Trattamento *SOC* con CAR-T nel Linfoma Diffuso a Grandi Cellule B e nel linfoma mantellare recidivato o refrattario

Prof. Paolo Corradini
Chair of Hematology, University of Milano
Division of Hematology , Fondazione IRCCS Istituto Nazionale dei Tumori, Milano, Italy

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DEI TUMORI

Sistema Sanitario Regione Lombardia

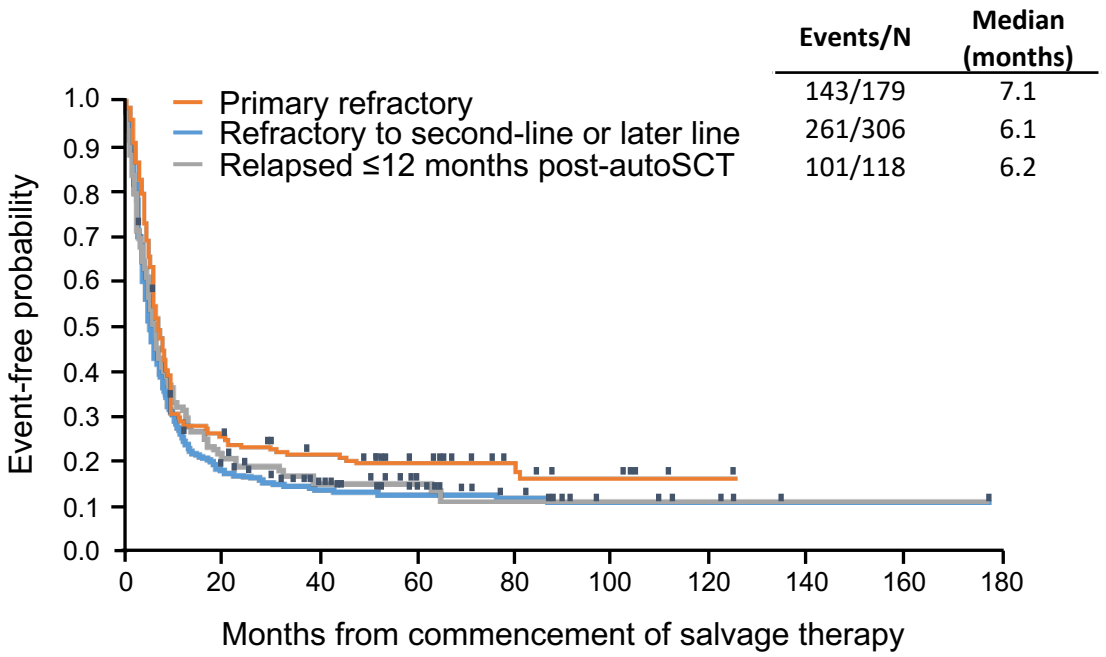
Conflict of Interest Declaration

Prof. Paolo Corradini

- No employment for any for-profit health care company (public or private) to disclose
- No leadership role (officer or board of directors) in any for-profit health care company (public or private) to disclose
- No stock or other ownership interest in any for-profit health care company (public or private) to disclose
- No activity as speakers' bureau for any for-profit health care company (public or private) to disclose
- I had honoraria paid by for-profit health care companies during the past 2 years: Abbvie, Amgen, Celgene, Daiichi Sankyo, Gilead, Janssen, Kite, Novartis, Roche, Sanofi, Servier, Takeda (Consulting, Advisory role or Lecturer)
- I had travel and accommodations paid by for-profit health care companies during the past 2 years: Novartis, Janssen, Celgene, BMS, Takeda, Gilead, Amgen, AbbVie, Roche, Sanofi

Poor outcomes in R/R DLBCL have led to an increased number of patients being treated with CAR-T cell therapy

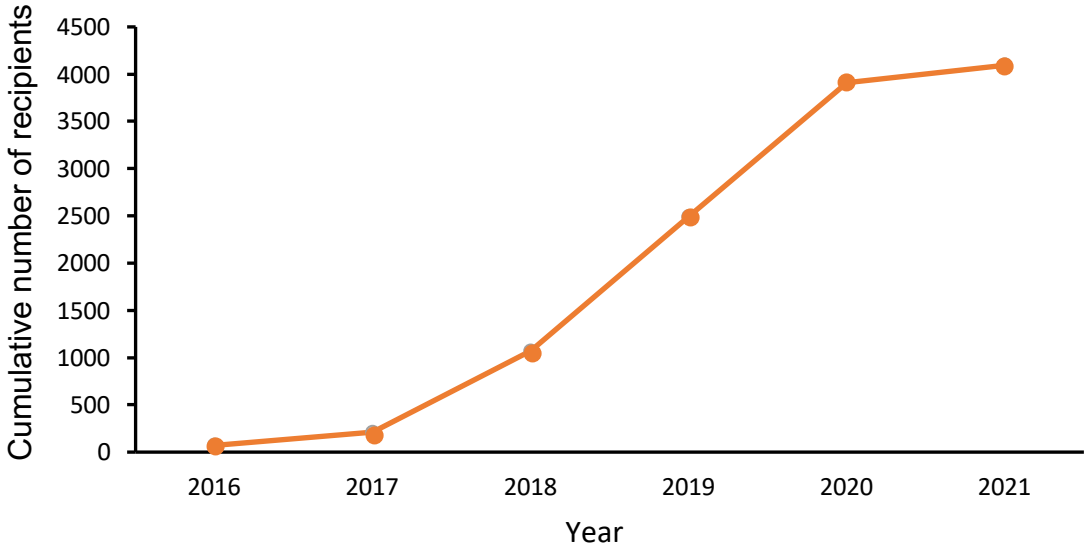
OS in SCHOLAR-1 study[1]



	Events/N	Median (months)
Primary refractory	143/179	7.1
Refractory to second-line or later line	261/306	6.1
Relapsed ≤12 months post-autoSCT	101/118	6.2

N=636; ORR 26%; CR 7%; median OS 6.3 months

Number of recipients of CAR-T cells in US: 2016–2021[2]*



*4094 patients and 4308 infusions, CIBMTR-CIDR data from the US[2], data incomplete for 2020 and 2021.
autoSCT, autologous stem cell transplantation; CAR, chimeric antigen receptor; CIBMTR-CIDR, Center for International Blood and Marrow Transplant Research–Cellular Immunotherapy Data Resource; CR, complete response; DLBCL, diffuse large B-cell lymphoma; ORR, overall response rate; OS, overall survival; R/R, relapsed or refractory.
1. Crump M *et al. Blood* 2017;130:1800–8; 2. Moskop, A, Hu ZH, Pasquini MC. Current uses of CAR-T cell therapies in the US: CIDR summary slides, 2020. Available at: http://www.cibmtr.org (accessed May 2021).

