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High TUBB3 Expression, an Independent Prognostic Marker in Patients with Early Non–Small Cell Lung Cancer Treated by Preoperative Chemotherapy, Is Regulated by K-Ras Signaling Pathway
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Retraction in Part: A Genomic Approach to Identify Molecular Pathways Associated with Chemotherapy Resistance

Correction: Narciclasine, a Plant Growth Modulator, Activates Rho and Stress Fibers in Glioblastoma Cells

Several allosteric MEK inhibitors are in clinical development and have been designed to treat patients with tumors harboring RAS/RAF pathway alterations. Acquired resistance to this class of inhibitors is a pressing clinical problem. To identify strategies to overcome this resistance, Hatzivassiliou and colleagues derived and characterized three independent MEK inhibitor-resistant cell lines. All of the resistant cell lines harbored mutations in the allosteric binding pocket of MEK that is targeted by arylamine MEK inhibitors. In all cases the MEK resistant cell lines retained their addiction to the MAPK pathway and remained sensitive to a selective inhibitor of the ERK1/2 kinases, suggesting a role for ERK inhibitors in combating or preventing MEK inhibitor resistance. For details, see article by Hatzivassiliou and colleagues on page 1143.
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