

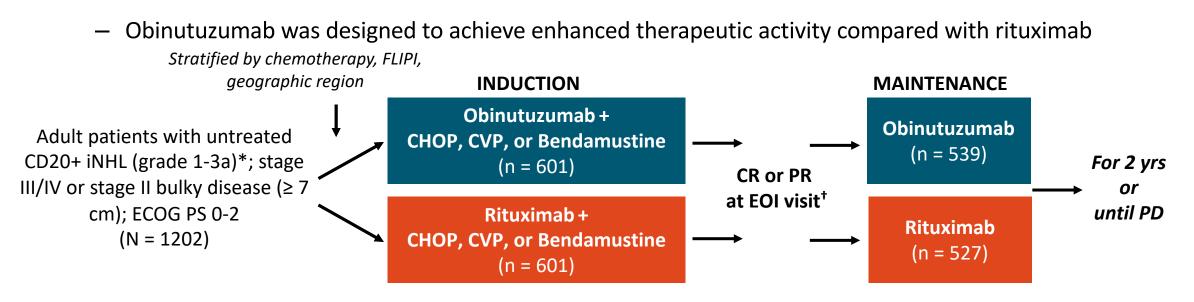
Making Cancer History

Follicular Lymphoma

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GALLIUM: Frontline Obinutuzumab-Based vs Rituximab-Based Chemoimmunotherapy

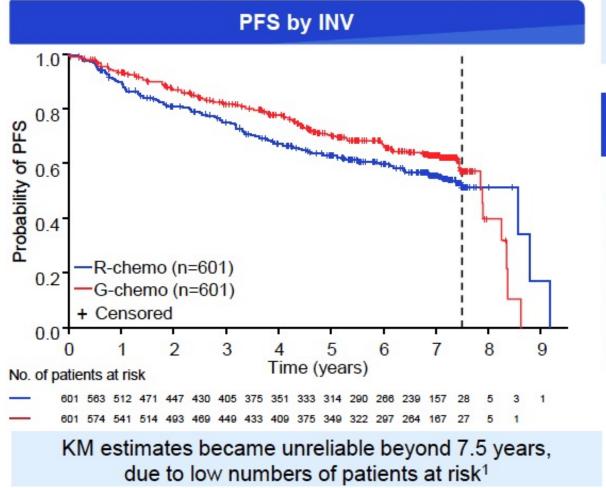
International randomized, open-label phase III study



*All data presented for patients with FL, although study also enrolled patients with MZL (randomized separately). *Patients with SD at EOI followed up to 2 yrs for PD.

- Primary endpoint: PFS by investigator in patients with FL
- Secondary endpoints: PFS by IRC, OS, DFS, DoR, TTNT, CR/ORR at EOI (± FDG-PET), safety

GALLIUM Final Analysis: PFS Benefit After 8 Years Follow-Up



Median observation time: 7.9 (0.0-9.8) years

INV-assessed PFS	G-chemo (n=601)	R-chemo (n=601)	
Patients with event, n (%)	206 (34.3)	244 (40.6)	
7-year PFS, % (95% CI)	63.4 (59.0–67.4)	55.7 (51.3–59.9)	
HR (95% CI)*	0.77 (0.64–0.93)		
P-value	0.006		

R = rituximab; G = obinutuzumab



RELEVANCE: R2 vs. R-chemo in frontline FL, 6 year follow-up

Figure 1. Consort Diagram

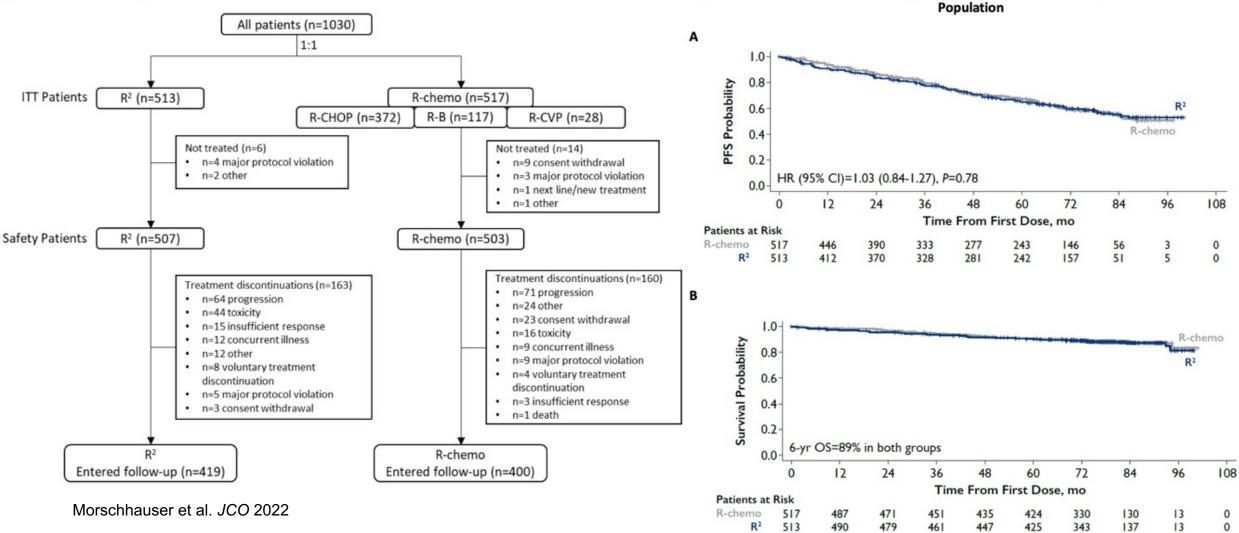
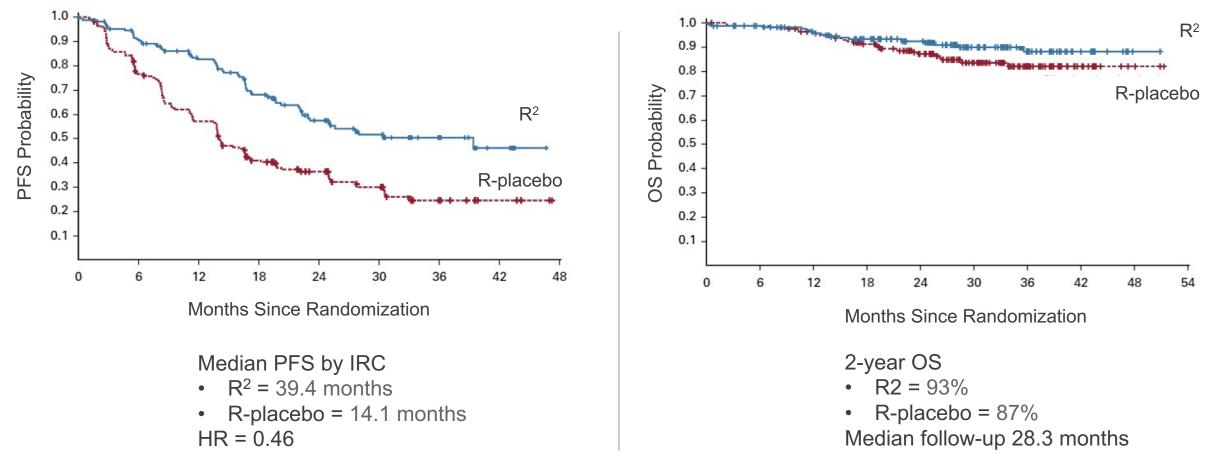


