

# Eppur si muove...

## La terapia nel MONDO LINFOMI



**Studi RE-MIND e RE-MIND2**

G. Loseto (Bari)

Coordinatore del LymphoTEAM

IRCCS Oncologico di Bari



**BARI, 28 GIUGNO 2022**

# Disclosures dott. Giacomo Loseto

Consulenza ad aziende con interessi commerciali in campo sanitario: **JANSSEN CILAG, GILEAD**

Partecipazione ad Advisory Board: **ITALFARMACO, JANSSEN CILAG, GILEAD, ROCHE, INCYTE, TAKEDA**

---

## **RE-MIND: Comparing Tafasitamab + Lenalidomide (L-MIND) with a Real-world Lenalidomide Monotherapy Cohort in Relapsed or Refractory Diffuse Large B-cell Lymphoma**

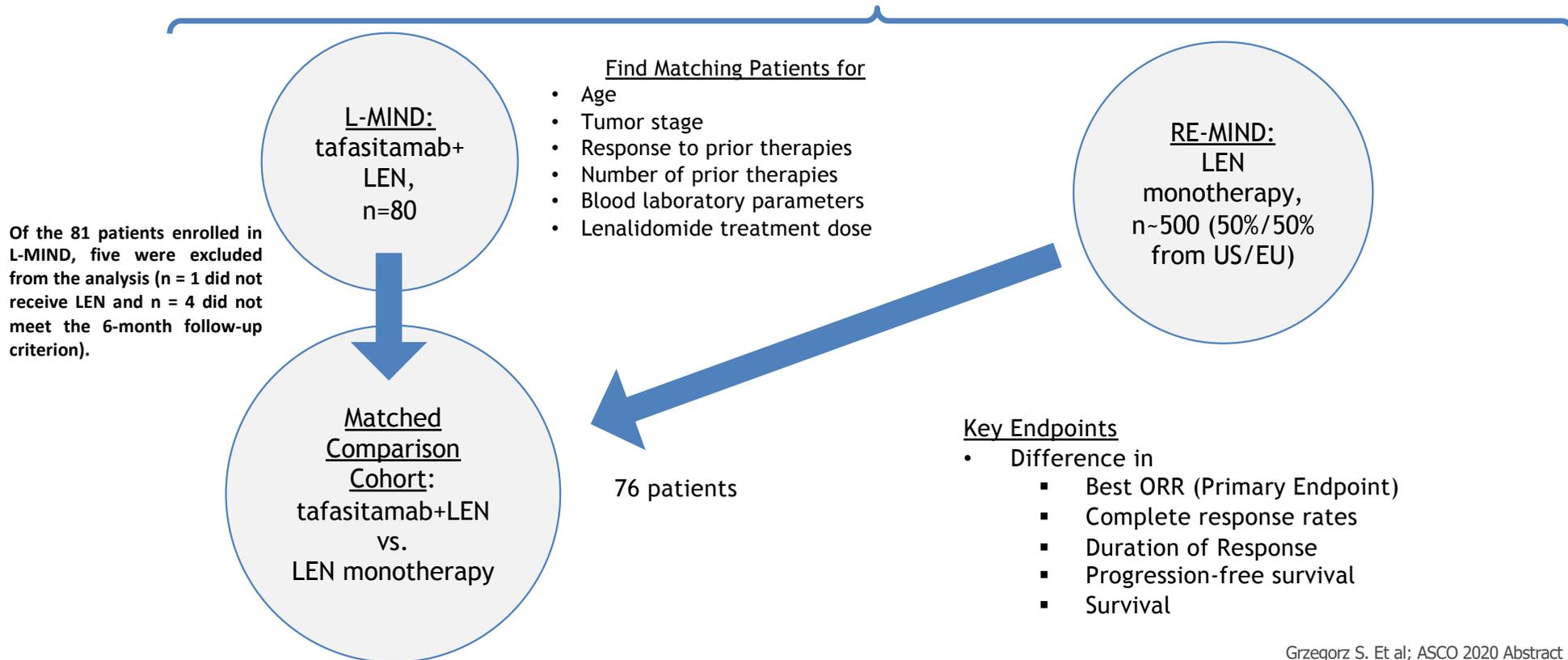


Pier Luigi Zinzani<sup>1</sup>, Thomas Rodgers<sup>2</sup>, Dario Marino<sup>3</sup>, Maurizio Frezzato<sup>4</sup>, Anna Maria Barbui<sup>5</sup>, Claudia Castellino<sup>6</sup>, Erika Meli<sup>7</sup>, Nathan H. Fowler<sup>8</sup>, Gilles Salles<sup>9</sup>, Bruce Feinberg<sup>10</sup>, Nuwan C. Kurukulasuriya<sup>11</sup>, Sascha Tillmanns<sup>12</sup>, Stephan Parche<sup>11</sup>, Debarshi Dey<sup>11</sup>, Günter Fingerle-Rowson<sup>11</sup>, Sumeet Ambarkhane<sup>11</sup>, Mark Winderlich<sup>11</sup>, and Grzegorz S. Nowakowski<sup>12</sup>

## RE-MIND: PROSPECTIVE-RETROSPECTIVE OBSERVATIONAL STUDY OF LEN MONOTHERAPY AS COMPARATOR TO L-MIND

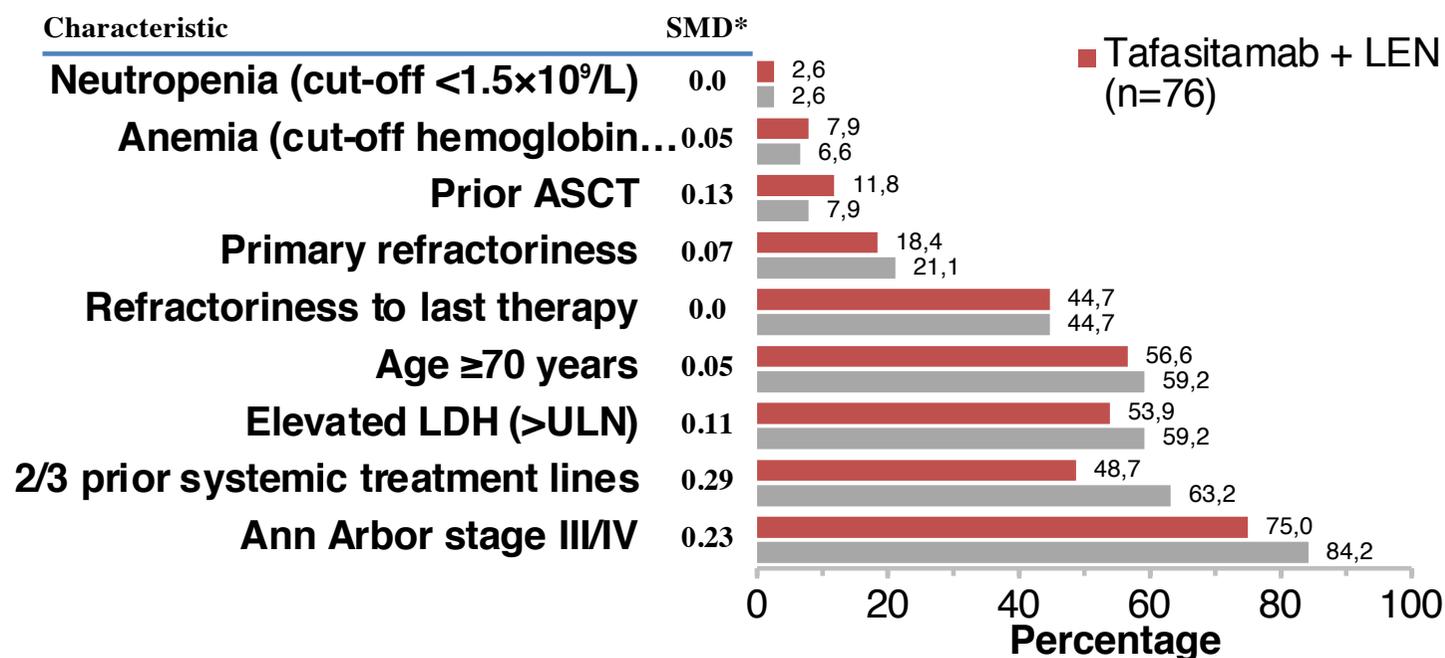
### Aligned Inclusion/Exclusion Criteria

Same histologies, 1-3 prior systemic therapies, not eligible for ASCT



## BASELINE CHARACTERISTICS USED FOR COHORT BALANCING

- Baseline characteristics were well balanced across the two cohorts after the matching procedure

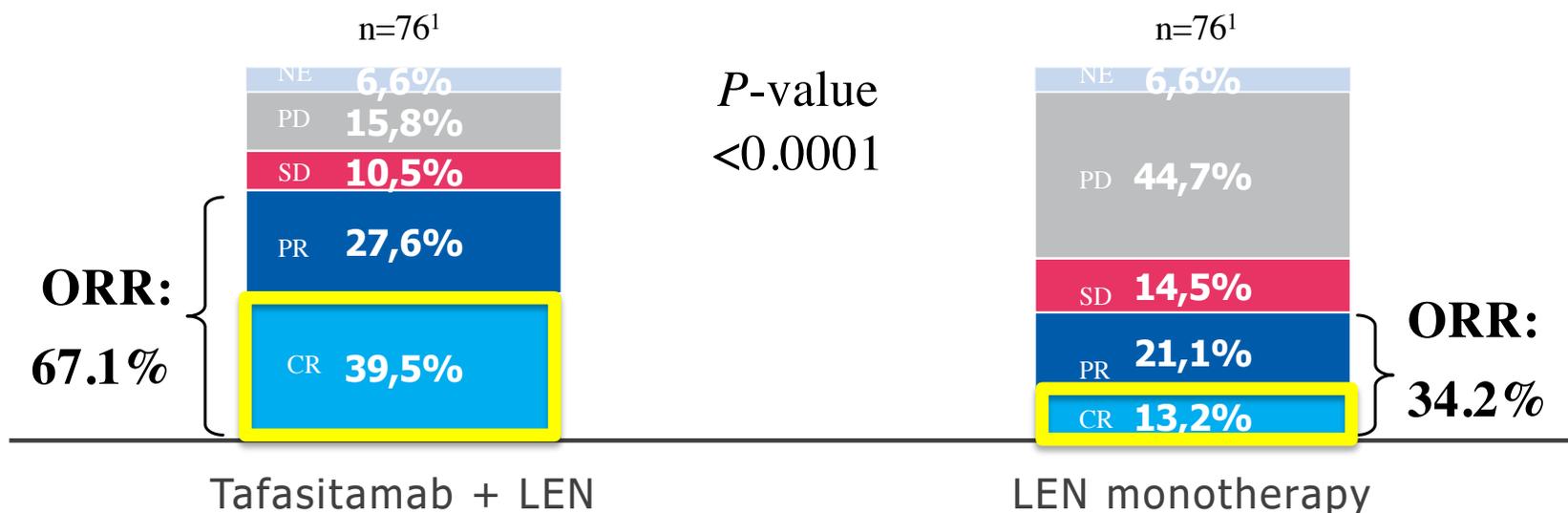


\*SMD is defined as the ratio of the difference of proportions of a baseline characteristic to the standard deviation of the pooled difference. This standardisation allows for comparison of the relative balance achieved across different baseline characteristics occurring in a low or high proportion.

