



Multiple Myeloma

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, hematology-oncology fellows and other healthcare providers involved in the treatment of multiple myeloma (MM).

OVERVIEW OF ACTIVITY

MM is a plasma cell neoplasm that accounts for approximately 10% of all hematologic cancers. It is estimated that 24,050 new cases will be diagnosed and 11,090 deaths will occur in the United States in 2014. Patients with smoldering (asymptomatic) or Stage I active myeloma may be observed, as they often have an indolent disease course for many years without therapy, although this paradigm may be changing for those considered to be at high risk. On the other hand, the disease course for advanced myeloma is uniformly aggressive. The introduction of new agents with substantial activity has improved outcomes and allowed patients to experience longer periods of remission. Both novel proteasome inhibitors and immunomodulatory (IMiD) agents have effectively transformed the standard treatment for patients with newly diagnosed and relapsed/refractory MM. Thus, the current challenge facing the oncology community is identifying those patients who will obtain the greatest benefit from a specific regimen while incurring the least toxicity.

For this reason, hematologic oncologists must be apprised of the unique risks and benefits accompanying each evidence-based treatment strategy and of the acceptable monitoring and supportive management techniques that enable early recognition of safety concerns and effective interventions to address side effects. Despite the existence of a number of tools to assist clinicians in this regard, many areas of controversy persist within academic and community settings. This program uses a review of recent publications and presentations, faculty cases and Q&A sessions to assist medical oncologists, hematology-oncology fellows and other healthcare providers with the formulation of up-to-date clinical management strategies for MM.

LEARNING OBJECTIVES

- Recall existing and emerging clinical research data to effectively implement evidence-based therapeutic approaches for patients with newly diagnosed and relapsed/refractory MM.

- Recognize essential patient care considerations with the use of proteasome inhibitor- and/or IMiD-containing systemic therapies in newly diagnosed MM.
- Examine optimal duration and benefits/risks of lenalidomide maintenance therapy after stem cell transplantation for patients with active MM.
- Assess the use of bone-targeted therapy in patients with newly diagnosed MM regardless of the presence of disease in the bone.
- Recall new data with novel treatment approaches with histone deacetylase inhibitors or monoclonal antibodies for relapsed and/or refractory MM.
- Appraise emerging clinical trial data with proteasome inhibitors and tyrosine kinase inhibitors as treatment for Waldenström macroglobulinemia.
- Develop a risk-adapted treatment plan for patients with smoldering MM.
- Assess the ongoing clinical trials evaluating therapeutic approaches for MM, and counsel appropriately selected patients for study participation.

ACCREDITATION STATEMENT

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HOW TO USE THIS CME ACTIVITY

This CME activity consists of a video component. To receive credit, the participant should watch the video, complete the Post-test with a score of 75% or better and fill out the Educational Assessment and Credit Form located at ResearchToPractice.com/RTPODMM2014/CME.

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FACULTY — The following faculty (and their spouses/partners) reported real or apparent conflicts of interest, which have been resolved through a conflict of interest resolution process:

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RESEARCH TO PRACTICE STAFF AND EXTERNAL

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Hardware/Software Requirements:

A high-speed Internet connection
A monitor set to 1280 x 1024 pixels or more
Internet Explorer 7 or later, Firefox 3.0 or later, Chrome, Safari 3.0 or later
Adobe Flash Player 10.2 plug-in or later
Adobe Acrobat Reader
(Optional) Sound card and speakers for audio

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Select Publications

A multicenter, randomized, double blind, placebo controlled phase III study of panobinostat in combination with bortezomib and dexamethasone in patients with relapsed multiple myeloma. [NCT01023308](#)

A phase II study of modified lenalidomide, bortezomib and dexamethasone for transplant-ineligible patients with newly diagnosed multiple myeloma. [NCT01782963](#)

Attal M et al. Lenalidomide maintenance after stem-cell transplantation for multiple myeloma: Follow-up analysis of the IFM 2005-02 trial. *Proc ASH* 2013;[Abstract 406](#).

Attal M et al. Lenalidomide maintenance after stem-cell transplantation for multiple myeloma. *N Engl J Med* 2012;366(19):1782-91.

Bolli N et al. Whole exome sequencing of multiple myeloma reveals an heterogeneous clonal architecture and genomic evolution. *Proc ASH* 2013;[Abstract 399](#).

Brinhen S et al. A phase II study with carfilzomib, cyclophosphamide and dexamethasone (CCd) for newly diagnosed multiple myeloma. *Proc ASH* 2013;[Abstract 685](#).

