

Lymphom  
Kompetenz  
**KOMPAKT**



**KML KONGRESSE**

Expert:innen berichten zu  
Lymphomen & Leukämien



Amy Sparwasser, Stock-Fotografie-ID: 1455291856

**ASH 2025**

**ORLANDO | 06.-09. Dezember 2025**



**Prof. Dr. med. Björn Chapuy**  
Charité Universitätsmedizin Berlin

# Diffuses großzelliges B-Zell-Lymphom (DLBCL)

# Offenlegung potentieller Interessenskonflikte

LymphomKompetenz KOMPAKT – ASH2025 wird in Kooperation mit acht unterstützenden Firmen durchgeführt.

Meine persönlichen Disclosures betreffen:

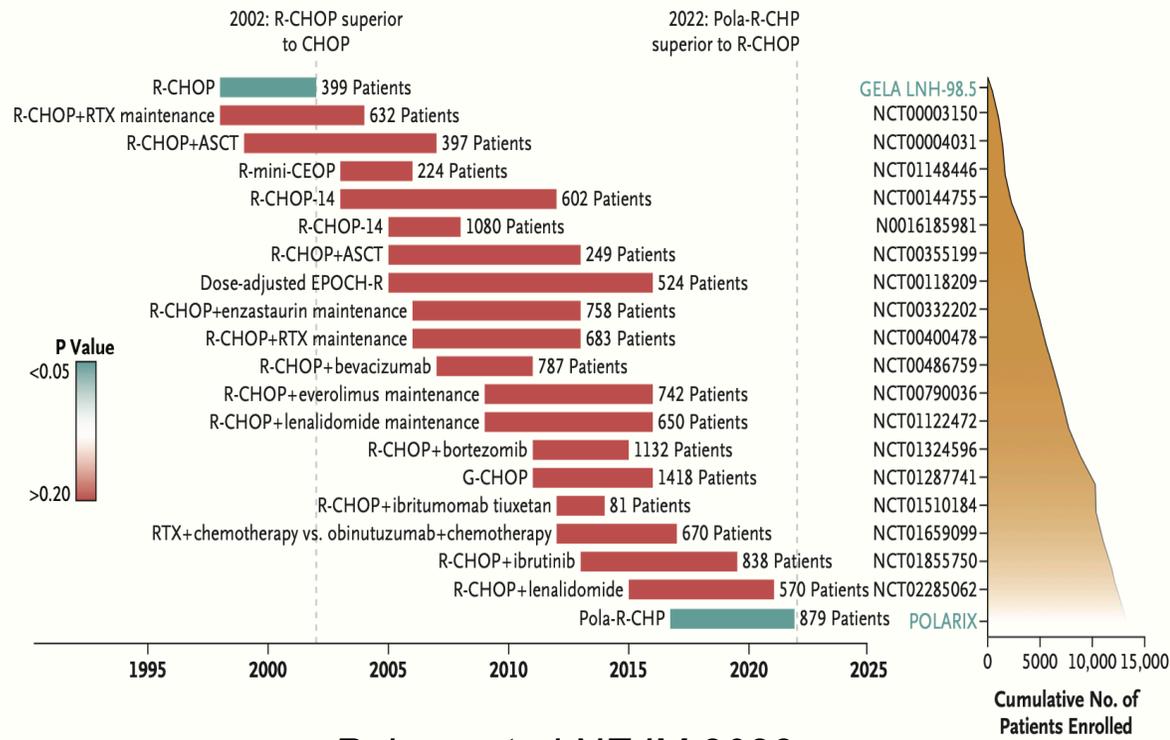
<b>Anstellungsverhältnis, Führungsposition</b>	Charité - Universitätsmedizin Berlin; Beirat German Lymphoma Alliance
<b>Beratungs-/ Gutachtertätigkeit</b>	AbbVie, BMS, Gilead, Incyte, J&J, Regeneron, Roche, Sobi
<b>Besitz von Geschäftsanteilen, Aktien oder Fonds</b>	-
<b>Patent, Urheberrecht, Verkaufslizenz</b>	Verschiedene Patente zur Molekularen Subtypisierung grosszelliger Lymphome, wie z.B. DLBclass
<b>Honorare</b>	AbbVie, Art tempi, Astra Zeneca, BMS, Incyte, J&J, Gilead, KML, Regeneron, Roche, Sobi, Ono
<b>Finanzierung wissenschaftlicher Untersuchungen</b>	Roche unterstützt die R-Pola-Glo Studie
<b>Andere finanzielle Beziehungen</b>	-
<b>Immaterielle Interessenkonflikte</b>	-

# Kapitel 1

## Erstlinientherapie

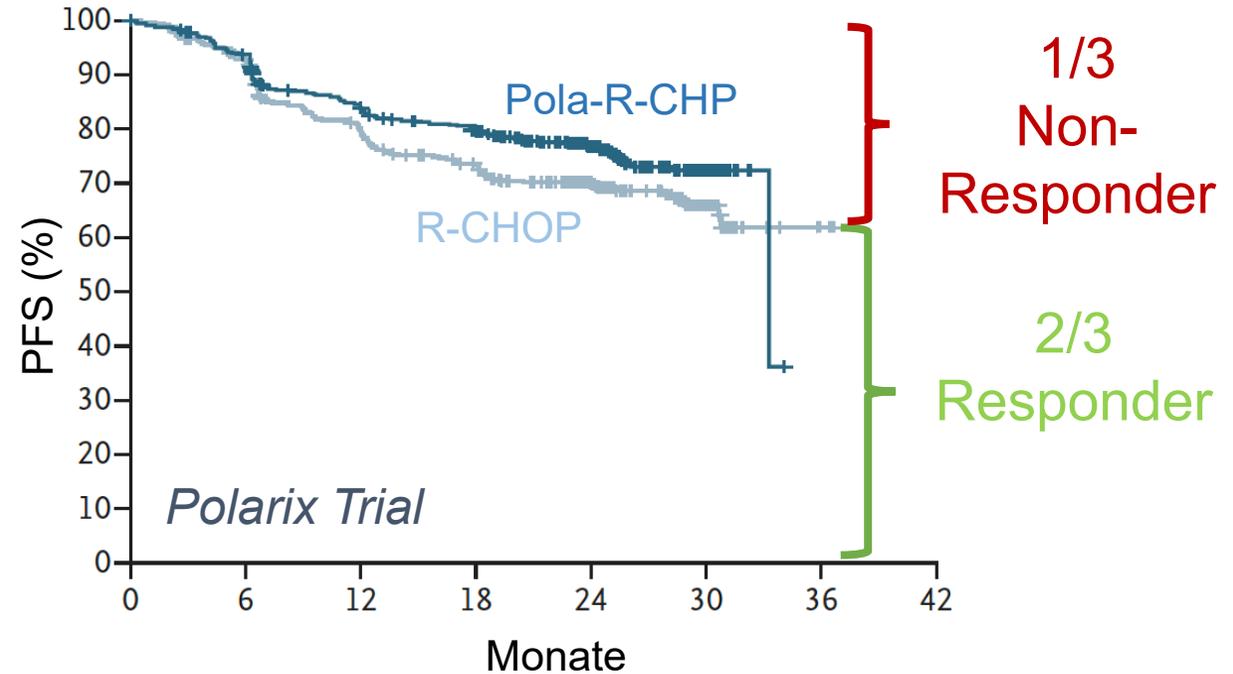
# Empirische Entwicklung/Optimierung von R-CHOP

50 Jahre CHOP / 25 Jahre R-CHOP



Palmer et al NEJM 2023

Standard of Care  
(R-CHOP-based)



Tilly et al. NEJM 2022

# Therapieoptimierung in der Erstlinie

**R-CHOP  
+  
X**

**R-CHOP  
+  
XY**

**No-CHOP**  
(Frei von klassischer  
Chemotherapie)

**All comer**

z.B.  
bsAB  
(*SkyGlo/EPO*  
*COR-NHL2*)  
*GoalSEEK*

**Risikoadaptierte  
Intensivierung**

z.B.  
frühe CART bei  
IPI4/5  
*ZUMA23*

**Subgruppen-spez.  
Intensivierung**

z.B.  
BTKi in non-GCB  
*ESCALADE*

**All comer**

z.B.  
Tafa/Len+RCH  
OP vs. RCHOP  
(*FrontMind*)

**18-80yo  
Window of  
opportunity**

z.B.  
(*SMART-  
STOP*)

**Chemolight  
Elderly/frail**

z.B.  
(*R-Pola-Glo*)

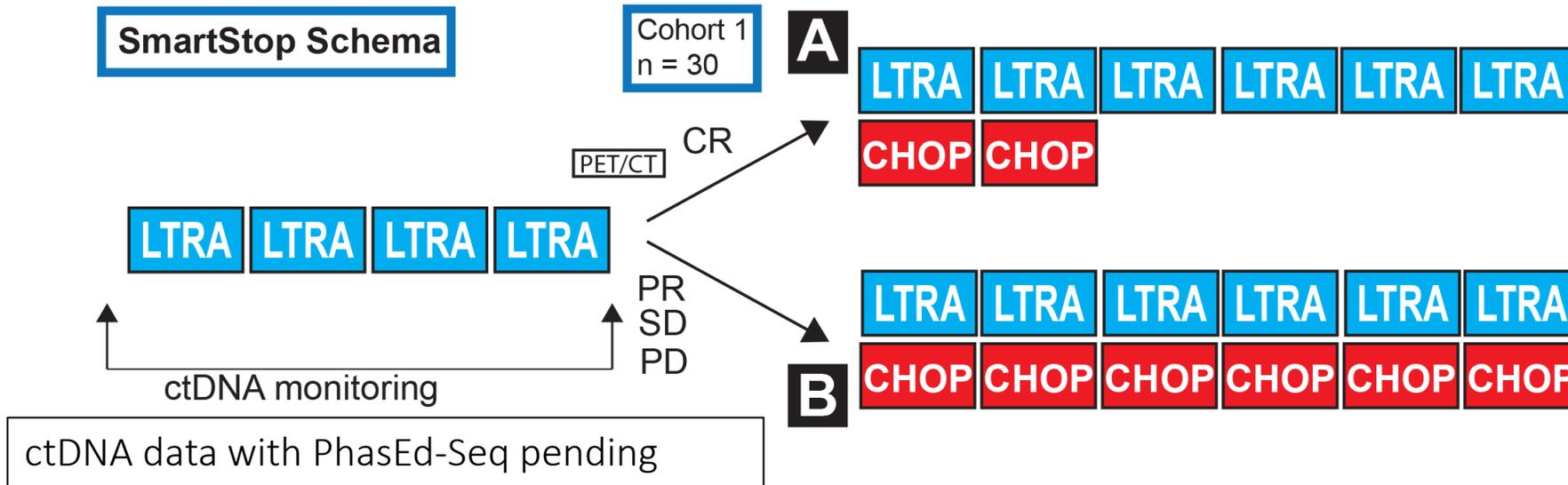
# Primary Analysis of the Smart Stop Trial: Lenalidomide, Tafasitamab, Rituximab, and Acalabrutinib Alone and with Combination Chemotherapy in Newly Diagnosed Diffuse Large B-Cell Lymphoma

Jason Westin, Luis Fayad, Raphael Steiner, Sairah Ahmed, Preetesh Jain, Luis Malpica, Ranjit Nair, Sattva Neelapu, Jared Henderson, Frederick Hagemeister, Maria Rodriguez, Chijioke Nze, Fateeha Furqan, Ayushi Chauhan, Mark Hamilton, Anath Lionel, Francisco Vega, Jisha Tom, Isak Durmic, Gita Masand, Rhanna Wilson, Cara Blyth, Christopher Flowers, Michael R Green, Dai Chihara

Department of Lymphoma & Myeloma, MD Anderson Cancer Center

# Smart Stop Schema and Endpoints

Primary Endpoints:  
 1A ORR after 4 LTRA  
 1B CRR at end of therapy



Doses of "Smart" portion of the clinical trial, cycle = 21 days				
Drug Name	Dose	Route	Dosing per cycle	Day of therapy
Lenalidomide (L)	25mg	PO	Daily	1-10
Tafasitamab (T)	12mg/kg	IV	Weekly	1, 8, 15
Rituximab (R)	375mg/m <sup>2</sup>	IV	Once	1
Acalabrutinib (A)	100mg	PO	BID	1-21

