

MAHOGANY: A Phase 3 Trial of Zanubrutinib Plus Anti-CD20 Antibodies vs Lenalidomide Plus Rituximab in Patients With Relapsed or Refractory Follicular or Marginal Zone Lymphoma



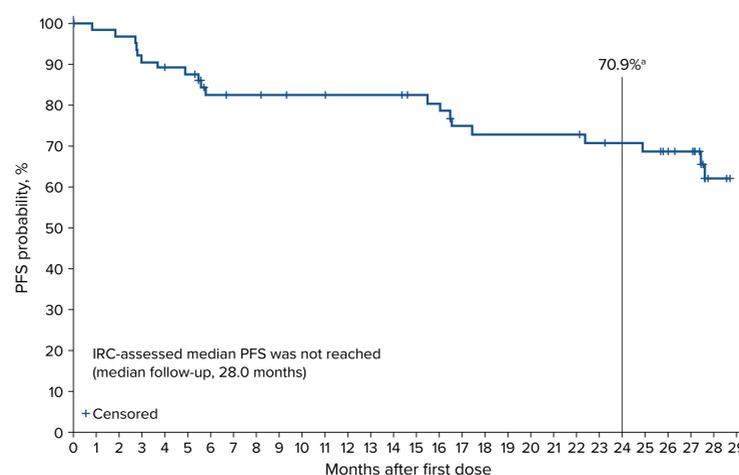
Loretta J. Nastoupil,¹ Yuqin Song,² Laurie H. Sehn,³ Clémentine Sarkozy,⁴ Pier Luigi Zinzani,⁵ Antonio Salar,⁶ Jun Zhang,⁷ Sha Huang,⁷ Julie Wang,⁷ Richard Delarue,⁷ Judith Trotman⁸

¹The University of Texas MD Anderson Cancer Center, Houston, TX; ²Peking University Cancer Hospital and Institute, Beijing, China; ³BC Cancer and the University of British Columbia, Vancouver, BC, Canada; ⁴Institut Curie, Saint Cloud, Paris, France; ⁵University of Bologna, Bologna, Italy; ⁶Hospital del Mar, Barcelona, Spain; ⁷BeiGene (Shanghai) Co, Ltd, Shanghai, China, and BeiGene USA, Inc, San Mateo, CA, USA; ⁸Concord Repatriation General Hospital, University of Sydney, Concord, NSW, Australia

BACKGROUND

- Relapsed/refractory (R/R) disease is common in patients with follicular lymphoma (FL) and marginal zone lymphoma (MZL)
- Zanubrutinib is a second-generation, potent, specific Bruton tyrosine kinase (BTK) inhibitor approved in the US for the treatment of chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL), Waldenström macroglobulinemia (WM), MZL, and mantle cell lymphoma¹
 - In patients with CLL/SLL² and WM,³ zanubrutinib was shown to be more effective and better tolerated than ibrutinib, a first-generation BTK inhibitor
- Previous findings have suggested that zanubrutinib may lead to improved responses in R/R MZL and FL
 - In the phase 2 MAGNOLIA study in R/R MZL (NCT03846427), zanubrutinib led to an overall response rate (ORR) of 68.2% (complete response [CR] rate, 25.8%) as assessed by an independent review committee (IRC); median progression-free survival (PFS) was not reached (Figure 1)⁴
 - In the randomized phase 2 ROSEWOOD study in R/R FL (NCT03332017), zanubrutinib + obinutuzumab led to an IRC-assessed ORR of 69.0% (CR rate, 39.3%) and prolonged PFS (Figure 2)⁵

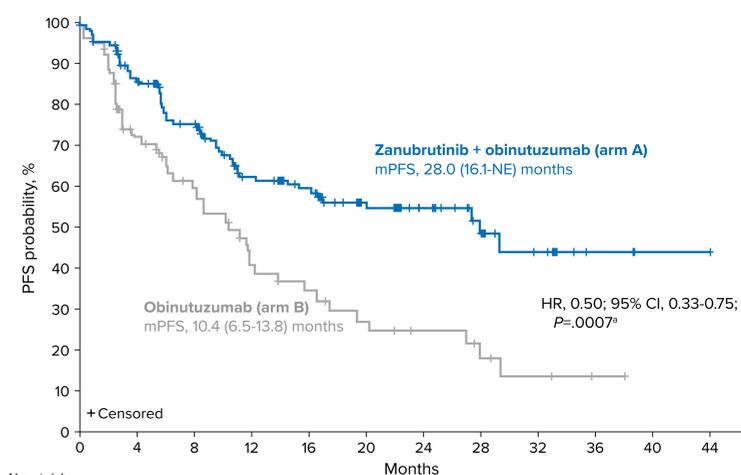
Figure 1. PFS by IRC in the Phase 2 MAGNOLIA R/R MZL Trial⁴



No. at risk 66 64 63 59 58 56 49 48 48 47 46 46 45 45 43 42 38 37 37 37 37 34 33 32 29 28 2 0

Adapted from Opat S, et al. *Blood*. 2022;140(suppl 1). Abstract 623. Data cutoff: May 4, 2022. IRC, independent review committee. * By PET and/or CT.

