This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Neurology				
Post-traumatic stress disorder (PTSD)	Adenylate cyclase activating polypeptide pituitary (ADCYAP1; PACAP); adenylate cyclase activating polypeptide 1 pituitary receptor type I (ADCYAP1R1; PAC1)	<p>Studies in humans and in rodents suggest that antagonizing PACAP or its receptor, PAC1, could help treat PTSD in women. In mice and rats, fear conditioning and estrogen treatment increased expression of Pacap in the amygdala compared with vehicle control. In traumatized women, blood levels of PACAP were higher than those in nontraumatized women. In a genomewide association study of traumatized women, a SNP within the <i>PAC1</i> gene was significantly associated with PTSD diagnosis compared with that in noncarrier controls ($p=0.0002$). Next steps include testing the effect of PAC1 antagonists in rodent models of PTSD.</p> <p>SciBX 4(10); doi:10.1038/scibx.2011.290 Published online March 10, 2011</p>	<p>Patent applications filed by The University of Vermont for diagnostics and therapeutic targeting of PACAP and PAC1; available for licensing Contact: Victor May, The University of Vermont, Burlington, Vt. e-mail: victor.may@uvm.edu</p>	<p>Ressler, K.J. <i>et al. Nature</i>; published online Feb. 24, 2011; doi:10.1038/nature09856 Contact: Kerry J. Ressler, Emory University, Atlanta, Ga. e-mail: kressle@emory.edu</p>