

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Transplantation				
Graft-versus-host disease (GvHD)	CD28 receptor	<p>Studies in cell culture and in mice suggest that antagonizing the B7 binding site of CD28 may be useful for preventing GvHD. In cultured mouse thymocytes, the anti-mouse CD28 antibody E18 blocked binding of B7 ligands to CD28 expressed on the cell surface. In a mouse model of acute GvHD, E18 significantly increased survival compared with that of mice receiving a control antibody ($p=0.02$). The E18-treated acute GvHD mice also had lower mean clinical disease scores than controls ($p<0.03$). Next steps include identifying and evaluating human anti-CD28 mAbs in animal models. Amotosalen, a plasma pathogen inactivation system using a psoralen S-59 light-activated compound from Cerus Corp., is marketed to treat GvHD.</p> <p>Thymoglobulin, a rabbit anti-thymocyte Ig from Genzyme Corp., is marketed for the same indication.</p> <p>At least 10 other companies have compounds in Phase III or earlier development for the indication.</p>	Not patented; E18 mAb commercially available from MorphoSys AG's AbD Serotec subsidiary	<p>Beyersdorf, N. <i>et al. Blood</i>; published online Sept. 9, 2008; doi:10.1182/blood-2008-03-146662</p> <p>Contact: Niklas Beyersdorf, University of Wurzburg, Wurzburg, Germany e-mail: niklas.beyersdorf@vim.uni-wuerzburg.de</p>