

Lymphom
Kompetenz
KOMPAKT



KML-Experten berichten
EHA2021 VIRTUAL



Prof. Dr. med. Peter Borchmann
Klinik I für Innere Medizin | Uniklinik Köln

CAR-T-Zell-Therapien

Offenlegung potentieller Interessenskonflikte

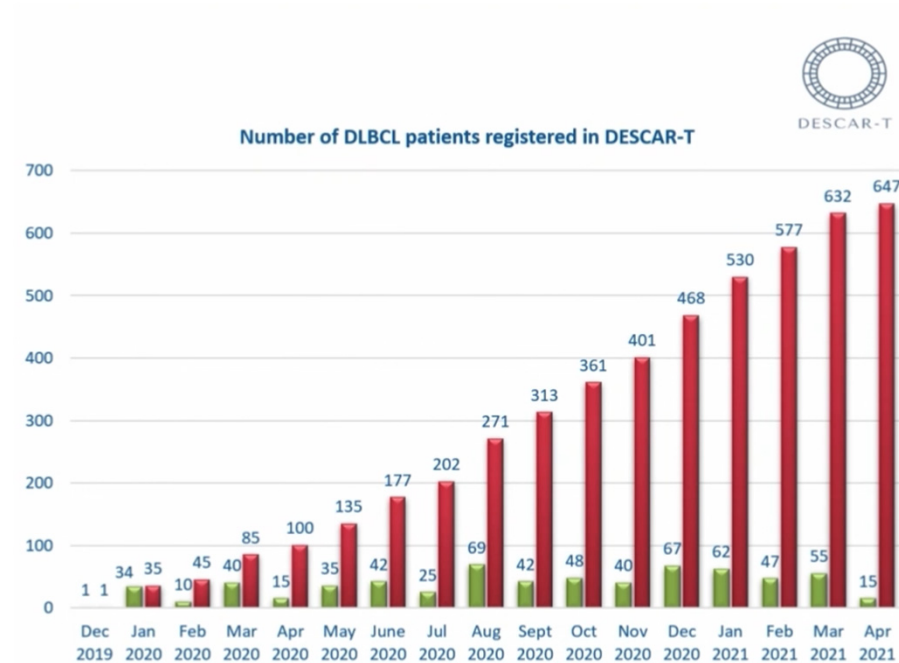
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Employment, management position	–
Advisory/expert activity	Takeda; Celgene, a Bristol-Myers Squibb Company; Roche; Amgen; Novartis; Miltenyi Biotech; Gilead
Ownership (shares, stocks, funds)	–
Patent, copyright, sales license	–
Honoraria	Takeda; Novartis; Celgene, a Bristol-Myers Squibb Company; Roche; MSD; Miltenyi Biotech; Gilead; Abbvie
Funding scientific research	Takeda Oncology; MSD; Novartis
Other financial relationships	–
Intangible conflicts of interest	–

DLBCL

S216: First results of DLBCL patients treated with CAR-T cells and enrolled in DESCAR-T registry, a French real-life database for CAR-T cells in hematologic malignancies

Steven Le Gouill et al., Nantes, Frankreich



PATIENTS' CHARACTERISTICS

	CAR-T ORDERED TREATED PTS (N=550)	CAR-T ORDERED UNTREATED PTS (N=53)
SEX (M / F)	331 / 219	36 / 17
MEDIAN AGE AT CAR-T ORDER (range)	63 (18-79)	65 (39-76)
>= 65yrs	229 (44%)	26 (51%)
DIAGNOSIS AT REGISTRATION		
DLBCL, NOS	482 (90%)	46 (90%)
PMBL	21 (4%)	0
HGBL, with MYC, BCL2 and/or BCL6 rearrangements	9 (1.7%)	4 (7.8%)
Other(s) / Missing	23 / 15	1 / 2
aaIPI AT REGISTRATION		
0-1	226 (45.7%)	11 (23%)
2	239 (48.3%)	28 (58.3%)
3	30 (6.1%)	9 (18.8%)
Missing	55	5
MEDIAN LINE OF TREATMENT (Range)	3 (1;10)	3 (2;7)
Auto-SCT / Allo-SCT	121 (22.5%) / 10 (2%)	5 (9.6%) / 1 (2%)
RESPONSE AFTER BRIDGING (n=441; 80.2%)		
CR	37 (8.4%)	/
PR	83 (18.8%)	/
SD	53 (12%)	/
PD	239 (54%)	/
Not Evaluated / Missing	16 (3.6%) / 13 (2.9%)	/
MEDIAN TIME FROM CAR-T ORDER TO TTT (days; Q1-Q3)	50 (43;60)	/