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Regular Article

LYMPHOID NEOPLASIA

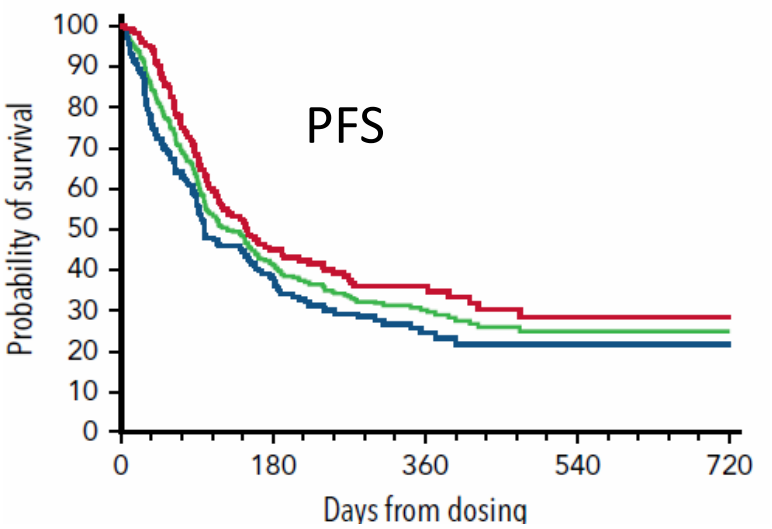
GLA/DRST real-world outcome analysis of CAR T-cell therapies for large B-cell lymphoma in Germany

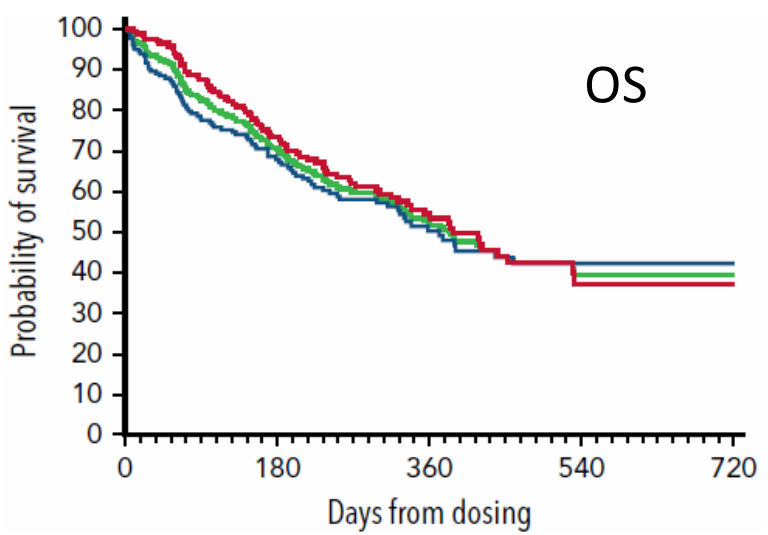
Wolfgang A. Bethge

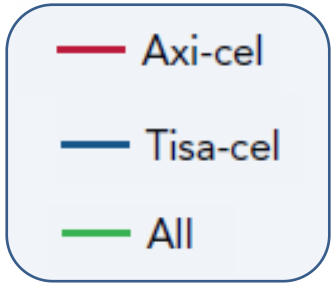
KEY POINTS

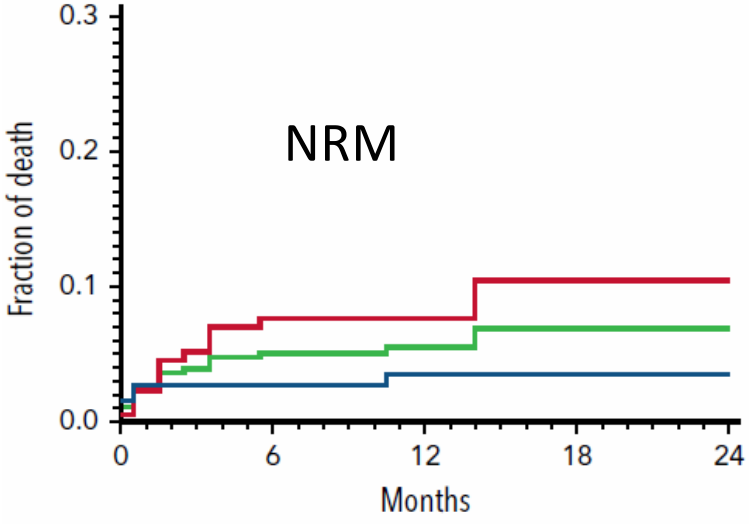
- Compared with tisa-cel, axi-cel was associated with better disease control but had a less favorable safety profile in SOC treatment of LBCL.
- This study suggests that important outcome determinants of CD19-directed CAR T-cell treatment of LBCL in the real-world setting are bridging success, CAR-T product selection, LDH, and the absence of prolonged neutropenia and/or severe neurotoxicity.
- With a median follow-up of 11 months, Kaplan-Meier estimates of OS, PFS, and nonrelapse mortality (NRM) 12 months after dosing were 52%, 30%, and 6%, respectively.

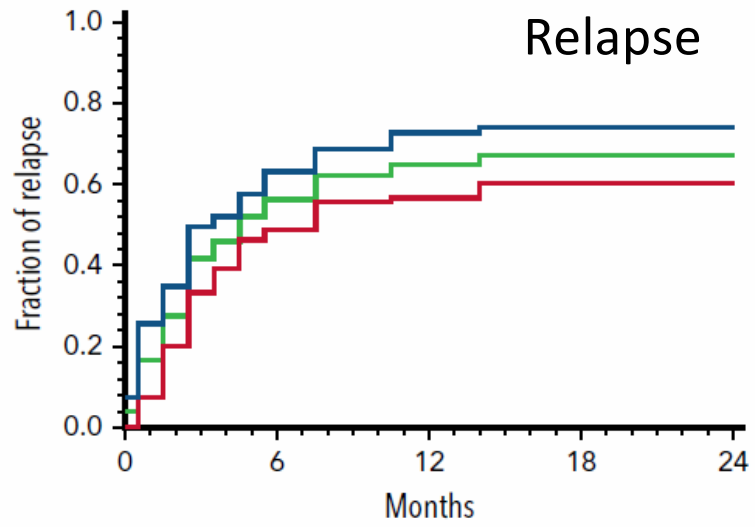
Survival, NRM, and relapse.











