

### **Forward Looking Statement**

This presentation contains "forward-looking" statements within the meaning of applicable securities laws, including the Private Securities Litigation Reform Act of 1995. Forward-looking statements may be identified by words such as "designed to," "anticipate," "can," "could," "expected," "on track," "plan," "potential," "positioned," "scheduled," "should," and "will," "would," or the negative of these and similar expressions.

These forward-looking statements, which are based on our management's current expectations and assumptions and on information currently available to management, include statements regarding the market opportunities with respect to lasme-cel (and the assumptions on which such determinations are based, including with respect to addressable populations and potential pricing), the potential of the phase 2 study to be a registrational phase, the advancement, timing and progress of clinical trials (including with respect to patient enrollment and follow-up), the timing of our presentation of data and submission of regulatory filings (including, without limitation, the date of BLA filling), the sufficiency of cash to fund operations, the potential benefit of our product candidates and technologies,—and the financial position of Cellectis.

These forward-looking statements are made in light of information currently available to us and are subject to numerous risks and uncertainties, including with respect to the significant risks associated with biopharmaceutical product candidate development. Among these are significant risks that the BALLI-01 Phase 1 data may not be validated by data from later stage of clinical trials and that our product candidate may not receive regulatory approval. Particular caution should be exercised when interpreting the results from phase 1 studies and results relating to a small number of patients, such results should not be viewed as predictive or future results.

Furthermore, many other important factors, including those described in our Annual Report on Form 20-F and the financial report (including the management report) for the year ended December 31, 2024 and subsequent filings Cellectis makes with the Securities Exchange Commission from time to time, as well as other known and unknown risks and uncertainties may adversely affect such forward-looking statements and cause our actual results, performance or achievements to be materially different from those expressed or implied by the forward-looking statements. Except as required by law, we assume no obligation to update these forward-looking statements publicly, or to update the reasons why actual results could differ materially from those anticipated in the forward-looking statements, even if new information becomes available in the future.

**d**s

## Lasmecabtagene Timgedleucel or Lasme-cel (UCART22)

# Lasme-cel could be a game changer in refractory or relapsed B-ALL



### Today's Reveal

- 1. The BALLI-01 Study for Patients with r/r B-ALL
  - Phase 1 Update → Lessons Learned
  - Phase 2 Design → Path to BLA and Market

### **Panel Discussion with Oncology Experts**

- 2. Lasme-cel Market Opportunity
  - Patient Need & Addressable Market
  - Where We Create Value
- 4. Building Tomorrow's Cell & Gene Therapies with AstraZeneca
  - Our Strategic Collaboration



**Q&A Session** 

### **B-ALL: An Unmet Medical Need**



#### **B-CELL ACUTE LYMPHOBLASTIC LEUKEMIA**

1L treated population: ~9,200 Patients (US, EU4, UK)\*
 High relapse in adults

### **HURDLES WITH EXISTING TREATMENTS**

- Chemotherapies: Lead to high relapse rate in adults
- ADCs have a limited effect: Low antigen expression
- CD19-directed therapies: ~50% relapse\*\*
- Therapies based on patient T-cells: When patients'
  T-cells are unfit or scarce, autologous CAR-T, in vivo
  CAR-T and T-cell engagers perform less effectively



### Why an Allogeneic CD22 CAR-T cell Product for r/r B-ALL?



Allogeneic CAR-T Starts with Healthy-donor T Cells
Healthier and less exhausted than autologous cells from heavily pretreated patients



Off-the-Shelf is designed for "Speed" – in B-ALL Every Day Counts



Standardized, Repeatable Quality
All patients would get the same product



CD22 Complements/Preempts CD19 (CD19-naïve and post-CD19) Engaging CD22 could potentially rescue CD19 failures



### **Fully Integrated Manufacturing**



CMC Development, Starting Materials

14,000 sq ft. facility

- ✓ Process & analytical development
- ✓ Starting materials manufacturing:
  - Buffers,
  - Plasmids,
  - > mRNA,
  - Viral vectors,
  - & QC testing
- Cryogenic storage rooms
- EU supply chain & logistics



### Raleigh, NC

UCART – Clinical & Intended Commercial Ready Site

82,000 sq ft. facility

- ✓ UCART GMP manufacturing
- ✓ QC testing labs
- ✓ Cryogenic storage rooms
- ✓ US supply chain & logistics



Allogeneic CAR-T





Scalable Manufacturing

"1 batch = 100s doses" Scalable to 1000s of doses



Controlled CoGs
Improved gross margins



### Lasme-cel as Bridge to Transplant Strategy

### **HSCT** as the Gold Standard For r/r B-ALL



### THE GOAL

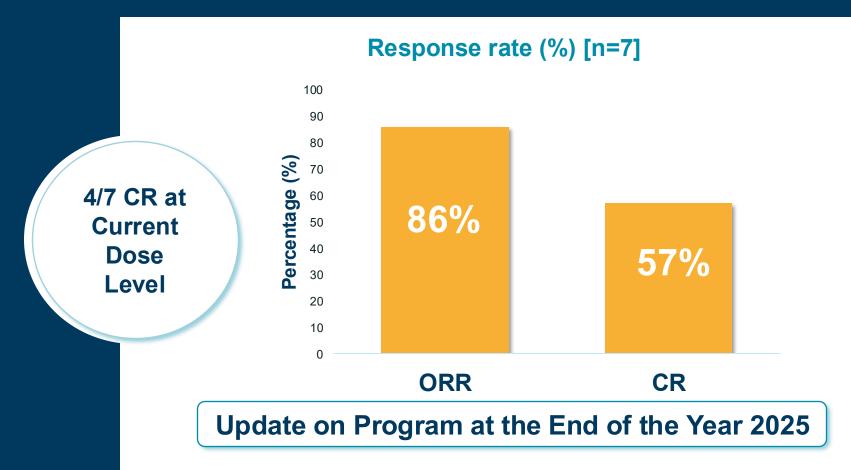
**Achieve a Path to a Potentially Curative HSCT** 

- Secure a remission window
- Make patient eligible for an HSCT
- Clear path to long-term remission
- Manageable safety profile



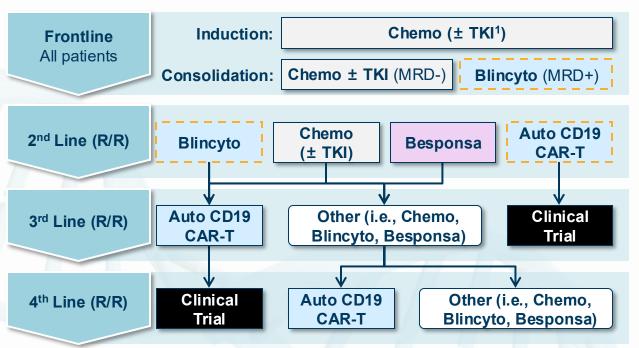


## Eti-cel (UCART20x22): High Response Rates in R/R NHL



### B-ALL: Chemo and Targeted Therapies Lead, Transplant Is the Cure

### **ALL Treatment Paradigm**





<sup>1</sup> Patients who achieve a complete response may receive a stem cell transplant if eligible (otherwise maintenance chemotherapy). R/R: Relapsed or Refractory; TKI: Tyrosine Kinase Inhibitor. Source: FDA Labels; NCCN Guidelines; UpToDate; Physician Interviews; ClearView Analysis.





