**NCCN Guidelines® Insights**

**155 Bone Cancer, Version 2.2017**

The NCCN Guidelines for Bone Cancer provide interdisciplinary recommendations for treating chordoma, chondrosarcoma, giant cell tumor of bone, Ewing sarcoma, and osteosarcoma. These NCCN Guidelines Insights summarize the NCCN Bone Cancer Panel's guideline recommendations for treating Ewing sarcoma. The data underlying these treatment recommendations are also discussed.

**NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)**

**230 Multiple Myeloma, Version 3.2017**

Multiple myeloma (MM) is caused by the neoplastic proliferation of plasma cells. These neoplastic plasma cells proliferate and produce monoclonal immunoglobulin in the bone marrow causing skeletal damage, a hallmark of multiple myeloma. Other MM-related complications include hypercalcemia, renal insufficiency, anemia, and infections. The recommendations discussed in this article are specific to the diagnosis and treatment of patients with newly diagnosed MM.

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**ONCOLOGY WATCH**

**137 Mad About MACRA**

*Margaret Tempero, MD*

**THE LAST WORD**

**271 Lean: Targeted Therapy for Care Delivery**

*Chadi Nabhan, MD, MBA; Gregory Horner, MA, CSSBB; and Michael D. Howell, MD, MPH*

**Molecular Insights in Patient Care**

**142 Response to PD-1 Blockade in Microsatellite Stable Metastatic Colorectal Cancer Harboring a POLE Mutation**

*Jun Gong, MD; Chongkai Wang, MD; Peter P. Lee, MD; et al*

Recent clinical evidence has demonstrated that microsatellite instability (MSI) or defective mismatch repair (MMR) and high tumor mutational load can predict response to the programmed cell death 1 (PD-1) receptor inhibitor pembrolizumab in metastatic colorectal cancer (mCRC). Mutations in polymerase ε (POLE), a DNA polymerase involved in DNA replication and repair, contribute to an ultramutated but microsatellite stable (MSS) phenotype in colorectal tumors that is uniquely distinct from MSI tumors. This report describes a clinical response to pembrolizumab in an 81-year-old man with treatment-refractory mCRC characterized by an MSS phenotype and POLE mutation identified on genomic profiling by next-generation sequencing.

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**ORIGINAL RESEARCH**

**172 Electronic Rapid Fitness Assessment: A Novel Tool for Preoperative Evaluation of the Geriatric Oncology Patient**

*Armin Shahrokni, MD, MPH; Amy Tin, MA; Robert J. Downey, MD; et al*

The American College of Surgeons and American Geriatrics Society recommend performing a geriatric assessment (GA) in the preoperative evaluation of older patients. To address this, experts from Memorial Sloan Kettering Cancer Center developed an electronic GA, the Electronic Rapid Fitness Assessment (eRFA). This study reviewed the feasibility and clinical utility of the eRFA in the preoperative evaluation of geriatric patients.

**181 Locally Advanced Colon Cancer: Evaluation of Current Clinical Practice and Treatment Outcomes at the Population Level**

*Charlotte E.L. Klaver, MD; Lieke Gietelink, MD; Willem A. Bemelman, MD; et al*

The goal of this study was to evaluate current clinical practice and treatment outcomes regarding locally advanced colon cancer at the population level using data from the Dutch Surgical Colorectal Audit.

**197 Vascular Invasion and Metastasis is Predictive of Outcome in Barcelona Clinic Liver Cancer Stage C Hepatocellular Carcinoma**

*Ali A. Mokdad, MD, MS; Amit G. Singal, MD, MS; Jorge A. Marrero, MD; et al*

Patients with Barcelona Clinic Liver Cancer (BCLC) stage C hepatocellular carcinoma (HCC) have variable long-term outcomes. Better delineation of prognosis is important for clinical trial enrollment and clinical practice in an era of precision medicine. This study hypothesized that stratification of patients with BCLC stage C HCC by presence of vascular invasion and/or metastasis improves prognostic discrimination.

**205 Identifying Educational Needs of the Multidisciplinary Cancer Team in the Treatment of Metastatic Breast Cancer**

*Priya Wanchoo, MD; Chris Larrison; Carol Rosenberg, MD; et al*

Rapid advancements in the field of metastatic breast cancer (mBC) add to the complexity of managing patients with this disease. An educational needs assessment of multidisciplinary mBC clinicians was executed to identify practice performance gaps and recommend educational strategies aimed at closing these gaps.

**219 Payer Coverage for Hereditary Cancer Panels: Barriers, Opportunities, and Implications for the Precision Medicine Initiative**

*Julia R. Trosman, PhD; Christine B. Weldon, MBA; Michael P. Douglas, MS; et al*

Hereditary cancer panels (HCPs), testing for multiple genes and syndromes, are rapidly transforming cancer risk assessment but are controversial and lack formal insurance coverage. This study aimed to identify payers’ perspectives on barriers to HCP coverage and opportunities to address them. Comprehensive cancer risk assessment is highly relevant to the Precision Medicine Initiative (PMI), and payers’ considerations could inform PMI’s efforts. This study describes the findings and discusses them in the context of PMI priorities.
Tyrosine kinase inhibitor (TKI) therapy with small molecule inhibitors of BCR-ABL tyrosine kinase has significantly reduced the annual mortality rate among patients with chronic myelogenous leukemia (CML). Although most of these patients respond to first-line TKI therapy, the use of TKIs is complicated by the development of resistance or intolerance in some patients, resulting in a loss of response or discontinuation of treatment. Inadequate response to TKI therapy is associated with poor long-term outcome, and the cases of patients with resistance or intolerance should be carefully evaluated for alternative treatment options. This report discusses the challenges associated with the management of newly diagnosed chronic phase CML in a patient with intolerance to multiple TKI therapies.

Metastatic melanoma is a devastating disease that has been increasing in incidence and until relatively recently had few effective treatment options. With the approval in 2011 of ipilimumab, a monoclonal antibody against cytotoxic T-lymphocyte–associated protein 4 (CTLA-4), however, that has begun to change. Use of this and similar agents can lead to characteristic and varied immune-related adverse events (irAEs); however, experience has shown that these can be managed with patient education, early recognition, and judicious use of systemic steroids. This case report highlights the full spectrum of clinical responses that are possible with the new generation of immunotherapies in metastatic melanoma—from rapidly developing and unpredictable irAEs to impressive and durable disease regressions.