

Healthcare Resource Utilization and Costs Associated with Obinutuzumab plus Bendamustine versus Rituximab plus Bendamustine for First-Line Treatment of Follicular Lymphoma

Tu My To,^{1*} Jamie T. Ta,¹ Arpamas Seetasith,¹ Rongrong Wang,¹ Dominic Lai,¹ Sheila Shapouri¹

*Presenting author



Background

- Obinutuzumab (G) is an anti-CD20 monoclonal antibody approved in the US for 1L treatment of FL, relapsed or refractory FL, and 1L chronic lymphocytic leukemia.
- G plus chemotherapy (G-chemo) demonstrated superior progression-free survival versus rituximab (R) plus chemotherapy (R-chemo) in patients with previously untreated FL in the Phase III, randomized GALLIUM study (NCT01332968).¹
- R-benda and G-benda are among the most commonly used chemoimmunotherapy (CIT) regimens for FL,² and information on comparative real-world HRU and real-world costs associated with G-chemo vs R-chemo in previously untreated FL patients is limited.
- The aim of this study was to compare HRU and costs for G-benda and R-benda for the 1L treatment of FL using US claims databases.

Patients included in this retrospective cohort study had a diagnosis of FL between February 1, 2015 and September 30, 2020, and received 1L R-benda or G-benda (Figure 1)

Figure 1: Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> Aged ≥18 years ≥1 inpatient claim or ≥2 outpatient claims with a diagnosis of FL between February 1, 2015 and September 30, 2020 Received 1L R-benda or G-benda between February 1, 2016 and March 31, 2020 	<ul style="list-style-type: none"> During the pre-index period: presence of other primary cancers (excluding lymphomas/leukemias), diffuse large B-cell lymphoma, National Comprehensive Cancer Network (NCCN)-recommended FL treatment or stem cell transplant During the study period: clinical trial participation or diagnosis of end-stage renal disease

- This study used administrative claims data from IQVIA PharMetrics® Plus and IBM® MarketScan Commercial and Medicare Supplemental databases.
- Date of the first claim for FL treatment was the index date.
- All patients had ≥12 months of pre- and ≥6 months of post-index continuous enrollment (CE) in medical and pharmacy benefits.
- Patients initiating 1L G-benda were propensity score matched 1:2 with patients initiating 1L R-benda based on age, sex, Charlson Comorbidity Index, region, and insurance payer type, which were determined during the pre-index period.
- All-cause and FL-related (i.e. claim that included an FL diagnosis) HRU and costs (2020 USD) PPPM during the follow-up period were reported. FL treatment-related costs (2020 USD) PPPM were also evaluated.
- Patients were followed until the earliest of initiation of second-line therapy, end of CE, or end of data availability.



Results

Overall, 270 patients were included in the matched 1L FL cohort

- A total of 91 patients receiving 1L G-benda and 839 patients receiving R-benda were identified.
- After propensity score matching, 90 (33.3%) patients receiving G-benda and 180 (66.7%) patients receiving R-benda for 1L treatment of FL were included.
- After matching, baseline characteristics were well-balanced between R-benda and G-benda patients (standardized mean difference [SMD] <0.1; **Table 1**).

Table 1: Demographics and baseline characteristics of FL patients treated with 1L G-benda propensity score matched 1:2 with those treated with 1L R-benda

	All N=270	G-benda N=90	R-benda N=180	SMD	P-value
Age at index, mean (SD)	59.1 (9.9)	58.9 (9.3)	59.2 (10.3)	-0.04	0.74
Sex, male (%)	122 (45.2%)	44 (48.9%)	78 (43.3%)	0.11	0.39
Region, n (%)					
Midwest	81 (30%)	25 (27.8%)	56 (31.1%)		
Northeast	29 (10.7%)	11 (12.2%)	18 (10%)	0.09	0.92
South	116 (43%)	39 (43.3%)	77 (42.8%)		
West	44 (16.3%)	15 (16.7%)	29 (16.1%)		
Insurance Payer, n (%)					
Commercial	181 (67%)	62 (68.9%)	119 (66.1%)		
Medicare Advantage/ Supplemental/ Risk	51 (18.9%)	17 (18.9%)	34 (18.9%)	0.11	0.96
Self-insured	38 (14.1%)	11 (12.2%)	27 (15%)		
Charlson Comorbidity Index, mean (SD)	1.7 (1.1)	1.8 (1.1)	1.7 (1.2)	0.01	0.62
Follow-up duration in months, Mean (SD) Median	12.1 (9.3) 7.4	11.5 (8.5) 7.6	12.4 (9.7) 7.4	-0.10	0.96

All-cause and FL-related HRU (PPPM and frequency counts) were similar for patients receiving 1L G-benda or R-benda

- Both all-cause and FL-related HRU were similar between R-benda and G-benda treated patients across all service categories (**Figure 1** and **Table 2**).

