

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Other				
Poisoning	Hypoxia-inducible factor prolyl hydroxylase 1 (EGLN2; HIF-PH1; PHD1); PHD2 (EGLN1; HIF-PH2); PHD3 (EGLN3; HIF-PH3)	<p>Mouse studies suggest pan-PHD inhibitors could help prevent damage to the GI tract and death resulting from acute radiation exposure. In irradiated mice, knockout of <i>Phd1</i>, <i>Phd2</i> and <i>Phd3</i> in GI tissues or pretreatment with a pan-PHD inhibitor decreased markers of GI toxicity and increased survival compared with no knockout or with vehicle pretreatment. In wild-type mice, the pan-PHD inhibitor improved survival in animals treated after total abdominal irradiation but failed to do so in animals treated after total body irradiation. Ongoing work includes testing additional PHD inhibitors in mice before and after radiation exposure. FibroGen Inc., Astellas Pharma Inc. and AstraZeneca plc have the small molecule PHD inhibitor roxadustat (FG-4592; ASP1517) in Phase III testing to treat anemia in patients with chronic kidney disease (CKD) and end-stage renal disease (ESRD). FibroGen and Astellas have the small molecule PHD inhibitor FG-2216 (YM311) in Phase II testing to treat anemia in patients with CKD. Akebia Therapeutics Inc. has the oral PHD inhibitor AKB-6548 in Phase IIb testing to treat anemia in patients with CKD.</p> <p>SciBX 7(24); doi:10.1038/scibx.2014.719 Published online June 19, 2014</p>	Patent application filed; available for licensing	<p>Taniguchi, C.M. <i>et al. Sci. Transl. Med.</i>; published online May 14, 2014; doi:10.1126/scitranslmed.3008523 Contact: Amato J. Giaccia, Stanford University, Stanford, Calif. e-mail: giaccia@stanford.edu</p>