

Phase 3 secondary endpoint: Omidubicel significantly accelerated platelet recovery

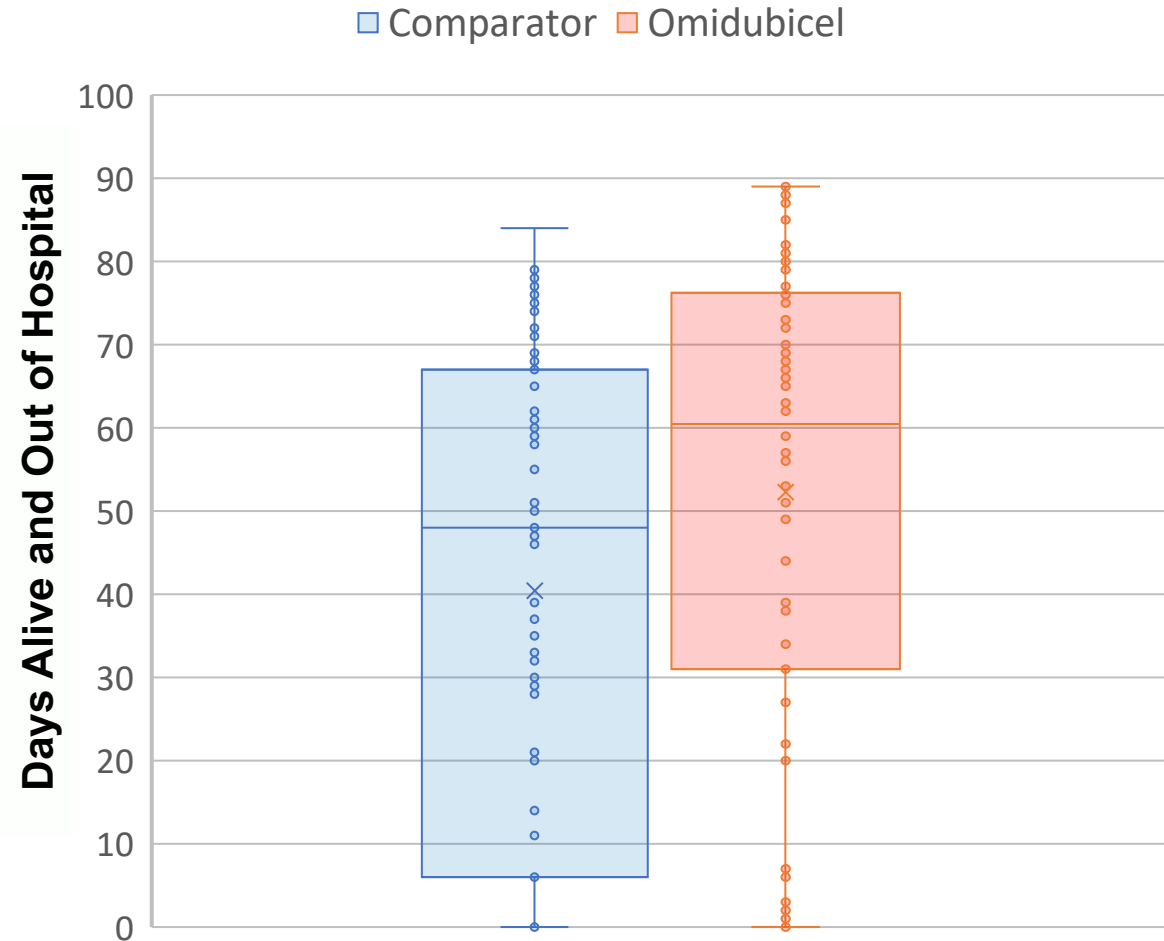
PLATELET ENGRAFTMENT AT 42-DAYS



Population: ITT

Phase 3 secondary endpoint: Omidubicel significantly reduced total hospitalization in first 100 days

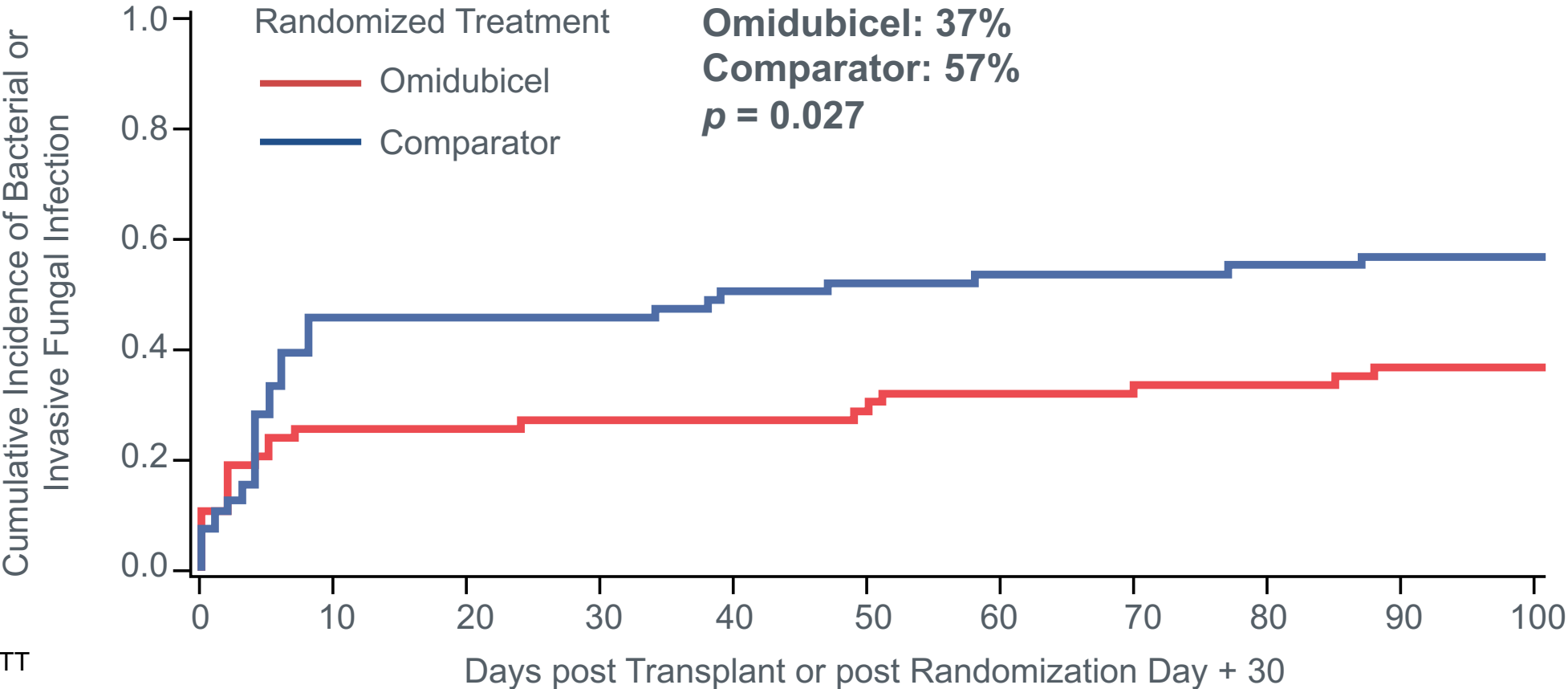
ALIVE AND OUT OF HOSPITAL IN FIRST 100-DAYS



Omidubicel: Median 60.5 days
Comparator: Median 48.0 days
p = 0.005

Phase 3 secondary endpoint: Omidubicel significantly reduced serious infection rate

INFECTIONS BETWEEN RANDOMIZATION AND 100 DAYS¹

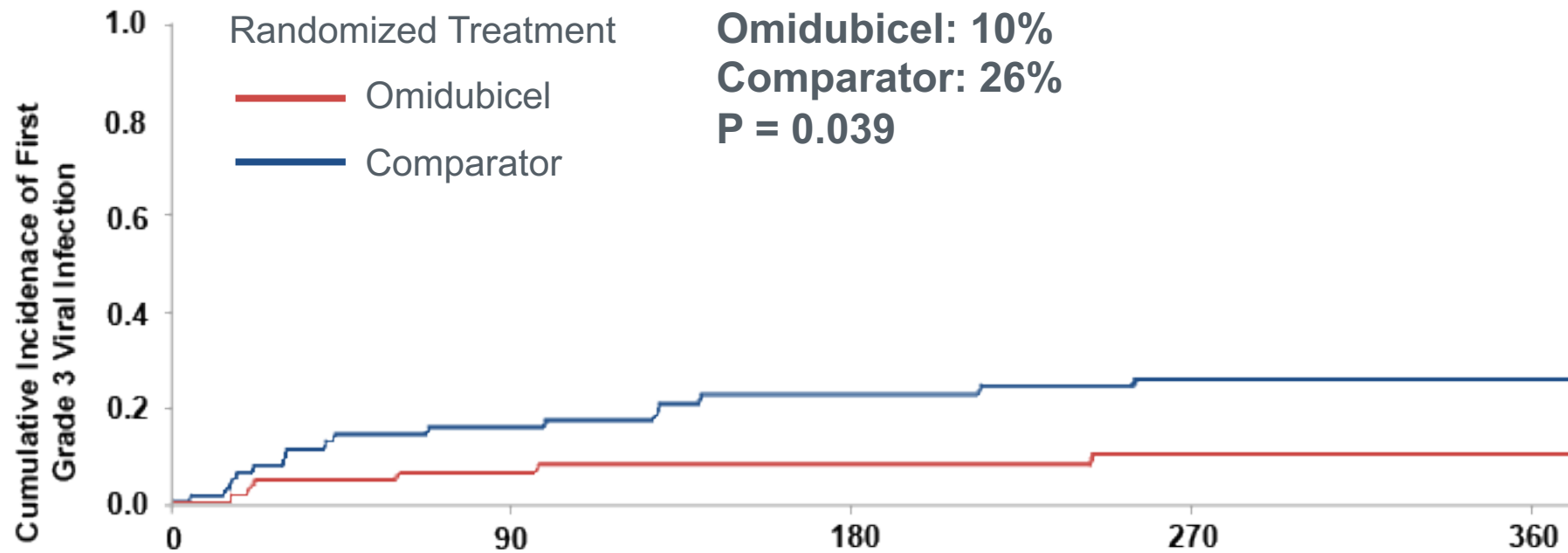


1. Proportion (%) of patients with any grade 2-3 bacterial infection or invasive fungal infection between randomization and 100 days following transplantation

