ELSEVIER

Blood 142 (2023) 3703–3704

The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

902.HEALTH SERVICES AND QUALITY IMPROVEMENT - LYMPHOID MALIGNANCIES

Glofitamab Results in Cost Savings Versus Epcoritamab in Diffuse Large B-Cell Lymphoma (DLBCL): A Total Cost of Care Analysis

Zahra Mahmoudjafari, PharmD[1], *Danilo Di Maio, PhD*[2], *Jia Li, PhD*[3], *Katherine L. Rosettie, MPH*[3], *Anthony Masaquel, PhDMPH*[3]

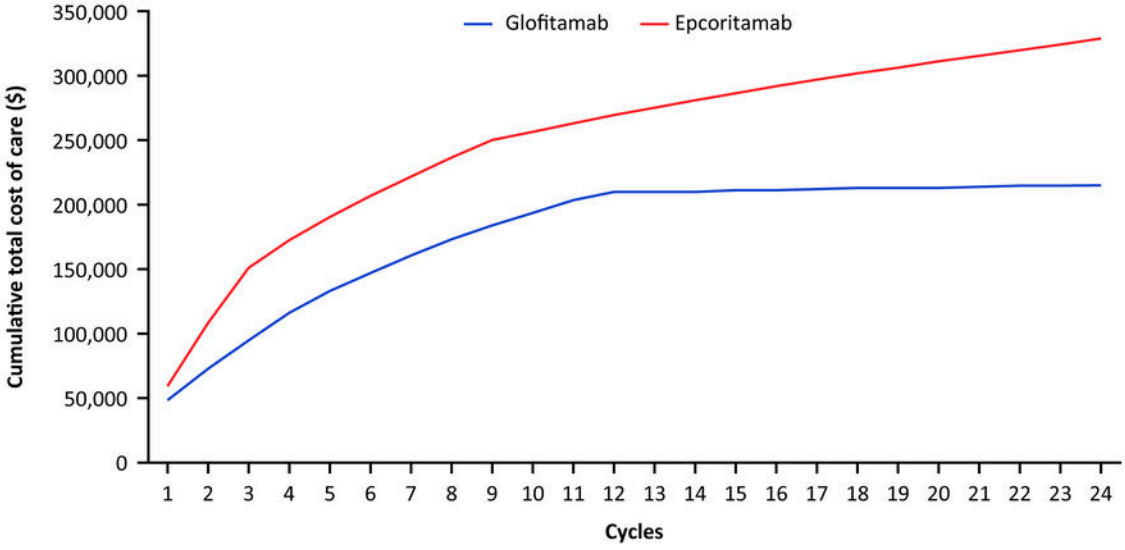
[1] The University of Kansas Health System, Kansas City, KS
[2] F. Hoffmann-La Roche Ltd, Basel, Switzerland
[3] Genentech, Inc., South San Francisco, CA

