

**La terapia cellulare CAR-T è più efficace  
del trapianto autologo nella terapia  
di 2L dei DLBCL ricaduti precocemente?  
Le ragioni del sì.**

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**UNIVERSITÀ  
DEGLI STUDI  
DI TRIESTE**

CONVEGNO EDUCAZIONALE GITMO

# HOT QUESTIONS IN TRASPLANTATION AND CELLULAR THERAPIES

**Udine**

**13-14 novembre 2023**

Aula Polifunzionale - Ospedale di Udine

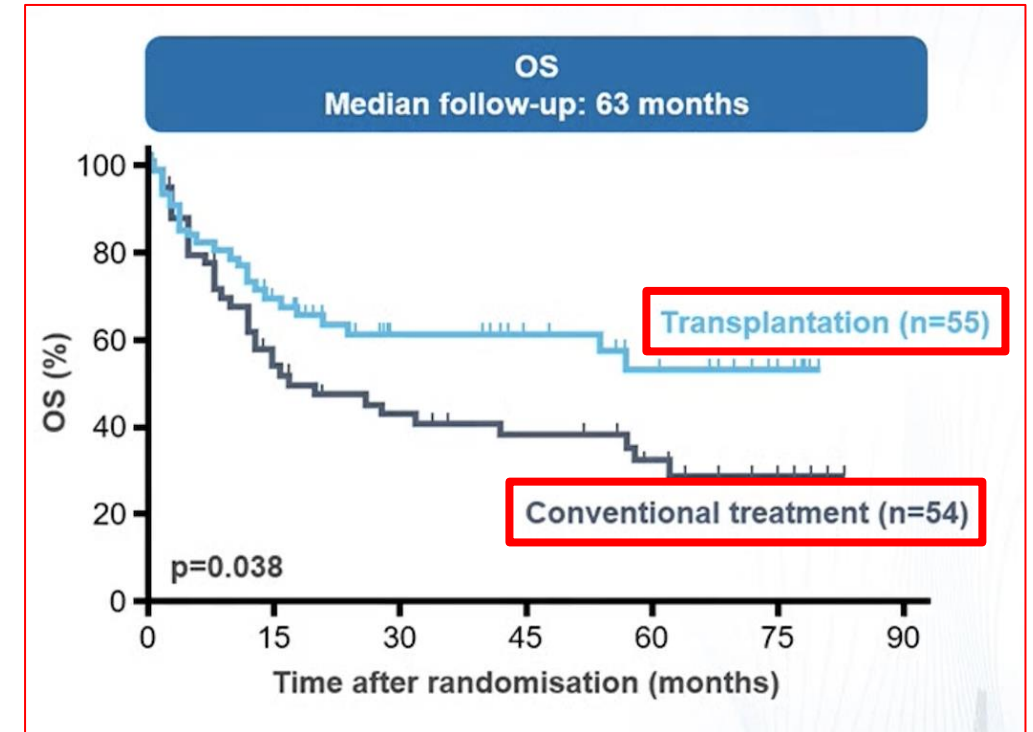
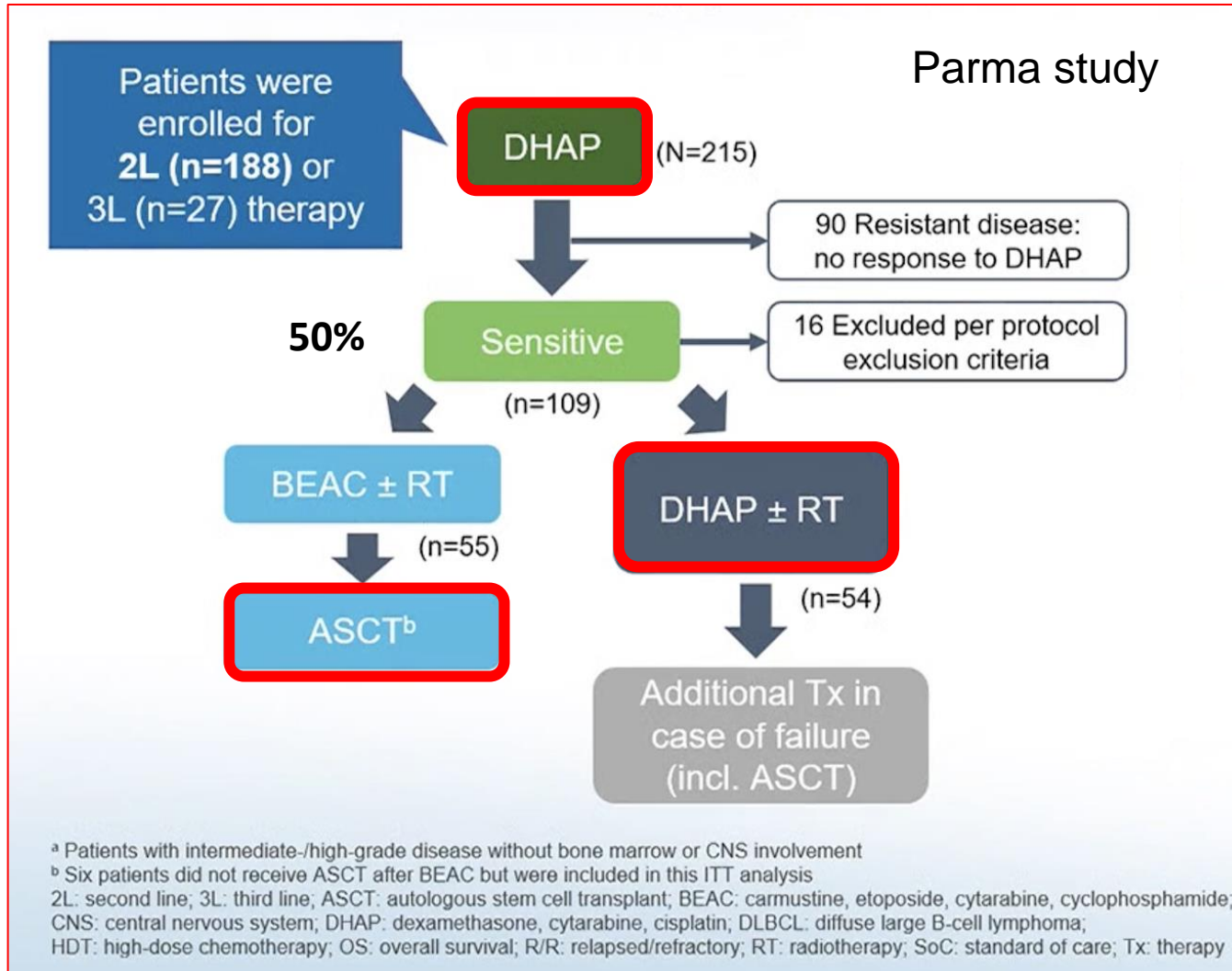
## DISCLOSURES: overall

**Consultancy:** Novartis, Abbvie, Amgen, Sobi, Argenx, Grifols

**Honoraria:** Celgene, Janssen, Gilead, Novartis, Roche, Amgen, Abbvie, Grifols

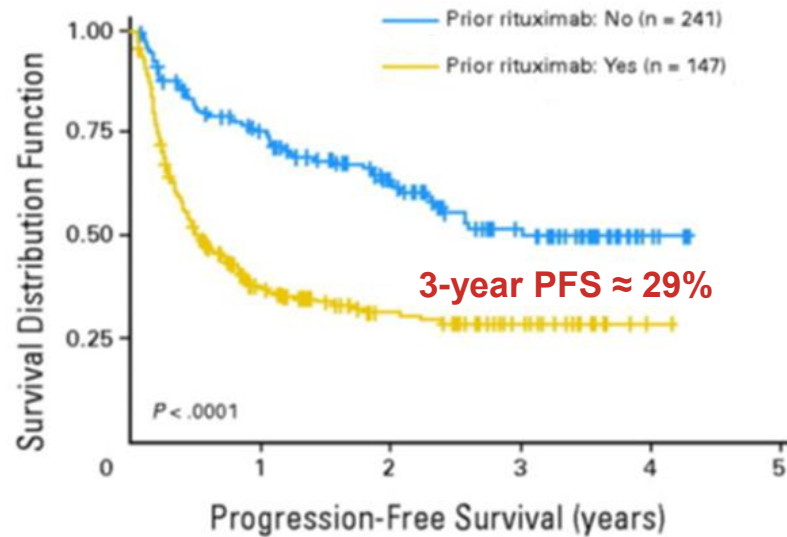
**Research funding:** Abbvie, Novartis, Celgene, Janssen

# La 2<sup>a</sup> linea nei DLBCL in era pre-Rituximab: ASCT standard of care

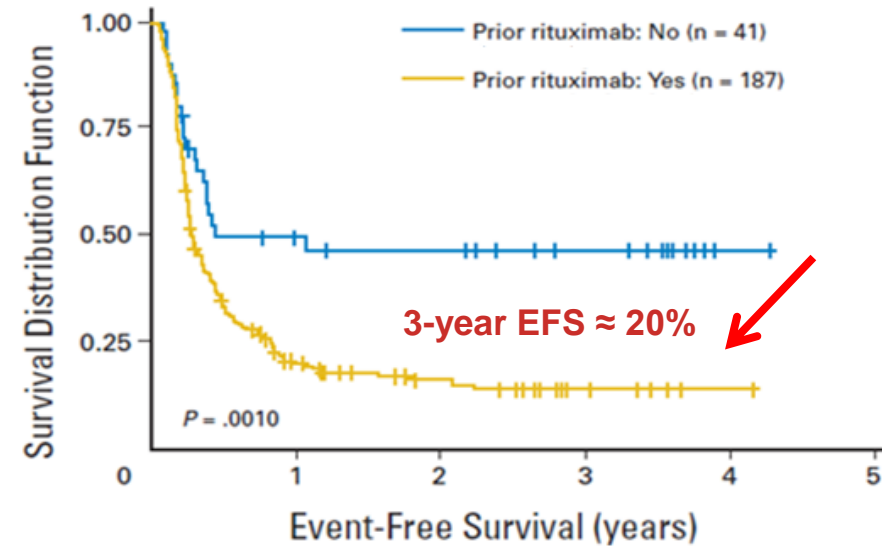


# Diminishing role of AutoSCT R/R patients in TE in the Rituximab era: CORAL study

HD chemo + autoSCT: all patients (intent to treat)

