Patterns of Treatment and Outcomes in CLL Patients in Australia: An Analysis of The Population-Wide Pharmaceutical Benefits Scheme Dataset

C.Tam[1], F-L. Zhao[2], R.Gauba[3], M.H Kouhkamari[4], S.C. Li[5], B. Tang[6]

[1] Lymphoma Service, Alfred Health, Monash University, Melbourne, VIC, Australia, [2] HEOR, Medical Affairs Department, BeiGene, Ltd., Sydney, NSW, Australia, [3] Medical Department, BeiGene Australia Pty. Ltd., Sydney, NSW, Australia, [4] RWE, Prospection Pty Ltd., Sydney, NSW, Australia, [5] Biomedical Sciences and Pharmacy, The University of Newcastle, Callaghan, NSW, Australia [6] HEOR, Medical Affairs Department, BeiGene, Ltd., San Mateo, CA, USA

ABSTRACT

Background

There is limited information on the chronic lymphocytic leukaemia (CLL) patient characteristics and outcomes, or the treatment strategies adopted for its management in the Australian real-world setting. This study aimed to describe the treatment patterns and outcomes of people with CLL who received treatment under the Pharmaceutical Benefits Scheme (PBS).

Methods

This retrospective study included patients who initiated CLL treatment between 2011/01/01 and 2021/07/31 with data extracted from the 10% PBS dataset. The dataset contains the dispensing records for 10% of the Australian population and captures all publicly funded treatments. Outcomes of interest were treatment patterns, duration of therapy, time to next treatment (TTNT), and overall survival (OS). The first medication used for CLL was designated as the index date. The Kaplan-Meier (KM) method was used to analyse the duration of therapy, TTNT and OS. The effects of baseline patient characteristics and comedications were explored with sub-group sensitivity analyses and Cox proportional hazards regression analyses wherever feasible.

Results

Of 803 CLL patients included, most patients were male (65%) and >60 years (77%). Treatment trends have changed over the last 10 years. In the frontline setting, fludarabine-chlorambucil-rituximab use has decreased while chlorambucil + CD20 agents usage has increased. In the relapsed/refractory (R/R) setting, CD20 monotherapy has decreased and BTKi and venetoclax ± CD20 usage has increased.

In the overall cohort, the median TTNT was 30 months (95%CI, 25-35). The median duration of ibrutinib therapy was 24 months (95%CI, 19-38) and 19 months (95%CI, 11-not reached (NR)) for venetoclax. Median OS was 127 (95%CI, 105-NR) and 94 months (95%CI, 74-NR) in front-line and R/R patients respectively. For the sub-cohort with R/R CLL initiating treatment after Nov 2017 (the first BTKi listing on the PBS) (n=114), the median OS was not reached yet.

Conclusions

In the Australian setting, CLL treatment patterns have significantly changed since the introduction of novel therapies. Median OS in the front-line setting is more than 10 years, while the R/R population has a shorter OS observed.