

### This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
<b>Cancer</b>				
Multiple myeloma (MM)	Signal transducer and activator of transcription 3 (STAT3)	<p>An <i>in vitro</i> study identified nifuroxazide as a STAT3 inhibitor that could potentially treat MM. Nifuroxazide was identified in a library screen as an inhibitor of STAT3 function. Incubation of U266 myeloma cells with nifuroxazide inhibited phosphorylation of STAT3 and lowered cell survival. The compound did not impair survival of normal blood mononuclear cells. Nifuroxazide plus a histone deacetylase inhibitor or a mitogen-activated ERK kinase inhibitor enhanced nifuroxazide activity. Further studies are necessary to evaluate nifuroxazide derivatives in animal models to select the best STAT3 inhibitor for clinical trials.</p> <p>Reata Pharmaceuticals Inc.'s RTA 402, an inhibitor of NF-<math>\kappa</math>B and STAT3 transcriptional activity, is in preclinical testing to treat multiple myeloma.</p> <p><b>SciBX 1(38); doi:10.1038/scibx.2008.923</b>  <b>Published online Oct. 23, 2008</b></p>	Patent application filed for STAT modulators for cancer therapy; available for licensing	<p>Nelson, E. <i>et al. Blood</i>; published online Sept. 29, 2008; doi:10.1182/blood-2007-12-129718</p> <p><b>Contact:</b> David A. Frank, Harvard Medical School and Brigham and Women's Hospital, Boston, Mass.            e-mail: <a href="mailto:david_frank@dfci.harvard.edu">david_frank@dfci.harvard.edu</a></p>