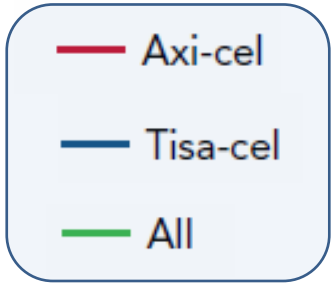


Figure 1

Conclusions

This study highlights some particularities of CD19-directed CAR T-cell treatment of LBCL in the real-world setting:

- a relevant risk of delayed infection-related NRM raising implications for potential prophylaxis strategies,

- the finding that effective bridging is an important predictor of CD19-directed CAR T-cell treatment efficacy and can overcome the adverse impact of actively proliferating disease on the outcome.

- these data suggest different safety/efficacy profiles of the two products available in the SOC setting, with less toxicity of tisa-cel, better disease control (CR and PFS) with axi-cel, and comparable survival.

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Emmanuel Bachy

ARTICLES

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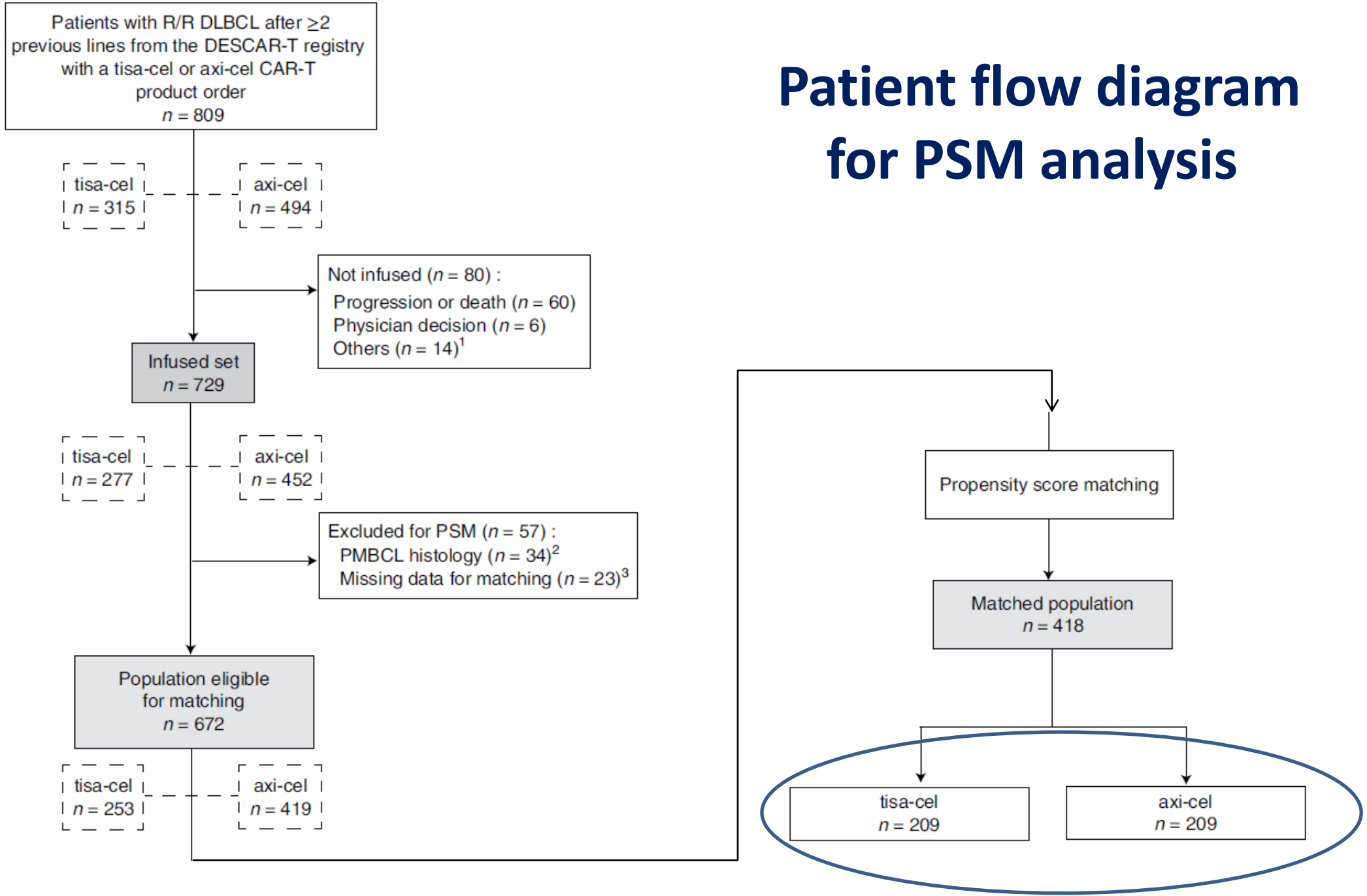
Check for updates

OPEN

A real-world comparison of tisagenlecleucel and axicabtagene ciloleucel CAR T cells in relapsed or refractory diffuse large B cell lymphoma

This matched comparison study supports a higher efficacy and also a higher toxicity of axi-cel compared to tisa-cel in the third or more treatment line for R/R DLBCL.

