Current Clinical Algorithms and Recent Therapeutic Advances in the Management of Multiple Myeloma and Related Blood Disorders

(Video Program)

CME Information

TARGET AUDIENCE

This activity is intended for medical oncologists, radiation oncologists, nurses and other healthcare providers involved in the treatment of hematologic cancers.

OVERVIEW OF ACTIVITY

Multiple myeloma (MM) is a plasma cell neoplasm that accounts for approximately 12% of all hematologic cancer and carries with it one of the worst death to new cases ratios. Although MM only represents 1.4% of all new cancer cases diagnosed in the United States, it would be difficult to identify another area of oncology in which the research database — and related treatment implications — has evolved more rapidly during the past decade. Featuring information on the latest research developments along with expert perspectives, this CME activity will deliver highly applicable, current clinical information delving into the individualized and multifaceted management of MM.

LEARNING OBJECTIVES

- Develop a risk-adapted treatment plan for patients with smoldering MM, considering the roles of observation and active treatment.
- Use patient- and disease-related factors, including cytogenetic profile, to customize the use of induction and maintenance therapeutic approaches in the transplant and nontransplant settings.
- Consider available research data and other clinical factors in the best-practice selection, sequencing and combining of current and recently approved novel agents in the nonresearch care of patients with relapsed/refractory MM.
- Design and implement a plan of care to recognize and manage side effects and toxicities associated with recently approved systemic therapies to support quality of life and continuation of treatment.
- Identify ongoing trials of investigational approaches in MM, and refer appropriate patients and obtain consent for study participation.

ACCREDITATION STATEMENT

This activity has been planned and implemented in accordance with the accreditation requirements and policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint providership of Penn State College of Medicine and Research To Practice. Penn State College of Medicine is accredited by the ACCME to provide continuing medical education for physicians.

CREDIT DESIGNATION STATEMENT

Penn State College of Medicine designates this enduring material for a maximum of 1.75 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

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 80% or better and fill out the Educational Assessment and Credit Form located at **ResearchToPractice.com/MMTT117/Video/CME**.

CONTENT VALIDATION AND DISCLOSURES

It is the policy of Research To Practice and Penn State College of Medicine to ensure balance, independence, objectivity and scientific rigor in all their educational programs. All faculty, planners and managers participating in this activity are required to disclose any relevant financial relationship(s) they (or spouse/partner) have with a commercial interest that benefits the individual in any financial amount that has occurred within the past 12 months; and the opportunity to affect the content of CME about the products or services of the commercial interest. Research To Practice and Penn State College of Medicine ensured that any conflicts of interest were resolved before the educational activity occurred.

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

Rafael Fonseca, MD
Getz Family Professor of Cancer
Chair, Department of Internal Medicine
Mayo Clinic Arizona
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Consulting Agreements: Amgen Inc, Bayer HealthCare Pharmaceuticals, Bristol-Myers Squibb Company, Celgene Corporation, Janssen Biotech Inc, Novartis, Sanofi Genzyme, Takeda Oncology.

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Consulting Agreements: Amgen Inc, Celgene Corporation, Novartis; **Contracted Research:** AstraZeneca Pharmaceuticals LP, Lilly.

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PENN STATE COLLEGE OF MEDICINE — Faculty and staff involved in the development and review of this activity have disclosed no relevant financial relationships.

RESEARCH TO PRACTICE STAFF AND EXTERNAL REVIEWERS — The scientific staff and reviewers for Research To Practice have no relevant conflicts of interest to disclose.

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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

Ali SA et al. **T cells expressing an anti-B-cell maturation antigen chimeric antigen receptor cause remissions of multiple myeloma.** *Blood* 2016;128(13):1688-700.

Attal M et al; IFM 2009 Study. **Lenalidomide, bortezomib, and dexamethasone with transplantation for myeloma.** *N Engl J Med* 2017;376(14):1311-20.

Attal M et al. **Lenalidomide (LEN) maintenance (MNTC) after high-dose melphalan and autologous stem cell transplant (ASCT) in multiple myeloma (MM): A meta-analysis (MA) of overall survival (OS).** *Proc ASCO* 2016;**Abstract 8001**.

Avet-Loiseau H et al. **Evaluation of minimal residual disease (MRD) by next generation sequencing (NGS) is highly predictive of progression free survival in the IFM/DFCI 2009 trial.** *Proc ASH* 2015;**Abstract 191**.

