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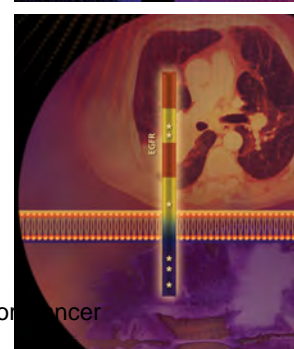
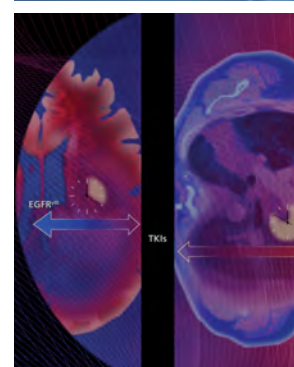
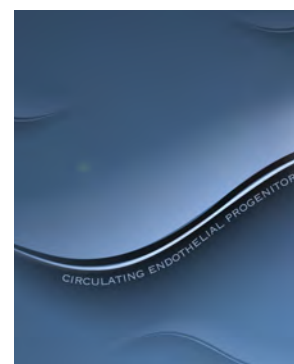
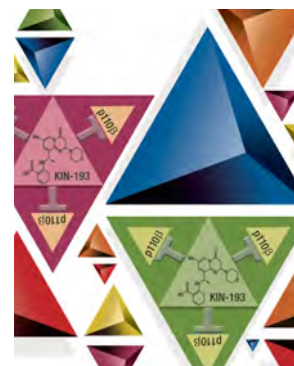
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I. Vivanco, H.I. Robins, D. Rohle, C. Campos, C. Grommes, P.L. Nghiemphu, S. Kubek, B. Oldrini, M.G. Chheda, N. Yannuzzi, H. Tao, S. Zhu, A. Iwanami, D. Kuga, J. Dang, A. Pedraza, C.W. Brennan, A. Heguy, L.M. Liao, F. Lieberman, W.K.A. Yung, M.R. Gilbert, D.A. Reardon, J. Drappatz, P.Y. Wen, K.R. Lamborn, S.M. Chang, M.D. Prados, H.A. Fine, S. Horvath, N. Wu, A.B. Lassman, L.M. DeAngelis, W.H. Yong, J.G. Kuhn, P.S. Mischel, M.P. Mehta, T.F. Cloughesy, and I.K. Mellinghoff

Précis: Glioma cells with extracellular domain EGFR mutations are selectively sensitive to type II EGFR inhibitors that stabilize the inactive kinase conformation.

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- An EMPaCT on Minority Recruitment
- MEK Inhibition Aids in Serous Ovarian Cancer

ON THE COVER

Vivanco and colleagues demonstrated that glioma-specific EGFR extracellular domain mutants were more sensitive to type II EGFR inhibitors (e.g., lapatinib) that stabilize an inactive kinase conformation than type I EGFR inhibitors (e.g., erlotinib) that target the active kinase conformation more commonly found in EGFR-mutant lung cancers. In a related article, Barkovich and colleagues found that the rapid release of erlotinib by glioma-specific EGFR mutants rendered them less sensitive to erlotinib than lung cancer-derived EGFR mutants. Together, these studies provide explanations for the limited success of first-generation EGFR inhibitors in treatment of EGFR-mutant gliomas and suggest alternative EGFR inhibition strategies may work best in these tumors. For details, please see the article by Vivanco and colleagues on page 458 and the article by Barkovich and colleagues on page 450.



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