

## Title abstract

Survival and drug treatment patterns in multiple myeloma patients exposed to an anti-CD38 monoclonal antibody, a proteasome inhibitor and an immunomodulatory imide drugs

## Authors

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## Abstract

**Introduction:** There is lack of real-world data on treatment and outcomes of triple-exposed multiple myeloma (MM) patients, i.e. treated with an immunomodulatory drug, a proteasome inhibitor, and an anti-CD38 monoclonal antibody (daratumumab). Assess subsequent drug regimens among triple-exposed MM patients, including the interval until the next treatment line and survival rates.

**Methods:** This study used data from the PHARMO Data Network to analyse MM patients who were triple-exposed and received subsequent new drug treatment(s) during follow-up. Dates of initiation of new treatment lines were defined as index date. The study's first endpoint was overall survival (OS), which was the time from the index date to death, end of data availability, or December 31, 2020. The second endpoint was time-to-next-treatment (TTNT), i.e. the time until the start of the next treatment line.

**Results:** Among 65 triple-exposed MM patients who received subsequent drug treatment, 19 patients (29%) received two additional lines of treatment and 4 (6%) received three additional lines of treatment. In the first subsequent line of treatment, in total 23 different drug combinations were used among 65 patients with an average age of 69 years and 45% female. Most common was combination therapy of carfilzomib with dexamethasone (17%). In the second subsequent line of treatment, in total 12 different drug combinations were used among 19 patients with an average age of 69 years and 53% female. Most common was combination therapy of cyclophosphamide with pomalidomide (21%). The median TTNT for the first subsequent treatment line was 127 days (interquartile range 79-200 days), with a median OS of 217 days (interquartile range 89-304 days).

**Conclusion:** The current study found no standard of care for triple-exposed MM patients, with very heterogeneous drug treatments given. The limited survival benefit suggests a need for a novel treatment approach for MM patients.