

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Eukaryotic translation initiation factor 2 α kinase 3 (EIF2AK3; PERK); eukaryotic translation initiation factor 2A (EIF2A)	<p>Mouse studies suggest inhibiting PERK and EIF2A signaling could help treat radiotherapy-resistant cancers. In mouse xenograft models for human colorectal cancer and glioma, greater PERK and EIF2A signaling was associated with increased tolerance to hypoxia and tumor resistance to radiotherapy compared with normal PERK and EIF2A signaling. In a mouse xenograft model for colorectal cancer with increased PERK and EIF2A signaling, inhibition of EIF2A signaling decreased both hypoxia tolerance and radiotherapy resistance compared with no inhibition. Next steps include developing PERK inhibitors and testing them in preclinical models.</p> <p>SciBX 6(10); doi:10.1038/scibx.2013.235 Published online March 14, 2013</p>	Unpatented; licensing status not applicable	<p>Rouschop, K.M. <i>et al. Proc. Natl. Acad. Sci. USA</i>; published online March 7, 2013; doi:10.1073/pnas.1210633110</p> <p>Contact: Bradly G. Wouters, University of Toronto, Toronto, Ontario, Canada e-mail: bwouters@uhnresearch.ca</p> <p>Contact: Kasper M. Rouschop, Maastricht University Medical Center, Maastricht, the Netherlands e-mail: kasper.rouschop@maastrichtuniversity.nl</p>