Oncology Nursing™ UPDATE

Clinical Investigator and Nursing Perspectives on the Management of Multiple Myeloma

OVERVIEW OF ACTIVITY

Multiple myeloma (MM) is a plasma cell neoplasm that accounts for approximately 10% of all hematologic cancers and carries with it the worst death to new cases ratio (3:4) among all the blood cancer subtypes. Patients with smoldering (asymptomatic) myeloma may be cared for by observation only because the course of disease is often indolent for many years without therapy. However, patients with more advanced, active disease require immediate induction therapy in an effort to prepare eligible candidates for autologous stem cell transplant (ASCT). Optimal initial induction therapy for both ASCT candidates and those not eligible remains an area of clinical controversy, and multiple acceptable treatment options appear to merit consideration. Recent clinical research demonstrates an abundance of treatment options now available to patients with both newly diagnosed and relapsed or refractory MM. To provide oncology nurses with therapeutic strategies to address the disparate needs of patients with MM, the *Oncology Nursing Update* MM audio series employs one-on-one interviews with medical oncologists and nurses who are expert in caring for patients with MM. Upon completion of this CNE activity, oncology nurses should be able to formulate an up-to-date and more complete approach to the care of patients with MM.

LEARNING OBJECTIVES

- Discuss the benefits and risks associated with evidence-based systemic therapies used in the treatment of MM, including chemotherapy, proteasome inhibitors, corticosteroids and immunomodulatory agents, in the pre- and postautologous stem cell transplant (ASCT) settings and for patients who are not candidates for ASCT.
- Develop a plan of care to manage the side effects associated with these therapies to support quality of life and continuation of treatment.
- Evaluate the preliminary safety profiles and response outcomes observed in studies of next-generation proteasome inhibitors and immunomodulatory agents for patients with relapsed or refractory and previously untreated MM.

ACCREDITATION STATEMENT

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CREDIT DESIGNATION STATEMENT

This educational activity for 1.5 contact hours is provided by Research To Practice during the period of November 2012 through November 2013.

HOW TO USE THIS CNE ACTIVITY

This is an audio CNE program. This website contains CNE information, including learning objectives, faculty disclosures, a Post-test and an Educational Assessment and Credit Form, as well as links to relevant abstracts and full-text articles.

To receive credit, participants should read the learning objectives and faculty disclosures, listen to the audio MP3s and complete the Post-test and Educational Assessment and Credit Form located at ResearchToPractice.com/ONUMM112/CNE. A statement of CNE credit will be issued only upon completion of the Post-test, with a score of 75% or better, and the Educational Assessment and Credit Form. Your statement of credit will be mailed to you within 3 weeks or may be printed online.

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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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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
Macromedia Flash plug-in 6.0 or greater
Adobe Acrobat Reader
(Optional) Sound card and speakers for audio

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TOPICS DISCUSSED DURING THE PROGRAM

INTERVIEW WITH DR ANDERSON

- Extending progression-free and overall survival in MM in the era of novel agents
- Currently available and emerging proteasome inhibitors — bortezomib, carfilzomib and MLN9708 — and immunomodulatory drugs (IMiDs) — lenalidomide and pomalidomide
- Role of autologous stem cell transplant in the management of MM
- Maintenance therapy after initial induction treatment for transplant-ineligible patients
- Post-transplant maintenance lenalidomide and second primary cancers
- Selection of pretransplant induction regimen
- Tolerability and side effects of lenalidomide
- Bortezomib-related side effects and strategies to ameliorate neuropathy (eg, subcutaneous administration)
- Benefits of the irreversible proteasome inhibitor carfilzomib in relapsed, refractory MM and the lack of associated peripheral neuropathy
- Side effects of carfilzomib
- Potential role of carfilzomib as a component of induction therapy (eg, carfilzomib/lenalidomide/dexamethasone)
- Efficacy and side effects of the third-generation IMiD pomalidomide
- Etiology and management of renal failure in patients with MM
- Prevalence of peripheral neuropathy in MM at initial diagnosis
- Prevention of lytic bone disease and fractures with bisphosphonates
- Duration of bisphosphonate therapy for patients with active myeloma
- Bisphosphonate-associated osteonecrosis of the jaw (ONJ)