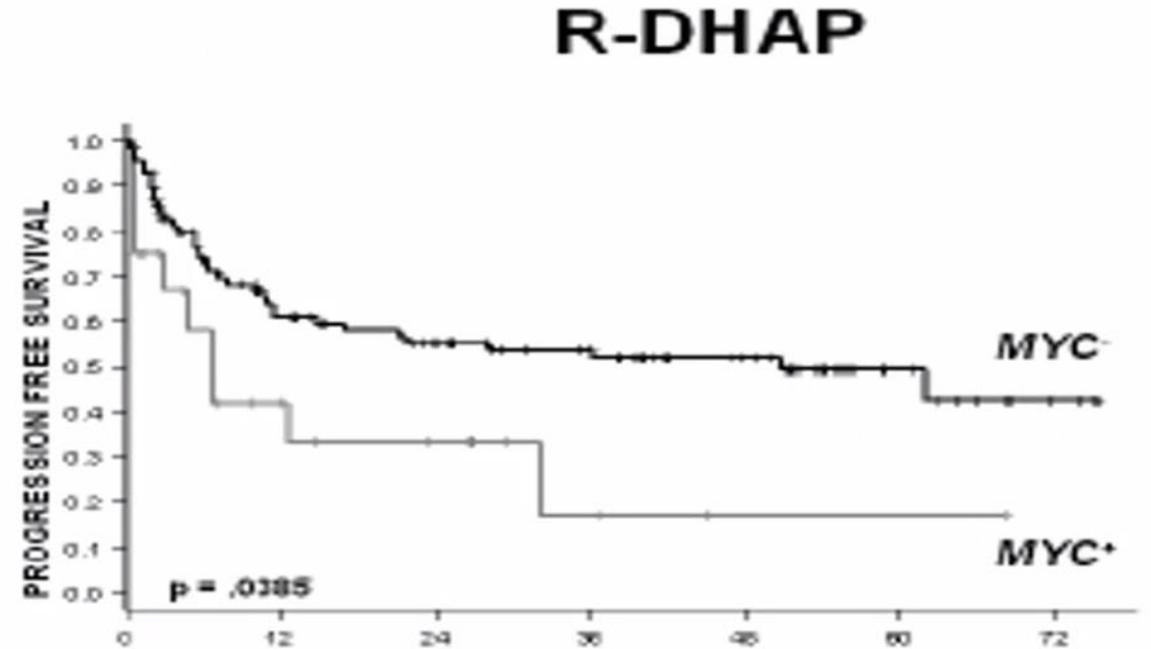
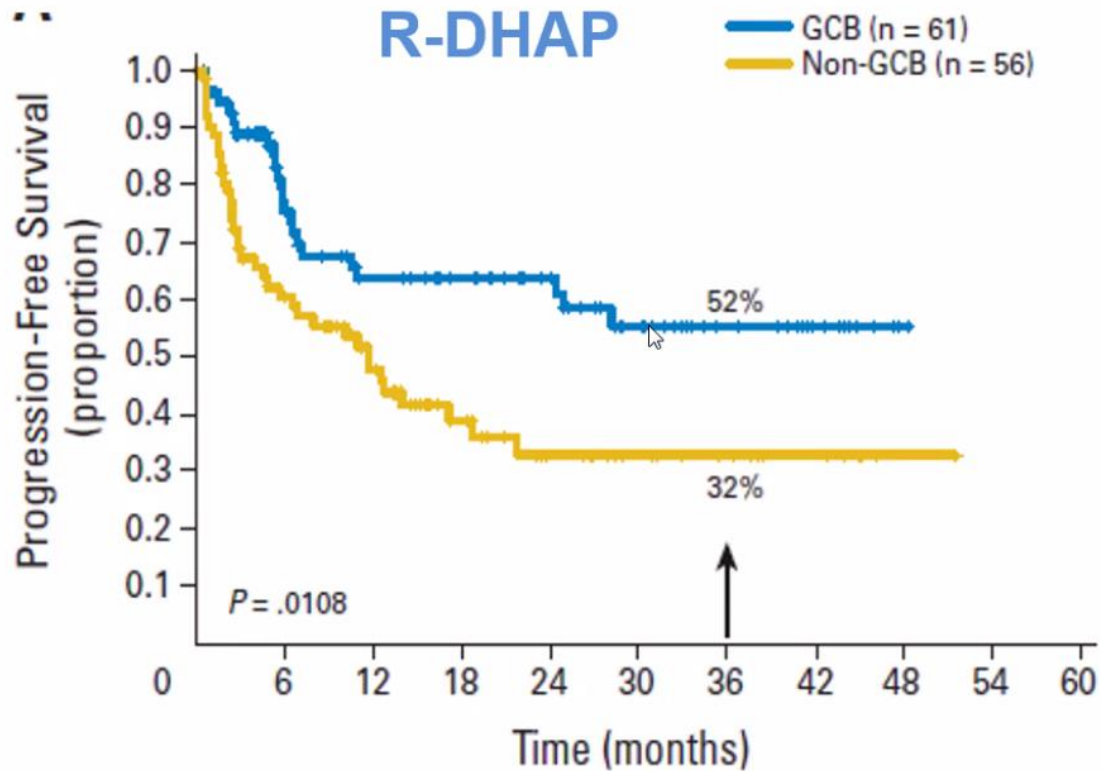


EFS for rituximab treatment + relapse <12 months after diagnosis



# Prognostic factors RR/DLBCL: Bio-CORAL trial experience

COO and MYC+ influence PFS at relapse according to second-line treatment for DLBCL



# Pivotal Anti-CD19 CAR T-Cell Therapy Trials

	Axicabtagene Ciloleucel <sup>[1]</sup>	Tisagenlecleucel <sup>[2]</sup>	Lisocabtagene Maraleucel <sup>[3]</sup>
<b>Construct</b>	Anti-CD19- <b>CD28</b> -CD3z	Anti-CD19- <b>41BB</b> -CD3z	Anti-CD19- <b>41BB</b> -CD3z
<b>Dose</b>	2 x 10 <sup>6</sup> /kg (max 2 x 10 <sup>8</sup> )	0.6 to 6.0 x 10 <sup>8</sup> /kg	50 to 150 x 10 <sup>6</sup>
<b>Lymphodepletion</b>	Flu/Cy 30/500 x 3 days	Flu/Cy 25/250 x 3 days, or bendamustine x 2 days	Flu/Cy 30/300 x 3 days

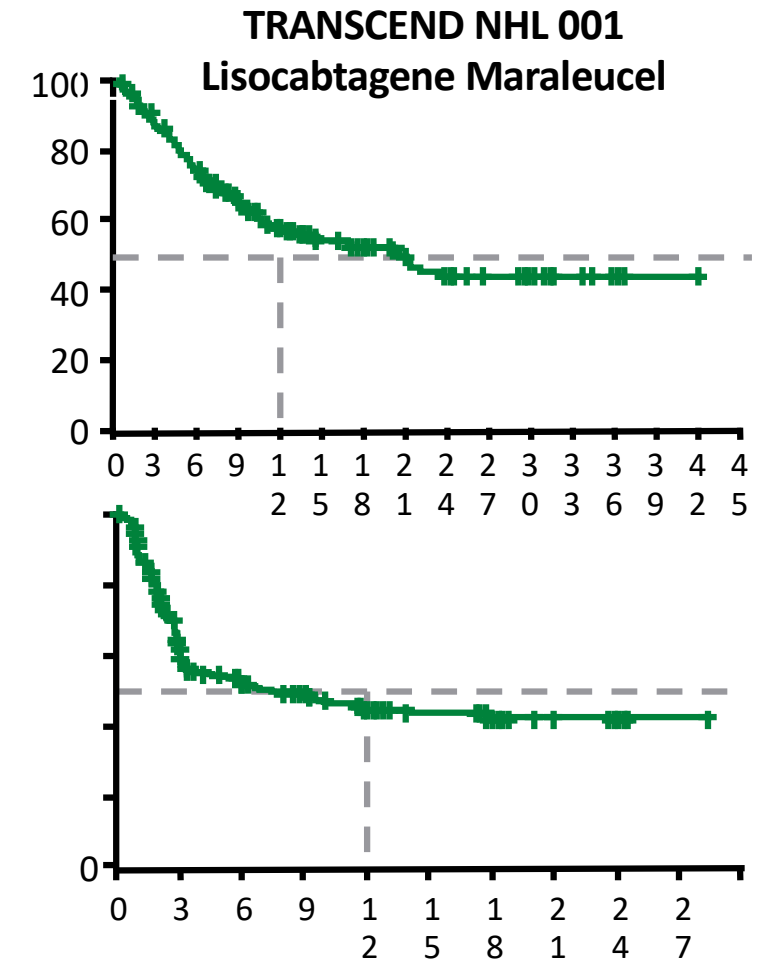
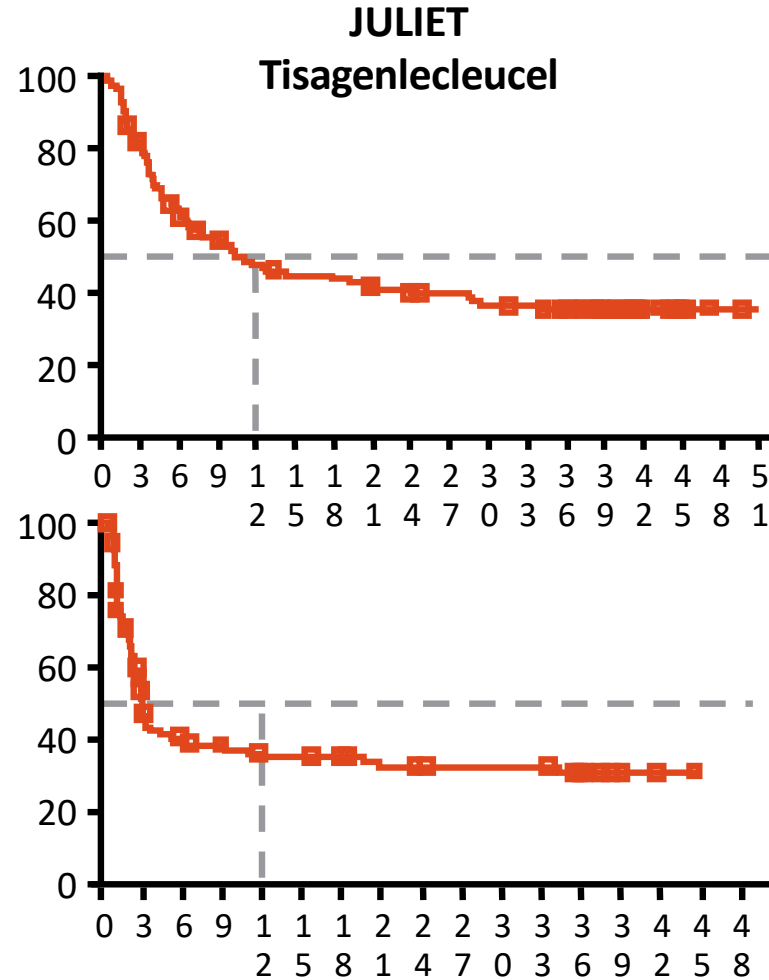
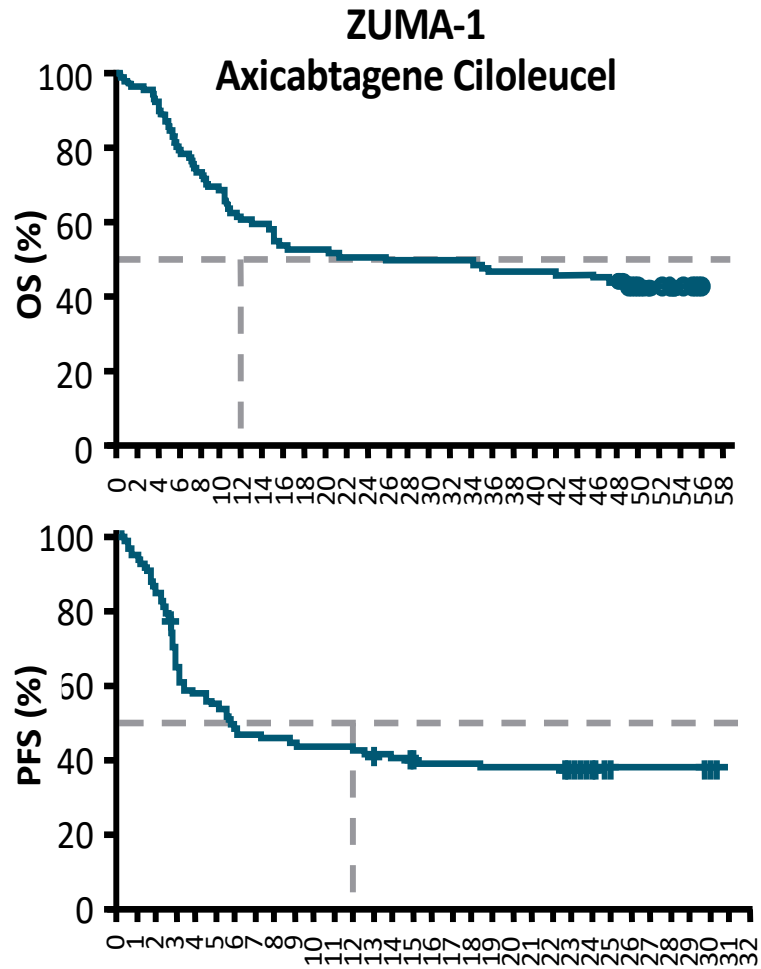
	ZUMA-1 <sup>[1,2]</sup>	JULIET <sup>[3]</sup>	TRANSCEND NHL 001 <sup>[4]</sup>
<b>Study phase</b>	II	II	I
<b>Patient population</b>	Adults with refractory DLBCL	Adults with R/R DLBCL	Adults with R/R DLBCL
<b>Apheresed/treated, n</b>	111/101	165/111	344/269 <sup>^</sup>
<b>Bridging therapy</b>	None allowed in pivotal trial	92%	59%
<b>ORR/CR, %</b>	82/54%	52/40%	73/53%
<b>Grade ≥ 3 CRS, %</b>	13 <sup>†</sup>	22 <sup>*</sup>	2 <sup>†</sup>
<b>Grade ≥ 3 NT, %</b>	28	12	10

<sup>^</sup>256 included in the efficacy-evaluable set.

