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related mortality by day 100 in either group. **Conclusions:** Our single-institution experience demonstrates that patients with HRNDMM utilizing an IMiD-based regimen followed by HDCT/ASCT results in superior overall survival compared to a non-IMiD regimen. **Keywords:** multiple myeloma, high-risk cytogenetics, immunomodulatory agent, MM

MM-239

A Tertiary Center Experience of Multiple Myeloma Patients with COVID-19: Lessons Learned and the Path Forward

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Context: The COVID-19 pandemic, caused by the SARS-CoV-2 virus, has resulted in over 100,000 deaths in the United States. Our institution has treated over 2,000 COVID-19 patients during the pandemic in New York City. **Objective:** We explored the population of myeloma patients who developed COVID-19 to identify risk factors tied to poor outcomes. **Design:** We performed a retrospective study of a cohort of 58 patients with a plasma cell disorder (54 MM, 4 smoldering MM) who developed COVID-19 between March 1, 2020 and April 30, 2020. We report epidemiological, clinical, and laboratory characteristics, including persistence of viral detection by polymerase chain reaction (PCR) and anti-SARS-CoV-2 antibody testing, treatments initiated, and outcomes. **Setting:** A large tertiary care cancer center in New York at the epicenter of the COVID-19 pandemic in the USA. **Patients:** Patient charts were analyzed retrospectively. Patients had MM or SMM and COVID-19. **Results:** Of the 58 patients diagnosed with COVID-19, 36 were hospitalized and 22 were managed at home. The median age was 67 years; 52% of patients were male, and 63% were non-white. Hypertension (64%), hyperlipidemia (62%), obesity (37%), diabetes mellitus (28%), chronic kidney disease (CKD, 24%), and lung disease (21%) were the most common comorbidities. In the total cohort, 14 patients (24%) died. Older age (>70 years), male sex, and cardiovascular risk were significantly ($p < 0.05$) associated with hospitalization. Among hospitalized patients, laboratory findings demonstrated elevation of traditional inflammatory markers (CRP, ferritin, D-dimer) and a significant ($p < 0.05$) association between elevated inflammatory markers, severe hypogammaglobulinemia, non-white race, and mortality. Ninety-six percent (22/23) of patients developed antibodies to SARS-CoV-2 at a median of 32 days after initial diagnosis. Median time to PCR negativity was 43 (range 19–68) days from initial positive PCR. **Conclusions:** Drug exposure and MM disease status at the time of contracting COVID-19 had no bearing on patient outcome. Mounting a severe inflammatory response to SARS-CoV-2 and severe hypogammaglobulinemia were associated with higher mortality. These findings pave a path to the identification of vulnerable patients who need early intervention to improve outcomes of myeloma patients in future outbreaks of COVID-19. The majority of myeloma patients mounted a specific

antibody response to SARS-CoV-2. **Keywords:** multiple myeloma, smoldering multiple myeloma, COVID-19, SARS-CoV-2, New York, pandemic, MM

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Impact of Prolonged Dose Delays on Response with Belantamab Mafodotin (Belamaf; GSK2857916) Treatment in the DREAMM-2 Study: 13-Month Follow-Up

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Context: Single-agent belamaf demonstrated deep and durable responses in the DREAMM-2 (NCT03525678) primary analysis (1) and long-term follow-up (2,3). Keratopathy (microcyst-like epithelial changes [MECs] observed on eye examination with/without symptoms) were managed through dose delays and reductions. **Objective:** To provide an update on the impact of dose delays on responses in patients receiving single-agent belamaf 2.5-mg/kg in DREAMM-2 (13-month follow-up). **Methods:** In the DREAMM-2 study (single-agent belamaf 2.5 mg/kg [n=97] or 3.4 mg/kg [n=99] Q3W), dose modifications were permitted to manage adverse events (AEs), including keratopathy (MECs), an eye examination finding that may/may not be associated with symptoms. Objective response (IMWG criteria 2016) was assessed by an independent review committee Q3W, regardless of treatment delays. Here, we report a post-hoc analysis on the impact of dose delays >63 days on clinical response in the 2.5-mg/kg arm (the selected dose for future clinical development based on risk-benefit assessment). **Results:** In patients receiving single-agent belamaf (2.5 mg/kg), dose delays (54%) and reductions (35%) due to AEs were common (2,3). Keratopathy (MECs) was the most frequent reason for dose delays (47%) and reductions (25%), leading to only 1 patient (1%) discontinuing treatment (2,3). Of 31 patients with ≥partial response, 16 had prolonged treatment interruptions (>63 days). Of these 16 patients, 14 (88%) continued experiencing a clinical benefit during the first prolonged delay: 6 (38%) deepened their response during delay (1 SD to MR; 2 PR to VGPR; 2 MR to VGPR; 1 VGPR to CR); 6 (38%) maintained the same response