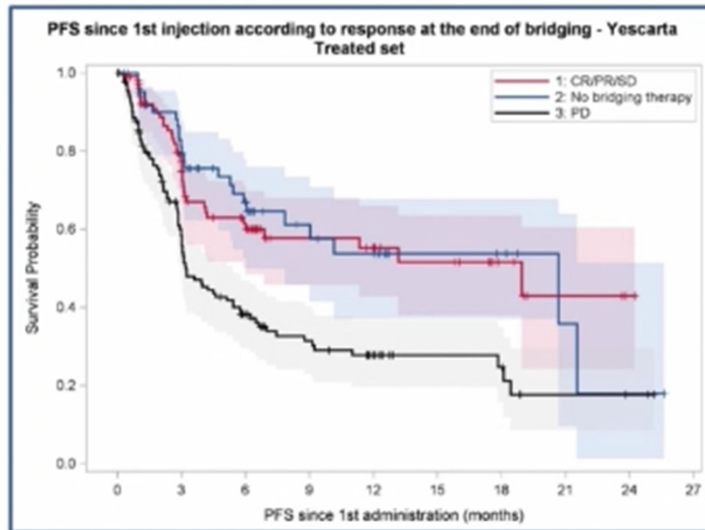
S216: First results of DLBCL patients treated with CAR-T cells and enrolled in DESCAR-T registry, a French real-life database for CAR-T cells in hematologic malignancies

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Axi-cel

PFS at 6 months[#]:

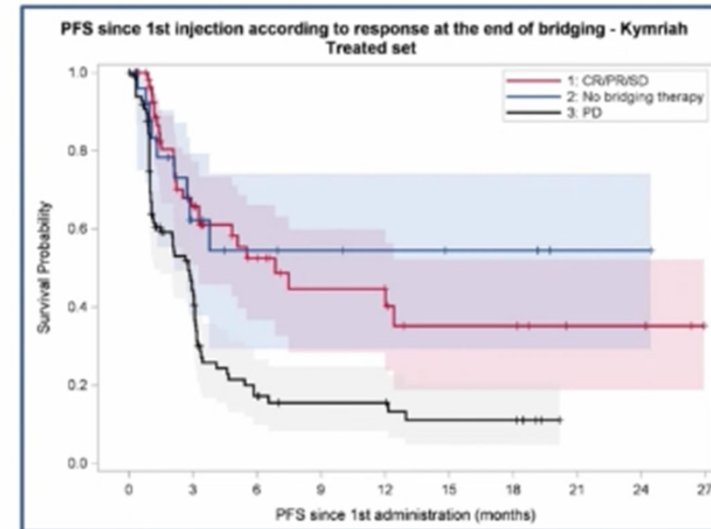
- CR/PR/SD = 61.4% [50– 71] (n=116)
- No bridging = 66.9% [52.5 – 77.9] (n=75)
- PD = 38.2% [29.5 – 46.9] (n=139)



Tisa-cel

PFS at 6 months * :

- CR/PR/SD = 52.5% [36.7 – 66] (n=57)
- No Bridging = 54.4% [29.2 – 74.1] (n=34)
- PD = 17.1% [9.7 – 26.4] (n=100)



S255: Polatuzumab Vedotin vs. CAR- T cell for patients with relapsed/refractory diffuse large B-cell lymphoma – a propensity score matched analysis.

Irit Avivi et al., Tel Aviv, Israel

Results- Patient Characteristics

Domain	CAR-T Group (n=41)	Pola group (n=41)	p value
Age, years (mean, ±S.D.)	64.1 (14.9)	68.4 (14.4)	0.18
Sex, female (n,%)	20 (49%)	18 (44%)	0.66
Transformed (n,%)	13 (32%)	12 (29%)	0.81
Non-GCB (n,%)	23 (56%)	24 (59%)	0.82
N lines prior (mean, ±S.D.)	3.2 (1.6)	3.2 (1.2)	0.94
Prior AHCT	14 (34%)	13 (32%)	0.81
ECOG >1 (n,%)	20 (49%)	21 (51%)	0.6
Elevated LDH (n,%)	22 (54%)	32 (78%)	0.39
Time from PD to Tx (Days)	52(43-82)	14-21	

Patient Characteristics (II)

Pola treated patients (n=41)

Pola-BR, n=31 ; Pola-R, n=10

Average bendamustine dose per cycle -75.5 mg/m² (35-90)

Median number of cycles - 4 for Pola-BR and 5 for Pola-R

CAR-T treated patients (n=41)

Bridging therapy – 30(73%)

steroids (n=1, 2.4%), Radiation (n=4, 9.8%), Chemotherapy (n=25, 61%).