Figure 2. Progression-free Survival by IRC (A) and Overall Survival (B) in the Intention-to-Treat Population

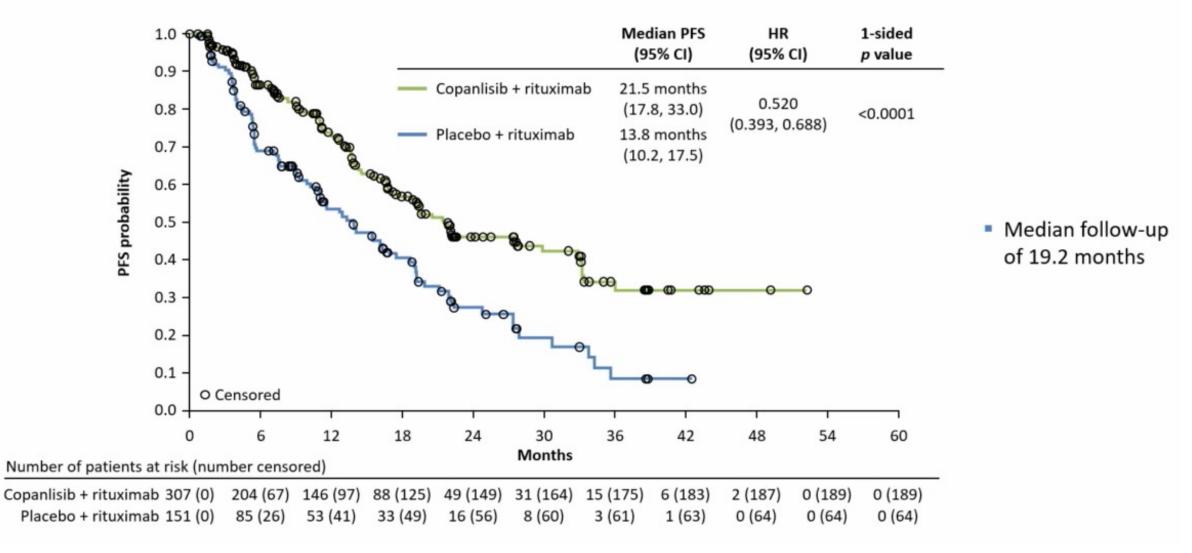
AUGMENT: Rituximab + Lenalidomide vs. Rituximab+ placebo *Efficacy*

Progression-Free Survival

Overall Survival



CHRONOS-3 in R/R iNHL: PFS



• Zinzani PL. et al. EHA 2021, abstract S211.

PI3K Inhibitors: Emerging Agents Zandelisib: Phase III COASTAL Study for FL and MZL

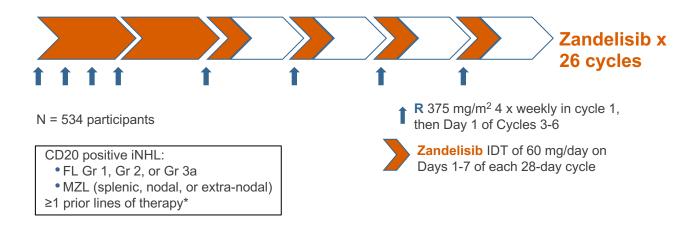
ELIGIBILITY CRITERIA

Major Inclusion Criteria

- Adult male or female subjects
- Histologically confirmed diagnosis of CD20-positive iNHL with histological subtype limited to:
 - FL Grades 1, 2, or 3a
 - MZL (splenic, nodal, or extra-nodal)
- R/R FL or MZL who received ≥ 1 prior line of therapy, which must have included an anti-CD20 antibody in combination with chemotherapy or lenalidomide
- At least one bi-dimensionally measurable lesion > 1.5 cm
- Adequate hematological, renal, and hepatic function
- Eastern Cooperative Oncology Group performance status score 0-1

Major Exclusion Criteria

- Histologically confirmed diagnosis of FL Grade 3b or transformed disease
- Subjects who received both R + bendamustine and R + CHOP (or other anthracycline-containing regimen) as previous lines of therapy, and those who received only single-agent anti-CD20 mAb therapy as a prior line of treatment
- Prior therapy with PI3K inhibitors
- · Ongoing or history of drug-induced pneumonitis
- Known lymphomatous involvement of the central nervous system
- Seropositive for or active viral infection with HBV, HCV, or HTLV-1



Rituximab + B (28 D cycles) x 6 or Rituximab + CHOP (21 D cycles) x 6

Primary endpoints

PFS

Secondary endpoints

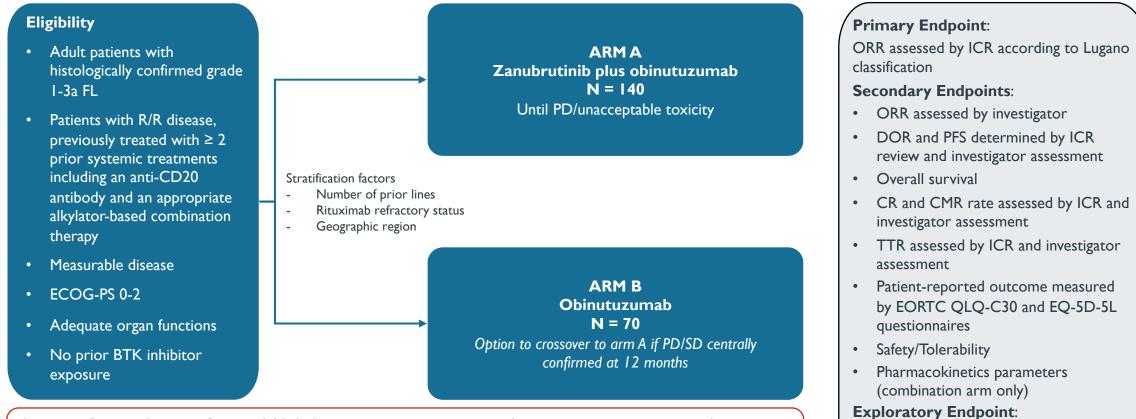
ORR, CRR, OS, TTNT, PFS2, PRO, Safety

BGB-3111-212 – ROSEWOOD STUDY



ORR after crossover to arm A

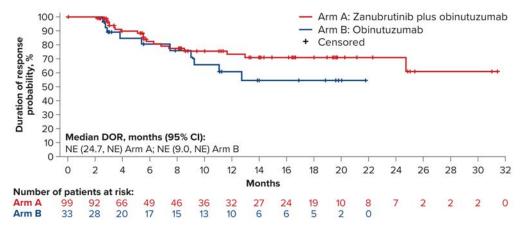
A Phase 2, Multicenter, Open-Label, Randomized Trial for Patients with Relapsed or Refractory Follicular Lymphoma



