Characterizing Patient Self-Reported Adherence to BTKis and Symptoms in CLL/SLL Using an Electronic Patient-Reported Outcomes (ePRO) Platform

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Objective
The covalent Bruton tyrosine kinase inhibitors (BTKis) zanubrutinib and acalabrutinib have revolutionized the treatment of hematological cancers, including chronic lymphocytic leukemia and small lymphocytic lymphoma (CLL/SLL). These oral therapies, designed for outpatient care, require ongoing attention to support adherence and monitor for potential side effects. The Canopy Remote Therapeutic Monitoring (RTM) electronic patient-reported outcomes (ePRO) platform is an electronic health record-integrated cloud-based questionnaire delivered via smartphone/web app or interactive voice response that has demonstrated value for measuring adherence and symptoms in the real world. This study examined self-reported medication adherence and symptoms among adult patients with CLL/SLL treated with zanubrutinib or acalabrutinib in a community oncology setting.

Methods
This was a retrospective study of patients with CLL/SLL who submitted at least one ePRO report during treatment with zanubrutinib or acalabrutinib from January 1, 2024 to Nov 1, 2025. ePRO monitoring began at enrollment and was followed by weekly reminders.

Results
A total of 1,749 ePRO reports were submitted by 241 patients over 65 days of treatment. Of these, 1,026 (58.6%) reports were submitted by patients treated with zanubrutinib and 723 (41.3%) by patients treated with acalabrutinib. Fewer reports submitted by patients treated with zanubrutinib vs acalabrutinib indicated a missed dose (7.6% vs 11.6%, respectively, $P<.008$). On reports describing a missed dose, fewer reports submitted by patients treated with zanubrutinib vs acalabrutinib noted diarrhea (3.8% vs 19.0%, respectively), headache (3.8% vs 14.3%), or sleep issues (2.5% vs 9.5%), but comparable proportions included bruising (7.6% vs 9.5%) or weakness/fatigue (16.5% vs 17.9%).

Conclusion
Patients treated with zanubrutinib reported fewer missed doses than those treated with acalabrutinib, and among ePRO reports of missed doses, fewer patients treated with zanubrutinib experienced common symptoms. Limitations include the retrospective nature of the study and patient self-selection for participation, which may limit generalizability.