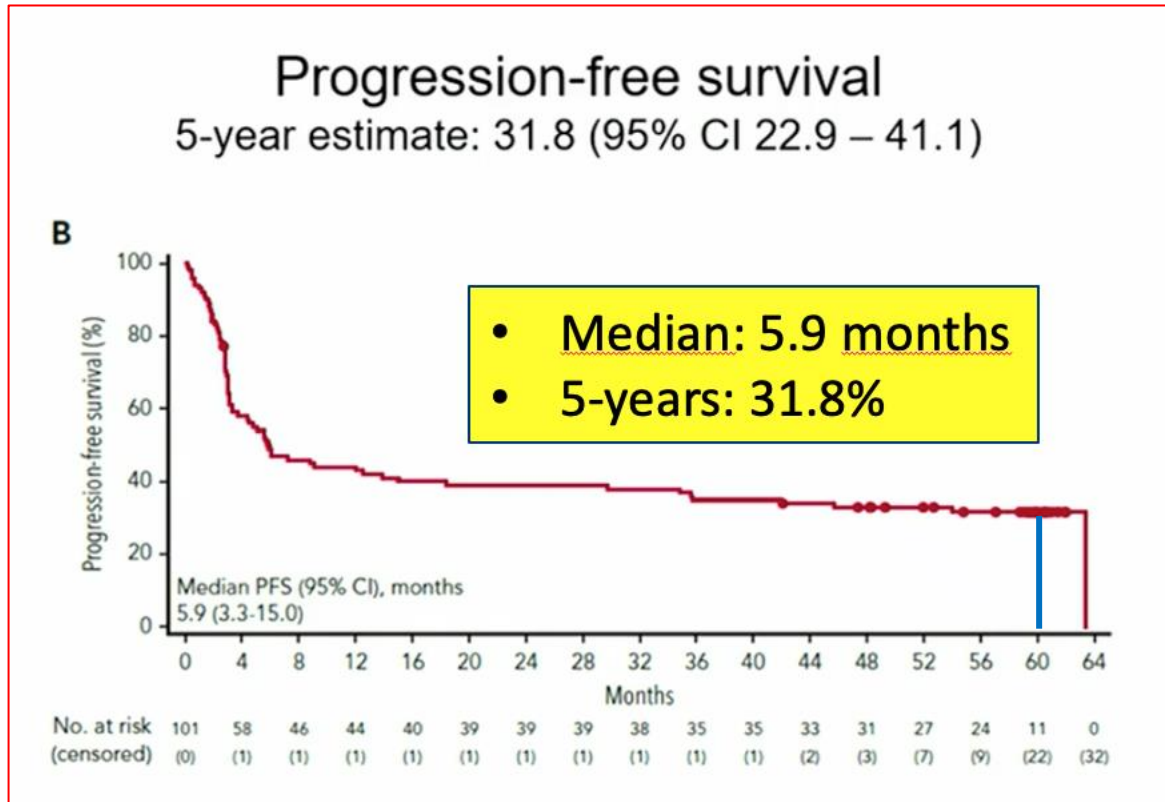
<sup>\*</sup>Per Penn scale. <sup>†</sup>Per Lee Scale.

1. Neelapu. NEJM. 2017;377:2531. 2. Locke. Lancet Oncol. 2019;20:31. 3. Schuster. NEJM. 2019;380:45. 4. Abramson. Lancet. 2020;396:839.

# Pivotal Anti-CD19 CAR T-Cell Therapy Trials



# ZUMA-1 (Axi-Cel): 5-year follow-up

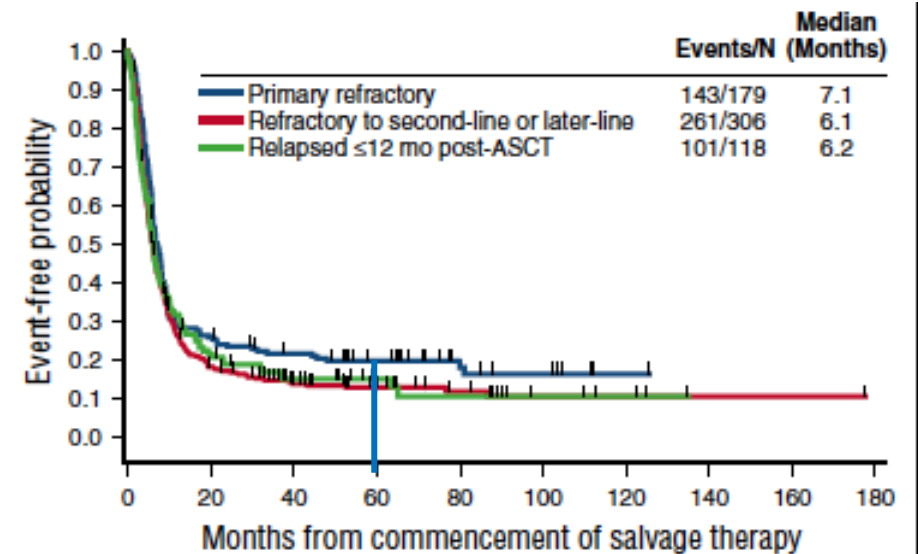


Neelapu SS et al, Blood 2023

## CLINICAL TRIALS AND OBSERVATIONS

### Outcomes in refractory diffuse large B-cell lymphoma: results from the international SCHOLAR-1 study

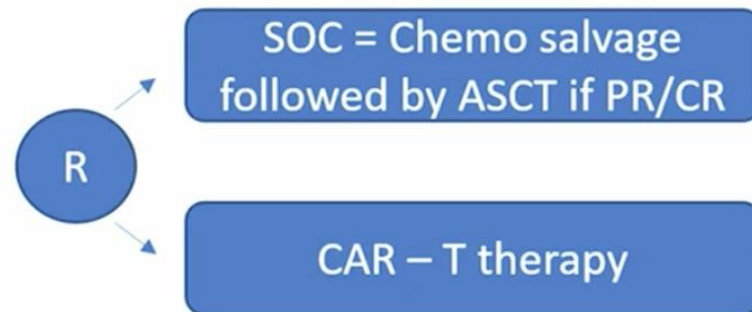
Michael Crump,<sup>1</sup> Sattva S. Neelapu,<sup>2</sup> Umar Farooq,<sup>3</sup> Eric Van Den Neste,<sup>4</sup> John Kuruvilla,<sup>1</sup> Jason Westin,<sup>2</sup> Brian K. Link,<sup>3</sup> Annette Hay,<sup>1</sup> James R. Cerhan,<sup>5</sup> Liting Zhu,<sup>1</sup> Sami Boussetta,<sup>4</sup> Lei Feng,<sup>2</sup> Matthew J. Maurer,<sup>5</sup> Lynn Navale,<sup>5</sup> Jeff Wiezorek,<sup>6</sup> William Y. Go,<sup>6</sup> and Christian Gisselbrecht<sup>4</sup>





# CD19 CAR T versus ASCT in DLBCL patients at 1st treatment failure after R-CHOP (or equivalent)

Axi-cel	ZUMA-7
Liso-cel	TRANSFORM
Tisa-cel	BELINDA



NCT03391466; NCT03575351; NCT03570892

## Differences exist:

- Inclusion criteria (histological subtypes, primary refractoriness definition...)
- **Bridging allowed before CAR T**
- Nb of chemo cycles in SOC arm
- **Product and LD therapy**
- Timing of response/events assessment
- Precise definition of events (EFS)
- Cross over planned / optional
- CAR T manufacturing time in SOC arm

