

# Nuove prospettive future nei linfomi: Aspetti terapeutici

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## Disclosure: Luigi Rigacci

Company name	Research support	Consultant	Stockholder	Speakers bureau	Advisory board	Other
Gilead				Х	Х	
Novartis				X	X	
Sandoz				X	X	
Abbvie				X	X	
Sobi					X	
Celgene				X		
Janssen				X	X	
Incyte				X	X	
Menarini		x				
Takeda					X	

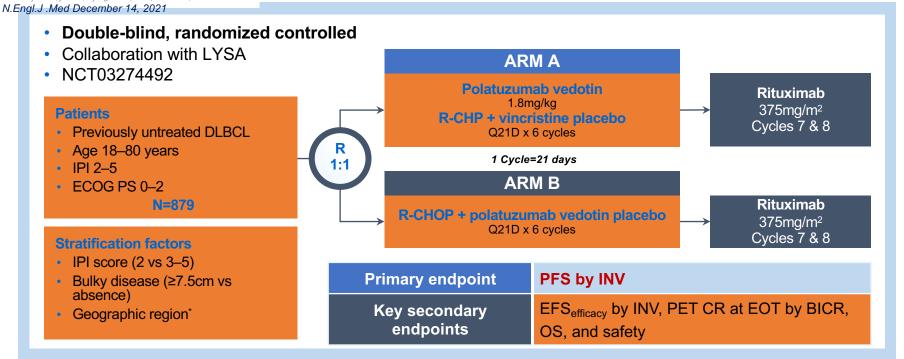
# DLBCL prima linea

ORIGINAL ARTICLE

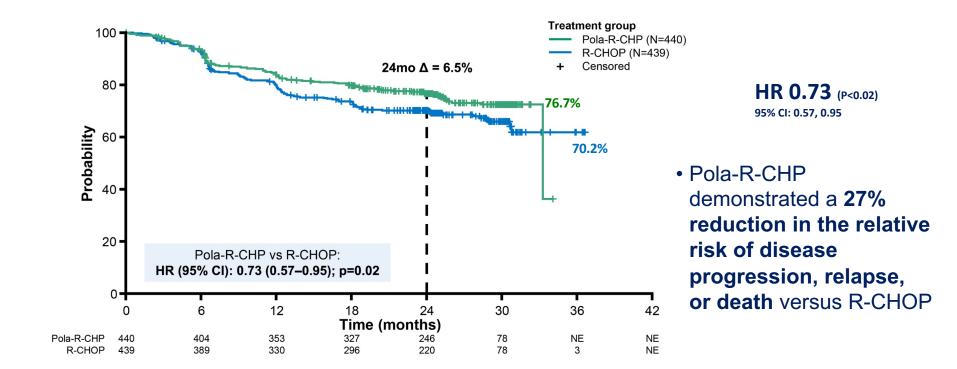
#### Polatuzumab Vedotin in Previously Untreated Diffuse Large B-Cell Lymphoma

H. Tilly, F. Morschhauser, L.H. Sehn, J.W. Friedberg, M. Trnöný, J.P. Sharman, C. Herbaux, J.M. Burke, M. Matasar, S. Rai, K. Izutsu, N. Mehta-Shah, L. Oberic, A. Chauchet, W. Jurczak, Y. Song, R. Greil, L. Mykhalska, J.M. Bergua-Burgués, M.C. Cheung, A. Pinto, H.-J. Shin, G. Hapgood, E. Munhoz, P. Abrisqueta, J.-P. Gau, J. Hirata, Y. Jiang, M. Yan, C. Lee, C.R. Flowers, and G. Salles

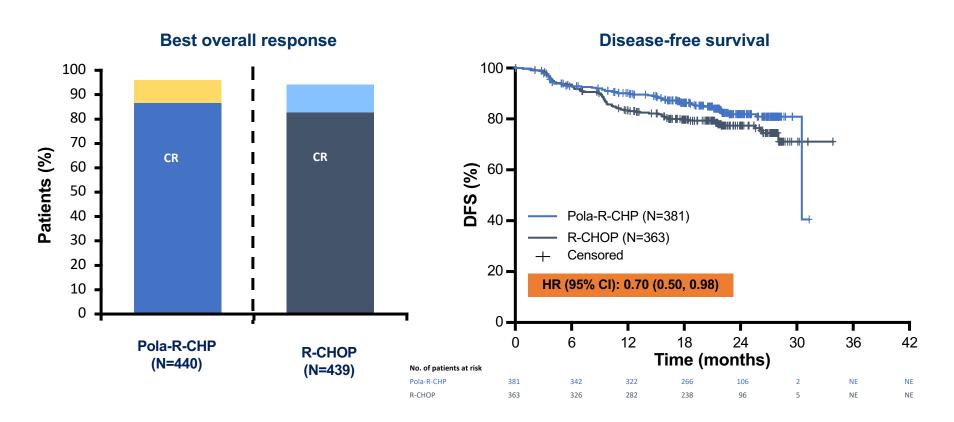
### Polarix: study design overview



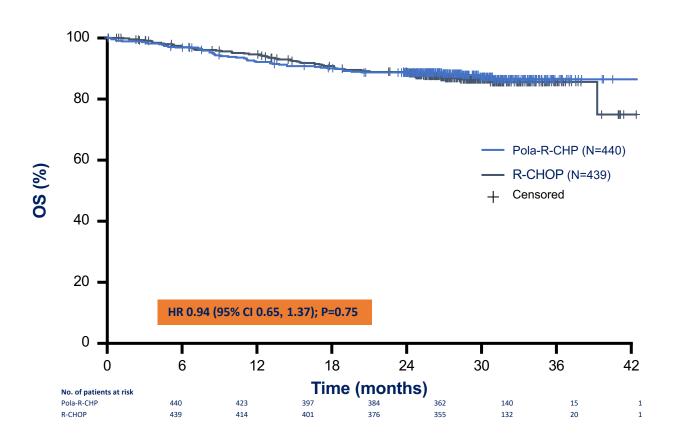
# Primary end-point Investigator-assessed PFS (ITT population)



### Response rates and disease-free survival



### Overall survival



# Mosunetuzumab and Polatuzumab Vedotin Demonstrates Preliminary Efficacy in Elderly Unfit or Frail Patients with Previously Untreated Diffuse Large B-Cell Lymphoma

Adam J. Olszewski, <sup>1</sup> Herbert Eradat, <sup>2</sup> Abraham Avigdor, <sup>3,4</sup> Netanel A. Horowitz, <sup>5</sup> Sunil Babu, <sup>6</sup> Itai Levi, <sup>7</sup> Matthew McKinney, <sup>8</sup> Seung Tae Lee, <sup>9</sup> Juan Miguel Bergua Burgues, <sup>10</sup> Antonia Rodriguez, <sup>11</sup> Mariana Bastos-Oreiro, <sup>12</sup> Chezi Ganzel, <sup>13,14</sup> Tae Min Kim, <sup>15</sup> Youngwoo Jeon, <sup>16</sup> Michal Taszner, <sup>17</sup> Mayur Narkhede, <sup>18</sup> Won Seog Kim, <sup>19</sup> Ho-Jin Shin, <sup>20</sup> David Lavie, <sup>21</sup> Dariusz Woszczyk, <sup>22</sup> Diana Dunshee, <sup>23</sup> Amy V. Kapp, <sup>23</sup> Mingzhu Zhou, <sup>24</sup> Connie Lee Batlevi, <sup>23</sup> Wahib Ead, <sup>23</sup> Gila Sellam, <sup>25</sup> Wojciech Jurczak <sup>26</sup>

<sup>1</sup>Brown University, Providence, RI, USA; <sup>2</sup>University of California, Los Angeles, CA, USA; <sup>3</sup>Sheba Medical Center, Ramat Gan, Israel; <sup>4</sup>Tel Aviv University, Tel Aviv, Israel; <sup>5</sup>Rambam Health Care Campus, Technion, Haifa, Israel; <sup>6</sup>Fort Wayne Medical Oncology and Hematology, Fort Wayne, IN, USA; <sup>7</sup>Soroka University Medical Center, Be'er-Sheva, Israel; <sup>8</sup>Puke Cancer Institute, Durham, NC, USA; <sup>9</sup>University of Maryland School of Medicine, Greenebaum Comprehensive Cancer Center, Baltimore, MD, USA; <sup>10</sup>San Pedro de Alcántara Hospital, Cáceres, Spain; <sup>11</sup>University Hospital October 12, Madrid, Spain; <sup>12</sup>Shaare Zedek Medical Center, Jerusalem, Israel; <sup>14</sup>Hebrew University of Jerusalem, Jerusalem, Israel; <sup>15</sup>Seoul National University Hospital, Seoul, Republic of Korea; <sup>16</sup>University Clinical Center, Medical University of Gdańsk, Gdańsk, Poland; <sup>18</sup>University of Alabama at Birmingham, Birmingham, AL, USA; <sup>19</sup>Sungkyunkwan University School of Medicine, Seoul, Republic of Korea; <sup>20</sup>Biochemical Research Institution, Pusan National University Hospital School of Medicine, Busan, Republic of Korea; <sup>21</sup>Hadassah Medical Center, Jerusalem, Israel; <sup>22</sup>University of Poole, Provincial Hospital, Opole, Poland; <sup>23</sup>Genentech, Inc., South San Francisco, CA, USA; <sup>24</sup>F. Hoffmann-La Roche Ltd, Shanghai, China; <sup>25</sup>F. Hoffmann-La Roche Ltd, Shasel. Switzerland; <sup>26</sup>Maria Skłodowska-Curie National Research Institute of Oncology. Kraków, Poland