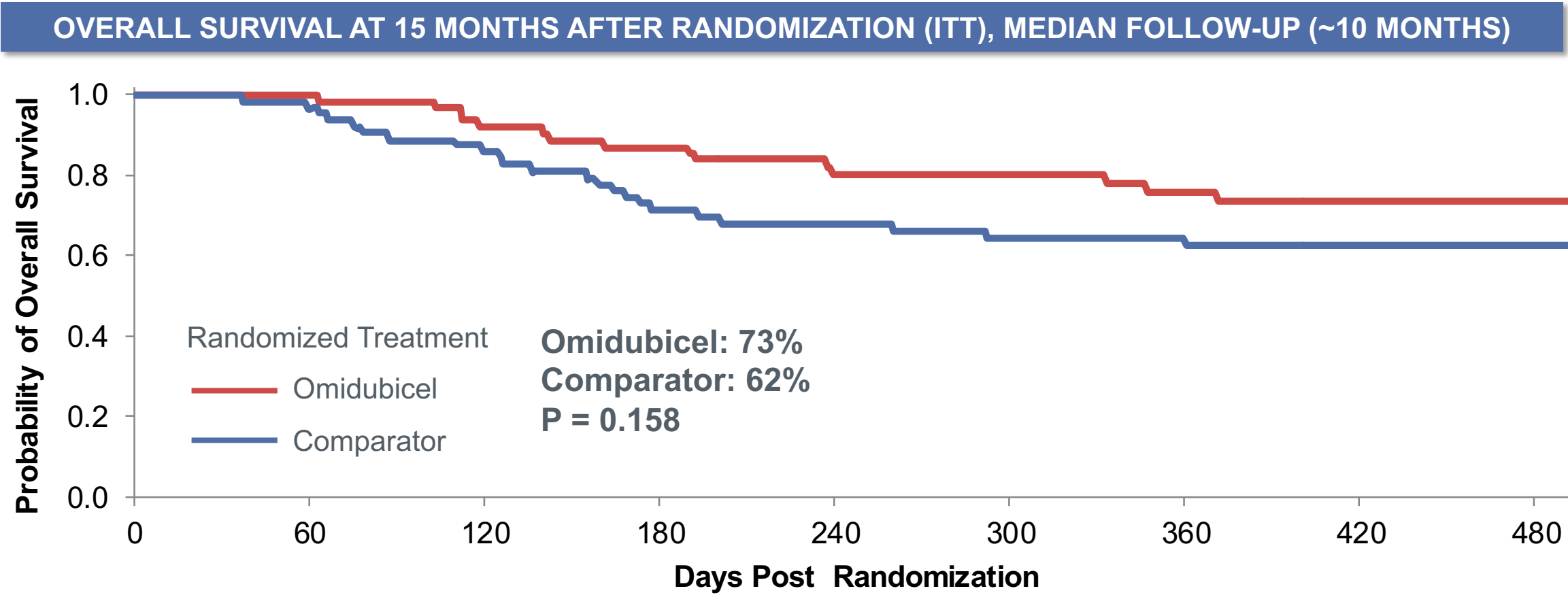
Phase 3 Exploratory Endpoint

Omidubicel significantly reduced viral infection rate

CUMULATIVE INCIDENCE OF FIRST GRADE 3 VIRAL INFECTION BY 1 YEAR FOLLOWING TRANSPLANTATION (ITT)



Phase 3 Exploratory Endpoint: Overall Survival at 15 Months (ITT)



Omidubicel Phase 3 key takeaways

**Positive
randomized,
controlled,
global Phase 3
registrational
trial**

**Achieved
primary endpoint
of improved
neutrophil
engraftment in
intent-to-treat
analysis**

**Achieved
all three
pre-specified
formal
secondary
end-points**

**Preparing for
rolling BLA
submission by
end of 2020**

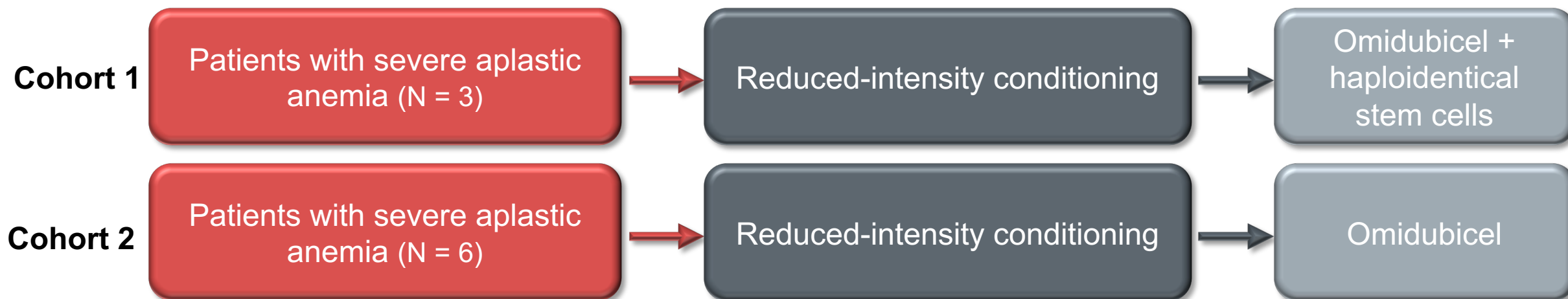
Omidubicel

Phase 2 Study in Severe Aplastic
Anemia

gamida ell

Omidubicel in severe aplastic anemia

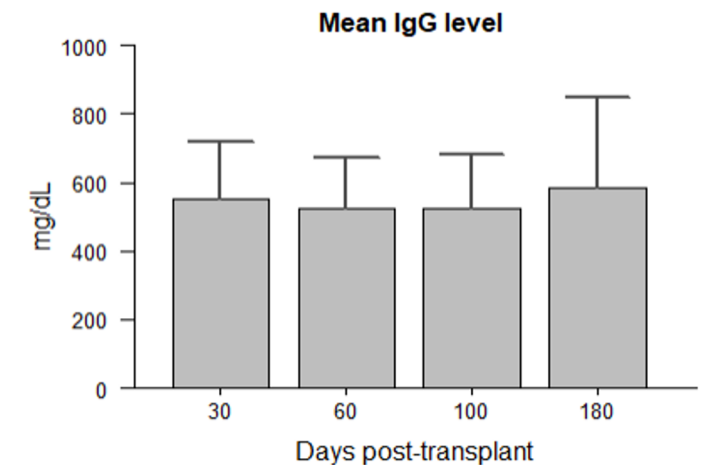
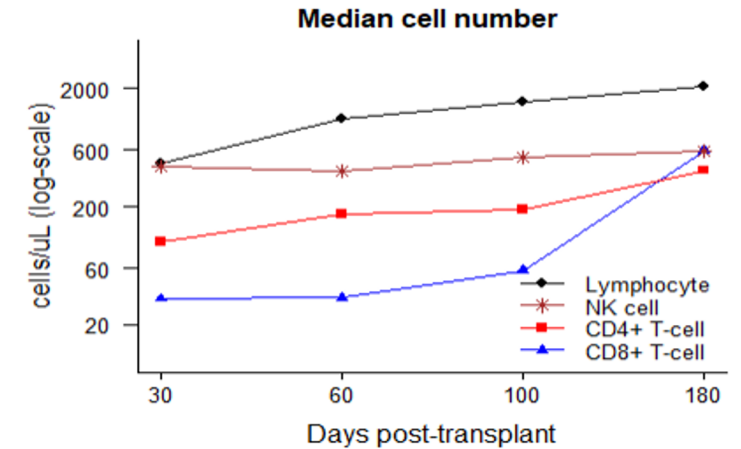
- Severe aplastic anemia (SAA) is a life-threatening bone marrow failure disorder
- 600-900 diagnosed with aplastic anemia in US each year¹
- Hematopoietic stem cell transplantation is the only potential for cure in SAA
- Omidubicel data from NIH study (Dr. Richard Childs) reported at ASH



Samour et al ASH 2020 Poster 1531

Omidubicel in aplastic anemia

- 8 patients engrafted, 1 had graft rejection
 - 1 patient died due to disseminated adenovirus infection
 - Neutrophil recovery: median 10 days (range 6-14)
 - Platelet recovery: median 31 days (15-40)
 - 1 patient with acute GVHD \geq grade 2
 - No chronic GVHD
 - Robust immune reconstitution
- Omidubicel led to sustained hematopoietic and immune recovery in patients with severe aplastic anemia



Real World Data

Collaboration with the Center for
International Blood and Marrow
Transplant Research (CIBMTR)

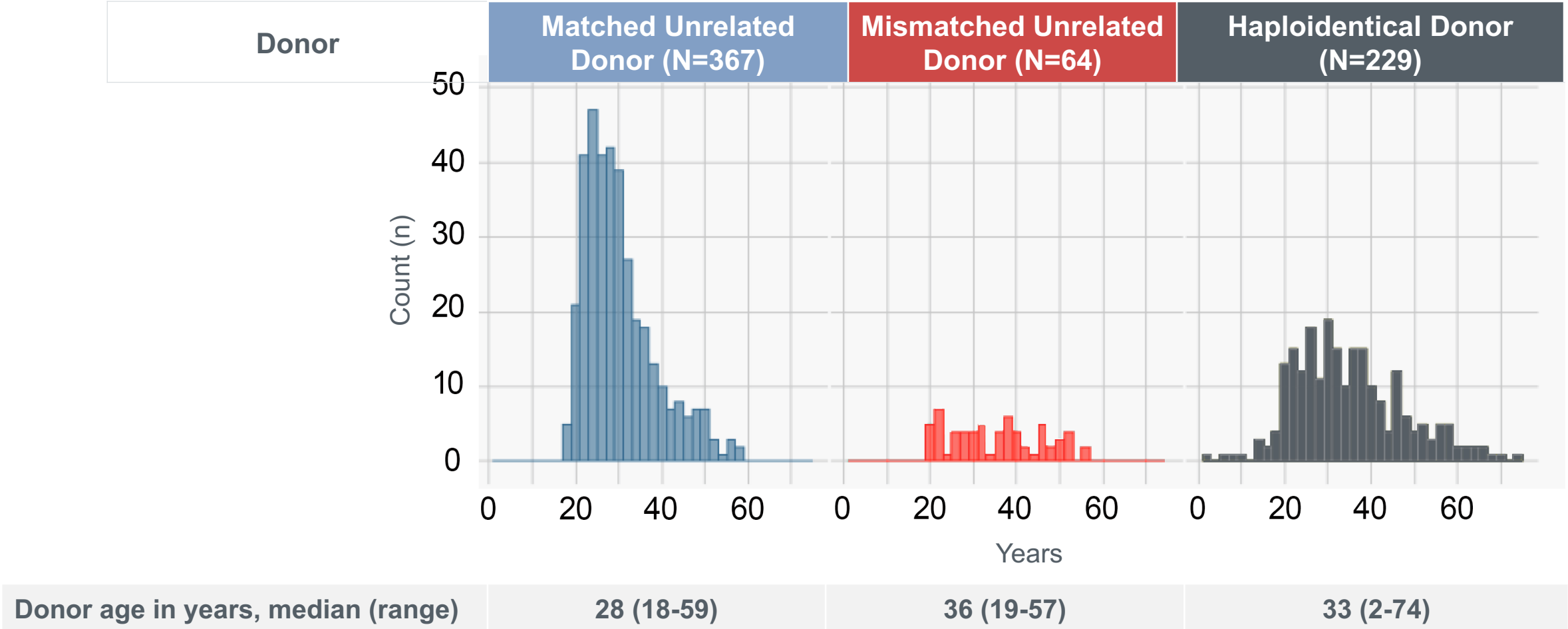
gamida Cell

Real world data collaboration with CIBMTR

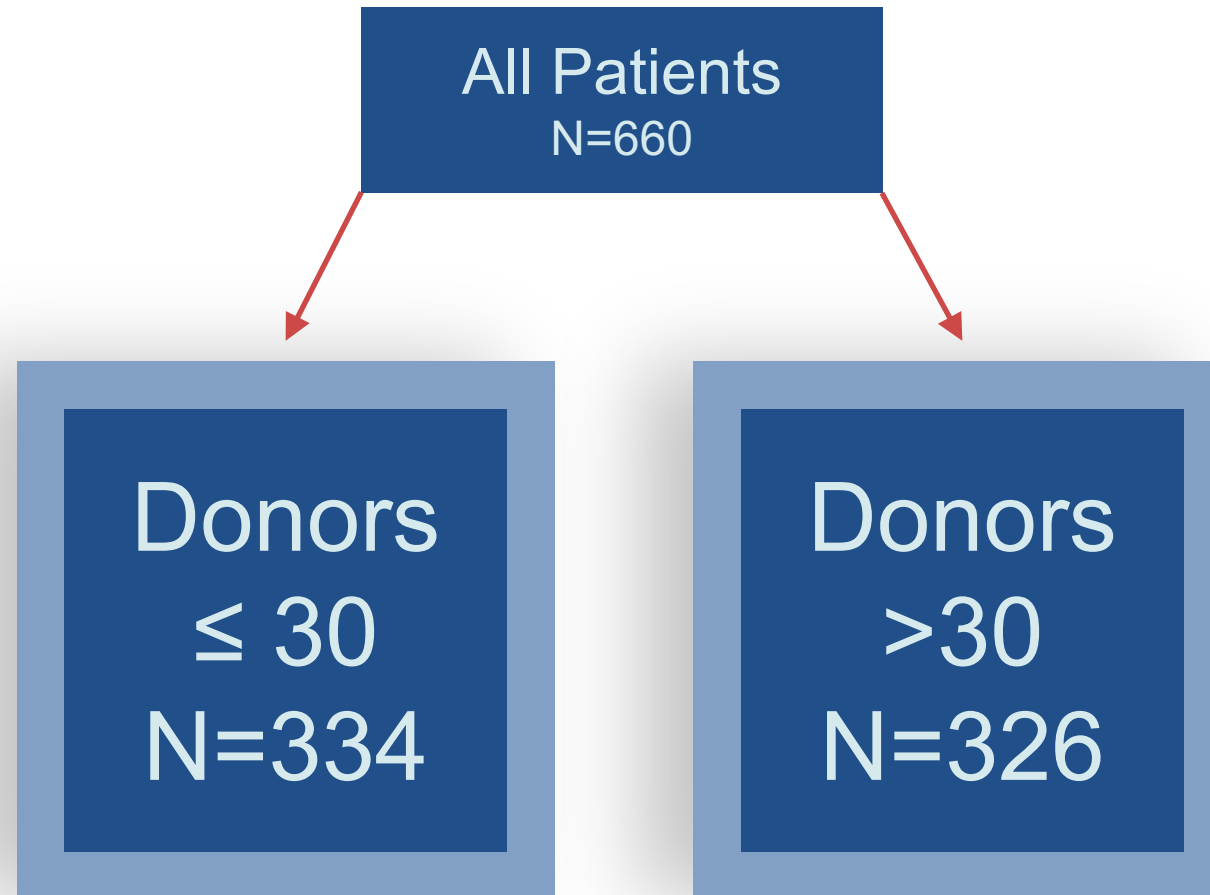
Data reported to the Center for International Blood and Marrow Transplant Research (CIBMTR)

