This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Thrombosis	Ectonucleoside triphosphate diphosphohydrolase 3 (ENTPD3; CD39L3)	<i>In vitro</i> and canine studies suggest engineered ENTPD3 can help prevent thrombosis. Extracellular ATP, which has proinflammatory and prothrombotic effects, can be broken down by the apyrase activity of ENTPD3. An optimized version of ENTPD3—called APT102—was generated that showed reduced aggregation and increased apyrase activity compared with the natural protein. <i>In vitro</i> , APT102 reversed ADP-dependent human platelet aggregation. In a canine model of thrombotic occlusion of the coronary artery, APT102 increased coronary blood flow and decreased bleeding and myocardial infarction after reperfusion compared with clopidogrel. Next steps include IND-enabling studies.	Patents issued covering composition of matter and method of use; additional patent applications filed; available for licensing	Moeckel, D. <i>et al. Sci. Transl. Med.</i> ; published online Aug. 6, 2014; doi:10.1126/scitranslmed.3009246 Contact: Dana Abendschein, Washington University in St. Louis School of Medicine, St. Louis, Mo. e-mail: dabendsc@dom.wustl.edu Contact: Ridong Chen, APT Therapeutics Inc., St. Louis, Mo. e-mail: rchen@apt-therapeutics.com
<i>SciBX</i> 7(35); doi:10.1038/scibx.2014.1040 Published online Sept. 11, 2014				