

This week in therapeutics

Indication	Target/marker/pathway	Summary	Licensing status	Publication and contact information
Cardiovascular disease				
Cardiovascular disorders	GPIIb/IIIa (CD41/CD61); solute carrier family 6, member 4 (SLC6A4; SERT)	A study in mice suggests that antagonizing the serotonin transporter SERT could lower platelet aggregation and help treat some cardiovascular and hematological disorders. Platelets taken from SERT knockout mice had significantly lower adenosine 5'-diphosphate-mediated and thrombin-mediated aggregation responses than platelets from wild-type mice ($p < 0.05$). <i>In vitro</i> , wild-type platelets treated with the selective serotonin reuptake inhibitors (SSRIs) citalopram and fluoxetine had attenuated aggregation. Reduced platelet activation was also seen in depressed patients after chronic SSRI treatment. The researchers next plan to examine mice with overactivity defects in SERT and to further investigate the transporter's mechanism. Celexa citalopram is marketed by Forest Laboratories Inc. to treat depression, and Prozac fluoxetine is marketed by Eli Lilly and Co. to treat depression and other neuropsychiatric disorders.	U.S. patent application filed covering manipulation of SERT and related pathway elements to treat serotonin-linked diseases; available for licensing	Carneiro, A.M. <i>et al. J. Clin. Invest.</i> ; published online March 3, 2008; doi:10.1172/JCI33374 Contact: Randy D. Blakely, Vanderbilt University School of Medicine, Nashville, Tenn. e-mail: randy.blakely@vanderbilt.edu