Figure 1: All-cause and FL-related HRU (PPPM)

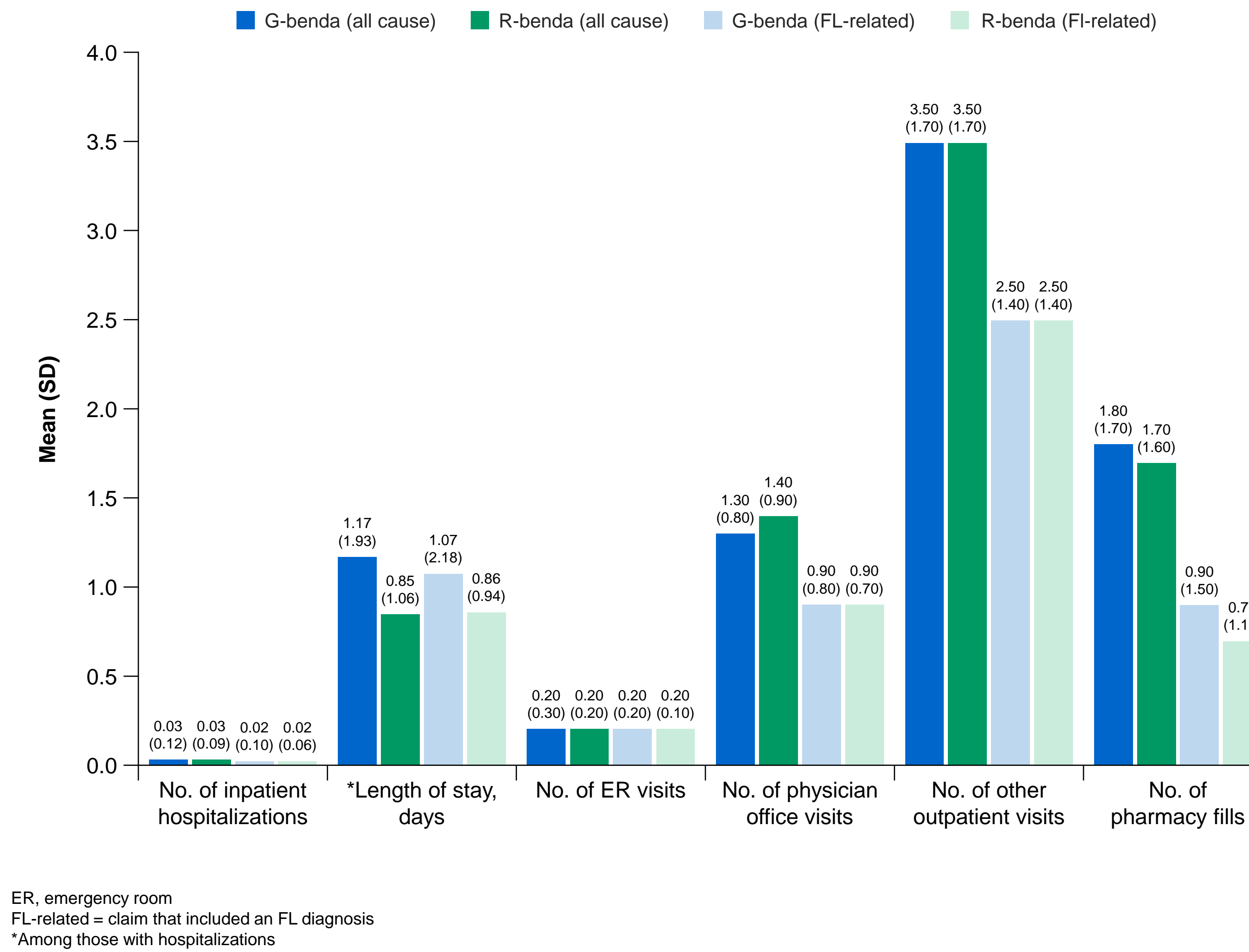


Table 2. All-cause and FL-related HRU frequency during follow-up*

	G-benda n=90	R-benda n=180	P-value
All-cause HRU, n (%)			
Any inpatient hospitalizations	15 (17%)	30 (17%)	1.00
Any ER visit	23 (26%)	52 (29%)	0.56
Any physician office visit	84 (93%)	170 (94%)	0.72
Any other outpatient visit	90 (100%)	180 (100%)	N/A
Any pharmacy fill	71 (79%)	149 (83%)	0.44
FL-related HRU, n (%)			
Any inpatient hospitalizations	11 (12%)	18 (10%)	0.58
Any ER visit	8 (9%)	11 (6%)	0.40
Any physician office visit	68 (76%)	148 (82%)	0.20
Any other outpatient visit	88 (99%)	177 (98%)	0.75
Any pharmacy fill	39 (44%)	67 (37%)	0.33

*Follow-up times were variable across patients in the cohort



