This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Prostate cancer	Sterol O-acyltransferase 1 (SOAT1; ACAT1)	<p>Studies in patient samples, mice and cell culture suggest inhibiting ACAT1 prevents cholesteryl ester (CE) synthesis and could help treat prostate cancer. In patient tissue samples, CE-filled lipid droplets were more abundant in high-grade and metastatic prostate cancers than other cancers or matched healthy tissues. In prostate cancer cell lines, pharmacological inhibition of ACAT1 increased cell cycle arrest and apoptosis and decreased cell migration and invasiveness compared with vehicle treatment. In a mouse xenograft model of metastatic prostate cancer, pharmacological inhibition of ACAT1 decreased tumor weight compared with treatment using vehicle or inhibitors of other lipid-synthesizing enzymes. Next steps include developing an injectable formulation of an ACAT1 inhibitor for intratumoral delivery.</p> <p>Atterocor Inc. has an inhibitor of ACAT1 in Phase I testing to treat adenocarcinoma.</p> <p>SciBX 7(14); doi:10.1038/scibx.2014.399 Published online April 10, 2014</p>	Patent application filed; available for licensing	<p>Yue, S. <i>et al. Cell Metab.</i>; published online March 4, 2014; doi:10.1016/j.cmet.2014.01.019</p> <p>Contact: Ji-Xin Cheng, Purdue University, West Lafayette, Ind. e-mail: jcheng@purdue.edu</p>