CART product:

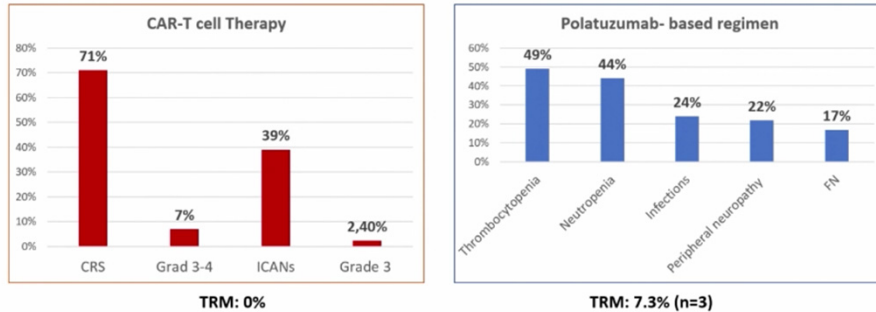
30(73%) got tisagenlecleucel, 11(27%) received axicabtagene ciloleucel.

8 were treated with CARTs after failing Pola. 8 were treated with Pola post CARTs

S255: Polatuzumab Vedotin vs. CAR- T cell for patients with relapsed/refractory diffuse large B-cell lymphoma – a propensity score matched analysis.

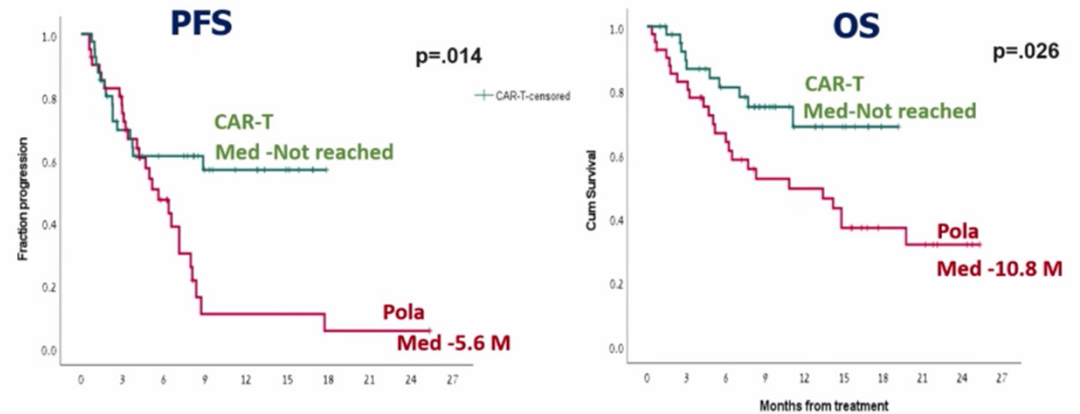
Irit Avivi et al., Tel Aviv, Israel

Adverse Events



Late Toxicities: Late cytopenia- 22% (n=9), all eventually recovered.
Hypogammaglobinemia ,14 (34%) ,not associated with subsequent infections.

PFS and OS



Follicular lymphoma

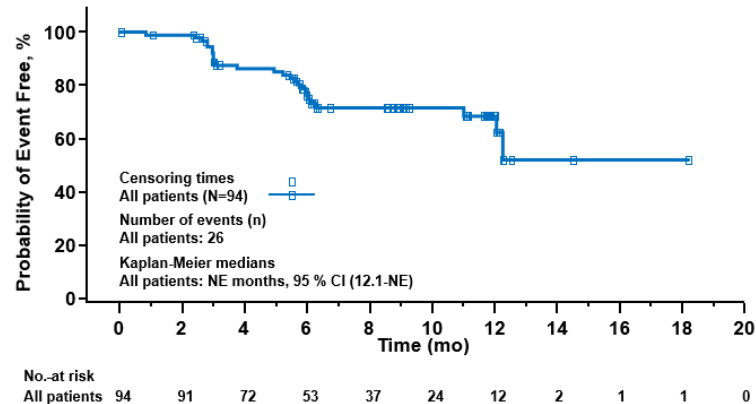
(S210) EFFICACY AND SAFETY OF TISAGENLECLEUCEL IN ADULT PATIENTS WITH RELAPSED/REFRACTORY FOLLICULAR LYMPHOMA: PRIMARY ANALYSIS OF THE PHASE 2 ELARA TRIAL

