St. Jude Children's Research Hospital

St. Jude Children's Research Hospital is the first and only NCI-designated Comprehensive Cancer Center devoted solely to children. Since opening 55 years ago, St. Jude Children's Research Hospital has played a pivotal role in increasing overall US pediatric cancer survival rates from 20% to 80%. St. Jude gained international attention within the first decade of its opening with groundbreaking research into acute lymphoblastic leukemia (ALL), contributing to a staggering jump in childhood ALL survival rates from 4% in 1962 to 50% in 1972, to higher than 90% today.

St. Jude has embarked on the world's most ambitious effort to discover the origins of pediatric tumors and seek new cures. This collaborative effort, called the St. Jude Children's Research Hospital – Washington University Pediatric Cancer Genome Project, has helped pinpoint the genetic factors behind some of the toughest pediatric cancers by comparing complete genomes of cells for more than 800 patients. This genomic data is being analyzed to help guide translational research and knowledge about tumor structure, while also helping improve future clinical protocols for tumor treatments.

Founded by the late entertainer Danny Thomas, St. Jude remains true to his vision by focusing on finding cures and saving children. No family ever pays St. Jude for the care their child receives. St. Jude is supported primarily by philanthropic donations. Based in Memphis, Tennessee, St. Jude freely shares its discoveries.

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NCCN Guidelines® Insights

563 Hepatobiliary Cancers, Version 1.2017

The NCCN Guidelines for Hepatobiliary Cancers provide treatment recommendations for cancers of the liver, gallbladder, and bile ducts. These NCCN Guidelines Insights summarize the panel's discussion and most recent recommendations regarding locoregional therapy for treatment of patients with hepatocellular carcinoma.

NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®)

608 Hodgkin Lymphoma, Version 1.2017

This portion of the NCCN Guidelines for Hodgkin Lymphoma (HL) focuses on the management of classical HL. Current management of classical HL involves initial treatment with chemotherapy or combined modality therapy followed by restaging with PET/CT to assess treatment response using the Deauville criteria (5-point scale). The introduction of less toxic and more effective regimens has significantly advanced HL cure rates. However, long-term follow-up after completion of treatment is essential to determine potential long-term effects.

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Molecular Insights in Patient Care

555 Identification of Targetable ALK Rearrangements in Pancreatic Ductal Adenocarcinoma

Aatur D. Singhi, MD, PhD; Siraj M. Ali, MD, PhD; Jill Lacy, MD; et al

In recent years, chromosomal rearrangements involving the anaplastic lymphoma kinase (ALK) gene have been the subject of intense clinical investigation. The ALK fusion protein represents an attractive target for directed therapy, but, to date, has not been reported in pancreatic ductal adenocarcinomas (PDACs). This study examined the prevalence of ALK rearrangements within a large cohort of locally advanced and metastatic PDACs, identifying 5 patients with an ALK-rearranged PDAC. The associated clinicopathologic features and molecular profiles were further analyzed.

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Differences in Medicare Expenditures Between Appalachian and Nationally Representative Cohorts of Elderly Women With Breast Cancer: An Application of Decomposition Technique
Ami Vyas, PhD, MBA; S. Suresh Madhavan, PhD, MBA; and Usha Sambamoorthi, PhD
Differences in Medicare expenditures during the initial phase of cancer care among rural and medically underserved elderly women with breast cancer (BC) and those from a nationally representative cohort have not been reported. The objective of this study was to determine Medicare expenditures during the initial phase of care among women in West Virginia who were Medicare beneficiaries with BC and compare them with national estimates.

Are We on the Same Page? Patient and Provider Perceptions About Exercise in Cancer Care: A Focus Group Study
Agnes Smaradottir, MD; Angela L. Smith, MA; Andrew J. Borgert, PhD; and Kurt R. Oettel, MD
Physical activity during and after cancer treatment can help with symptom management and reduce the risk of cancer recurrence. However, it is unclear what constitutes an optimal exercise program. In addition, provider and patient barriers exist to the recommendation and adoption of exercise as part of a cancer treatment plan. The goal of this study was to determine how providers and patients feel about exercise during cancer treatment and explore what the barriers to implementing such a program might be.

Patient-Controlled Analgesia for Cancer-Related Pain: Clinical Predictors of Patient Outcomes
Emily J. Martin, MD; Eric J. Roeland, MD; Madison B. Sharp; et al
Patient-controlled analgesia (PCA) is an effective approach to treat pain. However, data regarding patterns of PCA use for cancer pain are limited. The purpose of this study was to define the patterns of PCA use and related outcomes in hospitalized patients with cancer.

Initiation of Trastuzumab by Women Younger Than 64 Years for Adjuvant Treatment of Stage I–III Breast Cancer
Huei-Ting Tsai, PhD; Claudine Isaacs, MD; Filipa C. Lynce, MD; et al
Studies have reported disparities by age and race in the initiation of adjuvant trastuzumab for the initial treatment of older women with early-stage breast cancer, but less is known about its initiation in younger patients. Therefore, we assessed temporal trends and clinical and demographic factors associated with trastuzumab initiation in a large, population-based cohort of patients aged <64 years in 5 states.

Bronchoscopic Techniques Used in the Diagnosis and Staging of Lung Cancer
Andrew D. Lerner, MD, and David Feller-Kopman, MD
With the greater use of chest CT, the incidental detection of lung nodules is expected to increase. However, because most lung nodules are benign, there is a high demand for minimally invasive procedures that provide valuable diagnostic information while minimizing complications. Recent advances in bronchoscopic technology meet this demand. This article reviews these new bronchoscopic technologies.
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.

Full Spectrum: Efficacy and Toxicity of Immunotherapy in Metastatic Melanoma

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.