Brioli A et al. Serum free light chain escape in progression and treatment resistance in multiple myeloma: A marker for the impact of intra-clonal heterogeneity. *Proc ASH* 2013;[Abstract 752](#).

Facon T et al. Initial phase 3 results of the first (frontline investigation of lenalidomide + dexamethasone versus standard thalidomide) trial (MM-020/IFM 07 01) in newly diagnosed multiple myeloma (NDMM) patients (pts) ineligible for stem cell transplantation (SCT). *Proc ASH* 2013;[Abstract 2](#).

Fostier K et al. Carfilzomib: A novel treatment in relapsed and refractory multiple myeloma. *OncoTargets and Therapy* 2012;5:237-44.

IFM2005-02: Relevance of maintenance therapy using lenalidomide (Revimid®) after autologous stem cell transplantation patients under the age of 65. (Open, randomised, multi-centric trial versus placebo). [NCT00430365](#)

Jasielec J et al. Predictors of treatment outcome with the combination of carfilzomib, lenalidomide, and low-dose dexamethasone (CRd) in newly diagnosed multiple myeloma (NDMM). *Proc ASH* 2013;[Abstract 3220](#).

Korde N et al. Phase II clinical and correlative study of carfilzomib, lenalidomide, and dexamethasone followed by lenalidomide extended dosing (CRD-R) induces high rates of MRD negativity in newly diagnosed multiple myeloma (MM) patients. *Proc ASH* 2013;[Abstract 538](#).

Landgren O et al. Clinical and correlative pilot study of carfilzomib, lenalidomide, and dexamethasone followed by lenalidomide extended dosing (CRd – R) in high risk smoldering multiple myeloma patients. *Proc ASH* 2013;[Abstract 1939](#).

Lohr JG et al. Widespread genetic heterogeneity in multiple myeloma: Implications for targeted therapy. *Cancer Cell* 2014;25(1):91-101.

Martinez-Lopez J et al. Prognostic value of deep sequencing approach for minimal residual disease (MRD) detection in multiple myeloma patients. *Proc ASH* 2013;[Abstract 1848](#).

Martinez-Lopez J et al. Prognostic value of deep sequencing method for minimal residual disease detection in multiple myeloma. *Blood* 2014;123(20):3073-9.

McCarthy PL et al. Lenalidomide after stem-cell transplantation for multiple myeloma. *N Engl J Med* 2012;366(19):1770-81.

Randomized phase III trial of bortezomib, lenalidomide and dexamethasone (VRd) versus carfilzomib, lenalidomide, dexamethasone (CRd) followed by limited or indefinite lenalidomide maintenance in patients with newly diagnosed symptomatic multiple myeloma. [NCT01863550](#)

Richardson PG et al. PANORAMA 2: Panobinostat in combination with bortezomib and dexamethasone in patients with relapsed and bortezomib-refractory myeloma. *Blood* 2013;122(14):2331-7.

Richardson PG et al. Twice-weekly oral MLN9708 (ixazomib citrate), an investigational proteasome inhibitor, in combination with lenalidomide (len) and dexamethasone (dex) in patients (pts) with newly diagnosed multiple myeloma (MM): Final phase 1 results and phase 2 data. *Proc ASH* 2013;[Abstract 535](#).

Singh PP et al. Lenalidomide maintenance therapy in multiple myeloma: A meta-analysis of randomized trials. *Proc ASH* 2013;[Abstract 407](#).

Sonneveld P et al. Bortezomib induction and maintenance treatment improves survival in patients with newly diagnosed multiple myeloma: Extended follow-up of the HOVON-65/GMMG-HD4 trial. *Proc ASH* 2013;[Abstract 404](#).

Templeton JE et al. **Chronic bilateral thigh and knee discomfort in an 18-year-old man.** *Clin Orthop Relat Res* 2008;466(2):507-13.

Terpos E et al. **International Myeloma Working Group recommendations for the treatment of multiple myeloma-related bone disease.** *J Clin Oncol* 2013;31(18):2347-57.

Treon SP et al. **A prospective multicenter study of the Bruton's tyrosine kinase inhibitor ibrutinib in patients with relapsed or refractory Waldenstrom's macroglobulinemia.** *Proc ASH* 2013;[Abstract 251](#).

Treon SP et al. **Carfilzomib, rituximab and dexamethasone (CaRD) is highly active and offers a neuropathy sparing approach for proteasome-inhibitor based therapy in Waldenstrom's macroglobulinemia.** *Proc ASH* 2013;[Abstract 757](#).