**Primary endpoint: Event Free Survival**

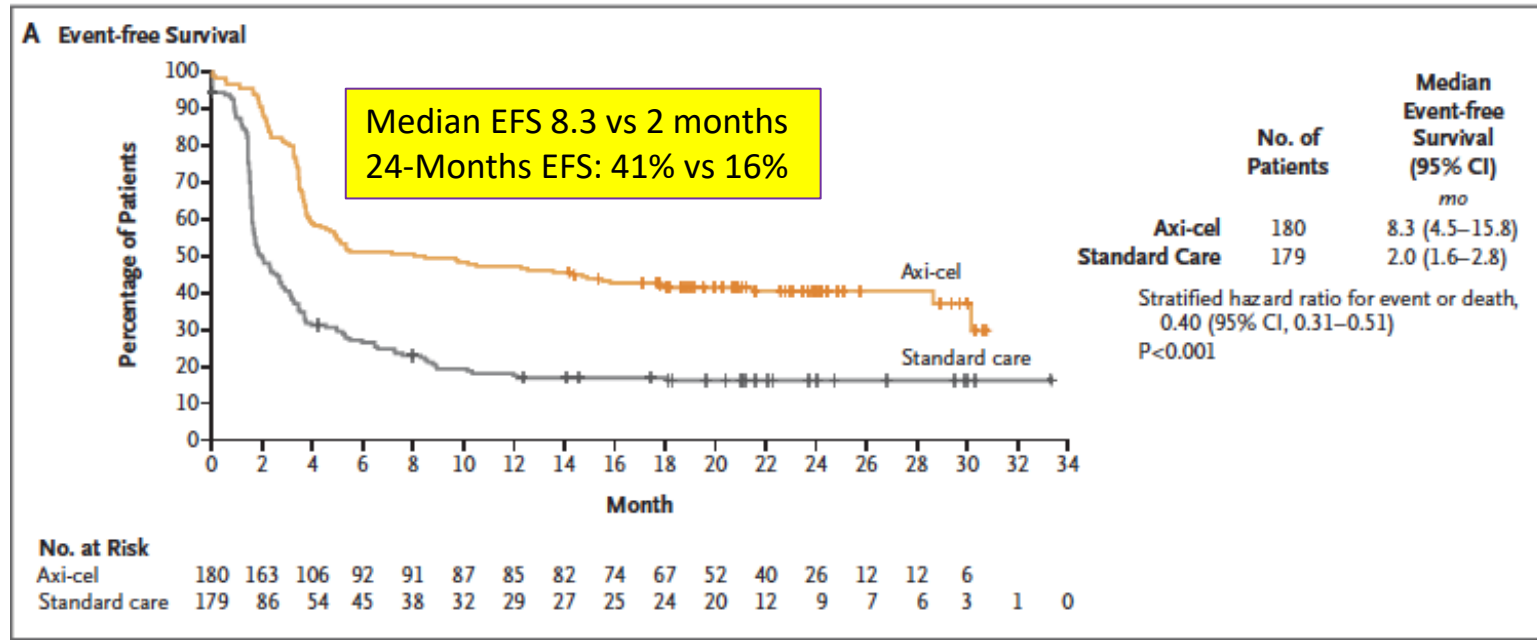
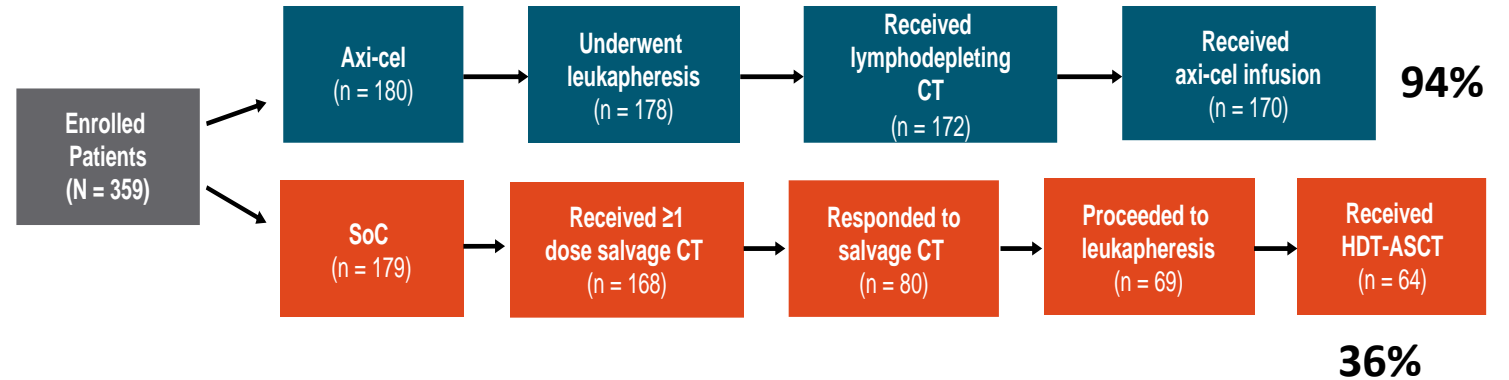
# ZUMA-7:

ORIGINAL ARTICLE

## Axicabtagene Ciloleucel as Second-Line Therapy for Large B-Cell Lymphoma

F.L. Locke, D.B. Miklos, C.A. Jacobson, M.-A. Perales, M.-J. Kersten, O.O. Oluwole, A. Ghobadi, A.P. Rapoport, J. McGuirk, J.M. Pagel, J. Muñoz, U. Farooq, T. van Meerten, P.M. Reagan, A. Sureda, I.W. Flinn, P. Vandenberghe, K.W. Song, M. Dickinson, M.C. Minnema, P.A. Riedell, L.A. Leslie, S. Chaganti, Y. Yang, S. Filosto, J. Shah, M. Schupp, C. To, P. Cheng, L.I. Gordon, and J.R. Westin, for All ZUMA-7 Investigators and Contributing Kite Members\*

### Phase 3 Randomized Trial of Axi-cel vs. Standard-Of-Care

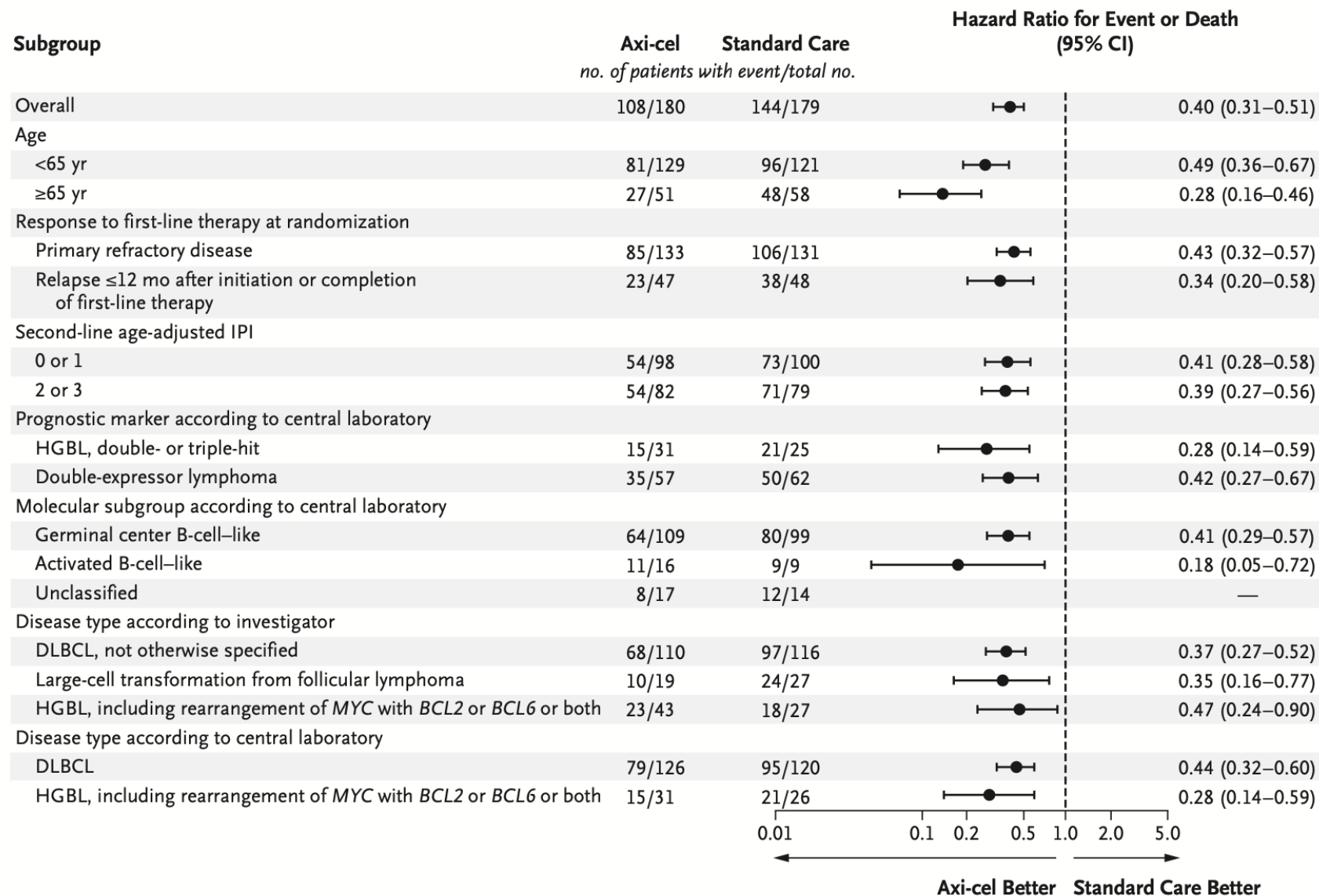


## ORIGINAL ARTICLE

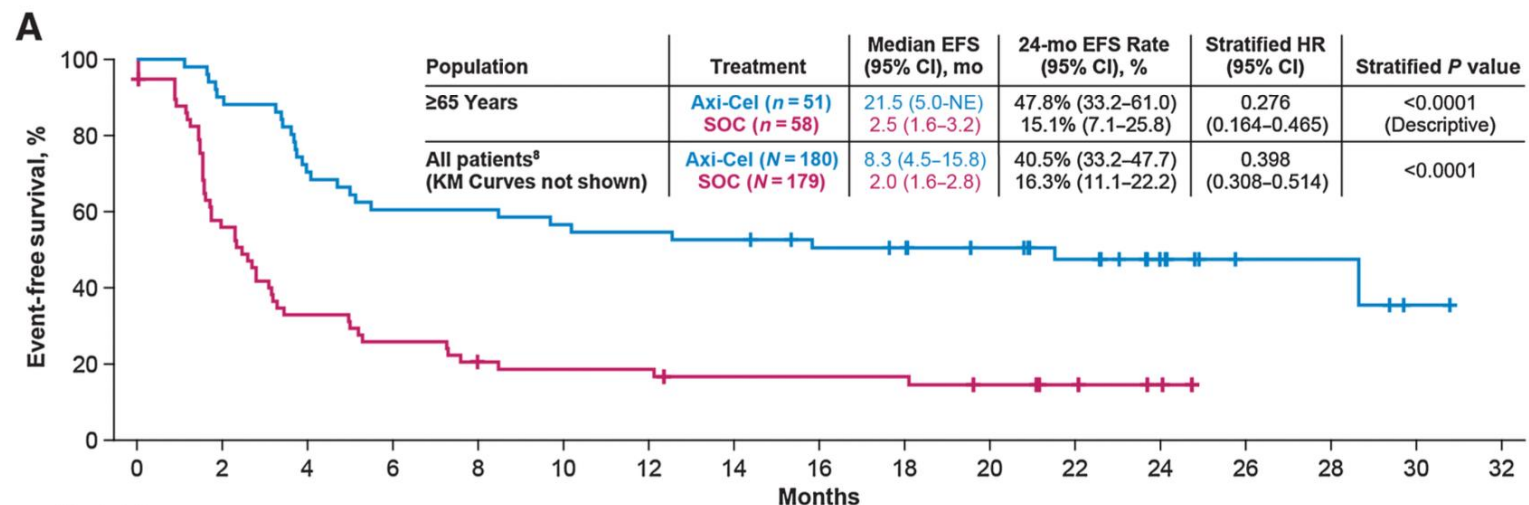
## Axicabtagene Ciloleucel as Second-Line Therapy for Large B-Cell Lymphoma

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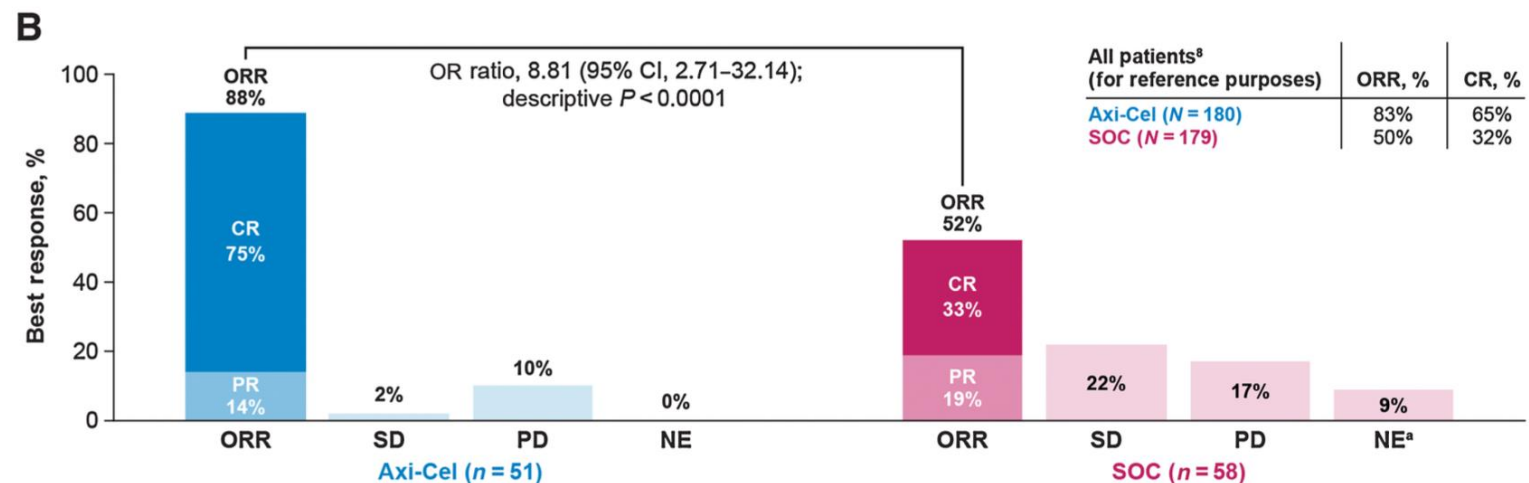
## B Subgroup Analysis



