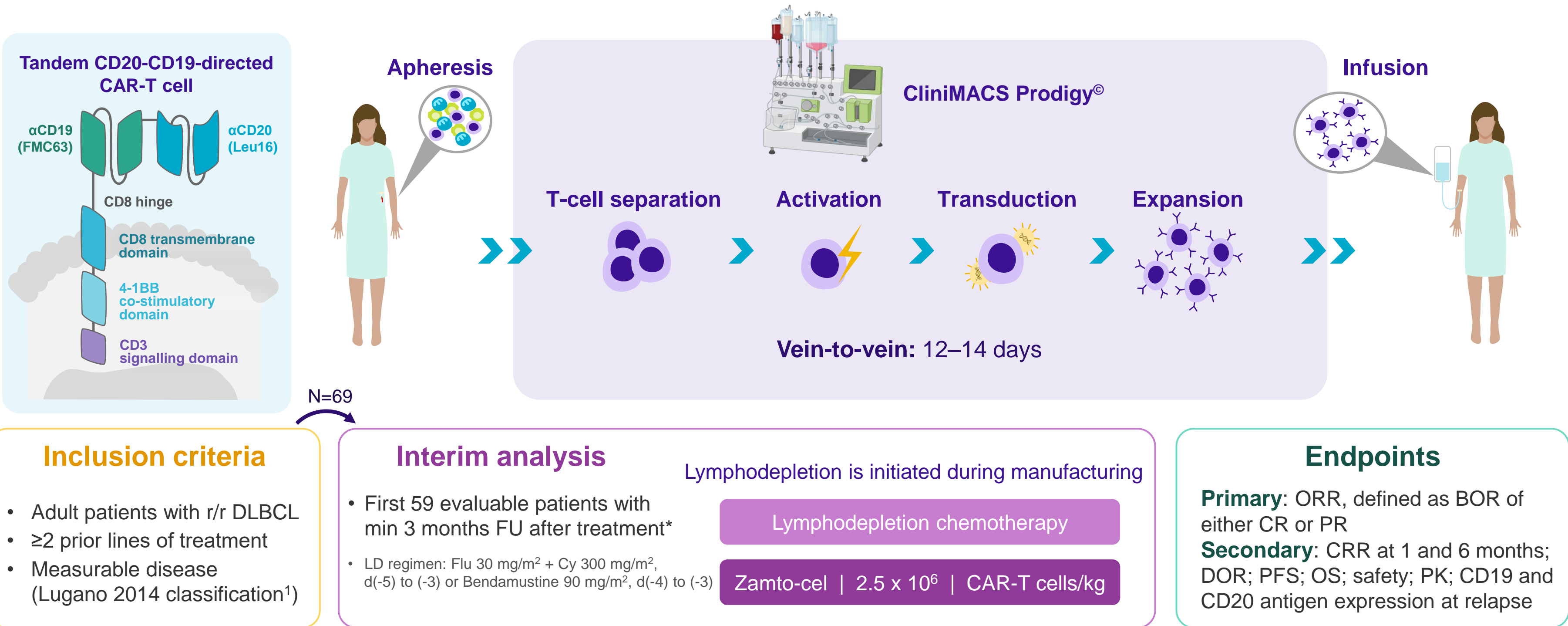


**Interim Results from a Phase 2 Pivotal Study
(DALY II USA) of Tandem CD20-CD19-Directed
Non-Cryopreserved CAR-T Cells –
Zamtocabtagene Autoleucel (Zamto-Cel) in Patients with
Relapsed/Refractory Diffuse Large B Cell Lymphoma**

Nirav N. Shah, Richard T. Maziarz, Caron A. Jacobson, Patrick B. Johnston, Sunil Abhyankar, Iris Isufi, Miguel Angel Perales, Monalisa Ghosh, Matthew Ulrickson, Allison C. Rosenthal, Javier L. Munoz, Nancy M. Hardy, Aaron P. Rapoport, Reem Karmali, Farrukh T. Awan, Matthew S. McKinney, Mitchell Horwitz, Matthew Lunning, Nathan Denlinger, Marek Ancukiewicz, Madhavi Nallewar, Kimberly C. Coleman, Esther Eromosele, Remigiusz Kaleta, Johanna Theruvath, Anna Wijatyk, and David B. Miklos

Zamto-cel – an investigational autologous tandem CD20-CD19-directed non-cryopreserved CAR-T cell product with short vein-to-vein time

