

Treatment Preferences and Quality of Life in Patients with Relapsed / Refractory Follicular Lymphoma

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BACKGROUND

- Follicular lymphoma (FL) is a common, yet heterogeneous, indolent form of non-Hodgkin lymphoma
- Despite variability in its clinical course, the majority of FL patients will experience relapse or refractory (R/R) disease within 5 years of their initial therapy²
- Amidst an evolving treatment landscape for R/R FL, where available options differ in efficacy and toxicity, treatment selection requires careful consideration of patients' goals and preferences

OBJECTIVE

To characterize patient health-related quality of life (HRQoL) and identify key treatment attributes that influence patients' treatment preferences in R/R FL

METHODS

- A multi-country, cross-sectional survey was administered online to patients (≥18) years old) with R/R FL between September-December 2023
- The survey included two discrete choice experiments (DCE) one for 2nd line (2L) therapies and one for 3^{rd} line (3L) therapies – included in the survey to evaluate patients' treatment preferences
- Patients were prompted to select between two hypothetical treatment profiles that varied on 7 treatment attributes with 3-6 levels representing ranges of each level reported in literature (Table 1); attributes and levels were identified via targeted literature review and 1-on-1 in-depth interviews with patients prior to survey development
- Preference weights and relative attribute importance (RI) were estimated using hierarchical Bayesian modeling
- A sensitivity analysis removing the autologous stem cell transplant (ASCT) administration attribute level was conducted with the 3L DCE to better understand how patients' preferences were influenced by other attributes/levels, as the ASCT attribute level included a description of developing a serious condition requiring hospitalizations, which was likely to drive preferences

- Patient-reported outcome measures were administered to characterize HRQoL and reported descriptively (Table 2)

DCE Prompt: Assuming everything else about the opt currently on treatment,	tions below to be the same, which would you most prefer? If you are please imagine you are starting over.				
2L	3L				
Progression Free Survival (PFS)					
1 year 8 months 2 years 2 months 3 years 9 months	10 months 2 years 3 years 3 months				
Overall 5-Year Survival (OS)					
55 out of 100 65 out of 100 70 out of 100	43 65 74				
Serious Adverse Event (SAE)					
25 out of 100 35 out of 100 45 out of 100	27 45 58				
Cytokine Release Syndrome (CRS)					
0 out of 100 40 out of 100 78 out of 100	0 45 78				
Neurological Adverse Events (NAE)					
0 out of 100 30 out of 100 56 out of 100	0 30 56				
Fatigue					
0 out of 100 25 out of 100 45 out of 100	0 15 30 45				
Administration / Impact					
Blood collected; patient is admitted to the hospital 2-3 weeks later to receive 3 days of IV infusion, followed by another IV infusion; remain in hospital for another week; return to normal functioning after 4 weeks	Blood collected; patient is admitted to the hospital 2-3 weeks later to receive 3 days of IV infusion, followed by another IV infusion; remain hospital for another week; return to normal functioning after 4 weeks.				
Blood is collected; patient receives IV infusion and remains	for 2-3 weeks. Patients return to normal functioning in 3-6 months				
in the hospital for 2-3 weeks. Patients return to normal functioning in 3-6 months	Tablet is taken by mouth twice a day for 2 years.				
IV infusion during an outpatient visit 2 days every 4 weeks for 6 months.	IV infusion during an outpatient visit every week for 3 weeks, followed k IV infusion every 3 weeks for one year.				
IV infusion during an outpatient visit every week for 4	IV infusion during an outpatient visit 2 days every 4 weeks for 6 months				
weeks, followed by IV infusion 2 days every 4 weeks for 6 months, followed by one IV infusion every 2 months for 2 years.	Blood is collected; patient receives IV infusion and remains in the hospir for 2-4 weeks; return to normal functioning after 6-12 months; risk for developing a serious condition that most often occurs within the first 1 days but can occur years after the procedure and often requires hospitalization*				

Table 1. Attributes and levels included in DCE

*Attribute level associated with autologous stem cell transplant (ASCT)

METHODS (CONT.)

