This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Myelodysplastic syndrome (MDS)	Casein kinase 1 (CSNK1; CKI)	<i>In vitro</i> and mouse studies suggest inhibiting CSNK1 could help treat MDS. Deletion of the long arm of chromosome 5q, which contains <i>CSNK1</i> , is associated with MDS. In lethally irradiated mice, transplantation of <i>Csnk1</i> -deficient hematopoietic stem cells (HSCs) led to higher numbers of circulating HSCs and a greater self-renewing capacity in those HSCs than transplantation of wild-type HSCs. In mice receiving transplants of <i>Csnk1</i> -deficient HSCs, pretreatment of the HSCs with a CSNK1 inhibitor led to lower levels of <i>Csnk1</i> -deficient HSCs and myeloid progenitor cells in bone marrow and circulation compared with vehicle pretreatment. Next steps could include identifying a selective CSNK1 inhibitor to treat patients with MDS with 5q deletions.	Patent and licensing status unavailable	Schneider, R.K. <i>et al. Cancer Cell</i> ; published online Sept. 18, 2014; doi:10.1016/j.ccr.2014.08.001 Contact: Benjamin L. Ebert, Harvard Medical School, Boston, Mass. e-mail: bebert@partners.org
SciBX 7(41); doi:10.1038/scibx.2014.1206				
Published online Oct. 23, 2014				