

### This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
<b>Infectious disease</b>				
Gastrointestinal infection	<i>Giardia lamblia</i>	<p><i>In vitro</i> and <i>in vivo</i> studies suggest that 5-nitroimidazole analogs could overcome metronidazole resistance to treat <i>G. lamblia</i> infection. <i>In vitro</i>, 2-ethenyl-5-nitroimidazole derivatives had anti-giardial activity comparable to that for metronidazole but with less cytotoxicity. In a mouse model of <i>G. lamblia</i> infection, six analogs cleared infection more effectively than comparable doses of metronidazole. Additional <i>in vitro</i> testing showed that 10 analogs were active against at least 1 strain of metronidazole-resistant <i>G. lamblia</i>. Future studies could include lead optimization and correlating the analogs' potency and selectivity with their physicochemical properties.</p> <p>Pfizer Inc. markets Flagyl metronidazole to treat giardiasis, <i>Clostridium difficile</i>-associated diarrhea (CDAD) and other bacterial and parasitic infections.</p> <p><b>SciBX 2(24); doi:10.1038/scibx.2009.977</b>  <b>Published online June 18, 2009</b></p>	Patent and licensing status unavailable	<p>Valdez, C. <i>et al. J. Med. Chem.</i>; published online May 29, 2009; doi:10.1021/jm900356n</p> <p><b>Contact:</b> Lars Eckmann, University of California, San Diego, La Jolla, Calif.            e-mail:  <a href="mailto:leckmann@ucsd.edu">leckmann@ucsd.edu</a></p>