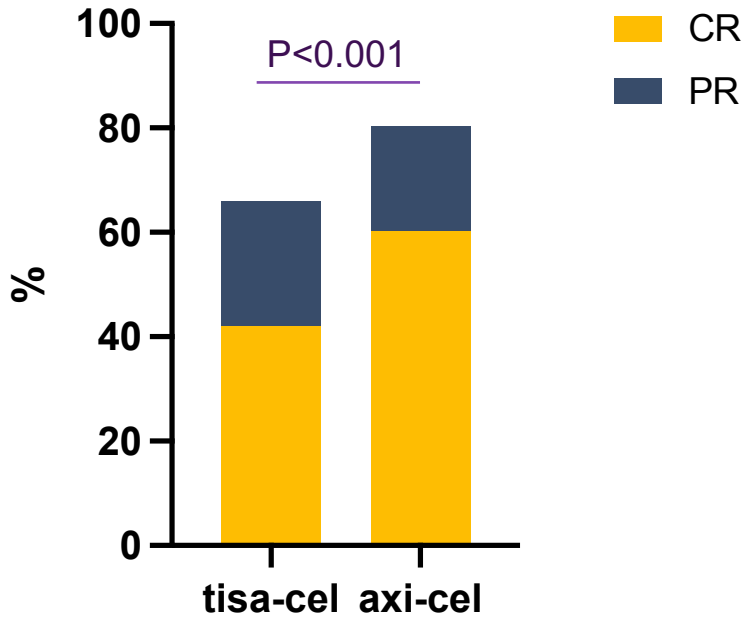
Patient flow diagram for PSM analysis



Results: Response Rates

	PSM		
	axi-cel N=209	tisa-cel N=209	P
Response rate*			
ORR % (95% CI)	80.4 (74.3-85.5)	66.0 (59.2-72.4)	<0.001
CRR % (95% CI)	60.3 (53.3-67.0)	42.1 (35.3-49.1)	<0.001

**according to Lugano 2014 classification*

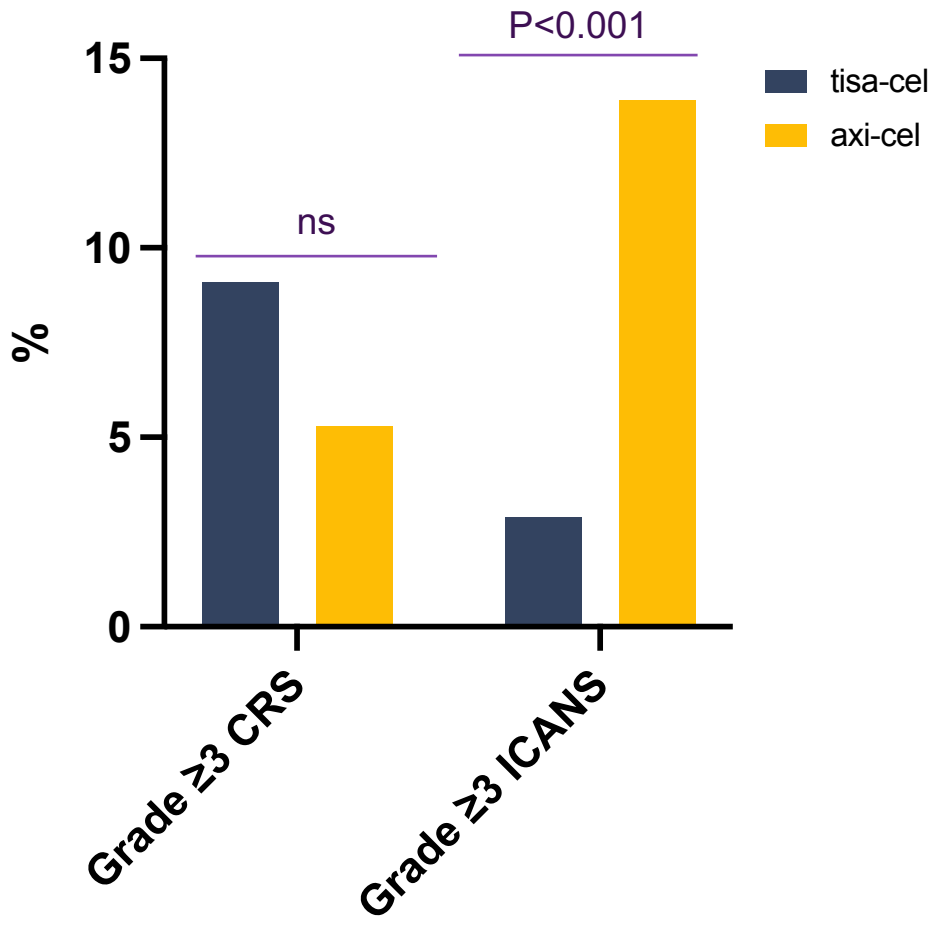


Bachy E, et al. EHA 2022. S260; Bachy et al., Nature Medicine, 2022

Toxicity

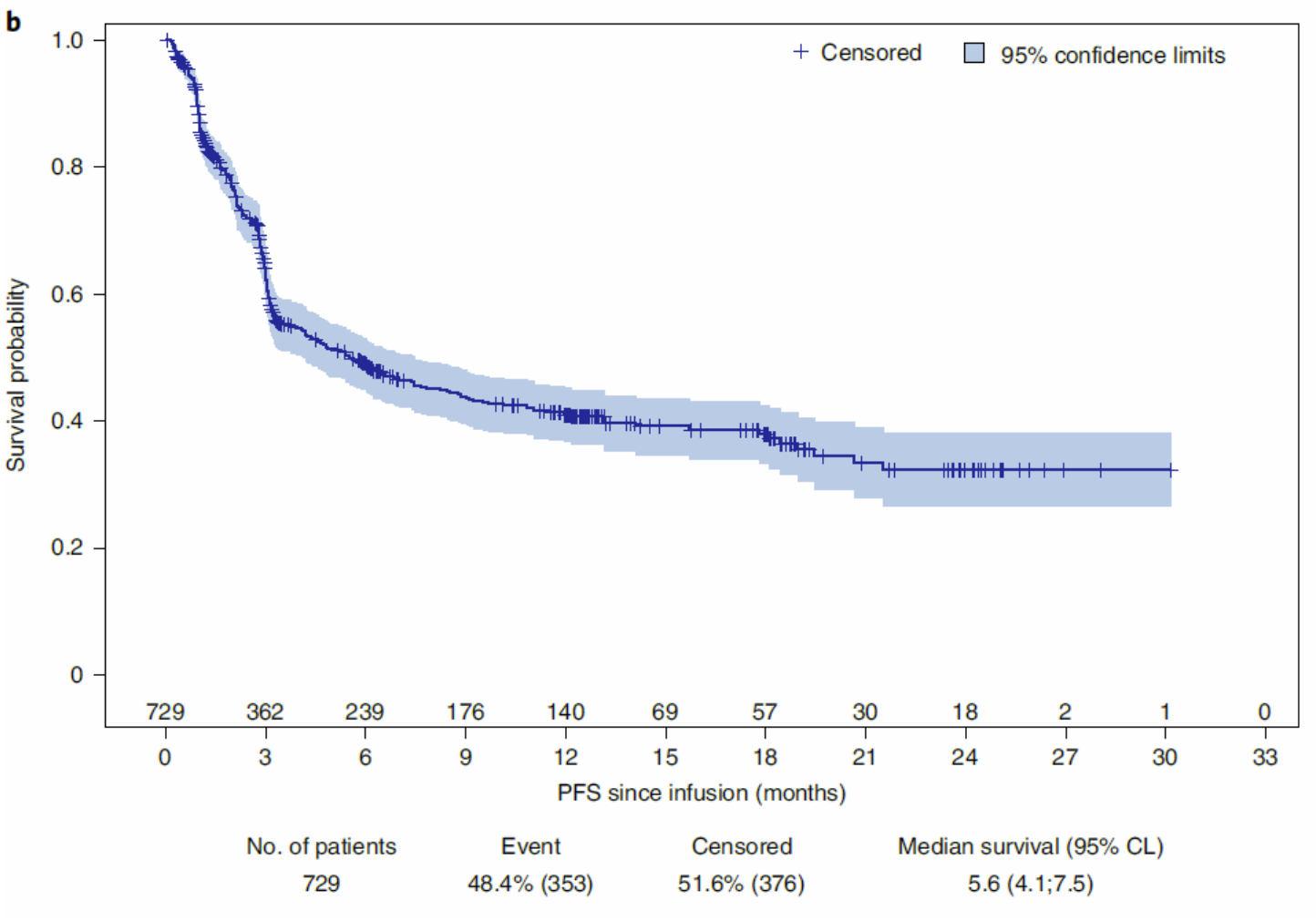
	Tisa-cel N=209		Axi-cel N=209		P-value
At least one CRS of grade >=3*					
Yes	**19**	**(9.1%)**	**11**	**(5.3%)**	P = 0.13
At least one Neurotoxicity of grade >=3*					
Yes	**6**	**(2.9%)**	**29**	**(13.9%)**	**P < 0.001**

