Malte Peters, Chief Development Officer

Meet the Team | June 25, 2019

This presentation includes forward-looking statements.

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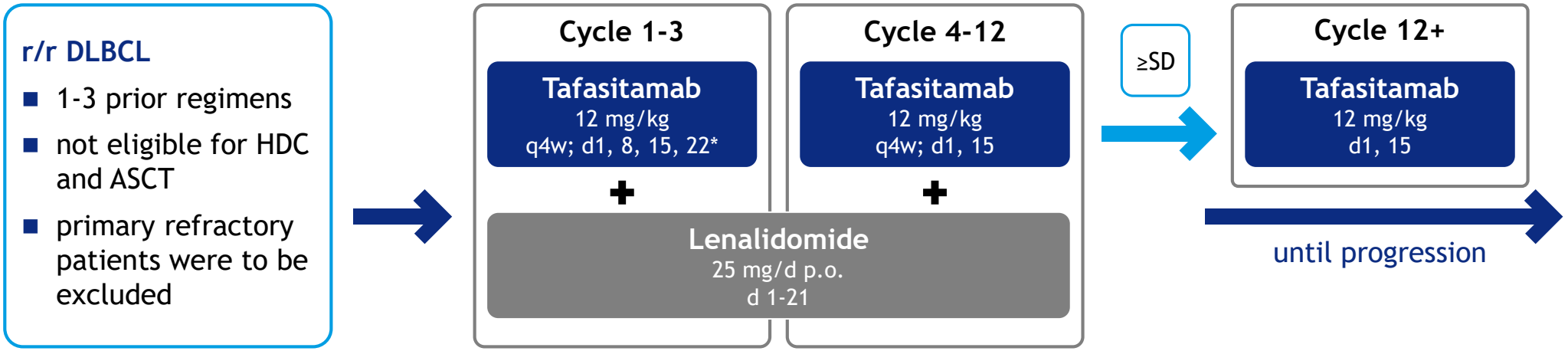
The compounds discussed in this slide presentation are investigational products being developed by MorphoSys and its partners and are not currently approved by the U.S. Food and Drug Administration (FDA), European Medicine Agency (EMA) or any other regulatory authority (except for guselkumab/Tremfya®). Any shown cross-trial comparison between MorphoSys-own investigational products and literature data have significant limitations. Such data comparisons have been prepared at the request of, and for the sole benefit of, the investor community.

We are working toward our intention to transform into a biopharmaceutical company supported by tafasitamab data

L-MIND: Study Design of Tafasitamab/Lenalidomide

Phase 2, single-arm, open-label, multicenter study (NCT02399085)



- Sample size suitable to detect ≥15% absolute increase in ORR for tafasitamab/LEN combination vs. LEN monotherapy at 85% power, 2-sided alpha of 5%
- Mature Data: At time of primary endpoint analysis with data cut-off 30 Nov 2018; minimum follow-up 12 months, median follow-up 17.3 months

Primary endpoint

- Overall response rate (ORR), central read

Secondary endpoints

- Progression-free survival (PFS)
- Duration of response (DoR)
- Overall survival (OS)
- Safety of the tafasitamab + LEN combination
- Exploratory and biomarker-based analyses

* a loading dose of MOR208 was administered on day 4 of cycle 1
#Primary refractory DLBCL was defined as no response to or progression/relapse during or within 6 months of frontline therapy
Response assessment (Cheson 2007 Criteria) after cycles 2, 4, 6, 9 and 12, thereafter every 3 cycles.
ASCT, autologous stem cell transplant; HDC, high-dose chemotherapy; SD, stable disease, p.o., per os; LEN, lenalidomide

