

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Notch 1 (NOTCH1); estrogen receptor- β	<p><i>In vitro</i> and mouse studies suggest estrogen receptor-β agonists could help treat squamous cell carcinoma (SCC). In an analysis of published datasets, <i>NOTCH1</i> and its transcriptional activators, including estrogen receptor-β, were downregulated in SCC cells but not in keratinocytes. In skin, oral and lung SCCs, virus vector-mediated estrogen receptor-β overexpression or a selective small molecule estrogen receptor-β agonist increased <i>NOTCH1</i> expression and decreased cell proliferation compared with no alteration or with vehicle. In mice intradermally injected with human head and neck SCC cells, an estrogen receptor-β agonist decreased tumor size and proliferation compared with vehicle. Next steps include identifying additional agonists.</p> <p>Bionovo Inc. has the estrogen receptor-β agonist MF101 in Phase III testing to treat menopause. At least five other companies have estrogen receptor-β agonists in Phase II or earlier testing.</p> <p>SciBX 7(20); doi:10.1038/scibx.2014.578 Published online May 22, 2014</p>	Provisional patent application filed; available for licensing	Brooks, Y.S. <i>et al. J. Clin. Invest.</i> ; published online April 17, 2014; doi:10.1172/JCI72718 Contact: G. Paolo Dotto, University of Lausanne, Lausanne, Switzerland e-mail: paolo.dotto@unil.ch