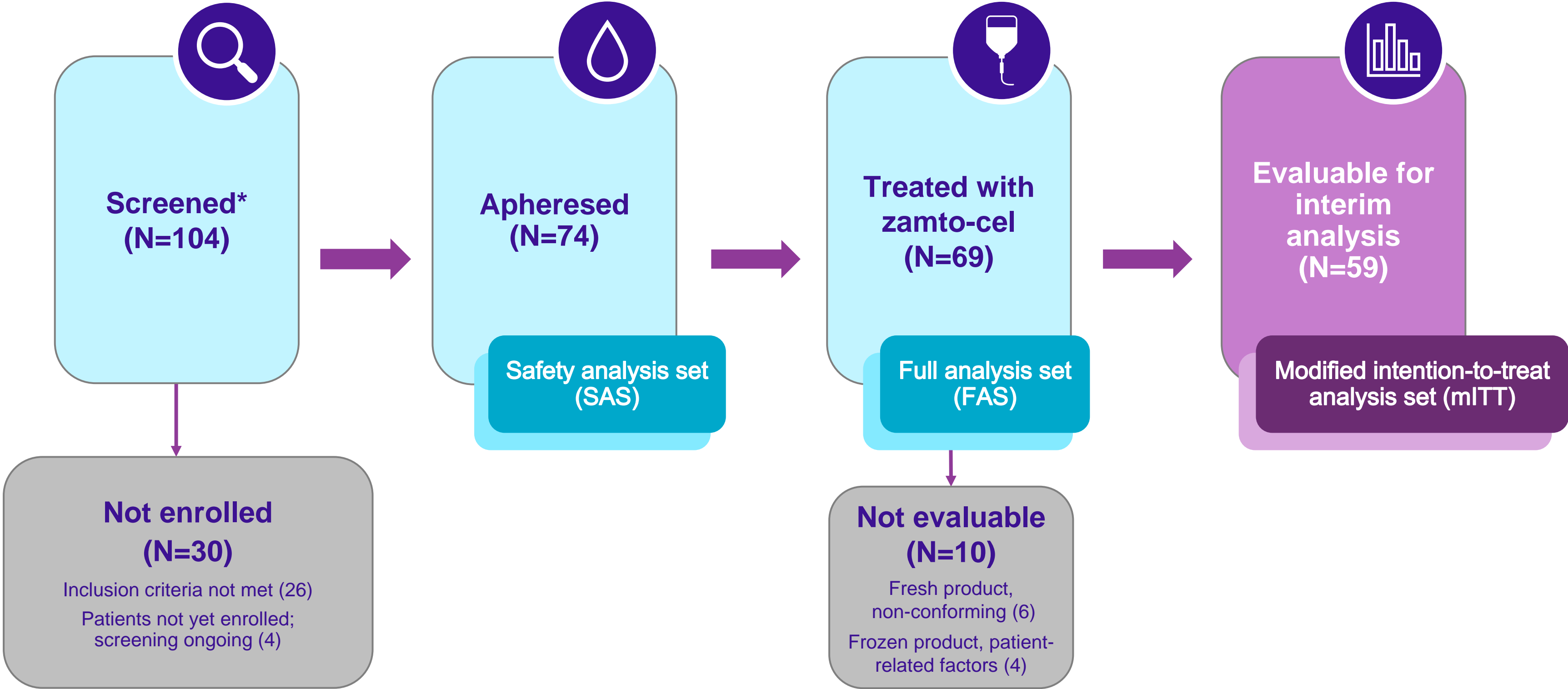


*Study start date: 25 May 2021.

BOR, best overall response; CAR-T cell, chimeric antigen receptor T cell; CR, complete response; CRR, complete response rate; Cy/Flu, Cyclophosphamide/Fludarabine; DOR, duration of response; FU, follow-up; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; PK, pharmacokinetics; PR, partial response; r/r DLBCL, relapsed/refractory diffuse large B-cell lymphoma.

1. Cheson BD, et al. J Clin Oncol 2014;32(27):3059-68.

Patient disposition:
59 patients were evaluated in the planned interim analysis (mITT)

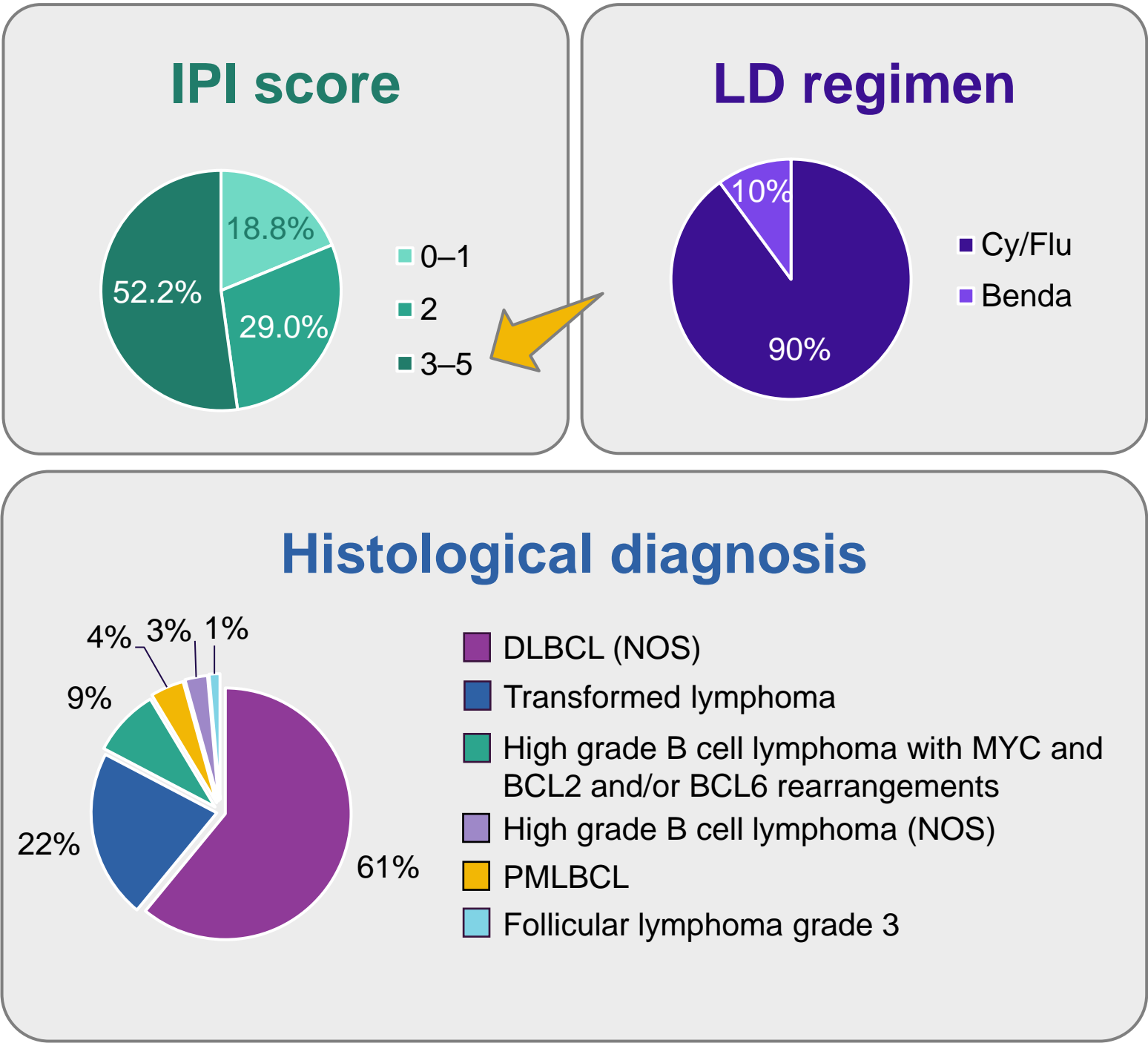


*Data cut-off: 29 Mar 2024.

