

Population-wide patterns of care in mantle cell lymphoma (MCL) in Australia: An analysis of the Pharmaceutical Benefits Scheme (PBS) dataset

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ABSTRACT

Aim: The MCL treatment landscape in Australia is changing with the introduction of Bruton's tyrosine kinase inhibitors (BTKis) and bendamustine. This study analyzed the practice impact of introducing publicly funded novel agents for MCL by evaluating MCL treatment patterns in Australian patients from 2011-2021 using population-wide prescription records.

Method: Patients who initiated MCL treatment from 01Jan2011-31Jul2021 were extracted from the Services Australia 10% PBS dataset, which includes dispensing records for 10% of the Australian population and captures all publicly funded treatments in Australia. The index date was the commencement of any drug for MCL. First-line (1L) therapy was the first prescribed MCL treatment. A patient was defined as relapsed/refractory (R/R) if they commenced a drug in a different therapeutic category, or restarted a regimen after a >180-day gap. Descriptive analyses were conducted to examine treatment use for the overall 10-year population by therapy line. Analyses by calendar year were performed to assess treatment pattern changes.

Results: 241 patients with MCL were identified; majority were male (68.4%) and > 60 years (84.9%; 70-79 years=42.1%). Baseline comedications included antihypertensives (44.1%), anticoagulants (14.5%), and/or antipsychotics/antidepressants (12.5%). In the overall population (2011-2021), most

1L treatments were bendamustine-rituximab (BR, 53.9%), rituximab+other regimens (27.6%), or rituximab monotherapy (11.2%). The most common regimens for R/R patients included BTKis (66.3%), rituximab monotherapy (52.8%), or rituximab+other regimens (31.5%). A trend in adoption of novel agents was observed throughout the years following PBS listing. From 2011-2020, 1L BR use increased from 0% to 50% while 1L use of all other rituximab-containing regimens decreased from 100% to 16.7%; BTKi use in R/R patients increased from 0% to 74.7%.

Conclusion: Australian MCL treatment patterns have changed significantly since the introduction of BTKis and bendamustine-containing regimens. Use of 1L rituximab-containing regimens except BR has decreased and BTKi use in R/R patients has increased.