

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Mitochondrial transporter	<p><i>In vitro</i> and mouse studies suggest that an analog of GSAO could help treat cancer. The new analog, 4-(<i>N</i>-(<i>S</i>-penicillamylacetyl)amino)phenylarsinous acid, accumulated in endothelial cells about 85 times faster than 4-(<i>N</i>-(<i>S</i>-glutathionylacetyl)amino)phenylarsinous acid (GSAO) due to more efficient entry and less removal by multidrug resistance-associated proteins. In cancer cell lines, the new analog had a 44-fold increase in antiproliferative activity compared with GSAO. The analog was also 20-fold more effective at inhibiting pancreatic carcinoma tumor growth in mice. Next steps include Phase I/IIa testing of the compound.</p> <p>Arsenical GSAO is a tripeptide that inactivates mitochondrial adenine nucleotide translocase. The compound blocks angiogenesis and has shown activity in preclinical models of cancer.</p> <p>SciBX 2(39); doi:10.1038/scibx.2009.1467 Published online Oct. 8, 2009</p>	Findings patented; available for licensing	<p>Dilda, P. <i>et al. J. Med. Chem.</i>; published online Sept. 29, 2009; doi:10.1021/jm9008339</p> <p>Contact: Philip J. Hogg, The University of New South Wales, Sydney, New South Wales, Australia e-mail: p.hogg@unsw.edu.au</p>