# Safety and Efficacy of Axicabtagene Ciloleucel versus Standard of Care in Patients 65 Years of Age or Older with Relapsed/Refractory Large B-Cell Lymphoma



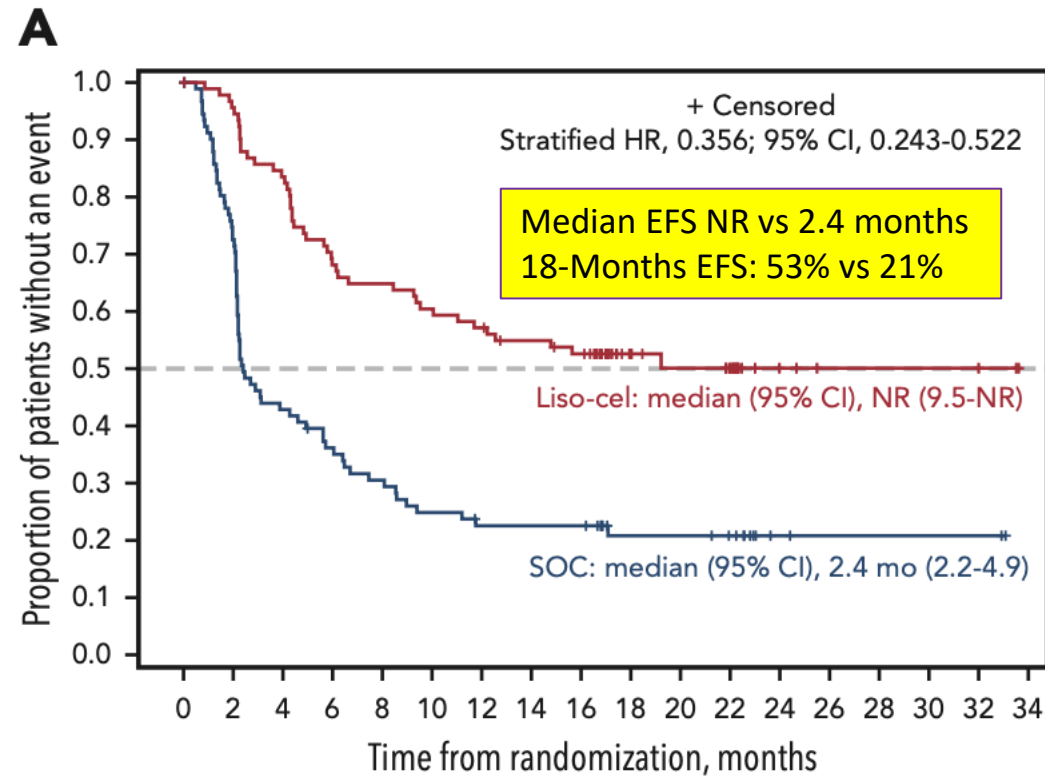
No. at risk	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
Axi-Cel	51	46	36	31	31	29	28	27	24	23	20	16	9	4	4	1	0
SOC	58	32	19	15	11	10	10	8	8	8	6	4	2	0			



# Lisocabtagene maraleucel as second-line therapy for large B-cell lymphoma: primary analysis of the phase 3 TRANSFORM study

Jeremy S. Abramson,<sup>1</sup> Scott R. Solomon,<sup>2</sup> Jon Amason,<sup>3</sup> Patrick B. Johnston,<sup>4</sup> Bertram Glass,<sup>5</sup> Veronika Bachanova,<sup>6</sup> Sami Ibrahim,<sup>7</sup> Stephan Mielke,<sup>8</sup> Pim Mutsaers,<sup>9</sup> Francisco Hernandez-Ilizaliturri,<sup>10</sup> Koji Izutsu,<sup>11</sup> Franck Morschhauser,<sup>12</sup> Matthew Lunning,<sup>13</sup> Alessandro Crotta,<sup>14</sup> Sandrine Montheard,<sup>14</sup> Alessandro Previtali,<sup>14</sup> Ken Ogasawara,<sup>15</sup> and Manali Kamdar,<sup>16</sup> for the TRANSFORM Investigators

## TRANSFORM: Phase 3 Randomized Trial of Liso-cel vs. Standard-Of-Care



No. at risk

SOC	92	66	39	32	27	22	19	19	19	12	12	10	3	2	2	2	0
Liso-cel	92	87	76	62	59	55	52	48	45	24	20	17	5	3	3	3	0

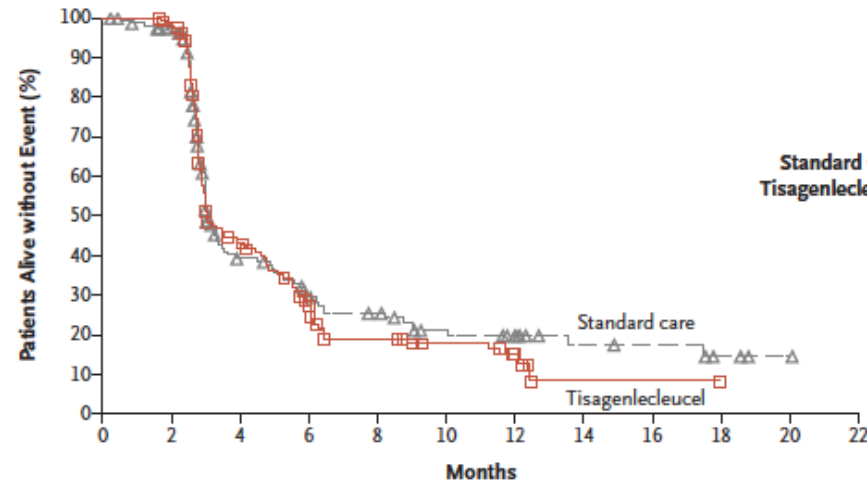
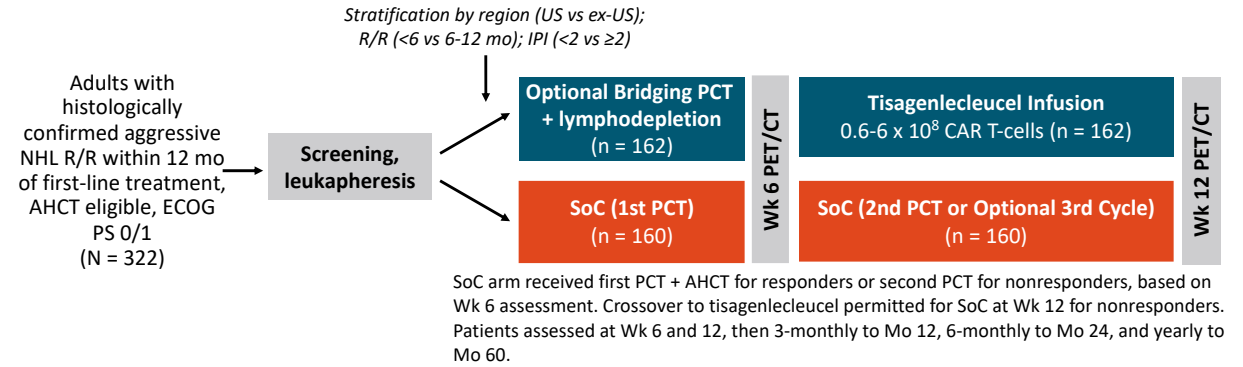
ORIGINAL ARTICLE

## Second-Line Tisagenlecleucel or Standard Care in Aggressive B-Cell Lymphoma

M.R. Bishop, M. Dickinson, D. Purtill, P. Barba, A. Santoro, N. Hamad, K. Kato, A. Sureda, R. Greil, C. Thieblemont, F. Morschhauser, M. Janz, I. Flinn, W. Rabitsch, Y.-L. Kwong, M.J. Kersten, M.C. Minnema, H. Holte, E.H.L. Chan, J. Martinez-Lopez, A.M.S. Müller, R.T. Maziarz, J.P. McGuirk, E. Bachy, S. Le Gouill, M. Dreyling, H. Harigae, D. Bond, C. Andreadis, P. McSweeney, M. Kharfan-Dabaja, S. Newsome, E. Degtyarev, R. Awasthi, C. del Corral, G. Andreola, A. Masood, S.J. Schuster, U. Jäger, P. Borchmann, and J.R. Westin

## BELINDA:

## Phase 3 Randomized Trial of Tisa-cel vs. Standard-Of-Care



	No. of Patients	No. of Events	Median Event-free Survival (95% CI) mo
Standard Care	160	104	3.0 (3.0-3.5)
Tisagenlecleucel	162	117	3.0 (2.9-4.2)

Hazard ratio for event or death (tisagenlecleucel vs. standard care), 1.07 (95% CI, 0.82-1.40)  
P=0.61

No. at Risk	0	2	4	6	8	10	12	14	16	18	20	22
Standard care	160	148	45	31	25	17	12	7	6	3	1	0
Tisagenlecleucel	162	156	57	32	19	13	6	1	1	0	0	0

# CAR T-cell therapy vs. SoC in 2L DLBCL - Safety

	ZUMA-7 <sup>1,2</sup>		TRANSFORM <sup>3</sup>		BELINDA <sup>4,5</sup>	
	SoC	Axi-Cel	SoC	Liso-Cel	SoC	Tisa-Cel
N	168	170	91	92	160	162
Grade 3–5 AEs	83%	91%	87%	92%	84%	90%
Grade 3–5 haematological toxicity						
Anaemia	39%	30%	49%	49%	57%	33%
Thrombocytopenia	57%	15%	64%	49%	47%	32%
Neutropenia	41%	69%	51%	80%	39%	40%
Febrile neutropenia	27%	2%	24%	15%	25%	13%
Grade 3–5 infections	11%	14%	21%	15%	15%	17%
Prolonged cytopenias	19%	29%	3%	43%	N/A	N/A
CRS						
Grade 1–2	---	86%	---	48%	---	53.7%
Grade 3–5	---	6%	---	1% <sup>b</sup>	---	4.9%
Onset / Duration (median)	---	3 / 7 d	---	5 / 4 d	---	N/A
Neurological events						
Grade 1–2	19%	39%	---	7%	---	8.4%
Grade 3–5	1%	21%	---	4%	---	1.9%
Onset / Duration (median)	23 / 23 d	7 / 9 d	---	11 / 6 d	---	N/A
<b>Toxic deaths (due to AEs)</b>	<b>2 (1%)</b>	<b>7<sup>a</sup> (4%)</b>	<b>2 (2%)</b>	<b>1 (1%)</b>	<b>13 (8.1%)</b>	<b>10 (6.2%)</b>

Cross-study comparisons cannot be made due to differences in study designs, endpoint definitions and patient populations

<sup>a</sup> Only 1 related to CAR T; <sup>b</sup> No case Grades 4–5 AE: adverse event; CRS: cytokine release syndrome

1. Locke FL, *et al.* ASH 2021 (Abstract 2). 2. Locke FL, *et al.* N Engl J Med 2022. 3. Abramson R, *et al.* Blood 2022. 4. Bishop MR, *et al.* ASH 2021 (Abstract LBA6). 5. Bishop MR, *et al.* N Engl J Med 2022.

