This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Pancreatic cancer	Vitamin D receptor (VDR)	<p><i>In vitro</i> and mouse studies suggest vitamin D analogs could help treat pancreatic cancer. VDR levels were higher in pancreatic stellate cells (PSCs) from patients with pancreatic cancer than in PSCs from patients with benign pancreatic tumors. In a human pancreatic cancer cell line cultured in conditioned media from patient-derived PSCs, pretreatment with the vitamin D analog calcipotriol decreased proliferative and prosurvival proteins compared with no pretreatment. In mouse models of pancreatic cancer, calcipotriol plus Gemzar gemcitabine decreased tumor growth compared with gemcitabine alone. Next steps could include IND-enabling studies of calcipotriol.</p> <p>The vitamin D analog paricalcitol is in researcher-sponsored Phase I and Phase I/II trials as a neoadjuvant and post-surgical adjuvant, respectively, to treat pancreatic cancer.</p> <p>Eli Lilly and Co. markets Gemzar gemcitabine, a nucleoside analog that inhibits DNA synthesis, to treat pancreatic, breast and ovarian cancers and non-small cell lung cancer (NSCLC). The compound is in Phase III testing to treat biliary and cervical cancers.</p> <p>Teijin Pharma Ltd. markets Bonalfa tacalcitol monohydrate, activated vitamin D₃, to treat psoriasis.</p> <p>Deltanoid Pharmaceuticals Inc. has DP001 (2MD), a vitamin D analog, in Phase IIa testing to treat secondary hyperparathyroidism.</p> <p>Merck KGaA and Hybrigenics S.A. have inecalcitol, an oral synthetic analog of vitamin D, in Phase II testing to treat psoriasis, prostate cancer and chronic lymphocytic leukemia (CLL).</p> <p>SciBX 7(39); doi:10.1038/scibx.2014.1154 Published online Oct. 9, 2014</p>	Patented; available for licensing	<p>Sherman, M.H. <i>et al. Cell</i>; published online Sept. 25, 2014; doi:10.1016/j.cell.2014.08.007</p> <p>Contact: Ronald M. Evans, Salk Institute for Biological Studies, La Jolla, Calif. e-mail: evans@salk.edu</p> <p>Contact: Michael Downes, same affiliation as above e-mail: downes@salk.edu</p>