Real-world zanubrutinib treatment patterns in mantle cell lymphoma (MCL) among US community oncology patients with prior Bruton tyrosine kinase inhibitor (BTKi) therapy

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Introduction

MCL is a rare and aggressive type of non-Hodgkin lymphoma. The next-generation BTKi, zanubrutinib (zanu), was developed to maximize efficacy and tolerability in patients by minimizing off-target binding. The FDA has approved acalabrutinib (acala), as a single agent and in combination with bendamustine and rituximab, and zanu for treating relapsed/refractory MCL. The first-generation BTKi, ibrutinib (ibr), was voluntarily withdrawn in April 2023. Here, we evaluate the characteristics, treatment duration, and reasons for treatment discontinuation in patients with MCL previously treated with ibr or acala who later received zanu in the real-world US oncology setting.

Methods

This retrospective observational study included US adult patients with MCL who initiated acala or ibr at any time between December 1, 2013, and November 30, 2023, and subsequently received zanu at any time through May 31, 2024. Index date was the start date of zanu. The study utilized structured electronic health data from the Integra Connect PrecisionQ de-identified real-world database. Descriptive statistics were summarized to describe demographic and treatment characteristics.

Results

Eighty patients were included in the study. Before zanu treatment, 21 had received acala, 49 ibr, and 10 ibr followed by acala. The median (range) age at index date was 76 (52, 88) years for the ibr-to-zanu group, 76 (65, 88) years for the acala-to-zanu group, and 72 (48, 86) years for the ibr-to-acala-to-zanu group; more males were included than females: 69%, 67%, and 80% males, respectively. Most patients in each group were White: 78%, 62%, and 80%, respectively. The majority of patients with prior ibr received ibr in the first (42.4%) and second (52.5%) line of therapy (LOT), while patients with prior acala distributed more evenly in the first (38.7%), second (25.8%) and third (25.8%) LOT.

Fifty-four percent of patients with prior ibr and 58% with prior acala discontinued treatment within 1 year before initiation of zanu. Seventy-one percent of patients with prior ibr and 58% with prior acala initiated zanu as their subsequent therapy. The median duration of ibr and acala treatment prior to zanu treatment was 348 and 300 days, respectively. The median (interquartile range) duration of zanu treatment was 378 (126, 582) days, with 38 (47.5%) patients staying on zanu treatment at data cut-off.

Conclusions

In the US community setting, most patients with MCL treated with zanu who had prior ibr or acala treatment discontinued ibr or acala within 1 year. Real-world data from across the US have demonstrated the effectiveness of zanu in MCL after treatment with another BTKi. Reasons for discontinuation are still to be examined.