

This week in therapeutics

| Indication | Target/marker/pathway | Summary | Licensing status | Publication and contact information |
|-------------------------------|--|---|---|---|
| Cardiovascular disease | | | | |
| Atherosclerosis | Apolipoprotein B-100 (APOB-100); T cell receptor- β variable 3-1 (TRBV3-1; TCRBV3S1) | <p>A study in mice and in cell culture suggests that blocking T cell response to APOB-100 could help treat and prevent atherosclerosis. In cell culture, T cells that reacted to APOB-100 expressed TRBV3-1. In a mouse model of atherosclerosis, increasing expression of anti-Trbv3-1 antibodies to block Trbv-1 signaling led to inhibition of T cell reactivity to ApoB-100 and reduction in atherosclerotic lesion size by 65% compared with what was seen in noninduced controls. Next steps include evaluating the effects of blocking the T cell response to APOB-100 in long-term studies.</p> <p>Mipomersen, a second-generation antisense inhibitor of APOB-100 mRNA from Isis Pharmaceuticals Inc. and Genzyme Corp., is in Phase III testing to treat hypercholesterolemia. At least six other companies have compounds targeting APOB-100 in Phase I or earlier to treat atherosclerosis or hypercholesterolemia.</p> <p>SciBX 3(20); doi:10.1038/scibx.2010.620 Published online May 20, 2010</p> | Patent application filed covering use in atherosclerotic cardiovascular disease; licensing status undisclosed | <p>Hermansson, A. <i>et al. J. Exp. Med.</i>; published online May 3, 2010; doi:10.1084/jem.20092243</p> <p>Contact: Göran K. Hansson, Karolinska Institute, Stockholm, Sweden e-mail: goran.hansson@ki.se</p> |