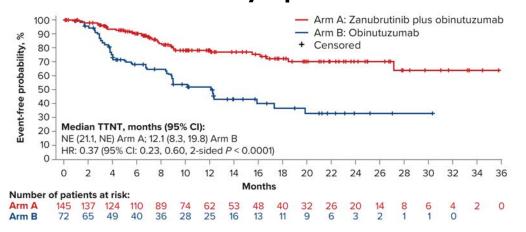
Assuming $ORR_A = 0.55$ and $ORR_B = 0.30, 210$ patients will be enrolled in a 2:1 ratio to provide a power of approximately 91% in testing ORR_A versus ORR_B using a normal approximation to binomial distribution with a 2-sided significance level of 0.05 with continuity correction

EFFICACY ENDPOINTS: ROSEWOOD STUDY (ITT ANALYSIS SET)

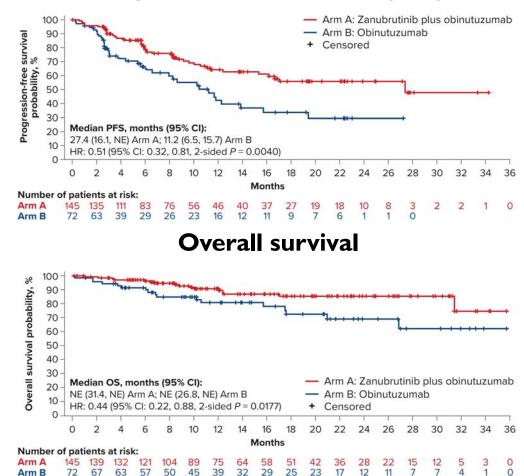
Duration of Response (IRC)



Time to Next Antilymphoma Treatment

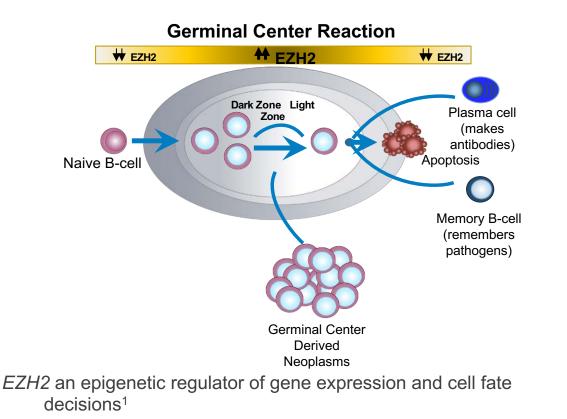


Progression-free survival (IRC)

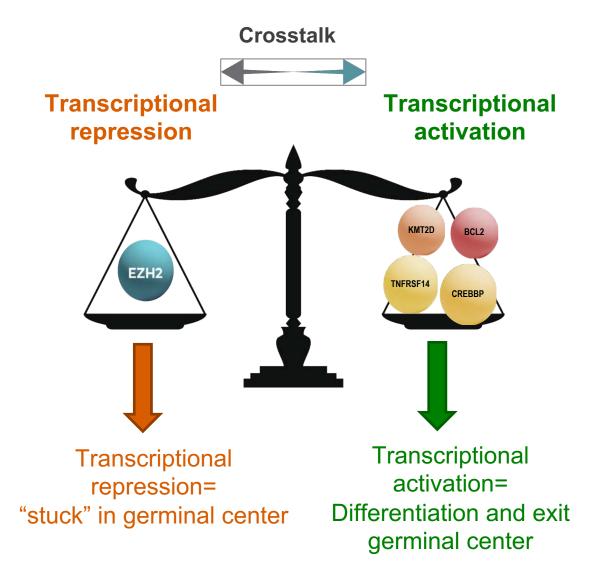


Arm B

Tazemetostat: Follicular Lymphoma and EZH2



- EZH2 is required for normal B-cell biology and germinal center formation²
 - Oncogenic mutations in *EZH2* suppress exit from germinal state and "lock" B cells in this state thereby transforming into a cancer²



Tazemetostat for R/R FL Phase 2, Open-Label, Multicenter Study

Response in the MT EZH2 Cohort

Response in MT EZH2 (n=45)	IRC	INV
ORR, n (%) [95% Clª]	31 (69) [53, 82]	35 (78) [63, 89]
CR, n (%)	6 (13)	4 (9)
PR, n (%)	25 (56)	31 (69)
SD, n (%)	13 (29)	10 (22)
PD, n (%)	1 (2)	0

- 44 of 45^b (98%) patients with evidence of tumor reduction, by IRC
- mPFS, 13.8 mos (95% CI, 10.7-22.0)

^aBy Brookmeyer and Crowley method. ^b4 subjects with missing post-baseline values and 1 subject with poor image. ^cBest overall response based on Cheson (2007) criteria for lymphomas.

Response in the WT *EZH2* **Cohort**

Response in WT EZH2 (n=54)	IRC	INV
ORR, n (%) [95% Cl ^a]	19 (35) [23, 49]	18 (33) [21, 48]
CR, n (%)	2 (4)	3 (6)
PR, n (%)	17 (31)	15 (28)
SD, n (%)	18 (33)	16 (30)
PD, n (%)	12 (22)	16 (30)
NE/missing/unknown, ^b n (%)	5 (9)	4 (7)

- 37 of 49^c (69%) patients with evidence of tumor reduction, by IRC
- mPFS, 11.1 mos (95%Cl, 3.7-`14.6)

Mosunetuzumab: CD20xCD3 Bispecific

• Single-arm, pivotal Phase II expansion in patients with R/R FL and ≥2 prior therapies

Key inclusion criteria	Mosunetuzumab administration
 FL (Grade 1–3a) ECOG PS 0–1 ≥2 prior regimens, including ≥1 anti-CD20 Ab ≥1 alkylating agent 	 Q3W intravenous administration C1 step-up dosing (CRS mitigation) Fixed-duration treatment 8 cycles if CR after C8 17 cycles if PR/SD after C8 No mandatory hospitalization C1 C2 C3 C8 / C17

Endpoints

- Primary: CR (best response) rate by IRF* assessed vs 14% historical control CR rate¹
- Secondary: ORR, DoR, PFS, safety and tolerability