Chemotherapy Clinical Trial

## Poor Response Rates after Targeted Therapy Failure<sup>1</sup>

### After targeted therapy failure, salvage chemo yields low ODD and MRD<sup>2</sup>:

High unmet need in heavily pretreated patients



Post Blina failure

ORR <20% MRD-ve <10%



Post Ino failure

ORR <10-15% MRD-ve <5-10%



Post CAR-T failure

ORR <10% MRD-ve <5%



### **Key Questions Being Addressed in BALLI-01 Trial**



Is Cellectis' manufactured product superior?



Is Alemtuzumab needed to optimize response?



What is the optimal dose?

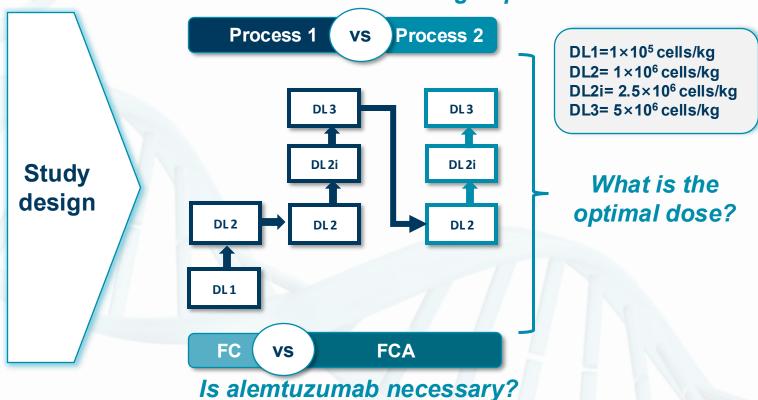


Which endpoint best reflects benefit?



### **BALLI-01 Study Design**

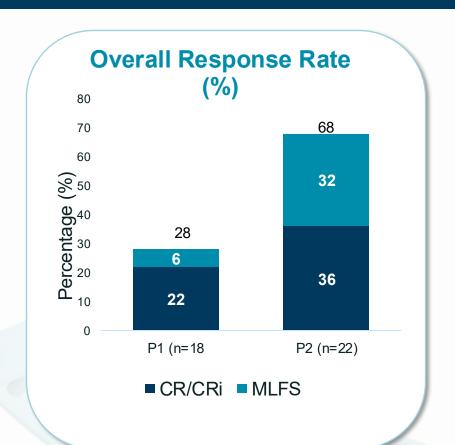
### Is our internal manufacturing superior?





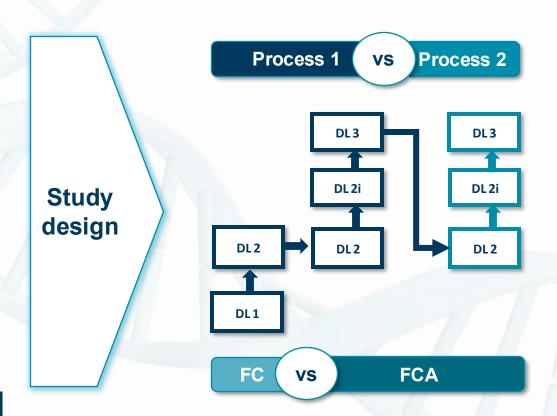
### Cellectis Manufactured Product (P2) Is Superior to CDMO Product (P1)

Higher response rates in P2 cohort





### **BALLI-01 Study Design**



DL1=1×10<sup>5</sup> cells/kg DL2= 1×10<sup>6</sup> cells/kg DL2i= 2.5×10<sup>6</sup> cells/kg DL3= 5×10<sup>6</sup> cells/kg



## **BALLI-01 Key Inclusion Criteria**



### **Key Inclusion**

- Age 15-70 years, adequate organ function
- ECOG PS ≤1
- B-ALL blast CD22 expression >70%
- >2 Prior lines
- Transplant ineligible



### **Key Outcomes**

- Safety
- Investigator assessed response
- RP2D of UCART22
- PK Alemtuzumab



## **Exploratory Objectives**

- UCART22 expansion
- Trafficking, persistence
- Immune Reconstitution

All patients transplant ineligible at study entry



## **BALLI 01 | Demographic and Baseline Characteristics**

	DL	DL3 P2	
	(n=12)	Age ≤ 50 (n=9)	Total (n=40)
Age (yrs), median (range)	27 (16-66)	23 (16-45)	27 (16-68)
Sex, n (%)			
Male	5 (41.7)	3 (33.3)	22 (55)
Female	7 (58.3)	6 (66.7)	18 (45)
ECOG PS, n (%)			
0	5 (41.7)	4 (44.4)	14 (35)
1	6 (50)	4 (44.4)	23 (57.5)
Missing	1 (8.3)	1 (11.1)	3 (7.5)
Number of prior treatments, median(range)	5 (2-11)	5 (4 – 11)	4 (2 – 11)
Prior HSCT, n (%)	4 (33.3)	4 (44.4)	18 (45)
Prior inotuzumab, n (%)	7 (58.3)	5 (55.6)	22 (55)
Prior blinatumomab, n (%)	11 (91.6)	8 (88.9)	32 (80)
Prior CD19 CAR T-cell therapy, n (%)	5 (41.7)	4 (44.4)	20 (50)
Bone Marrow blasts %	62.5 (14 – 91.5)	62.5 (14 – 91.5)	63.25 (1.0 – 99.0)



## Heavily Pretreated Population: Median 4-5 Prior Lines of Therapy

### Significant prior treatment with targeted therapies

80%

Previously treated

BLINCYTO® (blinatumomab)