# Safety Summary

## Median of percentage of planned doses which were received

Lenalidomide	Tafasitamab	Acalabrutinib
88%	93%	100%

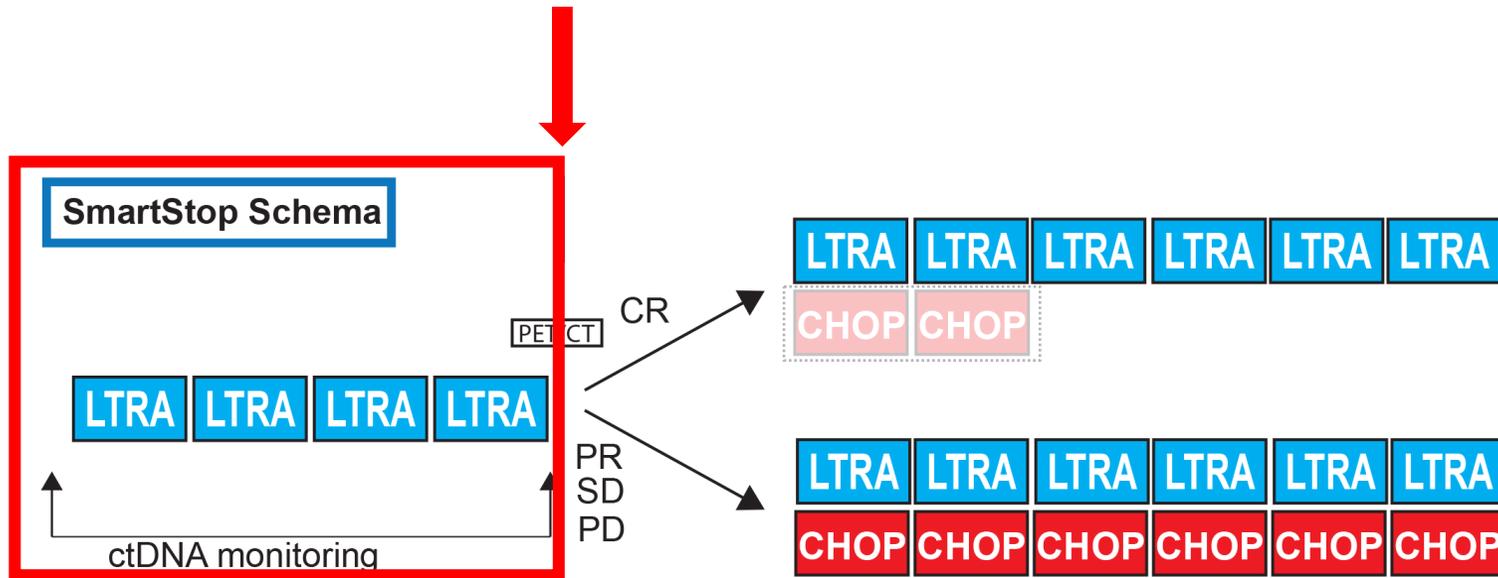
## Number of cycles delivered

LTRA Median (range)	
	10 (1-10)

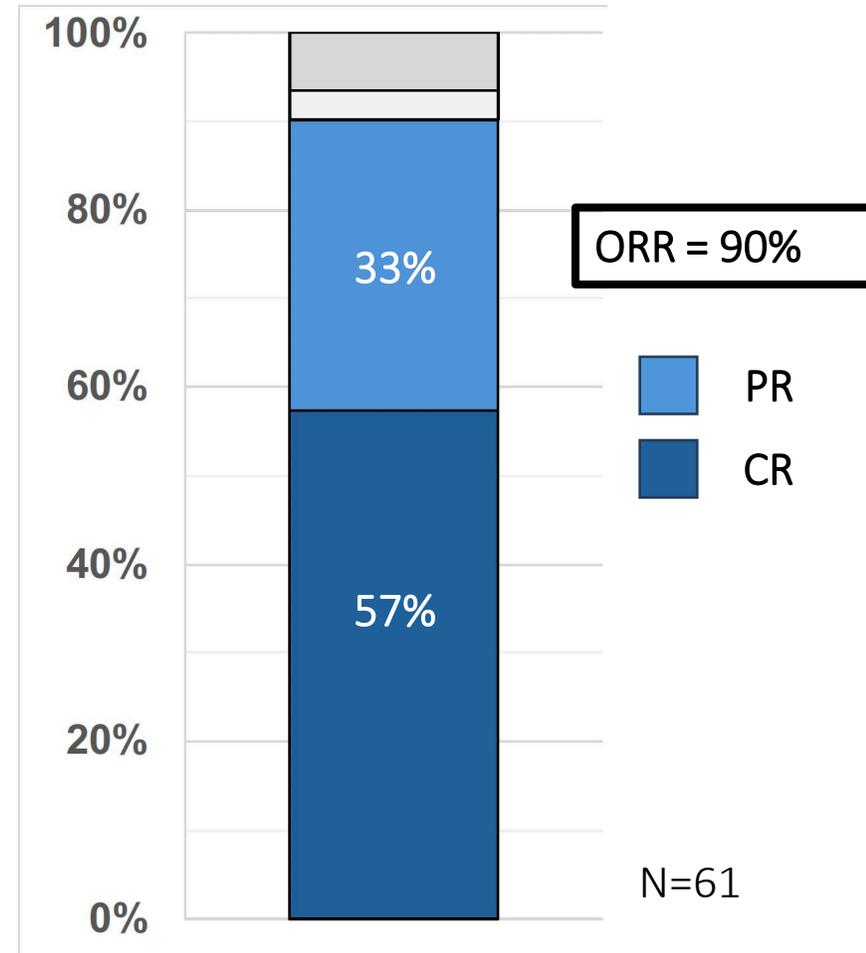
AE (N = 61)	Any Grade	Grade ≥3
Anemia	55 (90%)	5 (8%)
Neutropenia	53 (87%)	35 (57%)
Platelet count decreased	47 (77%)	9 (15%)
Fatigue	41 (67%)	1 (2%)
Rash maculo-papular	28 (46%)	4 (7%)
Transaminitis	26 (43%)	0
Nausea	23 (38%)	0
Headache	22 (36%)	0
Creatinine increased	28 (36%)	0
Infections and infestations	20 (33%)	3 (5%)
Infusion related reaction	19 (31%)	1 (2%)
Edema	17 (28%)	0
Constipation	19 (31%)	0
Peripheral sensory neuropathy	14 (23%)	3 (5%)
Cough	11 (18%)	0
Diarrhea	9 (15%)	0
Dizziness	10 (16%)	1 (2%)
Mucositis oral	7 (12%)	0
Vomiting	9 (15%)	4 (7%)
Febrile neutropenia	4 (7%)	3 (5%)
COVID infection	13 (21%)	

# Results:

## Primary Endpoint 1A: ORR after LTRA lead in

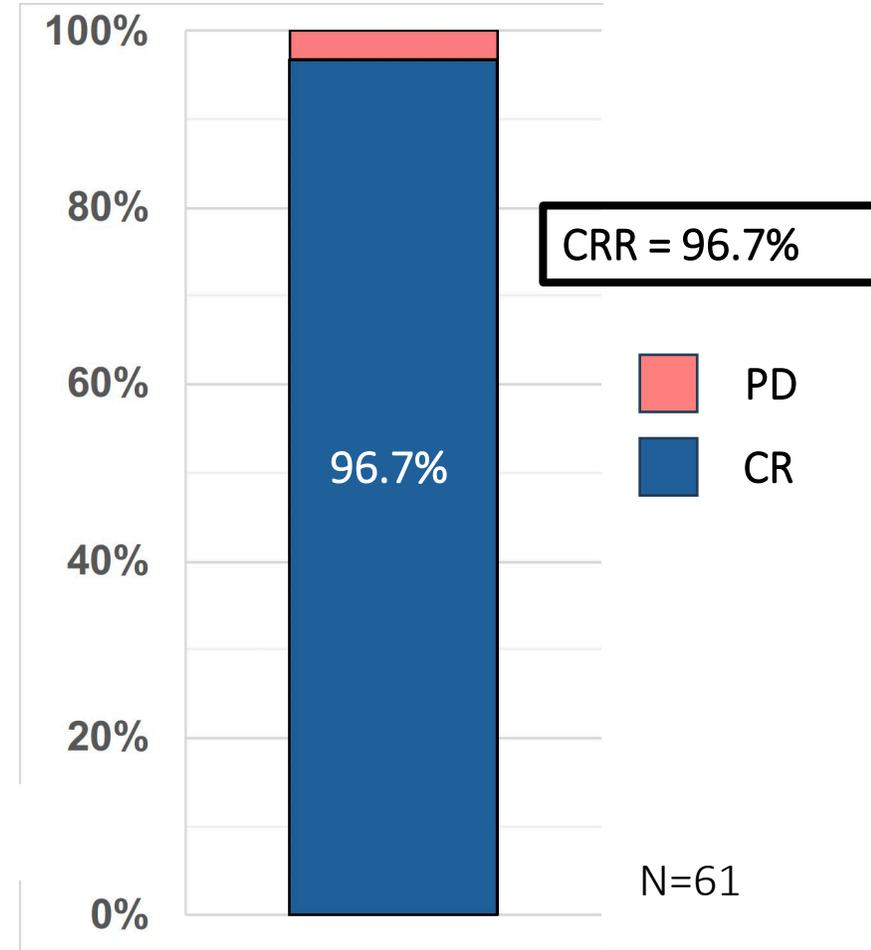
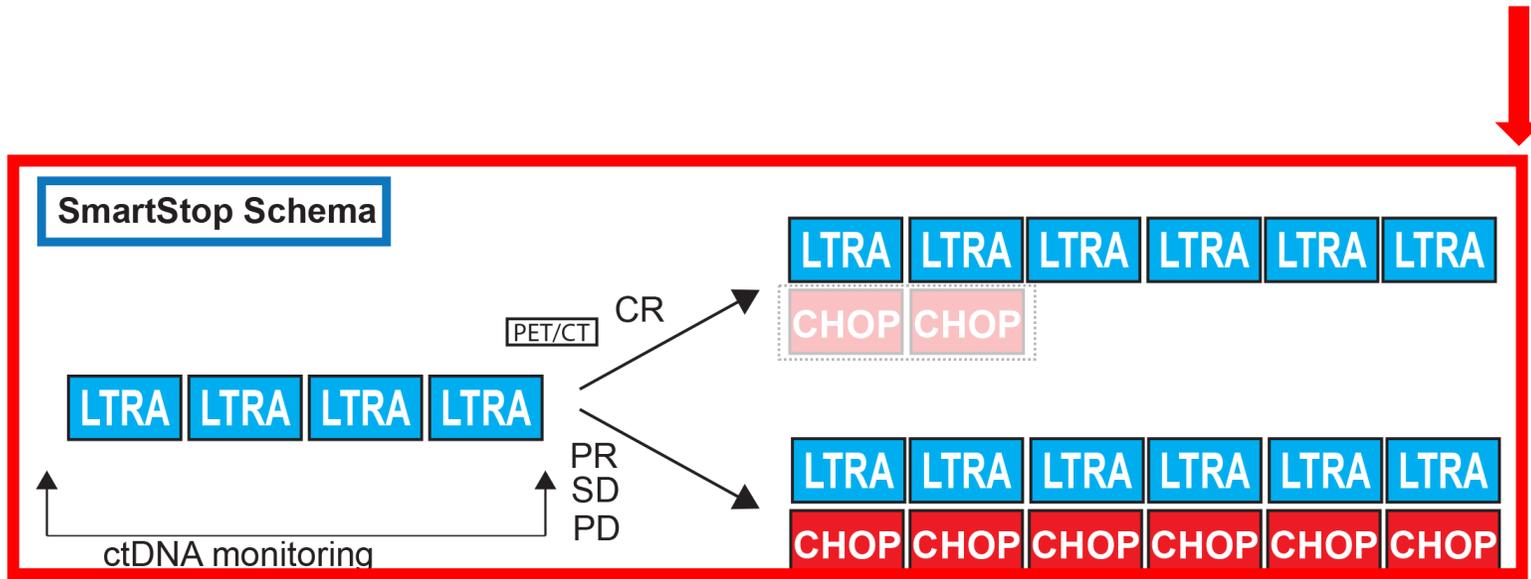


Primary Endpoint 1A: ORR after LTRA is 90%



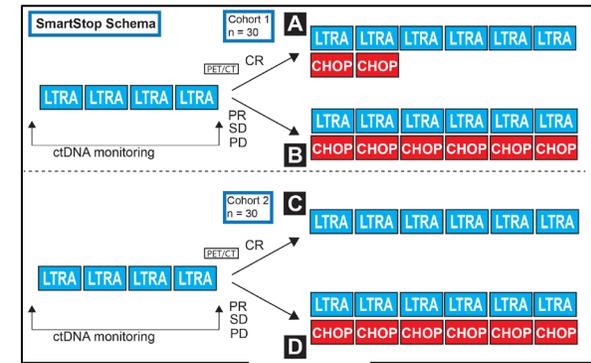
# Results:

