This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Atherosclerosis	Not applicable	<p>Patient and mouse studies suggest inhibiting intestinal microbiota-mediated metabolism of L-carnitine could help prevent atherosclerosis and other cardiovascular diseases. In a cohort of 2,595 subjects undergoing cardiac evaluation, elevated levels of L-carnitine and trimethylamine-N-oxide (TMAO) in plasma were associated with increased risk of cardiovascular diseases and the occurrence of an adverse cardiovascular event. Mouse and human gut microbiota were shown to metabolize L-carnitine to produce TMAO. In a mouse model for atherosclerosis, antibiotics prevented L-carnitine-mediated increases in disease. Next steps could include screening for compounds that inhibit production of TMAO by the microbiota.</p> <p>SciBX 6(16); doi:10.1038/scibx.2013.388 Published online April 25, 2013</p>	Patent and licensing status unavailable	<p>Koeth, R.A. <i>et al. Nat. Med.</i>; published online April 7, 2013; doi:10.1038/nm.3145 Contact: Stanley L. Hazen, Cleveland Clinic, Cleveland, Ohio e-mail: hazens@ccf.org</p>