BUDGET IMPACT ANALYSIS OF ZANUBRUTINIB FOR PATIENTS WITH TREATMENT-NAÏVE CHRONIC LYMPHOCYTIC LEUKEMIA OR SMALL LYMPHOCYTIC LYMPHOMA IN THE UNITED STATES

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OBJECTIVES: The randomized, phase 3 SEQUOIA trial (NCT03336333) compared the efficacy and safety of zanubrutinib, a next-generation Bruton’s tyrosine kinase inhibitor (BTKi), to bendamustine plus rituximab (BR) in patients with previously untreated chronic lymphocytic leukemia (CLL) or small lymphocytic lymphoma (SLL). The objective of this study is to develop a budget impact model (BIM) and estimate the incremental costs associated with using zanubrutinib in the population.

METHODS: The BIM combined epidemiological data, clinical trial data on disease progression and treatment duration, market share estimates, treatment-related costs, treatment monitoring and disease management costs, and adverse event costs for the approved comparators (BTK inhibitors and immunochemotherapies) and zanubrutinib, over a three-year time-horizon. Budget impact and per-member-per-month (PMPM) costs were estimated for the base-case scenarios of clinical practice with and without zanubrutinib. A blended payer perspective (80% commercial and 20% Medicare) was used. Deterministic sensitivity analyses (DSA) were conducted to assess parameter uncertainties and explore key model drivers.

RESULTS: In the base case, 31 patients out of 1 million were estimated to receive active treatment each year for treatment-naïve CLL. The overall budget impact was a reduction of $83,473 over a 3-year time horizon, representing a 0.22% cost-saving with the use of zanubrutinib. Total healthcare costs were $37.75m with zanubrutinib and $37.84m without. The expected average PMPM budget reduction was $0.002. DSA indicated that drug costs, payer perspective and treatment duration had the greatest impact on the financial budget estimates.

CONCLUSION: The budget impact analysis suggests that providing access to zanubrutinib for patients with treatment-naïve CLL is associated with cost savings in a US health plan.