

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	CTLA-4 (CD152); signal transducer and activator of transcription 3 (STAT3)	<p><i>In vitro</i> and mouse studies suggest a CTLA-4-binding aptamer linked to STAT3 siRNA could help treat cancer. An aptamer was designed that binds to CtlA-4 and is linked to Stat3 siRNA. In mouse models of melanoma, colorectal cancer, lymphoma and renal cell carcinoma, the aptamer-siRNA conjugate increased antigen-specific antitumor immunity and decreased tumor growth compared with a control aptamer-siRNA conjugate or vehicle. Next steps include clinical development of the aptamer-siRNA conjugate. Bristol-Myers Squibb Co. markets the CTLA-4 mAb Yervoy ipilimumab to treat melanoma. At least two other companies have therapeutics targeting CTLA-4 in Phase II or earlier testing. Isis Pharmaceuticals Inc. and AstraZeneca plc have ISIS-STAT3Rx, an antisense oligonucleotide targeting STAT3, in Phase I/II testing to treat cancer.</p> <p>SciBX 7(27); doi:10.1038/scibx.2014.790 Published online July 17, 2014</p>	Provisional patent filed; available for licensing	<p>Herrmann, A. <i>et al. J. Clin. Invest.</i>; published online June 2, 2014; doi:10.1172/JCI73174</p> <p>Contact: Hua Yu, City of Hope Comprehensive Cancer Center, Duarte, Calif. e-mail: hyu@coh.org</p>