This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Various				
Atherosclerosis; periodontitis	Caspase recruitment domain family member 15 (CARD15; NOD2)	<p>Mouse studies suggest stimulating NOD2 could help treat atherosclerosis and periodontal bone loss. In an <i>apolipoprotein E (ApoE)</i> knockout model of inflammation, deletion of <i>Nod2</i> increased <i>Porphyromonas gingivalis</i>-induced atherosclerosis, periodontal bone loss and inflammatory serum cytokine levels compared with no <i>Nod2</i> alteration. In <i>ApoE</i>^{-/-} mice, a NOD2 stimulator decreased serum cytokine levels, atherosclerosis and bone loss compared with vehicle. Next steps could include testing NOD2 stimulators in additional models of periodontal bone loss and atherosclerosis.</p> <p>Takeda Pharmaceutical Co. Ltd. markets the NOD2-targeting biologic Junovan mifamurtide to treat bone cancer.</p> <p>At least two other companies have NOD2-activating compounds in Phase I or earlier development to treat cancer or infectious diseases.</p> <p>SciBX 7(2); doi:10.1038/scibx.2014.64 Published online Jan. 16, 2014</p>	Patent and licensing status unavailable	<p>Yuan, H. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online Dec. 9, 2013; doi:10.1073/pnas.1320862110 Contact: Salomon Amar, Boston University, Boston, Mass. e-mail: samar@bu.edu Contact: Susan E. Leeman, same affiliation as above e-mail: sleeman@bu.edu</p>