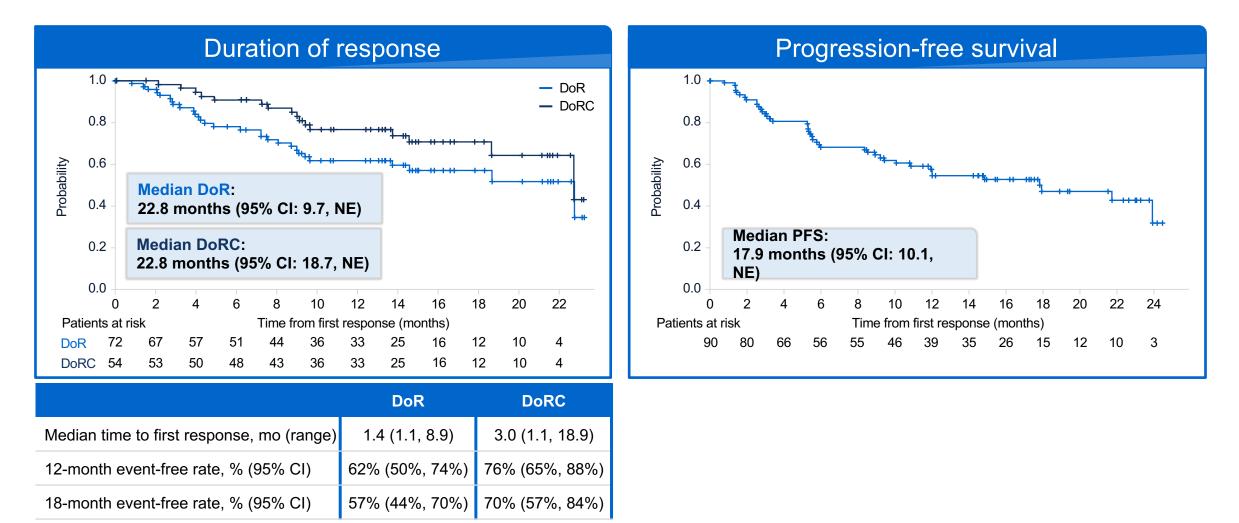
*assessed by CT and PET-CT using Cheson 2007 criteria²; Ab, antibody; CR, complete response; CT, computed tomography; D, Day; DoR, duration of response; IRF, independent review facility; ORR, objective response rate; PET, positron emission tomography; PFS, progression-free survival; PR, partial response; Q3W, once every 3 weeks; SD, stable disease

1. Dreyling et al. J Clin Oncol 2017;35:3898–905 2. Cheson et al. J Clin Oncol 2007;25:579–86

High affinity binding to CD20 on B cells

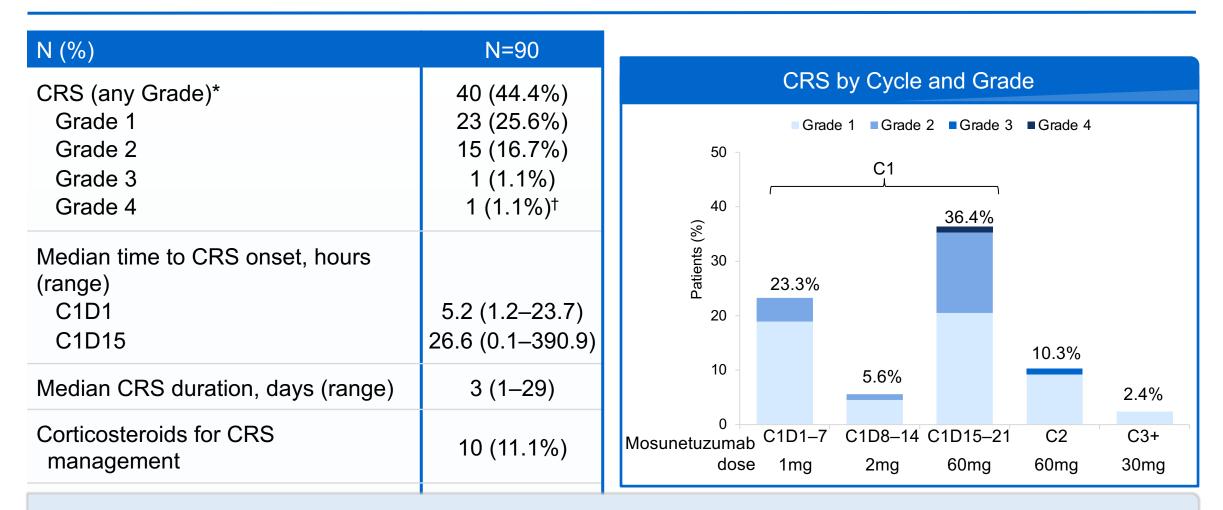
Silent Fo region CD3 T-cell engagement

Duration of response and progression-free survival



DoRC, duration of response in complete responders; DoR, duration of response in responders; mo, month; NE, not estimable

Cytokine release syndrome



CRS was predominately low Grade and in Cycle 1. All events resolved.

MOSUN+LENALIDOMIDE PHASE 1B

Key inclusion criteria

- CD20+ FL Grade 1–3a
- R/R to ≥1 prior chemo-immunotherapy regimen including an aCD20 antibody; prior lenalidomide allowed
- ECOG PS 0–2

M-Len administration

Mosunetuzumab

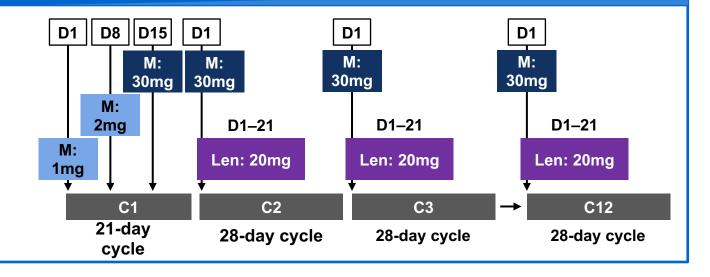
- IV administration for 12 cycles (C1: Q3W; C2–12: Q4W)
- C1 step-up dosing (CRS mitigation)
- No mandatory hospitalization

Lenalidomide

• Oral administration for 11 cycles (C2–12)

Objectives

- Primary: safety and tolerability of M-Len
- Other: efficacy (response, durability of response) and pharmacokinetics

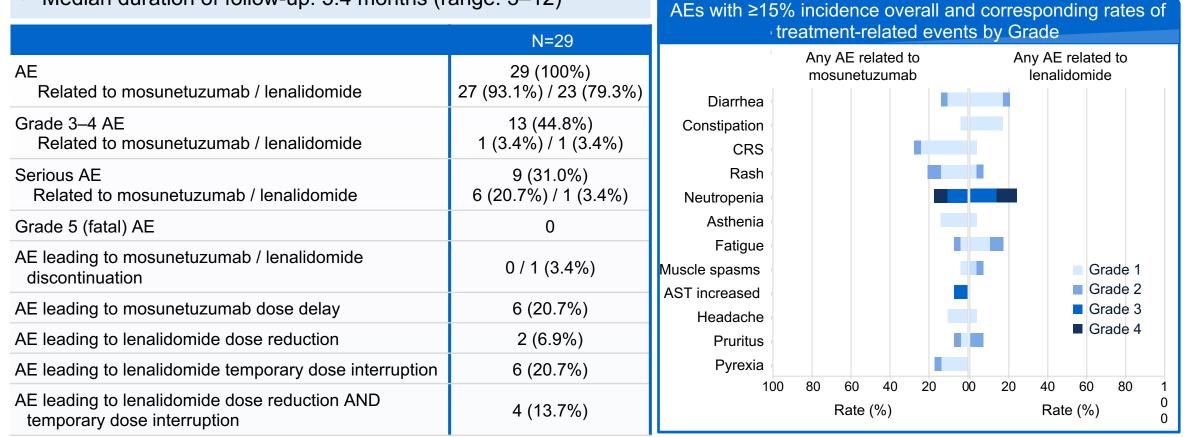


C, Cycle; CRS, cytokine release syndrome; D, Day; IV, intravenous; Q3W, once every 3 weeks; Q4W, once every 4 weeks

