This week in therapeutics

Indication	Target/marker/ pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Macrophage scavenger receptor 1 (MSR1; SR-A; CD204); toll-like receptor 4 (TLR4)	<p>Studies in mice and in cell culture suggest that inhibiting CD204 could increase the efficacy of TLR4 agonists as immunotherapy adjuvants for cancer. CD204 knockout mice had less tumor growth when vaccinated with ovalbumin plus a TLR4 agonist than CD204-expressing controls. In cultured CD204-deficient dendritic cells (DCs), a TLR4 agonist increased the cells' capacity to activate antigen-specific T cells compared with that seen in wild-type DCs. Ongoing work is seeking to confirm the results in human antigen-presenting cells and to elucidate the mechanism by which CD204 regulates TLR4 signaling.</p> <p>GlaxoSmithKline plc's AS04 vaccine adjuvant contains the TLR4 agonist monophosphoryl lipid A. GSK's Cervarix, a vaccine against human papillomavirus (HPV) types 16 and 18 formulated with AS04, is under FDA review and is approved in more than 90 countries to prevent cervical cancer.</p> <p>SciBX 2(15); doi:10.1038/scibx.2009.614 Published online April 16, 2009</p>	Patented; available for licensing	<p>Yi, H. <i>et al. Blood</i>; published online April 6, 2009; doi:10.1182/blood-2008-11-190033 Contact: Xiang-Yang Wang, Roswell Park Cancer Institute, Buffalo, N.Y. e-mail: xiang-yang.wang@roswellpark.org</p>