- Inclusion criteria corresponding to omidubicel Phase 3 trial
 - Hematologic malignancy
 - Myeloablative conditioning
 - Allogeneic HSCT
- Donors:
 - Haploidentical related, with post-transplant cyclophosphamide (haplo);
 - 8/8 HLA-matched unrelated (MUD); or
 - 7/8-matched unrelated (MMUD) donor
- First tranche of data: patients transplanted between Jan 2017 and Dec 2018

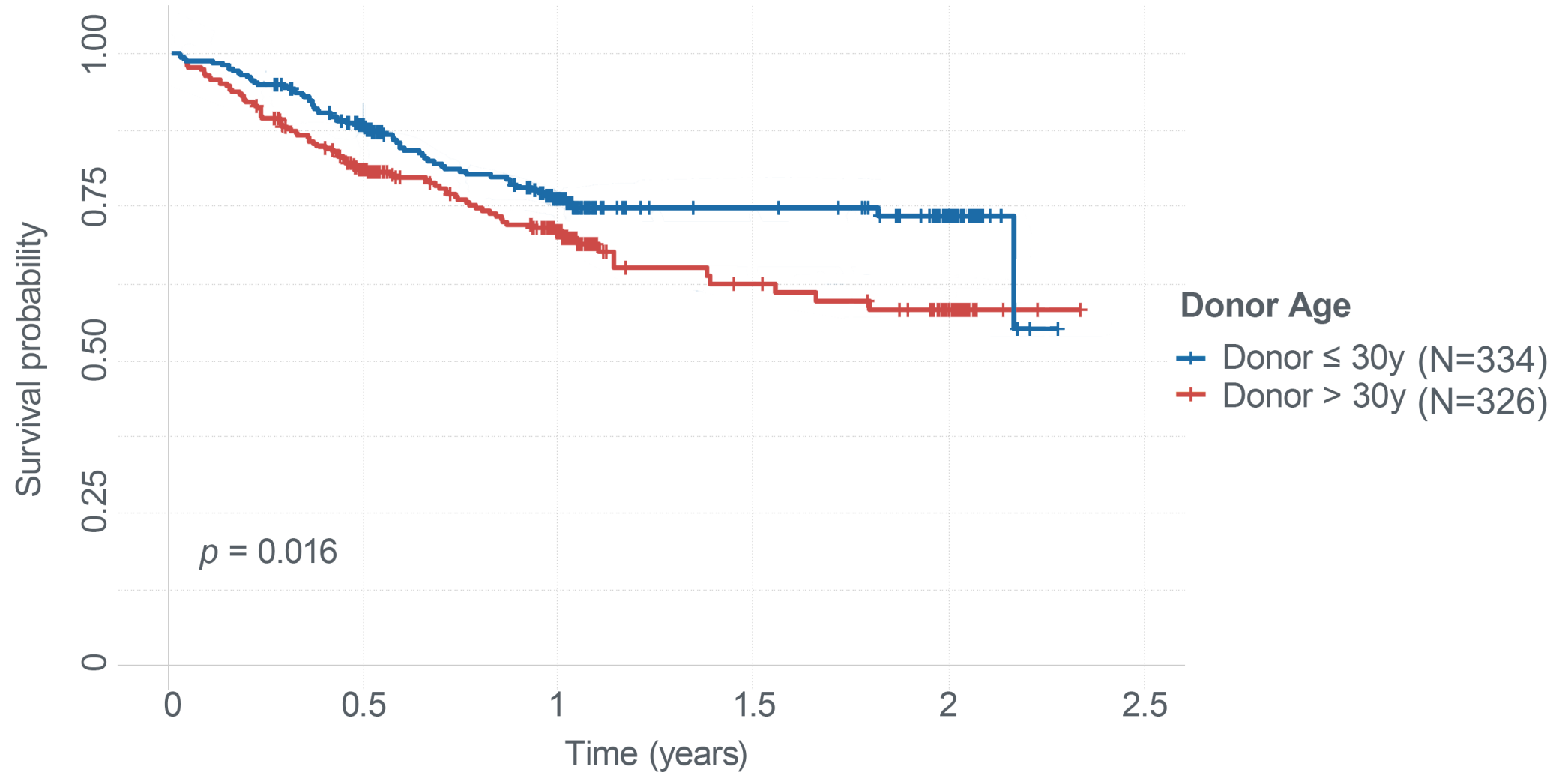
Distribution of donor age



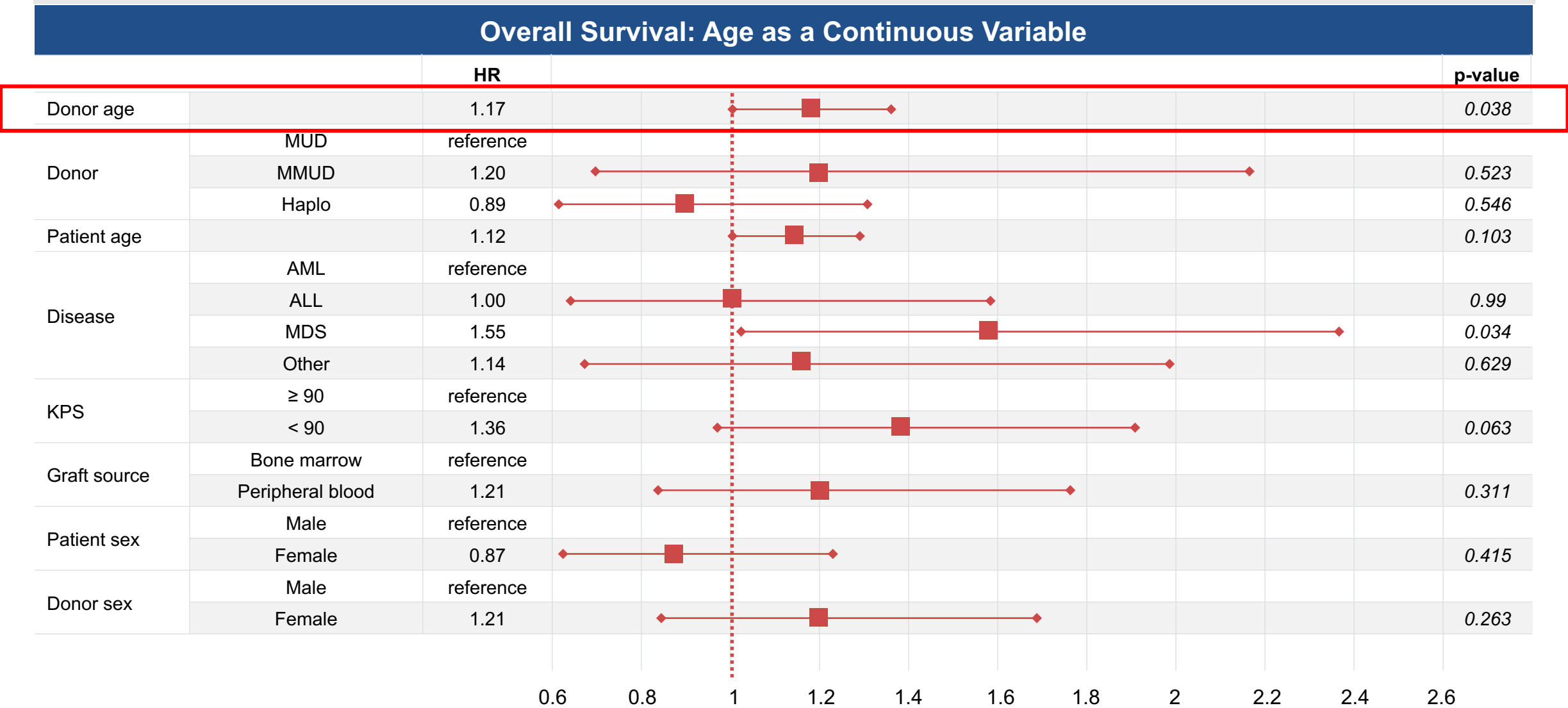
Patient groups



Overall survival is associated with donor age



Overall survival by donor age — multivariable analysis: 17% excess risk for every additional decade of donor age



Real world data collaboration

Donor age is an important consideration for donor selection

Cord blood, the starting material for omidubicel, is considered the most naïve graft source

Additional data encompassing 2019 transplants will be analyzed when available

Advances in the development of graft sources and new approaches to prioritizing donors may broaden the availability of HSCT and improve patient outcomes

Omidubicel

Commercial Potential and
Launch Readiness

Michele Korfin

Chief Operating and Chief Commercial Officer

gamida Cell

Substantial market opportunity to both improve known issues with existing donor source as well as expand the market to treat untransplanted patients

~13,000 patients with hematologic malignancies are eligible for transplant annually in the U.S.

		Patients	Challenges	Unmet Need / Omidubicel Opportunity
Omidubicel opportunity	Not Matched / Not Referred	5,200	<ul style="list-style-type: none">• Access to care and graft source• Limited therapy options	➡ Increase Access
	Matched Unrelated (MUD)	5,200	<ul style="list-style-type: none">• Availability of graft source• Quality of graft source• Time to engraftment• Infection• Risk of GvHD• Potency of GvL effect	➡ Improve Outcomes
	Mismatched Unrelated (mMUD)			
	Haploidentical			
	Cord Blood			
	Matched Related (MRD)	2,600	<ul style="list-style-type: none">• Availability of sibling donor	

Physician feedback supports attractiveness of omidubicel profile relative to current modalities

Performance of Omidubicel (Base Case) vs Current Transplants on Different Metrics (n = 83)