55%

Previously treated



50%

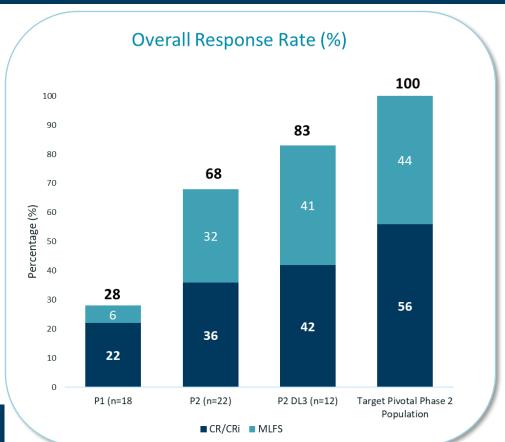
Previously treated







## High Response Rates in P2 Cohort



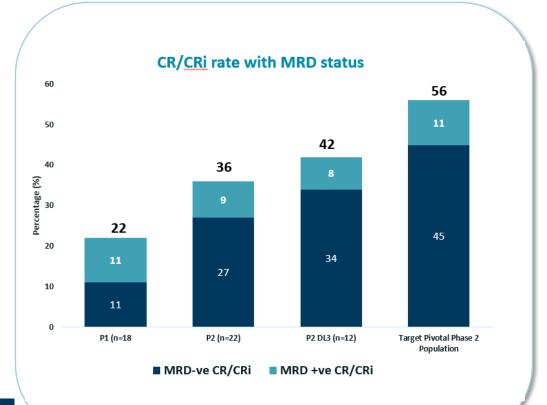
Recommended Phase 2 Dose: DL3

Target Phase 2 population:

DL3 ≤ 50 years



### **High Response Rates in P2 Cohort**

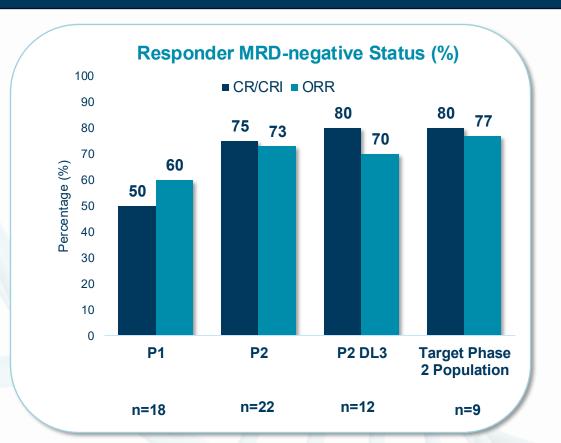


In Target Phase 2 population 80% who achieved CR/CRi were also MRD-ve



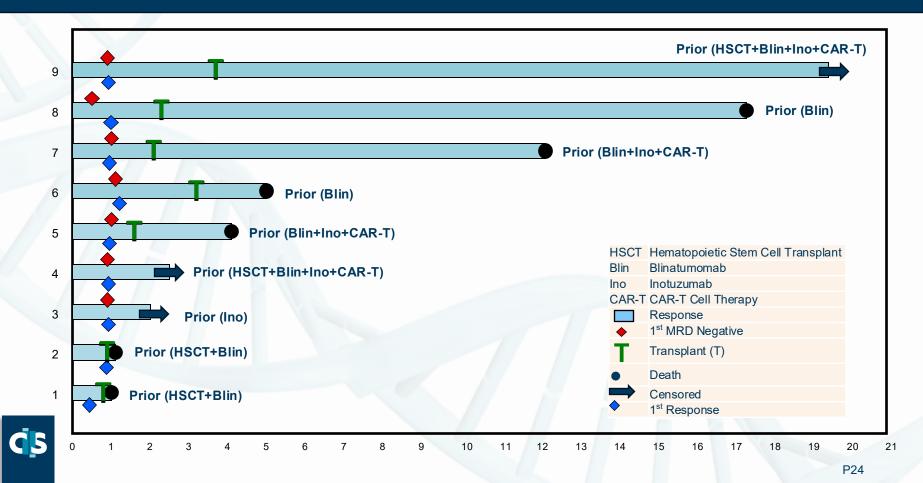
### **Deep Responses in P2 Cohort**

of MRD
Negativity
in Both
Cohorts



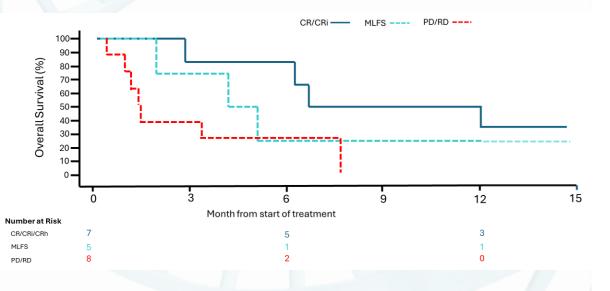


## **Swimmer Plot – Target Phase 2 Population**

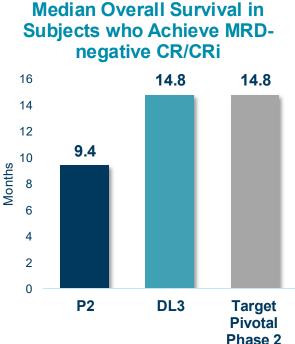


### Improved Survival in Patients Who Responded

### **Overall Survival over 12 months by Response (P2)**



14.8 months
Median overall survival in subjects who achieve MRD-negative CR/CRi



■ DL3 ■ Target Pivotal Phase 2 Population

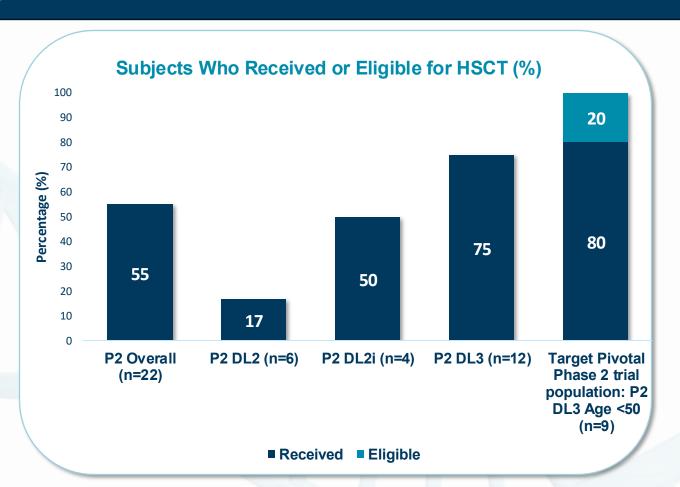


**Population** 

### **Achieving Transplant: an Important Clinical Outcome**

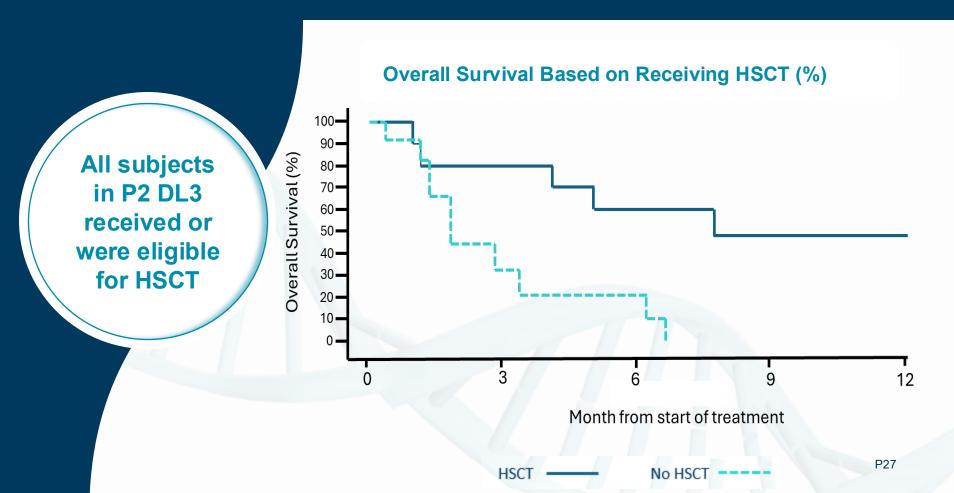
100% Received or Eligible for HSCT

In Phase 2 target population

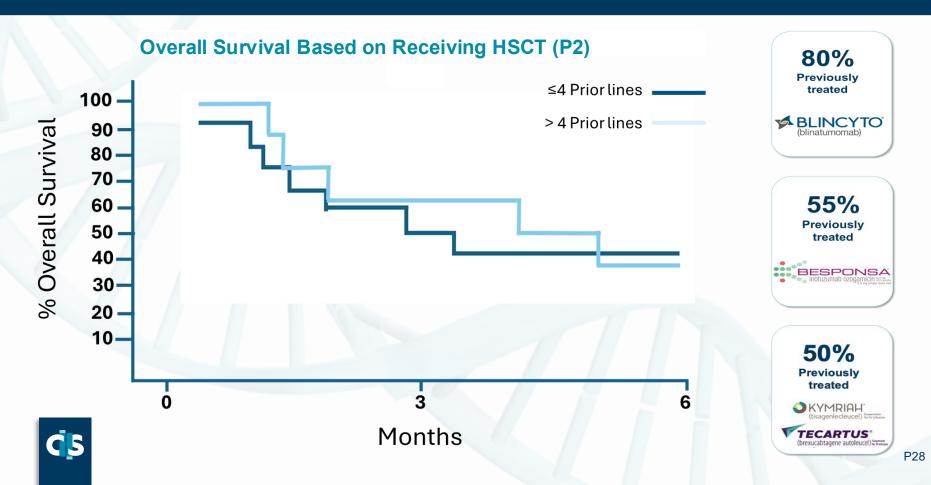




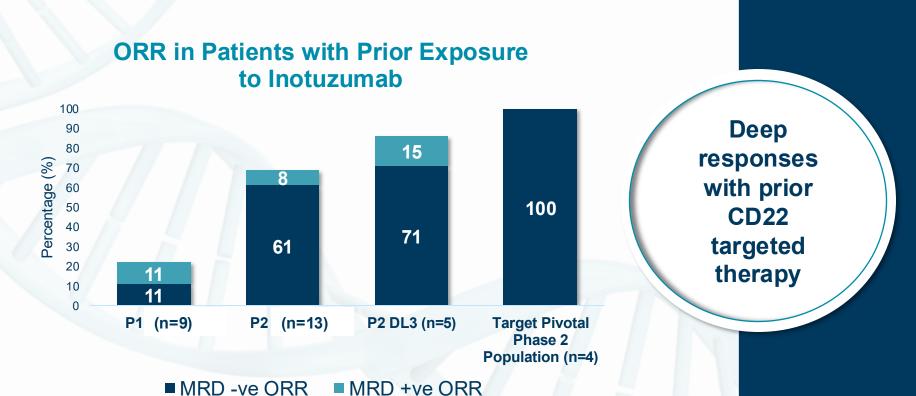
### Improved Survival in Patients Who Achieved Transplant



### **No Impact of Prior Lines of Treatment on Outcome**

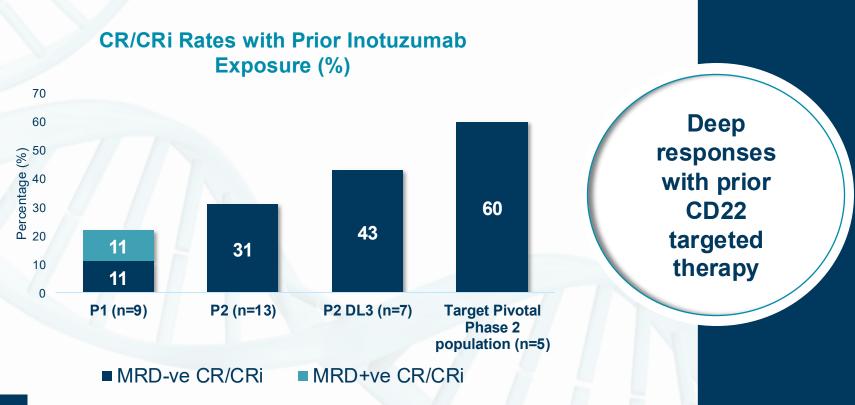


### **High ORR in Patients Who Had Prior Inotuzumab**





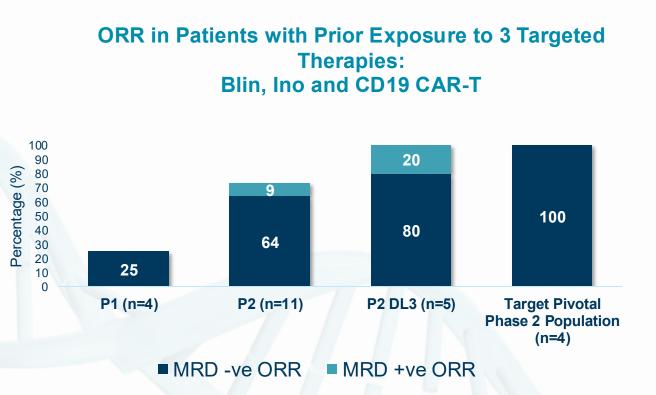
### High CR/CRi Rate in Patients Who Had Prior Inotuzumab





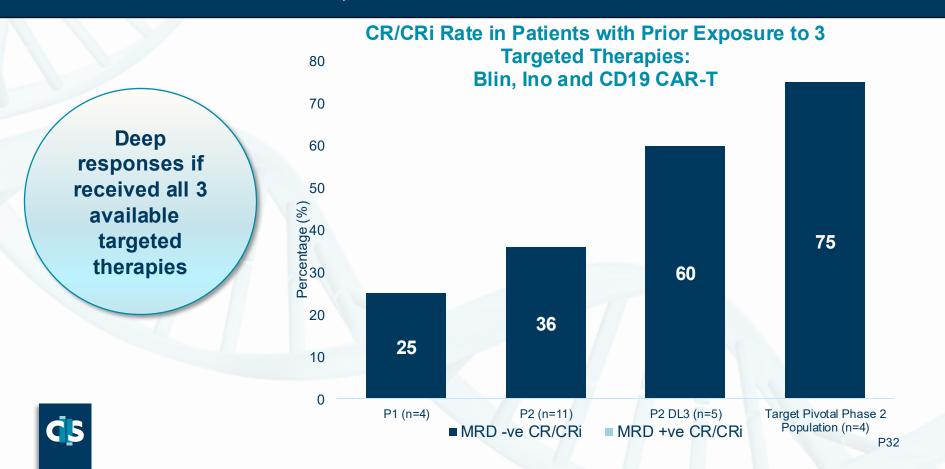
# High ORR in Patients Exposed to 3 Prior Targeted Therapies: Inotuzumab, Blinatumomab and CD19 CAR-T