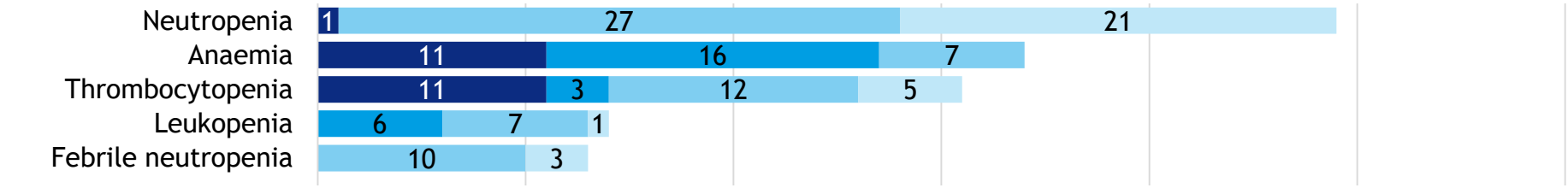
Baseline Characteristics

Characteristic	Specification	n=81 (%)
Sex	Male	44 (54)
	Female	37 (46)
Age [years]*	median (range)	72 (41-86)
Risk (IPI)*	0-2	40 (49)
	3-5	41 (51)
Ann Arbor Stage*	I-II	20 (25)
	III-IV	61 (75)
Elevated LDH*	Yes	45 (56)
	No	36 (44)
Prior Lines	Median	2
	1	40 (49)
	2	35 (43)
	3	5 (6)
	4	1(1)
Primary Refractory	Yes	15 (18)
	No	66 (82)
Refractory to last prior therapy*	Yes	36 (44)
	No	45 (56)
Prior SCT	Yes	9 (11)
	No	72 (89)
Cell of Origin (Centrally assessed - Hans algorithm)	GCB	37 (46)
	Non-GCB	20 (25)
	Unknown	24 (30)

