

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Tubulin	<p>An SAR study identified pyrano[3,2-<i>c</i>]pyridone and pyrano[3,2-<i>c</i>]quinolone compounds with antiproliferative and apoptotic activity that could be useful for treating cancer. In a human T cell leukemia cell line, two pyranoquinolones had apoptotic activity. One compound showed a dose-dependent response, and the other was potent at both low and high concentrations. In a cervical adenocarcinoma cell line, both compounds had submicromolar GI₅₀ values. In an <i>in vitro</i> tubulin polymerization assay, both compounds completely suppressed microtubule polymerization. Next steps include studying pyranopyridone and pyranoquinolone compounds in a panel of cancer cell lines, followed by studies in mice.</p> <p>At least nine companies have tubulin inhibitors for multiple cancers in development stages ranging from discovery to Phase III trials.</p>	Patent application filed; available for licensing	Magedov, I. <i>et al. J. Med. Chem.</i> ; published online March 25, 2008; doi:10.1021/jm701499n Contact: Joerg Huelsken, Department of Chemistry, New Mexico Institute of Mining and Technology, Socorro, N.M. e-mail: akornien@nmt.edu