Morschhauser ash 2021 abstract

Adverse event summary

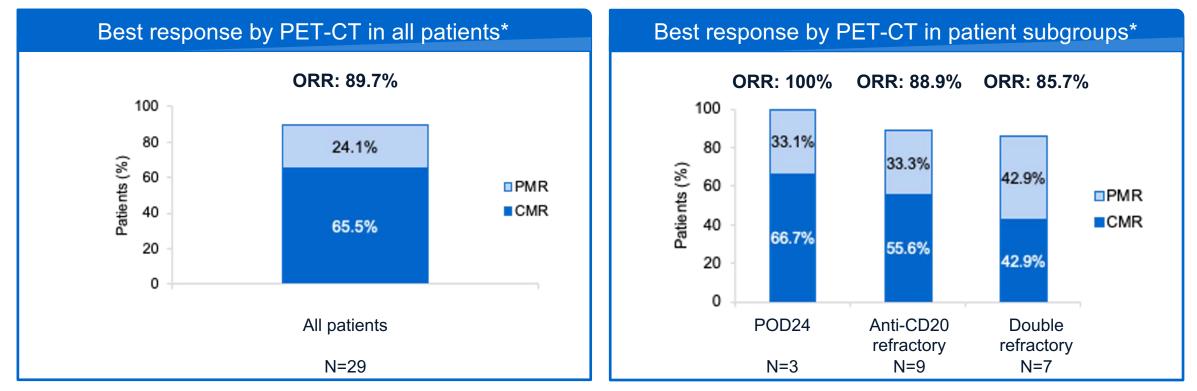
• Median duration of follow-up: 5.4 months (range: 3–12)



• M-Len had a favorable safety profile. No AEs led to mosunetuzumab discontinuation.

MOSUN+LEN PHASE 1B EFFICACY

 Median time to first / best response: 2.5 mo (range: 1.4–5.3) / 2.5 mo (range: 1.4– 10.7)

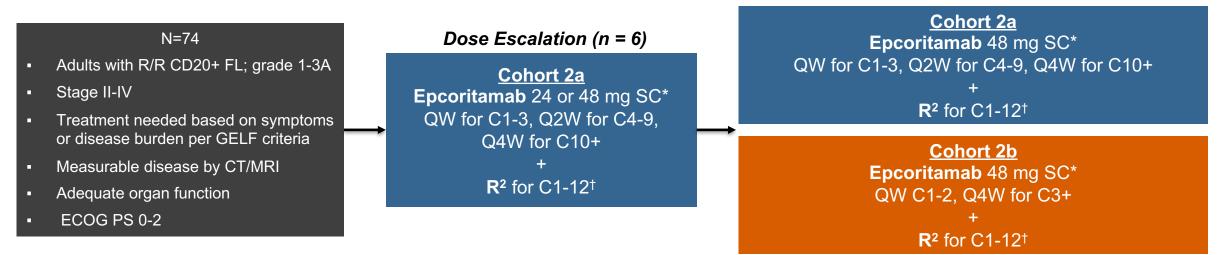


• High ORR and CMR rate in overall population and in patients with high-risk disease

*assessed by investigators using Lugano 2014 criteria¹; CMR, complete metabolic response; mo, months; ORR, overall response rate; PET-CT, positron emission tomography-computed tomography; PMR, partial metabolic response

Bispecific Ab Epcoritamab + R2 in R/R FL Phase I/II EPCORE NHL-2 Trial

Dose Expansion (n = 68)

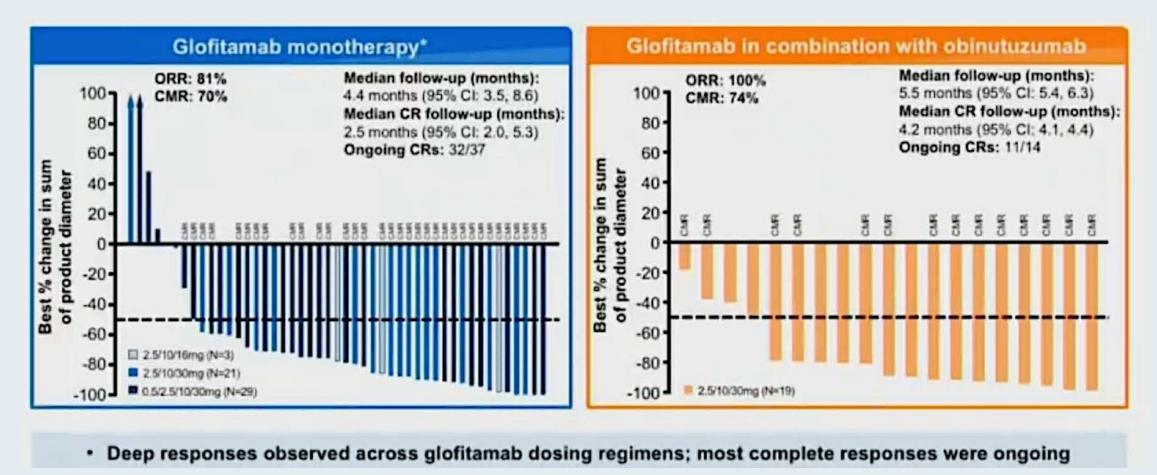


Best Overall	Arn	Arm 2b	
Response,* n (%)	At Any Time (n = 28 [†])	At 6 Wk (n = 27)	At 6 Wk (n = 28)
ORR	28 (100)	25 (93)	26 (93)
CMR	27 (96)	19 (70)	17 (61)
• PMR	1 (4)	6 (22)	9 (32)
SD	0	2 (7)	1 (4)
PD	0	0	1 (4)

- Half of patients experienced CRS, which was predominantly low grade and resolved in all cases
- 1 patient experienced ICANS (grade 2) that resolved

Falchi L, et al. J Clin Oncol. 2022;40(suppl 16):7524.

Phase I/II Study of Glofitamab as Monotherapy or in Combination with Obinutuzumab for R/R FL



- Myelosuppression was more common with the combination
- CRS rates were high and comparable, and cases were mainly low grade

Morschhauser F et al. ASH 2021; Abstract 128.



Conclusions

- Outcomes for the majority of patients with FL are favorable.
- Balancing the goals of therapy with patient specific characteristics generally informs treatment selection given the number of therapies available.
- An unmet need is identifying optimal sequencing of therapy or predictive biomarkers.
- The goal of treatment is to achieve a normal life expectancy without negatively impacting quality of life.