Summary

This retrospective cohort study compared the real-world healthcare resource utilization (HRU) and total costs of care for obinutuzumab plus bendamustine (G-benda) versus rituximab plus bendamustine (R-benda) for first-line (1L) treatment of follicular lymphoma (FL)

Patients in US claims databases aged ≥18 years, who had ≥1 inpatient claim or ≥2 outpatient claims with a diagnosis of FL from February 1, 2015 to September 30, 2020, and received 1L G-benda (n=90) were propensity score matched 1:2 to those who received R-benda (n=180)

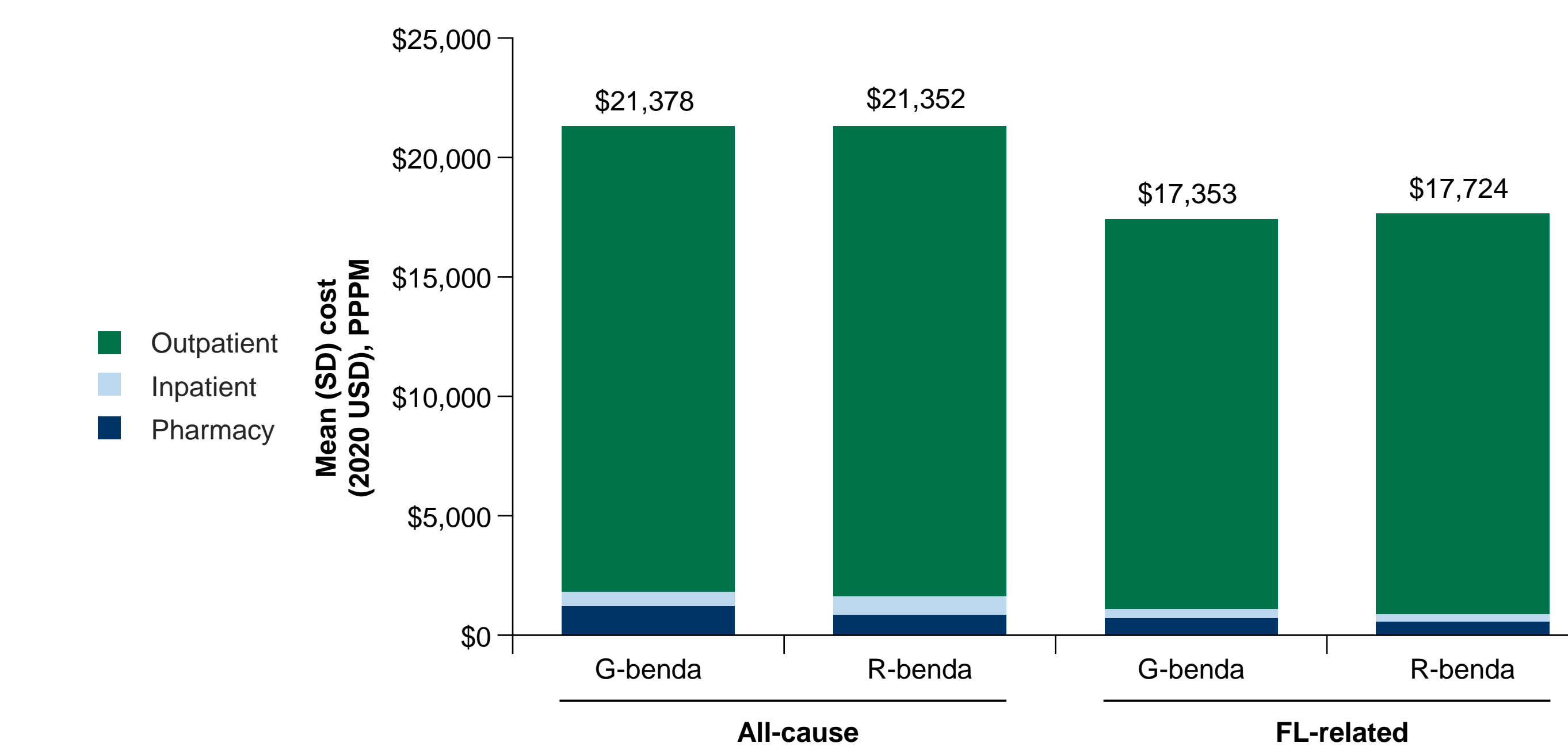
All-cause and FL-related HRU (PPPM) were similar between R-benda and G-benda treated patients across all service categories.