**per ASTCT consensus grading criteria, Lee et al., BBMT, 2019*



Sesques et al. EHA 2022. S210; Bachy E, et al. EHA 2022. S260.

Survival of the whole cohort of pts treated with commercial tisa-cel or axi-cel from the French DESCAR-T registry before any matching

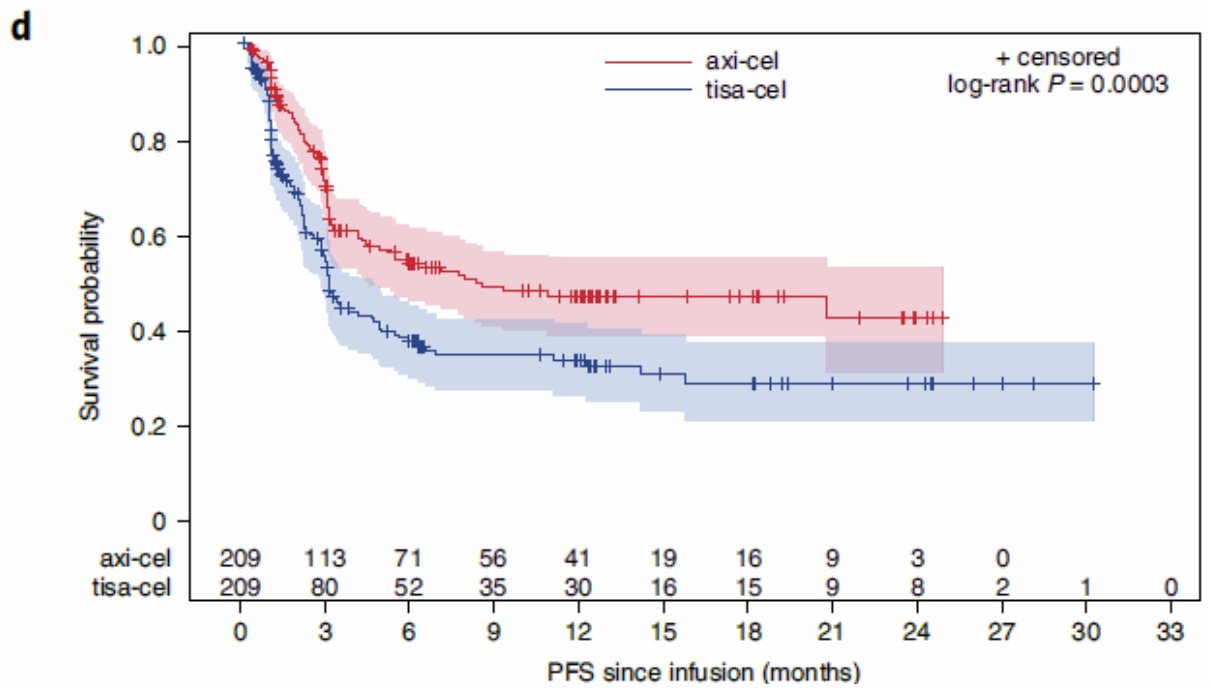


PFS from CAR T infusion (*n = 729)*

Shaded areas correspond to the 95% confidence bands. CL, confidence limit.

