

## This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Breast cancer	Heat shock protein 90 (Hsp90); Hsp70	<p><i>In vitro</i> studies identified an Hsp90 inhibitor that could help treat breast cancer. Hsp90 inhibitors that work by blocking the Hsp90 ATP-binding site can promote cancer cell survival through increased expression of Hsp70. In triple-negative breast cancer cells, a compound that blocked Hsp90's interaction with a cochaperone lowered Hsp70 expression, whereas a compound that blocked the Hsp90 ATP-binding site increased Hsp70 expression. The interaction inhibitor also increased cell-cycle arrest and apoptosis and decreased cell migration compared with a compound that blocked the Hsp90 ATP-binding site. Next steps could include testing the interaction inhibitor in mouse models of cancer.</p> <p>At least 13 companies have Hsp90 inhibitors in clinical and preclinical testing to treat cancer.</p> <p><b>SciBX 4(37); doi:10.1038/scibx.2011.1034</b>  <b>Published online Sept. 22, 2011</b></p>	Findings unpatented; unavailable for licensing	<p>Pimienta, G. <i>et al. Mol. Pharm.</i>; published online Sept. 1, 2011; doi:10.1021/mp200346y</p> <p><b>Contact:</b> Genaro Pimienta, Yale University, New Haven, Conn.  e-mail: <a href="mailto:genaro.pimienta-rosales@yale.edu">genaro.pimienta-rosales@yale.edu</a></p>