Martin Dreyling et al *et al.*, Munich, Deutschland

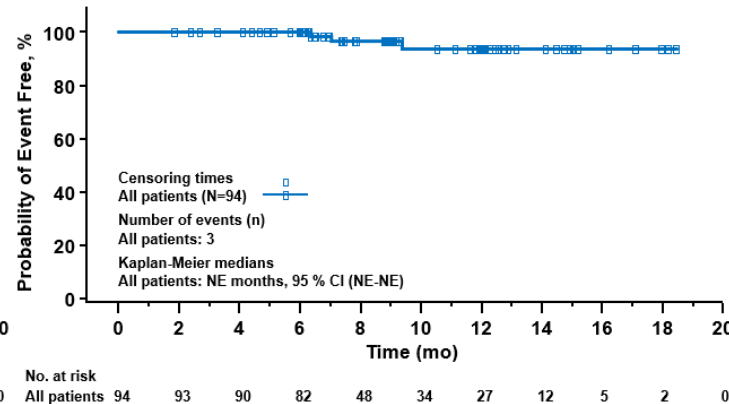
Best Overall Response Rate

Response Rate, %	Patients Evaluable for Efficacy ^b (n=94)
CR	66.0 ^b
PR	20.2
ORR (CR+PR)	86.2

PFS



OS

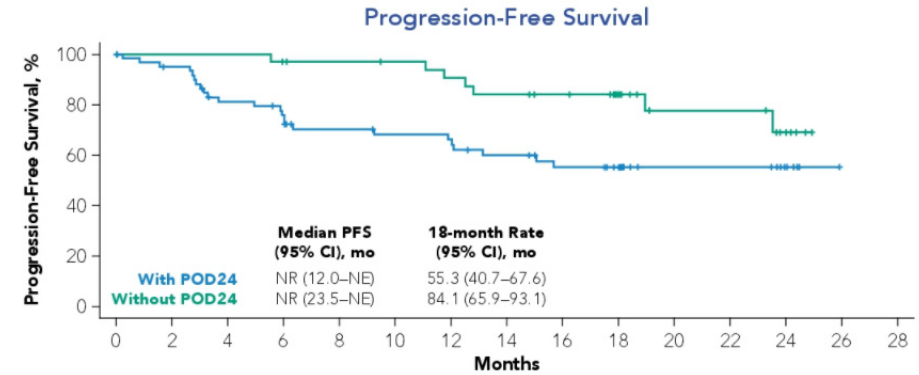
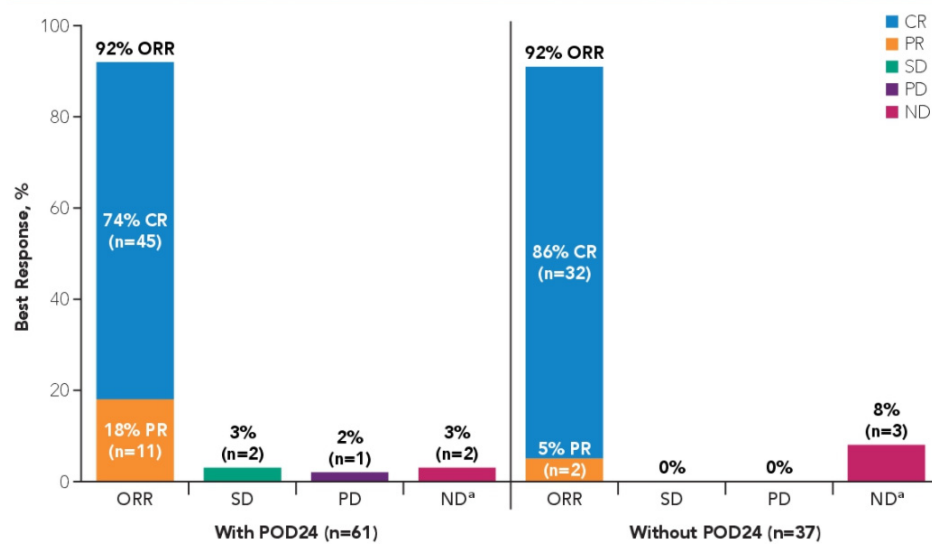


Follow-up: 10 Monate
Median PFS/OS: not reached
6-Mo PFS: 76%

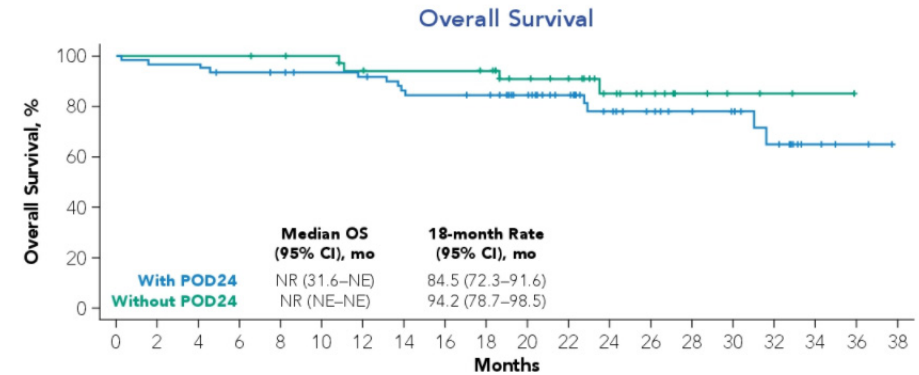
(S213) OUTCOMES IN ZUMA-5 WITH AXICABTAGENE CILOLEUCEL IN PATIENTS WITH RELAPSED/REFRACTORY INDOLENT NON-HODGKIN LYMPHOMA WHO HAD THE HIGH-RISK FEATURE OF EARLY PROGRESSION AFTER FIRST CHEMOIMMUNOTHERAPY