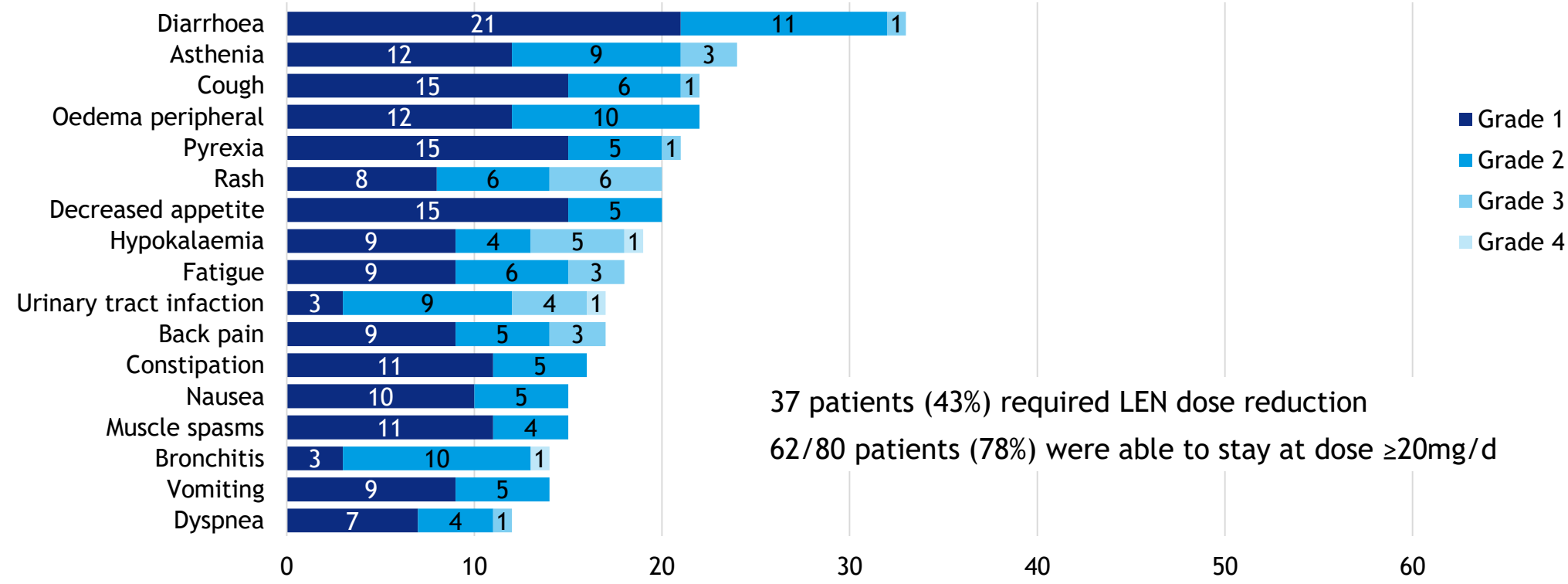
*at study entry

Tafasitamab + Lenalidomide Safety Profile

Hematologic TAEs in ≥10% Patients

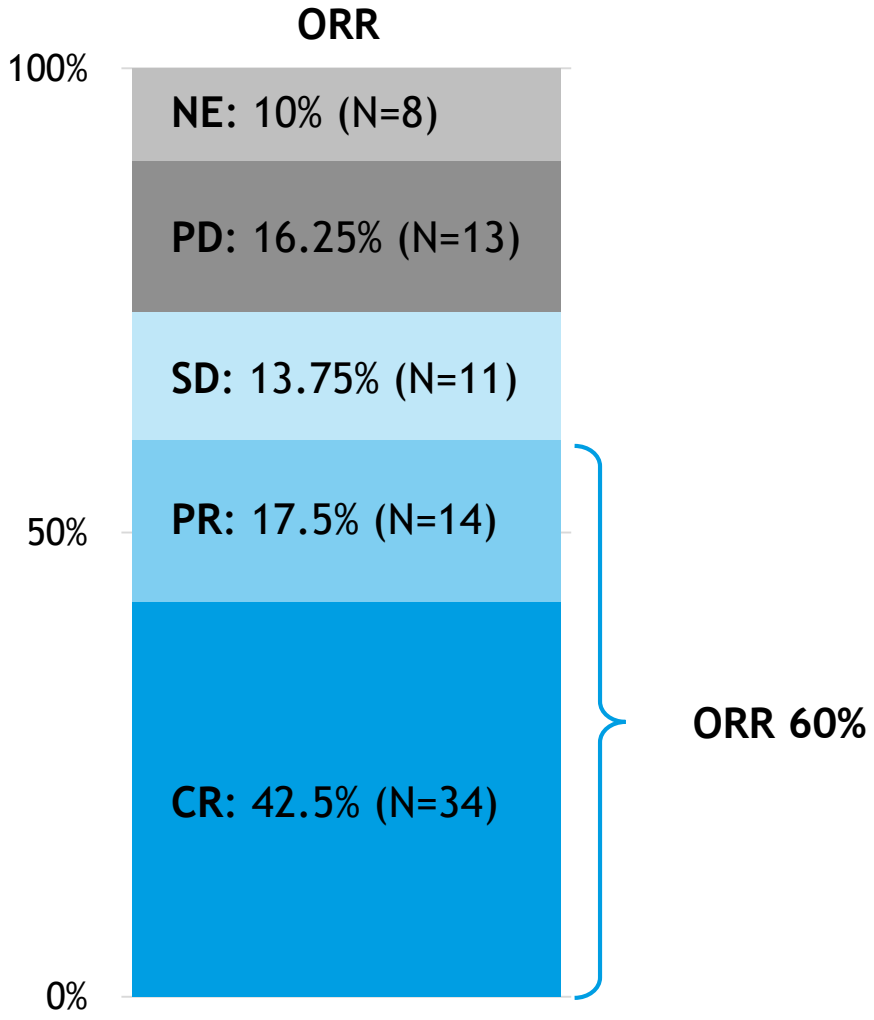


Non-hematologic TAEs in ≥10% Patients



N=81; TEAEs, treatment-emergent adverse events, numbers represent % patients

Primary Endpoint: Overall Response Rate (ORR) by IRC



- ORR 60.0% (95%CI: 48.4% - 70.8%)
- CR-rate 42.5%
  - 82% of CRs PET-confirmed
  - 18% of CRs based on CT only

N=80: full analysis set → patients receiving at least one dose of Tafasitamab and LEN