Patient baseline characteristics:

Advanced, heavily pre-treated population with diverse histology

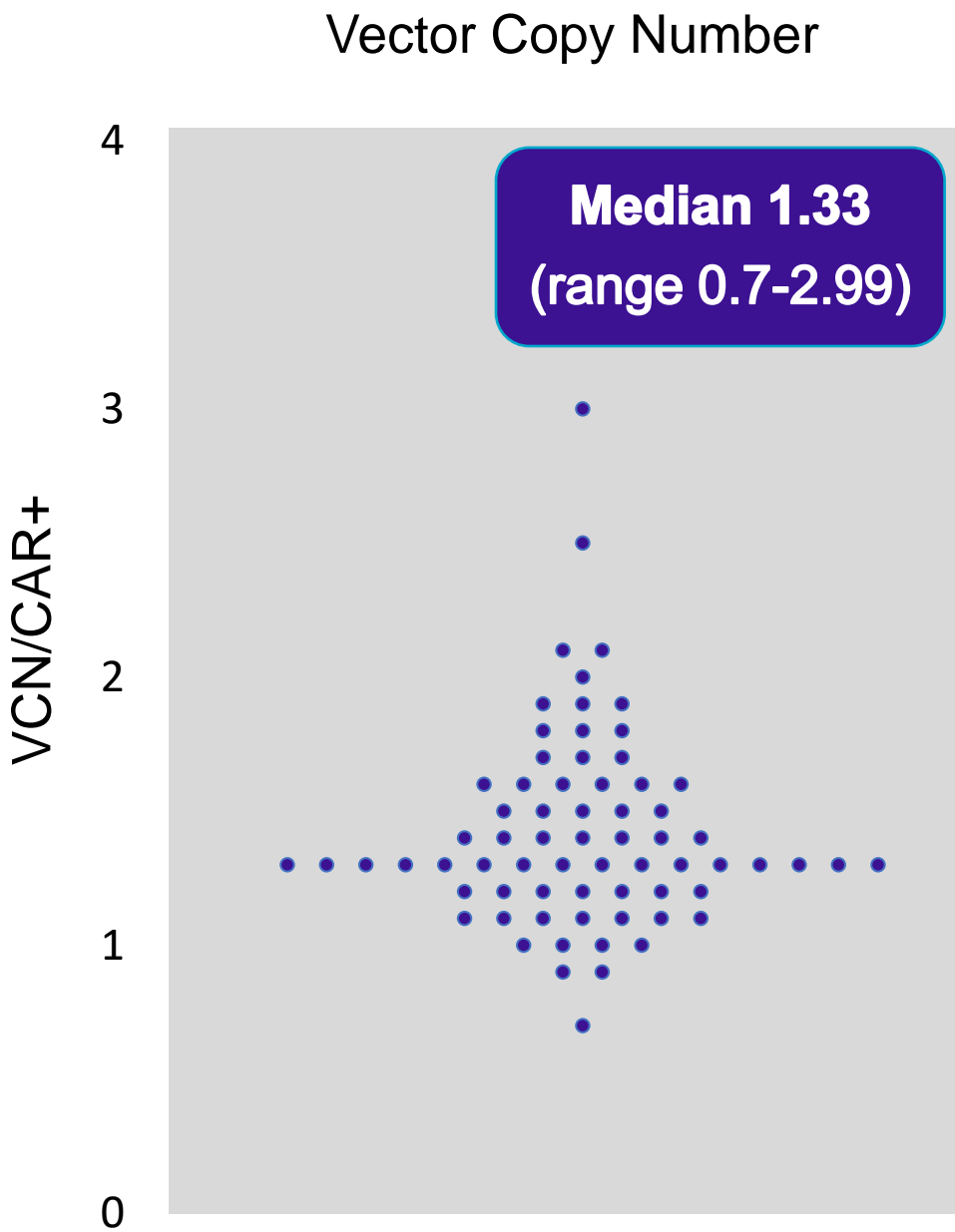
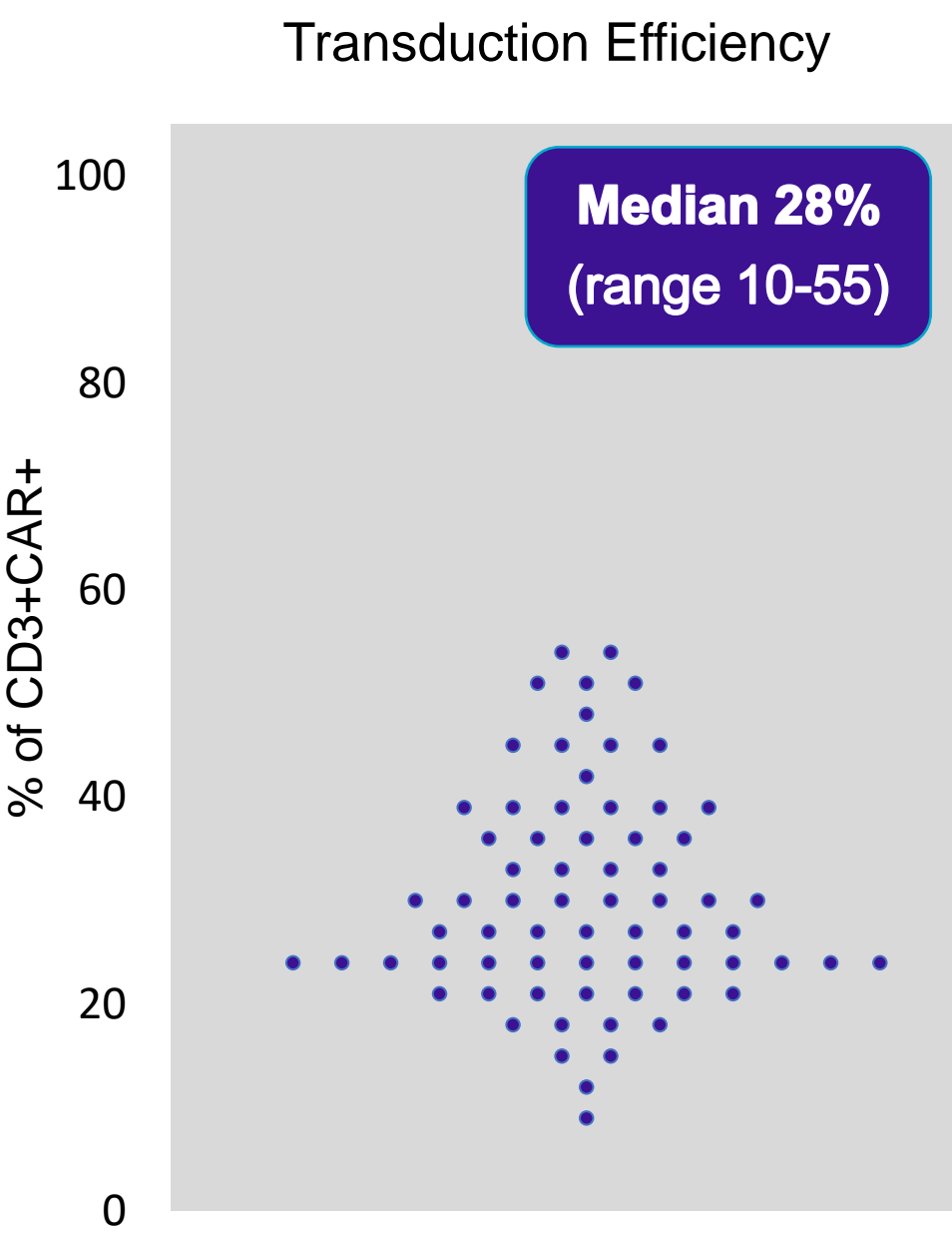
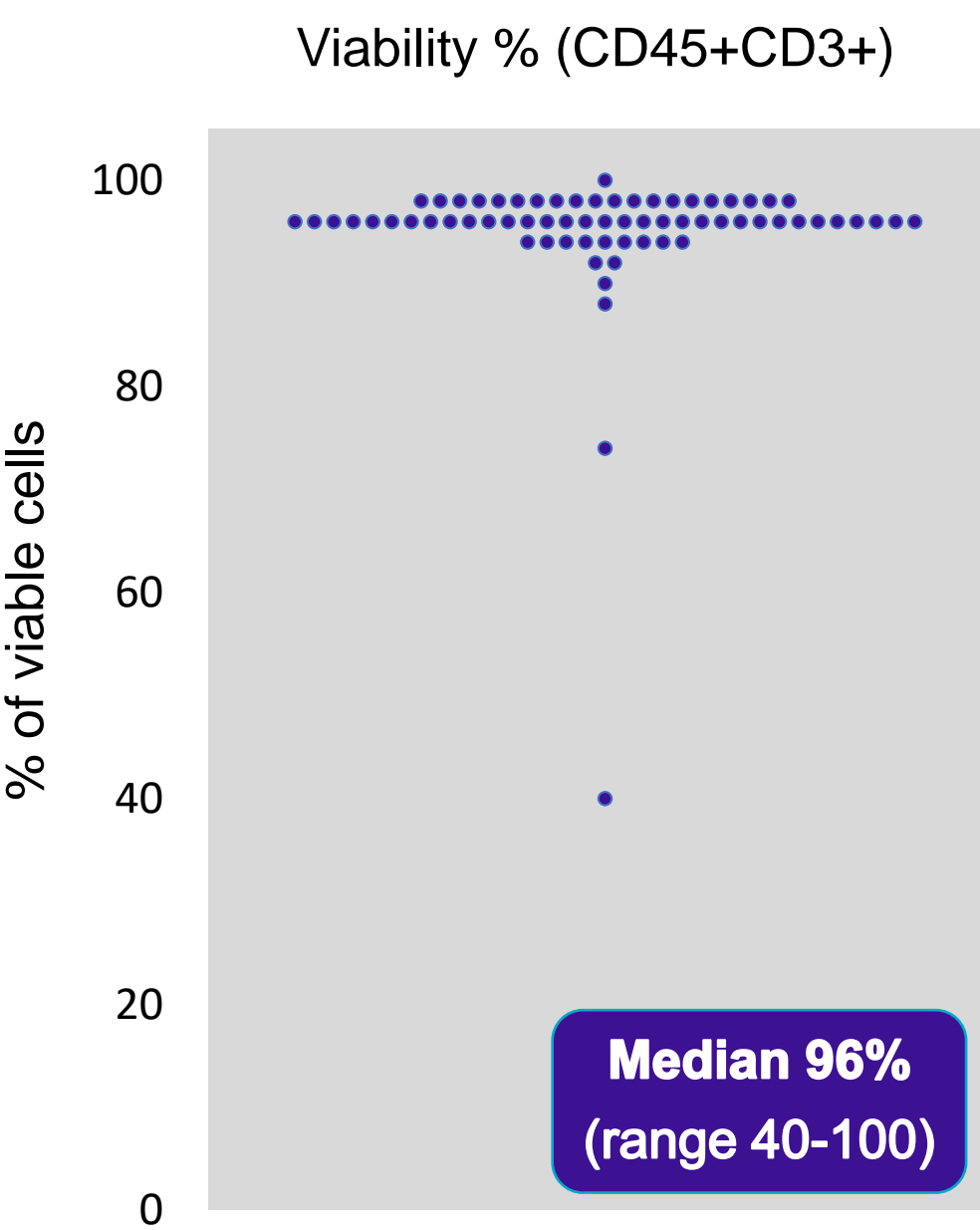
	FAS (N=69)
Median age, years (range)	65 (25–85)
Male sex, N (%)	47 (68.1)
Race, N (%)	
White	57 (82.6)
Asian	10 (14.5)
Black	1 (1.4)
Unknown	1 (1.4)
LDH elevated, N (%)	38 (55.1)
≥2 extranodal sites, N (%)	37 (53.6)*
Prior lines, N (%)	
2	52 (75.4)
3+	17 (24.6)
History of ASCT, N (%)	17 (24.6)
Bridging, N (%)	
Steroids	3 (4.3)
RT	1 (1.4)