### Study overview

#### Key inclusion criteria

- Previously untreated DLBCL
- Age ≥80 years OR age 65–79 years and considered ineligible\* for CIT
- ECOG PS 0-2

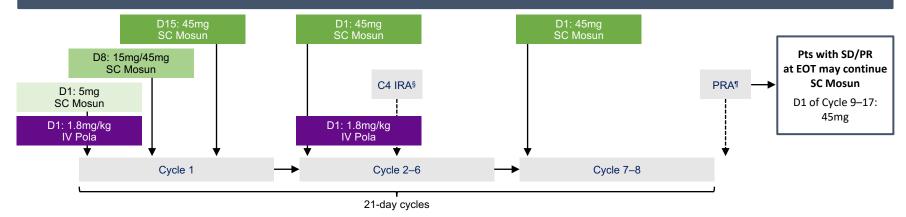
#### **CRS** mitigation strategies

- Step-up SC Mosun dosing in Cycle 1
- Pre-medication with dexamethasone in Cycle 1<sup>†</sup>
- Pre-medication with acetaminophen and diphenhydramine may also be given<sup>‡</sup>

#### Primary efficacy endpoint

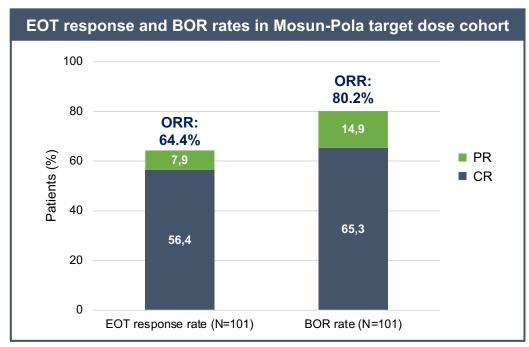
- ORR by PET-CT at the PRA as assessed by IRC according to Lugano 2014 criteria<sup>1</sup>
- Additional objectives: Evaluation of safety, immunogenicity, pharmacokinetics, and pharmacodynamics

#### SC Mosun-Pola administration: Cohort C1 (N=7): 5/15/45mg; Cohort C2 + C Expansion (N=101): 5/45/45mg (target dose cohort)



### simplified geriatric assessments

# Investigator-assessed EOT and BOR response rates



Response rate, n (%)	EOT N=101	BOR N=101
ORR	65 (64.4)	81 (80.2)
CR	57 (56.4)	66 (65.3)
PR	8 (7.9)	15 (14.9)
SD	4 (4.0)	4 (4.0)
PD	10 (9.9)	4 (4.0)
ND	22 (21.8)*	12 (11.9) <sup>†</sup>

- 6/8 pts with PR at EOT continued treatment beyond Cycle 8, and 3/6 pts converted from PR to CR during continuation
- The difference between BOR and EOT is attributed to 22 patients who did not reach the EOT visit due to AEs, death, and subject withdrawal, which reflects the frailty and high co-morbidity burden of the study population

Mosun-Pola induces encouraging response rates in elderly unfit or frail pts with previously untreated DLBCL

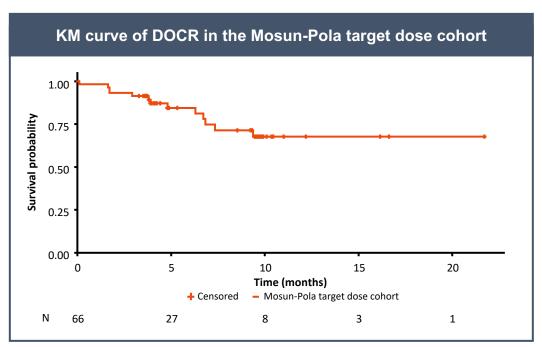
### Fatal AE summary

	All N=108		
n (%)	Any	Treatment- related	
Gr 5 AEs	18 (16.7)	5 (4.6)	
Infections	13 (12.0)	4 (3.7)	
COVID-19 pneumonia	9 (8.3)	1 (0.9)	
COVID-19	1 (0.9)	1 (0.9)	
Staph bacteremia	1 (0.9)	1 (0.9)	
Sepsis	1 (0.9)	0	
Pneumonia	1 (0.9)	1 (0.9)	
Other Gr 5 AEs	5 (4.6)	1 (0.9)	
Unexplained death	2 (1.9)	1 (0.9)	
Pulmonary embolism	1 (0.9)	0	
Suicide	1 (0.9)	0	
Cardiac arrest	1 (0.9)	0	

- 13/18 fatal AEs were infections
  - 77% (10/13) of fatal AEs of infection were COVID-19
  - 80% (8/10) of fatal COVID-19 events occurred during the Omicron waves in 2022, with no trend related to geographic location
  - 80% (8/10) of pts with fatal COVID-19 events were frail per simplified geriatric assessment
  - All pts had received at least one dose of COVID-19 vaccine
  - 70% (7/10) of pts with fatal COVID-19 events received COVID-specific antiviral treatments

The COVID-19 pandemic impacted the safety profile observed in the current study; other fatal AEs were comparable with those observed in similar patient populations

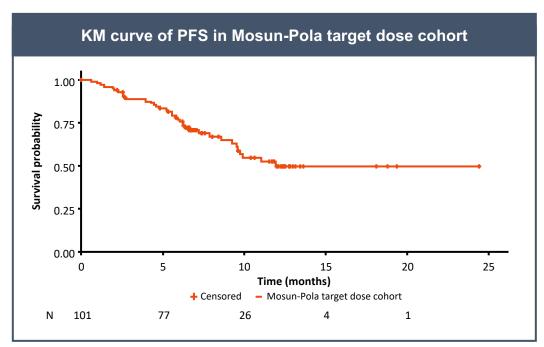
### DOCR in Mosun-Pola target dose cohort



	Mosun-Pola target dose cohort N=101
Complete responders, n (%)	66 (65.3)
Median follow up time, months (range)	12.6 (1–25)
	Mosun-Pola target dose cohort N=66
Median DOCR, months (range)	NE
9-month DOCR event-free rate, % (95% CI)	71.4 (56.8, 85.9)
Patient disposition Censored/no event at CCOD Event Disease progression Death after CR	53 (80.3) 13 (19.7) 2 (3) 11 (17)

Mosun-Pola induces durable CRs in elderly unfit or frail pts with previously untreated DLBCL

### PFS in Mosun-Pola target dose cohort



	Mosun-Pola target dose cohort N=101
Median PFS, months (95% CI)	11.9 (9.5, NE)
9-month PFS event-free rate, % (95% CI)	64.8 (54.2, 75.5)
12-month PFS event-free rate, % (95% CI)	49.7 (36.8, 62.5)
Patient disposition Censored/no event at CCOD Event Disease progression Death	64 (63.4) 37 (36.6) 12 (12) 25 (25)

Early data show encouraging PFS with Mosun-Pola in elderly unfit or frail pts with previously untreated DLBCL

# DLBCL R/R

### Novel therapies approved in RR-DLBCL

Other than CAR-T

	Pola-BR	Loncast. Tesirine	Tafasitamab/Lena	Selinexor
MOA	Anti-CD79b ADC	Anti-CD19 ADC	Anti-CD19 mAb/Immunomod	XPO-1 inhibitor
ORR	45%	48%	58%	28%
CR rate	40%	24%	40%	10%
PFS	9.2 m	4.9 m	11.6 m	2.6 m
DOR	12.6 m	10.3 m	43.9 m	9.3 m
OS	12.4 m	9.9 m	33.5 m	NR

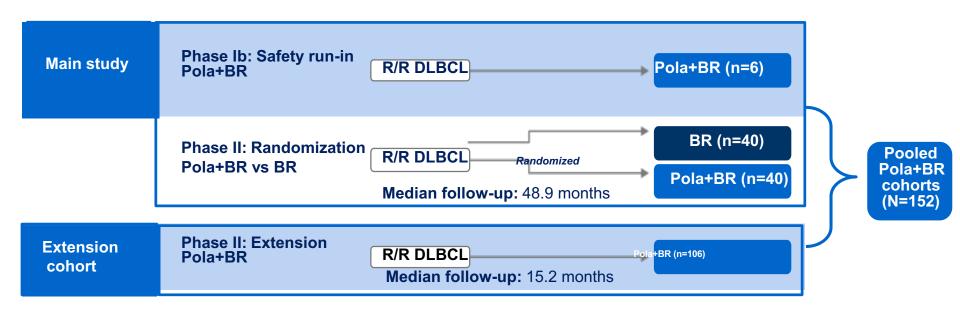
# Randomised Phase II study of pola-BR versus BR (GO29365): study design

### Key eligibility criteria

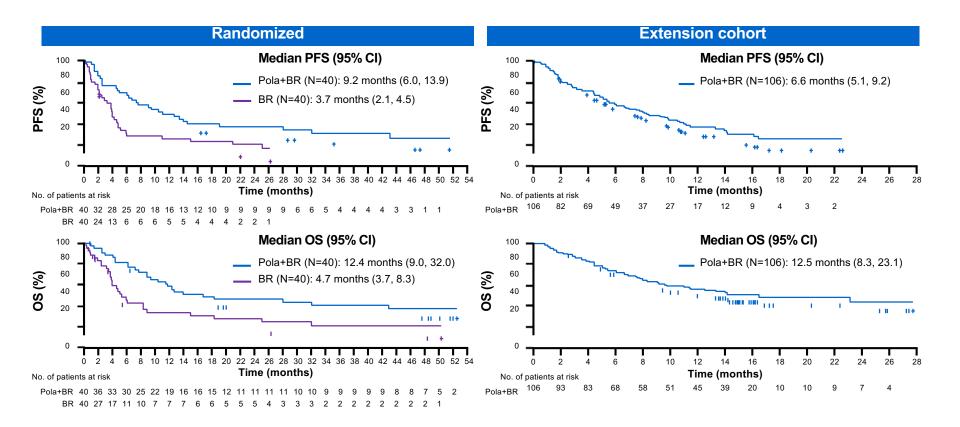
**Inclusion:** transplant-ineligible DLBCL, after at least 1 line of therapy