Caron A. Jacobson *et al.*, Boston, Massachusetts, USA

Figure 3. ORR by IRRC Assessment in Patients With iNHL by POD24 Status



No. at Risk	0	2	4	6	8	10	12	14	16	18	20	22	24	26
With POD24	61	56	46	42	35	33	32	28	24	20	10	10	5	0
Without POD24	37	34	34	32	31	30	28	26	24	20	11	11	6	0



No. at Risk	0	2	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
With POD24	61	59	59	56	55	53	52	48	47	46	39	31	23	19	16	14	10	4	2	0
Without POD24	37	37	37	37	36	35	32	31	31	30	25	23	14	9	5	3	2	1	0	0

CAR T-cell therapy in follicular lymphoma: status quo 2021

S213: Outcomes in ZUMA-5 with axicabtagene ciloleucel (axi-cel) in patients (pts) with relapsed/refractory (R/R) indolent non-Hodgkin lymphoma (iNHL) who had the high-risk feature of progression within 24 months from initiation of first anti-CD20-containing chemoimmunotherapy (POD24).

Characteristic	With POD24 (n=81)	Without POD24 (n=48)
Disease type, n (%)		
FL	68 (84)	40 (83)
MZL	13 (16)	8 (17)
Median age (range), years	60 (34–78)	62 (42–79)
≥65 years, n (%)	26 (32)	18 (38)
Male, n (%)	42 (52)	32 (67)
Stage III-IV disease, n (%)	67 (83)	45 (94)
≥3 FLIPI, n/n (%)	30/68 (44)	17/40 (43)
High tumor bulk (GELF criteria), n (%)^a	41 (51)	21 (44)
Median no. of prior therapies (range)	3 (1–10) ^b	3.5 (2–8)
≥3, n (%)	49 (60)	36 (75)
Prior PI3Ki therapy, n (%)	22 (27)	17 (35)
Prior lenalidomide, n (%)	25 (31)	19 (40)
Prior autologous SCT, n (%)	16 (20)	11 (23)
Refractory disease, n (%)^c	62 (77)	30 (63)

S210: Efficacy and safety of tisagenlecleucel (Tisa-cel) in adult patients (Pts) with relapsed/refractory follicular lymphoma (r/r FL): Primary analysis of the phase 2 Elara trial.

	All Patients (N=97)
Median age (range), y	57.0 (29-73)
≥65 y, n (%)	24 (24.7)
ECOG PS, n (%)	
0	56 (57.7)
1	37 (38.1)
2	4 (4.1)
Bulky disease at study entry,^c n (%)	63 (64.9)
Stage at study entry III-IV, n (%)	82 (84.5)
FLIPI ≥3 at study entry, n (%)	58 (59.8)
Median no. of prior therapies (range)	4 (2-13)
≥5, n (%)	27 (27.8)
POD24 from first anti-CD20 mAb-containing therapy, ^d n (%)	58 (59.8)
Refractory to last line of therapy, ^e n (%)	76 (78.4)
Prior autologous HSCT, n (%)	35 (36.1)
Refractory to ≥2 regimens,^f n (%)	74 (76.3)
Double refractory, ^g n (%)	67 (69.1)
Prior therapy	
Anti-CD20 mAb and alkylating agents, ^h n (%)	63 (64.9)
PI3K inhibitors, n (%)	20 (20.6)
Lenalidomide and rituximab, n (%)	16 (16.5)

(LB1904) A COMPARISON OF CLINICAL OUTCOMES FROM ZUMA-5 (AXICABTAGENE CILOLEUCEL) AND THE INTERNATIONAL SCHOLAR-5 EXTERNAL CONTROL COHORT IN RELAPSED/REFRACTORY FOLLICULAR LYMPHOMA (R/R FL)