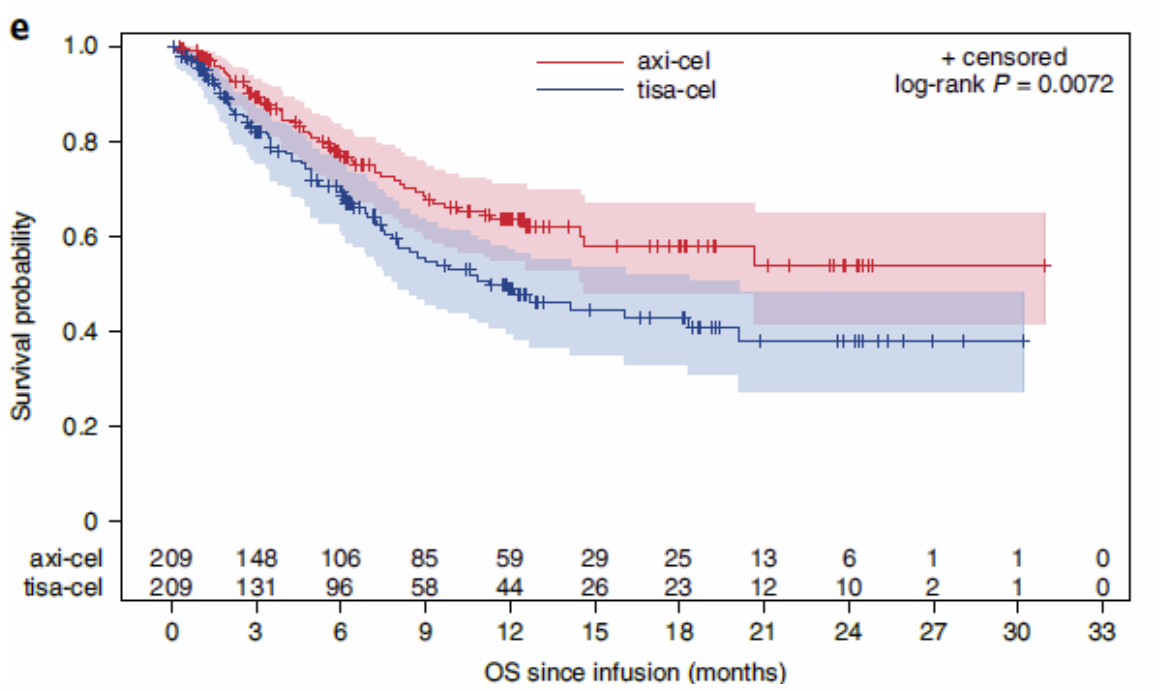
Survival according to CAR T product after PSM

PFS according to CAR T product



	No.of patients	Event	Censored	Median survival (95% CL)
axi-cel	209	43.1 % (90)	56.9 % (119)	8.2 (4.4 ; NA)
tisa-cel	209	55.5 % (116)	44.5 % (93)	3.1 (2.8 ; 4.1)

OS according to CAR T product



	No.of patients	Event	Censored	Median survival (95% CL)
axi-cel	209	28.2 % (59)	71.8 % (150)	Not reached (14.7 ; NA)
tisa-cel	209	37.8 % (79)	62.2 % (130)	11.2 (8 ; 20.1)