Table 2. Patient-Reported Outcome Measures

Measure	Description
Work Productivity and Activity Impairment Questionnaire (WPAI) ⁴	 Reference period: past 7-days Among Patients who Worked (n=122) Absenteeism: % of work-time missed due to health problems Presenteeism: % time impaired by health problems while at work Overall Work Productivity Impairment: absenteeism and presenteeism combined to provide su missed/impaired due to health problems Among All Patients Activity Impairment: % of time experienced impairment in daily activities due to health problems
Functional Assessment of Cancer Therapy-General and Lymphoma subscale (FACT- G/Lym) ⁵	 Composite Scores (higher score = better) FACT – G: physical + social/family + emotional + functional (range: 0-108) FACT - Trial Outcome Index: physical + functional + lymphoma (range: 0-116) FACT - Lym Total: physical + social + emotional + functional + lymphoma (range: 0-168)
EQ-5D-5L ⁶	 EQ-5D Utility Index Score: comprised of 5 dimensions of health – mobility, self-care, usual active anxiety/depression – that are summarized as an index score ranging from 0-1, where 0=death ar EQ Visual Analogue Scale (VAS): asks patients to self-rate their current health states using a set state') to 100 ('best imaginable health state')

RESULTS

Characteristics of Participating Patients (Table 3)

- The sample included 195 patients from the United States (n=50), Germany (n=40), the United Kingdom (n=35), Brazil (n=30), France (n=25), and Japan (n=15)
- On average, patients were 59 years old; 59.0% of the sample was female and 73.9% were married
- The largest % of patients lived in a major metropolitan area (34.9%) • Average time since FL diagnosis was 80.6 months (~6.7 years) and 97% reported that their FL was
- managed by a hematologist or oncologist. • The average time since patients received their first FL treatment was 70.0 months (~5.8 years)

Table 3. Patients' sociodemographic and clinical characteristics

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	Overall	United States	United Kingdom	France	Germany	Brazii	Japan
	N = 195	N = 50 (25.6%)	N = 35 (17.9%)	N = 25 (12.8%)	N = 40 (20.5%)	N = 30 (15.4%)	N = 15 (7.7%)
Age in years; Mean (SD)	59.2 (10.2%)	60.8 (4.6%)	63.4 (9.1%)	66.8 (7.3%)	56.9 (9.6%)	47.7 (12.5%)	59.9 (6.7%)
Gender; n (%)							
Male	80 (41.0%)	20 (40.0%)	16 (45.7%)	12 (48.0%)	14 (35.0%)	12 (40.0%)	6 (40.0%)
Female	115 (59.0%)	30 (60.0%)	19 (54.3%)	13 (52.0%)	26 (65.0%)	18 (60.0%)	9 (60.0%)
Marital Status; n (%)							
Committed relations / Married	144 (73.9%)	38 (76.0%)	24 (68.6%)	20 (80.0%)	27 (67.5%)	25 (83.3%)	10 (66.7%)
Single, never married, separated / divorced or	37 (19.0%)	4 (8.0%)	10 (28.6%)	5 (20.0%)	8 (20.0%)	5 (16.7%)	5 (33.3%)
Declined to answer	14 (7.2%)	8 (16.0%)	1 (2.9%)	0 (0.0%)	5 (12.5%)	0 (0.0%)	0 (0.0%)
Location of Residence: n (%)							
Major metropolitan area	68 (34.9%)	4 (8.0%)	6 (17.1%)	0 (0.0%)	24 (60.0%)	28 (93.3%)	6 (40.0%)
Urban area	35 (17.9%)	17 (34.0%)	7 (20.0%)	3 (12.0%)	2 (5.0%)	2 (6.7%)	4 (26.7%)
Suburb of a large city	33 (16.9%)	17 (34.0%)	12 (34.3%)	1 (4.0%)	1 (2.5%)	0 (0.0%)	2 (13.3%)
Small city,	31 (15.9%)	8 (16.0%)	4 (11.4%)	8 (32.0%)	8 (20.0%)	0 (0.0%)	3 (20.0%)
Rural or small town	28 (14.4%)	4 (8.0%)	6 (17.1%)	13 (52.0%)	5 (12.5%)	0 (0.0%)	0 (0.0%)
Months since FL was diagnosed; Mean (SD)	80.6 (60.8)	35.3 (18.4)	87.3 (55.2)	134.3 (100.6)	105.0 (50.4)	66.9 (21.3)	51.9 (31.3)
Healthcare professional managing FL; n (%)		· · · · · · · · · · · · · · · · · · ·					
GP / FP / Internist	3 (1.5%)	0 (0.0%)	0 (0.0%)	2 (8.0%)	1 (2.5%)	0 (0.0%)	0 (0.0%)
Hematologist	71 (36.4%)	2 (4.0%)	32 (91.4%)	18 (72.0%)	4 (10.0%)	1 (3.3%)	14 (93.3%)
Oncologist / Medical Oncologist	116 (59.5%)	48 (96.0%)	1 (2.9%)	4 (16.0%)	34 (85.0%)	28 (93.3%)	1 (6.7%)
Radiation Oncologist	2 (1.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.5%)	1 (3.3%)	0 (0.0%)
Another type of healthcare professional	2 (1.0%)	0 (0.0%)	2 (5.7%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Not Sure	1 (0.5%)	0 (0.0%)	0 (0.0%)	1 (4.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Months since receiving first FL treatment; Mean	70.0 (59.3)	31.9 (18.4)	73.6 (58.2)	122.4 (101.4)	86.5 (47.0)	61.4 (17.5)	36.3 (26.9)
(SD)	× /	× /	· · · · ·		× ,		× /
Number of FL treatments received; Mean (SD)	2.6 (1.3)	3.0 (1.2)	2.6 (0.9)	3.1 (1.7)	2.6 (1.5)	1.9 (0.8)	1.6 (1.2)
FL returned in 2 years (yes); n (%)	77 (39.5%)	29 (58.0%)	11 (31.4%)	9 (36.0%)	8 (20.0%)	19 (63.3%)	1 (6.7%)
bbreviations: FL: follicular lymphoma; GP: general practitioner; FP: family practitioner; SD: standard deviation							