Deep responses if received all 3 available targeted therapies

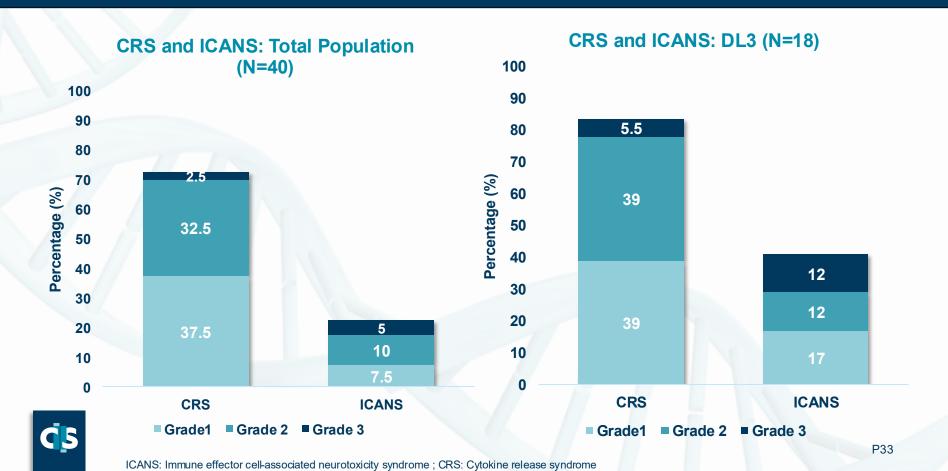




# High CR/CRi Rates in Patients Exposed to 3 Prior Targeted Therapies: Inotuzumab, Blinatumomab and CD19 CAR-T



### **Low Incidence of Grade ≥ 3 CRS and ICANS**



## **No Current Signal for IEC-HS**

# Significant interest in the risk of IEC-HS based on prior CD22 targeting autologous CAR-T

IEC-HS incidence

- One case observed in BALLI-01
- Grade 2 HLH Day 5
- Resolved with Anakinra/Dex

No evidence of CD22 target related effect



## **Lasme-cel | Related SAEs\***

Preferred Term	Grade	Dose Level	DL3 (n=18)	ALL (n=40)
Cytokine release syndrome -	3	DL3	1 (5.5)	2 (5)
	2	DL2		
Immune effector cell-associated neurotoxicity syndrome	3	DL3	2 (11.1)	2 (5)
Platelet count decreased	4	DL2		1 (2.5)
Hydrocephalus	3	DL2		1 (2.5)
Sepsis	5	DL2		1 (2.5)
Graft versus host disease in skin	2	DL2i (P1)		1 (2.5)
Multiple organ dysfunction syndrome*	5	DL3	1 (5.5)	1 (2.5)



\*One Dose limiting Toxicity at DL3: Additional guidance added to protocol to limit risk of recurrence

### Lasme-cel | Adverse Events of Special Interest (AESI)

Preferred Term	Grade	Dose Level	DL3 (N=18, %)	All (N=40, %)
Patients with at least 1 AESI			4 (22.2)	5 (12.5)
Cytokine release syndrome	3	DL3 (P2)	1 (5.5)	1 (2.5)
Immune effector cell-associated neurotoxicity syndrome	3	DL3 (P2)	2 (11.1)	2 (5)
Graft versus host disease in skin	2	DL2i (P1)		1 (2.5)
Infusion related reaction	4	DL3	1(5.5)	1 (2.5)

### CRS

Started 5 days after infusion of UCART22 and lasted for 6 days

### **ICANS**

- One subject Started 12 days after infusion and lasted 3 days
- One subject Started 6 days after infusion and lasted for 2 days



### **CLLS52** Related Infections: Grade ≥ 3

7/35 (20%) of subjects had infection Grade ≥ 3 considered related to alemtuzumab

Phase 2 Risk Mitigation: Enhanced Prophylaxis

P1 or P2	Dose Level	Preferred Term	Grade	Related to Alemtuzumab	Related to Cyclophosphamide	Related to Fludarabine
P1	DL3	Oral herpes	3	YES	NO	NO
P1	DL3	Cystitis bacterial	3	YES	NO	NO
P1	DL3	Herpes simplex reactivation	3	YES	YES	YES
P1	DL3	Cellulitis	3	YES	YES	YES
P2	DL2	Sepsis	5	YES	YES	YES
P2	DL2i	Sepsis	3	YES	YES	YES
P2	DL3	Aspergillus infection	5	YES	YES	YES
P2	DL3	Sinusitis	3	YES	YES	YES
P2	DL3	Stomatococcal infection	3	YES	YES	YES
P2	DL3	Sinusitis fungal	3	YES	YES	YES

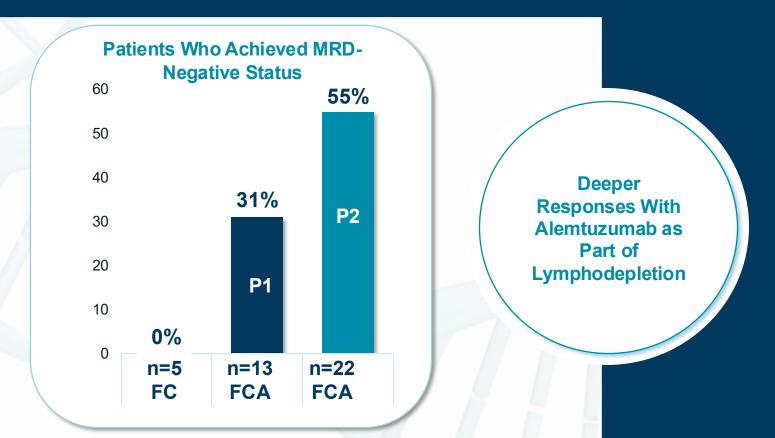


### **CMV** Reactivation: All Subjects

Dose Level	P1 or P2	Preferred Term	Grade Value	Related to UCART	Related to Alemtuzumab	Related to Cyclophosphamide	Related to Fludarabine
DL2	P1	Cytomegalovirus infection	2	No	YES	YES	YES
DL2I	P1	Cytomegalovirus infection reactivation	2	No	NO	NO	NO
DL2	P2	Cytomegalovirus infection	2	No	YES	YES	YES
DL3	P2	Cytomegalovirus infection	2	No	NO	NO	NO
DL3	P2	Cytomegalovirus infection	2	No	YES	YES	YES
DL3	P2	Cytomegalovirus infection reactivation	1	No	YES	YES	YES



