INTRODUCTION

Multiple Myeloma (MM) is a rare malignancy, accounting for only 0.8% of all cancers and 1% of hematologic malignancies in the world.

The main goals of MM treatment are to destroy malignant plasma cells; prevent or relieve symptoms; improve patient's life quality; and increase patient's overall survival. b-2. Therapeutic strategies of high doses chemotherapy followed by autologous stem cell transplantation were developed in the 1980s and, currently, are key part of frontline therapy for MM patients.

Novel therapies such as proteasome inhibitors (PIs) and immunomodulators (IMiDs) and mAbs are approved to treat MM in recently years. However, not all of them are approved or available in Brazil 3, 4.

According to “Diretrizes Diagnósticas e Terapêuticas do Mieloma Múltiplo”, the Brazilian MM guideline, the following drugs can be used to treat symptomatic MM in a multiagent combination regimen: bortezomib, cyclophosphamide, cisplatin, dexamethasone, doxorubicin, lipidic doxorubicin, espicoside, melphalan, oxaliplatin, and thalidomide. 5

Brazilian public healthcare is available for all citizens of the country; however, due to some issues of this system, including lack of new technologies and long waiting periods for consultations, a large part of the population uses the private market, that comprises 25% of the Brazilian healthcare system.

The aim of this retrospective study was to generate real world data (RWD) for MM patterns of care in Brazilian private healthcare system, since there is no previous published study in such country.

METHODS

This was a retrospective study of MM patients (ICO-10 C96) treated from March 2013 to March 2016. Data was obtained from Evidencias – Kantar Health database, a private market administrative claims database, which covers 3 million lives from 54 HMOs (equivalent to approximately 7% of the private market).

We collected information regarding demographics, staging, chemotherapy regimens, supportive treatment, stem cell transplantations (SCT), treatment duration, time to progression and lab exams of the patients.

A pattern of care flow with the most used chemotherapy regimens and mean number of cycles for each line of treatment was built.

Analyses were separated into patients who received and did not receive SCT (SCT+ vs. SCT-).

Time to next treatment (TTNT) was calculated from the beginning of the first-line until the beginning of the second-line; only for patients that dates of start of treatment were available. Patients that did not start next treatment were censored.

Descriptive statistics were used to report the results. Quantitative variables were summarized by mean, standard deviation, minimum, maximum, median and interquartile range. All analyses were conducted using SAS version 9.2.

RESULTS

Demographics

We retrieved data from 254 MM patients, 53.9% of those were women. In at least one line of treatment 41 patients received SCT (SCT+). Table 1 shows the demographic characteristics of these patients.

Table 1. Demographics

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Median (Q1 – Q3)</th>
<th>Median (Q1 – Q3)</th>
</tr>
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<tbody>
<tr>
<td>Age</td>
<td>67 (56 – 76)</td>
<td>60 – 71</td>
</tr>
<tr>
<td>Weight</td>
<td>67.0 Kg</td>
<td>60.0 – 78.9 Kg</td>
</tr>
<tr>
<td>Body Surface</td>
<td>1.60 – 1.90</td>
<td>1.86 m²</td>
</tr>
</tbody>
</table>

Most of the patients were assessed from the Southeast region of the country (n=120, 46.7%), followed by South (n=60, 23.6%), Northeast (n=46, 18.1%), and Midwest (n=40, 15.5%) and North (n=4, 1.6%).

Stage information was available for 127 (50%) patients. Out of these 14 (11%) werestage I, 38 (30%) stage II and 75 (59%) stage III.

Patterns of care

TTNT was possible to calculate for 46 patients. For 38 SCT+ patients median TTNT was 13.7 (Q3: 7.2-25.4) months. For the 10 SCT- patients median TTNT was 28.9 (Q1: 16.7-38.0) months.

An overview of lines of treatment for the patients assessed is shown on Figure 1. Nine patients used only supportive care.

Table 2 shows the most used regimens for patients that received and did not receive SCT for each line of treatment. Also, it shows the mean number of cycles and the percentage of patients in each regimen who used supportive therapy.

For Zoledronic acid (ZA) and pamidronate (PAM) are two bisphosphonates used to reduce MM bone complications. Fligaxin (FL) is used for patients with nephropathy and Epstein AIE (AE) to treat anemia.

CONCLUSIONS

Bortezomib-containing regimens, especially VCD, are the most used in all lines both for SCT+ and SCT- patients, with a typical length of therapy for 6-7 cycles.

Other common regimens used besides VCD in other lines are bortezomib + dexamethasone and melphalan + prednisone.

TTNT was significantly longer in patients who received SCT.

The relatively short TTNT, and the limited therapeutic choices underscored the unmet needs of the MM patients in Brazil.

REFERENCES


