This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
B cell lymphoma	Checkpoint kinase 2 (CHEK2; CHK2); MAP kinase 3 (MAPK3; ERK-1); MAPK1 (ERK-2)	<p><i>In vitro</i> and mouse studies suggest combining a CHK2 inhibitor with a dual inhibitor of ERK-1 and ERK-2 could help treat diffuse large B cell lymphoma (DLBCL). In primary DLBCL cells, a CHK2 inhibitor plus a dual ERK-1 and ERK-2 inhibitor induced greater apoptosis than either inhibitor alone. In mice with DLBCL xenograft tumors, the two inhibitors lowered tumor growth compared with either inhibitor alone. Ongoing work includes testing whether CHK2, ERK-1 and ERK-2 play roles in other lymphoma subtypes. Triolex (HE2386), a synthetic analog of an endogenous adrenal steroid hormone that inhibits ERK-2 and NF-κB from Harbor BioSciences Inc. and China National Pharmaceutical Group Corp. (Sinopharm), has completed Phase IIa testing to treat type 2 diabetes. The compound also is in Phase I/II testing to treat rheumatoid arthritis (RA). AEZS-131, an ERK-1 and ERK-2 inhibitor from Aeterna Zentaris Inc., is in preclinical testing to treat colorectal cancer. AEZS-132, a dual ERK-2 and phosphoinositide 3-kinase (PI3K) inhibitor from Aeterna Zentaris, is in preclinical development to treat colorectal and endometrial cancers.</p> <p>SciBX 4(29); doi:10.1038/scibx.2011.816 Published online July 28, 2011</p>	Unpatented; available for licensing	<p>Dai, B. <i>et al. Nat. Commun.</i>; published online July 19, 2011; doi:10.1038/ncomms1404 Contact: Ronald B. Gartenhaus, University of Maryland School of Medicine, Baltimore, Md. e-mail: rgartenhaus@som.umaryland.edu</p>