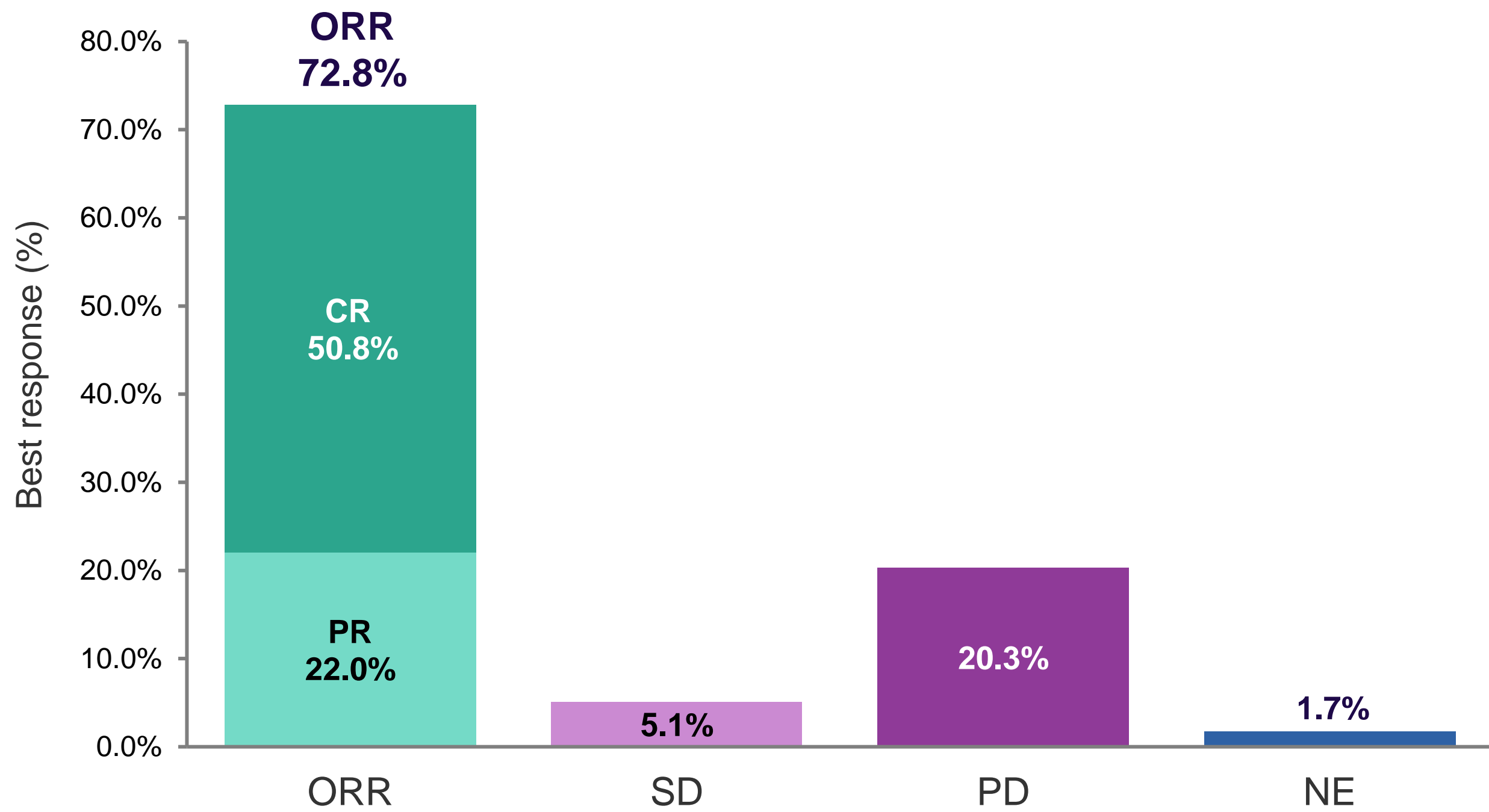
*As per IRC. ASCT, autologous stem cell transplant; BCL, B cell leukemia/lymphoma; Benda, Bendamustine; Cy/Flu, Cyclophosphamide/Fludarabine; DLBCL, diffuse large B cell lymphoma; FAS, full analysis set; IPI, International Prognostic Index; LD, lymphodepletion; LDH, lactate dehydrogenase; MYC, myelocytomatosis oncogene; NOS, not otherwise specified; PMLBCL, primary mediastinal (thymic) large B cell lymphoma; RT, radiotherapy.

