

DEVELOPMENT SCIENCES: Innovation & Technology

TITLE

Leveraging Real World Data (RWD) to Accelerate Drug Development

SUMMARY

Polatuzumab team was interested in the percentage of patients with diffuse large B-Cell lymphoma (DLBCL) with hepatic impairment to assess the need of a dedicated study. Flatiron database was leveraged: < 6% DLBCL patients had moderate or severe hepatic impairment. The exclusion criteria for polatuzumab studies would exclude <9% of DLBCL patients if applied to the Flatiron RWD population. This indicates that polatuzumab study population covers most of Flatiron RWD and a dedicated study would be of limited added value. Polatuzumab drug development has thus been accelerated.

IMPACT

- Flatiron RWD was leveraged to compare with pivotal study population
- A dedicated study in moderate or severe hepatic impairment was waived
- Polatuzumab has been approved

NCI Classification of Hepatic Impairment		
	Total Bilirubin	ALT or AST
Normal		
Mild	B1: ≤ ULN B2: > 1-1.5x ULN	B1: > ULN B2: Any
Moderate	> 1.5-3x ULN	Any
Severe	>3x ULN	Any

Defined cutoffs: AST and ALT with cutoffs of 2.5 * ULN, where ULN is defined as 40 for AST and 50 for ALT. High bilirubin defined as > 1.2

Flatiron RWD patients classified according to hepatic function
5.8% of moderate or severe

Hepatic Function – NCI Classification	DLBCL Patients (n = 1341)
Normal	1052 (78.4)
Mild	206 (15.4)
Moderate	28 (2.1)
Severe	50 (3.7)

Polatuzumab pivotal study population and Flatiron patient population have similar proportion of patients with Moderate/Severe hepatic impairment (<6%).A dedicated study in this population would be difficult to conduct and could therefore be waived.

CONTACT

Dan Lu, Senior Scientist, Clinical Pharmacology
lu.dan@gene.com



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