Babros AZ et al. **Pembrolizumab in combination with pomalidomide and dexamethasone for relapsed/refractory multiple myeloma (RRMM).** *Proc ASH* 2016;**Abstract 490**.

Dimopoulos MA et al; POLLUX Investigators. **Daratumumab, lenalidomide, and dexamethasone for multiple myeloma.** *N Engl J Med* 2016;375(14):1319-31.

Durie B et al. **Bortezomib with lenalidomide and dexamethasone versus lenalidomide and dexamethasone alone in patients with newly diagnosed myeloma without intent for immediate autologous stem-cell transplant (SWOG S0777): A randomised, open-label, phase 3 trial.** *Lancet* 2017;389(10068):519-27.

Ghobrial I et al. **Phase II trial of combination of elotuzumab, lenalidomide, and dexamethasone in high-risk smoldering multiple myeloma.** *Proc ASH* 2016;**Abstract 976**.

ICARIA-MM: A Phase 3 randomized, open-label, multicenter study comparing isatuximab (SAR650984) in combination with pomalidomide and low-dose dexamethasone versus pomalidomide and low-dose dexamethasone in patients with refractory or relapsed and refractory multiple myeloma. NCT02990338

Kumar S et al. **International Myeloma Working Group consensus criteria for response and minimal residual disease assessment in multiple myeloma.** *Lancet Oncol* 2016;17(8):e328-46.

Kumar S et al. **Venetoclax monotherapy for relapsed/refractory multiple myeloma: Safety and efficacy results from a phase I study.** *Proc ASH* 2016;**Abstract 488**.

Lonial S et al. **Daratumumab monotherapy in patients with treatment-refractory multiple myeloma (SIRIUS): An open-label, randomised, phase 2 trial.** *Lancet* 2016;387(10027):1551-60.

Magarotto V et al. **Triplet vs doublet lenalidomide-containing regimens for the treatment of elderly patients with newly diagnosed multiple myeloma.** *Blood* 2016;127(9):1102-8.

Mateos MV et al. **Lenalidomide plus dexamethasone versus observation in patients with high-risk smouldering multiple myeloma (QuiRedex): Long-term follow-up of a randomised, controlled, phase 3 trial.** *Lancet Oncol* 2016;17(8):1127-36.

Mateos MV et al. **Pembrolizumab in combination with lenalidomide and low dose dexamethasone for relapsed/refractory multiple myeloma (RRMM): Final efficacy and safety analysis.** *Proc ASCO* 2016;**Abstract 8010**.

Matulis SM et al. **Dexamethasone treatment promotes Bcl-2 dependence in multiple myeloma resulting in sensitivity to venetoclax.** *Leukemia* 2016;30(5):1086-93.

McCarthy P et al. **Lenalidomide (LEN) maintenance following high-dose melphalan and autologous stem cell transplant (ASCT) in patients (pts) with newly diagnosed multiple myeloma (MM): A meta-analysis of overall survival (OS).** *Clin Lymphoma Myeloma Leuk* 2017;17(1):e6.

Moreau P et al. **Oral ixazomib, lenalidomide, and dexamethasone for multiple myeloma.** *N Engl J Med* 2016;374(17):1621-34.

Moreau P et al. **Venetoclax combined with bortezomib and dexamethasone for patients with relapsed/refractory multiple myeloma.** *Proc ASH* 2016;**Abstract 975**.

Munshi NC et al. **Association of minimal residual disease with superior survival outcomes in patients with multiple myeloma: A meta-analysis.** *JAMA Oncol* 2017;3(1):28-35.

Paiva B et al. **Immune status of high-risk smoldering multiple myeloma patients and its therapeutic modulation under LenDex: A longitudinal analysis.** *Blood* 2016;127(9):1151-62.

Palumbo A et al; CASTOR Investigators. **Daratumumab, bortezomib, and dexamethasone for multiple myeloma.** *N Engl J Med* 2016;375(8):754-66.

Select Publications

Rajkumar SV et al. **International Myeloma Working Group updated criteria for the diagnosis of multiple myeloma.** *Lancet Oncol* 2014;15(12):e538-48.

San Miguel J et al. **Pembrolizumab in combination with lenalidomide and low-dose dexamethasone for relapsed/refractory multiple myeloma (RRMM): Keynote-023.** *Proc ASH* 2015;**Abstract 505**.

Usmani S et al. **Open-label, multicenter, dose escalation phase 1b study to assess the subcutaneous delivery of daratumumab in patients (pts) with relapsed or refractory multiple myeloma (PAVO).** *Proc ASH* 2016;**Abstract 1149**.