This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Genitourinary disease				
Polycystic ovary syndrome (PCOS)	DENN/MADD domain containing 1A (DENND1A)	<p>Patient and cell culture studies suggest a DENND1A isoform could be a marker and target for PCOS. Past studies have identified <i>DENND1A</i> as a risk locus for PCOS, which is caused by excess androgen secretion by a subset of ovarian follicle cells called thecal cells. In urine samples from patients with PCOS, levels of exosomes containing RNA of a truncated <i>DENND1A</i> isoform were higher than those in samples from healthy women. In patient thecal cells, a rabbit antibody or shRNA against the truncated <i>DENND1A</i> isoform decreased the induction of androgen-producing enzymes and consequent androgen production compared with an inactive control IgG or scrambled control shRNA. Ongoing work includes developing a PCOS diagnostic based on urine levels of <i>DENND1A</i> isoform RNA.</p> <p>SciBX 7(17); doi:10.1038/scibx.2014.494 Published online May 1, 2014</p>	Patent application filed by Pennsylvania State University and Virginia Commonwealth University; available for licensing	<p>McAllister, J.M. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 31, 2014; doi:10.1073/pnas.1400574111</p> <p>Contact: Jan M. McAllister, Pennsylvania State University Hershey College of Medicine, Hershey, Pa. e-mail: jmcallister@psu.edu</p>