<b>Caratteristiche pazienti</b>	<b>ZUMA-7 CAR-T arm</b>	<b>BELINDA CAR-T arm</b>	<b>TRANSFORM CAR-T arm</b>
<b>Pazienti</b>	180	162	92
<b>Età mediana</b>	58	59.5	60
<b>≥ 65 anni (%)</b>	<b>28 (- anziani)</b>	33	39
<b>PS ECOG 1 (%)</b>	47	43	48
<b>IPI ≥2 (%)</b>	46	<b>65 (+ HR)</b>	39
<b>Refractory (%)</b>	74	66	73
	<b>ZUMA-7 ASCT arm</b>	<b>BELINDA ASCT arm</b>	<b>TRANSFORM ASCT arm</b>
<b>Pazienti</b>	179	160	92
<b>Età mediana</b>	60	58	58
<b>≥ 65 anni (%)</b>	32	29	27
<b>PS ECOG 1 (%)</b>	44	41	38
<b>IPI ≥2 (%)</b>	44	<b>58 (+ HR)</b>	40
<b>Refractory (%)</b>	73	67	74



<b>Caratteristiche malattia</b>	<b>ZUMA-7 CAR-T arm</b>	<b>BELINDA CAR-T arm</b>	<b>TRANSFORM CAR-T arm</b>
<b>Pazienti</b>	180	162	92
<b>DLBCL (%)</b>	70	62	58
<b>HGBCL (%)</b>	0	4	/
<b>HGBCL including DHIT (%)</b>	17	20	24
<b>Missing/other</b>	13	14	18
<b>GCB (%)</b>	61	28	49
<b>ABC (%)</b>	9 (- ABC)	32	23
<b>Unclassified (%)</b>	9	2	27
<b>Missing/NA (%)</b>	22	38	1
	<b>ZUMA-7 ASCT arm</b>	<b>BELINDA ASCT arm</b>	<b>TRANSFORM ASCT arm</b>
<b>Pazienti</b>	179	160	92
<b>DLBCL (%)</b>	67	70	53
<b>HGBCL (%)</b>	1	5	/
<b>HGBCL including DHIT (%)</b>	14	12	23
<b>Missing/other</b>	19	13	24
<b>GCB (%)</b>	55	39	43
<b>ABC (%)</b>	5 (-ABC)	26	32
<b>Unclassified (%)</b>	8	4	25
<b>Missing/NA (%)</b>	32	31	/

Study design	ZUMA-7 CAR-T arm	BELINDA CAR-T arm	TRANSFORM CAR-T arm
Inclusion criteria	<ul style="list-style-type: none"> <li>• LBCL</li> <li>• refractory or relapsed within 12 months of 1L therapy</li> <li>• transplant-eligible</li> </ul>	<ul style="list-style-type: none"> <li>• LBCL</li> <li>• <b>PMBCL</b></li> <li>• <b>FOL 3B</b></li> <li>• refractory or relapsed within 12 months of 1L therapy</li> <li>• transplant-eligible</li> </ul>	<ul style="list-style-type: none"> <li>• LBCL</li> <li>• <b>PMBCL</b></li> <li>• <b>FOL 3B</b></li> <li>• refractory or relapsed within 12 months of 1L therapy</li> <li>• transplant-eligible</li> </ul>
Primary endpoint	<p style="text-align: center;">EFS</p> <p><b>SD considered event at week 21</b></p>	<p style="text-align: center;">EFS</p> <p>SD considered event at week 12</p> <p><i>PET scan at 6 weeks (that did not count as an event but might have affected clinical decision making)</i></p>	<p style="text-align: center;">EFS</p> <p>SD considered event at week 9</p>
Need for urgent therapy	<b>Excluded</b>	Included	Included
Bridging therapy	<b>Only steroids</b>	Allowed	Allowed
Control arm salvage therapy	<b>Only 1L allowed</b>	<b>Up to 2 lines allowed</b>	<b>Up to 2 lines allowed</b>

# Differences in the 3 studies that may have impacted the outcomes

<b>Study design</b>	<b>ZUMA-7 CAR-T arm</b>	<b>BELINDA CAR-T arm</b>	<b>TRANSFORM CAR-T arm</b>
<b>Definition of EFS</b>	pro	cons	pro
<b>Pathologic characteristics</b>	More GCB	<b>More ABC</b>	More ABC and HGBCL
<b>HR IPI distributon</b>		<b>Higher IPI <math>\geq 2</math></b>	
<b>Median time from randomization to infusion:</b>	<b>29 days</b> (IQR, 27 to 34 days)		<b>34 days</b> (IQR, 31 to 36 days)
<b>Median time from leukapheresis to infusion:</b>		<b>52 days</b> (IQR, 43 to 61 days) US: 41 days Non-US: 57 days	<b>36 days</b> (IQR, 34 to 41 days)
<b>Bridging therapy</b>	Only steroids	1 cycle: 36% <b>&gt;1 cycle: 48%</b>	1 cycle: 58% > 1cycle: 5%

## Role of CD19 Chimeric Antigen Receptor T Cells in Second-Line Large B Cell Lymphoma: Lessons from Phase 3 Trials. An Expert Panel Opinion from the American Society for Transplantation and Cellular Therapy

Miguel-Angel Perales<sup>1,2,\*</sup>, Larry D. Anderson Jr<sup>3</sup>, Tania Jain<sup>4</sup>, Saad S. Kenderian<sup>5</sup>, Olalekan O. Oluwole<sup>6</sup>, Gunjan L. Shah<sup>1,2</sup>, Jakub Svoboda<sup>7</sup>, Mehdi Hamadani<sup>8</sup>

Trial	ZUMA-7		BELINDA		TRANSFORM	
	Axi-cel	SOC	Tisa-cel	SOC	Liso-cel	SOC
No. of patients	180	179	162	160	92	92
Patient disposition						
CAR T infusion, %	94	N/A	96	N/A	98	N/A
Bridging, %	36*	N/A	83	N/A	63	N/A
1 cycle	N/A	N/A	36	N/A	58	N/A
> 1 cycle	N/A	N/A	48	N/A	5	N/A
Median days to infusion <sup>†</sup>	29	N/A	52	N/A	34	N/A
Auto-HCT, %	N/A	36	N/A	33	N/A	47
Crossover to CART cell therapy, %	N/A	56	N/A	51	N/A	55

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Trial	ZUMA-7		BELINDA		TRANSFORM	
	Axi-cel	SOC	Tisa-cel	SOC	Liso-cel	SOC
No. of patients	180	179	162	160	92	92
Patient disposition						
CAR T infusion, %	94	N/A	96	N/A	98	N/A
Bridging, %	36*	N/A	83	N/A	63	N/A
1 cycle	N/A	N/A	36	N/A	58	N/A
> 1 cycle	N/A	N/A	48	N/A	5	N/A
Median days to infusion <sup>†</sup>	29	N/A	52	N/A	34	N/A
Auto-HCT, %	N/A	36	N/A	33	N/A	47
Crossover to CART cell therapy, %	N/A	56	N/A	51	N/A	55

# Role of CD19 Chimeric Antigen Receptor T Cells in Second-Line Large B Cell Lymphoma: Lessons from Phase 3 Trials. An Expert Panel Opinion from the American Society for Transplantation and Cellular Therapy

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Trial	ZUMA-7		BELINDA		TRANSFORM	
	Axi-cel	SOC	Tisa-cel	SOC	Liso-cel	SOC
No. of patients	180	179	162	160	92	92
Patient disposition						
CAR T infusion, %	94	N/A	96	N/A	98	N/A
Bridging, %	36* *only steroids	N/A	83	N/A	63	N/A
1 cycle	N/A	N/A	36	N/A	58	N/A
> 1 cycle	N/A	N/A	48	N/A	5	N/A
Median days to infusion <sup>†</sup>	29	N/A	52	N/A	34	N/A
Auto-HCT, %	N/A	36	N/A	33	N/A	47
Crossover to CART cell therapy, %	N/A	56	N/A	51	N/A	55

## Role of CD19 Chimeric Antigen Receptor T Cells in Second-Line Large B Cell Lymphoma: Lessons from Phase 3 Trials. An Expert Panel Opinion from the American Society for Transplantation and Cellular Therapy

Miguel-Angel Perales<sup>1,2,\*</sup>, Larry D. Anderson Jr<sup>3</sup>, Tania Jain<sup>4</sup>, Saad S. Kenderian<sup>5</sup>, Olalekan O. Oluwole<sup>6</sup>, Gunjan L. Shah<sup>1,2</sup>, Jakub Svoboda<sup>7</sup>, Mehdi Hamadani<sup>8</sup>

Trial	ZUMA-7		BELINDA		TRANSFORM	
	Axi-cel	SOC	Tisa-cel	SOC	Liso-cel	SOC
No. of patients	180	179	162	160	92	92
Patient disposition						
CAR T infusion, %	94	N/A	96	N/A	98	N/A
Bridging, %	36*	N/A	83	N/A	63	N/A
1 cycle	N/A	N/A	36	N/A	58	N/A
> 1 cycle	N/A	N/A	48	N/A	5	N/A
Median days to infusion <sup>†</sup>	29	N/A	52	N/A	34	N/A
Auto-HCT, %	N/A	36	N/A	33	N/A	47
Crossover to CART cell therapy, %	N/A	56	N/A	51	N/A	55