ASCT, autologous stem cell transplantation; LDH, lactate dehydrogenase; LEN, lenalidomide; SMD, standardised mean difference; ULN, upper limit of normal.

Nowakowski G, et al. Poster presentation at ASCO 2020; Abstract 8020.

# ORR AND CR RATE

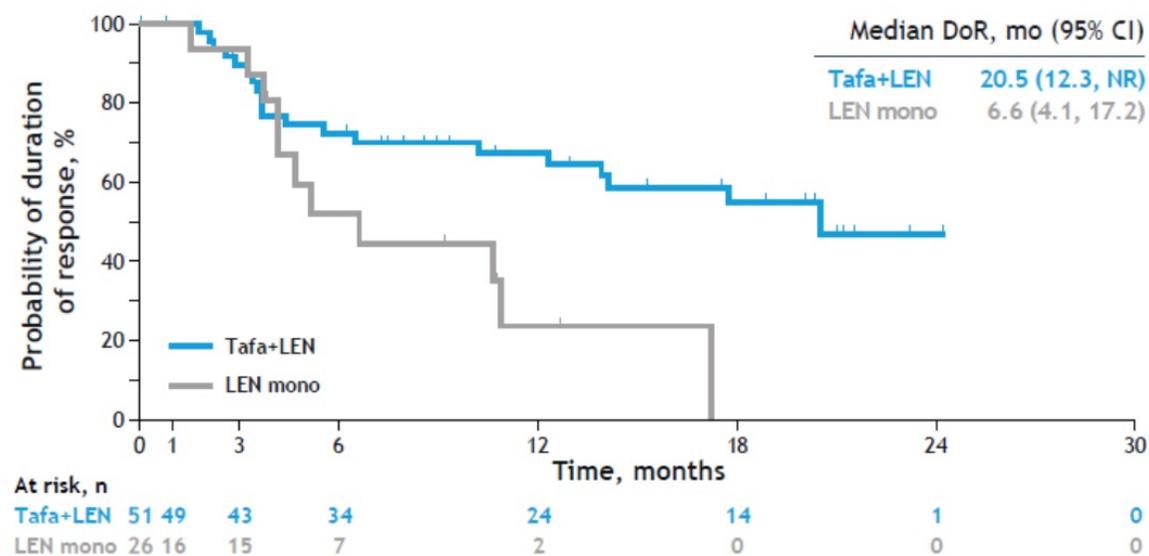


Endpoint/cohort	Tafasitamab + LEN (L-MIND cohort) (n=76 <sup>1</sup> )	LEN monotherapy (observational cohort) (n=76 <sup>1</sup> )
<b>ORR (% , 95% CI)</b>	67.1 (55.4–77.5)	34.2 (23.7–46.0)
<b>Odds ratio (95% CI)</b>	3.9 (1.9–8.1); $P<0.0001$	
<b>CR (% , 95% CI)</b>	39.5 (28.4–51.4)	13.2 (6.5–22.9)

Investigator assessed (IRC-assessed ORR for tafasitamab + LEN in L-MIND was 57.5%<sup>2</sup>).

CI, confidence interval; CR, complete response; IRC, independent review committee; LEN, lenalidomide; NE, not evaluated; ORR, overall response rate; PD, progressive disease; PR, partial response; SD, stable disease.

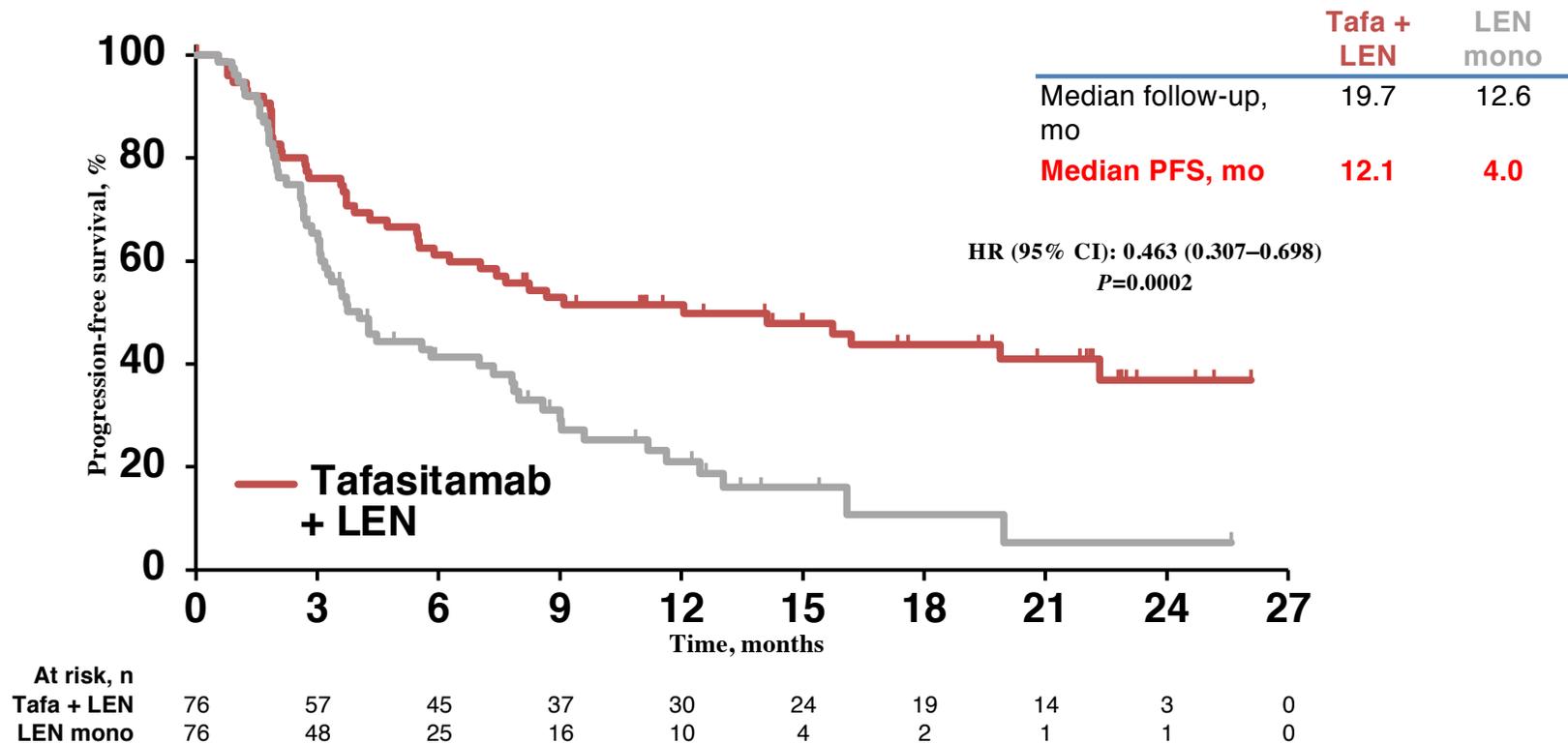
1. Nowakowski G, et al. Poster presentation at ASCO 2020; Abstract 8020; 2. Duell J, et al. Oral presentation at Virtual ICML 2021; Abstract 28.

**SECONDARY ENDPOINT: DURATION OF RESPONSE**

CI, confidence interval; DoR, duration of response; LEN, lenalidomide; MAS25, matched analysis set

