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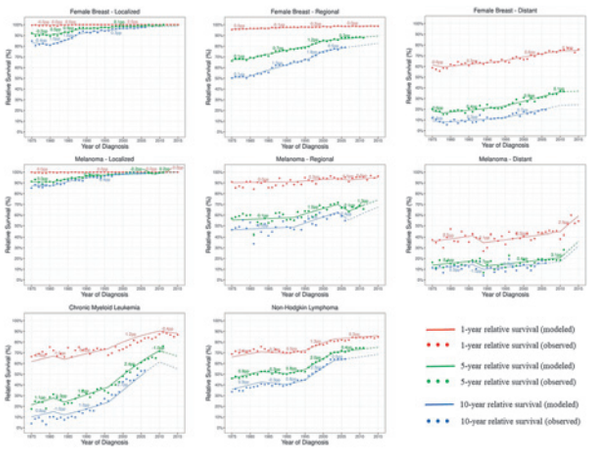
HIGHLIGHTS

Selected Articles from This Issue

Characterizing Trends in Cancer Patient's Survival Using JPSurv



Mariotto *et al.* | Page 2001

Improvements in cancer survival are usually assessed by comparing survival in grouped years of diagnosis. To enhance analyses of survival trends, Mariotto and colleagues presented the joinpoint survival model webtool (JPSurv) that analyzes survival data by single year of diagnosis and estimates changes in survival trends and year-over-year trend measures. The authors apply JPSurv to relative survival data for individuals diagnosed with female breast cancer, melanoma cancer, Non-Hodgkin Lymphoma (NHL) and Chronic Myeloid Leukemia (CML) between 1975–2015 in the Surveillance, Epidemiology, and End Results (SEER) Program. The greatest increases in trends for distant melanoma, NHL and CML coincided with the introduction of novel treatments, demonstrating the value of JPSurv for estimating and interpreting cancer survival trends. The JPSurv webtool provides a suite of estimates for analyzing trends in cancer survival that complement traditional descriptive survival analyses.

Racial/Ethnic Disparities in Childhood Cancer Survival in the United States

Zhao *et al.* | Page 2010

This study by Zhao and colleagues documented racial disparities in survival among patients with childhood cancer in the United States using recent nationwide registry data and examined the contribution of area-level socioeconomic status (SES) and health insurance on these disparities. Compared to non-Hispanic White childhood cancer patients, NH Black and Hispanic patients had worse survival for all cancers combined, leukemias and lymphomas, brain tumors, and solid tumors. Both SES and health insurance contributed to racial/ethnic disparities in childhood cancer survival. Improving health insurance coverage and access to care for children, especially those with low SES, may mitigate racial/ethnic survival disparities.

Tumor Necrosis Factor Inhibitors and the Risk of Cancer among Older Americans with Rheumatoid Arthritis

D'Arcy *et al.* | Page 2059

Tumor necrosis factor inhibitors (TNFis) are effective treatment for rheumatoid arthritis (RA), but some studies suggest that they might increase cancer risk. This study by D'Arcy and colleagues systematically evaluated associations between TNFis and cancer risk in older Americans with RA using SEER-Medicare data. TNFi use was associated with modestly increased risk of non-melanoma skin cancer and ∼2.5-fold elevated risk of follicular lymphoma, a non-Hodgkin lymphoma subtype. TNFi use was not associated with other cancers examined. The findings suggest that TNFis are relatively safe, but individuals initiating therapy may benefit from screening and sun-protective measures.

Integrating Genome and Methylome Data to Identify Candidate DNA Methylation Biomarkers for Pancreatic Cancer Risk

Zhu *et al.* | Page 2079

The role of DNA methylation in pancreatic cancer (PC) risk remains unclear. Zhu and colleagues integrated genome and methylome data to identify CpG sites (CpGs) with the genetically predicted methylation to be associated with PC risk, by studying 8,280 PC cases and 6,728 controls of European ancestry. A total of 45 CpGs at nine loci showed an association with PC risk, including 15 CpGs showing an association independent from known risk variants. These findings add additional insights into the role of methylation in regulating gene expression in PC development.

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