# Possible bias of the Tisa cel arm of the BELINDA trial

## Progressive disease on PET scan:

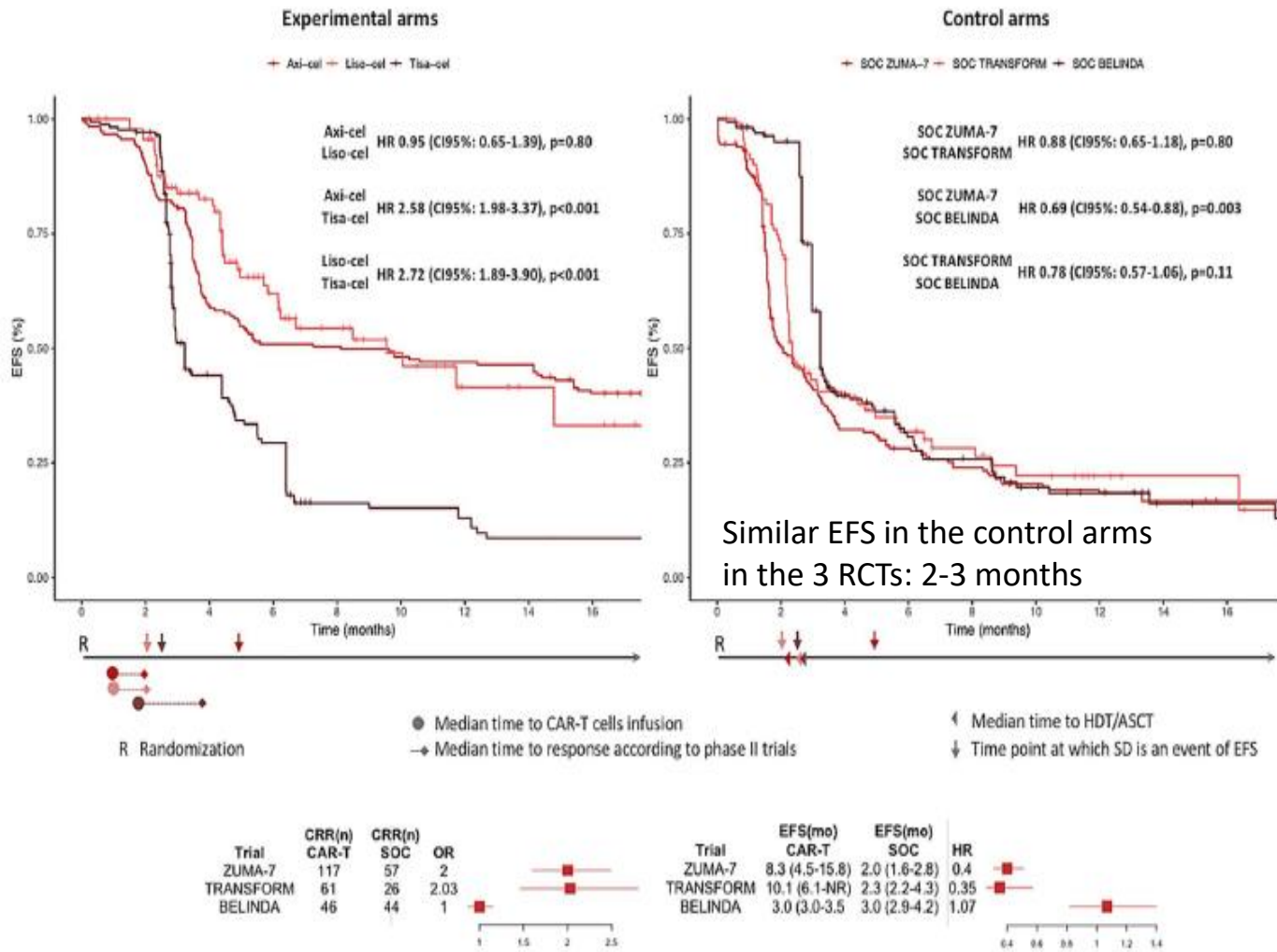
- Tisa-cel arm: 26% (impact of the long time before receiving Tisa-cel)
- > 1 cycle bridging therapy (48%)

## In BELINDA, response rates (ORR and CR) with Tisa-cel resulted lower than expected

- BELINDA: ORR: 46%; CR: 28%
- JULIET: ORR: 52%; CR 40%



# Comparing apples and oranges: The ZUMA-7, TRANSFORM and BELINDA trials



## CORAL study: EFS for rituximab treatment + relapse <12 months after diagnosis

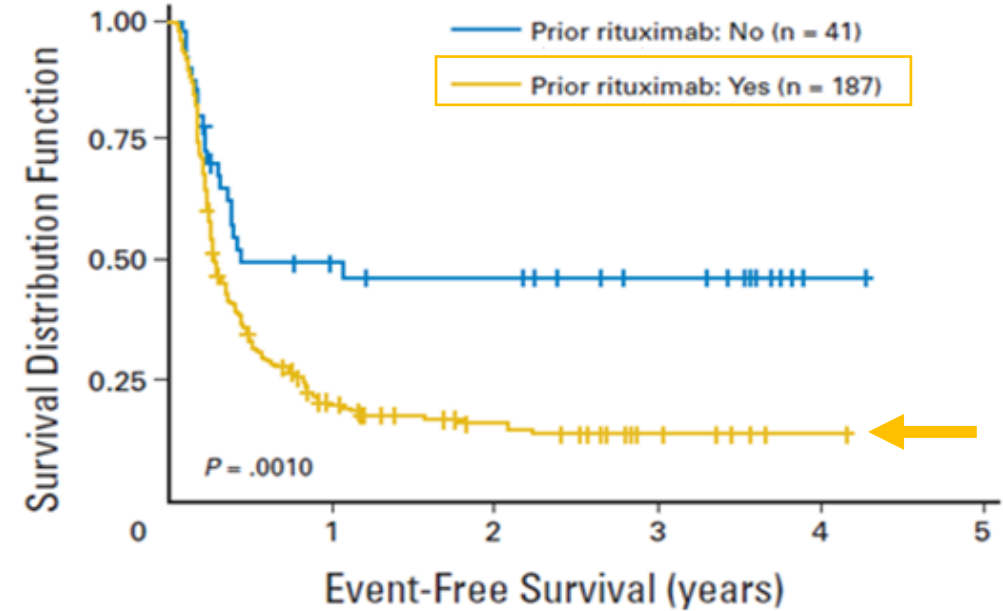


FIGURE 1 Reconstructed Event-Free Survival (EFS) curves and Forest plots showing EFS hazard ratio (HR) and complete response rate (CRR) odds ratio in the three trials. EFS: event-free survival, high dose therapy (HDT)/ASCT: HDT/autologous stem cell transplant (ASCT), SD: stable disease, HR: hazard ratio, CI: confidence interval, CRR: complete response rate, OR: odds ratio

# How to approach patients who started salvage therapy and have a response ?

- high-dose therapy and auto-HCT consolidation is curative for approximately 45% of patients with DLBCL despite achieving only a PR after salvage therapy.
- no alternative consolidation strategy (including CAR T cell therapy) has been proven superior to auto-HCT consolidation in patients with DLBCL
- cost considerations may favor auto- HCT
- although CAR T cell therapy can salvage patients who relapse after auto-HCT, the reverse sequence often is not feasible

# Autologous transplant vs chimeric antigen receptor T-cell therapy for relapsed DLBCL in partial remission

- CIBMTR registry database
- adult patients with DLBCL who received either an auto-HCT (266 patients; 2013-2019) or CAR-T treatment with axi-cel (145 patients; 2018-2019) while in a PR by CT-PET
- Median lines of therapy before auto-HCT vs CAR-T: 2 (1-6) vs 3 (2-11) ( $p < 0.001$ )
- > 2 lines of therapy before auto-HCT vs CAR-T: 33% vs 67% ( $p < 0.001$ )

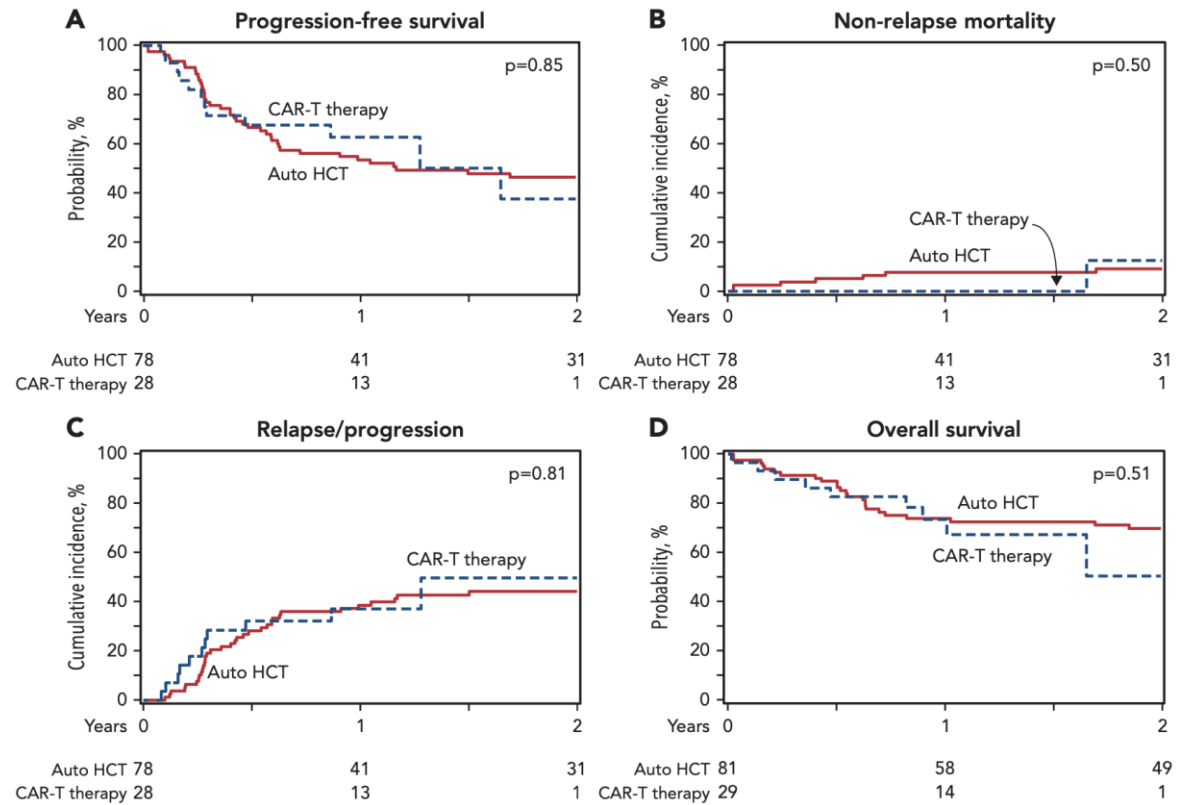
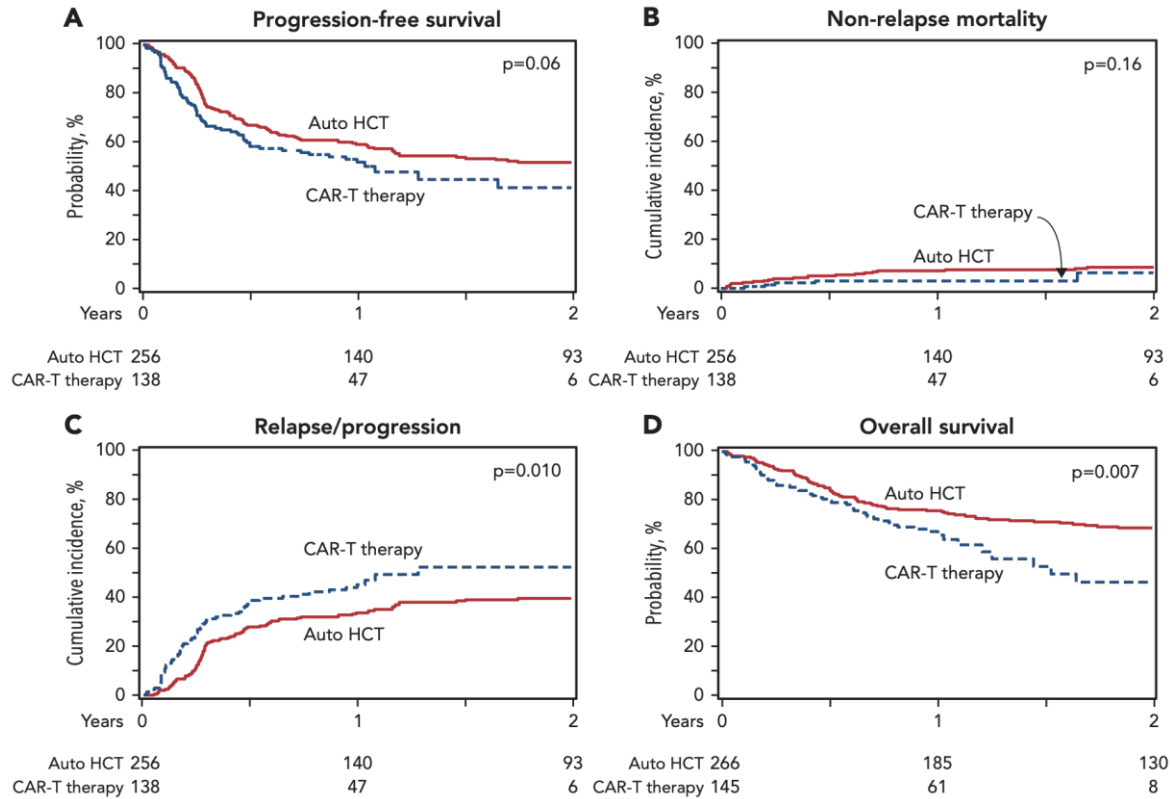
**KEY POINTS**

- In patients with DLBCL in PR postsalvage, auto-HCT and CAR-T gave 2-year progression-free survival (PFS) of 52% vs 42% and OS of 69% vs 47%.
- In patients with  $\leq 2$  prior lines of therapy, there was no difference in PFS or OS between the 2 groups.

