

## Real-world treatment patterns of Bruton tyrosine kinase inhibitors (BTKi) in patients with mantle cell lymphoma (MCL) in community oncology practices in the United States (US)

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**Background:** Real-world data on BTKi use in MCL remain limited. This study aimed to examine US real-world BTKi treatment pattern, duration, and adherence in MCL patients.

**Methods:** This retrospective observational study used electronic medical records (EMR) data from Integra Connect database in 18 US community-based oncology practices. Adults with MCL diagnosis on  $\geq 2$  separate dates who started BTKi therapy between 1/1/2019 and 11/30/2021 were included. EMR data was collected to ensure adequate medical history and  $\geq 6$ -months follow up period. Index date was defined based on the use of one of the 3 BTKi: zanubrutinib, acalabrutinib, and ibrutinib for 3 BTKi patient cohorts. Baseline comorbidities were collected  $\leq 90$  days prior to index date based on diagnosis records. Sociodemographic and clinical characteristics, comorbidities, and treatment patterns were examined by each BTKi group. Treatment duration was calculated based on EMR and claims until end of follow up. Discontinuation data was based on unstructured physician notes. Kaplan-Meier analysis was used to compare treatment duration between the 3 BTKi groups.

**Results:** In 402 MCL patients identified to start BTKi therapy (44 zanubrutinib; 161 acalabrutinib; 197 ibrutinib), the median age (range) at BTKi therapy start was 75 (56-89) years in zanubrutinib, 76 (36-89) in acalabrutinib, and 72 (36-89) in ibrutinib group ( $P < 0.01$ ; Table). There is no significant difference between the 3 BTKi groups in other baseline characteristics. Half of zanubrutinib patients used other BTKi in prior therapy, with 31.8% switched from other BTKis to zanubrutinib  $\leq 60$  days of treatment start. In acalabrutinib group, 29% had prior BTKi use. Given a later approval date, zanubrutinib group had a relative shorter mean follow-up period (493 days [d]) vs acalabrutinib (701 d) and ibrutinib (746 d). Nevertheless, zanubrutinib patients had significantly longer median treatment duration (292 d) vs acalabrutinib (259 d) and ibrutinib (149 d) ( $P < .01$ ).

**Conclusions:** Real-world EMR data from US community-based oncology practices suggested significantly longer treatment duration and adherence in MCL patients treated with zanubrutinib compared with acalabrutinib or ibrutinib. Further analyses on long term utilization are needed upon data maturation.

**Table**

	<b>Zanubrutinib</b> N=44	<b>Acalabrutinib</b> N=161	<b>Ibrutinib</b> N=197
Age, mean; median (range)*	74; 75 (56 - 89)	75; 76 (36 - 89)	70; 72 (36 - 89)
Follow-up days, mean (SD)*	493 (197)	701 (275)	746 (261)
Treatment duration days, median (range)*	292 (45-846)	259 (34-1152)	149 (42-1230)
90-day adherence*	84.1%	76.4%	59.9%

\* $P < .01$