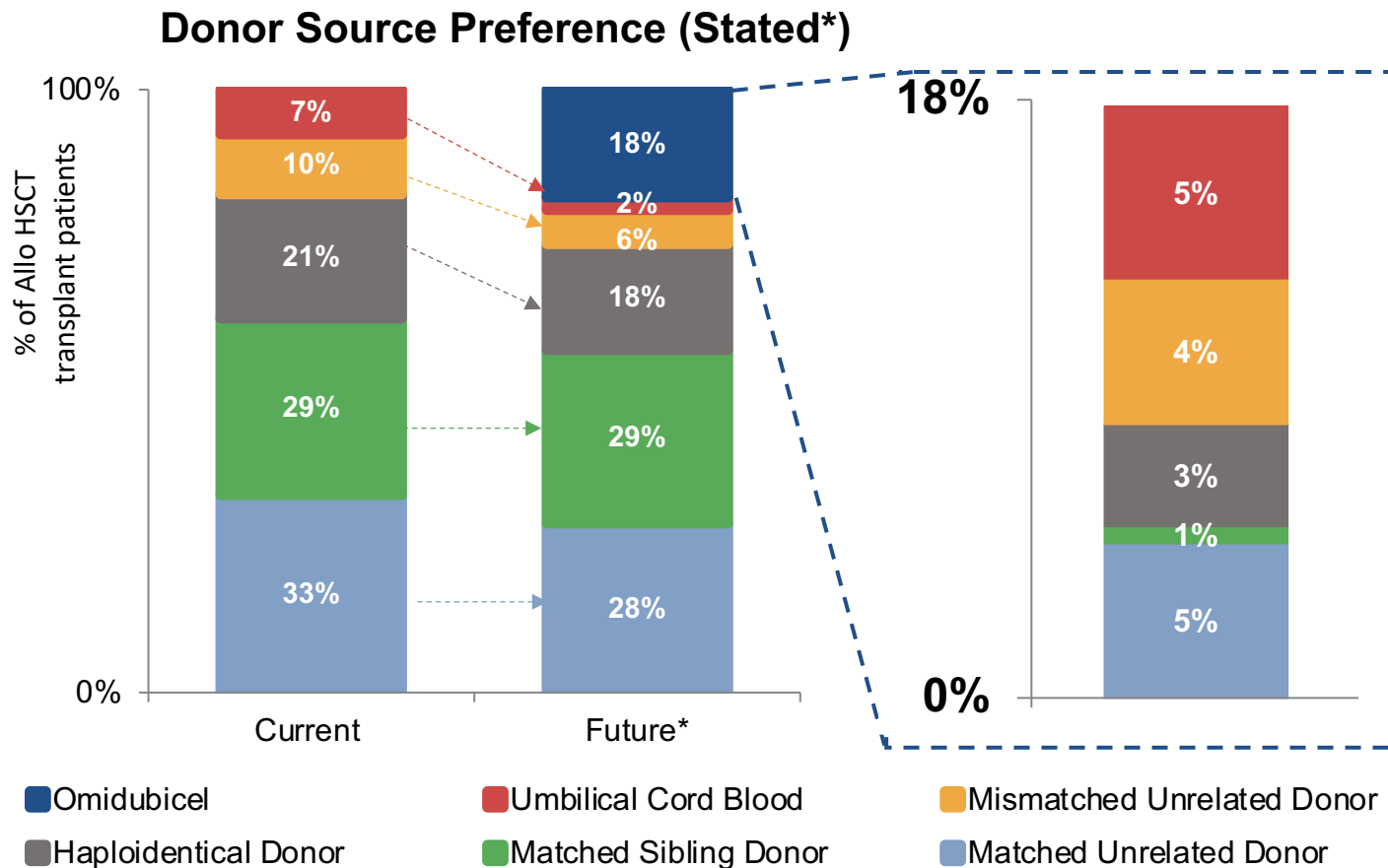
Advantages also resonate with payers as omidubicel presents a clear value proposition

Omidubicel has the potential to offer a treatment alternative for patients without a viable cell source

PERCEIVED ADVANTAGES OF Omidubicel

- **Faster engraftment** / better neutrophil recovery
 - Payers note speed of engraftment as a key advantage of omidubicel vs. the cord blood comparator and are impressed with shorter time to neutrophil recovery
- **Fewer infections** and less GVHD
 - Fewer infections vs. cord blood and potentially better GVHD stand out as omidubicel's immediate advantages to payers
 - Some payers were less impressed without a statistically significant p-value (Note: the statistical analysis was not available at the time of this research)
- **Decreased length of hospitalization**
 - Payers quickly recognize the short-term benefit of shorter hospital stay with omidubicel vs. cord blood

Omidubicel presents several advantages over existing donor sources and is anticipated to capture 18% of current volumes at peak levels of adoption (time to peak ~ 3 years)



+ Omidubicel's Competitive Advantage

vs. UCB:

- Better efficacy (neutrophil engraftment time, average days in the hospital, and neutrophil recovery)
- Eliminates the need to order 2 cords and risk running out of cells due to engraftment failure

vs. MMUD:

- Less risk of infections
- Speed
- Overall trend of decreasing MMUD use

vs. Haplo:

- Lower GVHD

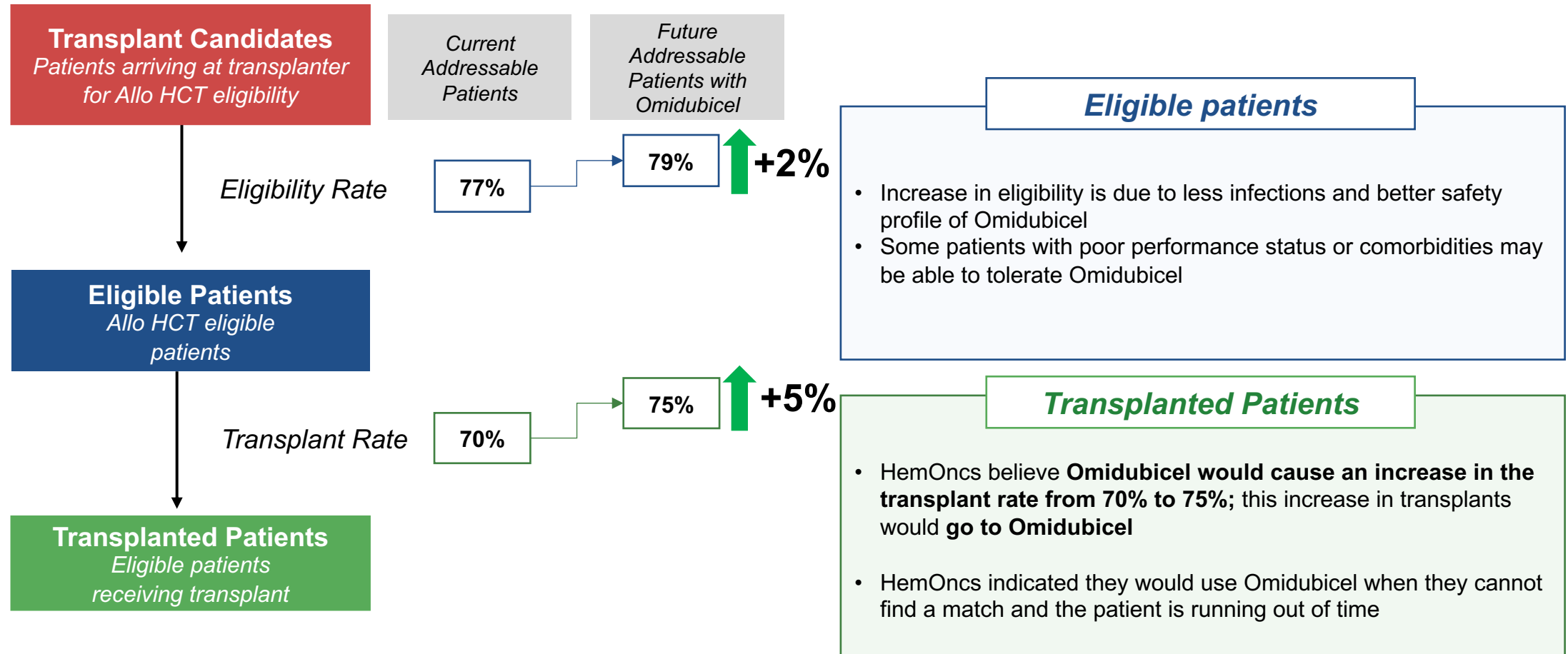
vs. MRD:

- Availability, as not every patient has a fit sibling donor

vs. MUD:

- Speed, especially important for patients whose disease is progressing rapidly
- Lack of donor follow through for MUD

Omidubicel is also anticipated to increase access for the number of transplanted patients through improved eligibility and transplantation rates

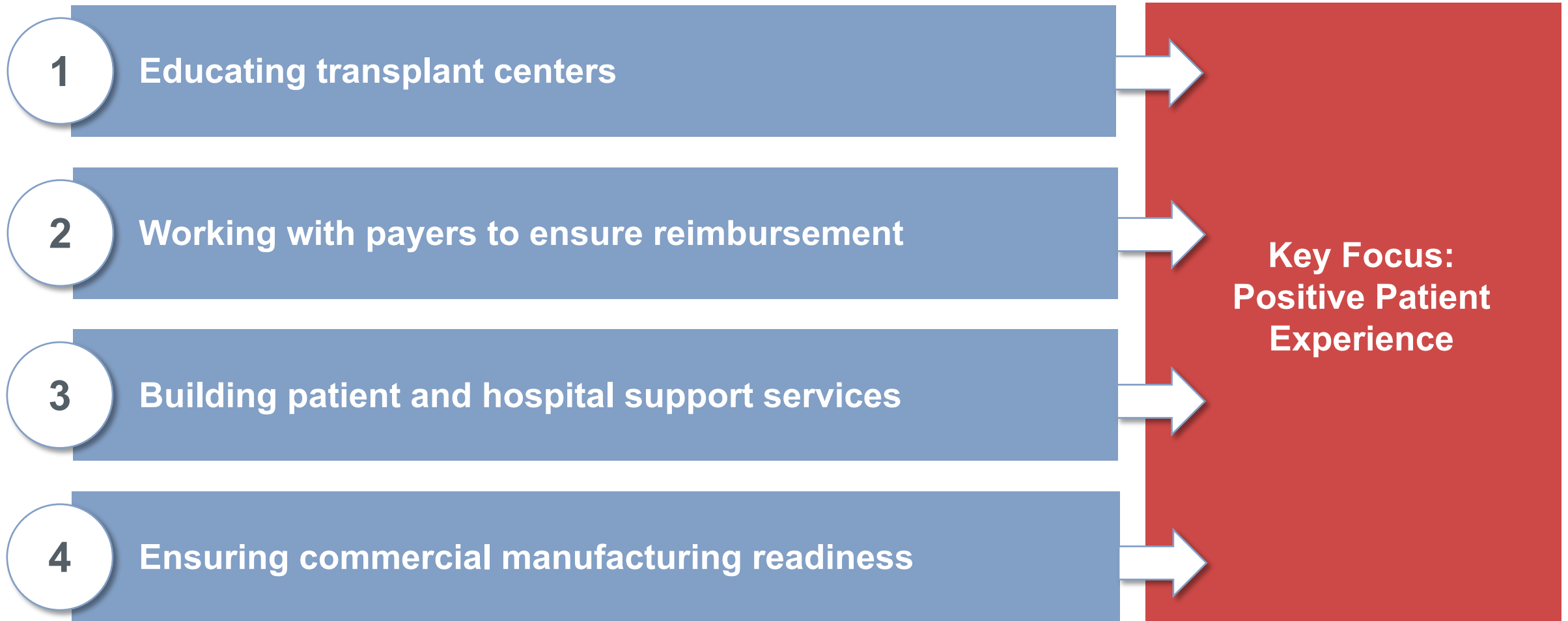


Omidubicel will be a therapy option for HSCT patients who do not have access to a matched related donor*

