This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Testicular cancer	Protein kinase B (PKB; Akt); phosphoinositide 3-kinase (PI3K)	<p>Human and cell culture studies suggest that inhibiting Akt or PI3K could help treat cisplatin-resistant testicular cancer. PI3K phosphorylates Akt, which in turn phosphorylates cyclin dependent kinase inhibitor 1A (p21; Cip1; CDKN1A; CIP1) and localizes it to the cytoplasm. In tissue isolated from patients with testicular embryonal carcinoma, CDKN1A levels were higher in cisplatin-resistant cancer tissue than in cisplatin-sensitive cancer tissue ($p < 3 \times 10^{-4}$). In an embryonal carcinoma cell line, cisplatin plus Akt or PI3K inhibitors decreased phosphorylation of CDKN1A and increased apoptosis compared with cisplatin plus vehicle control. Next steps include testing different combinations of cisplatin and PI3K and Akt inhibitors in mice.</p> <p>At least 15 other companies have inhibitors of Akt and PI3K in development stages from preclinical to Phase III.</p> <p>SciBX 3(35); doi:10.1038/scibx.2010.1066 Published online Sept. 9, 2010</p>	Unpatented; licensing status unavailable	<p>Koster, R. <i>et al.</i> <i>J. Clin. Invest.</i>; published online Sept. 1, 2010; doi:10.1172/JCI41939</p> <p>Contact: Steven de Jong, University Medical Center Groningen, Groningen, the Netherlands e-mail: s.de.jong@int.umcg.nl</p>