**Exclusion:** prior allogeneic SCT; history of transformation from indolent disease;

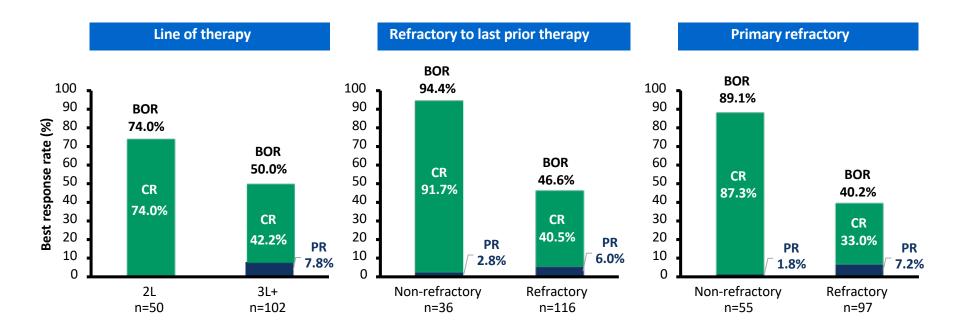
current Grade >1 PN



### PFS and OS in randomized and extension cohorts



# Best objective response in the pooled Pola+BR cohort (152 pts) according to line of therapy and refractory status



Responses were observed regardless of line of therapy and refractory status. The vast majority of responding patients achieved a CR

# MODE OF ACTIONS PROVIDE THE RATIONALE FOR TAFASITAMAB + LENALIDOMIDE COMBINATION

#### Tafasitamab MoA

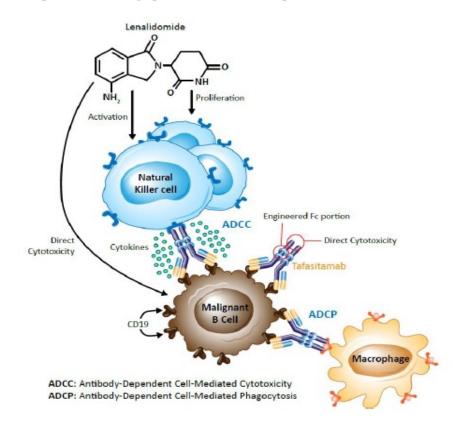
- Antibody Dependent Cellular Cytotoxicity via NK cells (ADCC)
- Antibody Dependent Cellular Phagocytosis (ADCP)
- Direct cytotoxicity



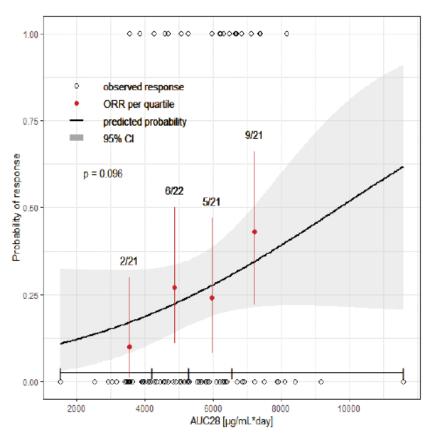
#### Lenalidomide MoA

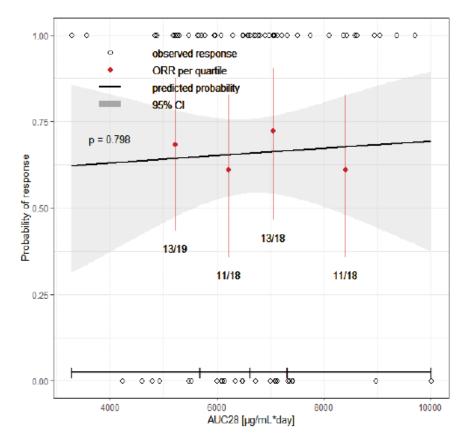
- Direct cytotoxicity
- Increase NK cell numbers (ADCC)
- Activate NK cells



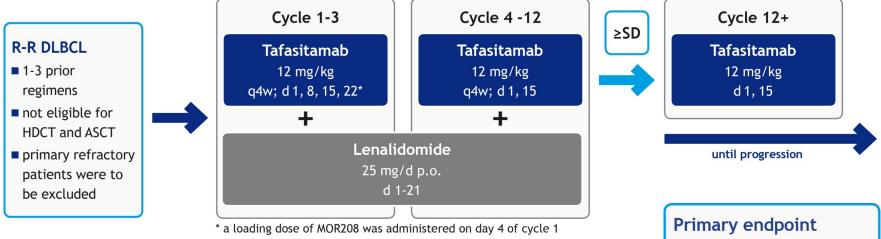


# RESPONSE PROBABILITY VERSUS AUC28 FOR TAFASITAMAB AND TAFASITAMAB-LENALIDOMIDE





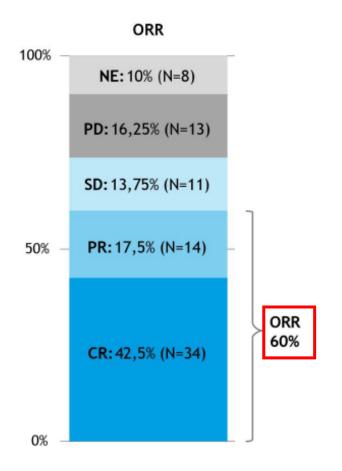
# L-MIND: study design phase 2 single arm open label multicenter study (NCT 02399085)



- Sample size suitable to detect ≥15% absolute increase in ORR for Tafasitamab/LEN combination vs. LEN monotherapy at 85% power, 2-sided alpha of 5%
- Mature Data: Primary Endpoint Analysis with data cut-off 30 Nov 2018; minimum Follow-Up 12 months, median Follow-Up 17.3 months

- ORR (Central read)
- Secondary endpoints
- PFS
- DoR
- OS
- Safety of the Tafasitamab
  - + LEN combination
- Exploratory and biomarker-based analyses

### Primary end point: ORR by IRC (80pts)



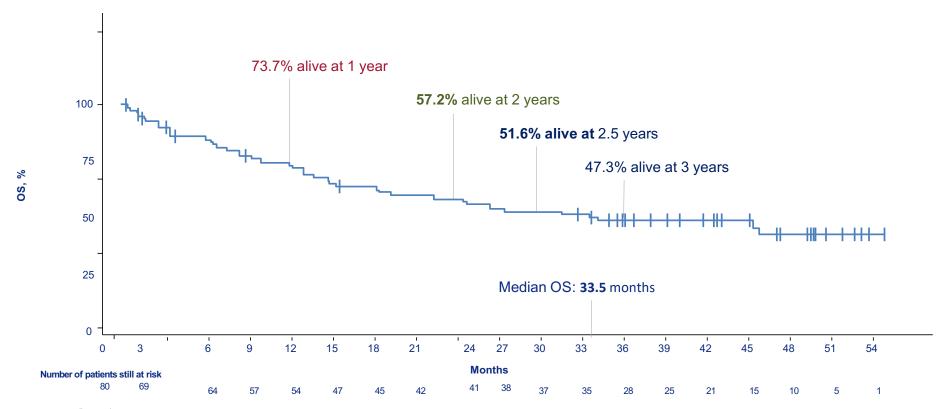
- ORR 60.0% (95% CI 48.4% 70.8%)
- CR-rate 42.5%
  - 82% of CRs PET-confirmed
  - 18% of CRs based on CT only

N=80: full analysis set → patients receiving at least one dose of tafasitamab and LEN

NE due to missing post-baseline tumor assessment

CR, complete response; PR, partial response; SD, stable disease; PD, progressive disease; NE, not evaluable.

# MOR 208 (Tafasitamab ) and Lenalidomide (L-MIND) : patients alive after 3 years of follow-up



OS, overall survival

### **Tafa-Lena US Real World: Patients**

**Patient and Disease** 

Characteristic	TLOC	L-MIND
Number of patients	81	80
Female sex	51%	46%
Age (yrs), median (range)	75 (26-94)	72 (41-86)
Race		
White, all ethnicity	89%	89%
Asian	6%	2%
Other/Unknown	5%	1%
Diagnosis		
DLBCL, NOS	59%	89%
Transformed	23%	9%
HGBCL (Double/Triple Hit)	<mark>15%</mark>	2%
Other	3%	0%
Cell of Origin (Hans)		
GCB	57%	47%
non-GCB	34%	26%
Unknown	10%	27%
Risk (IPI)		
0-2	28%	49%
3-5	72%	51%
Ann Arbor Stage		
I-II	10%	25%
III-IV	90%	75%

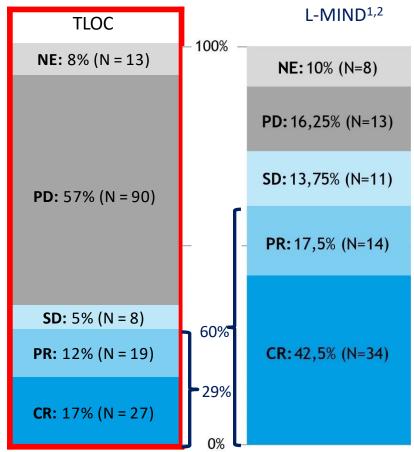
#### **Prior Treatment**

Characteristic	TLOC	L-MIND
Prior lines of therapy for DLBCL	*	
Median (range)	2 (0-11)	2 (1-4)
0	4%	0%
1	29%	49%
2	「 30%	43%
3 <b>68%</b>	16%	6%
4	6%	1%
≥5	16%	0 (0)
Refractory to last therapy	<mark>66%</mark>	<mark>44%</mark>
Prior SCT	13%	11%
Prior CAR T	28%	0%

