RESEARCH HIGHLIGHTS

Poor outcome to induction therapy for nonresponders

For patients with multiple myeloma, autologous stem-cell transplantation (SCT) has been a standard treatment; however, up to 50% of patients do not achieve a response following transplantation. Nonetheless, a lack of a response to induction therapy does not impact progression-free survival or overall survival outcomes, although this finding has only been assessed in patients treated with conventional therapies. A retrospective study by Gertz et al. showed that patients who do not achieve partial remission have a significantly shorter overall survival post-transplantation.

The study assessed 286 patients who had at least a partial response to thalidomide-based or lenalidomide-based therapy. The complete response and very good partial response (VGPR) rates were significantly higher for patients in the plateau (responding) group before transplantation compared with those in the relapsed-refractory group. Moreover, progression occurred in 83% who were refractory to treatment compared with 56% who showed a response. The overall survival was 75% in patients with a VGPR, and 54% in those without such a response.

Interesting, in those with a VGPR after transplantation, no survival advantage was conveyed for those achieving a pretransplantation response to novel agents, although the study was limited by a small sample size and short follow-up. "Absence of a response to induction therapy with thalidomide or lenalidomide predicts a poorer outcome after high-dose therapy", concludes Gertz "More effective induction schemes are needed to ensure response [is] achieved prior to SCT".

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Original article Gertz, M.A. *et al.* Stem cell transplantation in multiple myeloma: impact of response failure with thalidomide or lenalidomide induction. *Blood* **115**, 2348–2353 (2010)