

This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Computational models			
Computational model to predict tumor genotype and response to oncogene-targeted treatments	<p>A computational model based on quantitative imaging and markers of survival and death signaling could help predict which patients will respond to oncogene-targeted cancer therapy. In mice with lung cancer or lymphoma, a computational model that incorporates quantitative tumor imaging data plus survival and death process measurements was able to model tumor growth and response to oncogene-targeted therapy. In human lung cancer patients, the model predicted which patients had epidermal growth factor receptor (EGFR)-driven cancers and would respond to erlotinib with 93% accuracy. Next steps include larger prospective clinical trials.</p> <p>Tarceva erlotinib, a small molecule EGFR inhibitor from Astellas Pharma Inc., Chugai Pharmaceutical Co. Ltd. and Roche, is marketed to treat non-small cell lung cancer (NSCLC) and pancreatic cancer.</p> <p>SciBX 4(43); doi:10.1038/scibx.2011.1219 Published online Nov. 3, 2011</p>	Unpatented; licensing status not applicable	<p>Tran, P.T. <i>et al. Sci. Transl. Med.</i>; published online Oct. 5, 2011; doi:10.1126/scitranslmed.3002018</p> <p>Contact: Dean W. Felsher, Stanford University School of Medicine, Stanford, Calif. e-mail: dfelsher@stanford.edu</p> <p>Contact: David Paik, same affiliation as above e-mail: david.paik@stanford.edu</p>