This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Osteoporosis	MicroRNA-214 (miR-214)	<p><i>In vitro</i> and mouse studies suggest inhibiting miR-214 could help treat osteoporosis. In mouse preosteoblast cells, an anti-miR-214 antagomir increased mineral deposits, whereas a miR-214 mimic decreased deposits. In a mouse model of ovariectomy-induced osteoporosis, osteoblast-specific antagomir-214 increased bone mineral density, bone-to-tissue volume ratios and expression of activating transcription factor 4 (Atf4), which is required for osteoblast function, compared with an antagomir control or vehicle. Next steps include identifying a small molecule inhibitor of miR-214 activity.</p> <p>SciBX 6(1); doi:10.1038/scibx.2013.18 Published online Jan. 10, 2013</p>	Patent and licensing status unavailable	<p>Wang, X. <i>et al. Nat. Med.</i>; published online Dec. 9, 2012; doi:10.1038/nm.3026 Contact: Yingxian Li, China Astronaut Research and Training Center, Beijing, China e-mail: yingxianli@yahoo.cn Contact: Ge Zhang, Hong Kong Baptist University, Hong Kong, China e-mail: zhangge@hkbu.edu.hk</p>