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Multiple Myeloma: Clinical Updates from the American Society of Hematology Annual Meeting 2016

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Several important data for plasma cell neoplasms were presented in the last annual meeting of the American Society of Hematology held in San Diego (CA, USA), between 3 and 6 of December 2016. In this paper, the novel data for the management of patients with smoldering myeloma, multiple myeloma and systemic AL amyloidosis are summarized.

Smoldering (Asymptomatic) Myeloma

The benefit from early therapeutic intervention in patients with high-risk smoldering multiple myeloma (SMM) is always a matter of great importance for the myeloma community. In a phase 2 study, 39 patients with high-risk SMM (median age 62 years) were given weekly elotuzumab (10 mg/kg) on days 1, 8, 15, and 22 for the first two 28-day cycles, in combination with lenalidomide on days 1-21 and dexamethasone 40 mg on days 1, 8 and 15 (Arm A). An initial cohort of patients were randomized to receive lower dose of dexamethasone along with elotuzumab and lenalidomide (Arm B) based on the following stratification factors: age >65 years and high-risk cytogenetics based on t(4:14), t(14:16), 17p deletion or p53 mutation, and +1q amplification. For cycles 3-8, patients on both treatment arms were administered elotuzumab infusions on days 1, 8, and 15. After 8 cycles or best response, patients were given the option to mobilize with either cyclophosphamide or plerixafor and collect stem cells for future transplant. Patients on both treatment arms were then allowed to continue on maintenance therapy where they were administered elotuzumab (20 mg/kg) on day 1, in combination with lenalidomide days 1-21 of a 28-day cycle. After 11 patients were enrolled on each arm, arm B closed due to similar activity and toxicity to the higher dose dexamethasone arm based on published data demonstrating that high-dose dexamethasone, given once a week, does not have a detrimental effect on the immune system in patients with smoldering myeloma. The overall response rate (ORR) of 34 evaluable patients was 71%, including 9 very good partial responses (VGPR; 26%) and 15 partial responses (PR; 44%). Therapy related grade 3 toxicities included hypophosphatemia (23%), neutropenia (8%), infection (8%), anemia (3%), pulmonary embolism (3%), rash (3%), and diarrhea (3%).among patients with high-risk SMM. According to the authors, the high response rates among this patient population, who would otherwise remain untreated, is a promising starting point for the evaluation of early treatment in patients with high-risk SMM [1].

Multiple Myeloma: Newly Diagnosed Patients Who Are Eligible for High Dose Melphalan and Autologous Stem Cell Support (ASCT)

A large retrospective analysis, which compared the survival of newly diagnosed MM (NDMM) patients who received a first ASCT in the USA between 2004-2014, was presented. The study used data from more than 5,000 patients of the Center for International Blood and Marrow Transplant Research (CIBMTR) database. The analysis showed that outcomes of upfront ASCT recipients for MM have improved in the last 10 years (Figure 1), while RVD (lenalidomide, bortezomib and dexamethasone) is currently the most common pre-transplant induction