Bendamustine in the Treatment of Multiple Myeloma: Results and Future Perspectives

Pönisch W, Niederwieser D.

East German Study Group for Hematology and Oncology (OSHO), University of Leipzig, Philipp Rosenthalstrasse 23-25, D-4103 Liepzig, Germany.

Multiple myeloma (MM) is a malignancy of terminally differentiated plasma cells typically occurring in elderly patients. The clinical manifestations of this disease result primarily from the accumulation of monoclonal protein (paraprotein) in the serum and/or urine, anemia, lytic bone lesions, hypercalcemia, renal insufficiency, and immune deficiency. Multiple myeloma is incurable with standard chemotherapy. Melphalan and prednisone has been the mainstay of treatment for MM for about three decades. This regimen results in a clinical response in approximately 60% of patients and a median survival of approximately 36 months. A variety of combination therapies have also been used in MM, but have not been considered to offer a significant benefit compared with standard therapy. In early trials, bendamustine monotherapy was as effective as cyclophosphamide and various combination therapies in achieving remission in MM. This article describes a prospective, randomized, phase III study designed to compare the efficacy of bendamustine/prednisolone with a standard melphalan/prednisolone regimen.