

FULL TEXT LINKS



[Hematol Transfus Cell Ther.](#) 2024 Apr-Jun;46(2):153-160. doi: 10.1016/j.htct.2023.08.002.  
Epub 2023 Sep 13.

## COVID-19 in multiple myeloma patients: frequencies and risk factors for hospitalization, ventilatory support, intensive care admission and mortality – cooperative registry from the Grupo Brasileiro de Mieloma Múltiplo (GBRAM)

Marcia Garnica <sup>1</sup>, Edvan De Queiroz Crusoe <sup>2</sup>, Glaciano Ribeiro <sup>3</sup>, Rosane Bittencourt <sup>4</sup>, Roberto José Pessoa Magalhães <sup>5</sup>, Karla Richter Zanella <sup>6</sup>, Abrahão Elias Hallack Neto <sup>7</sup>, Juliana Souza Lima <sup>8</sup>, Caroline Bonamin Solo <sup>9</sup>, Emmanuella Graciott Souza <sup>3</sup>, Andre Magalhaes Fernandes <sup>10</sup>, Angelo Maiolino <sup>11</sup>, Vania Hungria <sup>12</sup>

Affiliations

PMID: 37718131 PMID: [PMC11150487](#) DOI: [10.1016/j.htct.2023.08.002](#)

### Abstract

**Introduction:** This study evaluated outcomes and risk factors for COVID-19 in 91 Brazilian multiple myeloma (MM) patients between April 2020 and January 2022.

**Results:** Of the 91 MM patients diagnosed with COVID-19, 64% had comorbidities and 66% required hospitalization due to COVID-19, with 44% needing ventilatory support and 37% intensive care. Age (OR 2.02; 95%CI 1.02 - 7.7) and hypertension OR 4.5; 95%CI 1.3 - 15.5) were independently associated with hospitalization and certain MM therapies (corticosteroids and monoclonal drugs) were associated with ventilatory support (OR 4.3; 95%CI 1.3 - 14 and OR 5.7; 95%CI 1.8 - 18, respectively), while corticosteroids and immunomodulatory drugs were linked to ICU admission (OR 5.1; 95% CI 1.4 - 18 and OR 3.4; 95%CI 1.1 - 10, respectively). The overall mortality rate was 30%, with the highest rate observed in the ICU (73%). Additionally, the ECOG performance status was linked to increased mortality (OR 11.5; 95%CI 1.9 - 69). The MM treatment was delayed in 63% of patients who recovered from COVID-19.

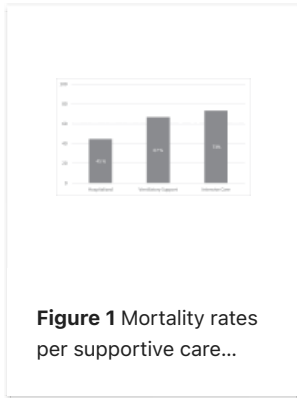
**Conclusions:** The findings highlight the need for preventing COVID-19 and prioritizing vaccination among MM patients, as they have high rates of severe outcomes in the event of COVID-19. It is also essential to monitor the potential clinical impacts of COVID-19 on MM patients in the long-term. Given the limited resources available in treating MM patients in Brazil during the COVID-19 pandemic, outcomes might be worse in this population.

**Keywords:** COVID-19; Infection; Mortality; Multiple myeloma; SARS-Cov 2.

Copyright © 2023 Associação Brasileira de Hematologia, Hemoterapia e Terapia Celular. Published by Elsevier España, S.L.U. All rights reserved.

[PubMed Disclaimer](#)

## Figures



## Related information

[MedGen](#)

## LinkOut - more resources

### Full Text Sources

[ClinicalKey](#)

[Elsevier Science](#)

[Europe PubMed Central](#)

[PubMed Central](#)

### Miscellaneous

[NCI CPTAC Assay Portal](#)