This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Assays & screens			
Profiling tumor-derived microvesicles in the blood of patients with glioblastoma multiforme (GBM)	<p>A microfluidic system for profiling tumor-derived microvesicles in the blood of patients with GBM could help guide treatment decisions. On a microfluidic chip, microvesicles were first labeled with a protein-targeted antibody conjugated to a magnetic nanoparticle and then detected by micro-NMR. The assay was able to distinguish between blood samples from patients with GBM and those from healthy volunteers with 90% accuracy based on the expression of four protein markers on microvesicles. In patients with GBM treated with Temodar temozolomide, changes in microvesicle numbers and biomarker expression could be used to distinguish responders from nonresponders. Next steps include expanding the approach to other tumor types and developing a platform for comprehensive analysis of microvesicle biomarkers, including proteins, mRNAs and microRNAs. Merck & Co. Inc. markets Temodar to treat GBM.</p> <p>SciBX 5(47); doi:10.1038/scibx.2012.1242 Published online Dec. 6, 2012</p>	Patent application filed on the micro-NMR system; unavailable for licensing	<p>Shao, H. <i>et al. Nat. Med.</i>; published online Nov. 11, 2012; doi:10.1038/nm.2994 Contact: Ralph Weissleder, Massachusetts General Hospital, Boston, Mass. e-mail: rweissleder@mgh.harvard.edu Contact: Hakho Lee, same affiliation as above e-mail: hlee@mgh.harvard.edu</p>