This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Musculoskeletal disease				
Muscular atrophy; muscle repair	Not applicable	<p>A study in mice suggests that an NO-releasing analog of guaifenesin could be useful for promoting muscle repair and preventing atrophy. In adult mice, transdermal delivery of guaifenesin dinitrate increased DNA synthesis in the back and quadriceps muscles compared with what was seen using placebo. In mice, oral administration of guaifenesin dinitrate increased satellite cell myogenesis compared with that seen in oil-treated controls. Satellite cell activation is important for muscle growth and repair. Next steps include evaluating the safety, bioavailability and pharmacokinetics of guaifenesin dinitrate in preclinical models.</p> <p>Guaifenesin is a generic over the counter expectorant.</p> <p>SciBX 2(13); doi:10.1038/scibx.2009.546 Published online April 2, 2009</p>	<p>Patent application filed covering composition and methods for increasing NO delivery for use in promoting muscle growth and repair under normal and diseased states; available for licensing from patent inventors</p> <p>Contact: Judy E. Anderson, University of Manitoba, Winnipeg, Manitoba, Canada e-mail: janders@ms.umanitoba.ca</p>	<p>Wang, G. <i>et al.</i> <i>Mol. Pharm.</i>; published online March 24, 2009; doi:10.1021/mp800226z</p> <p>Contact: Judy E. Anderson, University of Manitoba, Winnipeg, Manitoba, Canada e-mail: janders@ms.umanitoba.ca</p>