John Gribben et al *et al.*, London, United Kingdom

Baseline Characteristics After Propensity Score Weighting

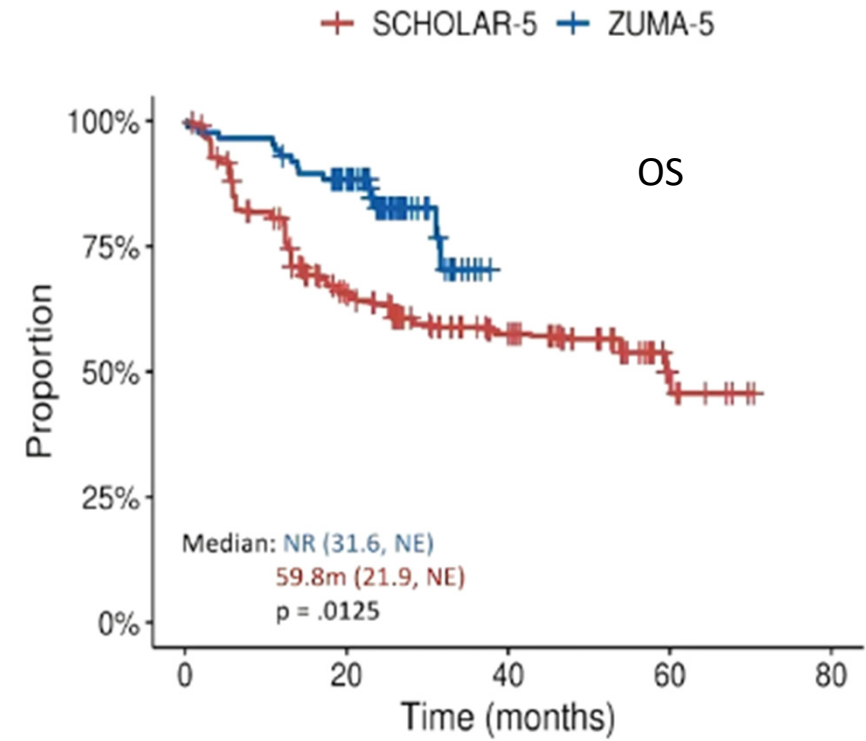
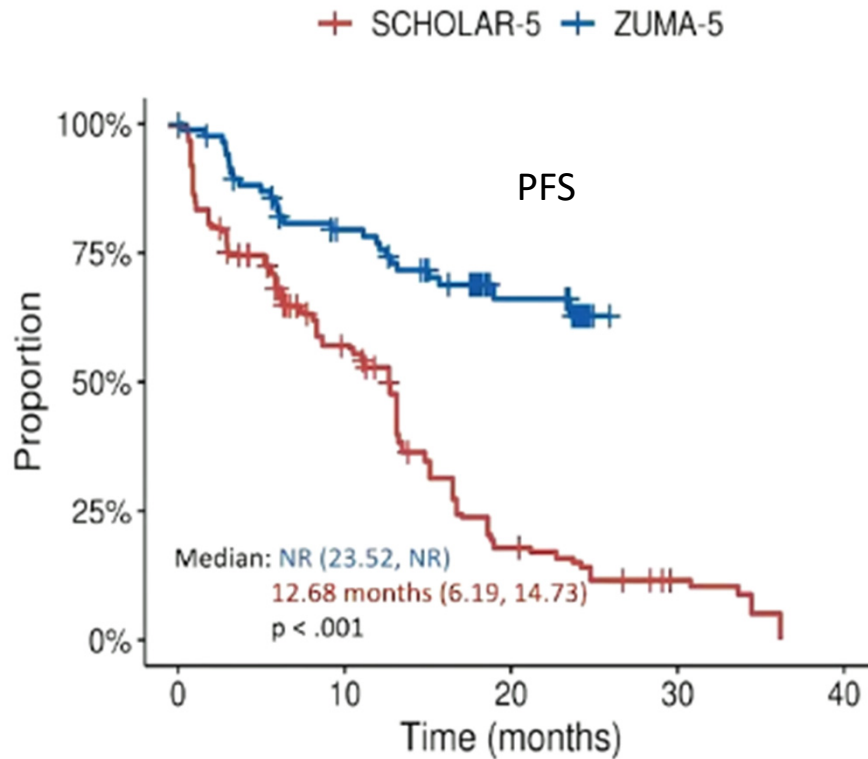
Effective sample size reduced from 143 to 85 after propensity score weighting

