This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine/metabolic disease				
Obesity	Adenosine A _{2A} receptor (ADORA _{2A})	<p>Mouse studies suggest ADORA_{2A} agonists could activate brown adipose tissue (BAT) to help treat obesity. In a mouse model of high-fat diet-induced obesity, an ADORA_{2A} agonist decreased body weight and fat mass and increased lean mass compared with vehicle. In mice, the ADORA_{2A} agonist or lentivirus-mediated overexpression of Adora_{2a} in white adipose tissue (WAT) induced browning of WAT and expression of BAT markers. Next steps could include evaluating clinical-stage ADORA_{2A} agonists in obesity models.</p> <p>Gilead Sciences Inc. and Astellas Pharma Inc. market the ADORA_{2A} agonist Lexiscan regadenoson as a cardiovascular imaging agent.</p> <p>Adenosine Therapeutics LLC's ADORA_{2A} agonist Stedivaze apadenoson is in Phase III testing for cardiovascular disease. At least five other companies have ADORA_{2A} agonists in Phase II or earlier testing to treat pain or cancer.</p> <p>SciBX 7(44); doi:10.1038/scibx.2014.1292 Published online Nov. 13, 2014</p>	Patent and licensing status unavailable	<p>Gnad, T. <i>et al. Nature</i>; published online Oct. 15, 2014; doi:10.1038/nature13816</p> <p>Contact: Alexander Pfeifer, University of Bonn, Bonn, Germany e-mail: alexander.pfeifer@uni-bonn.de</p>