25; mo, month; NR, not reached

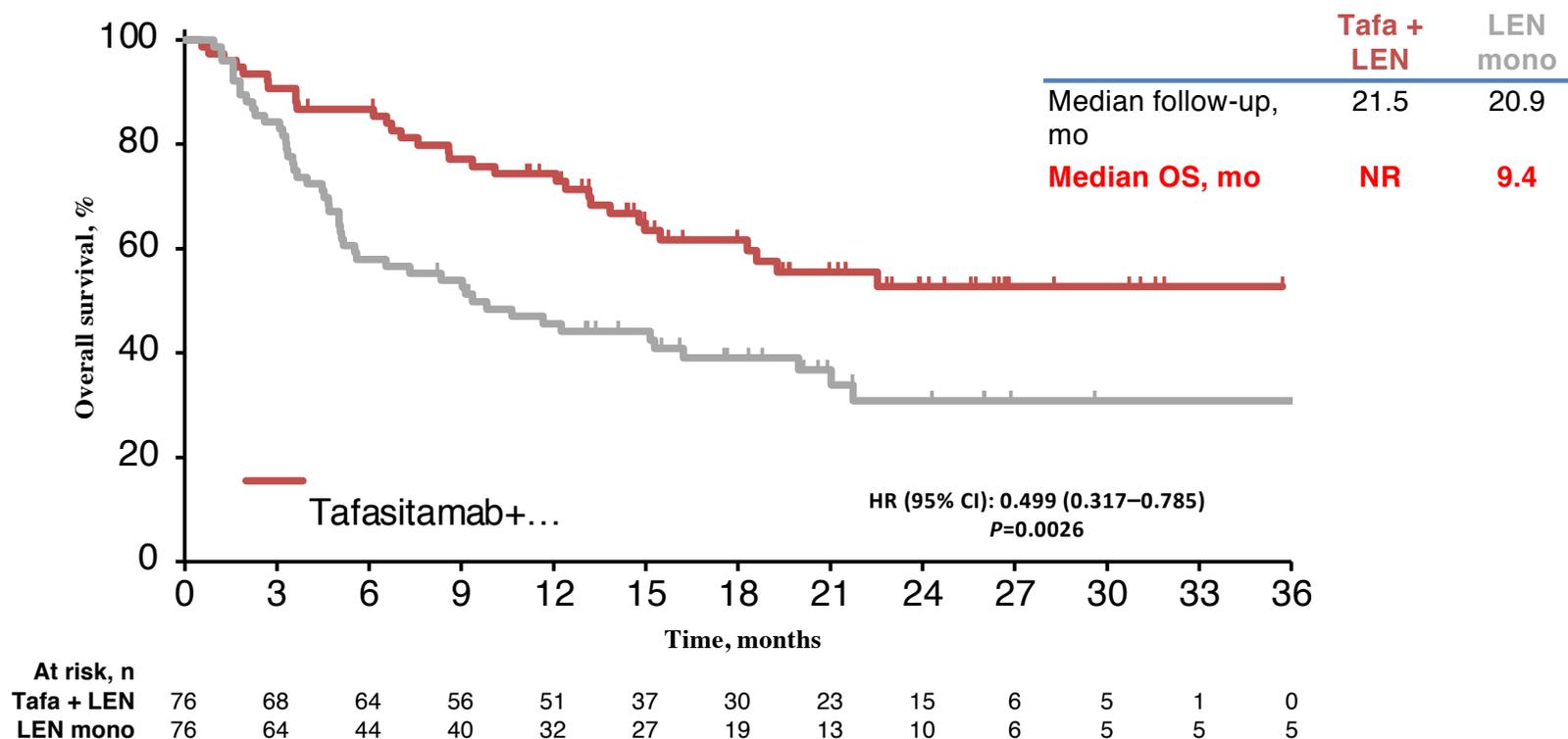
# SECONDARY ENDPOINTS: PROGRESSION-FREE SURVIVAL



CI, confidence interval; HR, hazard ratio; LEN, lenalidomide; mo, month(s); mono, monotherapy; NR, not reached; PFS, progression-free survival.

Nowakowski G, et al. Poster presentation at ASCO 2020; Abstract 8020.

# SECONDARY ENDPOINTS: OVERALL SURVIVAL



CI, confidence interval; HR, hazard ratio; LEN, lenalidomide; mo, month(s); mono, monotherapy; NR, not reached; OS, overall survival. Nowakowski G, et al. Poster presentation at ASCO 2020; Abstract 8020.

# SUMMARY

Observational national  
studies

Historical pooled  
analysis from 2  
Phase III CT and 3  
observational  
studies

Historical patient's  
level cohort study

	L-MIND (n 81)	RE-MIND (n 76)	Broccoli et al (n 153)	Mondello et al (n 123)	SCHOLAR trial (n 636)
	Tafa + Lena	Tafa+lena vs Lena	Lena	Lena	r/r therapies
<b>ORR</b>	<b>59%</b>	<b>67% vs 34%</b>	<b>29%</b>	<b>37%</b>	<b>26%</b>
CR	41%	39% vs 12%	23%	21%	7%
PR	17%	27% vs 22%	6%	16%	18%
mOS	31.6m	NR vs 9.4m	12m	Not reported	6.3m

Salles et al, Lancet Onc 2020  
Salles G et al. EHA. 2020; Abstract EP1201  
Crump et al, Blood 2017  
Broccoli et al, The Oncologist 2019  
Mondello et al, The Hematologist 2016

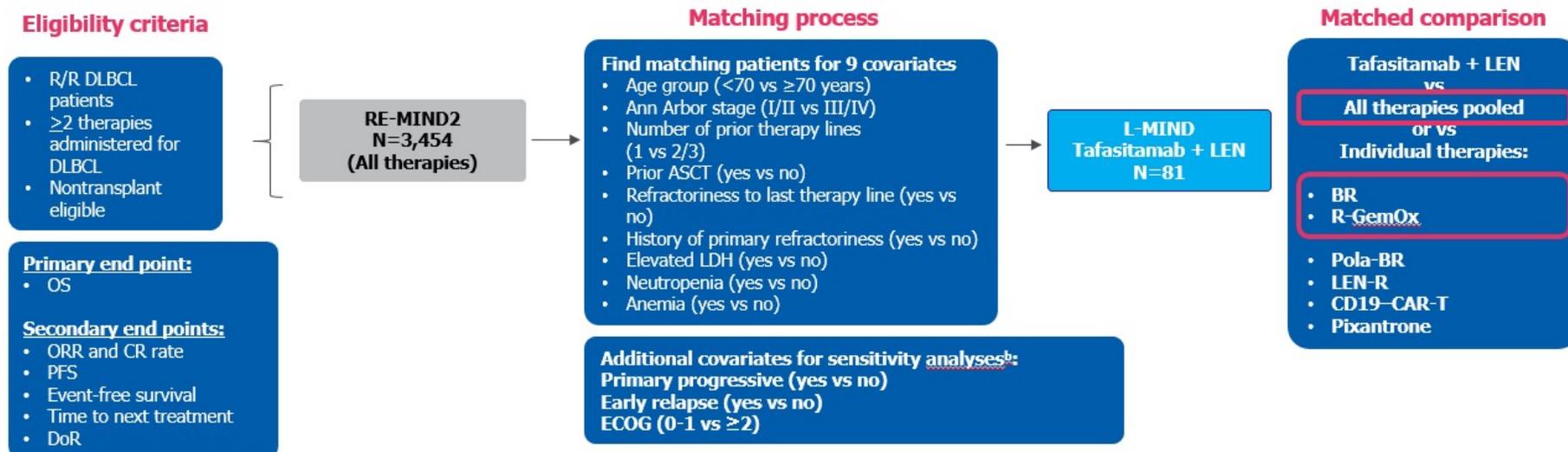
# CONCLUSIONS

- Significantly better ORR, CR and OS outcomes indicate substantial additional activity for the novel combination of tafasitamab + LEN versus LEN monotherapy in transplant-ineligible R/R DLBCL patients
- Within the limitations of non-randomised trials, ePS-based 1:1 matching allows for a robust estimation of the additional treatment effect attributable to tafasitamab when added to LEN as in the L-MIND trial
- RE-MIND outcomes are comparable to those published for LEN monotherapy in clinical trials

CR, complete response; DLBCL, diffuse large B-cell lymphoma; ePS, estimated propensity score; LEN, lenalidomide; ORR, overall response rate; OS, overall survival; R/R, relapsed/refractory. Nowakowski G, et al. Poster presentation at ASCO 2020; Abstract 8020.

# RE-MIND2: STUDY DESIGN AND METHODS

Matching criteria and estimated propensity score (ePS)-based method were applied and efficacy outcomes from the L-MIND cohort were compared with those treated with the observational cohort of patients enrolled in RE-MIND2 database



## REMIND2: ORR

Table 2. ORR and CR rate for tafasitamab + LEN vs systemic therapies pooled, BR, and R-GemOx

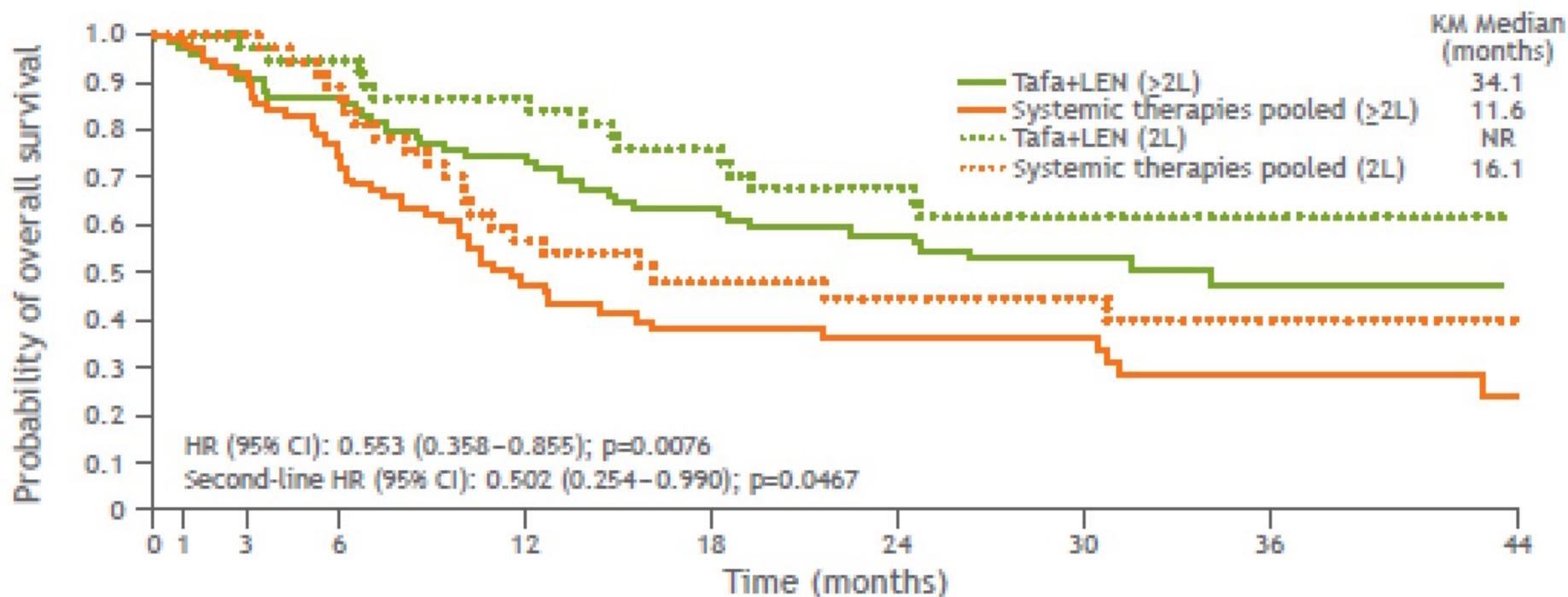
	MAS for systemic therapies pooled		MAS for BR		MAS for R-GemOx	
	Tafasitamab + LEN (n=76)	Systemic therapies pooled (n=76)	Tafasitamab + LEN (n=75)	BR (n=75)	Tafasitamab + LEN (n=74)	R-GemOx (n=74)
ORR, n (%) (95% CI)	51 (67.1) (55.4-77.5)	37 (48.7) (37.0-60.4)	50 (66.7) (54.8-77.1)	41 (54.7) (42.7-66.2)	51 (68.9) (57.1-79.2)	34 (45.9) (34.3-57.9)
Fisher's exact test p-value of ORR	0.032		0.181		0.007	
CR rate as best response, n (%) (95% CI)	29 (38.2) (27.2-50.0)	16 (21.1) (12.5-31.9)	29 (38.7) (27.6-50.6)	21 (28.0) (18.2-39.6)	29 (39.2) (28.0-51.2)	17 (23.0) (14.0-34.2)
Fisher's exact p-value of CR rate	0.032		0.225		0.050	

BR, bendamustine + rituximab; CI, confidence interval; CR, complete response; LEN, lenalidomide; MAS, matched analysis set; ORR, overall response rate; R-GemOx, rituximab + gemcitabine + oxaliplatin.

