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Y. Zhang, M. Gong, H. Yuan, H.G. Park, H.F. Frierson, and H. Li
Précis: RNA transcription across the SLC45A3–ELK4 gene boundary results in a putative oncogenic fusion product in the absence of chromosomal rearrangements.

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Précis: ZNF217 overexpression in breast cancer is associated with poor survival and response to neoadjuvant chemotherapy but may be a predictor of triciribine efficacy.

Zhang and colleagues observed that transcription occurs across the boundary of 2 adjacent genes, solute carrier family 45, member 3 (SLC45A3) and ETS-domain protein SRF accessory protein 1 (ELK4), in prostate cancers in association with decreased CCCTC-binding factor (CTCF) occupancy at intergenic insulator sequences. Multiple prostate cancer cell lines were dependent on SLC45A3–ELK4 expression, and chimeric SLC45A3–ELK4 RNA levels correlated with Gleason score. These findings establish cis-splicing as a mechanism by which oncogenic gene fusions can potentially occur and implicate SLC45A3–ELK4 as a putative driver of prostate cancer development. For details, please see the article by Zhang and colleagues on page 598.

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