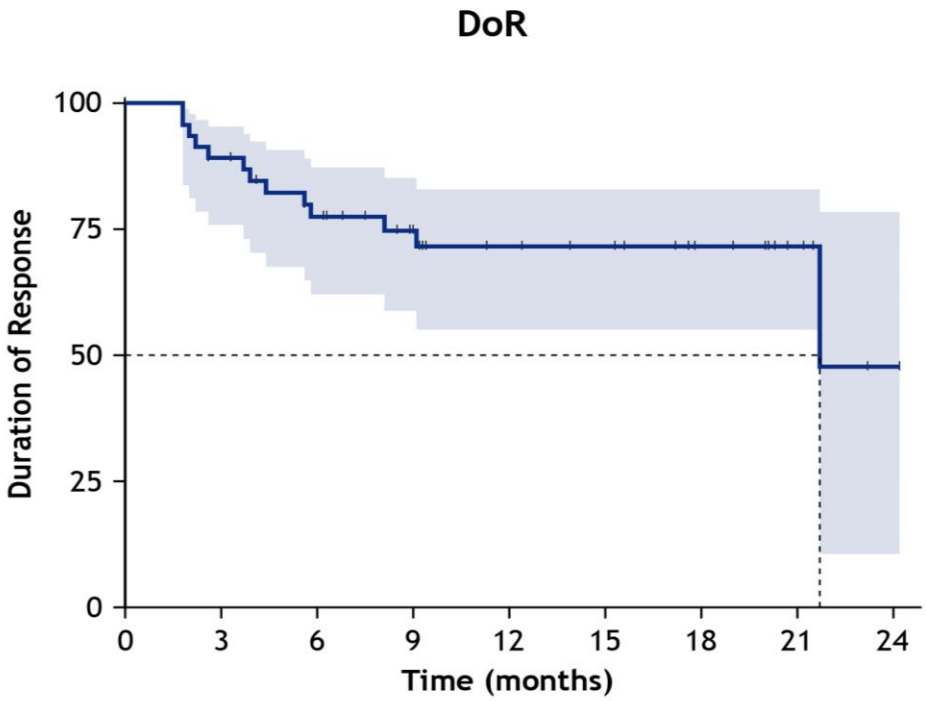
NE due to missing post-baseline tumor assessment

ORR, overall response rate; CR, complete response; NE, not evaluable; PD, progressive disease; PR, partial response; SD, stable disease; CI, confidence interval; PET, positron emission tomography; CT, computertomography

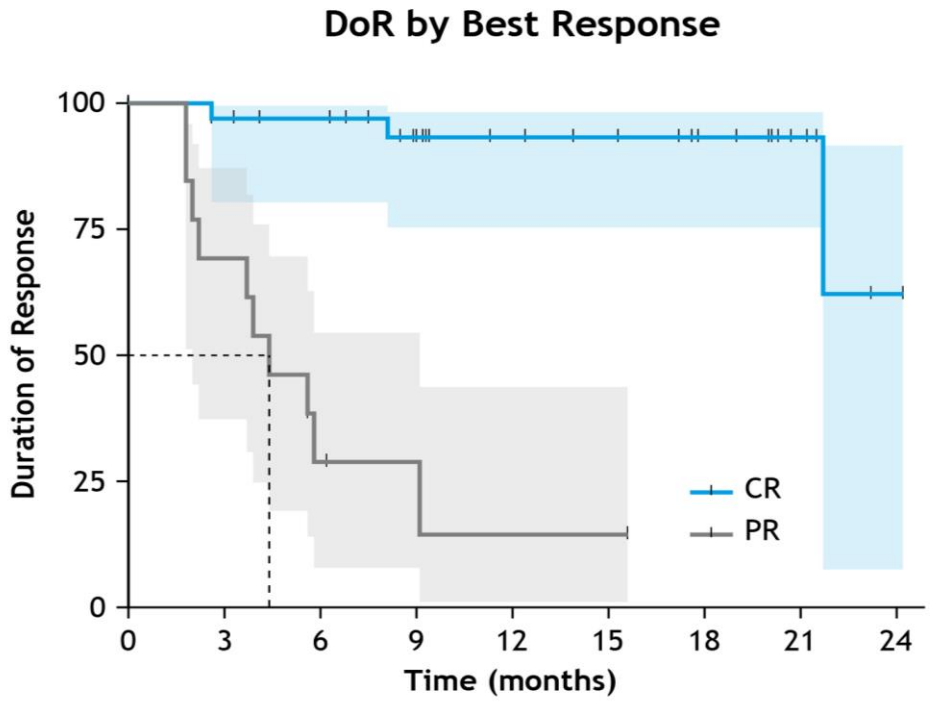
Duration of Response (DoR)

Data assessed by independent review committee (IRC)

Patients have 43% probability of a CR
CR patients have >90% probability of a durable response at 22 months



Number of patients at risk									
Overall	48	40	32	25	18	16	11	5	1



Number of patients at risk									
CR	34	31	29	23	17	15	11	5	1
PR	14	9	3	2	1	1	0	0	0