Omidubicel Launch Goals

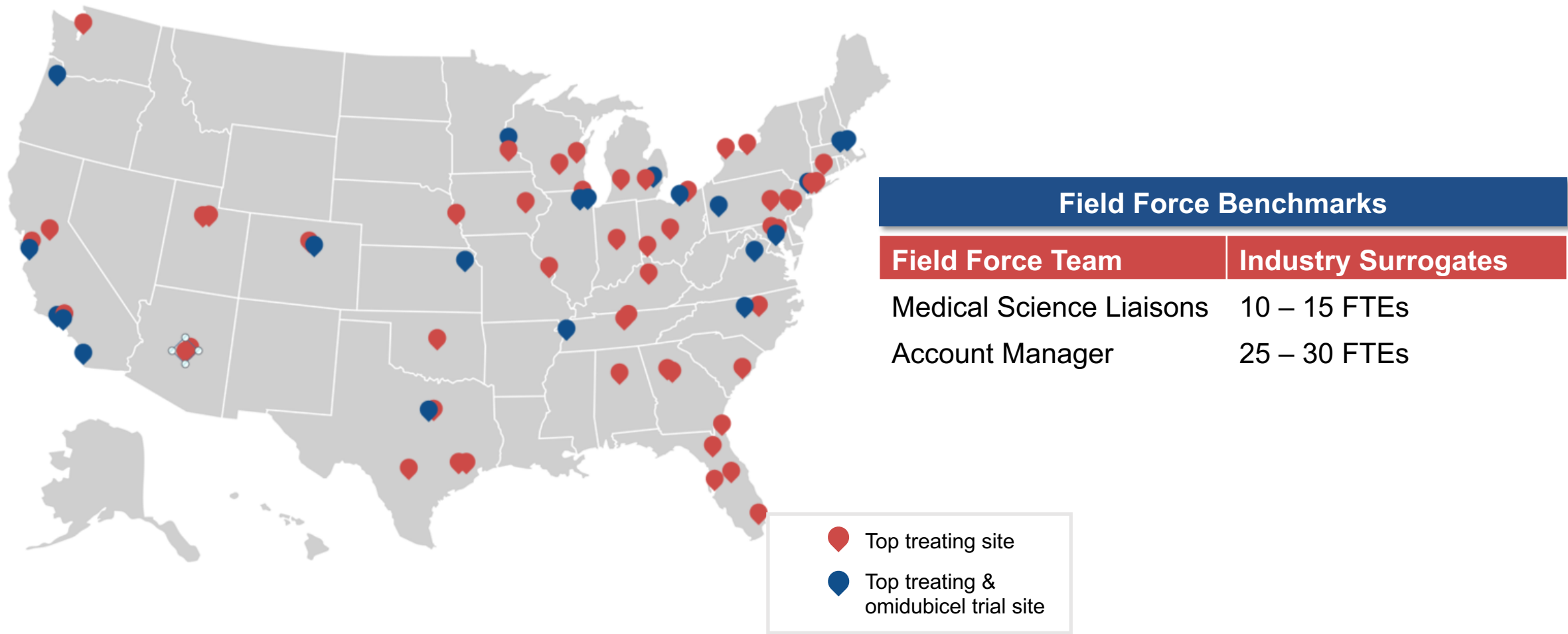
- ➔ ***Rapid time to peak market share: ~ 3 years to reach peak***
- ➔ ***~ 2,000 patients treated with Omidubicel per year, upon reaching peak (supported by market research)***
- ➔ ***Positive patient and transplant center experience with Omidubicel***

Key commercial activities and infrastructure build-out are underway to prepare for a successful omidubicel U.S. launch



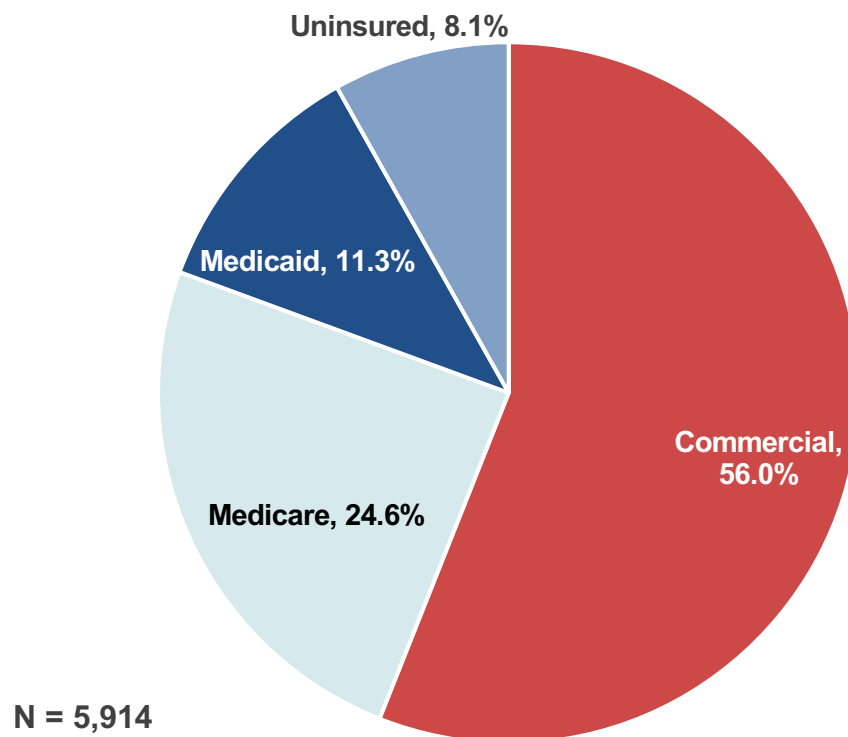
Gamida Cell has initiated the plan for education of the U.S. transplant centers

Approximately 70 transplant centers account for ~80% of bone marrow transplants in U.S.



Commercial payers are estimated to insure the majority of the transplant patients — feedback indicates commercial payers would reimburse omidubicel via carve-out

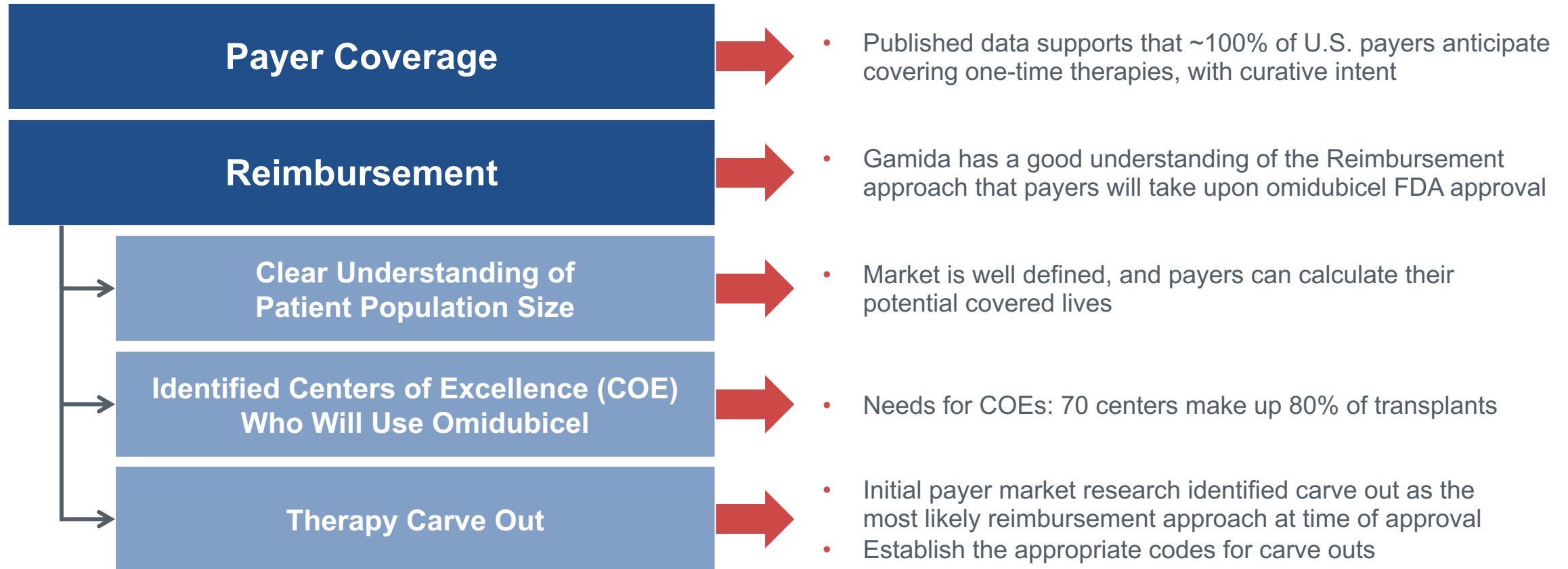
Analysis by Insurance Type¹



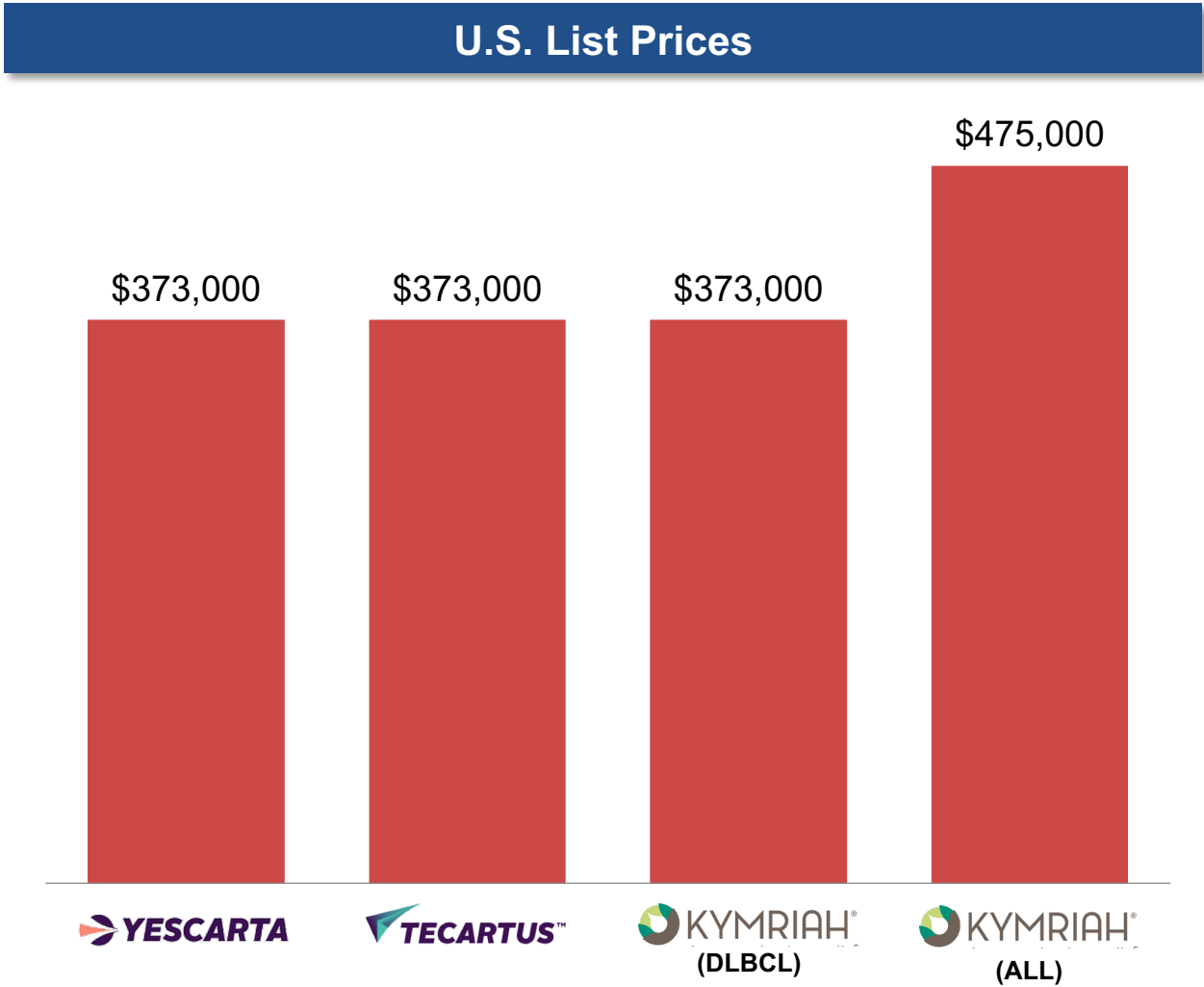
1. State Health Access Data Assistance Center (SHADAC) analysis of the American Community Survey (ACS) Use Microdata Sample (PUMS) files, State Health Compare, SHADAC, University of Minnesota, statehealthcompare.shadac.org, Accessed on March 1, 2019