Patient-Reported Outcomes

- Patients' mean EQ-5D scores ranged from 0.57 (Brazil) to 0.83 (Japan), with scores in all countries lower than published population norms^{6,7} (Figure 1; Panel A); mean EQ VAS scores were lowest in Germany and highest in Japan and France; average scores in each country were lower than published population norms^{6,7} (Figure 1; Panel B)
- Patients from Japan had the best FACT scores, followed by patients from France and Brazil; patients from Germany had the lowest FACT scores (Figure 2)
- Patients from Japan reported little WPAI; patients from the United States, France, Germany, and Brazil reported $\geq 50\%$ of their time at work in the past 7 days was impaired either via absenteeism or presenteeism (Figure 3)





■ Total ■ United States ■ United Kingdom ■ France ■ Germany ■ Brazil ■ Japan

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vities, pain/discomfort, and nd 1=perfect health cale of 0 ('worst imaginable health

RESULTS (CONT.)

Patient Treatment Preferences

- 2L (Figure 4; Panel A) Treatment preferences were most influenced by increases to PFS (RI=24.6%) and reducing the risk of NAE (RI=18.1%); reducing the risk of SAE and increasing OS influenced preferences least (RI: 7.2% and 9.5%, respectively)
- 3L (Figure 4; Panel B) Treatment administration and increases in PFS influenced preferences equally (RI: 25.2% and 24.5%, respectively). However, the administration regimen describing ASCT was largely driving the influence of administration, and when removed from the model (dark pink bars), administration was second to increases in PFS in terms of RI (PFS RI=28.0%; administration RI=15.6%); OS had greater RI in 3L settings compared to 2L setting (12.6% vs. 9.5%, respectively)

Figure 4. Relative attribute importance in the aggregate sample: 2L & 3L settings

(A) 2L FL therapy





event; PFS: median progression free survival; ASCT: autologous stem cell transplant

Figure 3. Work productivity and activity impairment in the past 7 days higher = worse) 70

productivity loss



Total United States United Kingdon France Germany Brazil Japan

Figure 5. Relative attribute importance stratified by country: 2L & 3L settings



10.0% 20.0% 30.0% 40.0% 50.0% 60.0% 70.0% 80.0% 90.0% 100.0% ■ PFS ■ NAE ■ Admin / Impact ■ CRS ■ Fatigue ■ OS ■ SAE

Note: RI estimates for treatment administration in the 3L DCE exclude the attribute level describing ASCT

Treatment Preference by Country (Figure 5)

- In 2L settings, increasing PFS was the most important attribute to patients from all countries, except Brazil, which patients preferred decreasing the risk of NAE over increasing PFS
- PFS was also the most important attribute in 3L settings, particularly among patients from the United Kingdom (RI=34.9%), France (RI=29.3%), and Japan (RI=28.6%)

LIMITATIONS

- Patients were recruited via convenience sampling; thus, preferences reported here may not generalize to the broader R/R FL patient population within their respective geographies
- DCEs are hypothetical in nature and therefore may not fully capture the complexity of treatment preferences for R/R FL patients

CONCLUSIONS

- Measures of WPAI and HRQoL show the negative impacts of FL on patients' lives across multiple geographies, particularly among patients from Germany
- PFS is the most significant factor influencing R/R FL patient treatment preferences, with patients expressing a willingness to tolerate increased SAEs in exchange for prolonged PFS.
- These results highlight the importance of delaying the worsening of R/R FL to preserve better quality of life

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DISCLOSURES

KK, KB, LK, FM, KP, PO are employees of Oracle Life Sciences, which was hired by Kite, a Gilead Company to oversee study design and execution; MR, SB, TB, GB and AP are employees and stockholders of Kite, a Gilead company