

## This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Cancer	Protein kinase B (PKB; Akt)	<p><i>In vitro</i> and mouse studies suggest that a class of selective PKB inhibitors could help treat cancer. <i>In vitro</i>, a series of piperidine carboxamide analogs selectively inhibited PKB at low nanomolar concentrations. In human prostate cancer and glioblastoma cell lines, the compounds blocked proliferation at low micromolar to nanomolar concentrations. In mice with glioblastomas, a lead compound inhibited tumor growth compared with no treatment. The compound was safe and showed good pharmacokinetics. Next steps could include testing the lead compound in animal models of other cancers.</p> <p>Aeterna Zentaris Inc. and Keryx Biopharmaceuticals Inc.'s perifosine (KRX-0401), an alkylphosphocholine modulator of the phosphoinositide 3-kinase (PI3K)/PKB pathway and other signal transduction pathways, is in Phase III testing to treat multiple myeloma (MM). The compound also has completed Phase II testing to treat colorectal cancer and is in Phase II testing to treat kidney, metastatic colon and several other cancers.</p> <p>VioQuest Pharmaceuticals Inc.'s VQD-002 tricyclic nucleoside (TCN-P), a tricyclic nucleoside inhibitor of PKB activation, is in Phase I testing to treat advanced hematological malignancies.</p> <p>Merck &amp; Co. Inc.'s PKB inhibitor, MK-2206, is in Phase I testing to treat breast cancer and advanced or metastatic solid tumors.</p> <p><b>SciBX 3(9); doi:10.1038/scibx.2010.274</b> <b>Published online March 4, 2010</b></p>	Patented by Astex Therapeutics Ltd.; licensing status unavailable	<p>McHardy, T. <i>et al. J. Med. Chem.</i>; published online Feb. 15, 2010; doi:10.1021/jm901788j</p> <p><b>Contact:</b> Ian Collins, Cancer Research UK Centre for Cancer Therapeutics, Surrey, U.K. e-mail: <a href="mailto:ian.collins@icr.ac.uk">ian.collins@icr.ac.uk</a></p>