Treatment Sequencing Patterns and Costs of Care in Patients With Relapsed/Refractory Multiple Myeloma

INTRODUCTION

- Multiple myeloma (MM) is a cancer of plasma cells of the bone marrow, and the 5-year survival rate among patients with MM is 45%.
- Treatment practices are changing rapidly, with novel agents and stem cell transplantation now recommended for MM treatment.
- An analysis of data from 1993–2007 found that use of traditional chemotherapies has decreased substantially in the US, while use of novel agents (thalidomide, bortezomib, and lenalidomide) has increased.
- Despite the availability of novel therapies and a general improvement in survival, the unmet need continues to be high, with patients requiring multiple lines of treatment.
- As patients go through multiple relapses, the complexity of treatment regimens increases, likely increasing the burden on healthcare resources.
- The current analysis evaluates treatment regimens, sequences, and associated healthcare costs across lines of therapy of patients who have initiated a 2nd-line (2L) therapy.

OBJECTIVES

- To evaluate treatment sequences and associated healthcare costs among patients among patients with relapsed or refractory multiple myeloma (RRMM) who have initiated a 2L therapy.

METHODS

STUDY DESIGN

- Retrospective cohort analysis.
- Administrative claims data from the 2006–2013 Truven Health MarketScan Commercial and Medicare Research databases were extracted.
- Eligible patients were identified and followed from initiation of a 2L treatment (study index date) until the end of continuous enrollment or end of the follow-up period.
- Progression to subsequent treatment lines was determined using an algorithm based on the timing of administrative claims.

STUDY POPULATION

- Patients were included in the study if they met the following criteria:
  - Age 18 years at diagnosis
  - Initiating 2L therapy
  - Follow-up time from index date to start of 3L treatment for at least 12 months
  - No more than 12 months from start of 3L to start of 4L treatment
  - No more than 12 months from start of 2L to start of 3L treatment
  - No prior autologous or allogeneic stem cell transplantation

RESULTS

- Patient characteristics are presented in Table 1 and categorized by line of therapy (2L–4L).
- Approximately 20% of patients received bortezomib as their initial therapy.
- The most commonly used 2L regimens were lenalidomide, lenalidomide-bortezomib, and lenalidomide-bortezomib-dexamethasone.
- The median time from start of 3L to start of 4L treatment was 6.6 months.

CONCLUSIONS

- In this study of patients with RRMM, 38% progressed from 2L to subsequent treatment lines, with variability in subsequent regimens and treatment sequences.
- Highest costs were incurred during the first 12 months after initiation of 2L treatment.
- The cost of managing progressive disease in RRMM is high, as observed by the difference in costs before and after progression from 2L.

REFERENCES


ACKNOWLEDGMENTS

This study was supported by Bristol-Myers Squibb. The data were provided by Truven Health Analytics, which received funding from Bristol-Myers Squibb. The file build was conducted by Gilani & Partners. Truven Health Analytics, Shapira-Frommer Inc. was contracted by Bristol-Myers Squibb to assist with methodology design, to carry out data analysis, and to provide publication support. Shapira-Frommer Inc. (Pty) Ltd assisted Shapira-Frommer Inc. and Gilani & Partners in developing the data analysis, and publication support. Potential conflicts of interest were provided by Kate Jason, PhD, at Caudle and was hosted by Bristol-Myers Squibb.

DISCLOSURES