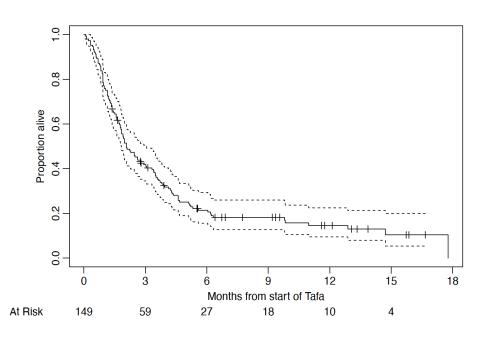
### **Treatment exposure and responses**

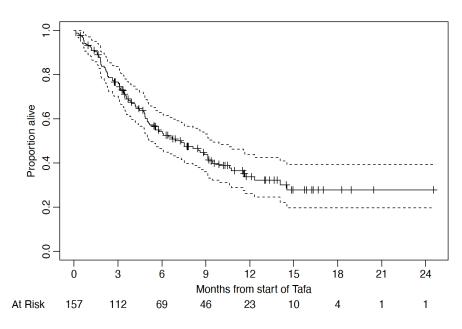
### **Best Response**

Treatment				
Time on treatment				
Median (IQR), days	59 (28 - 118)			
Lenalidomide treatment timing				
Patients with delay in initiation	46%			
Median delay time, days (IQR)	7 (4-20)			
Starting daily lenalidomide dose (L-MIND: 25 mg)				
Patients with dose reduction at initiation	66%			
Median starting dose, mg (IQR)	20 (10-25)			
Reasons for initial lenalidomide reduction				
Frailty/Performance status	43%			
Renal dysfunction	35%			
Cytopenias	10%			
Other/unknown	12%			



### Tafa-Lena US Real World Survival





Median PFS: 2.1 months (95% CI 1.8 – 3.0) Median follow-up: 5.2 months Median OS: 7.3 months (95% CI 5.2 – 9.5) Median follow-up: 5.2 months

### All about patient selection

√ 90% did not meet L-mind eligibility criteria



- a) more lines of therapy
- b) prior CAR T
- c) ECOG>3
- d) GFR

- Disease related outcome
- a) higher IPI
- b) >Stage III/IV
- c) Primary refractory
- d) HGBL

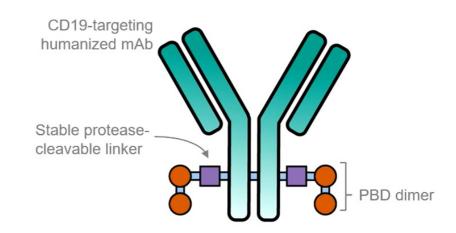
# L-MIND Eligible: 11 Reasons for L-MIND ineligibility:

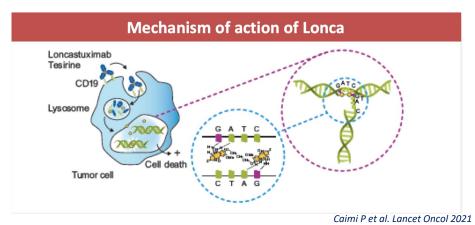
- EGFR < 60 ml/min
- Prior anti-CD19 therapy
- >3 prior lines of therapy
- ECOG PS 3-4
- High-grade B cell lymphoma

### Loncastuximab tesirine: an ADC targeted to CD19

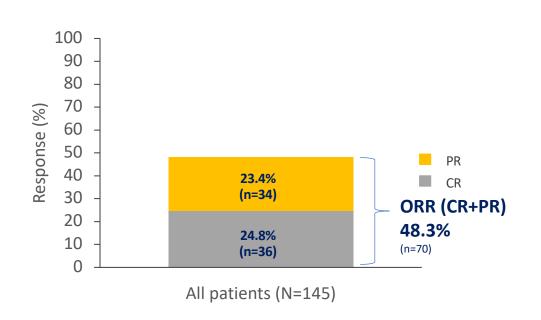
- Humanized anti-CD19

   antibody, stochastically
   conjugated through a
   cathepsin-cleavable valine alanine linker to a
   pyrrolobenzodiazepine (PBD)
   dimer toxin causing DNA
   crosslinking
- April 2021: FDA grants
   accelerated approval for
   DLBCL patients r/r NTE, after
   two or more lines of sistemic
   therapy (LOTIS-2 trial)





### Efficacy: ORR data and Follow-up analysis

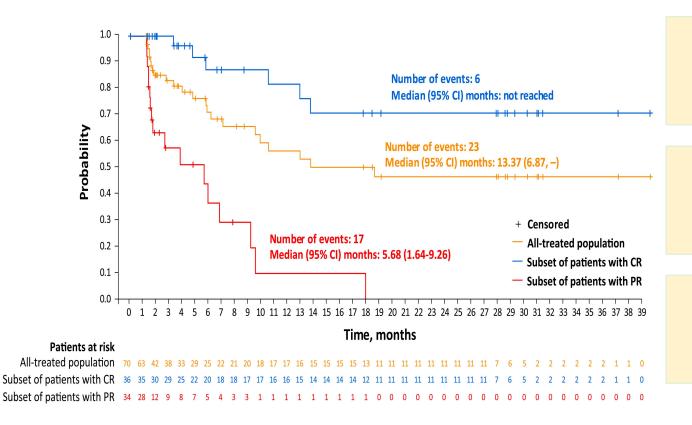


- **ORR** by central review was 70/145 **48.3%** (95% CI:<sup>2</sup> 39.9–56.7)
- CR rate 24.8% (95% CI:<sup>2</sup> 18.0–32.7)
- PR rate 23.4% (95% CI:<sup>2</sup> 16.8–31.2)

Median follow-up: 7.8 months (range 0.3–31.0)

Mean number of Lonca cycles administered: 4.6 (range 1–26)
Median number of Lonca cycles administered: 3 (range 1–26)
Mean number of Lonca cycles in responders (n=70): 6.8 (range 1–26)

### Duration of response by best overall response

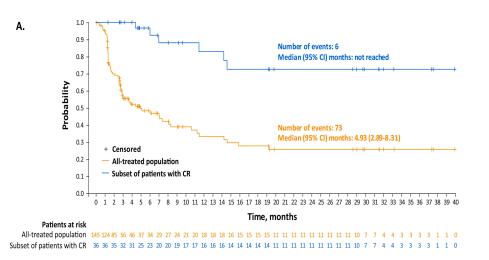


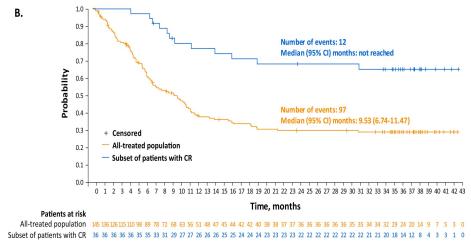
mDOR for patients
with a CR
Not reached

mDOR for the 70 responders 13.4 months (95% CI: 6.9–NE)

mDOR for patients
with a PR
5.7 months

### PFS and OS





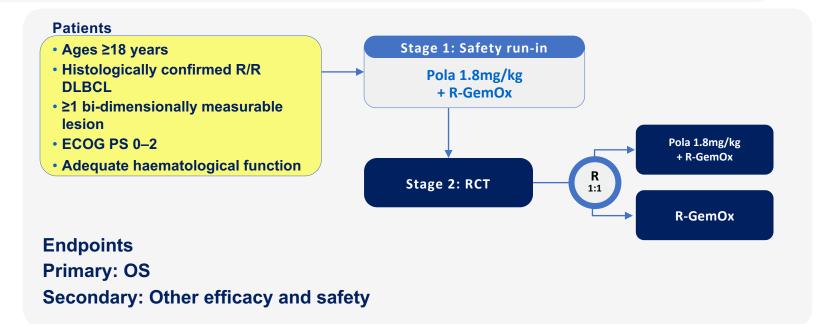
mPFS was 4.9 months

mOS was 9.5 months

## POLARGO Phase III study: Pola in combination with R-GemOx in R/R DLBCL

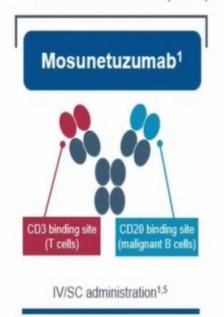
#### **Rationale**

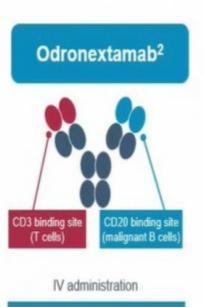
- Pola + BR had an acceptable safety profile and demonstrated benefit vs BR in the GO29365 study
- R-GemOx is another widely used combination in DLBCL

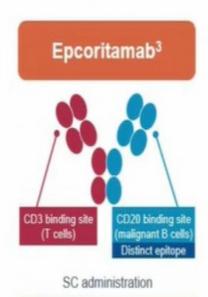


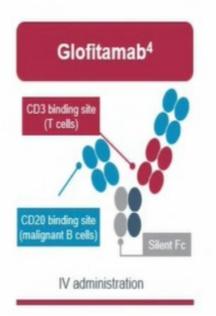
### Anti-CD20 / anti-CD3 Bispecific Antibodies

FDA BTD for R/R FL (2020)









