This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Ophthalmic disease				
Retinopathy of prematurity	Hypoxia-inducible factor 1 (HIF1A; HIF1); endothelial PAS domain protein 1 (EPAS1; HIF2A); hypoxia-inducible factor prolyl hydroxylase (EGLN2; HIF-PHD; EGLN)	Studies in mice suggest that stabilizing HIF activity could be useful for preventing hypoxia-induced neovascularization and retinopathy of prematurity. In mice, treatment with the prolyl hydroxylase inhibitor dimethyloxalylglycine prevented oxygen-induced vessel loss and led to significant decreases in vascular pathology compared with what was seen in saline-treated control mice. Prolyl hydroxylase induces hydroxylation of HIF1A, which leads to degradation and decreased stability. Next steps include identifying additional small molecule activators of HIF and inhibitors of prolyl hydroxylase.	Unpatented; unlicensed	Sears, J. <i>et al. Proc. Natl. Acad. Sci. USA</i> ; published online Dec. 1, 2008; doi:10.1073/pnas.0805817105 Contact: Jonathan E. Sears, Cleveland Clinic, Cleveland, Ohio e-mail: searsj@ccf.org
<i>SciBX</i> 2(2); doi:10.1038/scibx.2009.71 Published online Jan. 15, 2009				