This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Various				
Cancer; Alzheimer's disease (AD)	Protein phosphatase methylesterase 1 (PPME1); protein phosphatase 2 (PPP2CA; PP2A)	<i>In vitro</i> and mouse studies identified aza- β -lactam molecules as PPME1 inhibitors that could help treat cancer and AD. In an <i>in vitro</i> screen of over 300,000 small molecules, aza- β -lactams were low nM inhibitors of PPME1. In human breast cancer cells, the most potent compound blocked oncogenic PPME1-mediated demethylation of PP2A compared with vehicle control. In brain slices from mice, the lead compound selectively inhibited PPME1 and decreased PP2A demethylation compared with vehicle controls. Next steps include preclinical testing of PPME1 inhibitors in models of cancer and AD. SciBX 4(12); doi:10.1038/scibx.2011.349 Published online March 24, 2011	Unpatented; licensing status undisclosed	Bachovchin, D.A. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online March 11, 2011; doi:10.1073/pnas.1015248108 Contact: Gregory C. Fu, Massachusetts Institute of Technology, Cambridge, Mass. e-mail: gcf@mit.edu Contact: Benjamin F. Cravatt, The Scripps Research Institute, La Jolla, Calif. e-mail: cravatt@scripps.edu