

HEMATOLOGY

Reduced-intensity induction therapy for elderly patients with multiple myeloma

The addition of bortezomib to the standard treatment regimen of melphalan and prednisone for the treatment of elderly patients with newly diagnosed multiple myeloma has improved response rates and survival. However, this regimen is associated with increased toxic effects relative to those observed with melphalan and prednisone (as noted in the large randomized VISTA trial). Now, a study using a less-intensive bortezomib-based regimen has reported high efficacy and a favorable toxicity profile. Lead investigator Maria Mateos comments “...reduced-intensity induction with a bortezomib-based regimen, followed by maintenance, is a safe treatment for elderly patients with multiple myeloma”.

In a randomized trial, Mateos and colleagues compared bortezomib, melphalan, and prednisone with bortezomib, thalidomide, and prednisone therapy in 260 elderly (≥ 60 years) patients with previously untreated myeloma. “In

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order to reduce toxicity we decided to change the schedule of treatment,” Mateos explains. Her team used a once per week dosing regimen of bortezomib instead of using the typical twice per week schedule (as used in the VISTA trial). Patients that completed the induction cycles were then randomly assigned to maintenance therapy with bortezomib and either prednisone or thalidomide.

No significant differences in efficacy were observed between the melphalan and thalidomide regimens. Mateos noted that, in the present study, “grade 3–4 peripheral neuropathy and gastrointestinal symptoms were significantly reduced as compared with the VISTA trial,” (8% versus 13% and 4% versus 19%, respectively). She

added “efficacy was maintained or even improved, reaching a complete response rate of 42% after maintenance therapy,” (the complete remission rate reported in the VISTA trial was 30%).

Of note, the toxicity profile was notably different between the melphalan and thalidomide regimens: thalidomide was associated with some severe cardiac events. In future trials of reduced-intensity bortezomib-based therapy, Mateos and colleagues plan to replace thalidomide with lenalidomide, an immunomodulatory drug that is more effective and less toxic than thalidomide.

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Original article Mateos, M.-V. *et al.* Bortezomib, melphalan, and prednisone versus bortezomib, thalidomide, and prednisone as induction therapy followed by maintenance treatment with bortezomib and thalidomide versus bortezomib and prednisone in elderly patients with untreated multiple myeloma: a randomised trial. *Lancet Oncol.* 10, 934–941 (2010)