evasão, impossibilidade de tratamento, óbito. Somado a isso, é necessário buscar esclarecimentos sobre os achados deste estudo, como sexo, faixa etária e distribuição geográfica da doença. Por fim, os idosos merecem uma atenção maior na investigação por mieloma múltiplo, visto que eles representam 61,30% dos casos.

https://doi.org/10.1016/j.htct.2023.09.797

SAFETY OF DARATUMUMAB IN FRAIL PATIENTS WITH MULTIPLE MYELOMA

TX Carneiro [a], JLS Sales [b], LDS Pimentel [c], LG Fonseca [b], LBC Leão [a], MEL Araújo [b], NS Moraes [b]

[a] *Hospital Porto Dias Mater Dei, Belém, Brazil*
[b] *Universidade do Estado do Pará (UEPA), Belém, Brazil*
[c] *Hospital Ophir Loyola (HOL), Belém, Brazil*

Introduction: Frailty in elderly is associated with negative outcomes and high mortality. In frail patients diagnosed with Multiple Myeloma (MM), it's advisable to adjust the dosages of antineoplastic treatments to minimize associated toxicities. **Objective:** This study aims to present two clinical cases emphasizing the safety profile of Daratumumab in frail patients with MM. **Materials and methods:** MM patients receiving Daratumumab underwent a specialized geriatric assessment protocol. For frailty assessment, the modified Fried frailty criteria and the Frail Scale were utilized. The Lawton scale gauged functionality in instrumental activities of daily living (IADL), while sarcopenia assessment was conducted following the updated guidelines from the European Working Group on Sarcopenia. The study included elderly patients meeting three or more criteria on the Frail Scale. **Results:** Two frail patients diagnosed with MM were assessed during treatment with Daratumumab, Bortezomib, an alkylating agent, and corticosteroids, followed by Daratumumab maintenance. The first patient, S.N.C., aged 64, had type 2 diabetes mellitus, history of falls, osteoporosis with lytic bone lesions, and spinal fractures. She also had severe IADL dependence (scored 11 out of 27 on the Lawton scale) and used a wheelchair, having been independent earlier. She also displayed signs of sarcopenia. On the Frail Scale, she scored 3 of the 5 points. The initial treatment spanned seven cycles before transitioning to monthly maintenance. No dose modifications were required. After 6 months of therapy, the patient reported symptomatic relief, improved motor functions, regained walking abilities, and increased independence in IADL. The second patient, G.P.F., aged 78, had no notable comorbidities, but had several osteolytic lesions and fractures evident on CT scans. He was frail, dependent on IADL, exhibited nutritional risk and history of falls. He underwent a four-drug treatment for six cycles, subsequently establishing monthly maintenance. Upon reevaluation after completing the treatment cycles, he reported no outstanding complaints, regained his ambulation, and cited feeling well with a noted improvement in his IADL dependence. **Discussion:** Patients exhibiting frailty syndrome generally experience poorer outcomes and a higher rate of complications linked to therapeutic interventions across multiple clinical contexts. The efficacy of Daratumumab has been substantiated in the MAIA and ALCYONE trials for non-eligible patients per investigator subjective criteria. In the "frailty" sub-analysis of the MAIA study, geriatric assessment was not performed, and patients with high comorbidity scores were included. We present two cases with geriatric assessments and established frailty syndrome criteria who showed favorable outcomes with the chosen regimen, without need for dose adjustments. **Conclusion:** The administration of Daratumumab to frail patients in this study was safe and results in swift clinical responses. Thiago Xavier Carneiro receives honoraria from Janssen.

https://doi.org/10.1016/j.htct.2023.09.798

COMPREHENSIVE CIRCRNA ANALYSIS REVEALS MOLECULAR INTERACTIONS RELATED TO POOR OVERALL SURVIVAL IN MULTIPLE MYELOMA

LRD Merces [a], L Magalhães [a,b], GBS Souza [a], AVVD Berg [c], AKCRD Santos [a]

[a] *Universidade Federal do Pará (UFPA), Belém, Brazil*
[b] *Instituto Tecnológico Vale (ITV), Belém, Brazil*
[c] *Universidade do Estado do Pará (UEPA), Belém, Brazil*

Multiple myeloma (MM) is one of the most common hematologic malignancies, characterized by uncontrolled proliferation of plasma cells in the bone marrow. Investigating MM epigenetics at the non-coding RNAs (ncRNAs) level and their interactions can be a key factor in understanding this disease. Circular RNAs (circRNAs) are ncRNAs whose 5'and 3'ends are covalently joined and have been mostly investigated in MM by acting as microRNAs (miRs) sponges, but it is known that they also interact with RNA binding proteins (RBPs). This study aimed to investigate the differentially expressed (DE) circRNAs in MM, their relationship with RBPs and miRs, and their biological implications. Public RNA-Seq datasets (PRJNA634534, PRJNA472759) were downloaded from ENA and the reads were treated to obtain the circRNA count matrix. The DE circRNAs were identified using the CircTest package and then submitted in circAtlas3.0 to obtain their interactions with miRs and RBPs. Furthermore, only miRs that interacted with two or more circRNAs were considered. miRTarBase was used to identify the target genes, selecting those validated by strong evidence. Functional enrichment analyses (FEA) were performed, using ReactomePA, for each circRNA considering both their RBP and miR-targets. Lastly, by combining the circRNAs'expression results and their interaction with RBPs or miRs, genes were selected to be investigated in a bigger RNA-Seq dataset of MM patients, available in TCGA. Gene expression was compared according to the patient's vital status and ISS stage, and the DE genes were selected for a Kaplan-Meier survival analysis. All analyses were performed on R and p-values<0.05 were considered statistically significant. First, 6 circRNAs were found as downregulated in MM