This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Various				
Myeloproliferative disorder; hematological malignancies	Janus kinase-2 (JAK-2)	<p>Mouse studies suggest that the JAK-2 inhibitor R723 could help treat JAK-2-dependent myeloproliferative neoplasms and hematological malignancies. In a mouse model of <i>Jak-2</i>-dependent myeloproliferative neoplasia, R723 decreased disease pathology and increased survival compared with vehicle. In a mouse model of <i>Jak-2</i>-dependent acute leukemia, R723 improved survival compared with vehicle. Next steps include completing GLP toxicity studies in large animal models.</p> <p>Rigel Pharmaceuticals Inc's R723 is in preclinical development.</p> <p>Ruxolitinib, an oral JAK-1 and JAK-2 inhibitor from Incyte Corp. and Novartis AG, is in Phase III testing to treat myeloproliferative disorders and in Phase II trials to treat relapsed and refractory leukemia.</p> <p>At least four other companies have compounds that inhibit JAK-2 in Phase II testing or earlier to treat myeloproliferative disorders.</p> <p>SciBX 4(19); doi:10.1038/scibx.2011.550 Published online May 12, 2011</p>	<p>Patent pending; available for licensing from Rigel Pharmaceuticals</p> <p>Contact: Raul Rodriguez, Rigel Pharmaceuticals Inc., South San Francisco, Calif. phone: 650-624-1302 e-mail: rrodriguez@rigel.com</p>	<p>Shide, K. <i>et al. Blood</i>; published online April 29, 2011; doi:10.1182/blood-2010-01-262535</p> <p>Contact: Kazuya Shimoda, University of Miyazaki, Miyazaki, Japan e-mail: kshimoda@med.miyazaki-u.ac.jp</p>