## Primary Endpoint 1B: CR at End of Treatment



Primary Endpoint 1B: CR at End of Treatment is 96.7%

# Results: PFS and OS with Smart Stop (n = 61)



86.5% at 2y

98.4% at 2y

Median follow up for survival is 25.3 months

# Conclusions: Smart strategy: targeted therapy first

1. "Smart" strategy of targeted therapy first: successful, preserves curative intent
  - Smart Stop: Primary endpoints ORR after LTRA: 90%, CR at end of therapy: 96.7%
  - Smart Stop: PFS at 2y: 86.5%, OS at 2y: 98.4%
2. "Smart" strategy of targeted therapy first: more than half of patients may reduce or remove chemotherapy for newly diagnosed DLBCL
  - Lenalidomide, Tafasitamab, Rituximab, Acalabrutinib:
    - 57% CR rate after 4 cycles of LTRA, 89% had durable CR
    - After 2 cycles of CHOP and 6 cycles of LTRA: 0/19 progressed\*
    - After 0 cycles of CHOP and 6 cycles of LTRA: 4/16 progressed, all responded to 1L R-chemo
3. "Smart" strategy of targeted therapy first: does not impact response to chemotherapy
  - Patients without CR with LTRA (43%): 92% achieved CR with CHOP

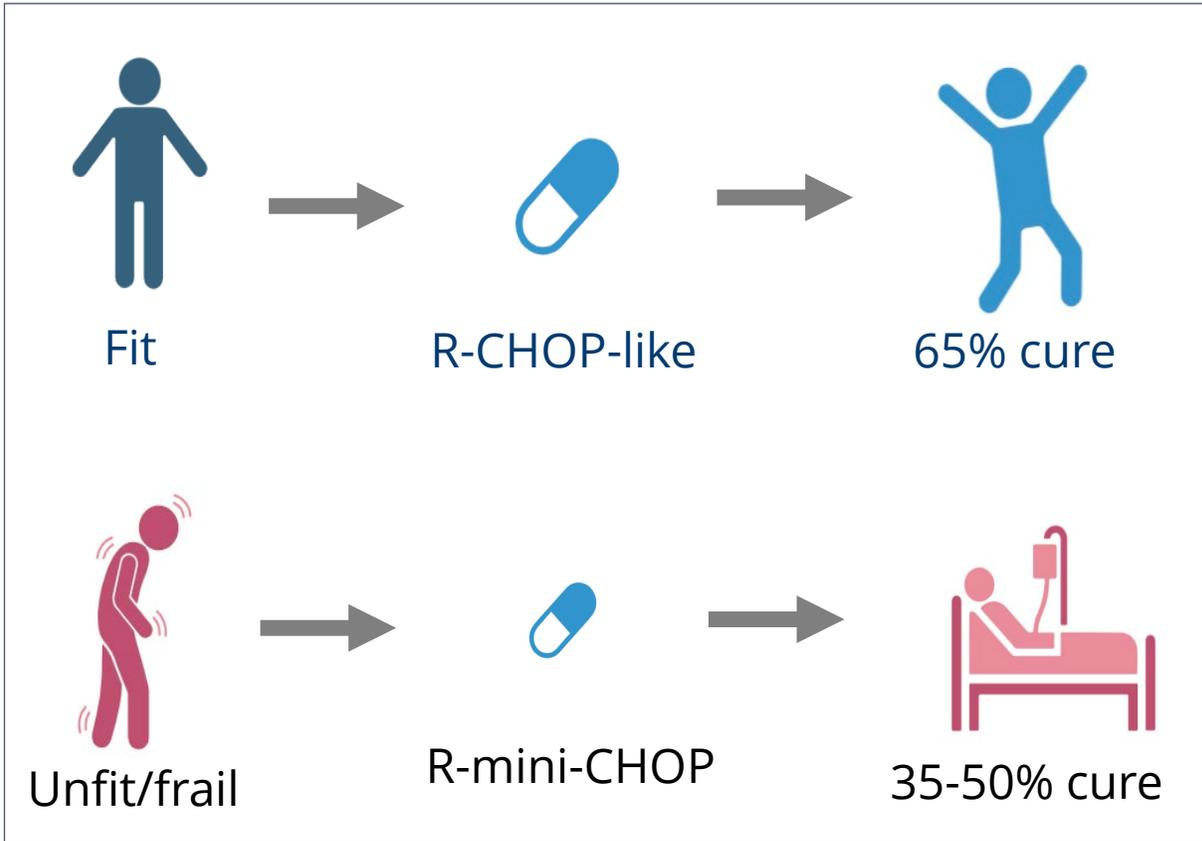


# Phase II Frontline Chemolight R-Pola-Glo Trial Induces High and Durable Response Rates in Elderly and Medically Unfit/Frail Patients With Aggressive B-Cell Lymphoma

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**B. Chapuy**, R. Wurm-Kuczera, R. Michael, M. Wang, P. Pichler, A. Huster, A. Kerkhoff, M. Panny, R. Schroers, A. Ossami Saidy, F. Müller, F. Damm, M. Orlinger, P. Staber, C. Schwaenen, L. Wohn, C. Schmitt, M. Hoffmann, M. Hänel, J. Düll, S. Heyn, S. Mayer, T. Weber, P. Reimer, N. Rotter, U. Schnetzke, B. von Tresckow, G. Kammerer, J. Rasvina, B. Lehner, T. Mika, D. Böckle, C. Leng, A.L. Illert, B. Altmann, B. Friedrichs, E. Willenbacher, D. Mougiakakos, C. Pott, S. Al-Batran, A. Rosenwald, D. Hellwig, S. Dietrich, B. Glass, G. Lenz, U. Keller, M. Ziepert, T. Melchardt, R. Greil

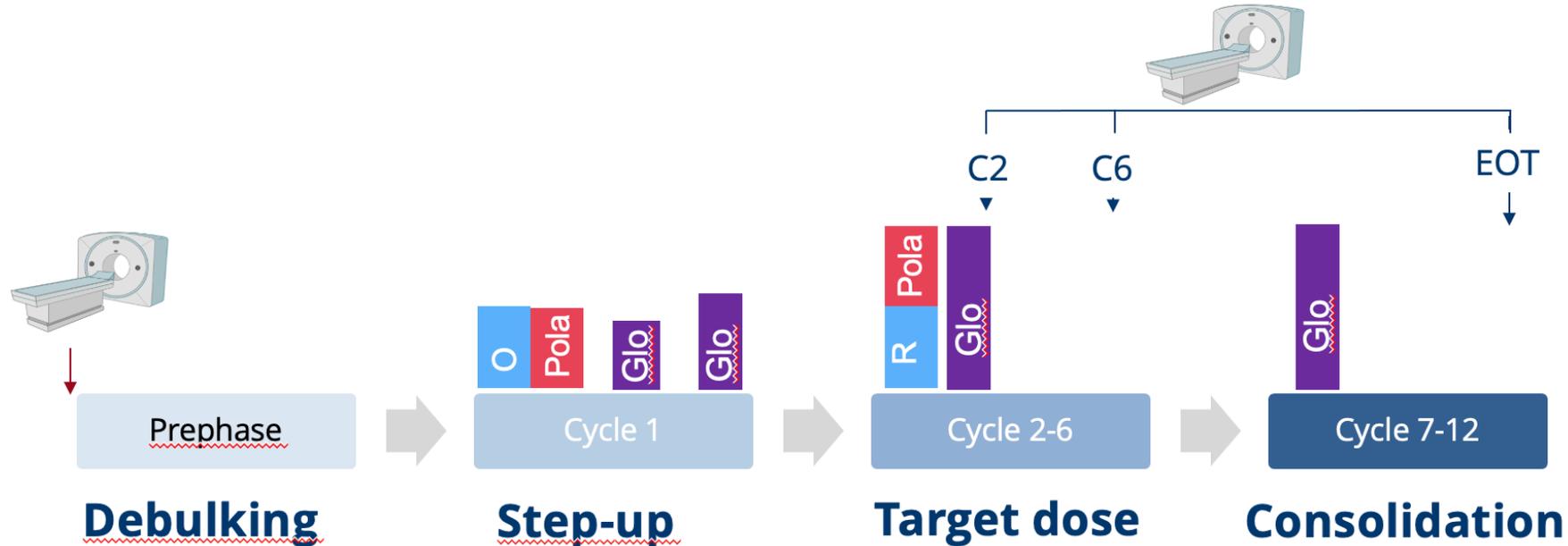
# Diffuse Large B-cell Lymphoma (DLBCL)



- DLBCL is the most common aggressive lymphoma, typically affecting elderly patients (median age 65 yo).
- Molecularly, DLBCL is a heterogeneous disease characterized by distinct transcriptional and genetic subtypes.
- Immunochemotherapy (R-CHOP-like/Pola-R-CHP) achieves high cure rates, but increased comorbidities in medically unfit and/or frail patients limit outcomes due to the use of less effective regimens.

**Unmet Medical Need:**  
Highly effective therapy for medically unfit and/or frail patients

# R-Pola-Glo – Study Design



## Indication

- **Untreated** patients >60 yo with LBCL
- Non-eligible for full dose R-CHOP

## Study Design

- One-arm, multicenter phase II
- 30 centers in Germany and Austria
- **80 pts** (C1-6 mandatory inpatient)
- Mandatory prophylaxis

## Endpoints

- **Primary: 1y-PFS rate**
- **Secondary:**
  - Efficacy (OS, EFS)
  - Feasibility/Toxicity

# R-Pola-Glo – Patients Characteristics

## Baseline Parameters

Cohort (N=80)	
Median age age > 85yo	80 (66-92) 19%
Advanced Stage (III/IV)	63% (50/80)
ECOG 2	28% (22/80)
LDH, > ULN	63% (50/80)
IPI 3-5	64% (51/80)

## Simplified Geriatric Assessment (sGA)

	FIT	UNFIT		FRAIL
ADL	≥5*	<5*	6*	<6*
	<i>and</i>	<i>and/or</i>	<i>and</i>	<i>and/or</i>
IADL	≥6*	<6*	8*	<8*
	<i>and</i>	<i>and/or</i>	<i>and</i>	<i>and/or</i>
CIRS-G	0 score = 3-4 <i>and</i> ≤8 score = 2	≥1 score = 3-4 <i>and/or</i> >8 score = 2	0 score = 3-4 <i>and</i> <5 score = 2	≥1 score = 3-4 <i>and/or</i> ≥5 score = 2
	<i>and</i>	<i>and</i>	<i>and</i>	<i>and</i>
Age	<80	<80	≥80	≥80
R-Pola-Glo (n=79)	6 (7.6)	28 (35.4)	15 (19)	30 (38)

91.3% medical unfit/frail

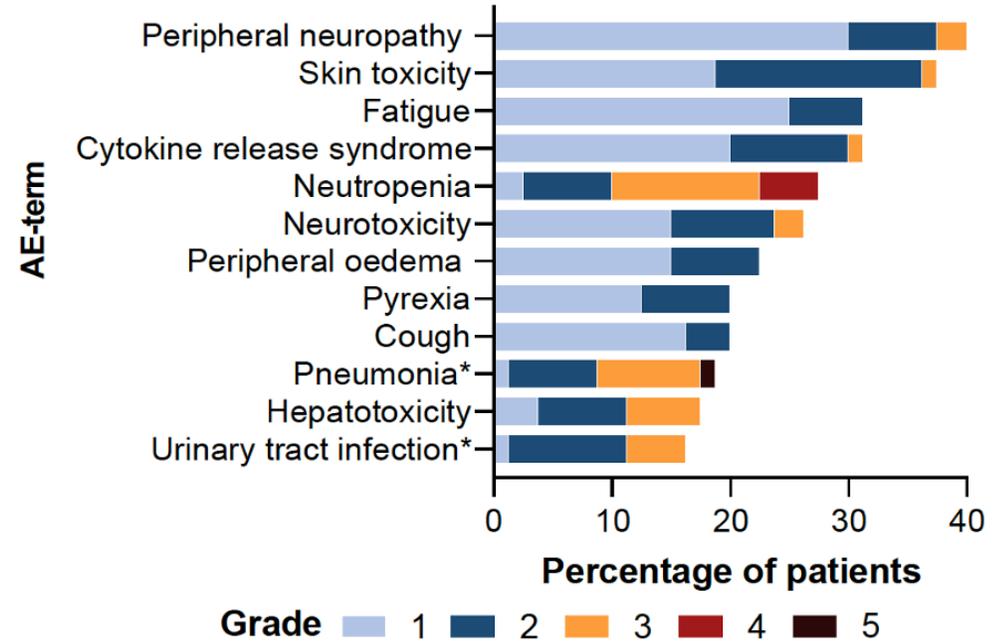
➔ Representative "real world" cohort of medical unfit/frail patients with high treatment complexity.