Gamida will be prepared for potential reimbursement approaches

2



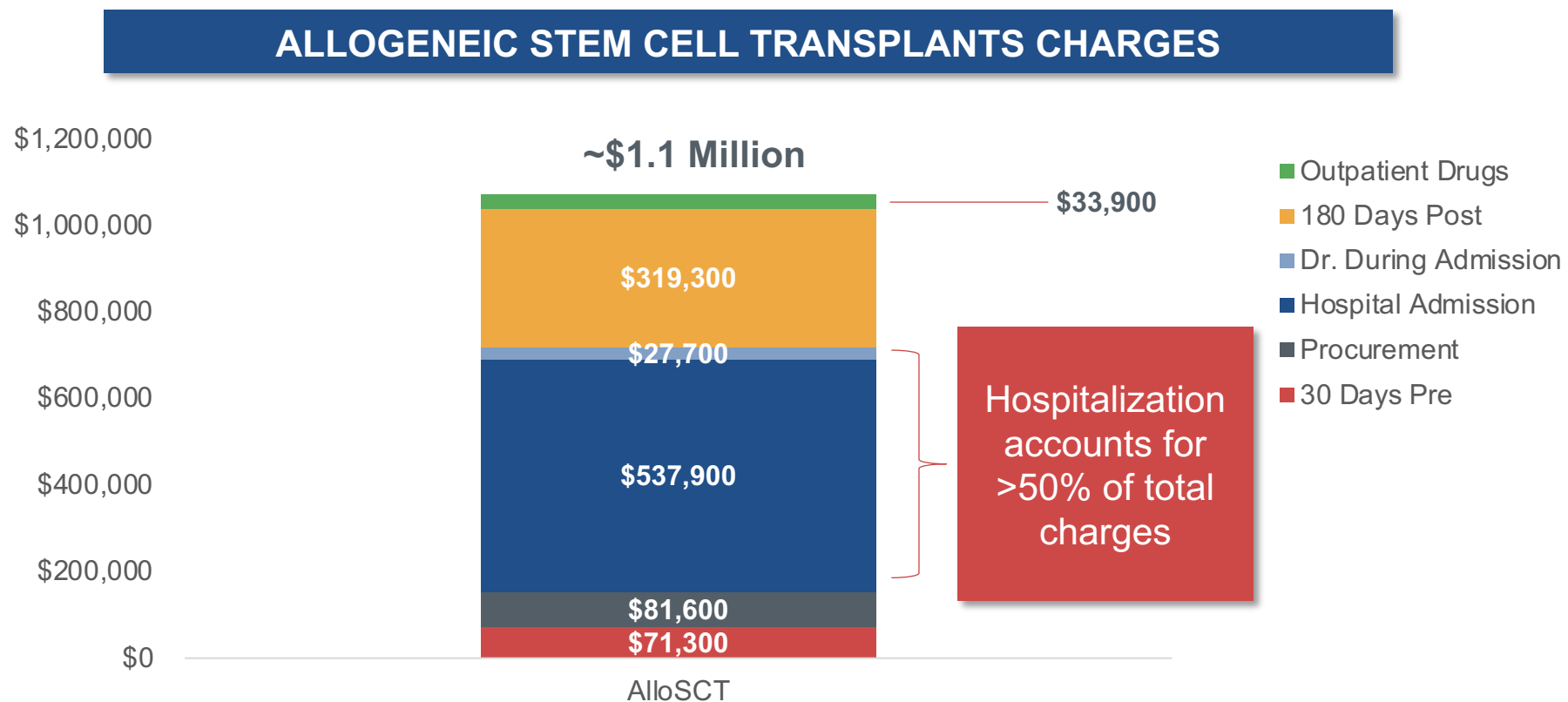
Payers have developed coverage and reimbursement approaches for CAR-T therapies



- CAR-T Therapies initially launched in 2017 in the U.S.
- Pricing ranged from \$373K - \$475K
- Payers referenced CAR-T pricing in the 2019 market research that Gamida conducted

Omidubicel has demonstrated a significant reduction in hospitalization time, the biggest cost driver of HSCT

2



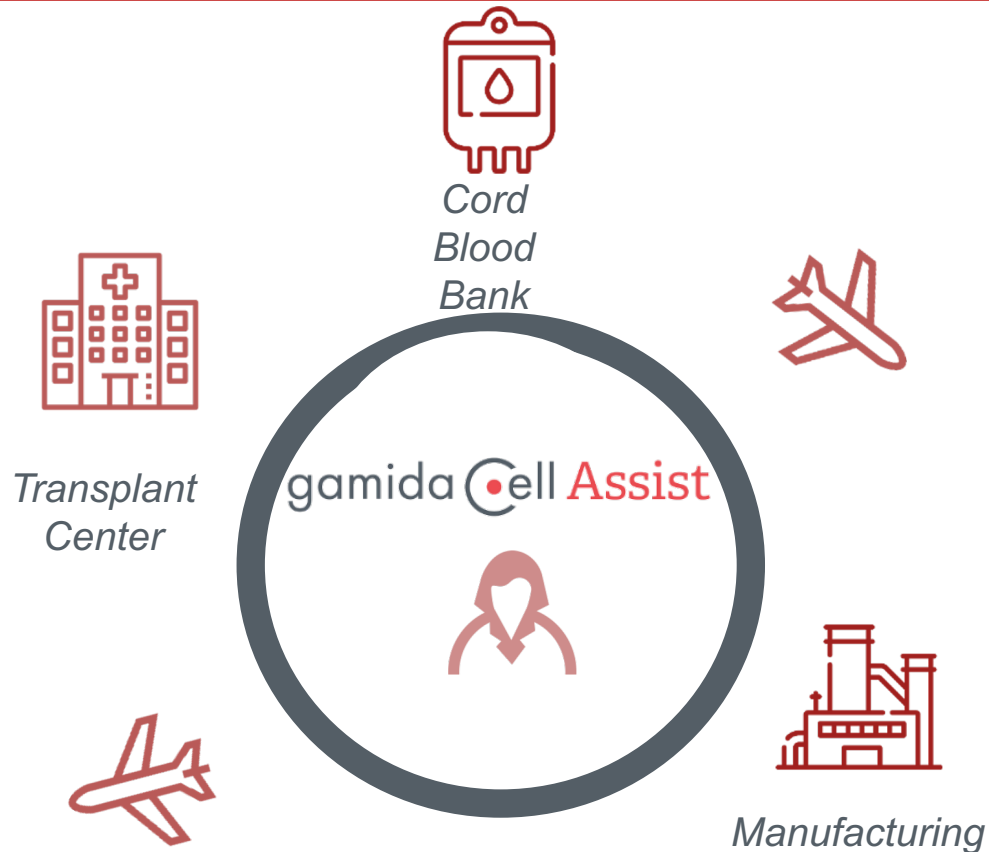


We are building a patient support operation to provide the assistance and services to healthcare professionals, patients, and caregivers that will support access to our therapy and strive to ensure a positive personalized experience

Gamida Cell Assist will be a key aspect of our patient-centric launch

3

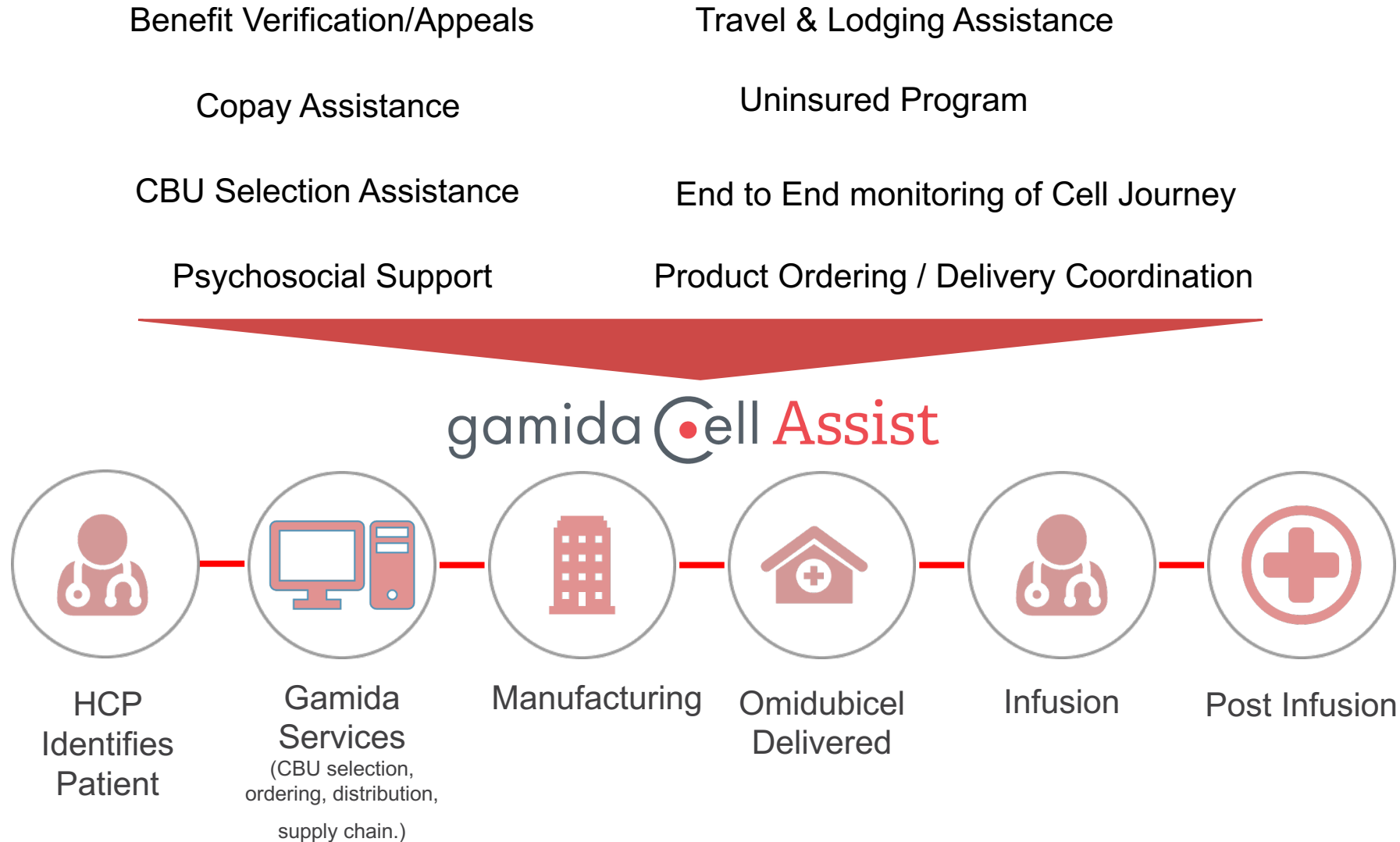
Building a patient support operation to provide the assistance and services to healthcare professionals, patients, and caregivers that will support access to our therapy and strive to ensure a positive personalized experience



- We are a support and solutions-oriented team that will provide a personalized, high touch experience
- Gamida Cell Assist will provide a single point of contact for patients and health care professionals
 - Through this, we will provide support and services throughout the therapy process
- Our focus is on keeping operations simple with the flexibility and agility needed to address the needs of each patient that requires cell therapy

Gamida Cell Assist: resource for the transplant center and patient from the point of omidubicel treatment decision

3



Manufacturing readiness on track to support potential 2H21 launch

4

Dual sourcing for manufacturing established for commercialization of omidubicel:

Kiryat Gat (Israel)

- Gamida Cell owned facility
- Construction completed in 2020 and hiring complete for initial team
- Qualification for BLA filing underway

Lonza (CMO)

- Well recognized cell and gene therapy manufacturer
- Manufacturing partner for the omidubicel Phase 3 study*



Photo of Gamida Cell-owned facility.

