This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Aromatase; NAD(P)H dehydrogenase, quinone 2 (NQO2; QR2)	<p><i>In vitro</i> assays suggest that casimiroin analogs could help treat cancer. Complete synthesis of the aromatase and QR2 inhibitor casimiroin and more than 30 of its analogs generated a series of compounds exhibiting low μM to high pM <i>in vitro</i> activity against the two enzymes without significant cytotoxicity in human breast, human prostate or mouse liver cell cultures. Structural studies of cocrystals of QR2 with casimiroin and one of the analogs provided information that can guide further lead optimization. Future studies include <i>in vivo</i> testing of the lead compounds.</p> <p>Marketed aromatase inhibitors for cancer include AstraZeneca plc's Arimidex anastrozole, Novartis AG's Femara letrozole and Pfizer Inc.'s Aromasin exemestane. Meditron Pharmaceuticals Inc. has a pair of aromatase inhibitors—MPI-674 and MPI-676—in Phase II testing for genitourinary indications.</p> <p>SciBX 2(12); doi:10.1038/scibx.2009.481 Published online March 26, 2009</p>	Patented; available for licensing	<p>Maiti, A. <i>et al. J. Med. Chem.</i>; published online March 6, 2009; doi:10.1021/jm801335z</p> <p>Contact: Mark Cushman, Purdue University, West Lafayette, Ind. e-mail: cushman@pharmacy.purdue.edu</p>