# R-Pola-Glo – Therapy Adherence and Overall Safety

## Therapy Adherence and AEs

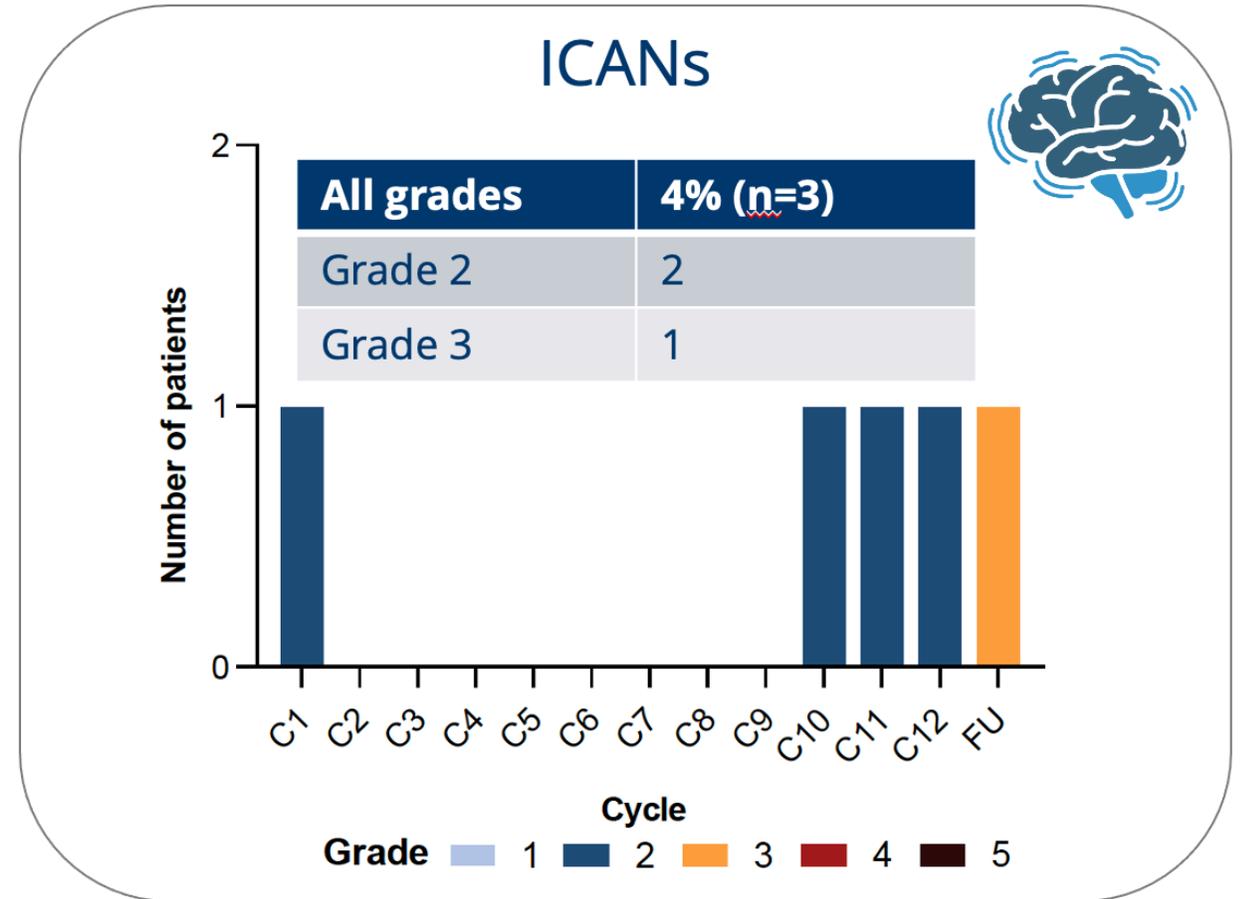
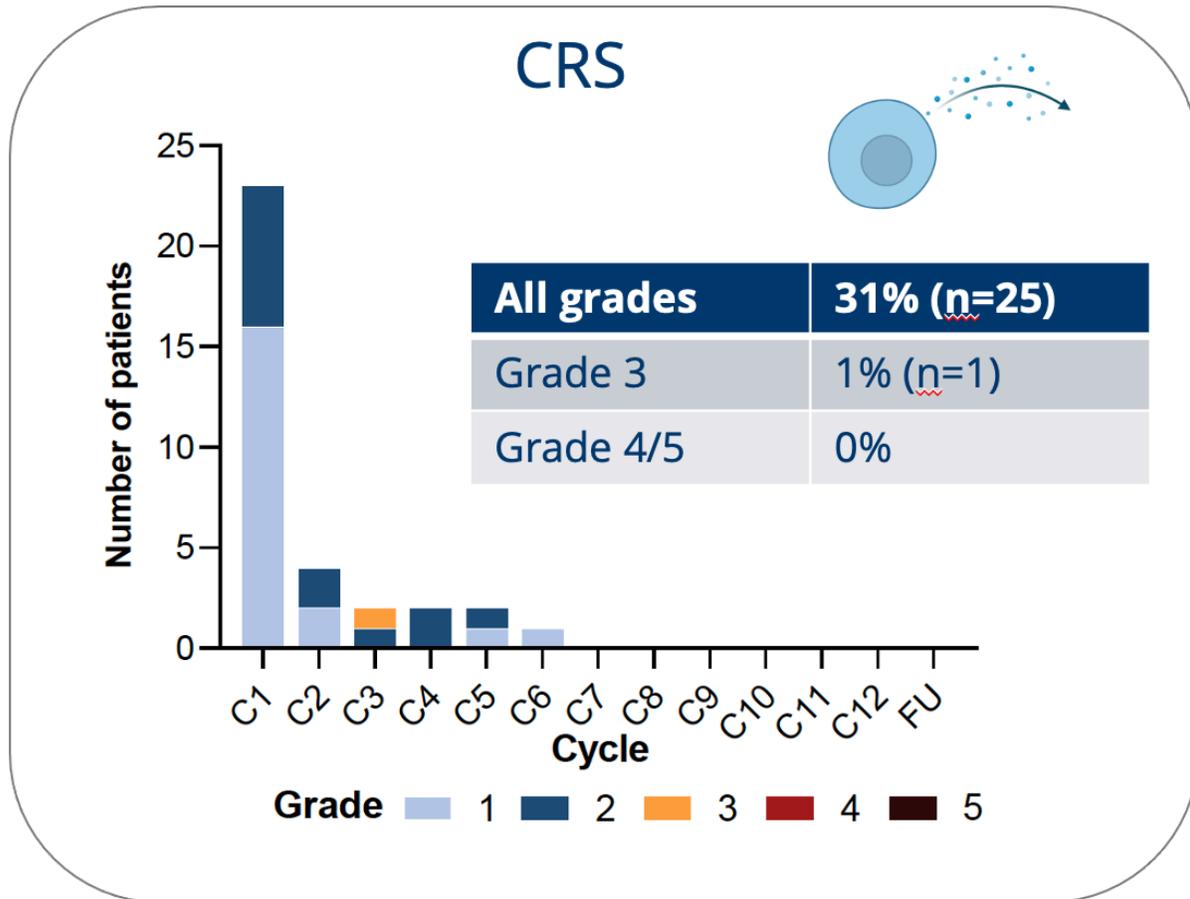
Cohort (N=80)	
Completing treatment as planned	80% (64/80)
AE, no grade 3-5 in any cycle	34% (27/80)
AE, grade 5	4% (3/80)

## Most common AE terms



- Treatment was well tolerated with no unexpected adverse event
- Low treatment-related mortality.
- 34% of patients finished treatment with no AE grade 3-5 in any cycle.

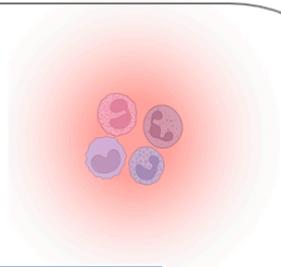
# R-Pola-Glo – ICANs/CRS



- ➔ CRSs usually occurred at early cycles and low grade, and all resolved completely.
- ➔ ICANs occurred infrequently.

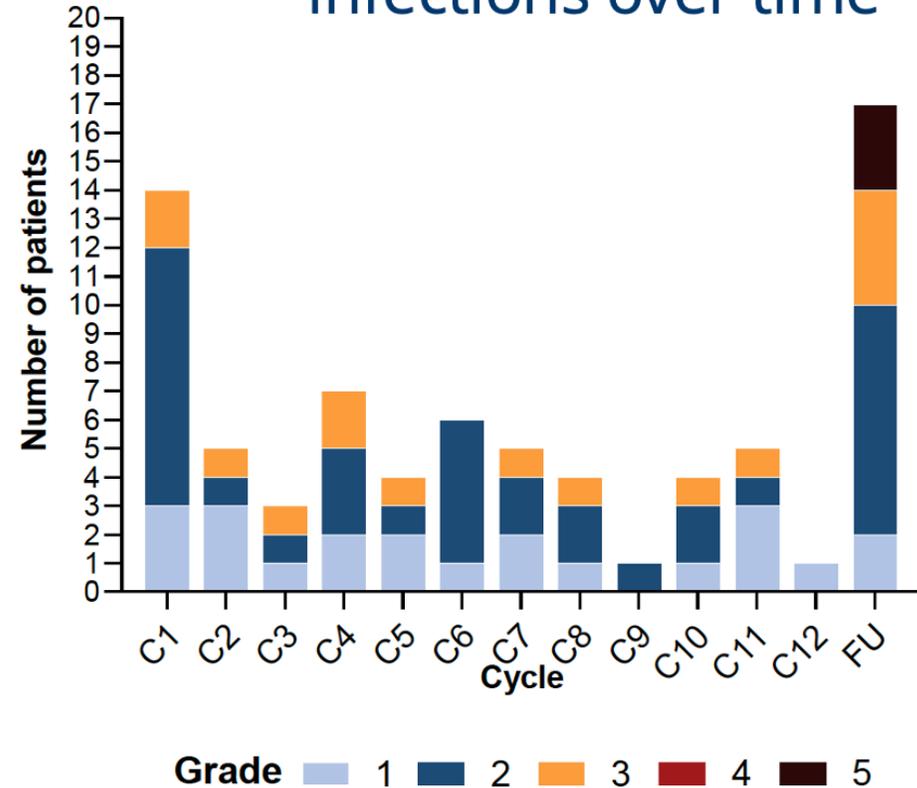
# R-Pola-Glo – Infections over time and Cycle

## Infections



<u>Infections</u>	<b>66% (n=53)</b>
Grade 3	19% (n=15)
Grade 4	3% (n=2)
Grade 5, all	4% (n=3)
COVID	1
COVID+RSV	1
<u>Unknown</u>	1

