

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Hypertension	Malonyl-CoA decarboxylase (MLYCD); pyruvate dehydrogenase kinase (PDK); 3-ketoacyl-CoA thiolase (ACAA2)	<p>A study in mice suggests that inhibiting MCD, PDK or ACAA2 could help treat pulmonary arterial hypertension (PAH). In a mouse model of hypoxia-induced PAH, <i>Mcd</i> knockout led to no symptoms compared with normal expression of <i>Mcd</i>. In mice expressing <i>Mcd</i>, trimetazidine and dichloroacetate (DCA) mimicked the metabolic effects of <i>Mcd</i> knockout and decreased PAH symptoms compared with vehicle control.</p> <p>The University of Alberta is evaluating DCA to treat PAH in an ongoing Phase I trial. Vastarel MR trimetazidine, an ACAA2 inhibitor, is marketed for angina by Servier.</p> <p>The university is also testing DCA, a generic small molecule PDK inhibitor, in a Phase II trial to treat anaplastic astrocytoma and glioblastoma. Metabolic Modulators Research Ltd. has PDK inhibitors in preclinical development to treat cardiovascular diseases and diabetes.</p> <p>SciBX 3(33); doi:10.1038/scibx.2010.1014 Published online Aug. 26, 2010</p>	MCD and PDK inhibitors patented; MCD inhibitors licensed to Eli Lilly; PDK inhibitors available for licensing from Metabolic Modulators Research	Sutendra, G. <i>et al. Sci. Transl. Med.</i> ; published online Aug. 11, 2010; doi:10.1126/scitranslmed.3001327 Contact: Evangelos D. Michelakis, University of Alberta, Edmonton, Alberta, Canada e-mail: em2@ualberta.ca