Total all-cause mean [SD] per patient per month (PPPM) costs were similar for patients receiving G-benda vs R-benda (\$21,378 [\$15,242] vs \$21,352 [\$14,145]; US dollars [USD]; p=0.77)

All-cause and FL-related costs were similar for patients receiving 1L G-benda or R-benda

- Mean [SD] total all-cause PPPM costs were similar for G-benda vs R-benda patients (\$21,378 [\$15,242] vs \$21,352 [\$14,145]; p=0.77 based on the nonparametric Wilcoxon rank sum test; **Figure 2**).
- The majority of total costs were FL-related, which were similar across both patient groups: \$17,353 (\$11,370) for G-benda vs \$17,724 (\$13,530) for R-benda (p=0.71).

Figure 2: All-cause and FL-related healthcare costs



	All-cause		FL-related	
	G-benda	R-benda	G-benda	R-benda
Total costs,*	\$21,378 (\$15,242)	\$21,352 (\$14,145)	\$17,353 (\$11,370)	\$17,724 (\$13,530)
Total medical costs	\$20,214 (\$15,557)	\$20,509 (\$14,424)	\$16,556 (\$11,694)	\$17,079 (\$13,641)
Total inpatient costs	\$612 (\$2,171)	\$789 (\$3,647)	\$355 (\$1,987)	\$249 (\$1,146)
Total outpatient costs	\$19,602 (\$15,425)	\$19,720 (\$14,096)	\$16,200 (\$11,459)	\$16,830 (\$13,649)
Total ER costs	\$69 (\$210)	\$68 (\$188)	\$12 (\$84)	\$4 (\$27)
Total physician office visit costs	\$143 (\$116)	\$175 (\$162)	\$100 (\$108)	\$116 (\$108)
Total other outpatient service costs	\$19,390 (\$15,394)	\$19,478 (\$14,037)	\$16,089 (\$11,426)	\$16,710 (\$13,621)
Total pharmacy costs	\$1,164 (\$4,346)	\$844 (\$3,296)	\$797 (\$2,803)	\$646 (\$3,201)

*All values are mean (SD)
FL-related = claim that included an FL diagnosis. USD = United States Dollar.

References

- Marcus R, et al. N Engl J Med 2017;377:1331-4.
- Ta J, et al. J Clin Oncol 2021;39(15 Suppl): Abstract e19534.

Acknowledgements

This study was sponsored by Genentech, Inc. The authors acknowledge Wenny Lin, PhD, MPH for her poster development contributions. Third party medical writing assistance, under the direction of Sheila Shapouri, was provided by Molly Heitz, PhD, of Ashfield MedComms, an Ashfield Health company, and was funded by Genentech, Inc.

Disclosures

TMT, JT: employment: Genentech; equity: Roche; AS: employment: Genentech; RW: employment: Genentech; previous employment: The SPHERE Institute; equity: Roche, Oragenics, Inc., Novavax, Inc., Aurinia Pharmaceuticals Inc., TG Therapeutics, Inc.; DL: employment and stockholder: Genentech; previous employment: AbbVie; equity: BMS and AbbVie; SS: employment: Genentech; equity: Roche.



Conclusions

- Our study found similar HRU and costs of care among patients with FL receiving 1L G-benda versus those receiving R-benda.
- This real-world economic analysis demonstrated similar costs with G-benda and R-benda, which complements clinical trial data that had demonstrated improved outcomes with G-chemo over R-chemo¹.

Presented at the 63rd ASH Annual Meeting and Exposition | 11-14 December 2021



Copies of this poster obtained through Quick Response (QR) Code are for personal use only and may not be reproduced without permission from ASH® and the author of this poster. Download this presentation: <https://bit.ly/3q6hsXr>

INTERACTIVE