Figure 2. PFS by IRC in the Phase 2 ROSEWOOD R/R FL Trial⁵



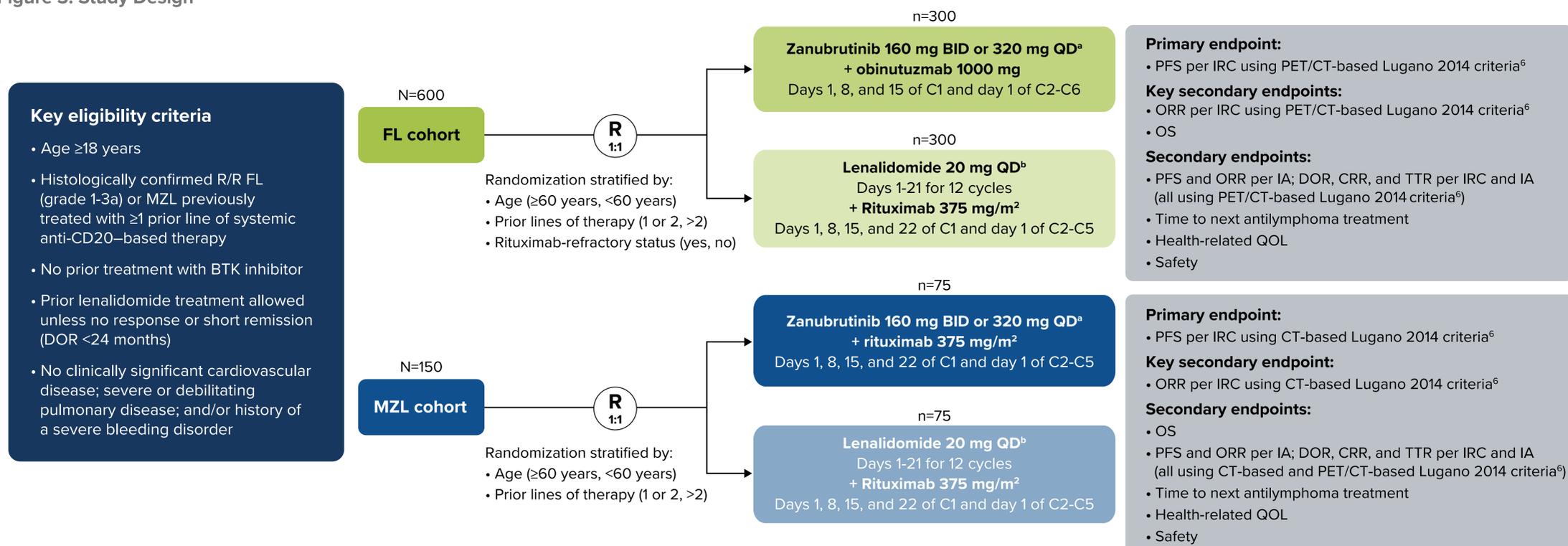
No. at risk
Arm A 145 135 116 96 92 79 67 62 56 45 38 35 25 22 15 10 9 5 3 3 1 1 0
Arm B 72 63 42 34 30 27 19 16 15 12 11 9 8 8 5 3 3 2 1 1 0

IRC, independent review committee. * Descriptive 2-sided P value.

METHODS

- MAHOGANY (BGB-3111-308; NCT05100862) is a randomized (1:1), open-label, multicenter phase 3 trial of zanubrutinib combined with the anti-CD20 antibodies obinutuzumab (FL) or rituximab (MZL) vs lenalidomide combined with rituximab in patients with R/R FL or MZL (Figure 3)

Figure 3. Study Design



One cycle is 28 days. C, cycle; CRR, complete response rate; IA, investigator assessment; IRC, independent review committee; QOL, quality of life; R, randomized; R/R, relapsed/refractory; TTR, time to response. * After completion of combination treatment, patients will receive zanubrutinib monotherapy until confirmed disease progression, unacceptable toxicity, withdrawal of consent, or study termination, whichever comes first. ^b Patients with creatinine clearance ≥30 mL/min but <60 mL/min will receive 10 mg QD. If the patient remains free of lenalidomide-related grade 3 or 4 toxicities for ≥2 cycles, the dose may be increased to 15 mg QD on days 1 to 21 of a 28-day cycle at the discretion of the treating physician from C3 to C12.