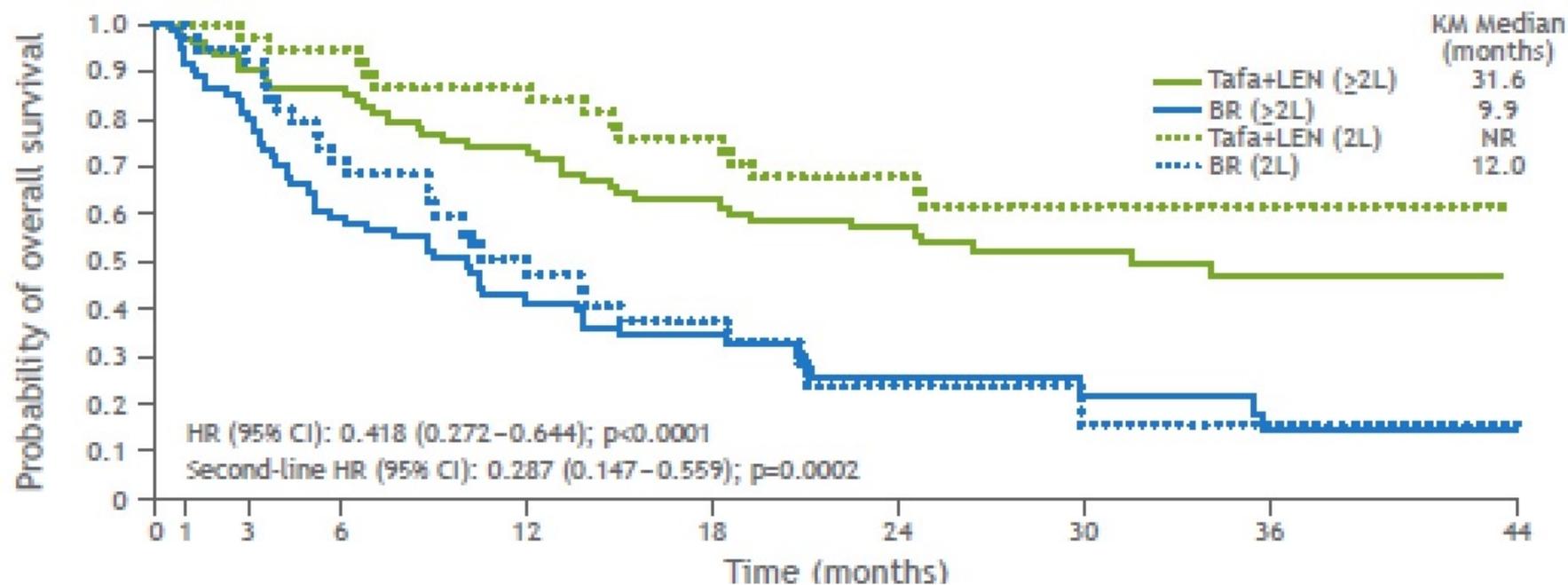
Tafasitamab + LEN vs therapies pooled and R-GemOx: ORR and CR significantly higher

A numerical improvement was observed for tafasitamab + LEN vs BR but no statistically significant

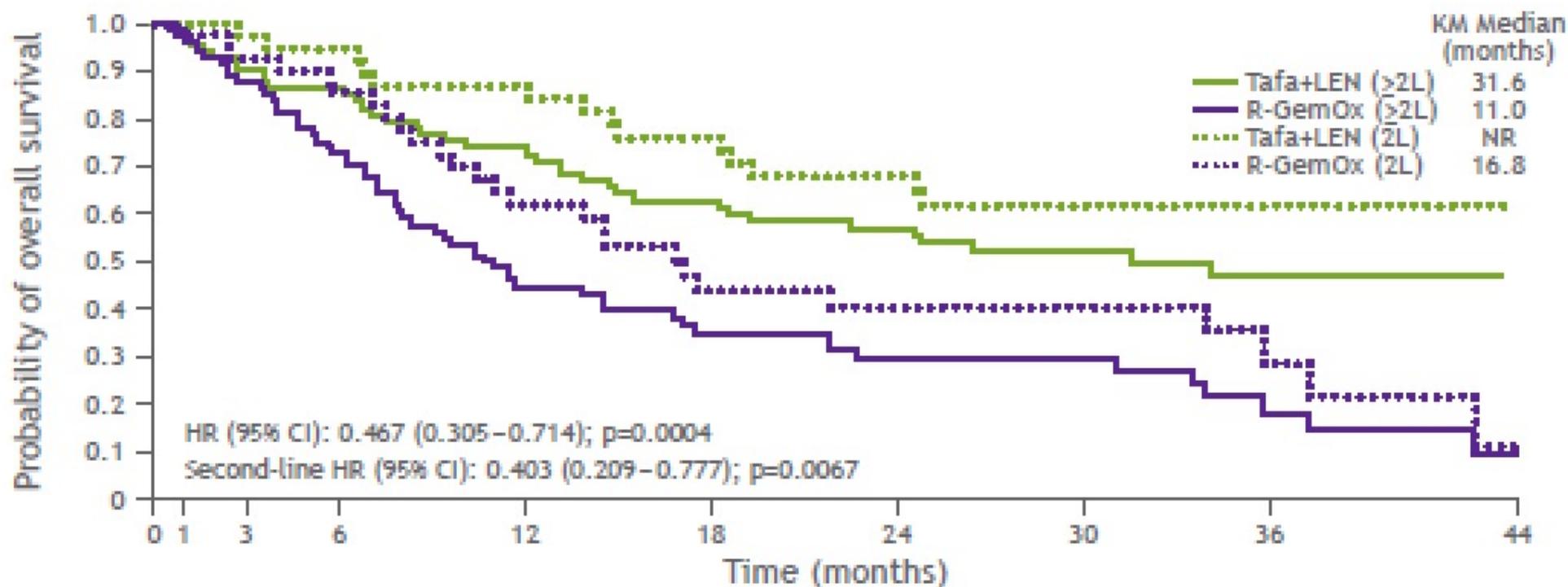
# RE-MIND2: OVERALL SURVIVAL VS POOLED THERAPIES



## RE-MIND2: OVERALL SURVIVAL VS BR

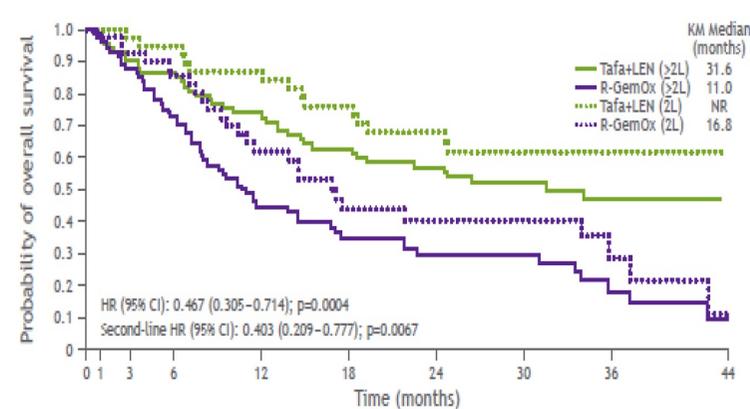
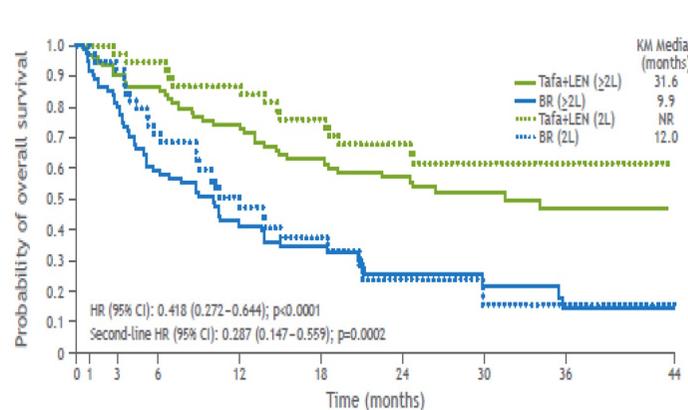
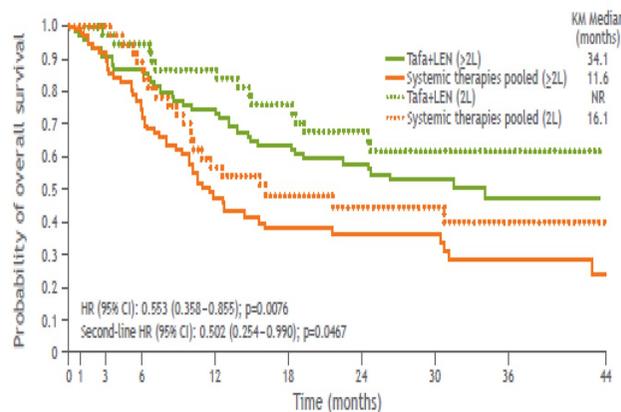