All analyses used the weighted SCHOLAR-5 sample

Characteristic	SCHOLAR-5 Before Weighting (n = 143)	ZUMA-5 (n = 86)	SCHOLAR-5 After Weighting (n = 85)	Balance
Median age (range), years	64 (36 – 89)	62 (34 – 79)	61 (36 – 89)	✓
Male, n (%)	81 (56.6%)	48 (55.8%)	53 (61.9%)	✓
POD24, n (%)	51 (35.7%)	49 (57%)	47 (55.9%)	✓
Prior lines of therapy, mean (SD)	2.86 (1.23)	3.6 (1.57)	3.53 (1.6)	✓
Refractory to prior line, n (%)	87 (60.6%)	63 (73.3%)	65 (76.6%)	✓
Prior SCT, n (%)	31 (21.7%)	21 (24.4%)	24 (28%)	✓
Size of largest node (cm), mean (SD)	4.91 (2.69)	5.2 (2.94)	4.93 (2.74)	✓
Time since last therapy (months), mean (SD)	18.25 (27.73)	8.44 (11.68)	7.74 (13.34)	✓
Time since diagnosis (months), mean (SD)	100.85 (63.72)	76.05 (62.75)	82.24 (58.5)	✓
ECOG, n (%):				
0	39 (33.1%)	51 (59.3%)	21 (29%)	✗
1	79 (66.9%)	35 (40.7%)	51 (71%)	

(LB1904) A COMPARISON OF CLINICAL OUTCOMES FROM ZUMA-5 (AXICABTAGENE CILOLEUCEL) AND THE INTERNATIONAL SCHOLAR-5 EXTERNAL CONTROL COHORT IN RELAPSED/REFRACTORY FOLLICULAR LYMPHOMA (R/R FL)

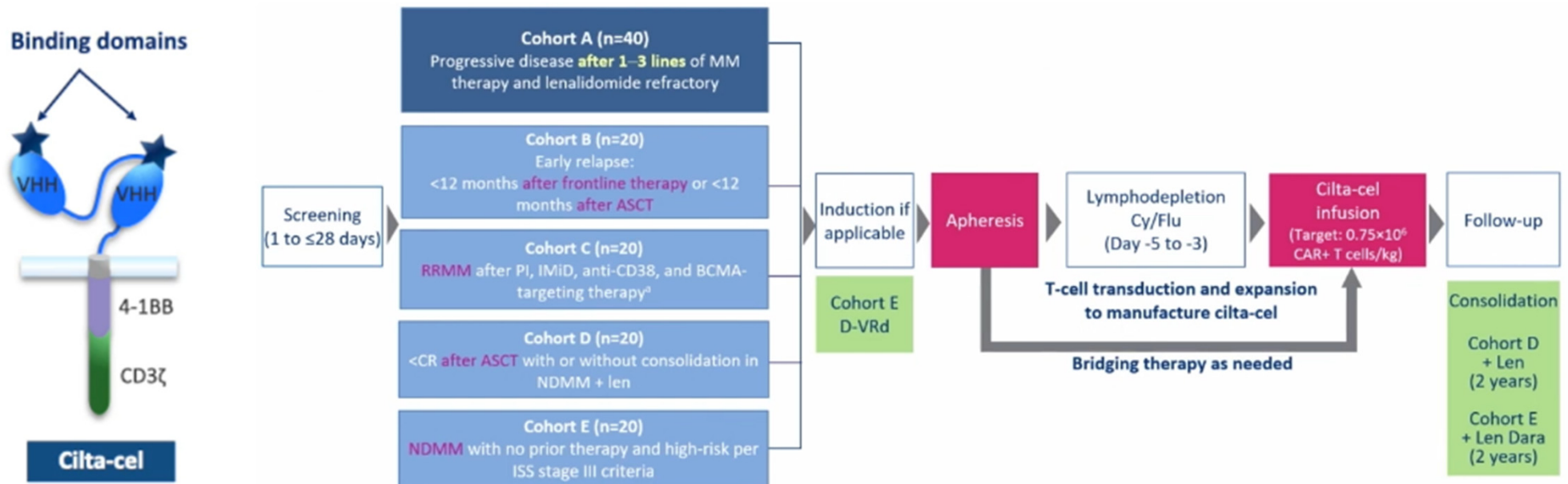
John Gribben et al *et al.*, London, United Kingdom



MM

S190 EFFICACY AND SAFETY OF THE BCMA-DIRECTED CAR-T CELL THERAPY, EFFICACY AND SAFETY OF THE BCMA-DIRECTED CAR-T CELL THERAPY, CILTACABTAGENE AUTOLEUCEL, IN PATIENTS WITH PROGRESSIVE MULTIPLE MYELOMA AFTER 1–3 PRIOR LINES OF THERAPY: INITIAL RESULTS FROM CARTITUDE-2

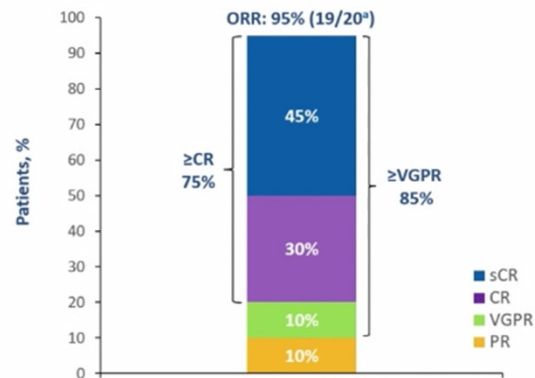
Aghar et al., Pittsburgh, United States of America



