Leveraging real-world data to support trial diversity action plans—a fit-for-purpose assessment in waldenström macroglobulinemia

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ABSTRACT

Background: The US Food and Drug Administration's draft guidance on diversity action plans (DAP) emphasizes the importance of enrolling participants from underrepresented populations in clinical studies. Rare diseases such as Waldenström macroglobulinemia (WM) present unique challenges for achieving diversity goals due to their low incidence rates, particularly in ethnic and racial minority patients (eg, 0.18 per 100,000 per year in African Americans). These challenges highlight the potential of real-world data (RWD) to augment clinical trials by assessing safety and other outcomes in minority populations.

Objectives: To evaluate the feasibility of leveraging RWD to assess the safety of zanubrutinib in ethnic and racial minority patients diagnosed with WM in the postmarketing setting.

Methods: A fit-for-purpose (FFP) assessment was conducted to evaluate the distribution of patients with WM treated with zanubrutinib (2021-2024) by ethnic and racial group. FFP criteria focused on database completeness, representativeness, and granularity in identifying racial and ethnic minority groups and relevant safety endpoints. Data were sourced from commonly used oncology research databases, including SEER-22 cancer registries, Symphony Health Solutions claims data, and TriNetX electronic health records. Assessment metrics included patient distribution by racial and ethnic group and the availability of data on safety outcomes such as atrial fibrillation, hypertension, and second primary malignancy.

Results: The FFP assessment identified minority representation among zanubrutinib-treated patients with WM across databases. Symphony Health Solutions recorded 438 patients initiating zanubrutinib as of July 31, 2024, including 22 African American (5.0%), 12 Hispanic (2.7%), and 9 Asian (2.1%) patients. Similarly, TriNetX identified 622 patients with WM initiating zanubrutinib as of September 16, 2024, including 23 Asian (3.7%), 20 African American (3.2%), and 11 Hispanic (1.8%) patients. Accrual rates in minority groups varied by database. During the most recent data refreshments in April and September 2024, 6-month rates were 9.5% in Symphony and 29.3% in TriNetX. Most databases could identify select safety outcomes through diagnosis, procedure, or prescription records, although differences in granularity were observed.

Conclusion: RWD databases can assess the safety of zanubrutinib in patients with WM from ethnic and racial minority groups in the postmarketing setting. Leveraging RWD can be an effective strategy to support DAP objectives, particularly when some patient groups are underrepresented in clinical studies or when study enrollment of patients with rare diseases is challenging.