Background: Bispecific CD20xCD3 T-cell engaging antibodies, including glofitamab and epcoritamab, are a new class of treatment for DLBCL, with recent Food and Drug Administration approvals in the United States (US). Given the differences between glofitamab versus epcoritamab, respectively, with regards to 1) mode of administration (intravenous vs subcutaneous), 2) treatment course (12-cycle fixed-duration treatment vs treat to progression), 3) frequency of administration per cycle, and 4) drug acquisition costs, we compared the total costs of care for the two drugs across several time horizons.
Methods: Per-patient total cost of care was examined for glofitamab versus epcoritamab across various cost categories. Drug costs were based on the Wholesale Acquisition Cost reported in AnalySource ® 2023 and treatment administration costs were based on the Centers for Medicare & Medicaid Services physician fee schedule from 2023. Costs arising from adverse reactions, including all-grade cytokine release syndrome, were obtained from the Healthcare Cost and Utilization Project Database (2017) or from Badarocco et al. Transplant Cell Ther 2023. Routine care costs were acquired from Tkacz et al. Leuk Lymphoma 2020. The analysis was conducted from a US healthcare perspective. Subsequent treatment costs following the glofitamab or epcoritamab treatment regimens were not included. Glofitamab treatment costs were based on time-to-off-treatment Kaplan-Meier curves from the pivotal Phase II trial (NP30179; NCT03075696), which take into account discontinuation due to toxicity and progression, and epcoritamab treatment costs were based on progression free survival curves from Thieblemont et al. J Clin Oncol 2023 (EPCORE NHL-1; NCT03625037), extrapolated using parametric distribution methods. Glofitamab is administered intravenously every 21 days until disease progression or to a maximum of 12 cycles. Epcoritamab is administered subcutaneously every 28 days until disease progression. Per-patient total and incremental cumulative cost savings were estimated over 24 treatment cycles, and over 1, 5 and 10 years, as well as lifetime. We examined cost differences during Cycles 1-3 (when dose administrations for epcoritamab are the most frequent at 4 injections per cycle). As available overall survival data from both pivotal trials are still likely immature, the model used a common progression/survival probability for both treatments to minimize uncertainty in the estimation of total costs over time. Costs were adjusted to 2023 US dollars using the Consumer Price Index and included 3% discounting.
Results: Total costs per patient were lower for glofitamab versus epcoritamab, resulting in cost savings at every cumulative cycle (**Figure A**). The cost saving per patient with glofitamab versus epcoritamab across Cycles 1-3, when epcoritamab has the most injections per cycle, was $56,275 ($95,904 for glofitamab vs $152,179 for epcoritamab). Per-patient cost savings were also observed for glofitamab versus epcoritamab over all time horizons, including 1 year ($68,195), 5 years ($223,692), 10 years ($325,175), and over the lifetime ($503,075) (**Figure B**). Per-patient costs arising from drug treatments were consistently lower for glofitamab compared with epcoritamab (**Figure B**). Per-patient incremental adverse reaction costs ($364) and per-patient incremental treatment administration costs ($8,398) were higher for glofitamab versus epcoritamab, respectively, over 1 year.
Conclusions: Glofitamab results in per-patient cost savings compared with epcoritamab at every cumulative administration cycle, particularly in the first few cycles when epcoritamab has more frequent dosing per cycle than glofitamab. Furthermore, glofitamab has lower total costs across all time horizons examined in this study (1-year, 5-year, 10-year, and lifetime). The lower total costs with glofitamab can be attributed to 1) lower annual drug acquisition costs, 2) fixed-duration treatment with a maximum of 12 cycles, and 3) less frequent dosing in earlier cycles. Costs related to adverse reactions and treatment administration were higher for glofitamab. With lower drug costs overall, glofitamab offers greater healthcare budget predictability compared with epcoritamab, which is expected to translate to cost savings at the broader healthcare system and population levels.

Disclosures Mahmoudjafari: *Genentech, Inc.:* Consultancy; *Pfizer, Genentech, Inc., BMS, KITE, Sanofi, Janssen:* Honoraria; *Omeros:* Speakers Bureau. **Di Maio:** *F. Hoffmann La Roche Ltd:* Current Employment, Current equity holder in publicly-traded company. **Li:** *Genentech, Inc.:* Current Employment; *F. Hoffmann La Roche Ltd:* Current equity holder in publicly-traded company. **Rosettie:** *Genentech, Inc.:* Current Employment; *IQVIA:* Ended employment in the past 24 months; *F. Hoffmann La Roche Ltd:* Current equity holder in publicly-traded company. **Masaquel:** *Genentech, Inc.:* Current Employment; *F. Hoffmann La Roche Ltd:* Current equity holder in publicly-traded company, Current holder of *stock options* in a privately-held company.

Figure: (A) Cumulative total cost of care for glofitamab versus epcoritamab over 24 treatment cycles and **(B)** differences in total costs of care between glofitamab and epcoritamab across various time horizons.

A.



B.

	1-year time horizon			5-year time horizon			10-year time horizon			Lifetime time horizon		
	Glofitamab	Epcoritamab	Difference*	Glofitamab	Epcoritamab	Difference*	Glofitamab	Epcoritamab	Difference*	Glofitamab	Epcoritamab	Difference*
Total Costs	**$200,829**	**$269,024**	**−$68,195**	**$207,350**	**$431,042**	**−$223,692**	**$210,597**	**$535,772**	**−$325,175**	**$214,924**	**$717,999**	**−$503,075**
Drug	$160,737	$237,695	−$76,958	$160,737	$392,199	−$231,462	$160,737	$493,033	−$332,296	$160,737	$669,796	−$509,059
Treatment administration	$13,419	$5,021	$8,398	$13,419	$6,015	$7,405	$13,419	$6,663	$6,756	$13,419	$7,800	$5,620
Adverse reactions	$23,569	$23,204	$364	$23,569	$23,204	$364	$23,569	$23,204	$364	$23,569	$23,204	$364
Routine care	$3,104	$3,104	$0	$9,625	$9,625	$0	$12,872	$12,872	$0	$17,199	$17,199	$0

*glofitamab versus epcoritamab.

Figure 1

https://doi.org/10.1182/blood-2023-174918