This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Small cell lung cancer (SCLC)	Unknown	<p>Computational, cell culture and mouse studies identified marketed drugs that could be repurposed to treat SCLC. A bioinformatics approach was used to analyze a library of FDA-approved drugs screened against multiple cell types. In mouse and human lung cancer cell lines, five of the six top-scoring candidates from the screen inhibited viability of multiple SCLC lines but not non-SCLC (NSCLC) lines. In mouse allograft and xenograft models of SCLC, the three most potent compounds—imipramine, promethazine and bepridil—each inhibited tumor growth. Next steps include studies to understand why the targets of imipramine and related molecules induce cell death in neuroendocrine tumor cells.</p> <p>Imipramine is a generic tricyclic antidepressant. Promethazine is a generic antipsychotic. Bepridil is a generic calcium channel blocker.</p> <p>SciBX 6(42); doi:10.1038/scibx.2013.1188 Published online Oct. 31, 2013</p>	Findings unpatented; bioinformatics approach licensed to NuMedii Inc.	<p>Jahchan, N.S. <i>et al. Cancer Discov.</i>; published online Sept. 26, 2013; doi:10.1158/2159-8290.CD-13-0183</p> <p>Contact: Julien Sage, Stanford University, Stanford, Calif. e-mail: julsage@stanford.edu</p> <p>Contact: Atul J. Butte, same affiliation as above e-mail: abutte@stanford.edu</p>