### Epcoritamab in RR-DLBCL – EHA 2022

Dose escalation

Dose expansion data cutoff: January 31, 2022 Median follow-up: 10.7 mo

#### B-NHL:

- √ No DLTs
- ✓ MTD not reached
- ✓ RP2D identified
- √ Manageable safety profile
- ✓ Encouraging antitumor activity

#### Key inclusion criteria:

- · R/R CD20+ mature B-cell neoplasm
- FCOG PS 0-2
- · ≥2 prior lines of antineoplastic therapy, including ≥1 anti-CD20 mAb
- FDG PET-avid and measurable disease by CT/MRI
- · Prior CAR T allowed

Step-up dosing<sup>a</sup> Epcoritamab SC

Treatment until RP2D 48 mg PDb,c or QW C1-3. unacceptable Q2W C4-9. toxicity Q4W C10+

LBCL Cohort N=157 DLBCL, HGBCL, PMBCL, and

FL Gr3B

LBCL N=157

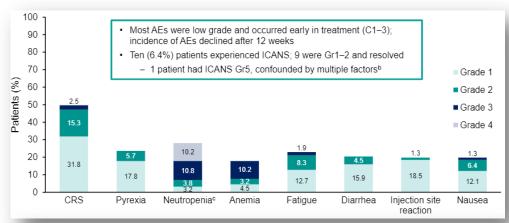
- · To ensure patient safety and better characterize CRS, inpatient monitoring was required at first full dose for 24 h in this part of the study
- **Primary endpoint:** ORR by independent review committee (IRC)
- · Key secondary endpoints: DOR, TTR, PFS, OS, CR rate, and safety/tolerability

Demographics

Demographics	LDOL, 14-107
Median age (range), y	64 (20-83)
<65 y, n (%)	80 (51)
65 to <75 y, n (%)	48 (31)
≥75 y, n (%)	29 (18)
ECOG PS, n (%)	
0	74 (47)
1	78 (50)
2	5 (3)
Disease Characteristics <sup>a</sup>	LBCL, N=157
Disease Characteristics <sup>a</sup> Disease type, n (%)	LBCL, N=157
	139 (89)
Disease type, n (%)	•
Disease type, n (%) DLBCL	139 (89)
Disease type, n (%) DLBCL De novo	139 (89) 97/139 (70)
Disease type, n (%) DLBCL De novo Transformed	139 (89) 97/139 (70) 40/139 (29)
Disease type, n (%) DLBCL De novo Transformed Unknown	139 (89) 97/139 (70) 40/139 (29) 2/139 (1)

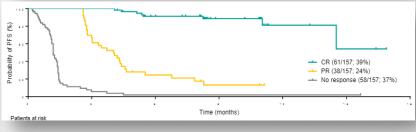
LBCL, N=157
1.6
2.4
3 (2–11)
111 (71)
96 (61)
130 (83)
119 (76)
31 (20)
61 (39)
46/61 (75)

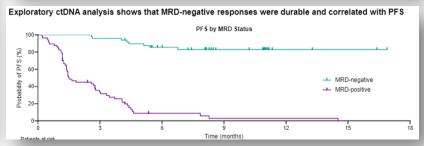
### **Epcoritamab: Adverse Events and Efficacy**



	LBCL	CRS Events by Dosing Period					
	N=157	100 1					
CRS events, n (%)a	78 (49.7)	90					Grade 1
Grade 1	50 (31.8)						
Grade 2	24 (15.3)	80 -					Grade 2
Grade 3	4 (2.5)	70					■ Grade 3
Median time to onset from first full dose, d	0.8 (20 h)	·					
CRS resolution, n (%)	77 (98.7)	§ 60 -					
Median time to resolution from first full dose, d	2 (48 h)	oatients 40					
Treated with tocilizumab, n (%)	22 (14.0)	ig 40 -			2.7		
Treated with corticosteroids, n (%)	16 (10.2)				12.9		
Leading to treatment discontinuation, n (%)	1 (0.6)	30 -					
*Graded by Lee et al. 2019 criteria.		20 -					
		10		2.0	27.2		
			1.3 4.5	9.8		1.4	1.5
CRS was primarily low grade and predictable: most events occurred follow the first full dose	wing	0 Т	4.5 Priming C1D1 0.16 mg n=157	Intermediate C1D8 0.8 mg n=153	First full C1D15 48 mg n=147	3.5 Second full C1D22 48 mg n=144	Third full+ C2D1+ 48 mg n=136
				Cycl	e 1		







Subcutaneous Epcoritamab + R-DHAX/C in Patients with Relapsed or Refractory Diffuse Large B-Cell Lymphoma Eligible for Autologous Stem Cell Transplant: Updated Phase 1/2 Results

Pau Abrisqueta, MD, PhD,<sup>1</sup> Raul Cordoba, MD, PhD,<sup>2</sup> Lorenzo Falchi, MD,<sup>3</sup> Sven de Vos, MD, PhD,<sup>4</sup> Marcel Nijland, MD, PhD,<sup>5</sup> Fritz Offner, MD, PhD,<sup>6</sup> Jun Wu, MD, MS,<sup>7</sup> Irina Bykhovski, PharmD,<sup>8</sup> Liwei Wang, PhD,<sup>8</sup> Ali Rana, MD, PhD,<sup>8</sup> Tycel Phillips, MD<sup>9</sup>

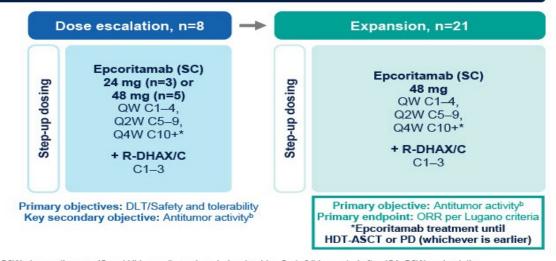
### Study Design: EPCORE NHL-2 Arm 4

A phase 1b/2, open-label trial evaluating the safety and antitumor activity of epcoritamab + R-DHAX/C in adults with R/R DLBCL who are eligible for transplant

#### Key inclusion criteria

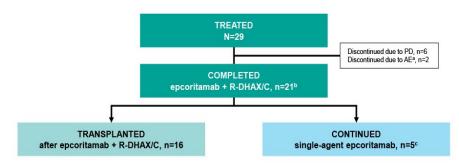
- R/R CD20+ DLBCL
  - DLBCL, NOS
  - "Double-hit" or "triple-hit" DLBCL<sup>a</sup>
  - FL grade 3B
  - T-cell/histiocyte-rich DLBCL
- Eligible for R-DHAX/C and HDT-ASCT
- ECOG PS 0-2
- · Measurable disease by CT or MRI
- · Adequate organ function

Data cutoff: September 16, 2022 Median follow-up: 12.6 mo ClinicalTrials.gov: NCT04663347



R-DHAX/C regimen in C1–3, 21 d each: rituximab 375 mg/m² IV Q3W; dexamethasone 40 mg/d IV or orally on days 1–4; cytarabine 2 g/m² IV repeated after 12 h Q3W; carboplatin AUC = 5 mg/mL x min (Calvert formula) or oxaliplatin 100 mg/m² IV Q3W. Cycle 4 was 21 d; cycles 5+ were 28 d each. a Classified as HGBCL, with MYC and BCL2 and/or BCL6 translocations. Turmor response was evaluated by PET-CT obtained at 6, 12, 18, 24, 36, and 48 wk, and every 24 wk thereafter, until disease progression.

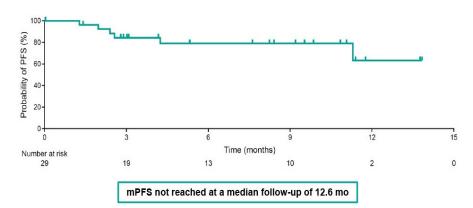
### **Patient Disposition**



The primary reason for patients not proceeding to transplant was patient and/or investigator choice

Mediand (range) follow-up was 12.6 (2.0+ to 17.1) mo

# **Progression-Free Survival**



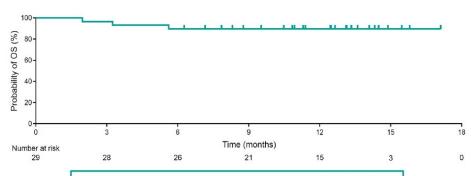
### **Overall and Complete Response Rates Were High**

Response, n (%) <sup>a</sup>	Received ASCT n=16	Did not receive ASCT n=11 <sup>b</sup>	Total efficacy evaluable n=27
Overall response	16 (100)	7 (64)	23 (85)
CMR	13 (81)	5 (45)	18 (67)
PMR	3 (19)	2 (18)	5 (19)
Stable disease	0	2 (18)	2 (7)
Progressive disease	0	1 (9)	1 (4)

Data cutoff: September 16, 2022. \*Based on modified response-evaluable population, defined as patients with ≥1 target lesion at baseline and ≥1 postbaseline response evaluation and patients who died within 60 of first dose. One patient died within 60 of first dose without assessment. \*Includes 5 patients who continued epocritamab monotherapy and 6 patients who discontinued prior to reaching transplant.