APPENDIX



Obinutuzumab plus chemotherapy demonstrates long-term benefit over rituximab plus chemotherapy in patients with previously untreated follicular lymphoma: final analysis of the GALLIUM study

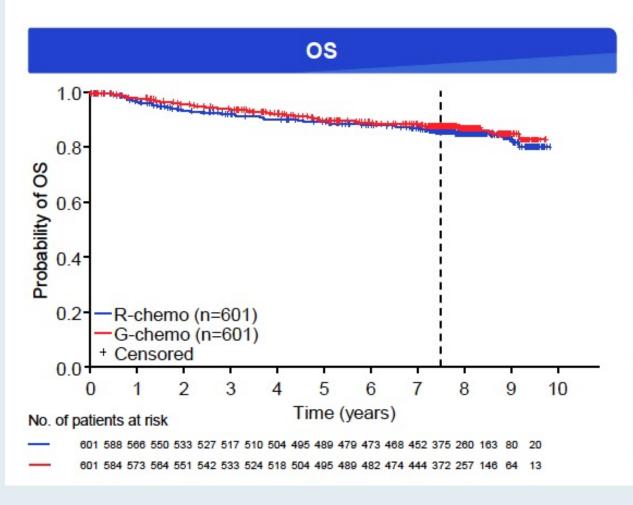
William Townsend,¹ Wolfgang Hiddemann,² Christian Buske,³ Guillaume Cartron,⁴ David Cunningham,⁵ Martin JS Dyer,⁶ John G Gribben,⁷ Elizabeth Phillips,⁸ Martin Dreyling,² John F Seymour,⁹ Andrew Grigg,¹⁰ Judith Trotman,¹¹ Tong-Yu Lin,¹² Xiao-Nan Hong,¹³ Dirk Kingbiel,¹⁴ Tina G Nielsen,¹⁴ Andrea Knapp,¹⁴ Michael Herold,¹⁵ Robert Marcus¹⁶

¹Cancer Research UK and UCL Cancer Trials Centre, University College Hospitals London, London, United Kingdom; ²Ludwig-Maximilians-University Hospital Munich, Munich, Germany; ³Universitätsklinikum Ulm, Ulm, Germany; ⁴CHU Montpellier, Montpellier, France; ⁵Royal Marsden Hospital, Sutton, United Kingdom; ⁶Ernest and Helen Scott Haematological Research Institute, University of Leicester, Leicester, United Kingdom; ⁷Queen Mary, University of London, St Bartholomew's Hospital, London, United Kingdom; ⁸University of Manchester, The Christie Hospital and National Institutes of Health Research Manchester Biomedical Research Centre, Manchester, United Kingdom; ⁹Peter MacCallum Cancer Centre, the Royal Melbourne Hospital, and University of Melbourne, Melbourne, Australia; ¹⁰Austin Hospital, Austin, Australia; ¹¹Concord Repatriation General Hospital, University of Sydney, Concord, Australia; ¹²Sun Yat-Sen University Cancer Centre, State Key Laboratory of Oncology in South China, and Collaborative Innovation Centre for Cancer Medicine, Guangzhou, China; ¹³Fudan University Shanghai Cancer Centre, Shanghai, China; ¹⁴F. Hoffmann-La Roche Ltd, Basel, Switzerland; ¹⁵HELIOS-Klinikum Erfurt, Erfurt, Germany; ¹⁶Kings College Hospital, London, United Kingdom





GALLIUM Final Analysis: Overall Survival



OS	G-chemo (n=601)	R-chemo (n=601)		
Patients with event, n (%)	76 (12.6)	86 (14.3)		
7-year OS, % (95% CI)	88.5 (85.6–90.9)	87.2 (84.1–89.7)		
HR (95% CI)*	0.86 (0.63–1.18)			
P-value	0.36			

G-chemo: 4% died due to PD, 4% due to AEs[†]

R-chemo: 6% died due to PD, 5% due to AEs[†]



Townsend W et al. EHA 2022; Abstract S206.

GALLIUM Final Analysis: Safety Summary

	Inductio	on phase	Maintenar	nce phase	Observation/fo	ollow-up phase
	G-chemo (n=595)	R-chemo (n=597)	G-chemo (n=540)	R-chemo (n=526)	G-chemo (n=577)	R-chemo (n=572)
Any Grade AE,* n (%)	589 (99.0)	585 (98.0)	517 (95.7)	479 (91.1)	254 (44.0)	208 (36.4)
Grade ≥3, n (%)	368 (61.8)	350 (58.6)	216 (40.0)	174 (33.1)	123 (21.3)	90 (15.7)
SAEs, n (%)	168 (28.2)	147 (24.6)	132 (24.4)	114 (21.7)	99 (17.2)	83 (14.5)
Most common AEs of interes	st, n (%)					
Neutropenia Grade ≥3	270 (45.4) 241 (40.5)	257 (43.0) 223 (37.4)	114 (21.1) 100 (18.5)	79 (15.0) 63 (12.0)	21 (3.6) 20 (3.5)	12 (2.1) 10 (1.7)
Infections Grade ≥3	309 (51.9) 45 (7.6)	294 (49.2) 45 (7.5)	382 (70.7) 65 (12.0)	317 (60.3) 54 (10.3)	131 (22.7) 50 (8.7)	105 (18.4) 33 (5.8)
Infusion-related reactions Grade ≥3	410 (68.9) 72 (12.1)	354 (59.3) 43 (7.2)	45 (8.3) 4 (0.7)	45 (8.6) 2 (0.4)	1 (0.2) 0	1 (0.2) 0



GALLIUM Final Analysis: Fatal AEs and Second Malignancies

	G-chemo					R-ch	emo	
Grade 5 AEs	+ CHOP (n=194)	+ CVP (n=60)	+ benda (n=338)	Overall (n=595)*	+ CHOP (n=203)	+ CVP (n=56)	+ benda (n=338)	Overall (n=597)
Grade 5 AEs, n (%)	5 (2.6)	1 (1.7)	20 (5.9)	26 (4.4)†	5 (2.5)	1 (1.8)	21 (6.2)	27 (4.5)†
Events since primary analysis, ¹ n	2	0	0	2	1	0	6	7

Second malignancies (malignant and unspecified tumors)*	G-chemo (n=595)	R-chemo (n=597)
All grades, %	13.1	9.9
Grade ≥3	8.4	6.5

- The difference in rates of second malignancies between arms was predominantly driven by:
 - Non-melanoma skin cancers: G-chemo, 3.9%; R-chemo, 2.8%
 - Hematological malignancies: G-chemo, 1.2%;[†] R-chemo, 0.3%[‡]



Townsend W et al. EHA 2022; Abstract S206.

Lancet Oncol 2022;23(8):1021-30.

