

# Abstract

## Measuring adherence in patients with oral targeted therapy in chronic lymphocytic leukaemia

**Author:** Barbora Hanusová

**Tutor:** doc. PharmDr. Josef Malý, Ph.D.

**Consultant:** PharmDr. Petra Rozsivalová

Department of Social and Clinical Pharmacy, Faculty of Pharmacy in Hradec Králové, Charles University

**Introduction and aims:** Chronic lymphocytic leukaemia (CLL) is a hematological disorder characterized by clonal proliferation of mature B-cells. New oral targeted drugs have been used in clinical practice to treat CLL. The aim of this thesis was to measure adherence to oral targeted drugs, analyze pharmacotherapy and identify drug-related problems (DRP) and their management.

**Methods:** The cross-sectional pilot study ran from September 2022 to March 2023 in University Hospital Hradec Králové. Patients  $\geq 18$  years old, with CLL diagnosis treated with ibrutinib, acalabrutinib or venetoclax were included. Medical data and pharmacotherapy were obtained using electronic medical records and patients' medication records. Guided interviews were performed to measure patients' adherence to oral targeted oncolytics using Czech version of The Basel Assessment of Adherence to Immunosuppressive Medications Scale (BAASIS-CZ) and determine their opinions about medicine using Czech translation of The Beliefs about Medicines Questionnaire (BMQ-CZ). Medication review and medication reconciliation were performed and DRP were identified and managed. Data were analyzed using descriptive statistics.

**Results:** 30 patients (9 women, 21 men) with average age  $72 \pm 6.9$  years were included in this study. Four (13.3%) patients were treated with acalabrutinib, eight (26.7%) with ibrutinib and 18 (60.0%) with venetoclax. These patients are often polymorbid with polypharmacotherapy, using in average  $9.8 \pm 3.7$  prescribed drugs. Nonadherence was observed in 10 (33.3%) patients. 63 DRP were identified and managed.

**Conclusion:** Patients with CLL are often polymorbid with polypharmacotherapy, what can lead to the development of nonadherence and DRP, as suggested by the results of this study. These results indicate that the role of pharmacist can be important in patients' education as well as in the identification and management of DRP.

**Key words:** Chronic lymphocytic leukaemia, pharmacotherapy, patient adherence.