This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Hypoxia-inducible factor 1 (HIF1); E1A binding protein p300 (EP300; p300)	<p><i>In vitro</i> and mouse studies suggest inhibiting the HIF1-p300 interaction could help treat cancer.</p> <p><i>In vitro</i>, an oxopiperizine mimic for a helix at the HIF1-p300 interface bound to p300 with a K_D of 38 nM. In cultured human cancer cell lines, the helical mimic decreased expression of HIF1-dependent genes compared with inactive analogs. In a mouse xenograft model of breast cancer, the mimic decreased tumor cell proliferation and tumor size compared with saline. Next steps include using a computational approach and non-natural amino acids to improve the potency of the compound.</p> <p>At least seven companies have compounds that inhibit HIF1 in Phase II or earlier testing to treat various cancers.</p> <p>SciBX 7(23); doi:10.1038/scibx.2014.672 Published online June 12, 2014</p>	Patent applications filed covering nonpeptidic helical mimics and their application to modulation of hypoxia signaling; licensing status not applicable	<p>Lao, B.B. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online May 12, 2014; doi:10.1073/pnas.1402393111</p> <p>Contact: Paramjit S. Arora, New York University, New York, N.Y. e-mail: arora@nyu.edu</p> <p>Contact: Bogdan Z. Olenyuk, University of Southern California, Los Angeles, Calif. e-mail: bogdan@usc.edu</p>