Multiple Myeloma

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Multiple myeloma (MM) is the second most common hematological disease. Almost two thirds of patients are older than 65 years at diagnosis, and a rising incidence of MM is observed with increasing age. There is a significant difference in outcome according to age. In a study conducted on 855 patients, the median survival for patients older than 65 years was 18 months, compared with 42 months in younger patients, regardless of the type of therapy received. Oral melphalan and prednisone (MP) has been considered the standard treatment for the majority of elderly patients. Low-dose melphalan should be considered the standard of care and incorporated in all induction treatments for patients who are not candidates for autologous transplant. At diagnosis, thalidomide has also been combined with MP. Oral MP plus thalidomide (MPT) was compared with MP alone in patients aged 60–85 years. The 2-year event-free survival rates were 54% for MPT and 27% for MP ($P = 0.0006$). The 3-year survival rates were 80% for MPT and 64% for MP ($P = 0.19$). In a multicenter phase I/II study, the combination of oral lenalidomide, melphalan, and prednisone was evaluated as induction therapy. At the maximum tolerated dose, 85.4% of patients showed at least a PR; 41.5% achieved at least a VGPR, and 17.1% reached immunofixation-negative CR. These observations provided the basis for a large international randomized trial comparing MP, MP plus lenalidomide (MPR), and MPR followed by lenalidomide maintenance treatment. Preliminary results suggest a major role for maintenance treatment. In a large phase III study, untreated myeloma patients aged > 65 years received a combination including bortezomib, melphalan, and prednisone (VMP). The VMP combination appeared to be significantly superior to MP. VMP appeared to overcome the poor prognosis conferred by retinoblastoma gene deletion and IgH translocations.