# RE-MIND2: OVERALL SURVIVAL VS R-GEMOX

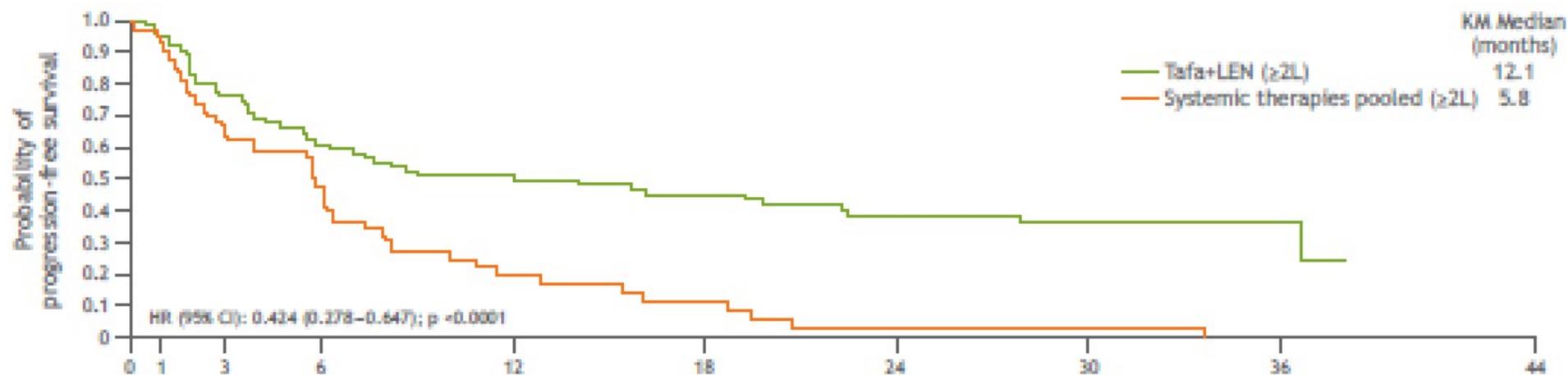


# RE-MIND2: OVERALL SURVIVAL

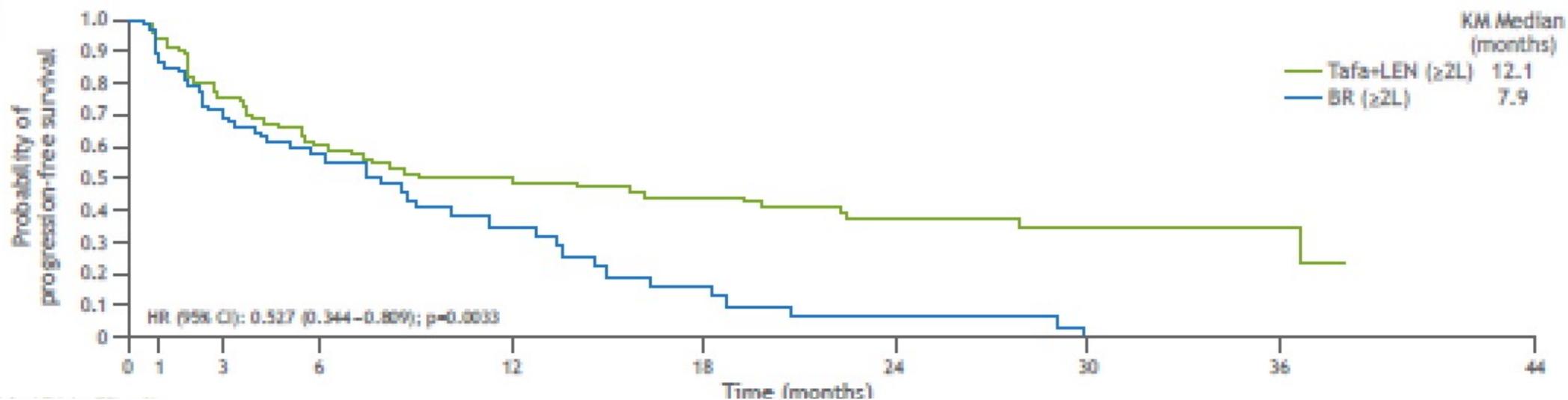
	Pooled therapies ≥2L (m)	Tafa-Lena ≥2L (m)	BR ≥2L (m)	Tafa-Lena ≥2L (m)	R-GEMOX ≥2L (m)	Tafa-Lena ≥2L (m)	Pooled therapies 2L (m)	Tafa-Lena 2L (m)	BR 2L (m)	Tafa-Lena 2L (m)	R-GEMOX 2L (m)	Tafa-Lena 2L (m)
mOS	11.6	34.1	9.9	31.6	11.0	31.6	16.1	NR	12.0	NR	16.8	NR
HR (95% CI)	0.553 (0.358-0.855)		0.418 (0.272-0.644)		0.467 (0.305-0.714)		0.502 (0.254-0.990)		0.287 (0.147-0.559)		0.403 (0.209-0.777)	
p value	0.0076		<0.0001		0.0004		0.0467		0.0002		0.0067	



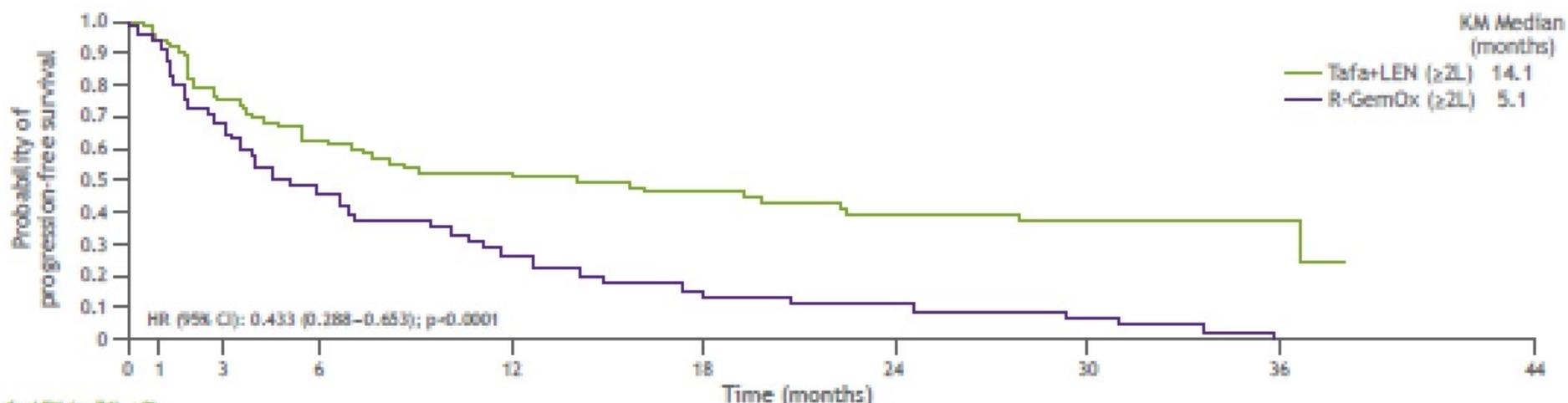
## RE-MIND2: PROGRESSION FREE SURVIVAL VS POOLED THERAPIES



# RE-MIND2: PROGRESSION FREE SURVIVAL VS BR

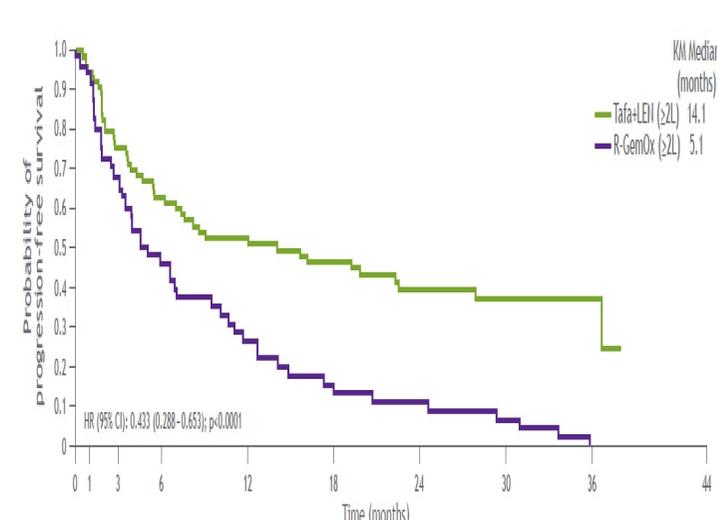
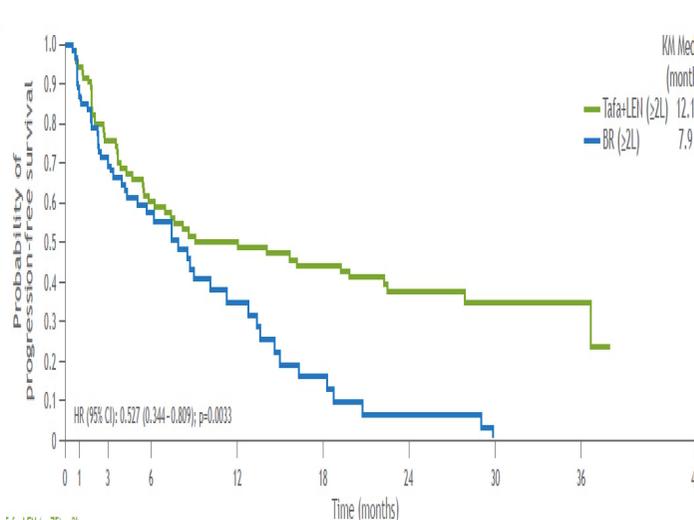
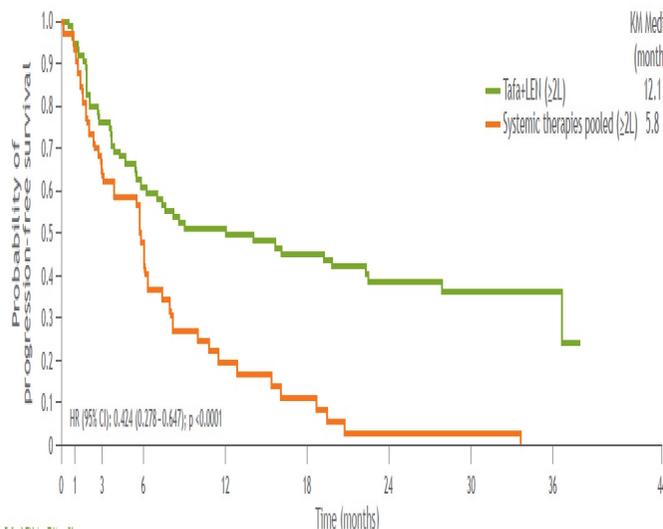