Successful manufacturing of zamto-cel

69 treated patients: 91.3% in-specification product manufacture

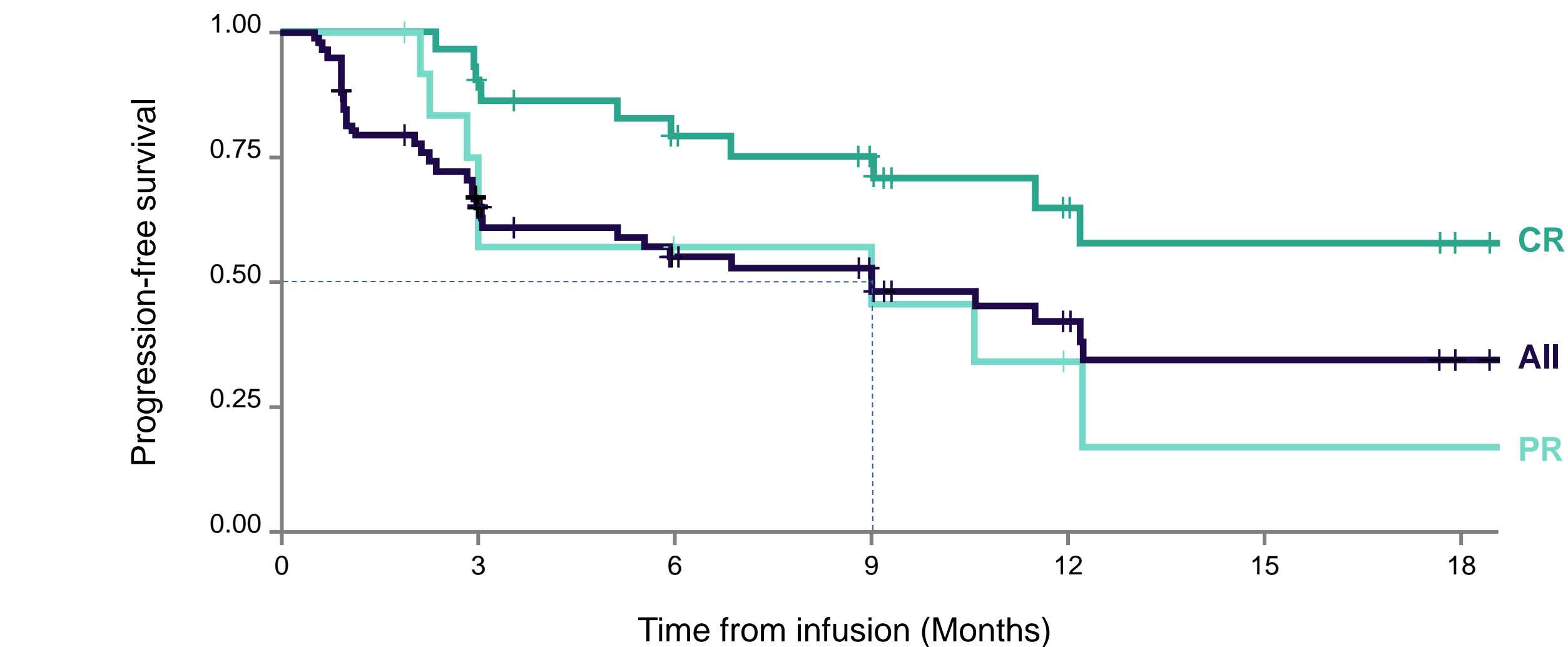


Response rates as Best Overall Response (BOR) showed high efficacy in the mITT (N=59) population



CR, complete response; mITT, modified intention-to-treat; NE, not evaluated; ORR, overall response rate; PD, progressive disease; PR, partial response; SD, stable disease.

