

THE DISTILLERY

This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Gastric cancer	Signal transducer and activator of transcription 3 (STAT3); IL-11	A study in mice suggests that antagonizing STAT3 signaling could help treat gastric cancer. In a mouse model of gastric cancer, knockout of the ligand-binding subunit of the IL-11 receptor lowered both STAT3 activation and IL-11 expression and prevented gastric tumor formation compared with what was seen in models that expressed the receptor subunit. In the same models, a STAT3 antisense oligonucleotide lowered tumor burden compared with that in controls that received either saline or sham oligonucleotide. Next steps include identifying the downstream targets of STAT3 that drive the gastric phenotype in mice and performing gene- expression studies both in unaffected gastric tissue and diseased gastric tissue from patients at various disease stages. RTA 402, a synthetic triterpenoid that inhibits STAT3 from Reata Pharmaceuticals Inc., is in Phase I testing to treat solid tumors and lymphoid	Not patented; unlicensed	Ernst, M. <i>et al. J. Clin. Invest.</i> ; published online April 22, 2008; doi:10.1172/JCI34944 Contact: Brendan Jenkins, Monash Institute of Medical Research, Monash University, Clayton, Victoria, Australia e-mail: Brendan.Jenkins@med.monash. edu.au

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