# RE-MIND2: PROGRESSION FREE SURVIVAL VS R-GEMOX

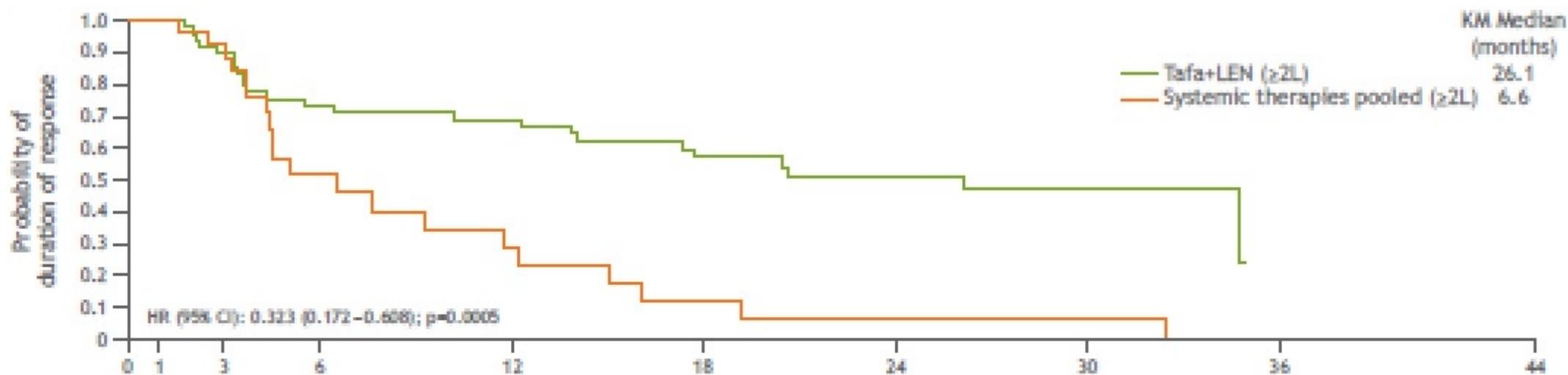


# RE-MIND2: PROGRESSION FREE SURVIVAL

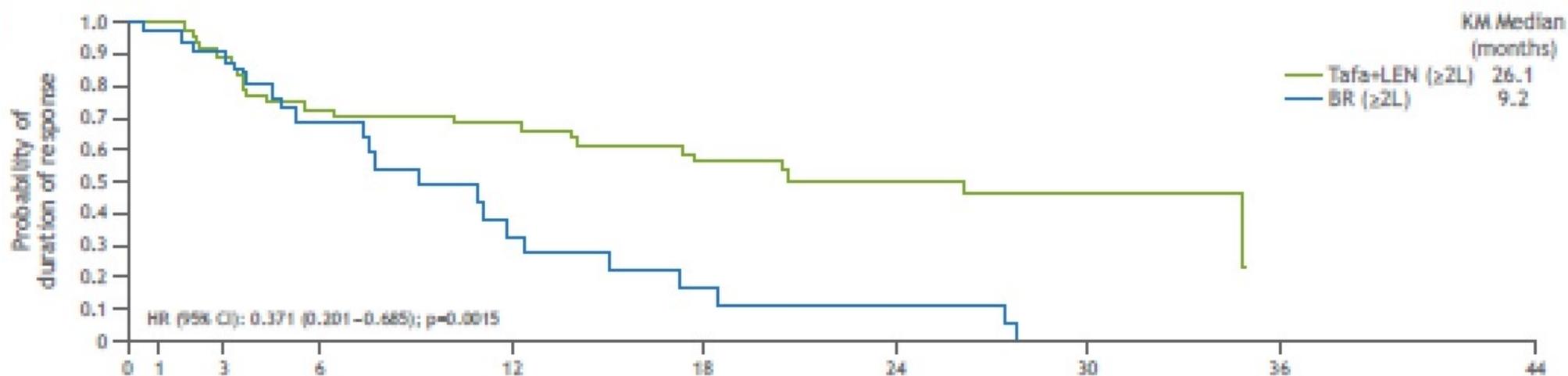
	Pooled therapies $\geq 2L$ (m)	Tafa-Lena $\geq 2L$ (m)	BR $\geq 2L$ (m)	Tafa-Lena $\geq 2L$ (m)	R-GEMOX $\geq 2L$ (m)	Tafa-Lena $\geq 2L$ (m)	Pooled therapies 2L (m)	Tafa-Lena 2L (m)	BR 2L (m)	Tafa-Lena 2L (m)	R-GEMOX 2L (m)	Tafa-Lena 2L (m)
mPFS	5.8	12.1	7.9	12.1	5.1	14.1	8.0	16.2	8.8	16.2	7.1	16.2
HR (95% CI)	0.424 (0.278-0.647)		0.527 (0.344-0.809)		0.433 (0.288-0.653)		0.452 (Not reported)		0.475 (Not reported)		0.466 (Not reported)	
p value	<0.0001		0.0033		0.0001		0.0081		0.0155		0.0096	



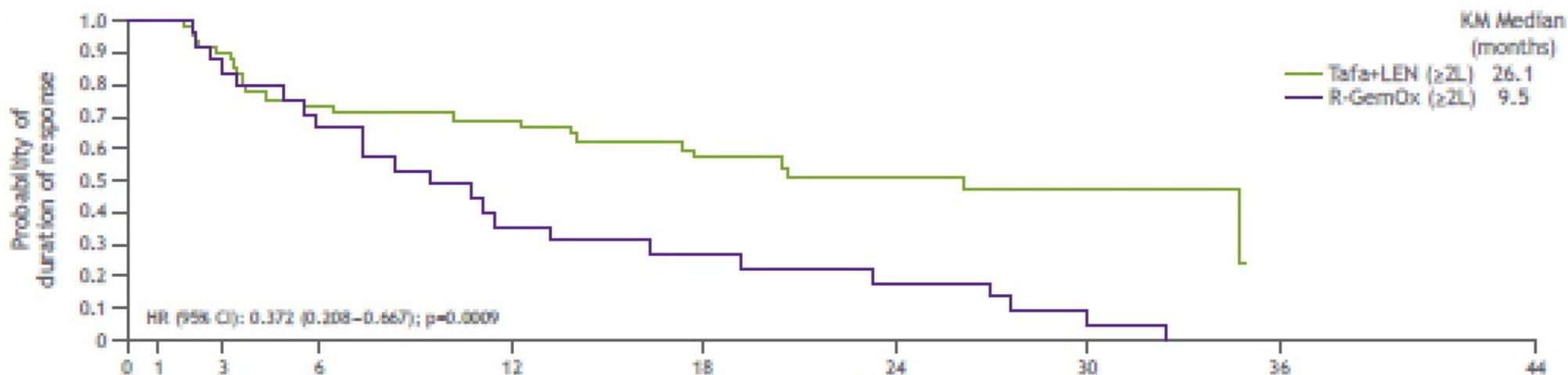
# RE-MIND2: DURATION FO RESPONSE VS POOLED THERAPIES



# RE-MIND2: DURATION OF RESPONSE VS BR

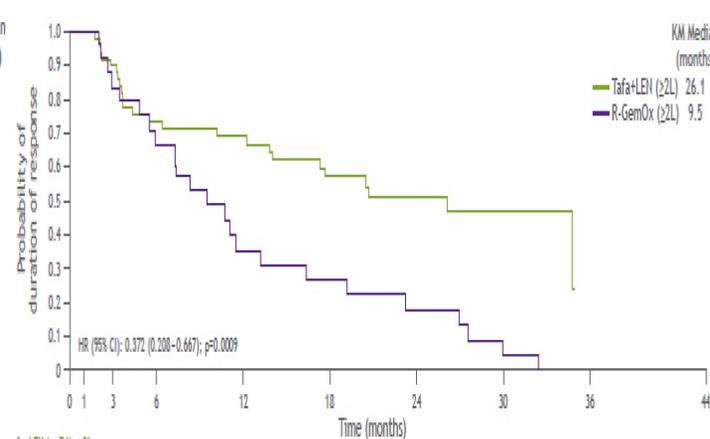
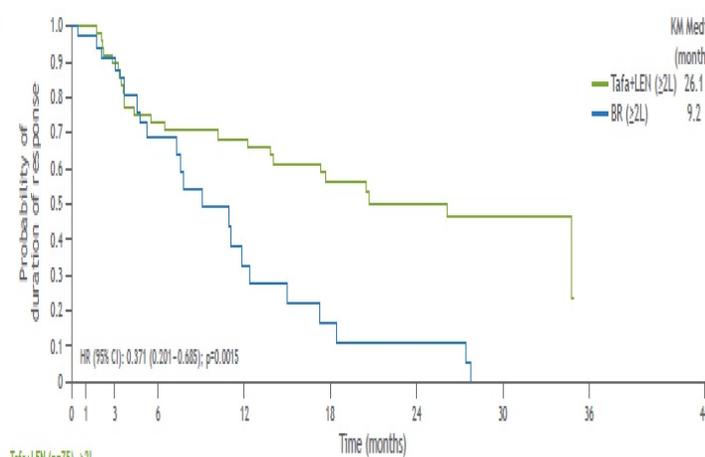
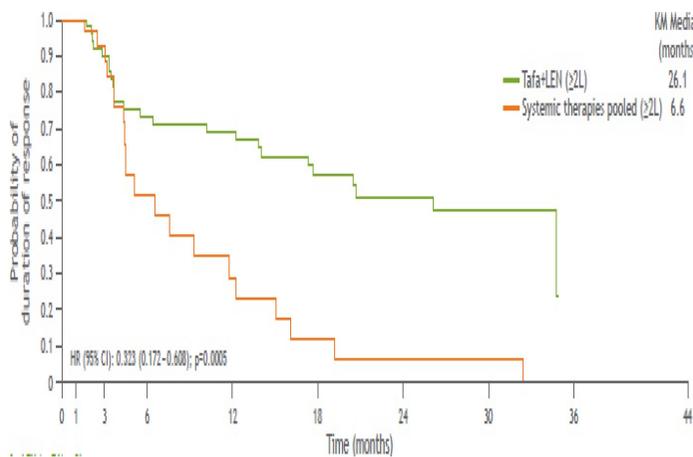


# RE-MIND2: DURATION OF RESPONSE VS R-GEMOX



# RE-MIND2: DURATION OF RESPONSE

	Pooled therapies $\geq 2L$ (m)	Tafa-Lena $\geq 2L$ (m)	BR $\geq 2L$ (m)	Tafa-Lena $\geq 2L$ (m)	R-GEMOX $\geq 2L$ (m)	Tafa-Lena $\geq 2L$ (m)
mDoR	6.6	26.1	9.2	26.1	9.5	26.1
HR	0.323		0.371		0.372	
p value	0.005		0.0015		0.0009	



Grzegorz S. Nowakowski et al, SOHO September 8-11, 2021: Poster number ABCL-346

# Tafasitamab plus lenalidomide versus Pola-BR, R2, and CAR-T: comparing outcomes from RE-MIND2, an observational, retrospective cohort study in relapsed/refractory diffuse large B-cell lymphoma