Current commercialization focus is the U.S. Market — global evaluation in process

~15,000 patients with hematologic malignancies
are eligible for transplant annually in the EU-5

Commercial potential and launch readiness key takeaways

Omidubice1 Key Takeaways

- Potential to be **first FDA-approved** cell therapy for bone marrow transplantation
- **Compelling clinical profile** to date
 - Unprecedented **time to neutrophil engraftment**
 - **Reduced hospitalization** time and decreased risk of infection
 - Generally **well-tolerated**
- Initiation of rolling BLA submission **anticipated in 4Q20**
- Pre-commercial activities underway for **potential launch**

GDA-201

Harnessing Innate Immunity Using Natural
Killer (NK) Cells to Treat Cancer

Tracey Lodie, Ph.D.
Chief Scientific Officer

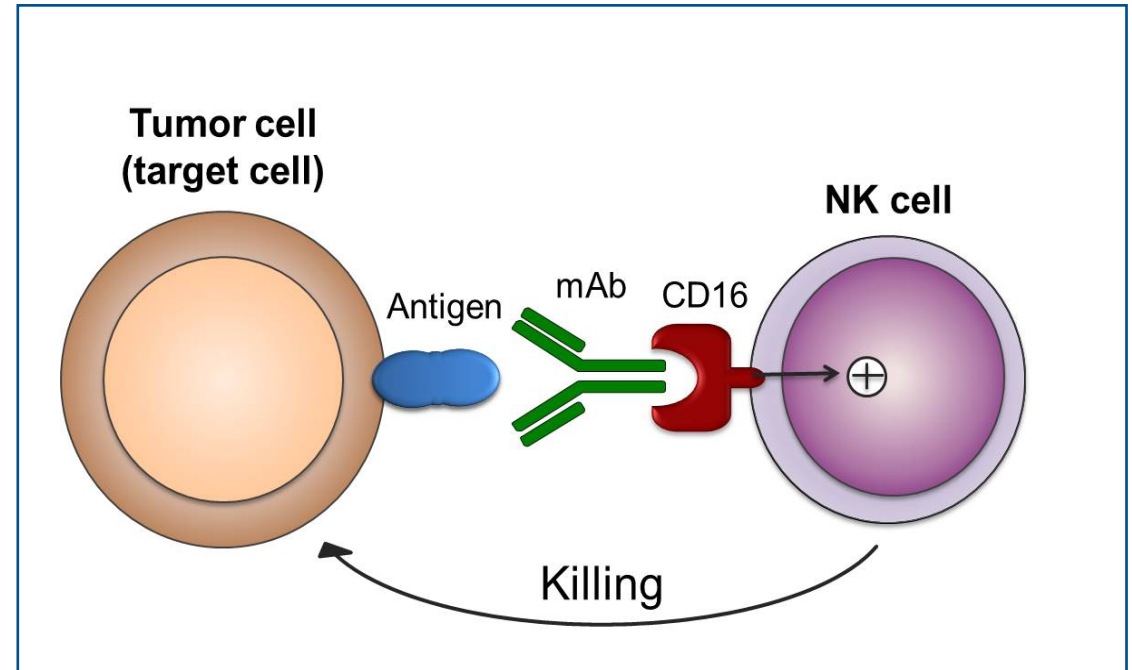
gamida ell

Putting NK cells to work using our NAM technology platform

Benefits of NK Cells

- Natural killer (NK) cells infusion is a promising immune therapy for cancer
 - No HLA matching required
 - Synergy with antibodies
 - Potential for off-the-shelf therapy
- Expansion is necessary to obtain clinically meaningful doses with retained cell function

GDA-201: NK Cells + Tumor-specific Antibodies



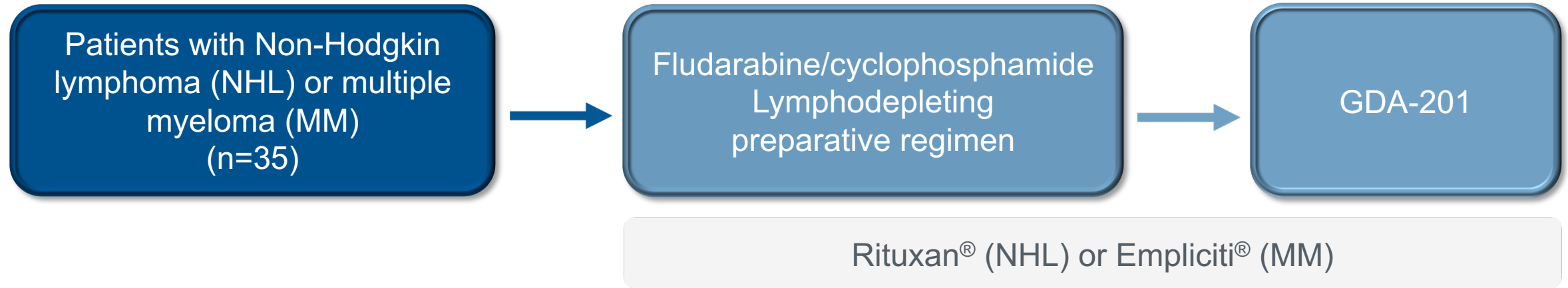
GDA-201

Phase 1 Trial of GDA-201 in Patients with Refractory
Non-Hodgkin Lymphoma and Multiple Myeloma

Ronit Simantov, M.D.
Chief Medical Officer

gamida Cell

Phase 1 study of GDA-201 in patients with non-Hodgkin lymphoma and multiple myeloma



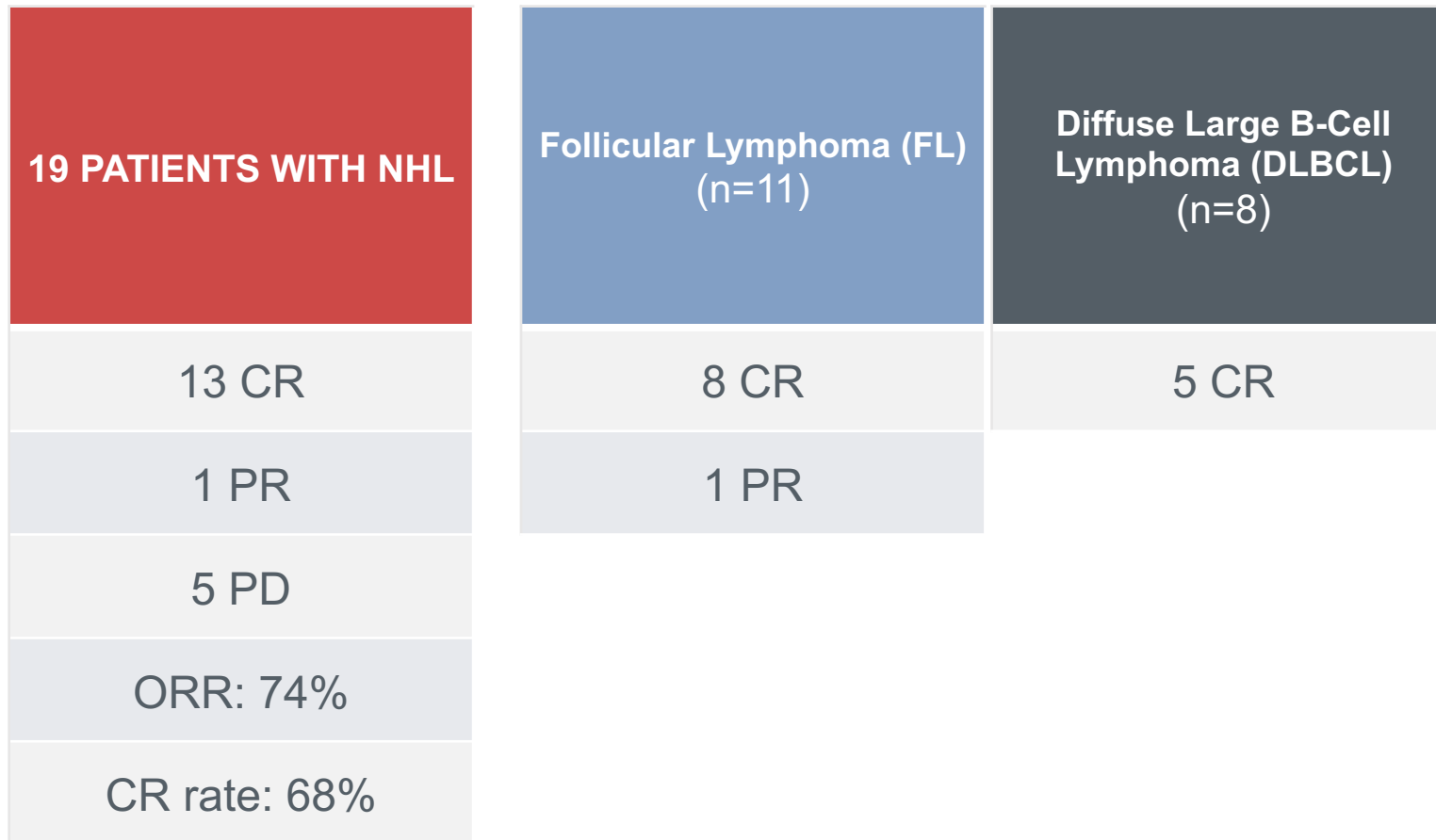
- **Primary endpoint:** Maximum tolerated dose of GDA-201 (3 doses evaluated)
- **Secondary endpoints:** Overall response, toxicity

Grade 3-5 Adverse Events (N=35)

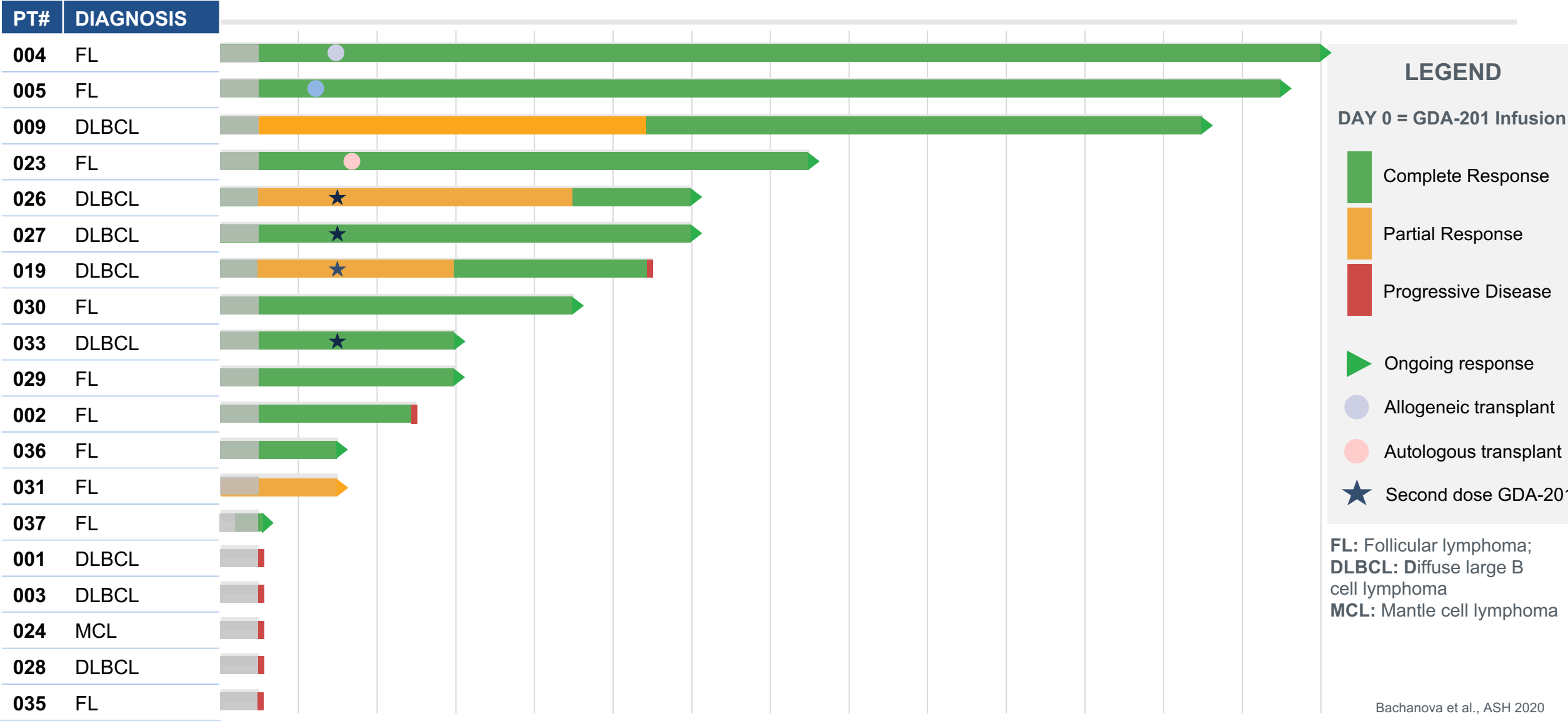
- Adverse events mostly attributed to lymphodepleting chemotherapy
- Most common adverse events were decreased neutrophil count, febrile neutropenia, anemia and low platelet counts
- No dose limiting toxicities
- No GVHD
- No neurotoxicity events
- No marrow aplasia

