This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Topoisomerase I (TOP1); tyrosyl-DNA phosphodiesterase 1 (TDP1)	<p><i>In vitro</i> studies identified a <i>bis</i>(indenoisoquinoline)-based inhibitor of TOP1 and TDP1 that could help treat cancer. <i>In vitro</i>, the most potent molecule inhibited human TDP1 with an IC₅₀ of 1.9 μM and also inhibited TOP1 with potency comparable to that of the TOP1 inhibitor camptothecin. Next steps could include optimizing the compound and evaluating it in animal cancer models.</p> <p>Camptosar irinotecan, a semisynthetic derivative of camptothecin, is marketed by Yakult Honsha Co. Ltd. and Pfizer Inc. to treat colorectal and non-small cell lung cancers.</p> <p>At least 10 other companies have camptothecin analogs and derivatives in Phase III trials or earlier to treat cancer.</p> <p>SciBX 5(21); doi:10.1038/scibx.2012.546 Published online May 24, 2012</p>	Patent and licensing status unavailable	<p>Nguyen, T.X. <i>et al. J. Med. Chem.</i>; published online April 26, 2012; doi:10.1021/jm300335n</p> <p>Contact: Mark Cushman, Purdue University, West Lafayette, Ind. e-mail: cushman@purdue.edu</p>