- Median\* follow-up was 12.6 mo (range, 2.0+ to 17.1)
- · Median duration of response and median duration of CMR were not reached
- Median time to response and complete response was 1.4 mo (range, 1.2–2.2 and 1.2–5.6, respectively)
- . Efficacy was consistent in primary refractory patients: ORR 82%; CMR 59%

### **Overall Survival**



An estimated 90% (95% CI, 71%–97%) of patients remained alive at 12 mo; mOS not reached at a median follow-up of 12.6 mo

# Subcutaneous Epcoritamab Plus Lenalidomide in Patients With Relapsed/Refractory Diffuse Large B-Cell Lymphoma From EPCORE NHL-5

Irit Avivi, MD,<sup>1</sup> Won Seog Kim, MD,<sup>2\*</sup> Po-Shen Ko, MD,<sup>3</sup> Carlos Grande Garcia, MD, PhD,<sup>4</sup> David Lavie, MD,<sup>5</sup> David Chism, MD, MS,<sup>6</sup> Mostafa Seliem, PharmD,<sup>7</sup> Edwin E. Jeng, PhD,<sup>7</sup> Neha Joshi, PhD,<sup>7</sup> Satya Siddani, PhD,<sup>7</sup> Wissam Assaily, PhD,<sup>7</sup> Mariana Sacchi, MD,<sup>8</sup> Minh Dinh, MD,<sup>7</sup> Abraham Avigdor, MD<sup>9</sup>

<sup>1</sup>Hematology Division, Sourasky Medical Center and the Sackler Faculty of Medicine, Tel Aviv University, Tel Aviv, Israel; <sup>2</sup>Division of Hematology-Oncology, Department of Medicine, Samsung Medical Center, Sungkyunkwan University, Seoul, South Korea; <sup>3</sup>Division of Hematology, Talpei Veterans General Hospital Division of Hematology, Taipei, Taiwan; <sup>4</sup>Clinica Universidad de Navarra, Madrid, Spain; <sup>5</sup>Department of Hematology, Hadassah Medical Center, Jerusalem, Israel; <sup>6</sup>Thompson Cancer Survival Center, Knoxville, TN, USA; <sup>7</sup>AbbVie, North Chicago, IL, USA; <sup>8</sup>Genmab, Plainsboro, NJ, USA; <sup>9</sup>Sheba Medical Center, Ramat Gan and Tel Aviv University, Tel Aviv, Israel

# Study Design: EPCORE NHL-5 (NCT05283720)

### Key inclusion criteria: arm 1

- Adults ≥18 y
- Histologically confirmed CD20\* DLBCL<sup>a</sup>
  - DLBCL, NOS
  - High-grade B-cell lymphoma with MYC and BCL-2 and/or BCL-6 translocations
  - FL grade 3B
- R/R disease<sup>b</sup> with ≥1 prior anti-CD20 mAb-containing systemic therapy
- · ASCT ineligible or failed prior ASCT
- · Prior CAR T allowed, but prior CD3/CD20 bispecific antibodies not allowed
- ECOG PS 0-2
- Measurable disease

Data cutoff: Oct 6, 2023 Median follow-up: 8.2 mo

### Dose escalation and dose expansion

Arm 1 Epcoritamab + lenalidomide (12 x 28-day cycles) R/R DLBCL

Arm 2 Epcoritamab + ibrutinib + lenalidomide R/R DLBCL

Arm 3 Epcoritamab + polatuzumab + R-CHP 1L DLBCL

Arms 4-5 Epcoritamab + CC-99282 (CELMoD) R/R DLBCL, R/R FL

Arms 6-7 Epcoritamab + ibrutinib ± venetoclax R/R MCL, 1L MCL

### **Epcoritamab dosing schedule**

Cycle 1, day 1: SUD1 (0.16 mg) Cycle 1, day 8: SUD2 (0.8 mg)

> Cycle 1, days 15, 22; full dose (48 mg) Cycles 2-3, days 1, 8, 15, 22; full dose (48 mg)

Cycles 4-12, day 1: full dose (48 mg)

Lenalidomide dosing schedule

Cycles 1-12: 25 mg once daily on days 1-21

### Premedication and CRS prophylaxis

Diphenhydramine, acetaminophen, and corticosteroids were mandatory for CRS prophylaxis with the first 4 epcoritamab doses

- Prednisone 100 mg for 4 d was initially recommended
- Current recommendation is dexamethasone 15 mg for 4 dc

### **Objectives**

Dose escalation: safety, tolerability, and identify expansion dose (RP2D)

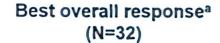
Dose expansion: safety, tolerability, and antitumor activity

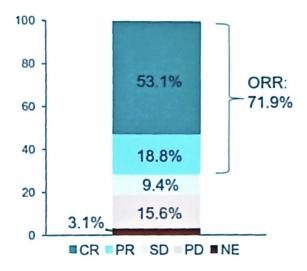
\*Per WHO 2018 classification

Additional information can be found in the following presentation: Vose J, et al. ASH 2023, abstract 1729

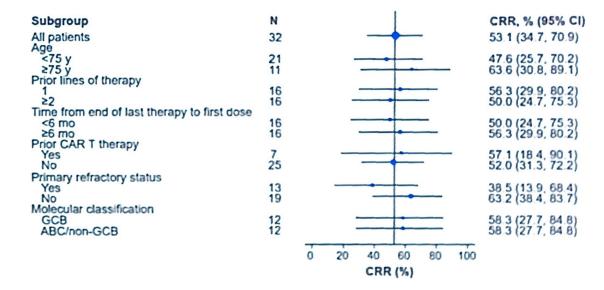
PRelapsed disease is defined as disease that previously responded to therapy but progressed ≥6 mo after completion of therapy. Refractory disease is defined as disease that either progressed during therapy, failed to achieve an objective response to prior therapy, or progressed within 6 mo after completion of therapy (including maintenance therapy)

# Frequent and Deep Responses Observed





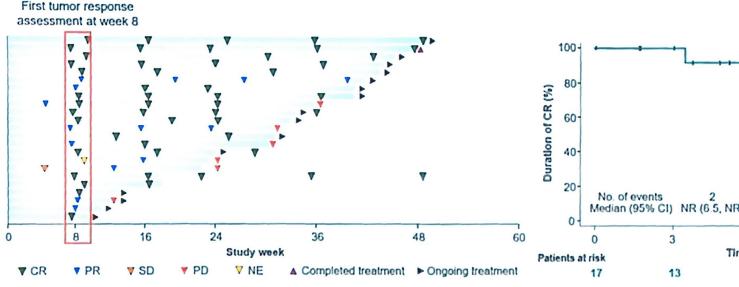
# Complete response in subgroups (N=32)

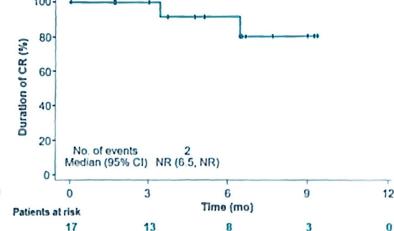


# Early and Durable Responses Observed<sup>a</sup>



# **Duration of complete response**





- Median time to response was 1.8 mo (range: 1.0–3.6)
- Median time to CR was 1.9 mo (range: 1.6–3.6)
- · Median duration of CR was not reached

Glofitamab Monotherapy in Relapsed or Refractory
Large B-Cell Lymphoma: Extended Follow-Up from a
Pivotal Phase II Study and Subgroup Analyses in Patients with
Prior Chimeric Antigen Receptor T-Cell Therapy and
by Baseline Total Metabolic Tumor Volume

Martin Hutchings,<sup>1</sup> Carmelo Carlo-Stella,<sup>2</sup> Franck Morschhauser,<sup>3</sup> Lorenzo Falchi,<sup>4</sup> Emmanuel Bachy,<sup>5</sup> Guillaume Cartron,<sup>6</sup> Cyrus Khan,<sup>7</sup> Monica Tani,<sup>8</sup> Joaquin Martinez-Lopez,<sup>9</sup> Nancy L. Bartlett,<sup>10</sup> Antonio Salar,<sup>11</sup> Joshua Brody,<sup>12</sup> Sirpa Leppä,<sup>13</sup> Pauline Baumlin,<sup>14</sup> Estefania Mulvihill,<sup>14</sup> James Relf,<sup>15</sup> Saibah Chohan,<sup>16</sup> Derrick Kaufman,<sup>17</sup> Linda Lundberg,<sup>14</sup> Michael Dickinson<sup>18</sup>

# Study design

# Pivotal single-arm Phase II study in patients with R/R LBCL and ≥2 prior therapies

# Key inclusion criteria

- DLBCL NOS, HGBCL, transformed FL, or PMBCL
- ECOG PS 0–1
- ≥2 prior therapies, including:
  - Anti-CD20 antibody
  - Anthracycline

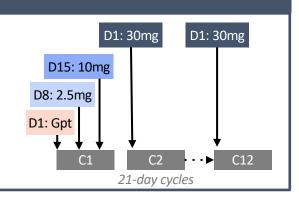
### Glofitamab IV administration

### **Fixed-duration treatment:**

Up to 12 cycles (8.3 months)

## **CRS** mitigation:

- Obinutuzumab IV pre-treatment (1000mg)
- C1 step-up dosing
- Monitoring after first glofitamab dose (2.5mg)

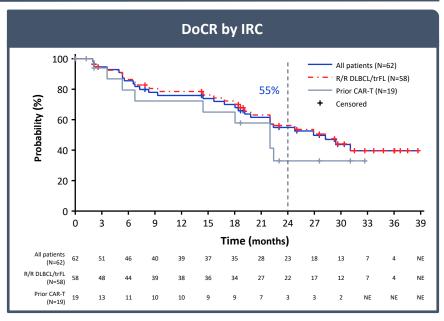


### **Endpoints**

- Primary: CR (best response) rate by IRC\*
- Key secondary: ORR, DoR, DoCR, DoCR, And OS