Event	Severity			Total
	Grade 3	Grade 4	Grade 5	
Hematologic	9	19	0	28
Anemia	3			3
Febrile neutropenia	4	3		7
Neutrophil count decreased	2	10		12
Platelet count decreased		3		3
White blood cell decreased		3		3
Cardiac and Vascular	8	2	0	10
Arythmia	3	1		4
Hypertension	4			4
Hypotension	1	1		2
Pulmonary	6	1	0	8
Dyspnea/Tachypnea	3			3
Hypoxia	2			2
Pneumonia		1		2
Pulmonary Edema	1	1		2
Infectious/Immune	3	0	1	4
Cytokine release syndrome	1			1
Sepsis			1	1
Upper respiratory infection	2			2
Other	18	2	0	20
Fever	2			2
Pain	4			4
Electrolyte abnormality	5			5
Generalized weakness	2			2
Confusion	1			1
Rash	1			1

Response rates



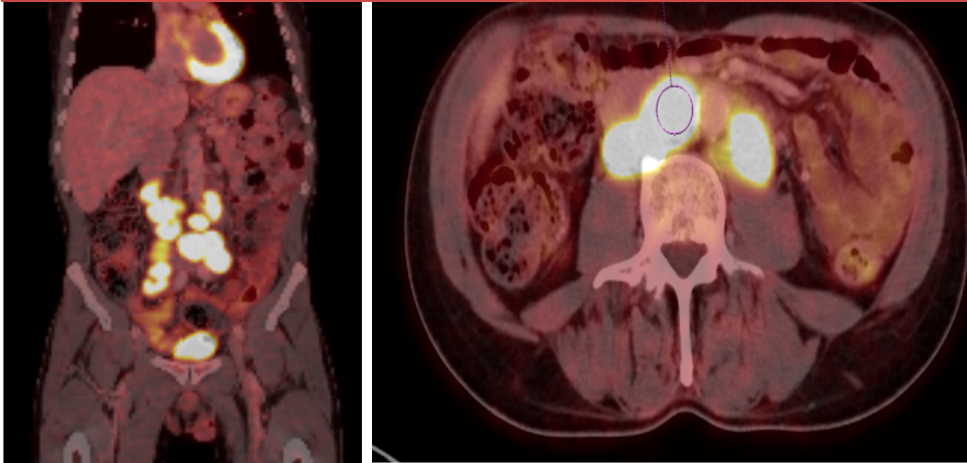
GDA-201 is highly active in non-Hodgkin lymphoma



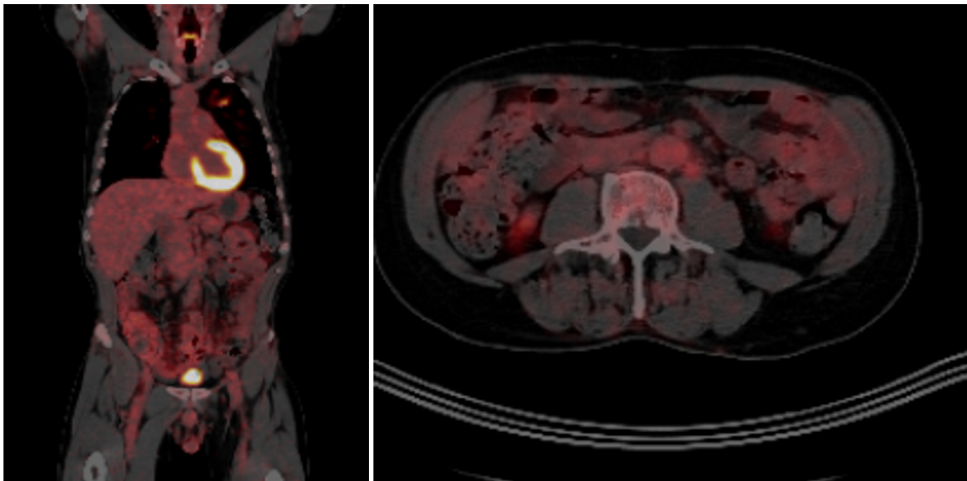
Bachanova et al., ASH 2020

Patient 009

Pt 009: Baseline



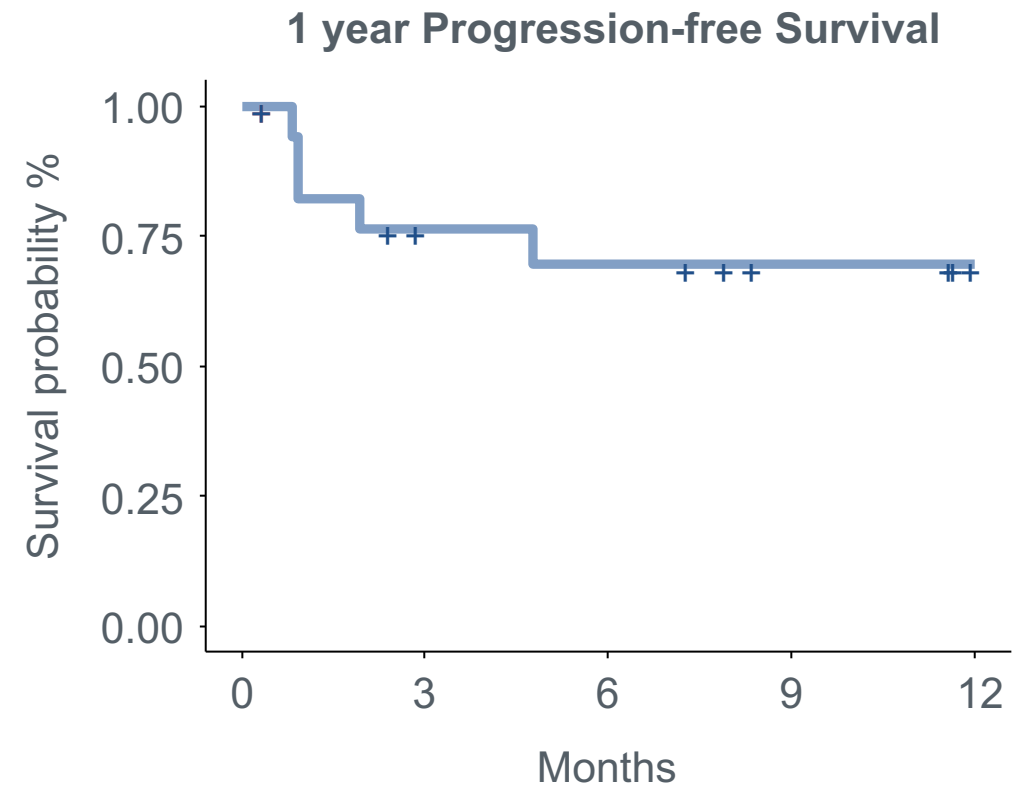
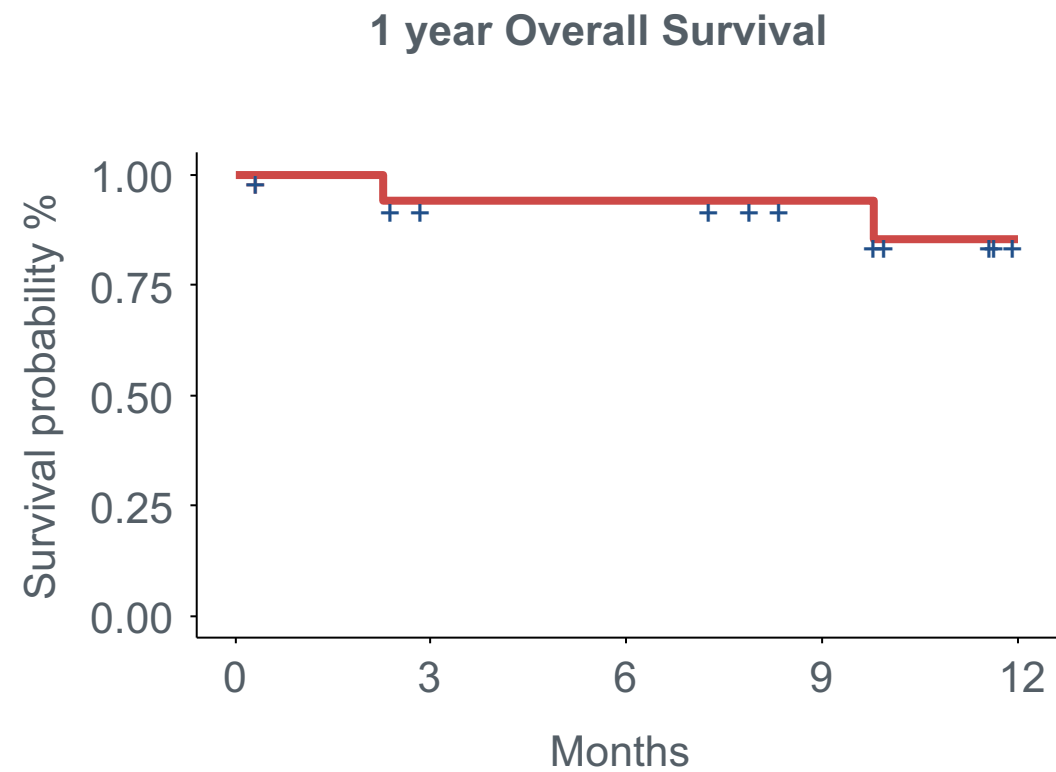
Pt 009: 6-month post GDA-201



- 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/Revlimid, 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
- 12 months: Complete response

Bachanova et al., ASH 2019

OS and PFS following GDA-201



Median follow-up is 10 months (range 1- 28 months)

Bachanova et al., ASH 2020

Phase 1 GDA-201 study: conclusions

- GDA-201 is a novel cell product manufactured with nicotinamide without genetic engineering
- GDA-201 target dose of 2×10^8 cells/kg in multi-dose infusions is safe and well tolerated
- GDA-201 cells expand in blood, traffic to bone marrow and lymph nodes, and exhibited proliferative phenotype and cytotoxic function.
- Remarkable clinical response of 74% was observed in NHL with almost all complete remissions
- The median duration of response is 10 months with 11 out of 19 patients in ongoing remission
- Future directions include cryopreservation of GDA-201 and IND filing in 2021 with exploration of multiple treatment cycles for a multi-center trial.

Data support multi-center Phase 1/2 study

A person wearing a motorcycle helmet and gear is riding a motorcycle on a road. The person is wearing a grey and yellow jacket, blue jeans, and brown boots. The motorcycle is white and black. The background is a blurred road and greenery.

Meet Wayne

Wayne participated in the Phase 1/2 clinical study of GDA-201 at the University of Minnesota to treat lymphoma. His lymphoma is in remission a year after treatment.

“[The doctors] were finding that the lymphoma appeared to have evaporated, completely gone away, that the lymph nodes were really showing no signs of having any kind of cancer in them.”

This is one patient and results may not be indicative. Omidubicel is investigational and safety and efficacy have not been established by any agency.

Pipeline Deep Dive Summary

Julian Adams, Ph.D.
CEO

gamida Cell

We are inspired to cure

NAM Platform

Potential to expand any cell type, including stem cells and NK cells

Omidubicel

Preparing for BLA submission and potential launch

GDA-201

Promising early clinical activity in heavily pre-treated patients with lymphoma
Preparing for multi-center Phase 1/2 study

Looking Ahead

Potential to launch first-ever FDA-approved bone marrow transplant graft

A Patient's Perspective

gamida Cell

Q&A

gamida Cell