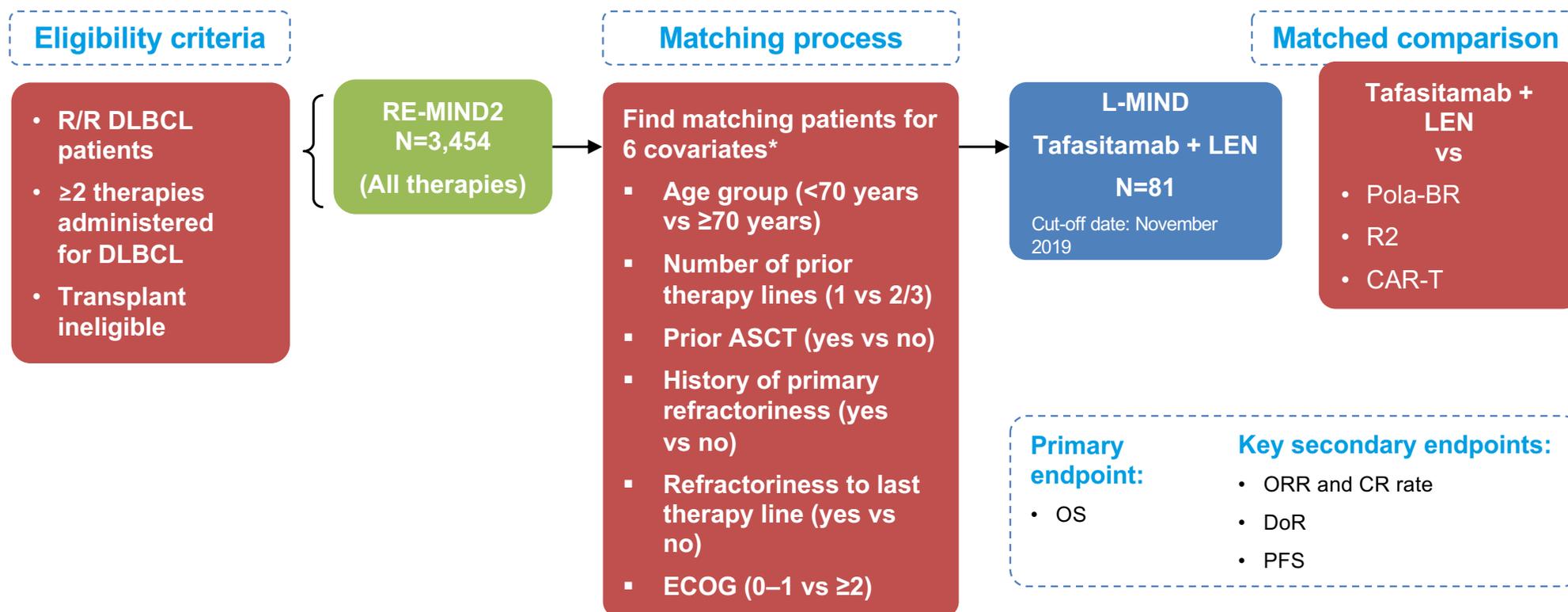
**Grzegorz S. Nowakowski,<sup>1\*</sup> Dok Hyun Yoon,<sup>2</sup> Patrizia Mondello,<sup>3</sup> Erel Joffe,<sup>3</sup> Anthea Peters,<sup>4</sup> Isabelle Fleury,<sup>5</sup> Richard Greil,<sup>6</sup> Matthew Ku,<sup>7</sup> Reinhard Marks,<sup>8</sup> Kibum Kim,<sup>9</sup> Pier Luigi Zinzani,<sup>10</sup> Judith Trotman,<sup>11</sup> Lorenzo Sabatelli,<sup>12</sup> Dan Huang,<sup>13</sup> Eva E. Waltl,<sup>13</sup> Mark Winderlich,<sup>13</sup> Sumeet Ambarkhane,<sup>13†</sup> Nuwan C. Kurukulasuriya,<sup>14</sup> Raul Cordoba,<sup>15</sup> Georg Hess,<sup>16</sup> Gilles Salles<sup>3</sup>**

<sup>1</sup>Division of Hematology, Mayo Clinic, Rochester, MN, USA, <sup>2</sup>Department of Oncology, Asan Medical Center, Songpa-gu, Seoul, South Korea,

<sup>3</sup>Department of Medicine, Memorial Sloan Kettering Cancer Center, New York, NY, USA, <sup>4</sup>Department of Oncology, University of Alberta, Edmonton, Alberta, Canada, <sup>5</sup>Maisonneuve-Rosemont Hospital, Institute of Hematology, Oncology and Cell Therapy, Montreal University, Montreal, Canada, <sup>6</sup>Paracelsus Medical University Salzburg, Salzburg Cancer Research Institute-CCCIT, and Cancer Cluster Salzburg, Austria, <sup>7</sup>Department of Haematology, St Vincent's Hospital and University of Melbourne, Melbourne, Victoria, Australia, <sup>8</sup>University Hospital Freiburg Internal Medicine I, Freiburg im Breisgau, Germany,

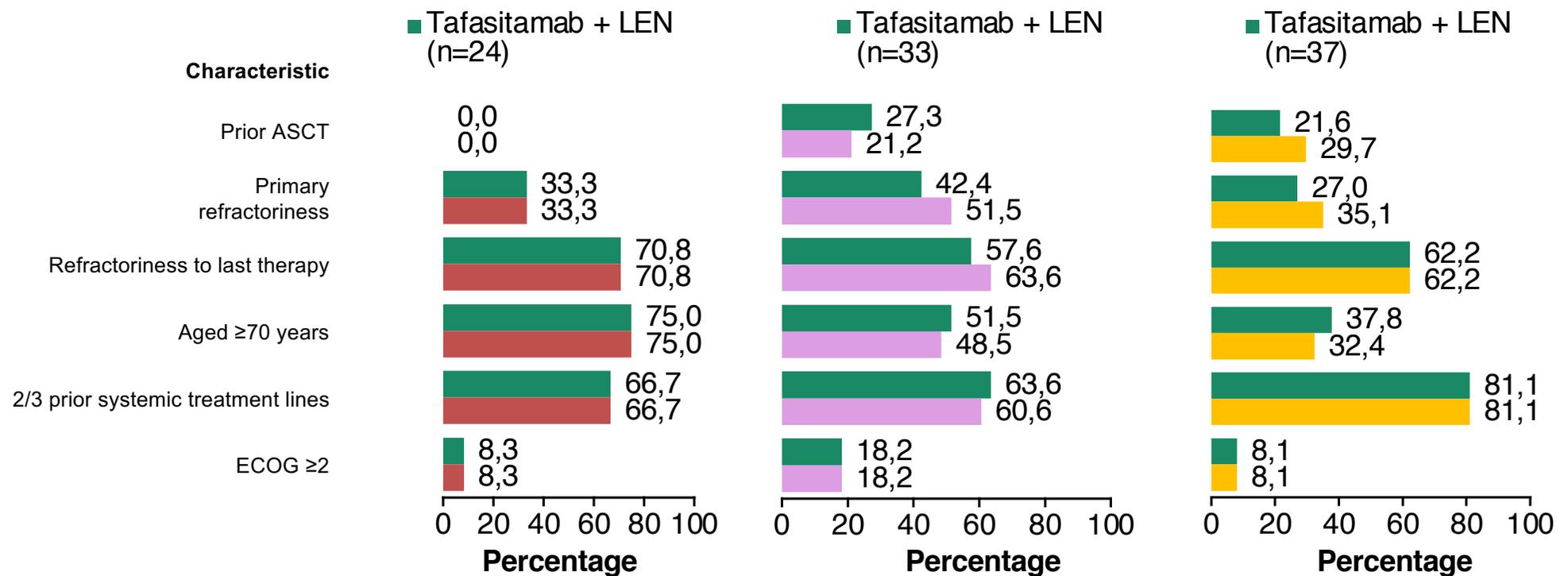
<sup>9</sup>University of Utah, Salt Lake City, UT & University of Illinois at Chicago, Chicago, IL USA; <sup>10</sup>IRCCS Azienda Ospedaliero-Universitaria di Bologna, Istituto di Ematologia "Seràgnoli" & Dipartimento di Medicina Specialistica, Diagnostica e Sperimentale Università di Bologna, Bologna, Italy; <sup>11</sup>Haematology Department, Concord Repatriation General Hospital, University of Sydney, Concord, NSW, Australia, <sup>12</sup>Incyte Biosciences International Sàrl, Morges, Switzerland, <sup>13</sup>MorphoSys AG, Planegg, Germany, <sup>14</sup>MorphoSys AG, Boston, MA, USA, <sup>15</sup>Department of Hematology, Fundacion Jimenez Diaz University Hospital, Health Research Institute IIS-FJD, Madrid, Spain, <sup>16</sup>Department of Hematology, Oncology and Pneumology, University Medical Center, Johannes Gutenberg-University Mainz, Germany.

