This week in techniques

Approach	Summary	Licensing status	Publication and contact information
Computational models			
Prediction of drug efficacy using computational analysis of self-reported patient outcomes	<p>Computational analysis of self-reported patient outcomes could help predict the efficacy of therapeutic compounds. As proof of concept, 149 amyotrophic lateral sclerosis (ALS) patients took off-label lithium carbonate and reported their Revised ALS Functional Rating Scale (ALSFRS-R) score on a public website. A computational algorithm then compared the ALSFRS-R scores of lithium-treated patients with the scores of matched control patients who did not take lithium. The algorithm detected no statistically significant difference between lithium-treated patients and controls after one year, a finding that agreed with an independently conducted Phase II/III trial of lithium to treat ALS. Next steps include applying the algorithm to other diseases that cause progressive disability such as multiple sclerosis (MS), Parkinson's disease (PD) and fibromyalgia.</p> <p>SciBX 4(18); doi:10.1038/scibx.2011.525 Published online May 5, 2011</p>	Patented; licensing status unavailable	<p>Wicks, P. <i>et al. Nat. Biotechnol.</i>; published online April 24, 2011; doi:10.1038/nbt.1837</p> <p>Contact: Paul Wicks, PatientsLikeMe Inc., Cambridge, Mass. e-mail: pwicks@patientslikeme.com</p>