### Data Suggest Alemtuzumab Is Key to Achieving Response







### Clear Registration Path for Lasme-Cel in r/r-ALL

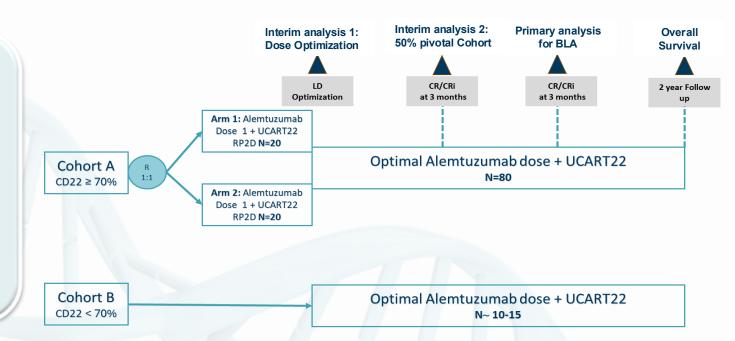




#### Phase 2 Pivotal Phase 2

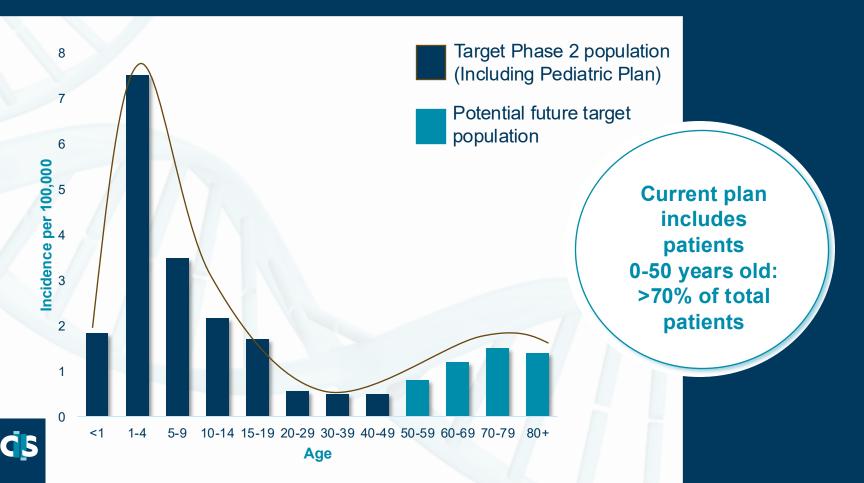
Primary Endpoint:
CR / CRi,
evaluated within
3 months (from
Day 28 to Day 84)

Age 12-50 years



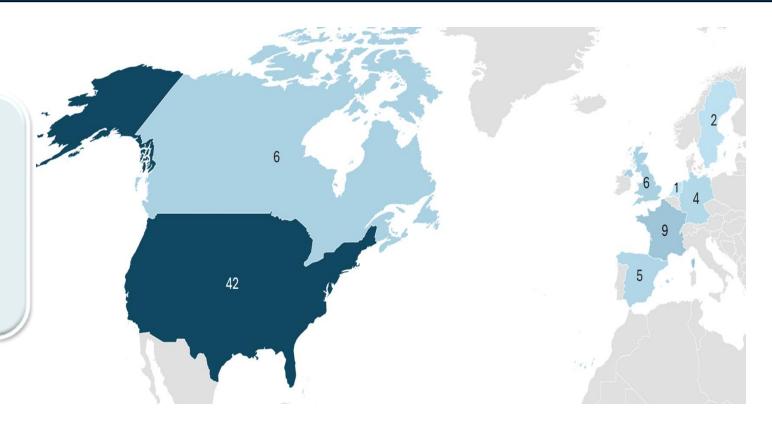


### **Age Distribution of ALL**



### **Recruitment Driven by 75 Planned Study Sites**

75 Study
centers
planned in
North
America and
Europe





# Clear Registration Path to BLA Submission Targeted For 2028: Key Anticipated Milestones



### **Multiple Catalysts to 2H 2028**





### Lasme-cel is a Highly Differentiated Off-the-shelf CAR-T

#### **Lasme-cel Product Overview and Differentiation**

CD22 CAR

Potential first-in-class **CD22 CAR-T**, providing a potent alternative to CD19-targeting agents

**Allogeneic Therapy** 

Off-the-shelf therapy enables immediate treatment initiation, significantly broadening the addressable market

Fully Internalized Manufacturing

Manufacturing and logistics excellence can enable **fast uptake upon potential commercialization** 

**Highly Attractive Margins** 

**High pricing potential** with **significantly lower manufacturing costs** than autologous CAR-T



### Lasme-cel Can Fill Whitespace In the B-ALL Treatment Paradigm

#### **Select FDA-Approved Therapies in B-ALL**

	Target				
	CD19	CD22			
ADC		BESPONSA: inotuzumab ozogamina national ozogamina n			
TCE	BLINCYTO (blinatumomab) finguistion 35 mag angue-doze wall				
Auto CAR-T	(tisagenlecleucel) the obecabtagene autoleucel (bexucabtagene autoleucel) (				
Allo CAR-T		celectis Lasme-cel			

Lasme-cel is positioned to be the first CD22 allogeneic CAR-T therapy to market



#### **ALL Treatment Paradigm**

Frontline

Consolidation:

Chemo (± TKI¹)

Consolidation:

Blincyto

± Chemo ± TKI

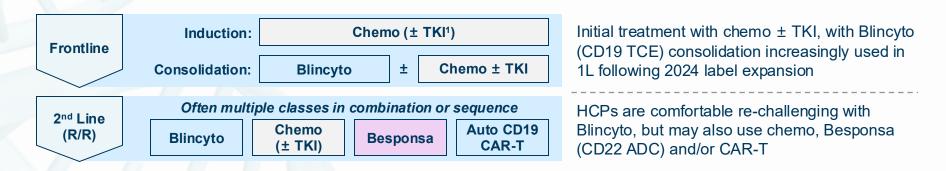
Initial treatment with chemo ± TKI, with Blincyto (CD19 TCE) consolidation increasingly used in 1L following 2024 label expansion



<sup>1</sup> Patients who achieve a complete response may receive a stem cell transplant if eligible (otherwise maintenance chemotherapy). HCP: Health Care Provider; IO: Immuno-oncology; R/R: Relapsed or Refractory; TCE: T Cell Engager; TKI: Tyrosine Kinase Inhibitor. Source: FDA Labels; NCCN Guidelines; UpToDate; Physician Interviews: ClearView Analysis.