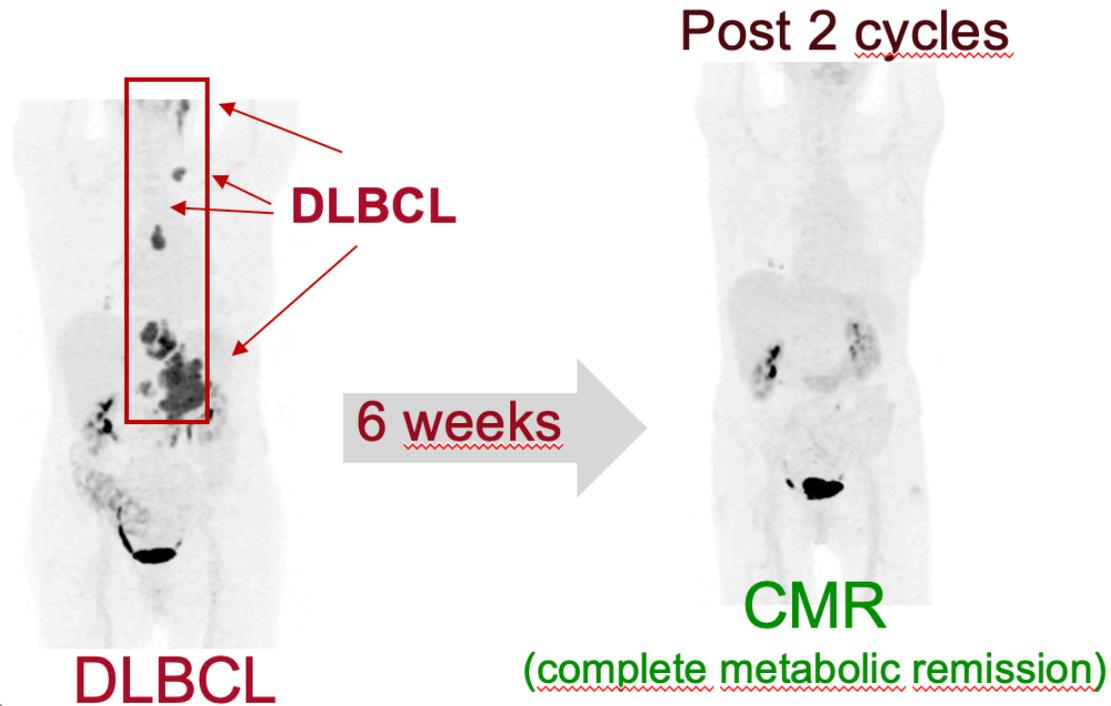
## Infections over time



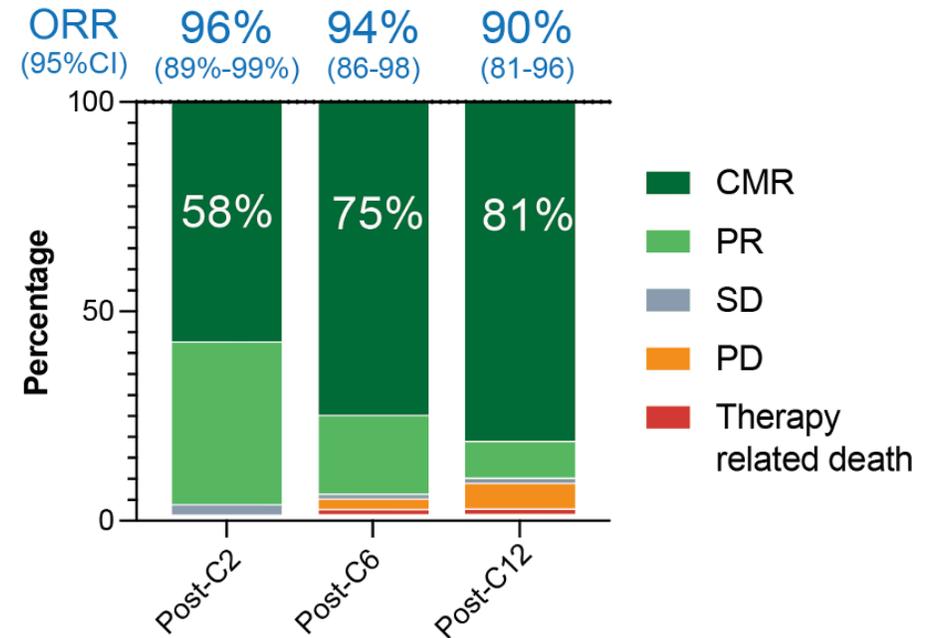
➔ Patients experienced manageable infections; only three grade 5 events occurred.

# R-Pola-Glo – Response

## Representative Case



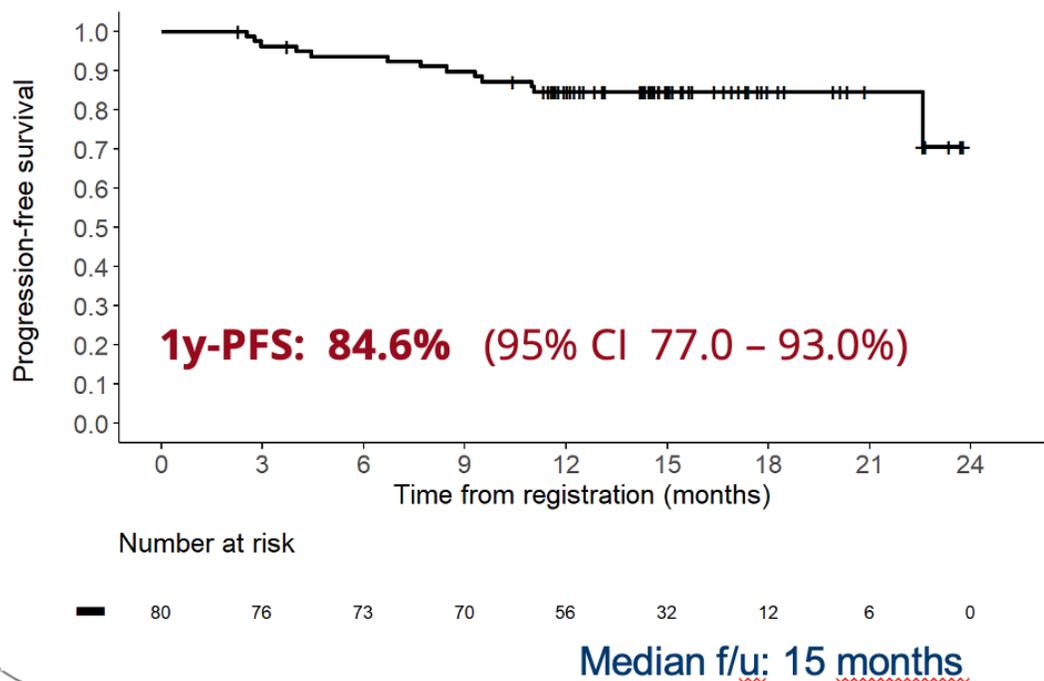
## Response Rate (n=80)



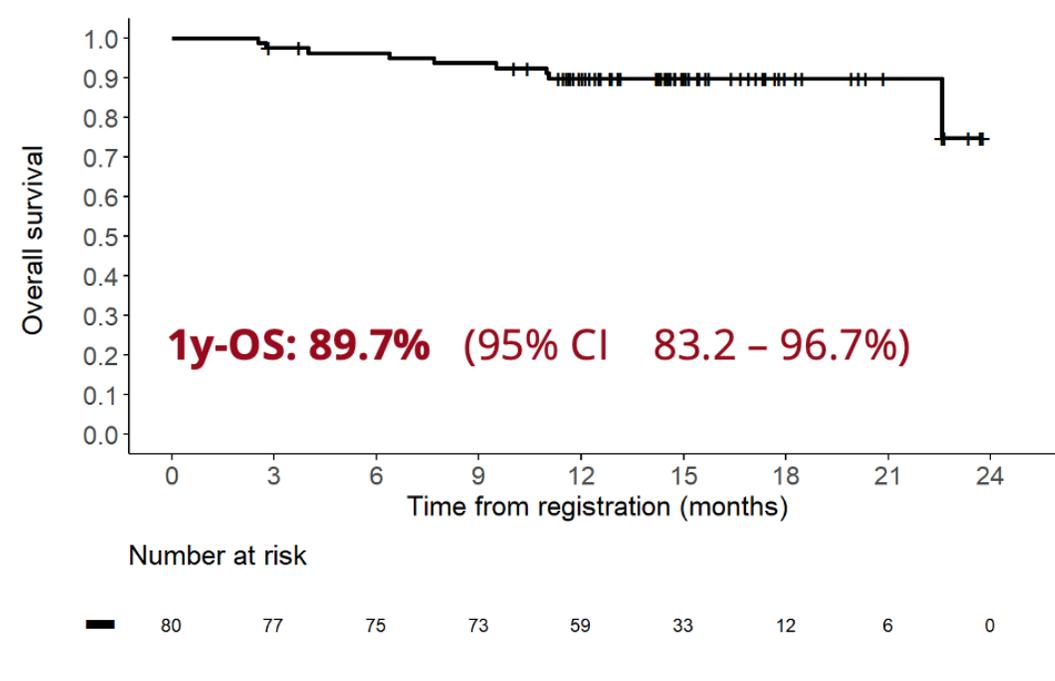
- ➔ ORR at cycles 2, 6, and EOT were 96%, 94%, and 90%; corresponding CMR rates were 58%, 75%, and 81%, respectively.
- ➔ CMR conversions were observed after C6, highlighting the role of glofitamab consolidation.

# R-Pola-Glo – Outcome

## 1-year Progression-free Survival (PFS)



## 1-year Overall Survival (OS)



- With a median follow-up time of 15 months, responses were durable and the 1y-PFS and 1y-OS rates were 85% and 90%, respectively.
- At time of analysis (July 2 2025), 89% (71/80) of patients were alive.

# R-Pola-Glo – Conclusion

- R-Pola-Glo achieved high and durable CMR rates with a manageable safety profile.
- Responses translated into a high 1-year survival rate in elderly/frail and medically unfit patients with aggressive B-cell lymphoma.
- Our results demonstrates that an anthracycline-free regimen can induce durable remissions in a population considered to be ineligible for standard approaches.
- R-Pola-Glo demonstrate higher response rates and improved survival outcomes at 1 year compared with regimes considered as SOC, supporting its further clinical evaluation as a frontline option for this vulnerable patient population.

