

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Endocrine disease				
Obesity	Bone morphogenic protein 7 (BMP7; OP-1)	<p>Studies in mouse cell lines and <i>in vivo</i> suggest that BMP7 stimulates brown adipogenesis, which could be useful for treating obesity. Brown adipose tissue efficiently burns energy and is thought to promote weight loss. Cultured brown preadipocytes treated with BMP7 developed into brown adipocytes, in contrast to mock-treated controls or cultures exposed to other BMPs, which did not differentiate. Mice transfected with BMP7-expressing adenovirus had higher levels of brown adipose tissue and higher whole-body energy expenditure than mock-treated controls. Next steps include examining the effect of BMP7-induced brown adipose tissue on body weight and health in mouse models of obesity.</p> <p>Stryker Corp. markets BMP7 products for long bone nonunion fractures and lumbar spine fusion.</p>	Patent pending; available for licensing	<p>Tseng, Y.-H. <i>et al. Nature</i>; published online Aug. 20, 2008; doi:10.1038/nature07221</p> <p>Contact: Yu-Hua Tseng, Harvard Medical School, Boston, Mass.</p> <p>e-mail: Yu-Hua.Tseng@joslin.harvard.edu</p>