Key: CD19 Targeting	CD22	Chemo-	Clinical
	Targeting	therapy	Trial

#### **ALL Treatment Paradigm**

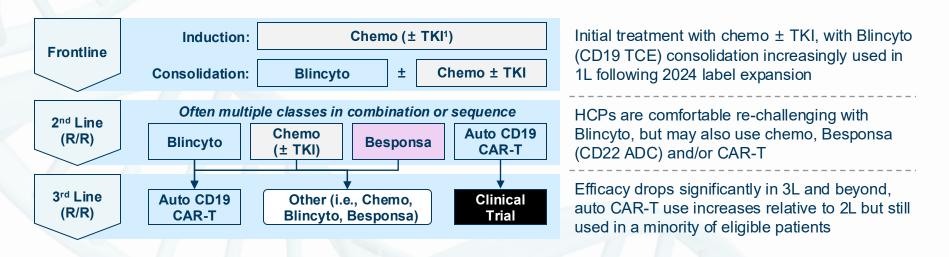




Patients who achieve a complete response may receive a stem cell transplant if eligible (otherwise maintenance chemotherapy). HCP: Health Care Provider; IO: Immuno-oncology; R/R: Relapsed or Refractory; TCE: T Cell Engager; TKI: Tyrosine Kinase Inhibitor. Source: FDA Labels; NCCN Guidelines; UpToDate; Physician Interviews: ClearView Analysis.

Key:	CD19 Targeting	CD22 Targeting	Chemo- therapy	Clinical Trial

#### **ALL Treatment Paradigm**

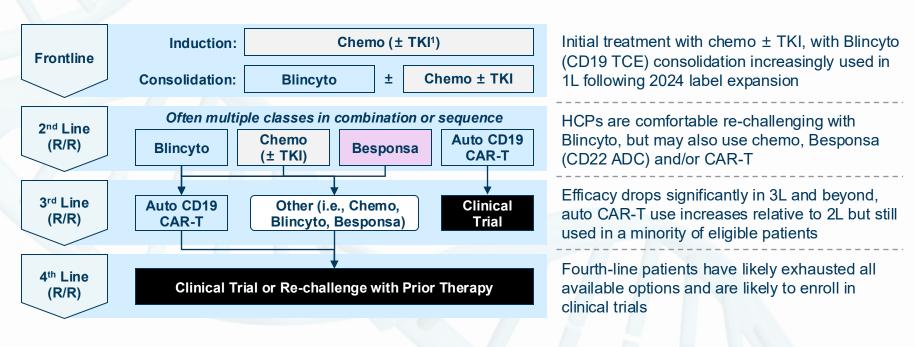




<sup>1</sup> Patients who achieve a complete response may receive a stem cell transplant if eligible (otherwise maintenance chemotherapy). HCP: Health Care Provider; IO: Immuno-oncology; R/R: Relapsed or Refractory; TCE: T Cell Engager; TKI: Tyrosine Kinase Inhibitor. Source: FDA Labels; NCCN Guidelines; UpToDate; Physician Interviews; ClearView Analysis.

Key:	CD19 Targeting	CD22 Targeting	Chemo- therapy	Clinical Trial

#### **ALL Treatment Paradigm**



**ds** 

<sup>1</sup> Patients who achieve a complete response may receive a stem cell transplant if eligible (otherwise maintenance chemotherapy). HCP: Health Care Provider; IO: Immuno-oncology; R/R: Relapsed or Refractory; TCE: T Cell Engager; TKI: Tyrosine Kinase Inhibitor. Source: FDA Labels; NCCN Guidelines; UpToDate; Physician Interviews; ClearView Analysis.

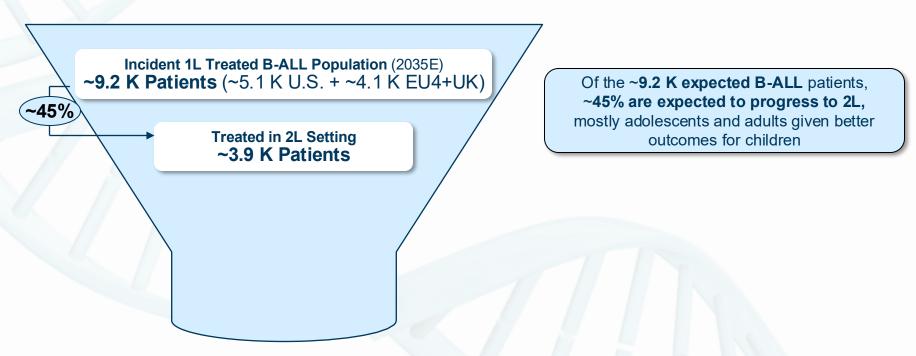
Key: CD19	Chemo- therapy	Clinical Trial

#### U.S. and EU4+UK 2035E Lasme-cel Addressable Population

Incident 1L Treated B-ALL Population (2035E) ~9.2 K Patients (~5.1 K U.S. + ~4.1 K EU4+UK)

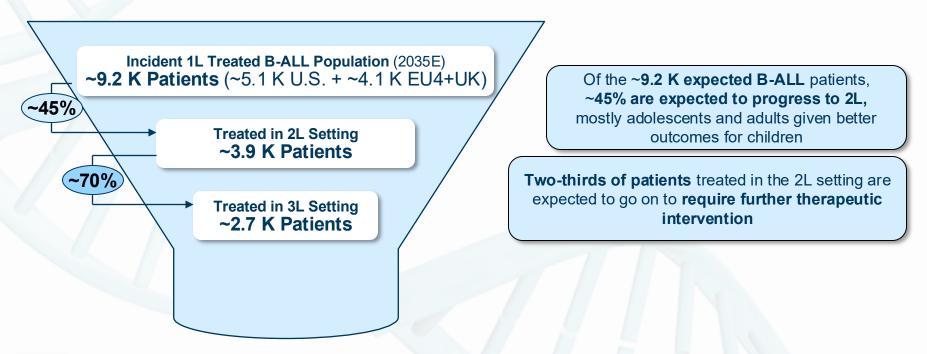


#### U.S. and EU4+UK 2035E Lasme-cel Addressable Population



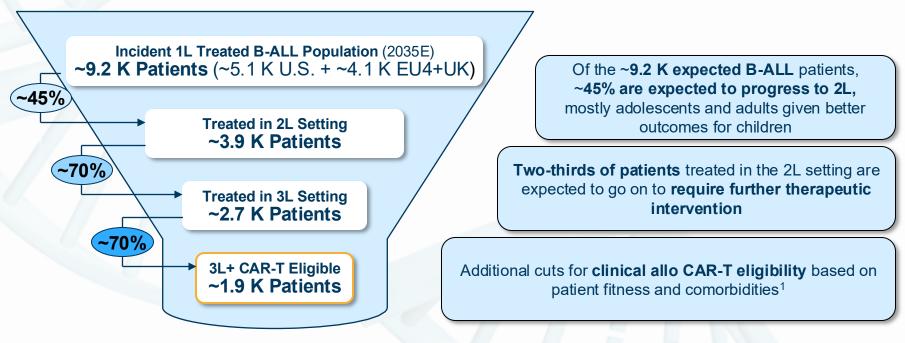


#### U.S. and EU4+UK 2035E Lasme-cel Addressable Population





#### U.S. and EU4+UK 2035E Lasme-cel Addressable Population





### Lasme-cel Has the Potential To Capture a Majority of the 3L+ Market

#### **Value Proposition of 3L+ Treatment Options**

#### Lasme-cel

- ★ Alternative target to CD19
- ♠ One-time dosing

- ◆ Off-the shelf availability
- ♠ Deep, MRD- responses in 3L+

"MRD negativity is very encouraging compared to what we have in third line."