Median Progression-free Survival (PFS) was 9 months



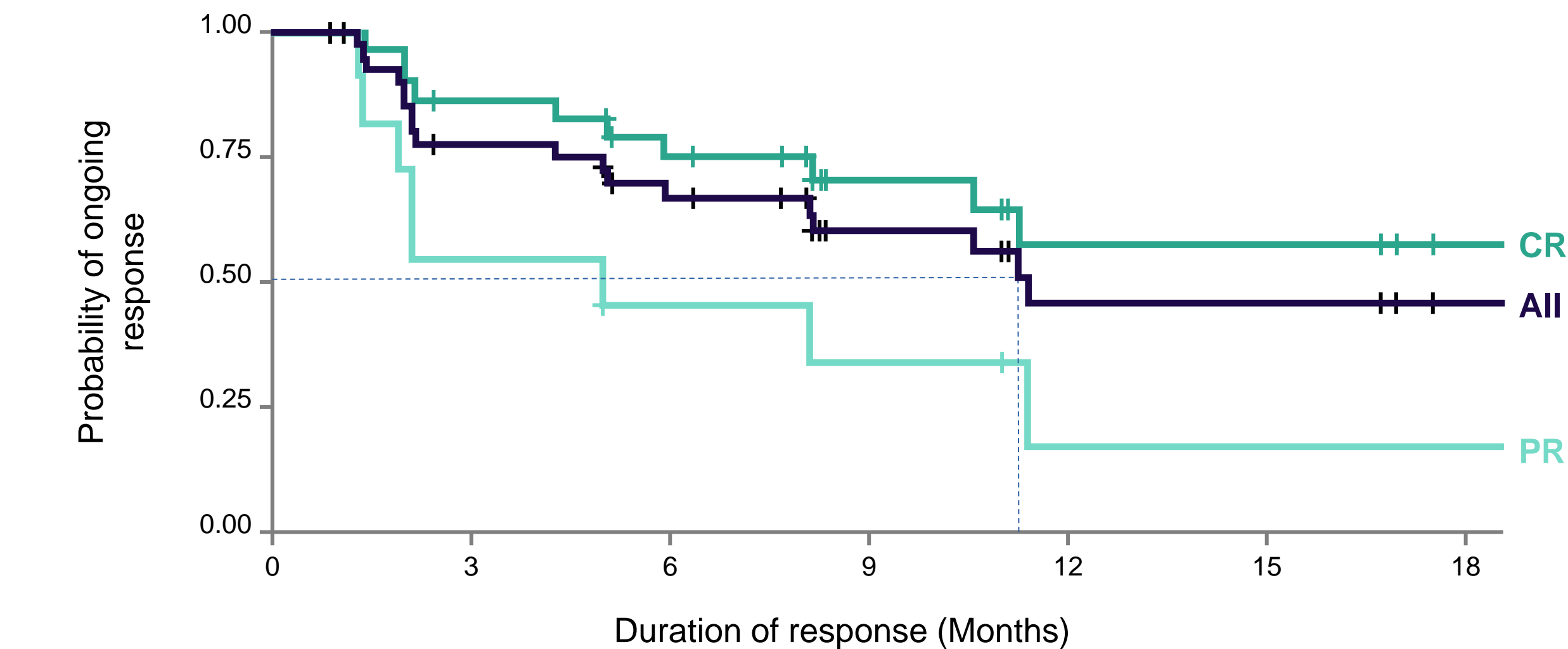
Progression-free Survival

- 6-month PFS: 55%

Number at risk								
BOR	CR	30	26	21	17	10	8	6
	PR	13	7	5	5	2	1	1
	All	59	34	26	22	12	9	7

BOR, best overall response; CR, complete response; mFU, median follow-up; PFS, progression-free survival; PR, partial response.

Median Duration of Response (DOR) was 11.4 months



Duration of Response

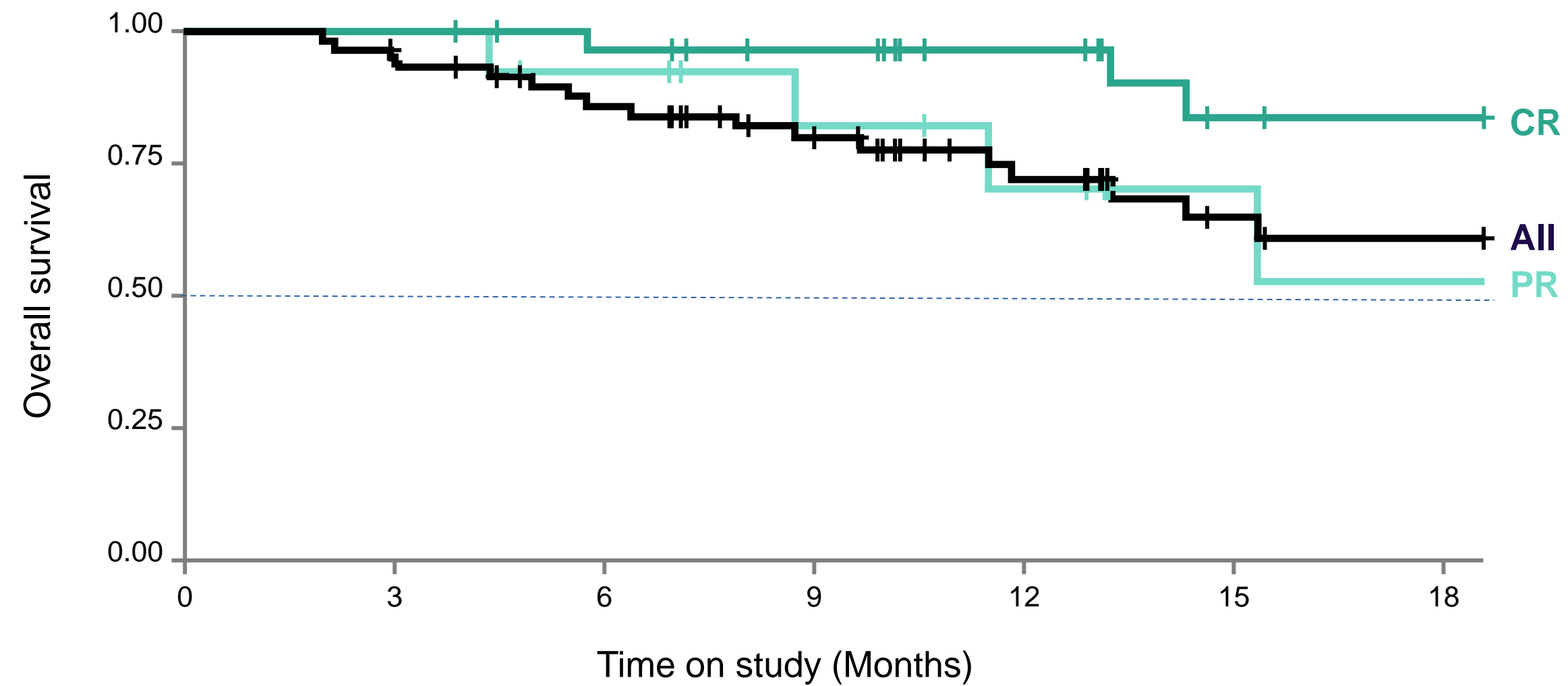
- All mDOR: 11.4 months
- CR mDOR: not reached

Number at risk

BOR	CR	30	24	19	12	8	8	5
	PR	13	6	4	3	1	1	1
	All	43	30	23	15	9	9	6

BOR, best overall response; CR, complete response; mDOR, median duration of response; PR, partial response.

