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This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Chronic lymphocytic leukemia (CLL)	Phosphoinositide 3-kinase (PI3K); protein kinase CK2	Studies in human cell samples suggest that dual inhibition of PI3K and protein kinase CK2 could help treat CLL. In cultured cells from CLL patients, a PI3K inhibitor plus a protein kinase CK2 inhibitor and/or fludarabine increased apoptosis compared with any of the agents alone. Ongoing work includes validating the findings in clinical studies of CLL patients. Fludara fludarabine, a purine nucleotide analog that inhibits DNA synthesis from Bayer AG and Genzyme Corp., is marketed to treat CLL and is approved to treat mantle cell lymphoma (MCL) and non-Hodgkin's lymphoma (NHL). Aeterna Zentaris Inc. and Keryx Biopharmaceuticals Inc. are developing perifosine (KRX-0401), an alkylphosphocholine modulator of PI3K, protein kinase B (PKB; Akt) and other signal transduction pathways that is in Phase III testing to treat multiple myeloma (MM) and colorectal cancer and in Phase II testing to multiple other cancers. Exelixis Inc. and sanofi-aventis Group's oral selective PI3K inhibitor, XL-147 (SAR245408), is in Phase II testing to treat endometrial cancer and in Phase II testing to treat multiple other cancers. Cylene Pharmaceuticals Inc's protein kinase CK2 inhibitor, CX-4945, is in Phase I testing to treat cancer.	available for licensing	Shehata, M. et al. Blood; published online June 24, 2010; doi:10.1182/blood-2009-10-248054 Contact: Medhat Shehata, Medical University of Vienna, Vienna, Austria e-mail: medhat.shehata@meduniwien.ac.at
		SciBX 3(27); doi:10.1038/scibx.2010.821 Published online July 15, 2010		