Articles

Zandelisib with continuous or intermittent dosing as monotherapy or in combination with rituximab in patients with relapsed or refractory B-cell malignancy: a multicentre, first-in-patient, dose-escalation and dose-expansion, phase 1b trial

John M Pagel*, Jacob D Soumerai*, Nishitha Reddy, Deepa Jagadeesh, Anastasios Stathis, Adam Asch, Huda Salman, Vaishalee P Kenkre, Alexia Iasonos, Judith Llorin-Sangalang, Joanne Li, Andrew D Zelenetz





Antitumor Activity of Zandelisib in Patients with Relapsed/Refractory FL

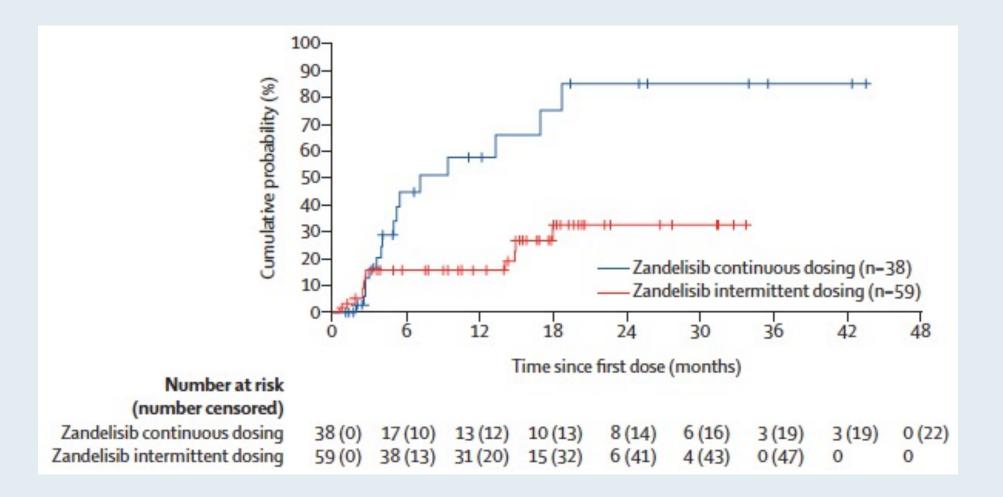
• During the dose-escalation phase, 60 mg of zandelisib was declared as both the minimum biologically effective dose and the recommended Phase II dose for further evaluation

	Evaluable patients	Overall response	Complete response
Follicular lymphoma			
Overall	62	51 (82%;70-91)	14 (23%; 13-35)
Zandelisib monotherapy	41	32 (78%; 62-89)	9 (22%;11-38)
Zandelisib plus rituximab	21	19 (90%; 70-99)	5 (24%; 8-47)
Refractory to rituximab*	8	7 (88%; 47-100)	1 (13%; 0-53)
Relapsed to rituximab*	13	12 (92%; 64-99)	4 (31%; 9-61)
Continuous dosing group (zandelisib monotherapy)	25	19 (76%; 55–91)	<mark>4 (16%; 4–36)</mark>
Intermittent dosing group	37	32 (86%; 71-95)	10 (27%; 14-44)
Zandelisib monotherapy	18	14 (78%; 52-94)	5 (28%; 10-53)
Zandelisib plus rituximab	19	18 (95%;74-100)	5 (26%; 9-51)

• Intermittent dosing of zandelisib did not result in reduced efficacy compared to continuous dosing



Time to Grade 3 or Worse Adverse Events of Special Interest with Zandelisib by Dosing Group





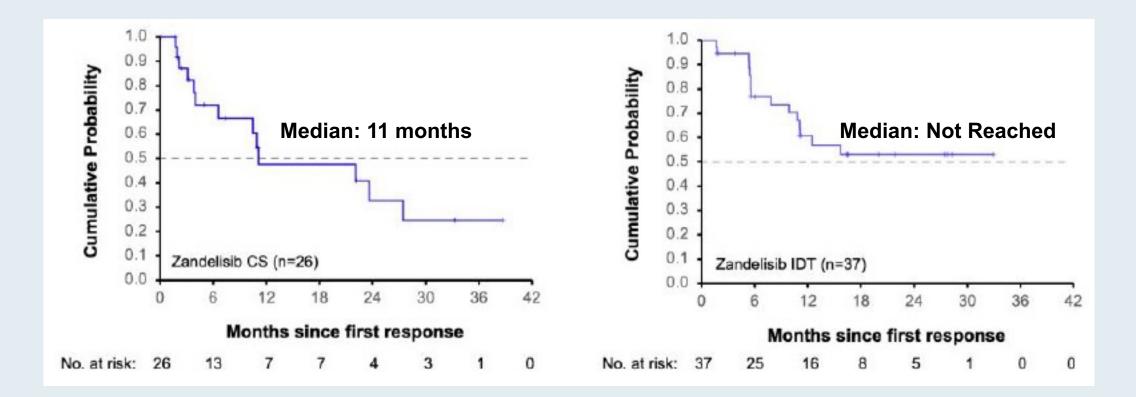
Adverse Events of Special Interest with Zandelisib by Dosing Group

	Continuous dosing group (n=38)			Intermitte	nt <mark>dosing</mark> g	roup (n=59)*
	Grade 1–2	Grade 3	Grade 4	Grade 1–2	Grade 3	Grade 4
Diarrhoea or colitis	9 (24%)	9 (24%)	0	22 (37%)	5 (8%)	0
Rash, all types	12 (32%)	2 (5%)	0	14 (24%)	3 (5%)	0
ALT or AST elevation	8 (21%)	2 (5%)	0	13 (22%)	3 (5%)	0
Lung infection or pneumonia	1 (3%)	6 (16%)	0	2 (3%)	1 (2%)	0
Mucositis	6 (16%)	1 (3%)	0	1(2%)	0	0
Non-infectious pneumonitis	0	0	0	1 (2%)	1(2%)	0

Zandelisib 60 mg once daily on an intermittent dosing schedule was safe, with low frequency of Grade 3 or worse adverse events

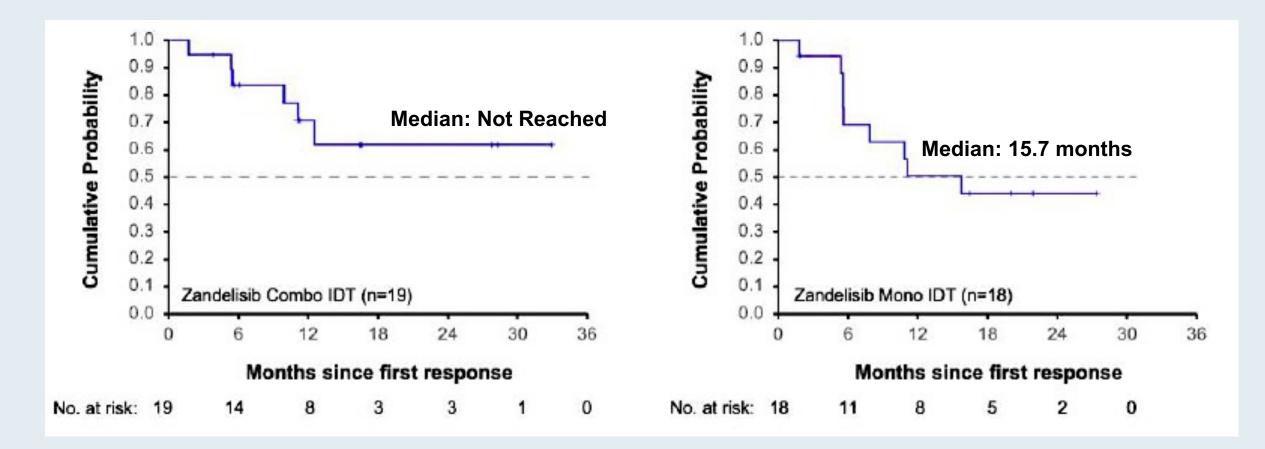


PFS for Patients with FL by Zandelisib Dosing Schedule





PFS by Treatment Arm for Patients with FL Who Received Zandelisib Intermittent Dosing Schedule