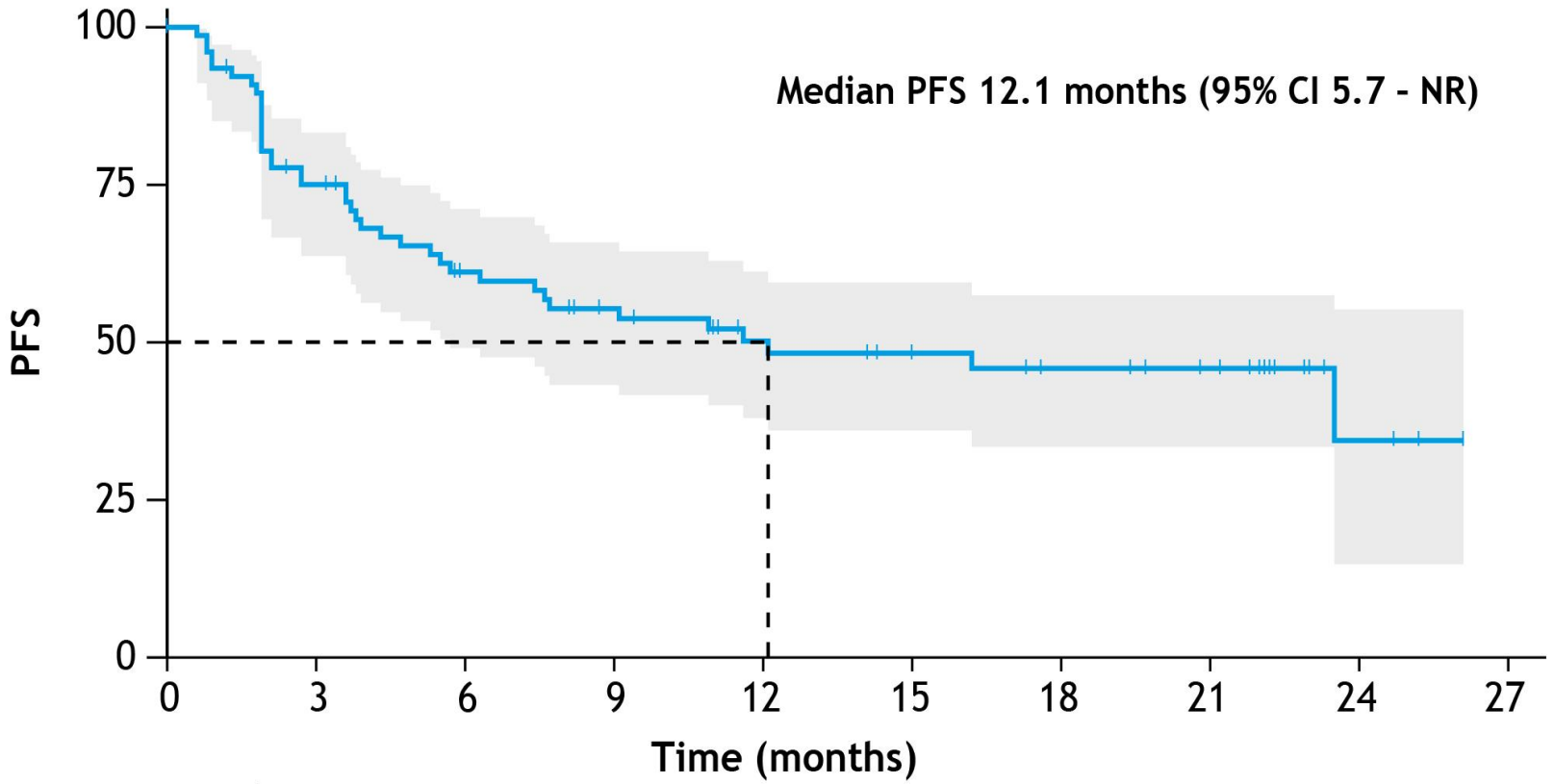
- Median DoR 21.7 months (95%CI: 21.7 – NR)

- Median DoR for CR patients: NR (95%CI: 21.7 – NR)
- Median DoR for PR patients: 4.4 mo (95%CI: 2.0 – 9.1)

DoR, duration of response; NR, not reached; CR, complete response; PR, partial response; CI, confidence interval; mo, months

Progression-free Survival (PFS)

Data assessed by independent review committee (IRC)