Outcome of 79 evaluable *SOC* LBCL patients

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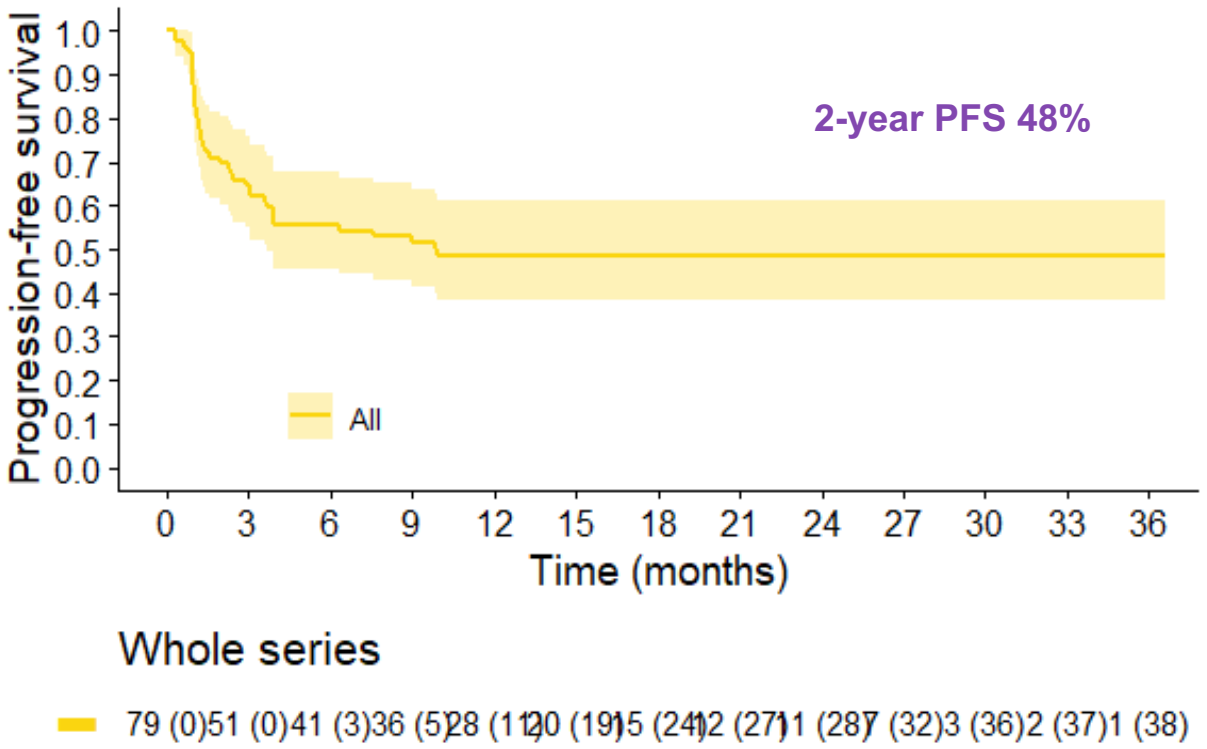
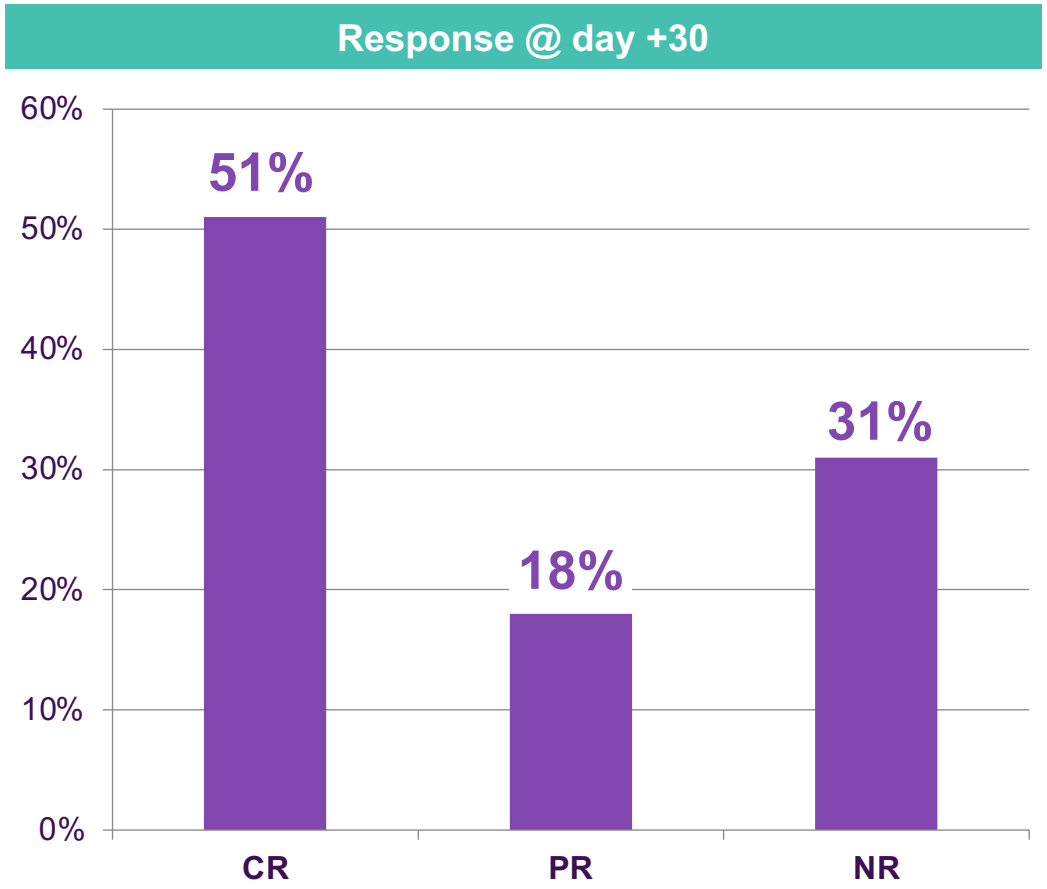
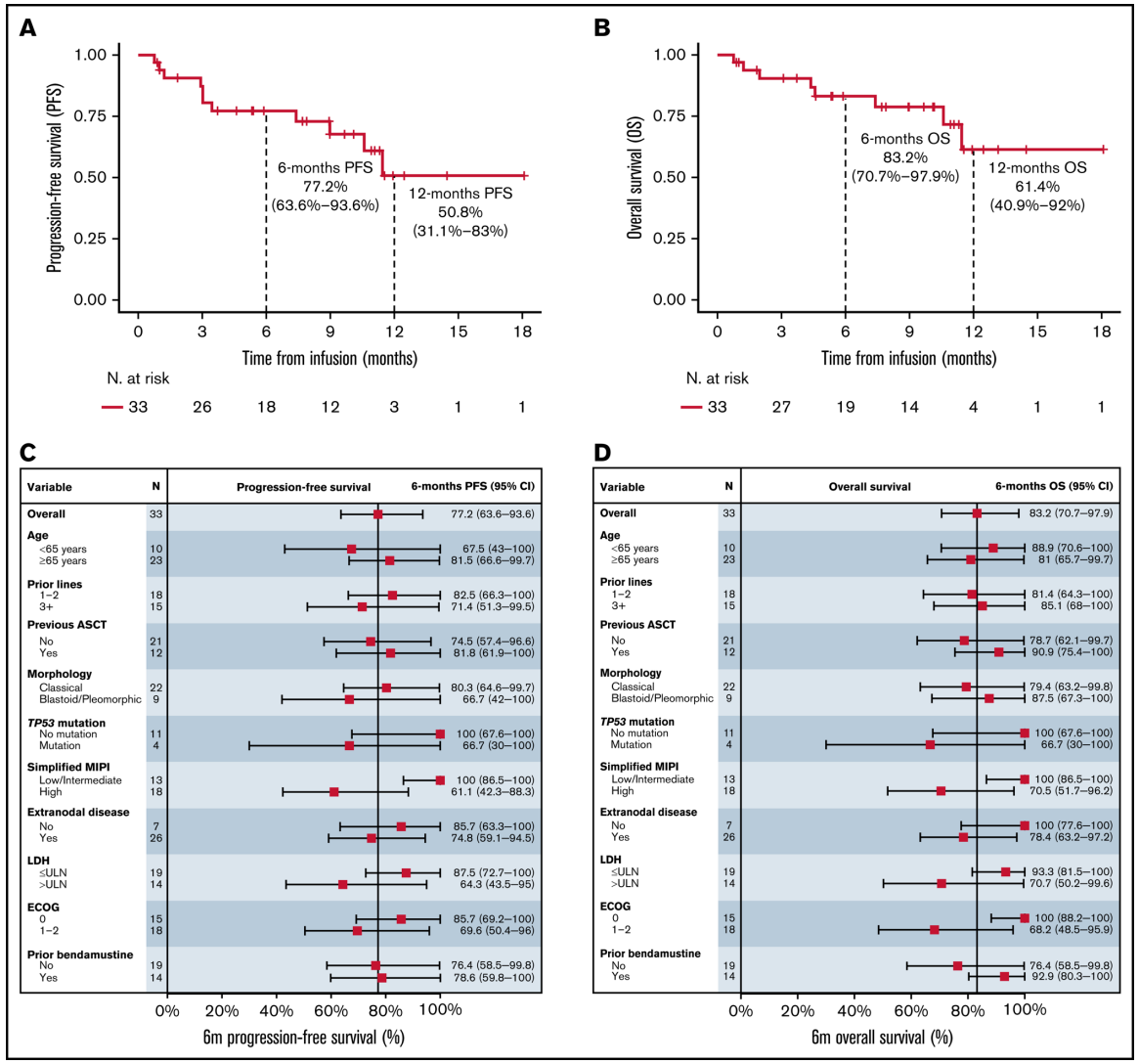


2-year PFS 48%



Speaker Experience, INT Milano

Real-world evidence of brexucabtagene autoleucel for the treatment of relapsed or refractory mantle cell lymphoma (19 of 28 infused)



Gloria Iacoboni,Kai Rejeski,Guillermo Villacampa,Jaap A. van Doesum,Annalisa Chiappella,Francesca Bonifazi,Lucia Lopez-Corral,Michiel van Aalderen,Mi Kwon,Nuria Martínez-Cibrian,Stefania Bramanti,Juan Luis Reguera-Ortega,Lina Camacho-Arteaga,Christian Schmidt,Ana Marín-Niebla,Marie José Kersten,Alejandro Martin Garcia-Sancho,Pier Luigi Zinzani,Paolo Corradini,Tom van Meerten,Marion Subklewe,Pere Barba, Real-world evidence of brexucabtagene autoleucel for the treatment of relapsed or refractory mantle cell lymphoma, **Blood Adv, 2022**