Median Overall Survival (OS) was not reached at the time of interim analysis

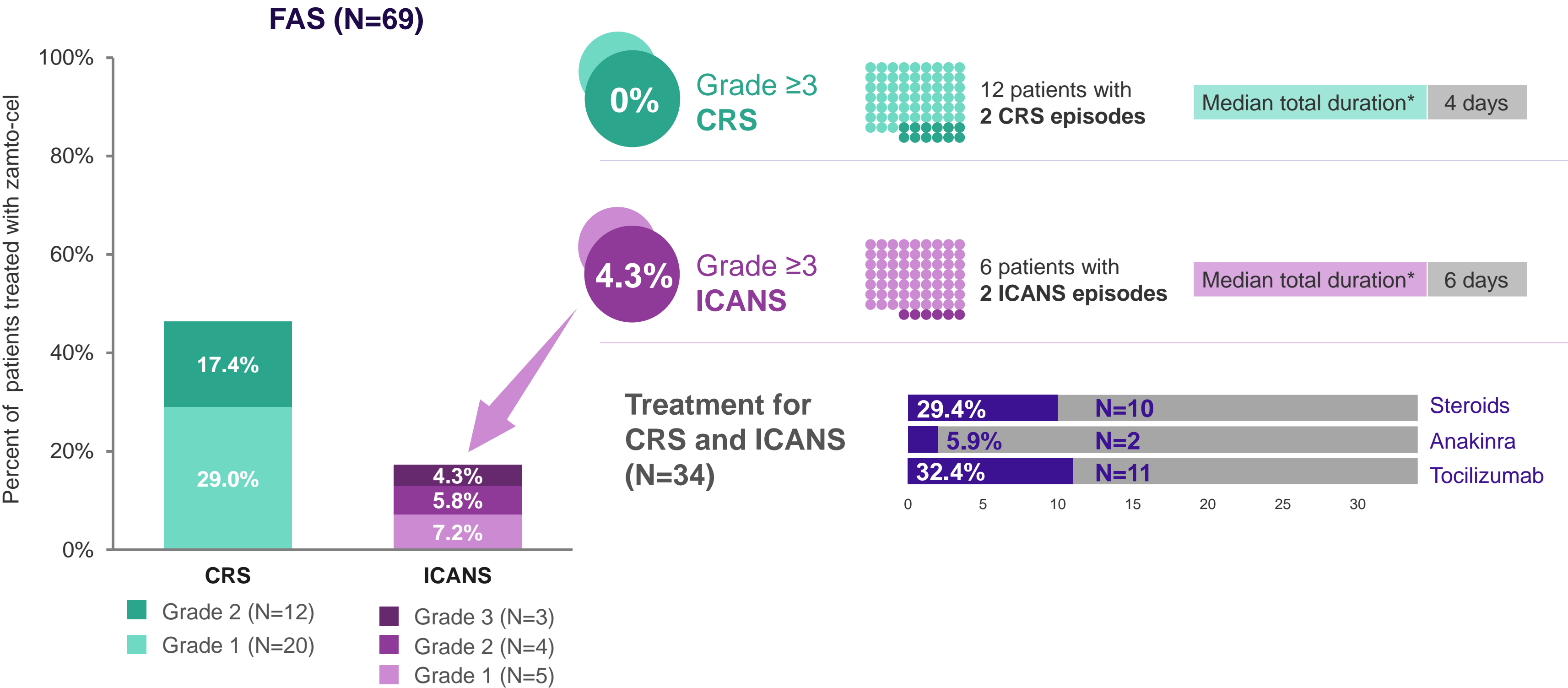


Number at risk

BOR	CR	30	30	27	24	18	12	11
	PR	13	13	11	8	6	4	3
	All	59	55	47	38	25	17	15

BOR, best overall response; CR, complete response; PR, partial response.

Low incidence of CRS and ICANS – mostly low grade



*Total duration includes gaps between episodes.

CRS, cytokine release syndrome; FAS, full analysis set; ICANS, immune effector cell-associated neurotoxicity syndrome.

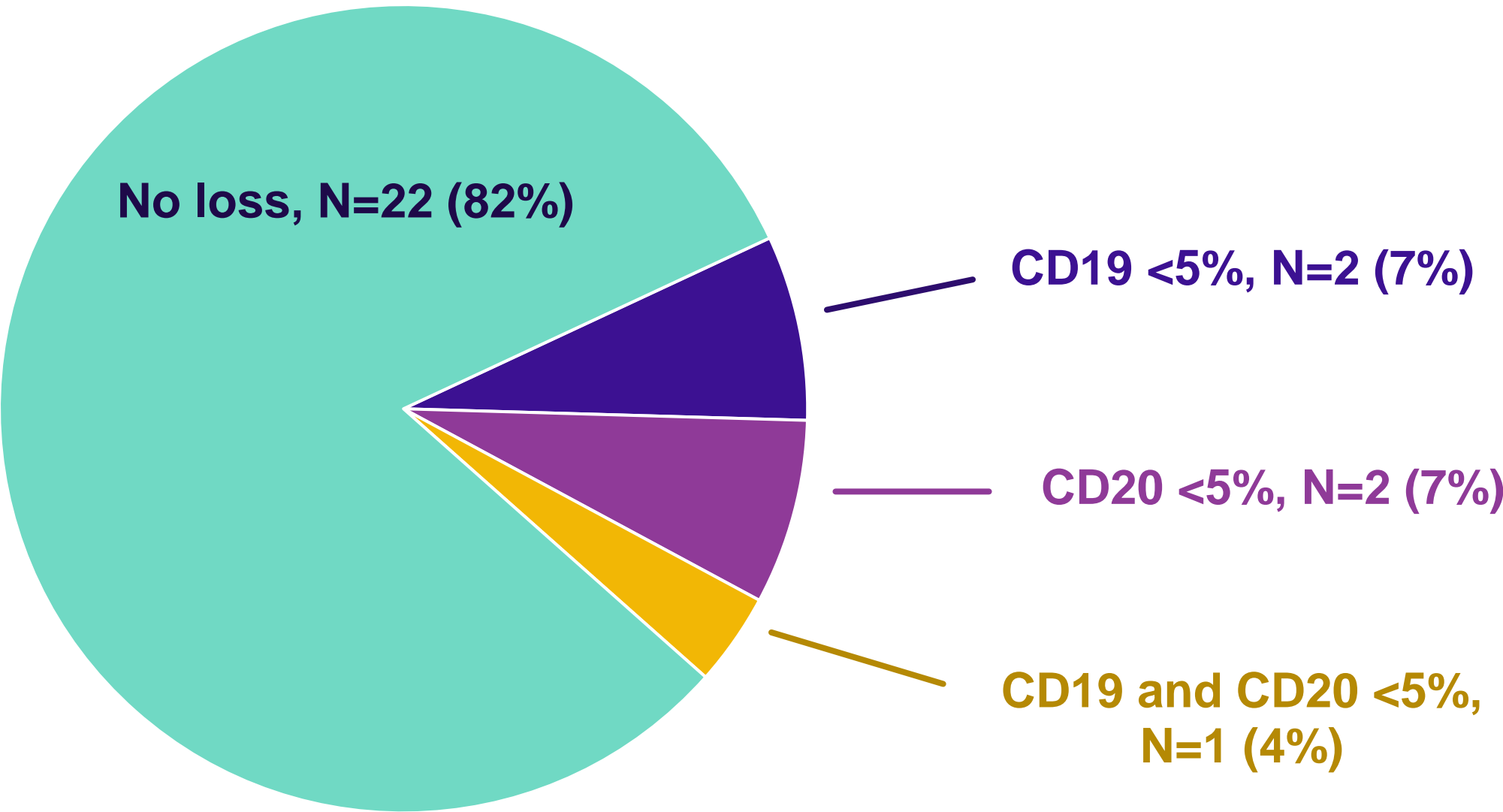
Adverse Events of Special Interest within 90 days