# Kapitel 2

## Zweitlinientherapie

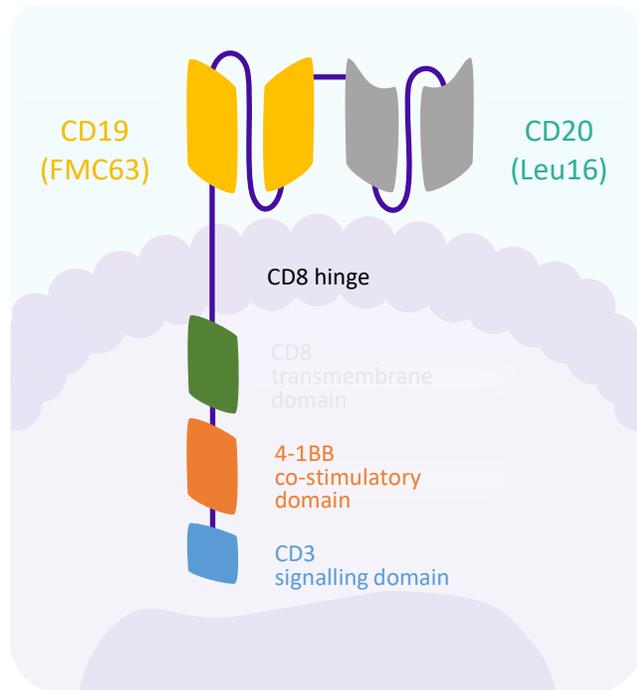
# Kapitel 2

## Zweitlinientherapie

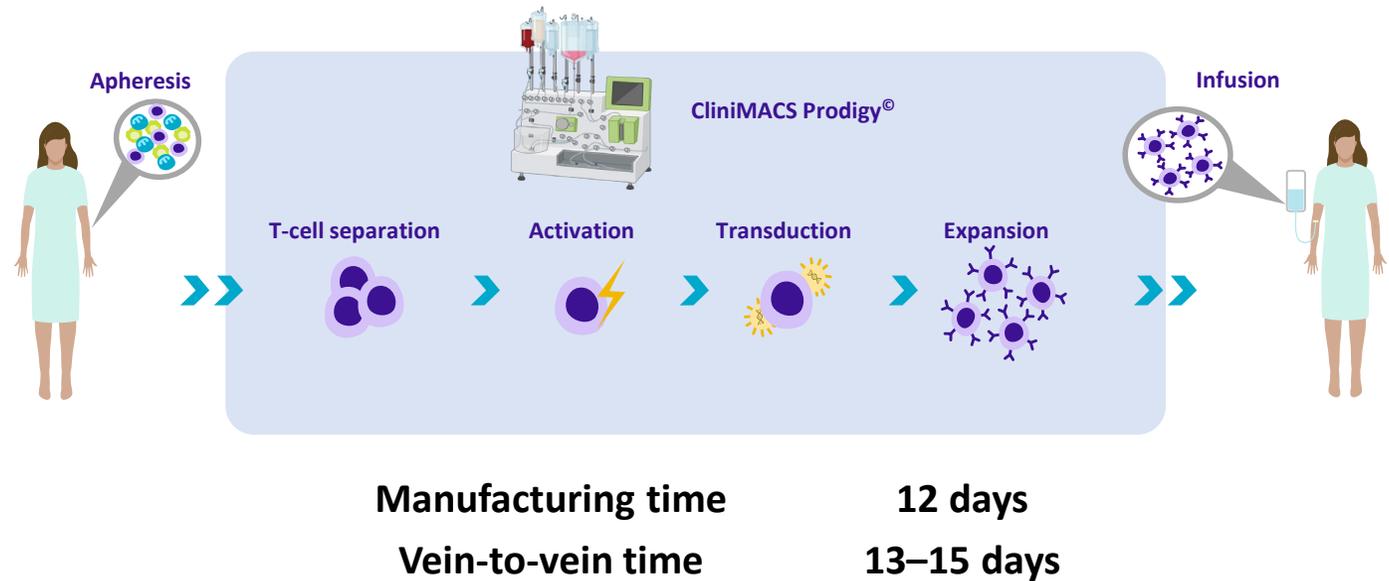
- **Neue CAR-T-Konstrukte**

# Zamtocabtagene autoleucel (zamto-cel): a novel tandem CD20-CD19 (directed) CAR-T cell therapy

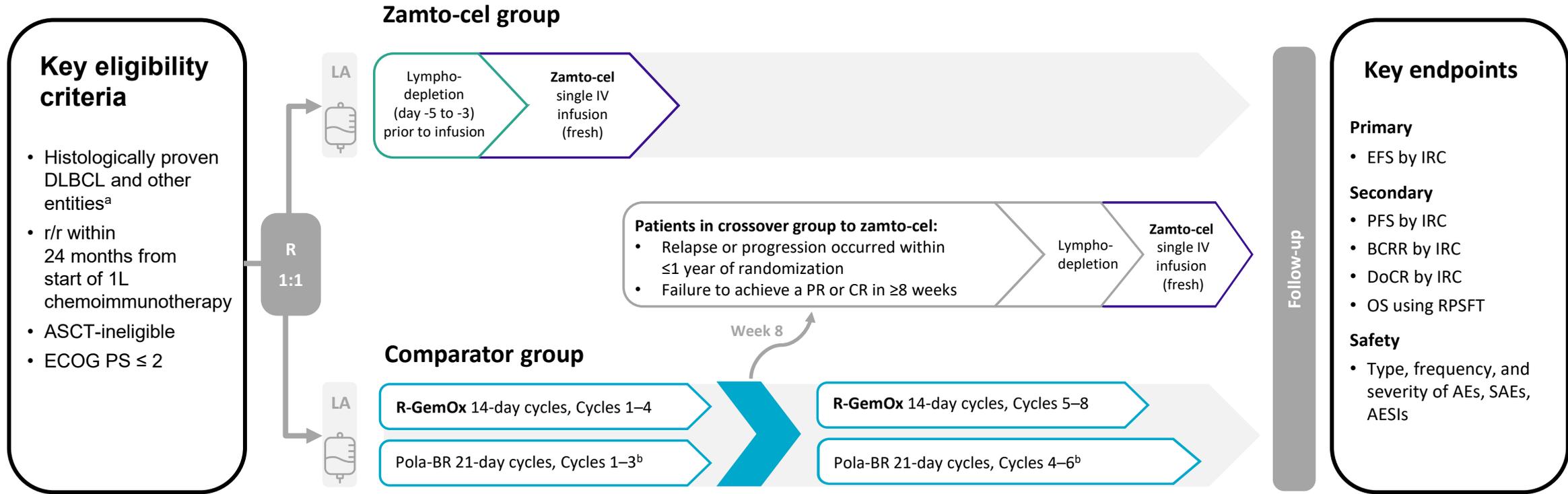
## Tandem CD20-CD19 (directed) CAR-T cell<sup>1</sup> therapy



Produced using a fully automated system and administered as a fresh (non-cryopreserved) formulation<sup>2</sup>



# DALY 2-EU study design (N=168): a randomized, multicenter, open-label trial (NCT04844866)

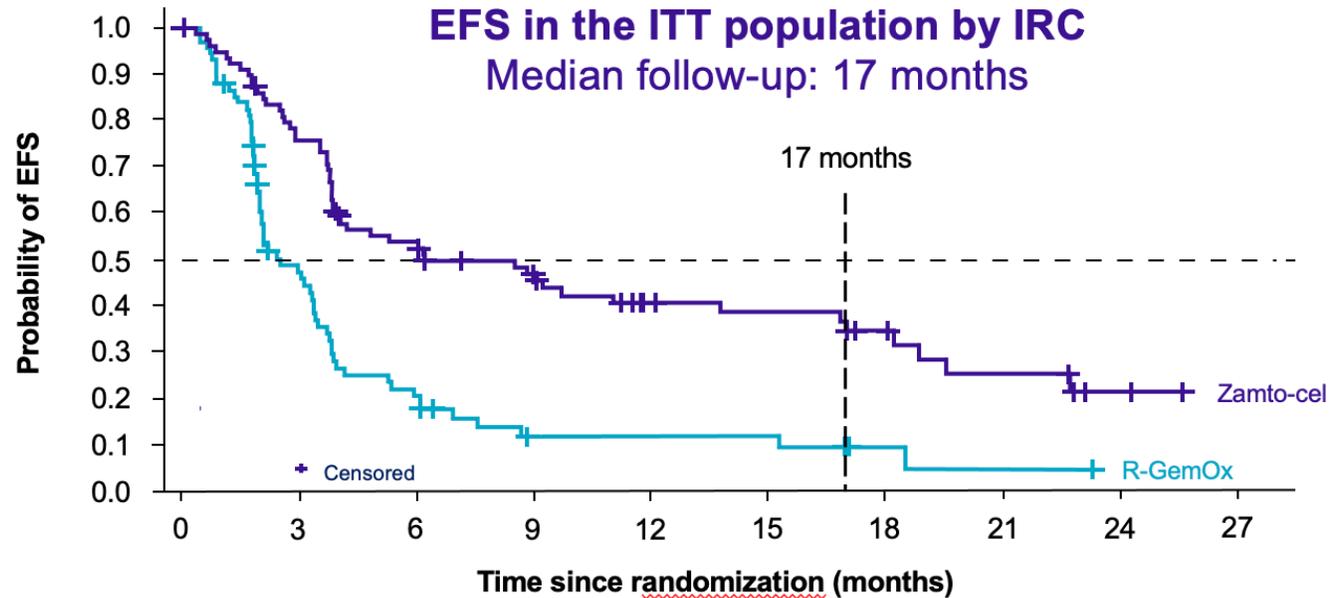


### Optional corticosteroid bridging therapy for high disease burden

- Oral or IV prednisone 50–100 mg or dexamethasone 30–40 mg QD for up to 4 days
- Stopped ≥7 days before leukapheresis and/or >72 hours before zamto-cel infusion

<sup>a</sup>As per 4th WHO classification (2016) the following entities could be included; DLBCL NOS, HGCL with MYC and BCL2 and/or BCL6 rearrangements with DLBCL/blastoid/intermediate histology or HGCL with MYC and BCL2 and/or BCL6 rearrangements (double hit lymphoma/triple hit lymphoma), high-grade BCL NOS, primary (thymic) large mediastinal BCL disease transformed from an earlier diagnosis of low-grade lymphoma (e.g., an indolent pathology such as follicular lymphoma, marginal zone lymphoma) into DLBCL with DLBCL disease progression subsequent to DLBCL-directed systemic treatment, and follicular lymphoma Grade 3B; <sup>b</sup>Results of the Pola-BR group were not part of the primary analysis and are not discussed in this presentation.  
 AE, adverse event; AESI, adverse event of special interest; ASCT, autologous stem-cell transplant; BCRR, best complete response rate; CR, complete response; DoCR, duration of complete response; IRC, independent review committee; LA, leukapheresis; Pola-BR, polatuzumab vedotin-bendamustine-rituximab; PR, partial response; R, randomization; R-GemOx, rituximab-gemcitabine-oxaliplatin; RPSFT, rank-preserving structural failure time; SAE, serious adverse event.  
 ClinicalTrials.gov: NCT04844866.

# DALY 2-EU primary endpoint: significant EFS benefit with zamto-cel



Number at risk, n	0	3	6	9	12	15	18	21	24	27
Zamto-cel	82	59	41	31	21	19	12	8	2	0
R-GemOx	78	32	14	5	5	5	2	1	0	0

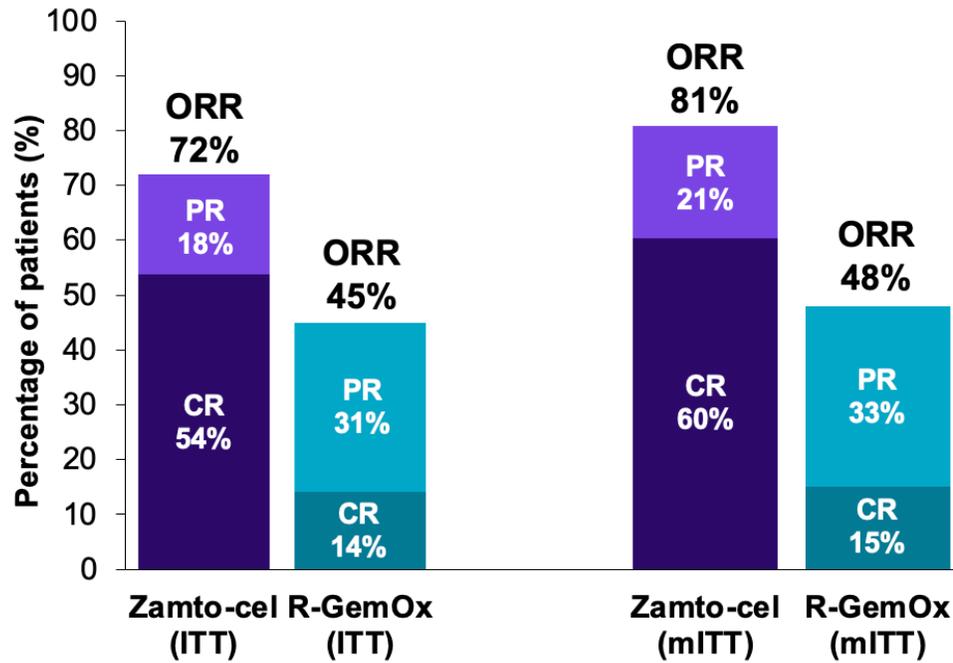
Primary endpoint	Zamto-cel (n=82)	R-GemOx (n=78)
<i>EFS based on IRC assessment<sup>a</sup></i>		
Median EFS, months (95% CI)	6.21 (3.84, 13.77)	2.53 (1.97, 3.35)
Patients with events, n (%)	52 (63.4)	63 (80.8)
HR (95% CI) p-value	0.39 (0.27, 0.58) p<0.0001	



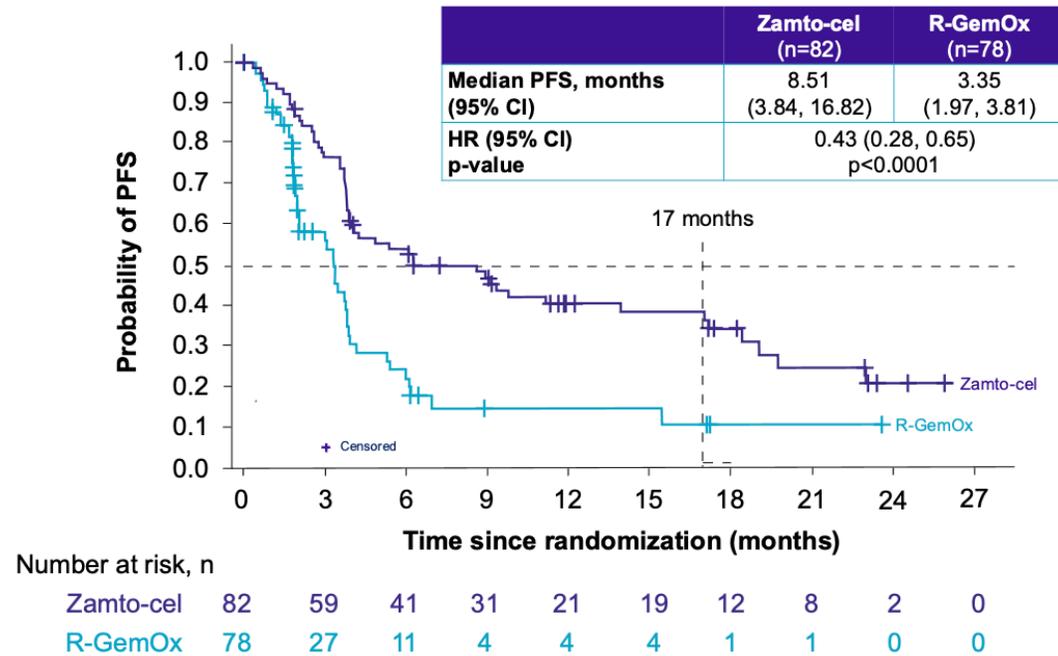
**Zamto-cel arm demonstrated highly statistically significant and clinically meaningful superiority over R-GemOx for EFS, with a HR of 0.39**