Study status

- Enrollment for MAHOGANY began in March 2022, and the study is currently recruiting
- Approximately 300 study sites in 25 countries are planned (Figure 4), with an estimated enrollment of 750 patients

Figure 4. Planned Study Sites



REFERENCES

- Brukins (zanubrutinib). Prescribing Information. BeiGene, Ltd; 2023.
- Brown JR, et al. *N Engl J Med*. 2023;388(4):319-332.
- Tam CS, et al. *J Clin Oncol*. 2022;40(suppl 16). Abstract 7521.
- Opat S, et al. *Blood*. 2022;140(suppl 1). Abstract 623.
- Flowers CR, et al. Presented at 2023 ASCO Annual Meeting; June 2-6, 2023; Chicago, IL. Abstract 7545.
- Cheson BD, et al. *J Clin Oncol*. 2014;32(7):3059-3068.

DISCLOSURES

LJN received research funding from Janssen Biotech, Genentech/Roche, Epizyme, IGM Biosciences, Novartis, Caribou Biosciences, Gilead Sciences, Allogene Therapeutics, BMS/Celgene, and Takeda; honoraria from Gilead/Kite, Novartis, Janssen Oncology, TG Therapeutics, BMS, ADC Therapeutics, MorphoSys, Epizyme, Genmab, Takeda, Genentech/Roche, Caribou Biosciences, Medscape, Neil Love, and PearView; and travel support from Roche/Genentech; and had a consulting or advisory role with LRF Scientific, SIRPant, Interius Bio, ADC Therapeutics, AbbVie, Genentech, MEI, Denovo, Takeda, Caribou Biosciences, Incyte, and Janssen. YS has nothing to disclose. LS had a consulting or advisory role with AbbVie, Seagen, Janssen, Amgen, Roche/Genentech, Gilead Sciences, Kite, Merck, Teva, TG Therapeutics, AstraZeneca, Incyte, Sandoz-Novartis, Genmab, Celgene/BMS, and BeiGene; honoraria from Amgen, AbbVie, Gilead Sciences, Janssen-Ortho, Kite, Merck, Roche/Genentech, Seagen, Teva, AstraZeneca, Incyte, Sandoz-Novartis, Genmab, Celgene/BMS, and BeiGene; and research funding from Roche/Genentech and Teva paid to their institution. CS received honoraria from AbbVie; research funding from Roche; and travel support from Roche and Incyte; provided expert testimony on behalf of Incyte; and had a consulting or advisory role with Janssen, GSK, Incyte, and BMS. PLZ had a consulting or advisory role with Celltrion, Gilead Sciences, Janssen-Cilag, BMS, Servier, Sandoz, MSD, Roche, EUSA Pharma, Kyowa Kirin, AstraZeneca, Takeda, Secura Bio, TG Therapeutics, Novartis, ADC Therapeutics, Incyte, and BeiGene and participated in speakers bureaus for Celltrion, Gilead, Janssen-Cilag, BMS, MSD, AstraZeneca, Takeda, Roche, EUSA Pharma, Kyowa Kirin, Incyte, BeiGene, and Novartis. AS received research funding from AbbVie and Roche; participated in speakers bureaus for BeiGene and Roche; and received travel funds from Kite and Janssen. JZ and SH are employees of BeiGene and own stock in BeiGene. JW is an employee of BeiGene, has received travel funds from BeiGene, and owns stock in BeiGene and BMS. RD has been an employee of Celgene/BMS, is an employee of BeiGene, and owns stock in Celgene/BMS and BeiGene. JT has received research funding from BeiGene, Janssen, Pharmacyclics, Roche, Celgene/BMS, and Selectar and has served on an advisory board for BeiGene.

ACKNOWLEDGMENTS

The authors thank the patients and their families, investigators, co-investigators, and the study teams at each of the participating centers. This study was sponsored by BeiGene Co, Ltd. Medical writing support was provided by Jenna M. Gaska, PhD (Articulate Science, LLC), and was supported by BeiGene Co, Ltd.

CORRESPONDENCE

Loretta J. Nastoupil, MD
The University of Texas MD Anderson Cancer Center
Houston, TX
LNastoupil@mdanderson.org

Copies of this poster obtained through Quick Response (QR) code are for personal use only and may not be reproduced without permission from ASCO[®] and the authors of this poster. Per ASCO requirements when you scan this QR code you will be redirected to the ASCO meeting site.