# RE-MIND2 expanded analysis study design



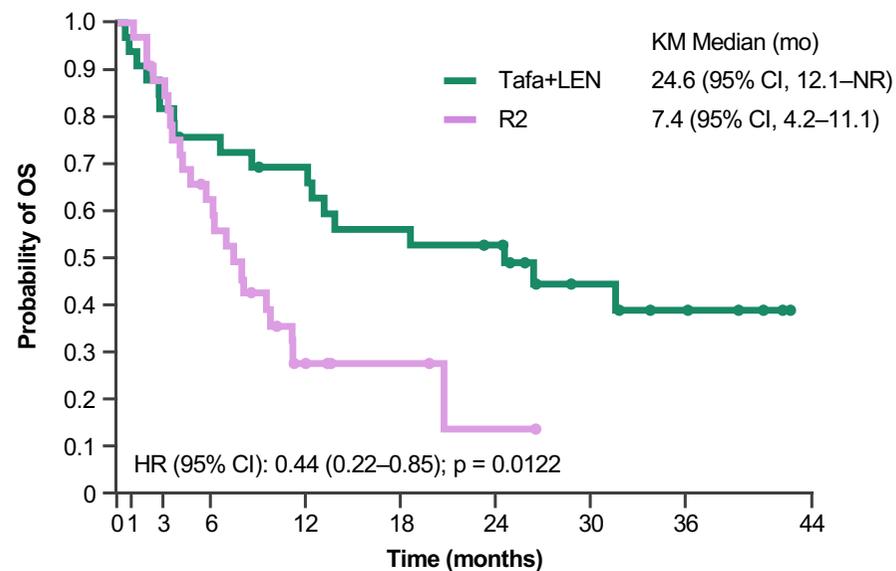
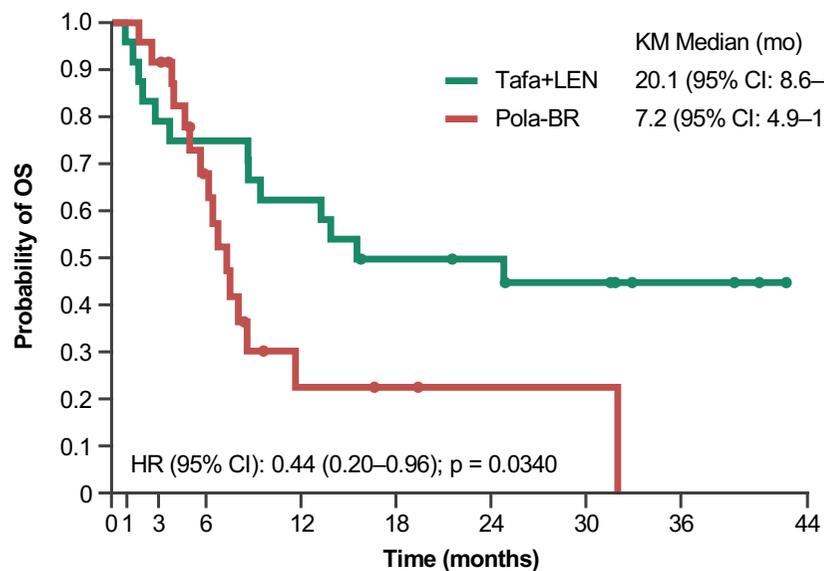
# Results: Baseline characteristics for tafasitamab + LEN versus Pola-BR, R2, and CAR-T

- A high degree of covariate balance was achieved between the tafasitamab plus LEN and comparator therapy cohorts



- ASCT, autologous stem-cell transplant; CAR-T, CD19 chimeric antigen receptor T-cell therapies; ECOG, Eastern Cooperative Oncology Group; LEN, lenalidomide; Pola-BR, polatuzumab vedotin plus bendamustine plus rituximab; R2, rituximab plus lenalidomide.

# Primary endpoint: OS

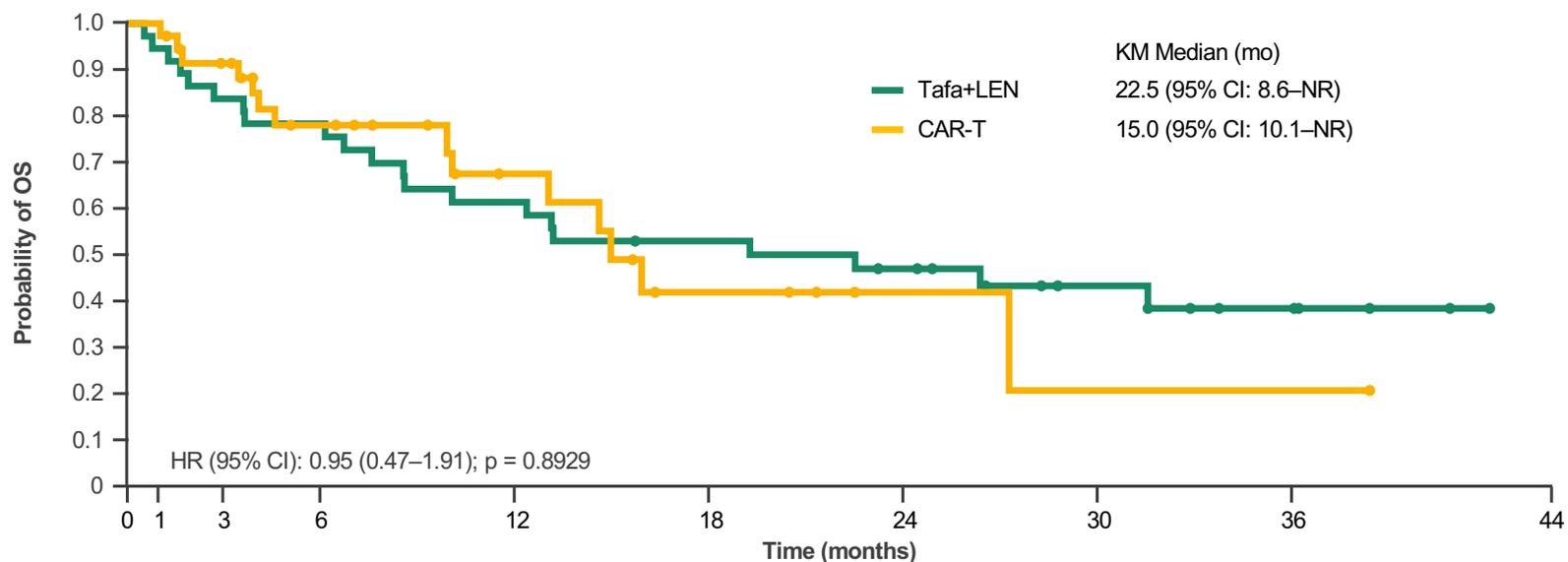


Median duration of follow-up: tafasitamab plus + LEN: 32 mo; Pola-BR: 16.6 mo

Median duration of follow-up: tafasitamab plus + LEN: 32; mo; R2: 13.4 mo

## Primary endpoint: OS

A comparable OS benefit with tafasitamab + LEN versus CAR-T (22 versus 15 months), without statistical significance, was observed



Median duration of follow-up: tafasitamab plus + LEN: 32 mo; CAR-T: 10.2 mo

G. S. Nowakowski, Saturday, ASH December 11, 2021

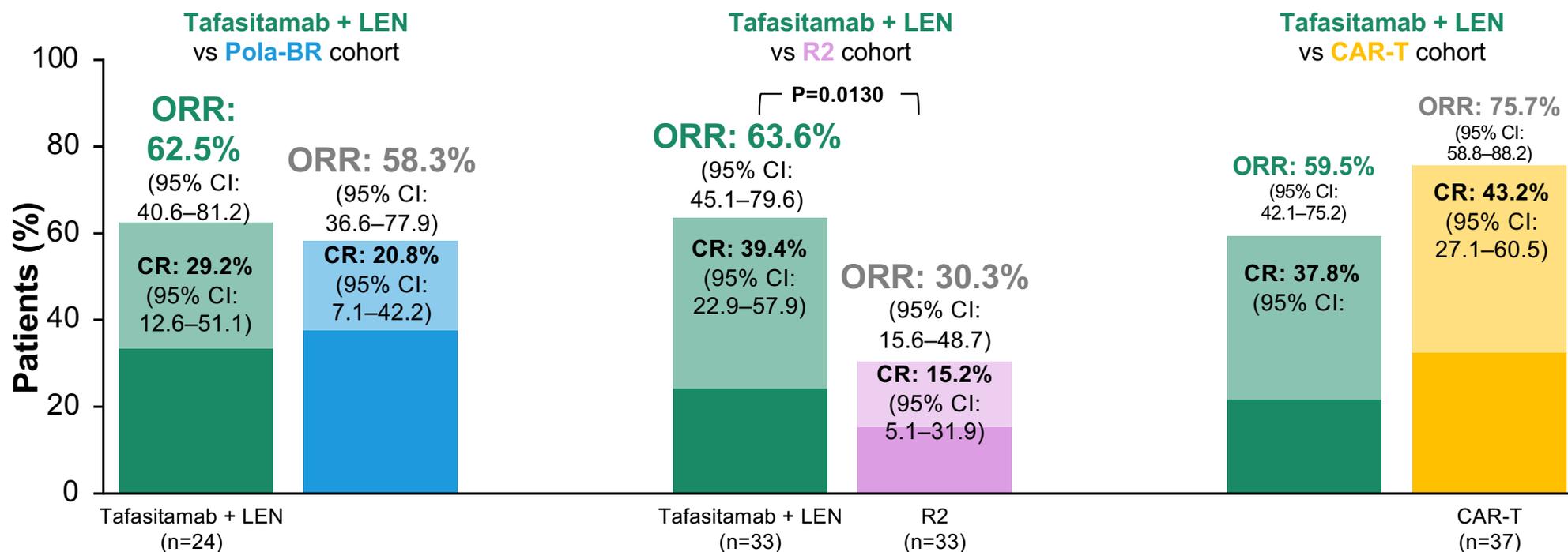
## Secondary endpoints: PFS and DoR

- Tafasitamab + LEN was associated with statistical and clinically meaningful improvements in PFS

	Tafa + LEN (n=24)	Pola-BR (n=24)	Tafa + LEN (n=33)	R2 (n=33)	Tafa + LEN (n=37)	CAR-T (n=37)
Median <b>PFS</b> , mo (95% CI)	8.0 (1.9–19.9)	5.0 (2.5–5.6)	5.9 (3.6–36.7)	2.8 (2.0–5.8)	6.3 (3.6–22.5)	4.0 (3.1–12.8)
HR (95% CI) p* value	0.482 (0.217–1.073) 0.0689		0.511 (0.281–0.927) <b>0.0252</b>		0.612 (0.302–1.240) 0.1696	
Median <b>DoR</b> , mo (95% CI)	17.7 (3.6–34.8)	2.3 (0.3–6.1)	34.8 (3.6–34.8)	12.4 (2.7–19.3)	26.1 (4.4–NR)	5.9 (2.0–10.0)

## Secondary endpoint: ORR and CR rate

- ORR and CR rate were statistically significantly higher with tafasitamab + LEN versus R2
- Statistical differences versus Pola-BR and CAR-T were not detected with the sample sizes in the matched cohorts



## Conclusions

- The primary endpoint was met for comparisons with tafasitamab + LEN compared with Pola-BR and R2
  - Statistically significant improvements in median **OS** were observed
  - Median OS was comparable with tafasitamab + LEN relative to CAR-T therapies
- **Numerical differences**, favoring tafasitamab + LEN, were observed for the **secondary endpoints**
- The RE-MIND2 study design used strict patient-level matching to compare real-world and clinical trial populations
  - This allows a contextualization of outcomes with different treatments in the absence of head-to-head trials
- Due to the recent approval of the comparator treatments, these data may inform treatment decisions in the context of emerging therapies for R/R DLBCL