# DALY 2-EU secondary endpoints: CR rate in zamto-cel 3.8x higher than R-GemOx

Response rates in the ITT and mITT populations



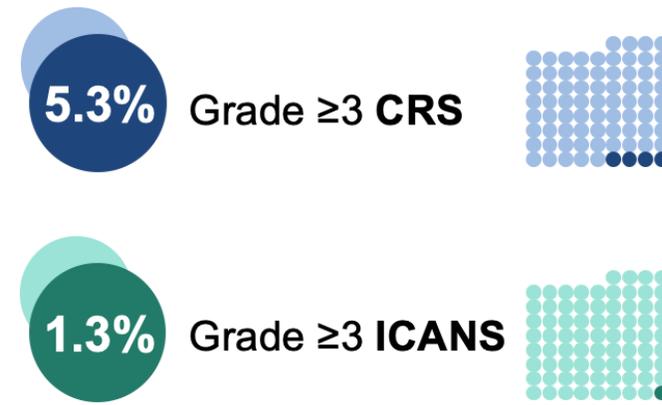
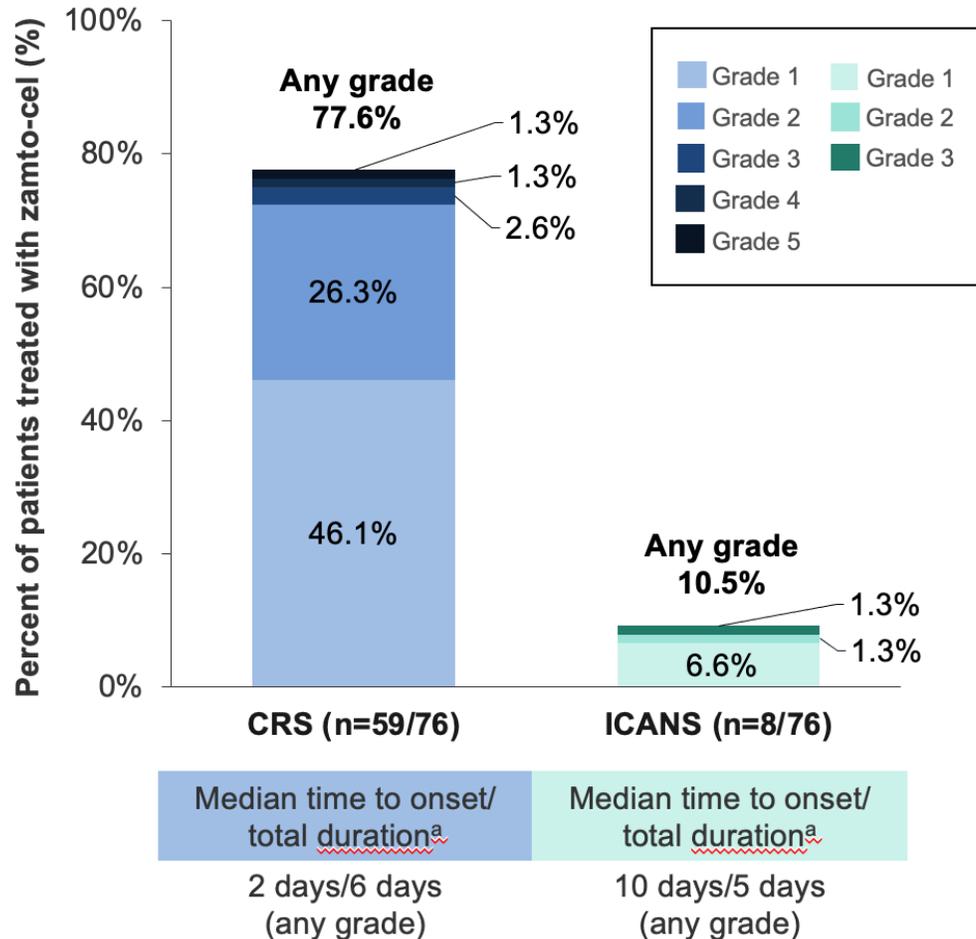
Median PFS by IRC  
Median follow-up: 17 months



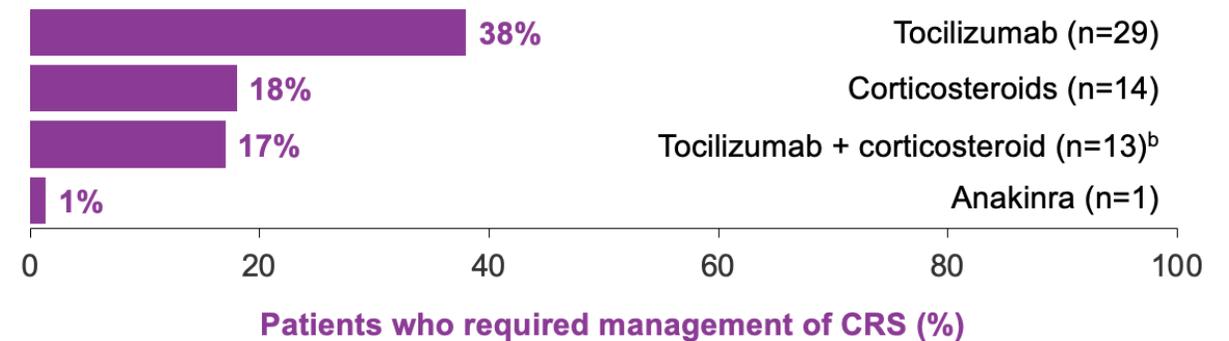
- ✓ PFS (HR [95% CI]: 0.43 [0.28, 0.65]; p<0.0001) for zamto-cel was statistically superior
- ✓ Zamto-cel demonstrated higher CR rate vs. R-GemOx

# DALY 2-EU: zamto-cel was well tolerated, with low rates of severe CRS and ICANS

Rates of CRS and ICANS in patients treated with zamto-cel



Management of CRS in patients treated with zamto-cel



<sup>a</sup>Total duration includes gaps between episodes. <sup>b</sup>The 13 patients that received tocilizumab + corticosteroid combination therapy were also counted individually for both tocilizumab (n=13/29) and corticosteroid (n=13/14). AE, adverse event; AESI, adverse events of special interest; CRS, cytokine release syndrome; CTCAE, Common Terminology Criteria for Adverse Events; c R-GemOx, rituximab gemcitabine oxaliplatin.

# DALY 2-EU: Summary and conclusions

## Zamto-cel:

- The first tandem CD20-CD19 (directed) fresh (non-cryopreserved) CAR-T cell product
- Short manufacturing time of **12 days**, with a vein-to-vein time of 13–15 days

## DALY 2-EU:

- Zamto-cel demonstrated **significant and clinically meaningful superiority** over R-GemOx in transplant-ineligible patients at high risk for treatment failure independent of baseline patient and disease characteristics
  - ✓ **EFS HR 0.39,  $p < 0.0001$**
  - ✓ **CR rate 54% (ITT) / 60% (mITT)**
- Zamto-cel showed a manageable safety profile
  - ✓ Grade  $\geq 3$  CRS in 5.3% of patients (n=4)
  - ✓ Grade  $\geq 3$  ICANS in 1.3% patients (n=1, Grade 3)



The favorable risk/benefit profile of zamto-cel supports its use as a preferred 2L treatment option for patients with r/r LBCL and transformed lymphomas

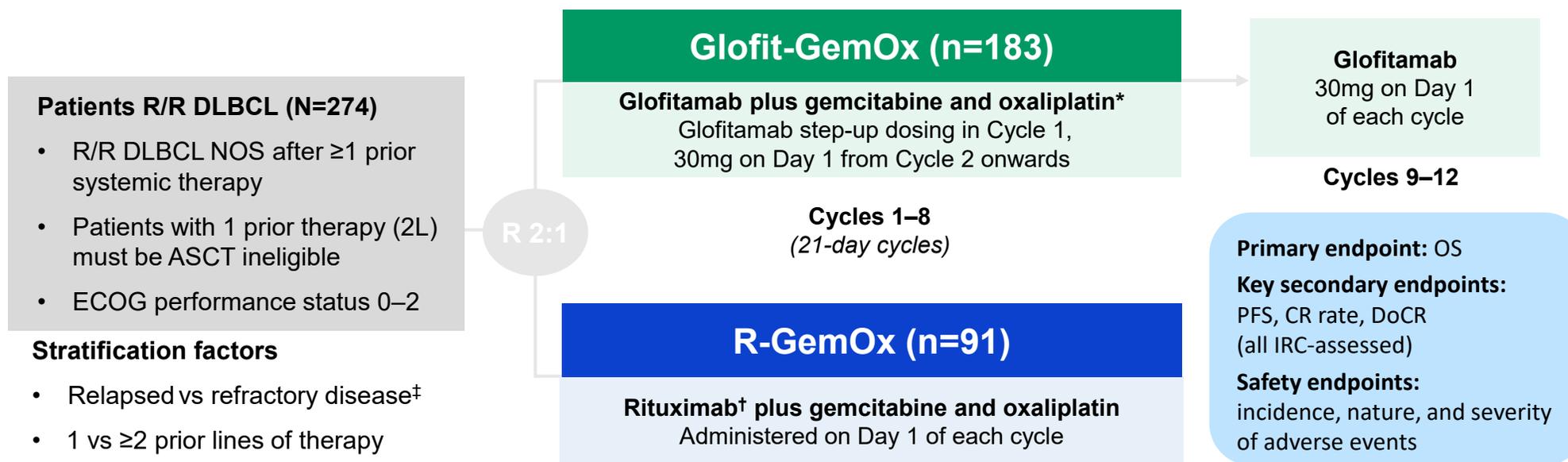
# Kapitel 2

## Zweitlinientherapie

- Neue CAR-T-Konstrukte
- **3 Jahres Follow up Glo-Gem-Ox**

# STARGLO (NCT04408638): a randomized, global, Phase III trial

- In STARGLO, Glofit-GemOx demonstrated clinically meaningful and statistically significant benefits in OS, PFS, and CR rate versus R-GemOx in ASCT-ineligible patients with R/R DLBCL after  $\geq 1$  prior line of therapy<sup>1</sup>



We report updated efficacy and safety results from STARGLO, with 3 years of follow-up

\*Gemcitabine 1000mg/m<sup>2</sup>, oxaliplatin 100mg/m<sup>2</sup>. In Cycle 1, obinutuzumab pretreatment on Day 1, GemOx on Day 2, Glofit 2.5mg on Day 8, Glofit 10mg on Day 15; in Cycles 2–8, Glofit 30mg and GemOx on Day 1. <sup>†</sup>Rituximab 375mg/m<sup>2</sup>. <sup>‡</sup>Relapsed: disease recurrence after a response that lasted  $\geq 6$  months after completion of last line of therapy; refractory: disease that did not respond to, or progressed  $< 6$  months after completion, of last line of therapy. ASCT, autologous stem cell transplant; CR, complete response; DoCR, duration of CR; ECOG, Eastern Cooperative Oncology Group; IRC, independent review committee; PFS, progression-free survival; OS, overall survival; NOS, not otherwise specified; R 2:1, randomized in a 2:1 ratio.

