This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Imaging			
Tumor-targeted molecular imaging for monitoring response to therapy in soft tissue sarcomas	PET-based imaging of tumor-targeted adenoviral constructs with radiotracers could more accurately measure soft tissue tumor response to therapy than standard imaging methods. In rat sarcoma xenograft models, researchers first delivered tumor-targeted adenoviral constructs, which produced herpes simplex virus thymidine kinase (HSVtk), and later delivered a radiolabeled substrate of the HSVtk enzyme to image with PET. This system was also used to monitor sarcoma response to ganciclovir treatment and could potentially be used to predict sarcoma response. When primary tumors were suppressed or regressed, levels of HSVtk decreased, which in turn reduced radiolabel accumulation. Further research is necessary to develop the method under GMP standards and to complete toxicology studies before filing an IND. Roche's Valcyte valganciclovir, a prodrug form of the nucleoside analog ganciclovir, is marketed to treat cytomegalovirus infection in HIV patients.	Patent Cooperation Treaty and provisional U.S. patent application filed covering the method; available for licensing	Hajitou, A. *et al. Proc. Natl. Acad. Sci. USA*; published online Feb. 3, 2008; doi:10.1073/pnas.0712184105 **Contact:** Wadih Arap, M. D. Anderson Cancer Center, University of Texas, Houston, Texas e-mail: warap@mdanderson.org **Contact:** Renata Pasqualini, same affiliation as above e-mail: rpasqual@mdanderson.org