

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Signal transducer and activator of transcription 3 (STAT3)	<p><i>In vitro</i> studies suggest carbazole sulfonate compounds could be useful to treat STAT3-dependent cancers. In triple-negative breast cancer cells and other cancer cell lines with elevated STAT3 activity, a carbazole analog inhibited cell viability with low micromolar EC₅₀ values by upregulating the STAT3-inactivating enzyme src homology protein tyrosine phosphatase 1 (SHP-1; SHPTP1; PTPN6). In mouse xenograft models of non-small cell lung cancer (NSCLC) and breast cancer, daily i.p. injection of the compound decreased tumor growth after five days compared with vehicle injection. Next steps could include compound optimization and efficacy and safety testing in additional preclinical models.</p> <p>SciBX 7(30); doi:10.1038/scibx.2014.890 Published online Aug. 7, 2014</p>	Patent and licensing status unavailable	<p>Hou, S. <i>et al. J. Med. Chem.</i>; published online June 30, 2014; doi:10.1021/jm4018042</p> <p>Contact: Milton L. Brown, Georgetown University Medical Center, Washington, D.C. e-mail: mb544@georgetown.edu</p> <p>Contact: Insoo Bae, same affiliation as above e-mail: ib42@georgetown.edu</p>