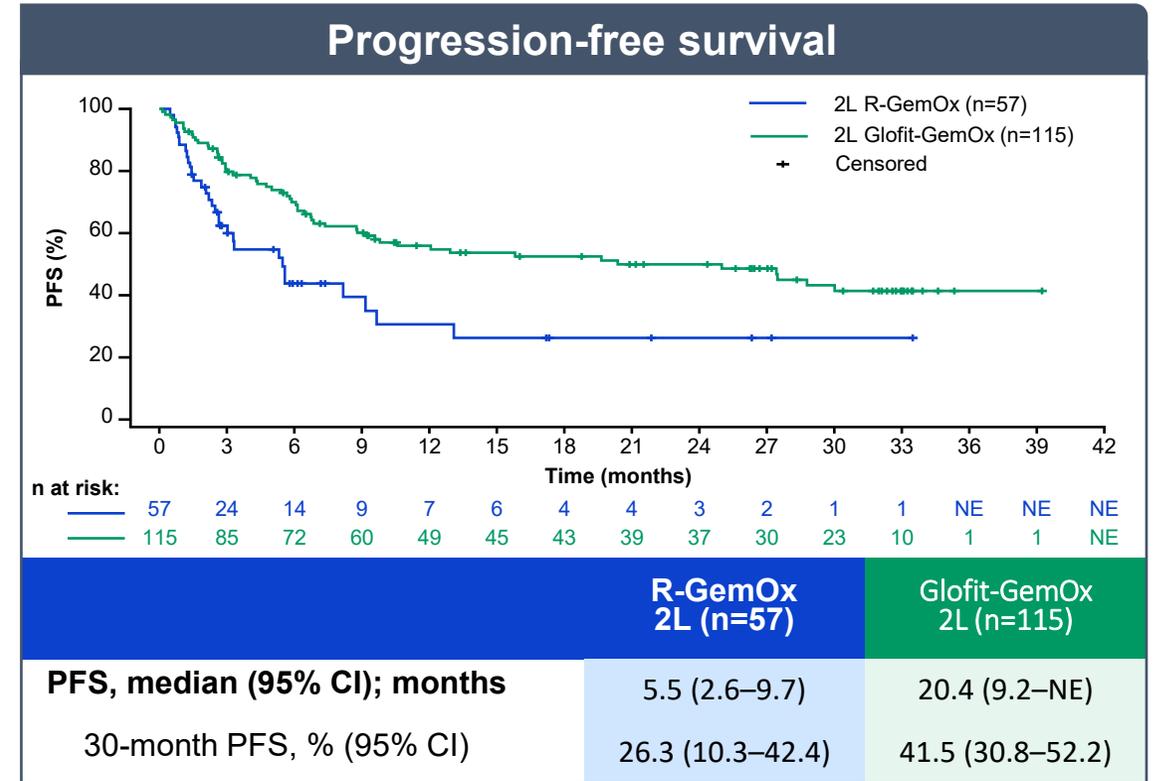
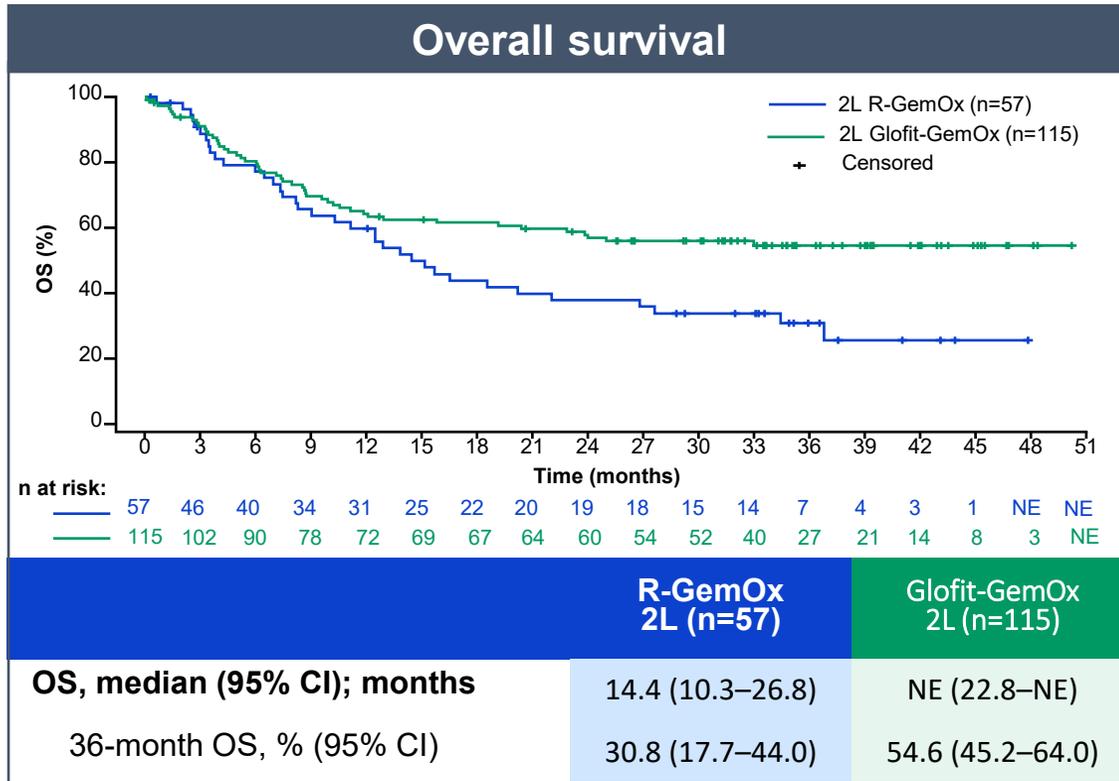
# After 3 years of follow-up, clinical benefit with Glofit-GemOx was sustained

- Median OS follow-up was 35.1 months (95% CI: 33.6–37.6)

Outcome	Overall		2L	
	R-GemOx (n=91)	Glofit-GemOx (n=183)	R-GemOx (n=57)	Glofit-GemOx (n=115)
<b>OS, median (95% CI); months</b>	12.5 (7.9–16.5)	25.5 (17.0–NE)	14.4 (10.3–26.8)	NE (22.8–NE)
36-month OS, % (95% CI)	27.4 (17.3–37.5)	47.1 (39.5–54.6)	30.8 (17.7–44.0)	54.6 (45.2–64.0)
<b>PFS, median (95% CI); months</b>	3.3 (2.3–5.6)	14.4 (8.8–27.4)	5.5 (2.6–9.7)	20.4 (9.2–NE)
30-month PFS, % (95% CI)	15.2 (0.9–29.5)	38.1 (29.8–46.3)	26.3 (10.3–42.4)	41.5 (30.8–52.2)
<b>ORR, n (%)</b>	37 (40.7)	125 (68.3)	28 (49.1)	83 (72.2)
<b>CR, n (%)</b>	23 (25.3)	107 (58.5)	16 (28.1)	73 (63.5)
<b>DoCR, median (95% CI); months</b>	24.2 (6.9–NE)	NE (27.2–NE)	NE (6.5–NE)	NE (24.8–NE)

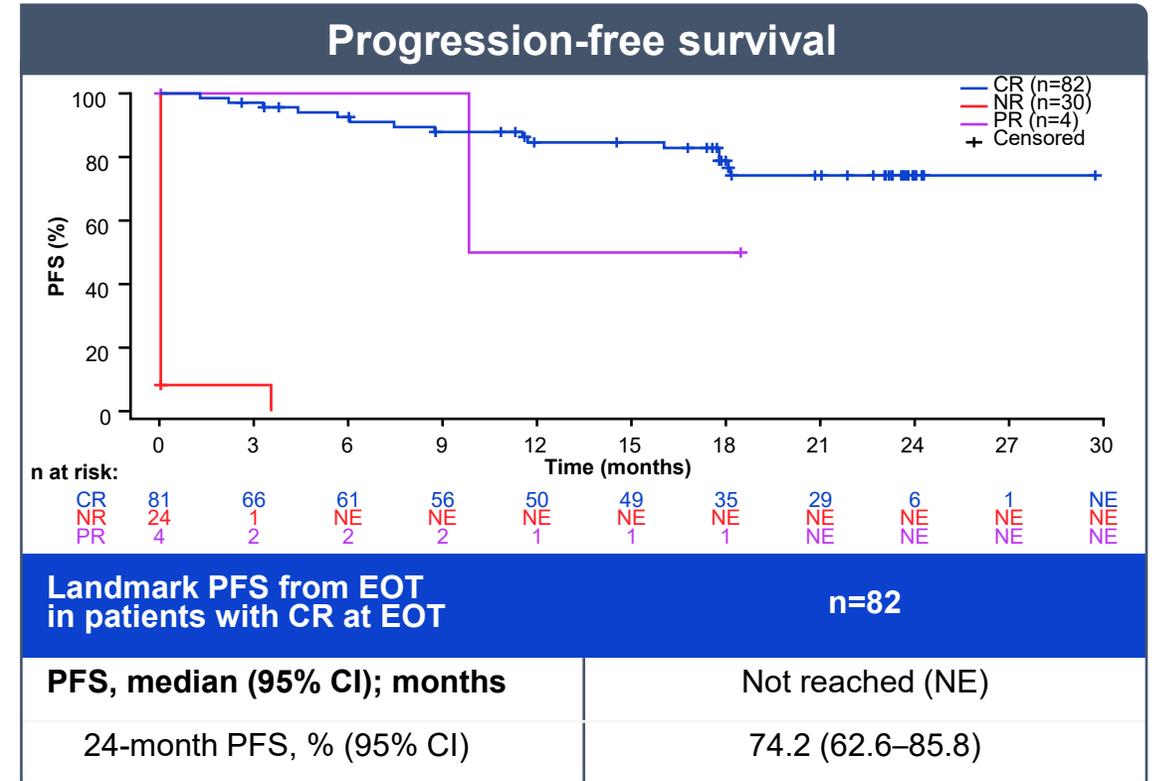
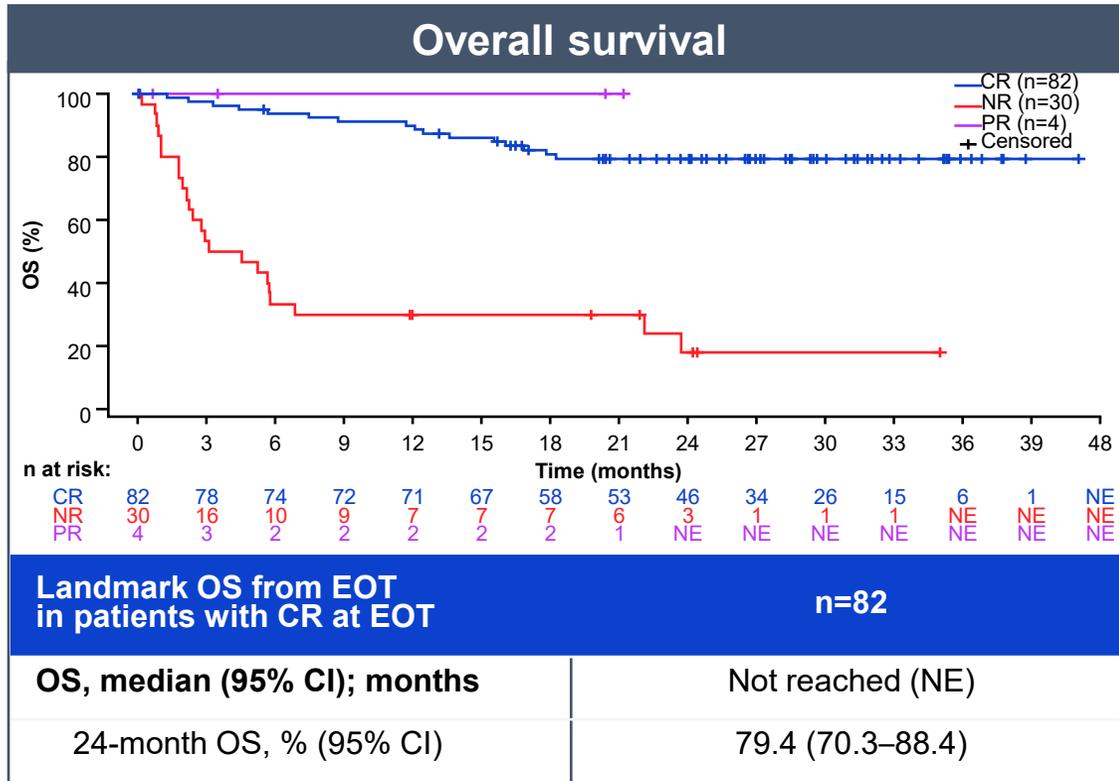
Survival and response outcomes were superior with Glofit-GemOx versus R-GemOx

# Glofit-GemOx treatment was particularly beneficial in the 2L setting



A pronounced efficacy benefit was observed for Glofit-GemOx versus R-GemOx in the 2L setting

# Landmark analysis by response at EOT in patients treated with Glofit-GemOx



The majority of Glofit-GemOx-treated patients who reached CR remained alive and progression free 2 years after EOT

## Conclusions

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- After 3 years of follow-up, substantial clinical benefits with Glofit-GemOx treatment were sustained, demonstrating superior OS, PFS, and CR rates compared with R-GemOx in ASCT-ineligible patients with R/R DLBCL
  - A pronounced efficacy benefit was observed for Glofit-GemOx versus R-GemOx in patients treated in the 2L setting
  - Most patients with a CR at EOT remained alive and progression free 2 years after EOT
- No new safety signals were identified, and no evidence of cumulative toxicity or new long-term AEs were observed

Sustained survival benefits and durable remissions support Glofit-GemOx as a potentially curative, off-the-shelf treatment option for patients with ASCT-ineligible R/R DLBCL

# Zusammenfassung | Take-Home-Messages

## Erstlinientherapie

- Keine Praxisveränderung - R-Pola-CHP/CHOP-like Therapien bleiben SOC
- Zielgerichtete Substanzen werden zunehmend in molekular definierten Subgruppen in klinischen Studien getestet
- Chemotherapie-freie/arme Konzepte werden in klinischen Studien exploriert und zeigen besonders bei älteren/medizinisch Unfiten Patienten ein sehr vielversprechendes Wirkungs-/Nebenwirkungsprofil

## Rezidiv Therapie

- Mehrere duale/bizistronische CART-Produkte, vorwiegend mit CD19/CD20 oder CD19/CD22, zeigen in klin. Studien : gute, deutlich über derzeitige SOC liegende Wirksamkeit bei gutem Toxizitätsprofil.
- Zamtocel ist ein CD19/CD20 CAR welches durch kurze vein-to-vein Zeit aufgrund der dezentralen Produktion, ein spannendes CAR Produkt darstellt, welches nun gegen den SOC getestet werden muss
- Glo-Gem-Ox zeigt auch in den 3 Jahresdaten ein weiterhin bestehendes Plateau und stellt somit für nicht hochdosisfähige Patienten eine potenziell kurative Therapieoption dar.

Die Kurzpräsentationen sind online unter

**[www.lymphome.de/ash2025](http://www.lymphome.de/ash2025)**

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