This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Purinergic receptor P2X ligand-gated ion channel 7 (P2RX7; P2X7)	<p>Mouse studies suggest inhibiting P2X7 could help treat cancer. In mice, injection of mouse carcinoma cells that had high levels of P2x7 expression led to tumor formation faster than injection of carcinoma cells with low levels of P2x7 expression. In mice injected with mouse melanoma or human neuroblastoma cells, a P2X7 antagonist or small hairpin RNA knockdown of P2X7 decreased tumor growth compared with no treatment. Next steps include animal studies with P2X7 antagonists that have been used in clinical trials in other indications.</p> <p>GlaxoSmithKline plc's GSK1482160, a purinergic ATP receptor antagonist that targets P2X7, is in Phase I testing to treat pain.</p> <p>Evotec AG's EVT 401, an oral small molecule P2X7 receptor antagonist, is in Phase I testing to treat rheumatoid arthritis (RA) and preclinical development to treat inflammatory bowel disease (IBD).</p> <p>Affectis Pharmaceuticals AG's AFC-5128, a P2X7 antagonist, is in preclinical development to treat pain and multiple sclerosis (MS).</p> <p>SciBX 5(18); doi:10.1038/scibx.2012.464 Published online May 3, 2012</p>	Unpatented; available for licensing	<p>Adinolfi, E. <i>et al. Cancer Res.</i>; published online April 13, 2012; doi:10.1158/0008-5472.CAN-11-1947</p> <p>Contact: Francesco Di Virgilio, University of Ferrara, Ferrara, Italy e-mail: fdv@unife.it</p>