

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Infectious disease</b>				
Bacterial infection	Bacterial RNA polymerase (RNAP)	<i>In vitro</i> studies identified bivalent inhibitors of RNAP that could help treat bacterial infections. Biochemical and crystallography studies showed that the cyclic-peptide antibiotic GE23077 inhibits bacterial growth by binding the active site of RNAP, a previously unknown site for antibacterial action. A new antibiotic was synthesized by linking GE23077 to rifamycin—which inhibits RNAP activity by binding a distinct site on the protein—and this dual-acting compound inhibited the growth of bacteria resistant to either parent compound. Next steps include optimizing derivatives.	Patent application filed; available for licensing	Zhang, Y. <i>et al. eLife</i> ; published online April 22, 2014; doi:10.7554/eLife.02450 <b>Contact:</b> Richard H. Ebright, Rutgers University, Piscataway, N.J. e-mail: <a href="mailto:ebright@waksman.rutgers.edu">ebright@waksman.rutgers.edu</a>
		<b>SciBX 7(20); doi:10.1038/scibx.2014.581</b> Published online May 22, 2014		