Cost Minimization Analysis of Zanubrutinib for the Treatment of Adult Patients with Mantle Cell Lymphoma Who Have Received at Least One Prior Therapy from the Payer Perspective in the United States

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Objectives: Mantle cell lymphoma (MCL) is a rare, aggressive, B-cell non-Hodgkin lymphoma. Zanubrutinib, a Bruton’s tyrosine kinase inhibitor (BTKi), was granted accelerated approval by the FDA in November 2019 for the treatment of adult patients with MCL who have received at least 1 prior therapy. This is a cost-minimization analysis of zanubrutinib in this setting from US Medicare and commercial payer perspectives.

Methods: The comparison of treatment costs in previously treated MCL patients was assessed among BTKi, zanubrutinib, acalabrutinib and ibrutinib. Costs (2020 USD) of drug acquisition, adverse event (AE) (grade 3+) management, and monitoring were obtained from RED BOOK, Centers for Medicare & Medicaid Services fee schedules (Medicare fee), National Fee Analyzer (commercial fee), and Healthcare Cost and Utilization Project, respectively. Dosage, AE rates, and monitoring assumptions were based on clinical trial publications and prescribing information. Costs per patient per year (PPPY) were estimated.

Results: The estimated total costs PPPY were $163,755 (zanubrutinib), $175,570 (acalabrutinib), and $185,994 (ibrutinib) for a Medicare plan; and $166,818 (zanubrutinib), $178,614 (acalabrutinib), and $189,011 (ibrutinib) for a commercial plan. The pharmacy costs PPPY were $157,484 (zanubrutinib), $171,229 (acalabrutinib), and $180,414 (ibrutinib), which accounted for more than 94% of the total costs for both plans. A small proportion of the total costs was related to AE, mainly for the management of neutropenia and pneumonia.

Conclusion: Zanubrutinib was associated with a PPPY cost saving in comparison with other BTKi, acalabrutinib and ibrutinib, among adults with MCL who have received at least 1 prior therapy from the US payer perspectives. The saving was primarily driven by lower drug acquisition cost with zanubrutinib. In addition to treatment cost, decision makers should also consider efficacy and tolerability of BTKi in treatment selection.

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