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

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Introduction

Despite higher selectivity of the second-generation Bruton tyrosine kinase inhibitor (BTKi) acalabrutinib (acala) compared with the first-generation BTKi ibrutinib (ibr), a notable fraction of clinical trial patients treated with acala discontinued treatment due to adverse events. The next-generation BTKi, zanubrutinib (zanu), was designed to maximize efficacy and tolerability in patients by minimizing off-target binding. The study objective was to evaluate the characteristics, treatment duration, and reasons for treatment discontinuation in patients with CLL/SLL previously treated with acala who received zanu in the real-world US community oncology setting.

Methods

This retrospective observational study included US adult patients with CLL/SLL who initiated acala at any time between January 1, 2020, and November 30, 2023, and subsequently received zanu at any time through April 18, 2024. Index date was the start date of zanu. The study utilized structured versus curated electronic health data from the Integra Connect-PrecisionQ de-identified real-world database. Demographic and treatment characteristics were summarized using descriptive statistics.

Results

A total of 151 patients were included in the analysis. 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 acala in the first (50.3%) or second (25.8%) line of therapy. Approximately 70% of patients discontinued acala within 1 year. After acala therapy, 79.5% of patients were treated with zanu, 11.3% were treated with another drug (anti-CD20 monotherapy, n=8; chemoimmunotherapy, n=6; BCL2 inhibitor, n=3) followed by zanu, and 9.3% were treated with ibr followed by zanu.

The median duration of acala in any line of therapy was 181 days (IQR 68, 391). After discontinuing acala and initiating zanu, patients stayed on zanu for a median duration of 224 days (IQR 103, 398), with 93 (61.6%) patients remaining on zanu at data cut-off.

Conclusions

In the US community setting, most patients with CLL/SLL who received acala discontinued therapy within 1 year of initiation. After prior acala therapy, the majority of patients treated with zanu remained on treatment at data cut-off. Consistent with other real-world data from across the US, the effectiveness of zanu in CLL/SLL was demonstrated despite prior acala treatment.