

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Cancer	Proteasome subunit- $\beta$ type 4 (PSMB4); serine hydroxymethyltransferase 2 mitochondrial (SHMT2)	<i>In vitro</i> and mouse studies suggest inhibiting PSMB4 or SHMT2 could help treat cancer. Mapping recurrently amplified regions in 392 primary human cancers and conducting functional RNAi screening identified new potential oncogenic drivers including <i>PSMB4</i> and <i>SHMT2</i> . In cultured fibroblasts, overexpression of PSMB4 increased growth and survival compared with wild-type PSMB4 expression. In multiple human tumor types, expression of <i>PSMB4</i> and <i>SHMT2</i> was higher than that in healthy tissue, with high expression correlating with poor relapse-free survival. Researchers did not disclose next steps, which could include screening for inhibitors of PSMB4 and SHMT2.	Patent and licensing status undisclosed	Lee, G.Y. <i>et al. Cancer Res.</i> ; published online April 22, 2014; doi:10.1158/0008-5472.CAN-13-2683 <b>Contact:</b> Richard M. Neve, Genentech Inc., South San Francisco, Calif. e-mail: <a href="mailto:never@gene.com">never@gene.com</a>
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