This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Markers			
Killer cell lectin-like receptor subfamily K member 1 (KLRK1; CD314; NKG2D) ligands as markers to predict response to anti-CTLA-4 (CD152) therapies and guide selection of radiation therapy regimens	Mouse studies suggest levels of NKG2D ligands could be used as a marker to predict patient responsiveness to anti-CTLA-4 therapies and help guide selection of radiation therapy regimens. In mice bearing poorly immunogenic tumors, an anti-CTLA-4 mAb plus radiotherapy led to greater T cell contact time with tumor cells and tumor regression than either therapy alone. In the xenograft mice treated with the combination therapy, an anti-NKG2D mAb reversed the increased T cell contact time and tumor regression, suggesting ligand-NKG2D interactions are required for anti-CTLA-4 and radiotherapy synergy. Next steps include clinical trials to determine the best radiation therapy regimens to use with anti-CTLA-4 therapies in patients with melanoma. Bristol-Myers Squibb Co. markets the human anti-CTLA-4 mAb Yervoy (ipilimumab) to treat melanoma. The mAb also is in Phase III testing for prostate cancer and Phase II testing for lung cancer, non-small cell lung cancer (NSCLC), pancreatic cancer and solid tumors. Pfizer Inc. and AstraZeneca plc have the human anti-CTLA-4 mAb tremelimumab in Phase II testing for liver cancer and solid tumors and in Phase I for melanoma and prostate cancer. SciBX 5(37); doi:10.1038/scibx.2012.993 Published online Sept. 20, 2012	Unpatented; unlicensed	Ruocco, M.G. <i>et al. J. Clin. Invest.</i>; published online Sept. 4, 2012; doi:10.1172/JCI61931 Contact: Sandra Demaria, New York University School of Medicine, New York, N.Y. e-mail: sandra.demaria@nyumc.org