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ABOUT THE COVER

The integrin family is a large collection of cell surface glycoproteins that facilitate extracellular matrix (ECM) interactions and signaling. Integrin receptors, composed of α and β subunits, bind ECM ligands and regulate a repertoire of critical cellular processes, including angiogenesis, adhesion, migration/invasion and survival. As such, targeting specific integrins or the signaling systems they regulate is of clinical relevance. In the context of prostate cancer, a number of integrin combinations are known to be expressed, and evidence suggests that changes in integrin expression accompany metastatic progression. Importantly, integrin β1 has been implicated as a key mediator of the switch to metastasis in other cancer types. Lee and colleagues used immunohistochemistry to characterize elevated levels of integrin β1 and activation of the prominent downstream signaling molecule focal adhesion kinase (FAK) in human specimens of localized and metastatic prostate cancer. The authors further demonstrated preclinically that systemic administration of antibodies against integrin β1 blocked prostate cancer metastasis in vivo. The cover shows immunohistochemical staining of a human specimen with localized prostate cancer with low phosphorylated-FAK. For additional results and details, please see the article by Lee and colleagues on page 405 in this issue.