This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Brain cancer	Transforming growth factor- β (TGFB1; TGF β); leukemia inhibitory factor (LIF); SMAD family member 4 (SMAD4; MADH4; DPC4)	<i>In vitro</i> and mouse studies suggest that targeting TGF β or LIF could help treat glioblastoma. In patient-derived glioma cells, TGF β increased self-renewal, induced expression of the cytokine LIF and increased protein secretion through activation of the SMAD complex. A neutralizing antibody against LIF or knockdown of <i>SMAD4</i> prevented self-renewal. In mice, implanted glioma cells that were stimulated with TGF β or LIF generated tumors faster than nonstimulated cells, and TGF β inhibitors decreased tumorigenic potential. Next steps include confirming the findings in additional patients. Antisense Pharma GmbH's AP 11014, a TGF β 1 antisense oligonucleotide, is in preclinical testing to treat several cancers. SciBX 2(15); doi:10.1038/scibx.2009.610 Published online April 16, 2009	Priority patent application filed in Spain; available for licensing	Penuelas, S. <i>et al. Cell</i> ; published online April 6, 2009; doi:10.1016/j.ccr.2009.02.011 Contact: Joan Seoane, Autonomous University of Barcelona, Barcelona, Spain e-mail: jseoane@ir.vhebron.net