This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Pulmonary disease				
Pulmonary disease	Src; tuberous sclerosis complex tumor suppressor 2 (TSC2)	<p>Studies in patient samples, cell culture and mice suggest inhibiting Src kinase activity could help treat the progressive cystic lung disease lymphangioleiomyomatosis (LAM). LAM commonly affects patients who have mutations in <i>TSC2</i>. In samples from patients with LAM and in a <i>Tsc2</i>-deficient rat fibroblast cell line, Src phosphorylation levels were greater than those in normal samples and wild-type fibroblasts. In mice, the Src kinase inhibitor saracatinib decreased lung colonization by <i>Tsc2</i>-deficient rat fibroblasts injected into the peritoneum compared with vehicle. Next steps include clinical trials to evaluate Src kinase inhibitors to treat LAM.</p> <p>AstraZeneca plc's saracatinib, a dual inhibitor of Src and BCR-ABL tyrosine kinases, has completed a Phase IIb trial in ovarian cancer.</p> <p>Bristol-Myers Squibb Co. and Otsuka Pharmaceutical Co. Ltd. market Sprycel dasatinib, a small molecule inhibitor of BCR-ABL and Src kinases, to treat acute lymphoblastic leukemia (ALL) and chronic myelogenous leukemia (CML).</p> <p>Pfizer Inc. markets Bosulif bosutinib, a dual inhibitor of BCR-ABL and Src kinases, to treat CML.</p> <p>At least six other companies have Src kinase-inhibiting drug candidates in Phase II testing or earlier to treat various cancers.</p> <p>SciBX 7(17); doi:10.1038/scibx.2014.501 Published online May 1, 2014</p>	Patent and licensing status undisclosed	<p>Tyryshkin, A. <i>et al. Cancer Res.</i>; published online April 1, 2014; doi:10.1158/0008-5472.CAN-13-1256</p> <p>Contact: N. Tony Eissa, Baylor College of Medicine, Houston, Texas e-mail: teissa@bcm.edu</p>