INTERVIEW WITH MS SPONG

- **Case discussion:** *A 69-year-old man with MM and significant bone pain receives CyBorD*
  - Use of subcutaneous bortezomib
  - Post-transplant maintenance lenalidomide
  - Prevention of lenalidomide-associated thrombosis
  - Side effects of pomalidomide
  - Family support and patient coping with myeloma and its treatment
- **Case discussion:** *A 54-year-old man with IgG kappa smoldering myeloma for several years develops active, indolent myeloma and receives cyclophosphamide, carfilzomib, thalidomide and dexamethasone on the CYCLONE trial*
  - Efficacy and side effects of carfilzomib
- **Case discussion:** *An 87-year-old man has smoldering myeloma for 2 decades before developing active myeloma with significant renal failure and anemia*
  - Lenalidomide-associated rash
  - Initiation and duration of bone-targeted treatment for MM
  - Prophylaxis for ONJ

SELECT PUBLICATIONS

Arnulf B et al. **Updated survival analysis of a randomized, phase 3 study of subcutaneous versus intravenous bortezomib in patients with relapsed multiple myeloma.** *Haematologica* 2012;[Epub ahead of print]. **Abstract**

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

Falco P et al. **Lenalidomide-prednisone induction followed by lenalidomide-melphalan-prednisone consolidation and lenalidomide-prednisone maintenance in newly diagnosed elderly unfit myeloma patients.** *Leukemia* 2012;[Epub ahead of print]. **Abstract**

Jakubowiak AJ et al. **A phase 1/2 study of carfilzomib in combination with lenalidomide and low-dose dexamethasone as a frontline treatment for multiple myeloma.** *Blood* 2012;120(9):1801-9. **Abstract**

Jakubowiak AJ et al. **Stringent complete response (sCR) in patients (pts) with newly diagnosed multiple myeloma (NDMM) treated with carfilzomib (CFZ), lenalidomide (LEN), and dexamethasone (DEX).** *Proc ASCO* 2012;**Abstract 8011**.

Lupo B, Palumbo A. **Lenalidomide in the treatment of young patients with multiple myeloma: From induction to consolidation/maintenance therapy.** *Adv Hematol* 2012;2012:906247. **Abstract**

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

Mohty B et al. **Treatment strategies in relapsed and refractory multiple myeloma: A focus on drug sequencing and 'retreatment' approaches in the era of novel agents.** *Leukemia* 2012;26(1):73-85. **Abstract**

Moreau P et al. **Pharmacokinetic, pharmacodynamic and covariate analysis of subcutaneous versus intravenous administration of bortezomib in patients with relapsed multiple myeloma.** *Clin Pharmacokinet* 2012;[Epub ahead of print]. **Abstract**

Morgan GJ et al. **Effects of induction and maintenance plus long-term bisphosphonates on bone disease in patients with multiple myeloma: The Medical Research Council Myeloma IX trial.** *Blood* 2012;119(23):5374-83. **Abstract**

Palumbo A et al. **Continuous lenalidomide treatment for newly diagnosed multiple myeloma.** *N Engl J Med* 2012;366(19):1759-69. **Abstract**

Richardson PG et al. **Oral weekly MLN9708, an investigational proteasome inhibitor, in combination with lenalidomide and dexamethasone in patients (pts) with previously untreated multiple myeloma (MM): A phase I/II study.** *Proc ASCO* 2012;**Abstract 8033**.

Vij R et al. **An open-label, single-arm, phase 2 study of single-agent carfilzomib in patients with relapsed and/or refractory multiple myeloma who have been previously treated with bortezomib.** *Br J Haematol* 2012;158(6):739-48. **Abstract**

Vij R et al. **Pomalidomide (POM) with or without low-dose dexamethasone (LoDEX) in patients (pts) with relapsed/refractory multiple myeloma (RRMM): Outcomes in pts refractory to lenalidomide (LEN) and/or bortezomib (BORT).** *Proc ASCO* 2012;**Abstract 8016**.