

## FEATURE ARTICLE

# Advances in the Management of Low- to Intermediate-Risk Myelodysplastic Syndrome: Integrating the National Comprehensive Cancer Network Guidelines

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Myelodysplastic syndromes (MDSs) are a group of hematologic diseases that present unique challenges for oncology nurses, especially because patients with the disorders are being seen more often in oncology practices. An increasing array of therapeutic options are available, and the National Comprehensive Cancer Network published its first clinical practice guidelines for MDSs in 2004. This article provides oncology nurses with the most recent data on supportive care as well as emerging therapies for patients with low- to intermediate-risk MDS.

**P**atients with myelodysplastic syndromes (MDSs) are becoming a more common part of oncology practice, partly because of an aging population, improved diagnostic capabilities, and the emergence of therapeutic options. Treatment for MDSs focuses on symptom management and supportive care. MDSs present unique challenges to oncology nurses, who are usually the primary providers of supportive care for patients with the syndromes. Traditionally, the majority of symptom management was accomplished via red blood cell or platelet transfusions, and it has been expanded to the use of erythropoiesis-stimulating therapies. New agents for active treatment of MDSs have been evaluated in clinical trials with promising results. One agent, azacitidine (5-azacitidine [Vidaza®, Pharmion Corporation, Boulder, CO]), was approved by the U.S. Food and Drug Administration (FDA) in May 2004 as the first active agent for the treatment of MDSs. A second agent, Revlimid® (lenalidomide, Celgene Corporation, Summit, NJ), was approved by the FDA in December 2005 for the treatment of transfusion-dependent anemia resulting from low- or intermediate-1-risk MDS associated with the deletion of 5q cytogenetic abnormality with or without additional cytogenetic abnormalities.

The National Comprehensive Cancer Network (NCCN) published its first clinical practice guidelines for MDSs in July 2004 (NCCN, 2006). The guidelines are comprehensive and provide useful information to oncology nurses dealing with MDSs. The guidelines will require ongoing modifications because of the expansion of clinical research in the characterization and treatment of MDSs and thus do not present detailed information on

### At a Glance

- ◆ Recent advances in the scientific understanding, classification, and risk stratification of the myelodysplastic syndromes (MDSs) are providing guidelines for individualizing treatment.
- ◆ Integrating supportive care with newer active therapies for the treatment of MDSs requires an understanding of the potential toxicities, nursing management, and advantages and disadvantages of each therapy.
- ◆ Consideration for the special needs of older patients, including management of comorbidities and polypharmacy, quality of life, and financial and social concerns, requires incorporating geriatric and oncology nursing strategies.

the most recent advances for certain therapies. This article is intended to provide oncology nurses with the most recent data on supportive care as well as emerging therapies for patients with low- to intermediate-risk MDS.

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