This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer; brain cancer; neuroendocrine tumors	Netrin 1 (NTN1); unc-5 homolog A (UNC5A; UNC5H1); UNC5C (UNC5H3); UNC5D (UNC5H4)	<p>Studies in primary tumors, cell cultures and animals suggest that inhibiting NTN1 could help treat aggressive neuroblastoma. In infants and children with stage 4 neuroblastoma tumors, high levels of NTN1 correlated with a five-year survival rate of <50%. In neuroblastoma cell cultures, NTN1 inhibition triggered apoptosis by blocking interactions between NTN1 and its receptors UNC5H1, UNC5H3 and UNC5H4. In a chicken embryo model of neuroblastoma, inhibiting NTN1 blocked primary tumor growth and the formation of lung metastases. Next steps include finding inhibitors of NTN1-UNC5H interactions, elucidating the antiapoptotic mechanism triggered by NTN1 inhibition and identifying interactions between NTN1 and other receptors.</p> <p>Netris Pharma is developing leads that target NTN1-UNC5H interactions to treat cancer. Molecular Insight Pharmaceuticals Inc.'s Azedra, a radiolabeled norepinephrine analog, is in Phase I testing to treat neuroendocrine cancer, including neuroblastomas.</p> <p>PharmaGap Inc.'s protein kinase C (PKC) inhibitor PhGa1 is in preclinical development to treat neuroblastoma and other cancers.</p> <p>SciBX 2(15); doi:10.1038/scibx.2009.616 Published online April 16, 2009</p>	Patented; exclusively licensed to Netris	<p>Delloye-Bourgeois, C. <i>et al. J. Exp. Med.</i>; published online April 6, 2009; doi:10.1084/jem.20082299</p> <p>Contact: Patrick Mehlen, University of Lyon, Lyon, France e-mail: mehlen@lyon.fnclcc.fr</p>