Response Rate for Patients with R/R FL and Safety in the Overall Population in a Phase Ib Trial of Zandelisib

Patients with R/R FL						
	Zandelisib 180 mg (n = 5)	Total (N = 21)				
Objective response rate	5 (83%)	9 (90%)	4 (80%)	18 (86%)		

No dose-limiting toxicities were observed, and antitumor activity was similar across the evaluated doses.

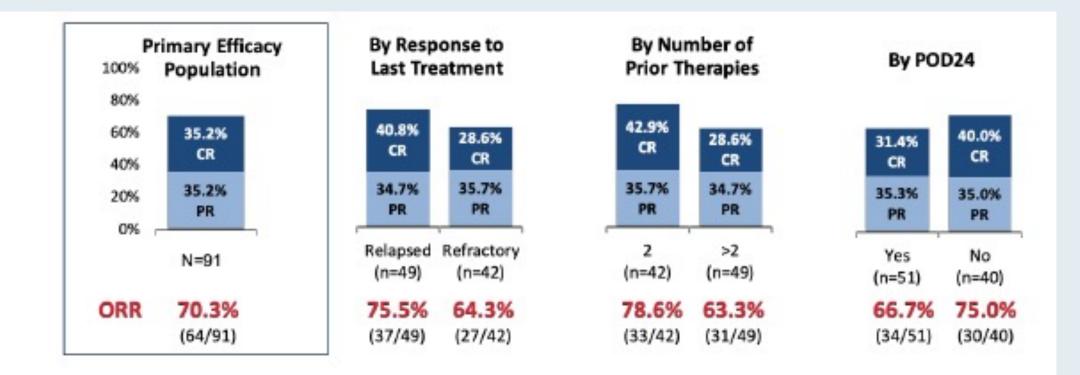


Primary Efficacy and Safety Analysis of a Global Phase II Study of Zandelisib Administered by Intermittent Dosing (ID) in Patients with Relapsed or Refractory (R/R) Follicular Lymphoma (FL): The TIDAL Study

Phillips T et al. SOHO 2022;Abstract 271.



TIDAL: Overall Response Rates with Intermittent Dosing of Zandelisib



- Disease control (CR+PR+SD) in 77 patients (85%)
- Follow-up is immature to accurately estimate duration of response



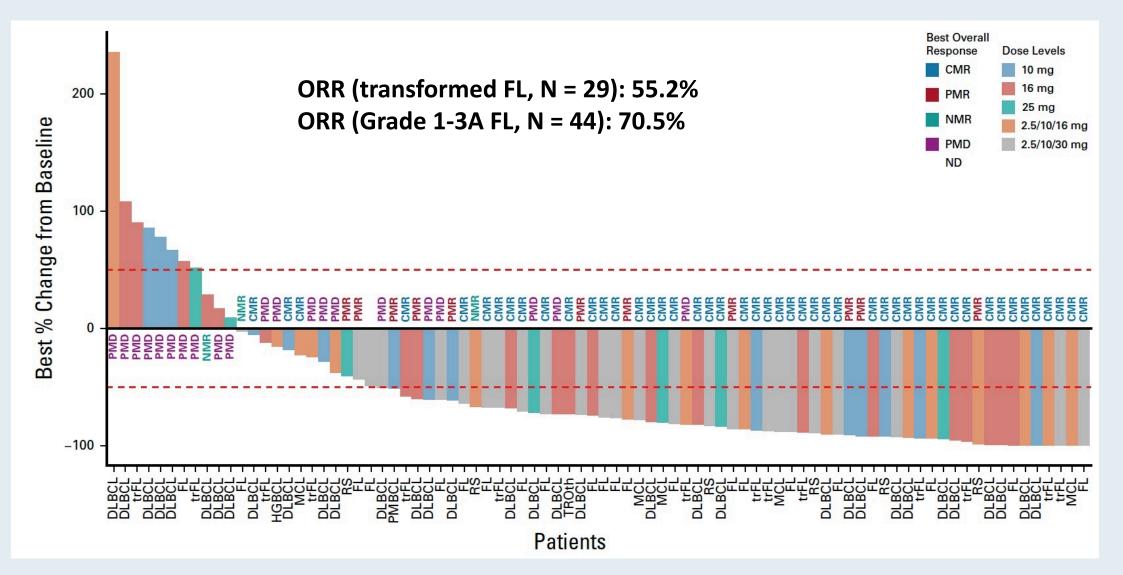
Glofitamab, a Novel, Bivalent CD2O-Targeting T-Cell–Engaging Bispecific Antibody, Induces Durable Complete Remissions in Relapsed or Refractory B-Cell Lymphoma: A Phase I Trial

Martin Hutchings, PhD¹; Franck Morschhauser, MD, PhD²; Gloria Iacoboni, MD^{3,4}; Carmelo Carlo-Stella, MD⁵; Fritz C. Offner, MD, PhD⁶; Anna Sureda, MD, PhD⁷; Gilles Salles, MD⁸; Joaquín Martínez-Lopez, MD, PhD, MBA⁹; Michael Crump, MD¹⁰; Denise N. Thomas, MSc¹¹; Peter N. Morcos, PharmD¹¹; Cristiano Ferlini, MD¹¹; Ann-Marie E. Bröske, PhD¹²; Anton Belousov, PhD¹³; Marina Bacac, PhD¹³; Natalie Dimier, PhD¹⁴; David J. Carlile, PhD¹⁴; Linda Lundberg, PhD¹⁵; David Perez-Callejo, MD, PhD¹⁵; Pablo Umaña, PhD¹³; Tom Moore, MD¹²; Martin Weisser, MD¹²; and Michael J. Dickinson, MBBS, DMedSci¹⁶

J Clin Oncol 2021;39:1959-70.



Response to Glofitamab in Patients with R/R B-Cell Lymphomas





Hutchings M et al. J Clin Oncol 2021;39:1959-70.

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Glofitamab as Monotherapy and in Combination with Obinutuzumab Induces High Complete Response Rates in Patients with Multiple Relapsed or Refractory (R/R) Follicular Lymphoma (FL)

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