S190 INITIAL RESULTS FROM MYELOMA AFTER 1–3 PRIOR LINES OF THERAPY: INITIAL RESULTS FROM CARTITUDE-2

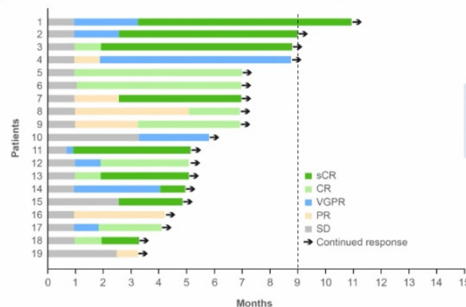
Aghar et al., Pittsburgh, United States of America

CARTITUDE-2: Overall Response Rate and MRD Negativity



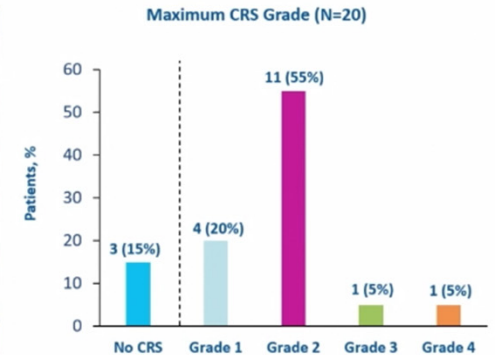
- Median time to first response: 1.0 month (range, 0.7–3.3)
- Median time to CR or better: 1.9 months (range, 0.9–5.1)
- All patients (n=4) with MRD-evaluable^b samples at the 10⁻⁵ threshold were MRD negative at data cut-off

CARTITUDE-2: Duration of Response



- Responses deepened over time
- No progression of disease at median follow-up of 5.8 months

CRS	N=20
Patients with a CRS event, n (%)	17 (85)
Time to onset, days, median (range)	7 (5–9)
Duration, days, median (range)	3.5 (2–11)
Supportive measures, ^a n (%)	
Tocilizumab	14 (70)
Corticosteroids	6 (30)
IV fluids	6 (30)
Oxygen	4 (20)
Anakinra	1 (5)
Vasopressor	1 (5)
CRS resolved or recovered in 94% of patients at the time of data cut-off	
Neurotoxicity	N=20
ICANS, n (%)	3 (15)
Median time to onset, days (range)	8 (7–11)
Median duration, days (range)	2 (1–2)
All ICANS were grades 1/2 No cases of movement and neurocognitive TEAEs	



- 1 death occurred on Day 100 after infusion due to COVID-19, and was assessed as treatment-related by the investigator

- Incidence of prolonged Grade 3/4 cytopenias beyond Day 60:
 - Neutropenia: 25%
 - Thrombocytopenia: 0%
 - Lymphopenia: 45%

DLBCL

- Real World Daten aus Frankreich erscheinen qualitativ hochwertig und zeigen sehr ähnliche Ergebnisse zu den Zulassungsstudien. Das gilt für Effektivität und Sicherheit. Produktunterschiede kann man nicht feststellen. Die Arbeit erscheint bedeutend belastbarer als die Deutsche Analyse vom EBMT 2021. FL
- Die Phase II Daten der verschiedenen Produkte sehen ähnlich aus, sind aber schwer vergleichbar. Eine Zulassung in diesem Feld wird mit diesen Daten angestrebt.

FL

- ELARA und ZUMA-5 zeigen Wirksamkeit in einem kritischen FL Kollektiv. Das mediane FU ist allerdings begrenzt, so dass Überlebensdaten noch mit Vorsicht zu beurteilen sind. Der Vergleich von ZUMA-5 mit SCHOLAR-5 ist natürlich primär als Unterstützung für die Zulassung zu sehen, zeigt aber sehr deutliche Unterschiede in PFS und OS, so dass die Aussage sehr wahrscheinlich relevant ist.

MM

- In früheren Linien sind Machbarkeit und Ansprechraten mit dem BCMA CAR Cilta-cel vielversprechend. Cartitide-4 wird auch in Deutschland offen sein.

**Haben Sie Fragen zu diesem Thema?
Schreiben Sie uns!**

eha2021@lymphome.de



Die Kurzpräsentationen sind online unter

www.lymphome.de/eha2021

Für den Inhalt verantwortlich:

Prof. Dr. med. Peter Borchmann

Klinik I für Innere Medizin • Uniklinik Köln



Das Informationsprojekt wird unterstützt von den Firmen



Diese hatten keinen Einfluss auf die Inhalte.