# Auto-HCT vs CAR-T in patients with DLBCL in PR

## All patients

## Patients with $\leq 2$ prior lines of therapy



## TRANSFORM: Efficacy outcomes in the crossover subgroup

Of 92 patients in the SOC group, 61 (66%) were approved for crossover to receive liso-cel

- 58 received CAR<sup>+</sup> T cells (57 received liso-cel, 1 received nonconforming product)
- Median time from crossover approval to liso-cel infusion was 15 days (range, 8–95)



	Crossover subgroup (n = 57) <sup>a</sup>
Median (range) follow-up, months <sup>b</sup>	12.0 (1.4–28.1)
Median (95% CI) EFS, months <sup>c</sup>	5.9 (3.1–15.1)
Median (95% CI) PFS, months <sup>c</sup>	5.9 (3.2–26.5)
Median (95% CI) OS, months <sup>c</sup>	15.8 (11.8–NR)

All endpoints were evaluated from the time of liso-cel infusion.

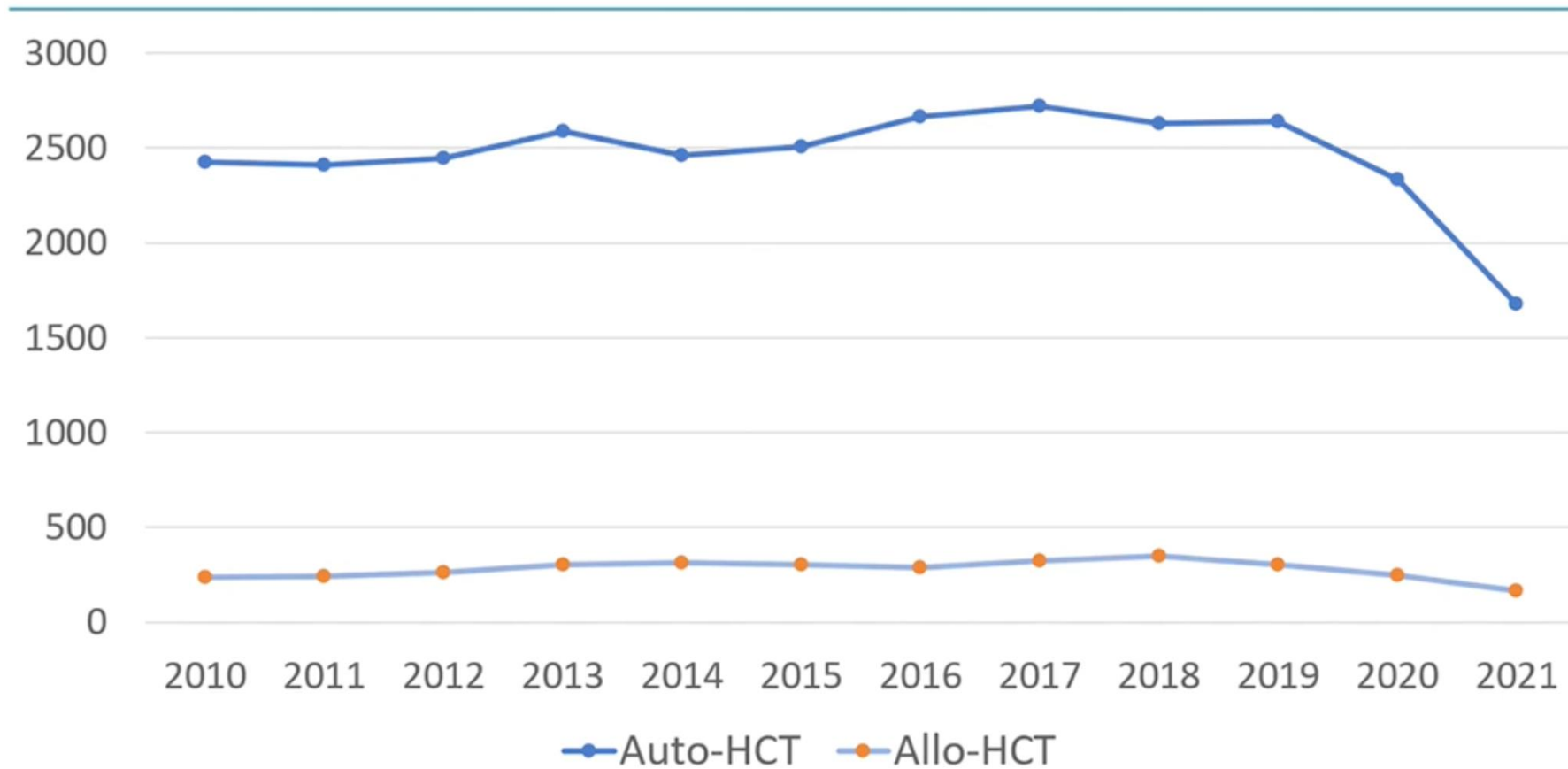
**Compared to 74% CR rate in 2<sup>nd</sup> line (exp arm)**

<sup>a</sup>Three patients approved for crossover who did not receive liso-cel and 1 patient who received nonconforming product were not included in the efficacy analyses; <sup>b</sup>Calculated for the 58 patients randomized to the SOC group who were approved for crossover and received CAR<sup>+</sup> T cells; <sup>c</sup>Median estimates of time to event were Kaplan-Meier product-limit estimates.

# La 2<sup>a</sup> linea nei DLBCL: ruolo del ASCT ?

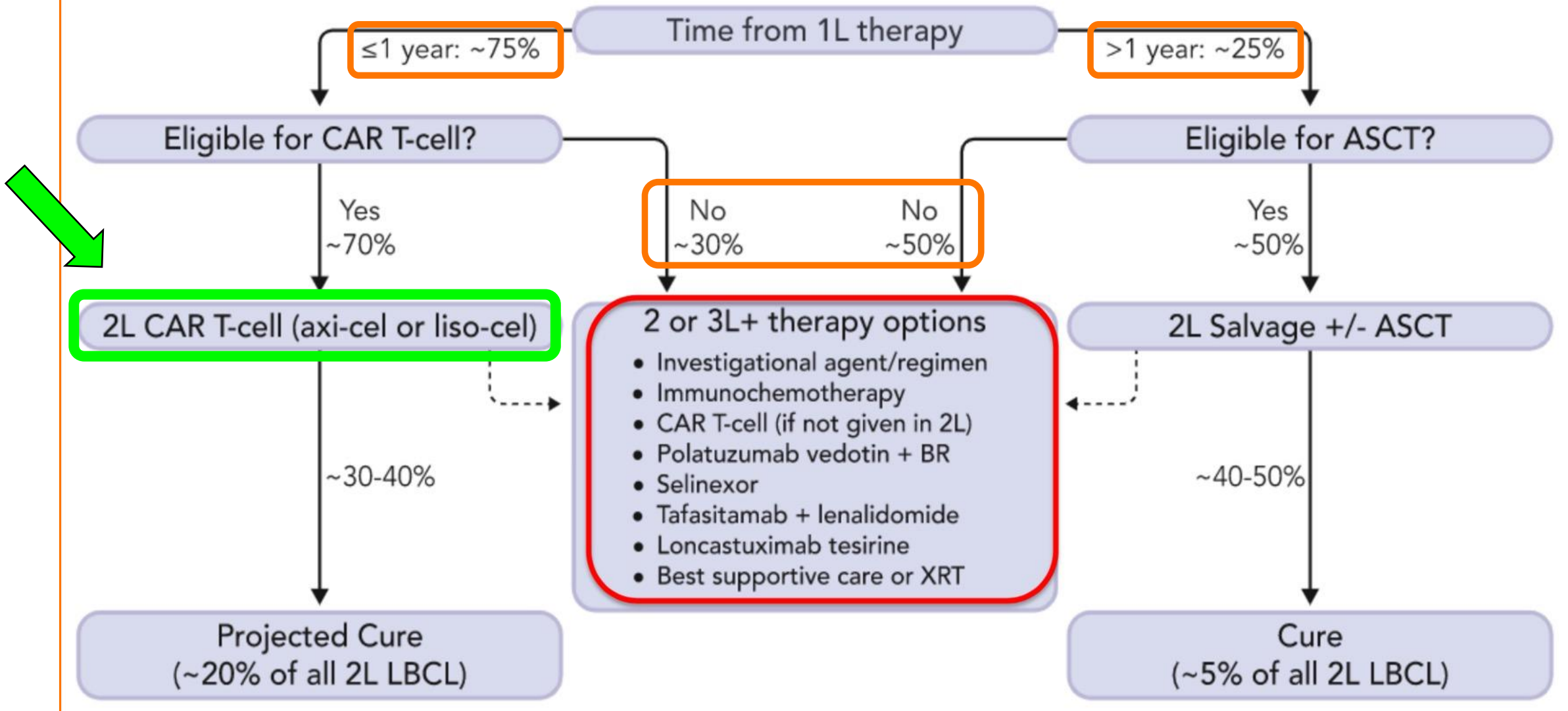


## HCT for RR DLBCL. EBMT Data



Data from EBMT Registry

# Algorithm for Second-line Therapy of LBCL



# Conclusioni

- La terapia di 2L nei pazienti giovani/fit viene data con **significato curativo**
- Nei pazienti con **DLBCL refrattari o ricaduti entro 12 mesi** dalla terapia di 1L e ritenuti **eleggibili al trapianto**, il trattamento di salvataggio con Axi-cel e Liso-Cel si è dimostrato globalmente superiore al trapianto autologo
- Le curve di EFS del braccio di controllo nei 3 studi sono risultate sovrapponibili; questo dato riflette lo scarso beneficio derivante dalla CIT di salvataggio
- Il trattamento di salvataggio con **Tisa-Cel** non si è dimostrato superiore al trapianto autologo; alcuni motivi legati al **disegno dello studio** possono almeno in parte essere responsabili del mancato raggiungimento dell'obiettivo
- Il reale impatto delle CAR-T vs autologo **nei pazienti responsivi alla terapia di salvataggio** rimane ancora da definire



## Gazzetta Ufficiale del 11/11/2023

*«Yescarta» e' indicato per il trattamento di pazienti adulti con linfoma diffuso a grandi cellule B (diffuse large B-cell lymphoma, DLBCL) e linfoma a cellule B ad alto grado (high-grade B cell lymphoma, HGBL) refrattario alla chemioimmunoterapia di prima linea o recidivante entro dodici mesi dal completamento della chemioimmunoterapia di prima linea».*

Attribuzione del requisito dell'innovazione terapeutica.

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