This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Obesity	Cyclooxygenase-2 (COX-2)	<i>In vitro</i> and mouse studies suggest that increasing COX-2 activity in adipose tissue could help treat obesity. In mice fed a high-fat diet, overexpression of COX-2 in white adipose tissue triggered infiltration of brown adipose cells, which led to increased energy expenditure and improved resistance to weight gain compared with what was seen in wild-type controls. The effects were mediated by prostaglandin, a substrate of COX-2. In cell culture, prostaglandin caused differentiation of mesenchymal progenitor cells into brown adipose cells. Next steps include studies in animals to better understand how prostaglandin acts on progenitor cells to convert them into highly thermogenic brown adipose tissue.	Animal models covered by patents; licensing status undisclosed	Vegiopoulos, A. <i>et al. Science</i> ; published online May 6, 2010; doi:10.1126/science.1186034 Contact: Stephan Herzig, German Cancer Research Center, Heidelberg, Germany e-mail: s.herzig@dkfz.de
SciBX 3(19); doi:10.1038/scibx.2010.583				
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