This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cancer				
Cancer	Plasminogen activator, urokinase receptor (PLAUR; UPAR)	<p><i>In vitro</i> and mouse studies suggest that plasmin could help improve stem cell mobilization for transplantation or regenerative medicine, as well as inhibit stem cell mobilization to treat cancer. <i>In vitro</i>, plasmin cleaved UPAR. In mice transplanted with bone marrow cells, a UPAR-neutralizing antibody disrupted hematopoietic stem/progenitor cell (HSPC) homing and engraftment to the bone marrow compared with what was seen using control antibody. In plasmin-deficient mice, treatment with a stem cell mobilization agent lowered HSPC homing and engraftment to the bone marrow compared with what was seen in wild-type mice. Next steps include modulating the plasmin pathway in conditions of both poor and excessive stem cell mobilization.</p> <p>Attenuon LLC's huATN-658, an antibody against a target in the urokinase plasminogen activator system, is in preclinical testing to treat cancer. Willex AG's Mesupron and WX-UK1, serine protease inhibitors targeting UPAR, are in Phase II and Phase I testing to treat cancer.</p> <p>SciBX 2(11); doi:10.1038/scibx.2009.440 Published online March 19, 2009</p>	Patent application filed covering findings; licensing status unavailable	<p>Tjwa, M. <i>et al.</i> <i>J. Clin. Invest.</i>; published online March 9, 2009; doi:10.1172/JCI36010</p> <p>Contact: Peter Carmeliet, Catholic University Leuven, Leuven, Belgium e-mail: peter.carmeliet@med.kuleuven.be</p>