Toxicity*	Grade ≥3, N (%)**
Hematologic toxicities	43 (62.3)
Neutropenia/Neutrophil count decreased	33 (47.8)
Anemia/Hemoglobin decreased	14 (20.3)
Thrombocytopenia/Platelet count decreased	8 (11.6)
Infections	3 (4.3)
Deaths (due to any cause) ***	5 (7.2)
IEC-HS	1 (1.4)
Secondary malignancies	0

*Up to 90 days post-CAR T cell infusion. **FAS, N=69. ***Causes: 3 due to disease progression 1 bacterial sepsis/intestinal perforation. 1 COVID-19 pneumonia; CAR-T cell, chimeric antigen receptor T cell; FAS, full analysis set; IEC-HS, immune effector cell-associated hemophagocytic lymphohistiocytosis-like syndrome.

Antigen loss does not appear as a driver of progression

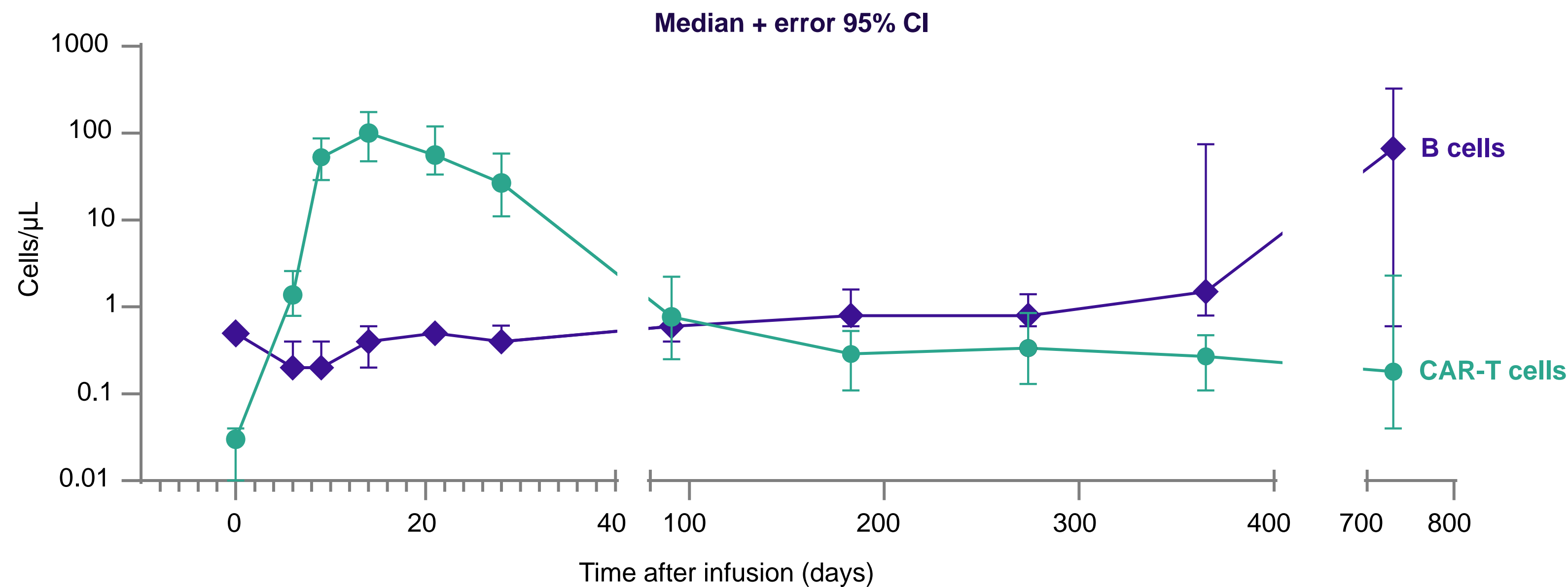
Number of tumors with CD19 and/or CD20 evaluation* at progression (N=27)



CD19/CD20
Only 1 patient experienced dual antigen loss

*Loss defined as <5% of positive cells.

CAR-T-positive cells persist and B cells recover over the time-period evaluated



CAR-T cell, chimeric antigen receptor T cell; CI, confidence interval.

Conclusions

Zamto-cel

- The first tandem CD20-CD19-directed non-cryopreserved CAR-T cell product
- Administered as a fresh product with a short vein-to-vein time of 14 days
- Lymphodepletion is initiated during the manufacturing process



DALY II US

- Pre-planned interim analysis of 59 evaluable patients
- ORR 72.8%; CRR 50.8%
- 6-month PFS: 55% (95% CI: 41-67); median PFS: 9.0 months
- Well tolerated therapy:
 - No grade ≥ 3 CRS
 - Grade ≥ 3 ICANS in only 4.3% of patients
- Dual CD20-CD19 targeting appears to mitigate antigen loss as a mechanism of resistance
- No patient died while awaiting treatment with CAR-T



Thank you for your attention!



This study is sponsored by Miltenyi Biomedicine GmbH (Germany)