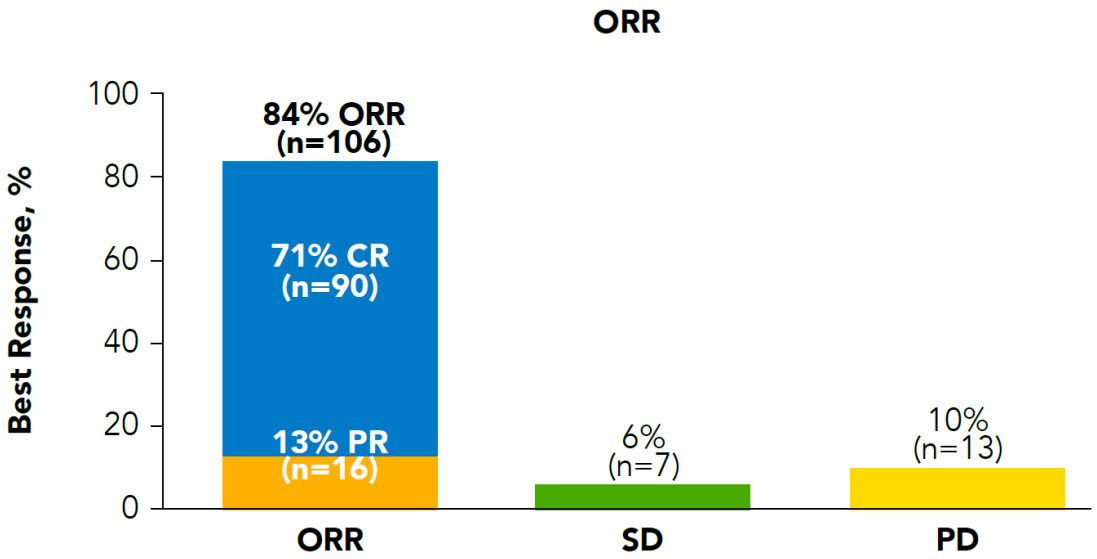
Real-World Outcomes of Brexucabtagene Autoleucel for the Treatment of Relapsed or Refractory Mantle Cell Lymphoma in the United States

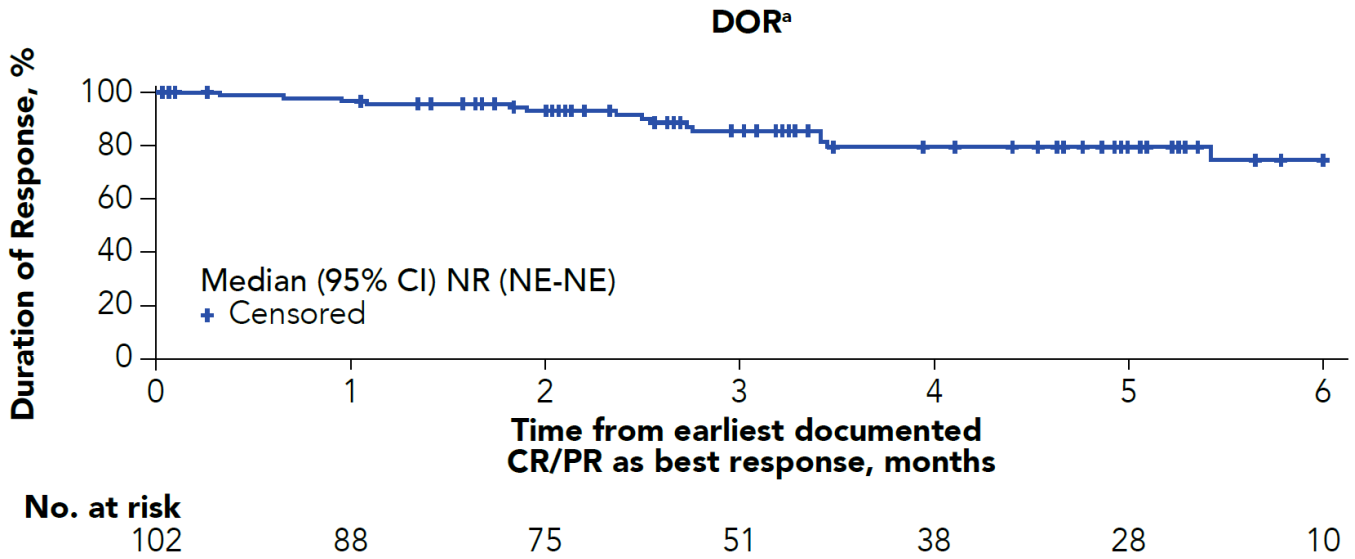
Frederick L. Locke, MD[1]; Zhen-Huan Hu, MPH[2]; James Gerson, MD[3]; Matthew J. Frank, MD; PhD[4]; L. Elizabeth Budde, MD, PhD[5]; Michael L. Wang, MD[6]; Brent Logan, PhD[7]; Ioana Kloos, MD, PhD[2]; Rubina Siddiqi, PhD[2]; Jina Shah, MD[2*]; Hairong Xu, MD, PhD[2]; Marcelo C. Pasquini, MD, MS[7]

[1]Moffitt Cancer Center, Tampa, FL, USA; [2]Kite, a Gilead Company, Santa Monica, CA, USA; [3]University of Pennsylvania Medicine, Philadelphia, PA, USA; [4]Stanford University, Stanford, CA, USA; [5]City of Hope National Medical Center, Duarte, CA, USA; [6]University of Texas MD Anderson Cancer Center, Houston, TX, USA; [7]Center for International Blood and Marrow Transplant Research, Medical College of Wisconsin, Milwaukee, WI, USA

*Dr. Shah was an employee of Kite when the studies reported here were conducted

Objective Response and Duration of Response (135 pts included in the analysis)





- Among all patients with best response assessed and reported (n=126), 106 (84%; 95% CI, 77-90) had an objective response
- With a median 6 months of follow-up, the median DOR was not yet reached; the estimated 3- and 6-month DOR rates were 85% (95% CI, 75-92) and 75% (95% CI, 58-85), respectively

[a] Among patients who achieved CR/PR as best response.

CR, complete response; DOR, duration of response; NE, not estimable; NR, not reached; ORR, objective response rate; PD, progressive disease; PR, partial response; SD, stable disease.

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