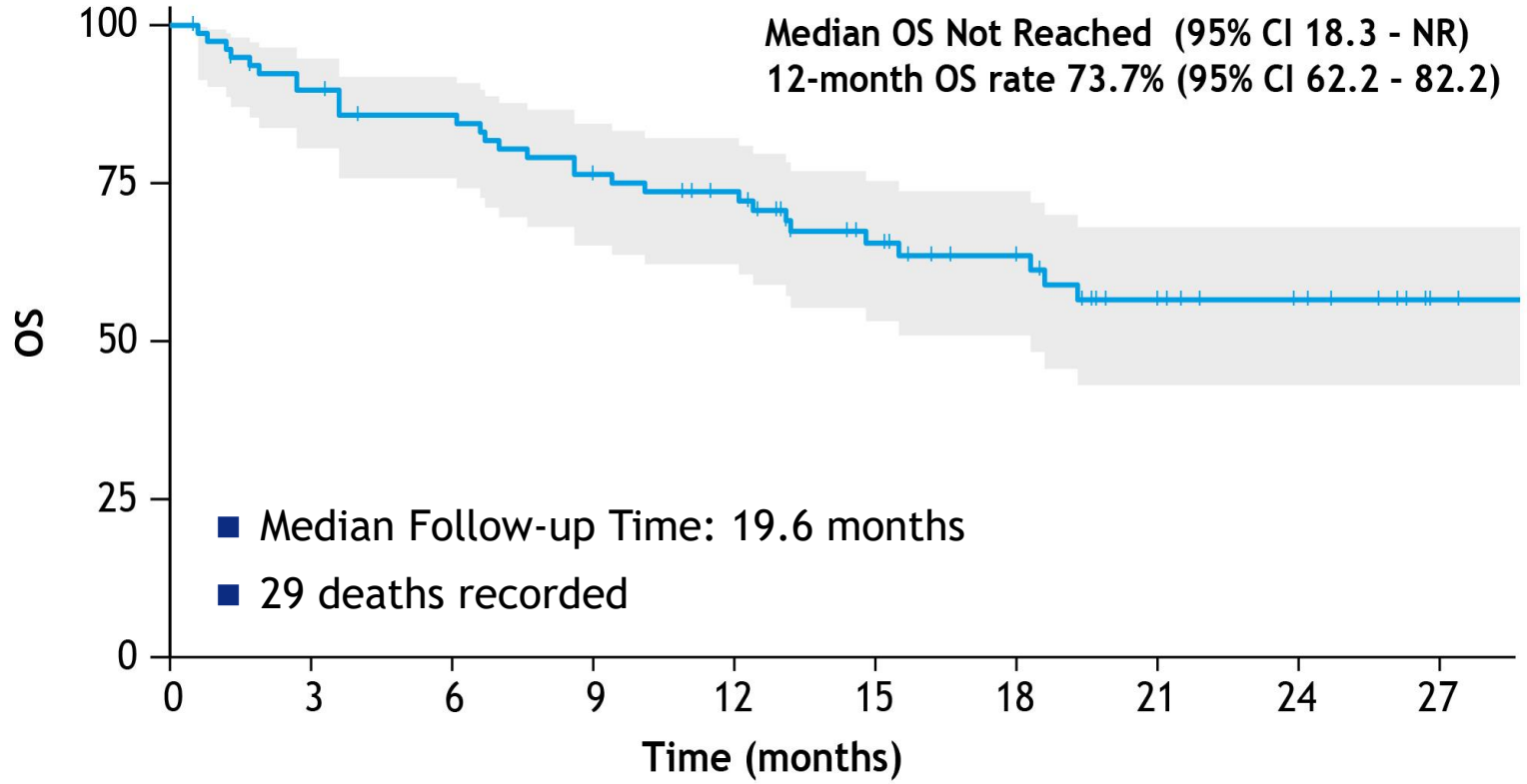
Number of patients at risk										
Overall	80	56	42	35	26	22	17	13	3	0

- Median Follow-up time 17.3 months
- 39 PFS events recorded
- 28 patients still ongoing with study treatment

CI, confidence interval; NR, not reached

Overall Survival (OS)

Data assessed by independent review committee (IRC)



Number of patients at risk

Overall	80	69	64	57	50	35	29	20	14	6

CI, confidence interval; NR,not reached

SUMMARY

Tafasitamab + lenalidomide showed promising activity with favorable safety profile

Durable responses and favorable overall survival represent a very positive outcome

Tafasitamab + lenalidomide has the potential to be a novel, chemo-free immunotherapy for r/r DLBCL patients