ALL Key Opinion Leader

Illustrative Lasme-cel Pref. Share Among Eligible Patients

~65%

Interviewed physicians indicated an expectation to use lasme-cel in a majority of eligible 3L+ patients if available; oncology analogs suggest preferred drug class could achieve 45 – 85% market share

#### Blincyto

- ♣ Often used in 1L / 2L
- Re-challenges CD19

#### Besponsa

- ♣ Repeat dosing
- ♣ Poor durability
- Often already used in 2L

#### Auto CD19 CAR-T

- Complex manufacturing
- ♣ Re-challenges CD19

#### Chemotherapy

- Limited efficacy in 3L+
- ♣ Highly toxic

"You could infuse this rapidly, in a small number of days, which would be favorable compared to CD19 CAR-T."

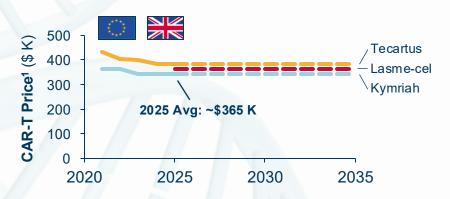
– ALL Key Opinion Leader

"After blina up front, then"
maybe a CD19 CAR-T...
then you really need
something else after
another relapse."
– ALL Key Opinion Leader,



### Lasme-cel Has High Pricing Potential Across the EU4 + UK and U.S.

#### Lasme-cel Ilustrative List Price, If Approved



 Lasme-cel illustrative anchor price triangulated from 2025 averaged EU4 + UK CAR-T price range of \$285 – 430 K, with 2035 list price assumed to remain constant with 2025

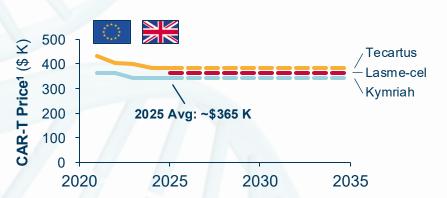
2025 Anchor Price: ~\$365 K

2035 List Price: ~\$365 K



### Lasme-cel Has High Pricing Potential Across the EU4 + UK and U.S.

#### Lasme-cel Ilustrative List Price, If Approved



1,000 | Kymriah | Aucatzyl | Lasme-cel | Tecartus | 200 | 2025 | Avg: ~\$515 K | 2020 | 2025 | 2030 | 2035

 Lasme-cel illustrative anchor price triangulated from 2025 averaged EU4 + UK CAR-T price range of \$285 – 430 K, with 2035 list price assumed to remain constant with 2025

2025 Anchor Price: ~\$365 K

2035 List Price: ~\$365 K

 Lasme-cel illustrative anchor price triangulated from 2025 CAR-T price range of \$420 – 590 K, with projected 2035 list price based on 2021 – 2025 price growth CAGR (~5%)

2025 Anchor Price: ~\$515 K

2035 List Price: ~\$840 K



### Lasme-cel Could Achieve Up To ~\$700 M in Peak Gross Sales (U.S., EU4, UK)

Assumption			Source / Rationale
Addressable Patients (#)	~1.1 K	~840	Represents expected 3L CAR-T eligible patients in 2035
	X	X	
Preference Share (%)	~65%	~65%	<ul> <li>Triangulated using physician-reported preferences and average market share of preferred oncology treatment classes with superior efficacy (e.g., PD-1 in NSCLC, PARPi in HRD OC, CAR-T vs HSCT in lymphoma)<sup>1</sup></li> </ul>
	X	X	
Market Access (%)	~90%	~90%	Based on industry standard assumption in oncology, triangulated with Yescarta access for both the U.S. and EU4+UK
	/ A = \\	=	
Treated Patients (#)	~620	~490	
	X	X	
Gross Price (\$)	~\$840 K	~\$365 K	<ul> <li>Price anchored on 2025 references for Kymriah, Tecartus, and Aucatzyl (Navlin), with 2035 projections using ~5% CAGR in the U.S. and flat pricing across EU4+UK</li> </ul>
	=	=	
Peak Gross Sales (\$)	~\$520 M	~\$180 M	

2035E Potential Peak Gross Sales (U.S., EU4, UK)

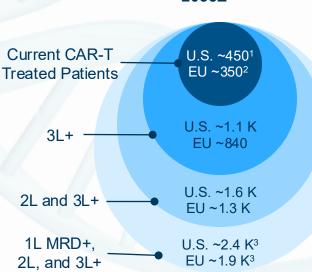
Up to ~\$700 M



### Peak Sales Could Increase to Up To ~\$1.3 B with Label Expansion

#### ILLUSTRATIVE





#### **Patient Segment**

**3L+** (Potential First Approval)
Large opportunity in the initial lasme-cel indication

#### **Expansion to Second Line**

Increased opportunity despite slight cannibalization of 3L sales<sup>4</sup>

#### **Indication in 1L MRD+**

Lasme-cel as 1L consolidation therapy in MRD+ patients<sup>4</sup>

1L MRD+, 2L, and 3L

#### **Peak Sales**

~\$700 M

+

~\$380 M

۲

~\$220 M

Up to ~\$1.3 B



### Lasme-cel Can Drive Meaningful Growth of the CAR-T Market In B-ALL

First-in-class Immunotherapy Beyond CD19

Lasme-cel Opportunity

Deep Responses with High CR Rates and Impressive MRD Negativity

Robust Peak Sales Potential (Up To ~\$700 M) With Highly Attractive Margins



## Clear Registration Path to BLA Submission Targeted For 2028: Key Anticipated Milestones



### **Multiple Catalysts to 2H 2028**



### **Cellectis Strategic Roadmap**

Lasme-cel Potential BLA Filing in r/r B-ALL (2028)

Eti-cel Potential EoP1 in r/r NHL (2026)

Preclinical PoC for *In Vivo* Gene Therapy (2026)



### Thank You

## Reach us at: investors@cellectis.com

#### **Cellectis Paris**

8, rue de la Croix Jarry 75013 Paris – France



#### **Cellectis New York**

430 East 29th Street New York, NY, 10016 – USA



#### **Cellectis Raleigh**

2500 Sumner Boulevard Raleigh, NC, 27616 – USA



