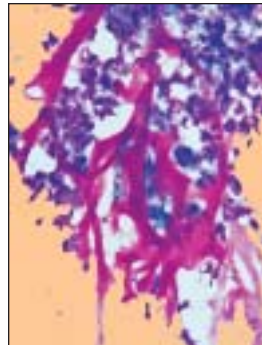


TEN BEST READINGS RELATING TO MYELOMA

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Richardson PG, Barlogie B, Berenson J, et al. A phase 2 study of bortezomib in relapsed, refractory myeloma. *N Engl J Med.* 2003;348:2609-2617.

This multicenter, open-label, nonrandomized phase II trial of the novel proteasome inhibitor bortezomib included 193 evaluable patients with relapsed refractory myeloma. Bortezomib induced clinically significant responses, with manageable toxic effects.

Harousseau JL, Attal M. High-dose therapy in multiple myeloma. *Hematol J.* 2003;4:163-170.

Autologous stem cell transplantation (ASCT) is the standard treatment for younger patients with newly diagnosed MM. Double ASCT appears to be superior, at least in patients who do not achieve a good response to one ASCT. For other patients, enough stem cells should be collected to perform two ASCTs, but the second should be performed only after relapse.

Dalton WS. The tumor microenvironment: focus on myeloma. *Cancer Treat Rev.* 2003;29 (suppl 1):11-19.

Cell adhesion-mediated drug resistance (CAM-DR) is particularly relevant in hematologic malignancies such as multiple myeloma, where myeloma cells localize in the bone marrow and interact with stroma and stromal cells, initiating the production of proteins that stimulate or support tumor survival. CAM-DR provides a plausible explanation for the protective mechanisms associated with myeloma cell adhesion and

demonstrates that the tumor microenvironment may hold the key to elucidating how tumor cells resist chemotherapy.

Kumar A, Loughran T, Alsina M, et al. Management of multiple myeloma: a systematic review and critical appraisal of published studies. *Lancet Oncol.* 2003;4: 293-304.

This review of all randomized studies in myeloma identified the introduction of high-dose chemotherapy and the use of bisphosphonates as the most important therapeutic advances in the management of myeloma for improving outcome. The quality of total evidence supporting treatment recommendations in myeloma is modest.

Shaughnessy JD Jr. Global gene expression profiling in the study of multiple myeloma. *Int J Hematol.* 2003;77:213-225.

High-throughput global gene expression profiling has become a powerful tool for investigating the molecular biology and clinical behaviors. The author discusses recent progress made in addressing many of the issues associated with gene expression through the molecular dissection of the transcriptome of normal plasma cells, MGUS, and MM.

Terpos E, Szydlo R, Apperley JE, et al. Soluble receptor activator of nuclear factor (kappa) ligand-osteoprotegerin ratio predicts survival in multiple myeloma: proposal for a novel prognostic index. *Blood.* 2003;102:1064-1069.

The authors measured soluble receptor activator of nuclear factor

The 10 best recent articles in the medical literature relating to myeloma are reviewed here.

Ten Best Readings

κ B ligand (sRANKL), osteoprotegerin (OPG), and bone remodeling markers in newly diagnosed MM to evaluate their role in osteoclast activation and possibly in plasma cell survival in MM. Their results confirm the importance of sRANKL/OPG in the development of bone disease, and they also highlight the role of this pathway in the biology of plasma cell growth as reflected by its influence on survival.

Richardson PG, Schlossman RL, Weller E, et al. Immunomodulatory drug CC-5013 overcomes drug resistance and is well tolerated in patients with relapsed multiple myeloma. *Blood*. 2002;100:3063-3067.

This phase 1 dose-escalation study of the thalidomide analog IMiD3 (also known as CC-5013) for relapsed and refractory MM demonstrated that the majority of patients benefited from treatment with CC-5013. The study provides the basis for the evaluation of CC-5013, either alone or in combination, to treat patients with MM at earlier stages of disease.

Weber D, Rankin K, Gavino M, et al. Thalidomide alone or with dexamethasone for previously untreated multiple myeloma. *J Clin Oncol*. 2003;21:16-19.

Thalidomide alone was effective in patients with newly diagnosed myeloma. The combination with dexamethasone induced a high frequency of response, rapid onset of remission, and low incidence of serious irreversible toxicity.

Rajkumar SV, Hayman S, Gertz MA, et al. Combination therapy

with thalidomide plus dexamethasone for newly diagnosed myeloma. *J Clin Oncol*. 2002;20:4319-4323.

The combination of thalidomide plus dexamethasone is a feasible and active regimen in the treatment of multiple myeloma. It merits further study as an oral alternative to infusional chemotherapy with vincristine, doxorubicin, and dexamethasone and other intravenous regimens currently used as pretransplantation induction therapy for myeloma.

Dudeney S, Lieberman IH, Reinhardt MK, et al. Kyphoplasty in the treatment of osteolytic vertebral compression fractures as a result of multiple myeloma. *J Clin Oncol*. 2002;20:2382-2387.

Kyphoplasty was efficacious in the treatment of osteolytic vertebral compression fractures resulting from multiple myeloma. Kyphoplasty is associated with early clinical improvement of pain and function as well as some restoration of vertebral body height.