

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Chronic myelogenous leukemia (CML)	Parathyroid hormone (PTH)	<p><i>In vitro</i> and mouse studies suggest PTH could help treat CML. In a mouse model of CML-like myeloproliferative neoplasia, overexpression of PTH in the bone marrow microenvironment, which mediates bone turnover, increased survival and decreased leukemia stem cell proliferation, frequency and maintenance compared with normal PTH expression. In contrast, overexpression of PTH in a mouse model of acute myelogenous leukemia (AML) increased tumor growth. In wild-type mice with established CML-like disease, PTH plus Gleevec imatinib increased long-term survival compared with either treatment alone or saline. Next steps could include testing PTH in additional animal models of CML.</p> <p>Eli Lilly and Co. markets Forteo teriparatide, a PTH fragment, to treat osteoporosis.</p> <p>At least seven other companies have therapeutics targeting the PTH receptor in Phase III or earlier testing for various indications.</p> <p>Novartis AG markets the tyrosine kinase inhibitor Gleevec to treat AML, CML and other cancers.</p> <p>SciBX 6(48); doi:10.1038/scibx.2013.1383 Published online Dec. 19, 2013</p>	Patent and licensing status unavailable	<p>Krause, D.S. <i>et al. Nat. Med.</i>; published online Oct. 27, 2013; doi:10.1038/nm.3364</p> <p>Contact: David T. Scadden, Massachusetts General Hospital, Boston, Mass. e-mail: dscadden@mgh.harvard.edu</p>