Real-world zanubrutinib treatment patterns in chronic lymphocytic leukemia/small lymphocytic lymphoma among US community oncology patients with prior acalabrutinib therapy

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ABSTRACT

Context: Despite higher selectivity of second-generation Bruton tyrosine kinase (BTK) inhibitor acalabrutinib versus first-generation BTK inhibitor ibrutinib, a notable fraction of clinical trial patients treated with acalabrutinib discontinued treatment due to adverse events. The next-generation BTK inhibitor zanubrutinib was designed to maximize efficacy and tolerability by minimizing off-target binding.

Objective: Evaluate characteristics, treatment duration, and reasons for treatment discontinuation in patients with chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL) previously treated with acalabrutinib who received zanubrutinib in the real-world US community oncology setting.

Design: Retrospective observational study.

Patients: US adult patients with CLL/SLL who initiated acalabrutinib January 1, 2020-November 30, 2023, and subsequently received zanubrutinib at any time through April 18, 2024.

Outcomes: Index date was the start date of zanubrutinib. The study utilized structured and curated electronic health data from the Integra Connect-PrecisionQ de-identified real-world database. Demographic and treatment characteristics were summarized.

Results: A total of 151 patients were analyzed. Median age (range) at index date was 74 (39-90) years, and 75 (49.7%) patients were female. One hundred and four (68.9%) patients were identified as White, nine (6.0%) as African American, and two (1.3%) as Asian.

Most patients received prior acalabrutinib in the first (50.3%) or second (25.8%) line of therapy (LOT). Approximately 70% of patients discontinued acalabrutinib within 1 year. After acalabrutinib therapy, 79.5% of patients were treated with zanubrutinib, 11.3% were treated with another drug (anti-CD20 monotherapy, n=8; chemoimmunotherapy, n=6; BCL2 inhibitor, n=3) followed by zanubrutinib, and 9.3% were treated with ibrutinib followed by zanubrutinib.

The median (interquartile range [IQR]) duration of acalabrutinib in any LOT was 181 days (68-391). After discontinuing acalabrutinib and initiating zanubrutinib, patients stayed on zanubrutinib for a median duration of 224 days (IQR 103-398), with 93 (61.6%) patients remaining on zanubrutinib at data cut-off.

Conclusions: In the US community setting, most patients with CLL/SLL who received acalabrutinib then zanubrutinib discontinued therapy within 1 year of initiation. After prior acalabrutinib therapy, most patients treated with zanubrutinib remained on treatment at data cut-off. Consistent with other US real-

world data, the effectiveness of zanubrutinib in CLL/SLL was demonstrated despite prior acalabrutinib treatment.