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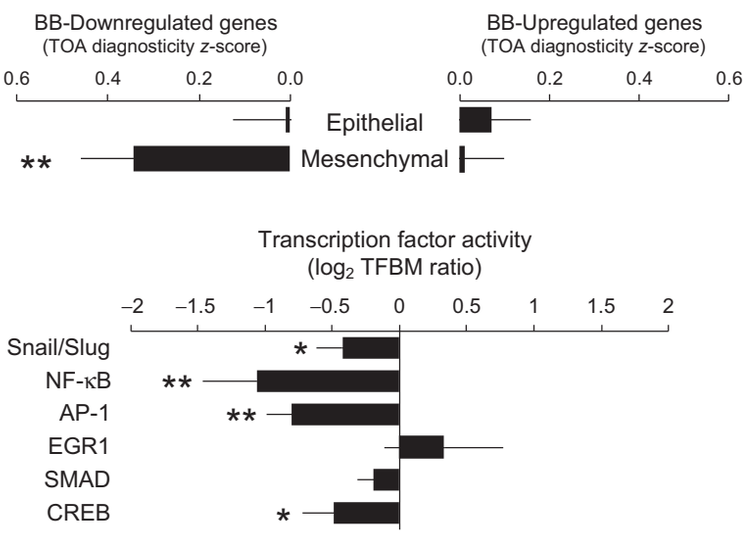
CLINICAL CANCER RESEARCH

HIGHLIGHTS

Selected Articles from This Issue

Preoperative β-Blockade Reduces Metastatic Biomarkers



Hiller *et al.* | Page 1803

Surgery is an important component of early-stage breast cancer treatment. However, surgery can result in elevated sympathetic nervous system activity, which may, in turn, increase the invasive capacity of residual breast cancer cells. In a phase II biomarker trial, Hiller and colleagues assessed the effects of treating preoperative patients with propranolol, a beta-blocker. This treatment strategy down-regulated biomarkers of invasive potential and inflammation and increased biomarkers of immune response. This strategy was well tolerated by patients and warrants further study, especially as it relates to clinical outcomes.

Trametinib in Non-V600 Mutated Cancers

Johnson *et al.* | Page 1812

Preclinical work has suggested that MEK inhibition would be an effective strategy in cancers harboring *BRAF* fusions or mutations outside the V600 codon. As part of the NCI-MATCH study, Johnson and colleagues assessed the efficacy of trametinib in patients with solid tumors harboring non-V600 *BRAF* alterations. Unfortunately, single agent trametinib resulted in low rates of clinical activity, and the primary study endpoint was not met. Further analysis will be needed to identify why this regimen failed, as well as to determine alternative treatment strategies for these patients.

Hyperprogressive Disease Captured by RECIST 1.1 Criteria

Matos *et al.* | Page 1846

Despite the advances in cancer treatment that have resulted from immune checkpoint inhibition (ICI), a subset of patients treated with ICI develop hyperprogressive disease (HPD). However, a clinical definition of HPD is lacking, making this phenomenon difficult to study. Matos and colleagues developed a RECIST-based definition of HPD in order to study the effects of this phenomenon on overall survival. Compared with the use of tumor growth rate alone to assess HPD, using the modified RECIST criteria showed that patients developing HPD had a significantly lower overall survival than patients not developing HPD, and this new definition identified more patients with HPD than tumor growth rate alone. These new HPD criteria, while warranting further study, should be a useful tool for oncologists.

CUE-101 Activates Tumor Antigen-Specific Antitumor Immunity

Quayle *et al.* | Page 1953

HPV16 E7 is expressed by HPV-positive cancers, and the E711-20 peptide is a known CD8 epitope. Clinical evidence suggests that T cells targeting HPV16 E7 show antitumor activity in patients with HPV16-driven cancers. Quayle and colleagues describe CUE-101, a novel fusion protein that binds to and promotes the activation and expansion of HPV16 E711-20-specific CD8+ T cells. *In vivo* assessment of CUE-101 revealed an induction of immunologic memory. Furthermore, CUE-101 activity was enhanced when combined with anti-PD-1 treatment. Based on these results, a clinical trial evaluating CUE-101 is underway in patients with HPV+ HNSCC.