# Response rates and DoCR

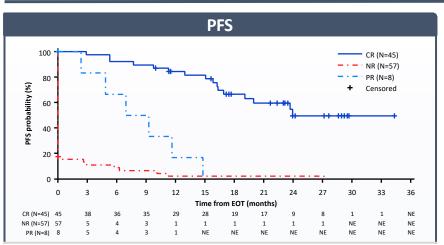
	All patients (N=155)*	R/R DLBCL/ trFL (N=132) <sup>1†‡</sup>	Prior CAR-T (N=52) <sup>†</sup>
<b>ORR,</b> n (%) [95% CI]	80 (52)	74 (56)	26 (50)
	[43.5–59.7]	[47.2–64.7]	[35.8–64.2]
<b>CR rate,</b> n (%) [95% CI]	62 (40)	58 (44)	19 (37)
	[32.2–48.2]	[35.3–52.8]	[23.6–51.0]
Median DoCR, months	26.9	28.3	22.0
(95% CI)	(19.8–NR)	(19.8–NR)	(6.7–NR)
<b>24-month DoCR</b> , % (95% CI)	55.0	56.2	33.1
	(41.1–68.8)	(41.9–70.4)	(7.2–59.0)
Median CR follow-up,	29.6	29.6	23.0
months (range)	(0–39)	(0–39)	(0–33)
Ongoing CRs, n/N (%)	34/62 (55)	32/58 (55)	10/19 (53)

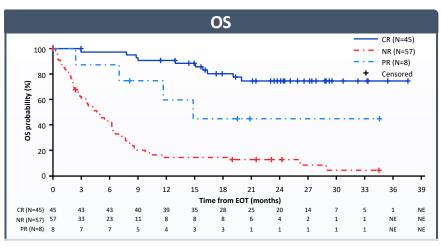


Median time on study: 32.1 months (range: 0–43)

With 32 months median follow-up, glofitamab showed high response rates and durable remissions across subgroups

# Landmark analysis by response at EOT





Landmark PFS from EOT in patients with CR at EOT*	N=45
Median PFS, months (95% CI)	24.0 (19.1-NE)
18-month PFS rate, % (95% CI)	66.6 (51.0–82.2)
18-month PFS rate, % (95% CI)	66.6 (51.0–82.2)

Landmark OS from EOT in patients with CR at EOT*	N=45
Median OS, months (95% CI)	NE (NE)
18-month OS rate, % (95% CI)	80.7 (68.6–92.8)

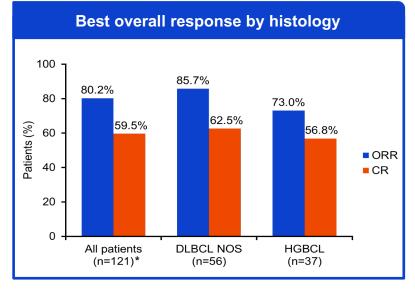
Majority of patients with a CR at EOT remained progression-free and alive at 18 months after EOT

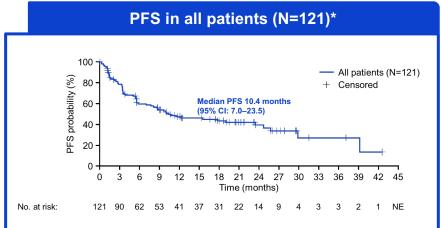
Glofitamab plus Polatuzumab Vedotin Continues to Demonstrate Frequent and Durable Responses and Has a Manageable Safety Profile in Patients with ≥2L Relapsed/Refractory DLBCL, Including HGBCL, and in Patients with Prior CAR T-Cell Therapy: Updated Results from a Phase Ib/II Study

Martin Hutchings et al

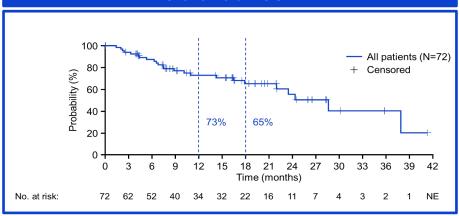
n (%) unless stated	N=125
Median age (range), years	67 (23–84)
Male	79 (63.2)
ECOG PS	
0–1	118 (94.4)
2	7 (5.6)
Histology	
de novo DLBCL	56 (44.8)
trFL	26 (20.8)
HGBCL	41 (32.8)
PMBCL	2 (1.6)
IPI score	
0/1	23 (18.4)
2/3	68 (54.4)
4/5	34 (27.2)

n (%) unless stated	N=125
Ann Arbor stage	
1/11	29 (23.2)
III/IV	96 (76.8)
Bulky disease	
>6cm	52 (41.6)
>10cm	19 (15.2)
Median prior lines of therapy (range)	2 (1–7)
Number of prior lines of therapy	
1	50 (40.0)
≥2	75 (60.0)
Prior CAR T-cell therapy	28 (22.4)
Refractory to any prior therapy	100 (80.0)
Refractory to last prior therapy	90 (72.0)

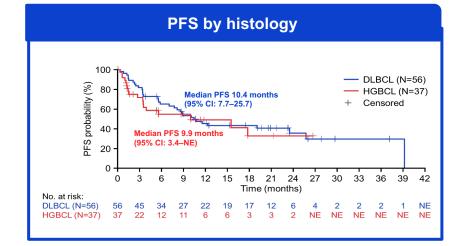








Median DOCR for DLBCL was 21.9 months (95% CI: 10.1–NE) and NE for HGBCL‡



# Mosunetuzumab Plus Polatuzumab Vedotin Demonstrates a Favorable Safety Profile and Efficacy in Patients With Relapsed/Refractory LBCL: Primary Analysis of a Phase Ib/II Study

L. Elizabeth Budde,<sup>1</sup> Adam J. Olszewski,<sup>2</sup> Sarit Assouline,<sup>3</sup> Izidore S. Lossos,<sup>4</sup> Catherine Diefenbach,<sup>5</sup> Manali Kamdar,<sup>6</sup> Nilanjan Ghosh,<sup>7</sup> Dipenkumar Modi,<sup>8</sup> Waleed Sabry,<sup>9</sup> Seema Naik,<sup>10</sup> Amitkumar Mehta,<sup>11</sup> Shazia K. Nakhoda,<sup>12</sup> Stephen D. Smith,<sup>13</sup> Kathleen Dorritie,<sup>14</sup> Ting Jia,<sup>15</sup> Song Pham,<sup>16</sup> Ling-Yuh Huw,<sup>17</sup> Hao Wu,<sup>17</sup> Iris To,<sup>17</sup> Michael C. Wei,<sup>17</sup> Julio C. Chavez<sup>18</sup>

¹City of Hope National Medical Center, Duarte, CA, USA; ²Legorreta Cancer Center at Brown University, Lifespan Cancer Institute, Providence, RI, USA; ³Jewish General Hospital, McGill University, Montreal, Quebec, Canada; ⁴University of Miami/Sylvester Comprehensive Cancer Center, Miami, FL, USA; ⁵Perlmutter Cancer Center at NYU Langone Health, New York, NY, USA; ⁶University of Colorado, Aurora, CO, USA; ¬Levine Cancer Institute/Atrium Health, Charlotte, NC, USA; ¬Barbara Ann Karmanos Cancer Institute, Wayne State University, Detroit, MI, USA; ¬Saskatoon Cancer Centre, College of Medicine, University of Saskatchewan, Saskatoon, Saskatchewan, Canada; ¬Penn State University College of Medicine, Hershey, PA, USA; ¬USA; ¬

# Study overview (NCT03671018)

# **Key inclusion criteria**

- LBCL (de novo DLBCL, HGBCL, trFL, or Grade 3b FL)
- ≥1 prior line of therapy, including an anti-CD20-directed therapy
- Patients who were ineligible for ASCT

# **Objectives**

- Efficacy and safety of mosun-pola
- Primary endpoint: Best ORR¹ by independent review committee (IRC)

# Mosun-pola fixed duration administration\*

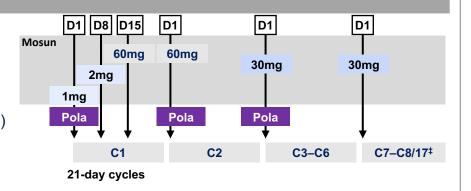
### Mosun<sup>†</sup>

- Cycle (C) 1 step-up dosing for CRS mitigation
- Q3W intravenous infusions at RP2D (C1–8/17)<sup>‡</sup>

### Pola

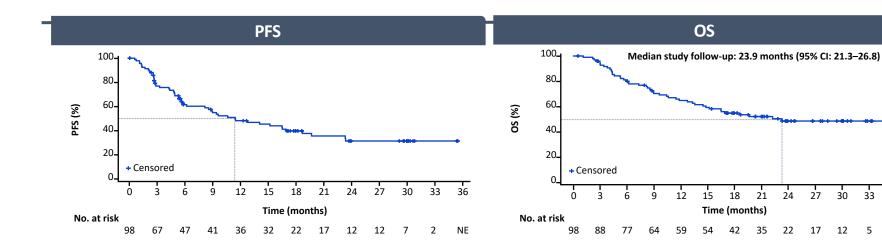
Q3W intravenous infusions (1.8mg/kg) (Day [D]1, C1–6)

No mandatory hospitalization Retreatment with mosun-pola was permitted



n, unless sta	ted	N=98	n, unless stated	N=98
Median age, years (range) 68 (20–88		68 (20–88)	Ann Arbor stage III–IV	85 (86.7%)
Gender, male		70 (71.4%)	Bulky disease, ≥6cm	33 (33.7%)
ECOG PS score			Extranodal involvement	65 (66.3%)
0 1 2		36 (36.7%) 55 (56.1%) 7 (7.1%)	Number of prior lines of therapy  1 ≥2	35 (35.7%) 63 (64.3%)
NHL histology DLBCL		CO (CO 49()	Median lines of prior therapy, n (range)	2 (1–8)
HGBCL		68 (69.4%) 18 (18.4%)	Prior ASCT	11 (11.2%)
trFL FL Grade	3b	8 (8.2%) 4 (4.1%)	Prior CAR T-cell therapy  Refractory to CAR T-cell therapy	35 (35.7%) 26/35 (74.3%)
Cell-of-origin (n=	=94)*		Primary refractory	56 (57.1%)
GCB Non-GCE Unknown		53 (56.4%) 33 (33.7%) 8 (8.5%)	Refractory to <sup>†</sup> Last prior therapy  Any prior CD20 therapy	76 (77.6%) 80 (81.6%)
ficacy	N=	<b>-</b> 98		, ,
dpoint*	INV	IRC	80	
st ORR, n 5% Cl]	62 (63.3%) [52.9–72.8]	58 (59.2%) [48.8–69.0]	% 60 - 40 - 20 -	<b>→</b>
<b>rate</b> , n 5% CI]	50 (51.0%) [40.7–61.3]	45 (45.9%) [35.8–56.3]	0 3 6 9 12 15 18 21 24 27 30 Time (months)	33 36

# PFS and OS



	N=98
Median PFS*, months (95% CI)	11.4 (6.2–18.7)
12-month event-free rate, % (95% CI)	48.2 (37.3–59.0)
24-month event-free rate, % (95% CI)	31.3 (20.1–42.6)

	N=98
Median OS, months (95% CI)	23.3 (14.8-NE)
12-month event-free rate, % (95% CI)	64.9 (55.2–74.5)
24-month event-free rate, % (95% CI)	48.6 (37.9–59.3)

# **Encouraging PFS and OS benefit observed at 2 years**

# Final analysis of the Phase 2 ELM-2 study: Odronextamab in patients with relapsed/refractory (R/R) diffuse large B-cell lymphoma (DLBCL)

Sabarish Ayyappan<sup>1</sup>, Won Seog Kim<sup>2</sup>, Tae Min Kim<sup>3</sup>, Jan Walewski<sup>4</sup>, Seok-Goo Cho<sup>5</sup>, Isidro Jarque<sup>6</sup>, Eiżbieta Iskierka-Jaźdżewska<sup>7</sup>, Michelle Poon<sup>8</sup>, Sung Yong Oh<sup>9</sup>, Francesca Lim<sup>10</sup>, Cecilla Carplo<sup>11</sup>, Tran-Der Tan<sup>12</sup>, Antonio Gutierrez<sup>13</sup>, Hullal Zhang<sup>14</sup>, Junning Cao<sup>15</sup>, Mingzhi Zhang<sup>16</sup>, Benoit Tessoulin<sup>17</sup>, Jingjin Li<sup>18</sup>, Melanie Ufkin<sup>18</sup>, Saleem Shariff<sup>19</sup>, Jurriaan Brouwer-Visser<sup>18</sup>, Lel Chi<sup>18</sup>, Aafia Chaudhry<sup>18</sup>, Hesham Mohamed<sup>18</sup>, Srikanth Ambati<sup>18</sup>, H. Miles Prince<sup>20</sup>, on behalf of ELM-2 Investigators

¹City of Hope Cancer Treatment Center, Atlanta, GA, USA; ²Samsung Medical Center, Center for Hernatologic Malignancy, Seoul, South Korea; ³Seoul National University Hospital, Seoul, South Korea; and Schooling Im. Marii Sklodowskiej-Curie Państwowy Instytut Badawczy, Warszawa, Poland; and Seoul St. Mary's Hospital, The Catholic University of Korea, Seoul, South Korea; and University Hospital, Singapore, and University Hospital, Singapore, Singapore, and University Hospital, Busan, South Korea; and University Hospital, Singapore, Singapore, and University Hospital, Busan, South Korea; and University Hospital, Singapore, and University Singapore, and Univ

ClinicalTrials.gov ID: NCT03888105

This study was funded by Regeneron Pharmaceuticals, Inc. Medical writing support was provided by Georgina Bartle of Oberon, a division of OPEN Health Communications and funded by Regeneron Pharmaceuticals. Inc.

# ELM-2 study design: DLBCL cohort

- Phase 2, open-label, multicohort, multicenter study of odronextamab monotherapy in R/R B-NHL (NCT03888105)
  - The final analysis was performed when all patients with DLBCL had the opportunity for ≥36 weeks of follow-up

# Key eligibility criteria

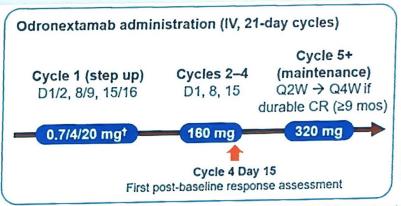
- DLBCL per WHO 2016 classification<sup>1</sup>
- ECOG PS 0 or 1
- Refractory to or relapsed after ≥2 prior lines of therapy, including an anti-CD20 antibody and an alkylator

Primary endpoint: ORR\* by ICR

# Secondary endpoints:

- ORR\* by local investigator
- CR\*, DOR\*, PFS\*, and OS
- Safety and tolerability
- Patient-reported outcomes

Key exploratory endpoint: MRD



Measures taken to facilitate diverse, inclusive enrollment:

- Diverse trial sites
- Translated consents for under-represented populations
- Extended screening windows for patients with access restraints
- Broad eligibility criteria to include patients with controlled HIV, hepatitis B and C
- I ower thresholds for those with compromised organ function

1 Cheson BD, et al. J Clin Oncol 2014 2000-68, 2 Beham-Schmid Comp. 2017, 10(4) 248-54.

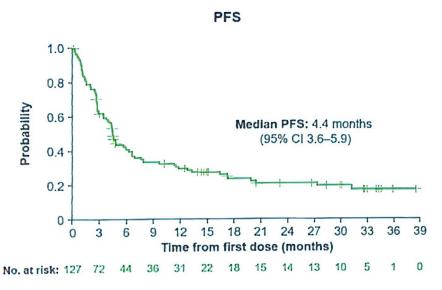


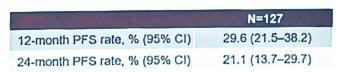
<sup>\*</sup>According to Lugano criteria.\* TThe study initiated with a Cycle 1 step-up regimen of 1/20 mg. This was modified to 0.7/4/20 mg to further mitigate the risk of CRS. Premedication administered during Cycle 1

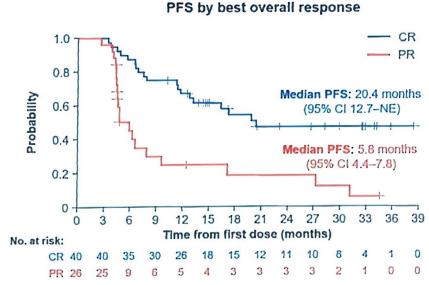
B-NHL, B-cell non-Hodgkin's lymphome; CD, cluster of differentiation, CR, complete response; CRS, cytokine release syndrome; D, day; DLBCL, diffuse large B-cell lymphome; DOR, duration of response; ECOG PS, Eastern Cooperative Oncology Group performance status, HIV, human immunodeficiency virus, ICR, independent central review, IV, intravenous, mos, months, MRD, minimal residual disease, ORR, objective response rate, OS, overall survival, PFS, progression-free survival, Q2W, every 2 weeks; Q4W, every 4 weeks, R/R, relapsed/refractory, WHO, World Health Organization

# **ELM-2: Progression-free survival**

Median PFS was 20.4 months in complete responders versus 5.8 months in partial responders



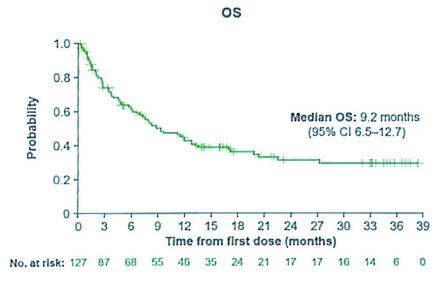




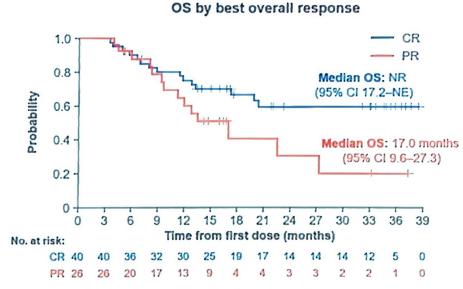
	CR (n=40)	PR (n=26)
12-month PFS rate, % (95% CI)	67.2 (50.3–79.5)	25.2 (9.5–44.7)
24-month PFS rate, % (95% CI)	47.5 (29.9-63.1)	18.9 (5.4–38.6)

# **ELM-2: Overall survival**

Median OS was not reached in complete responders versus 17.0 months in partial responders



The second second second second second	N=127
12-month OS rate, % (95% CI)	42.9 (33.7–51.8)
24-month OS rate, % (95% CI)	31.6 (22.4-41.1)



	CR (n=40)	PR (n=26)
12-month OS rate, % (95% CI)	75.0 (58.5–85.7)	60.2 (37.2-77.0)
24-month OS rate, % (95% CI)	59.6 (41.7–73.7)	30.5 (9.3-55.3)

# CONCLUSIONI

- ✓ In less than 5 years the treatment landscape of r/r DLBCL has dramatically changed with a significant improving in OS
- ✓ New antibodies (conjugated and nude) seem to improve R-CHOP results
- ✓ Bispecific antibodies are really improving results in R/R setting.
- ✓ We are progressively going towards a chemo—free approach in r/r DLBCL
- ✓ Despite a rapidly growing knowledge on the results of the new approaches, little is still known about the best association and sequencing



# **GRAZIE**