

Non-Confidential Disclosure

 Immune Disease Institute	Office of Technology Development 3 Blackfan Circle, 3 rd Floor Boston, Massachusetts 02115 www.idi.harvard.edu
IDI 00-009	METHODS FOR TREATING HEMOSTATIC DISORDERS BY MODULATING P-SELECTIN ACTIVITY (ANTI-THROMBOTIC)

Application: Treatment & prevention of thrombotic disorders including atherosclerosis, deep vein thrombosis, angina & restenosis following medical intervention.

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Invention Summary:

P-selectin, a member of the selectin family, is found on the surface of platelets and endothelial cells. A soluble form of P-selectin (sP-sel) is found in blood plasma as a protein on circulating microparticles. However, the biological role of sP-sel and other soluble adhesion molecules circulating in the blood has not been known. Previous work by Dr. Wagner et al. has shown that P-selectin could play a role in hemostasis. Wild type mice infused with a P-selectin immunoglobulin fusion protein (P-sel-Ig) produced a procoagulant state, which accelerated hemostasis. Studies showed that, in human blood, P-sel-Ig induced formation of procoagulant microparticles upon binding to the P-selectin glycoprotein ligand-1 (PSGL-1). Therefore, sP-sel plasma levels may be used to assess risk of a clotting incident. Human therapeutic methods are based on reducing hemostasis by administering an inhibitor of P-selectin activity causing a decrease in the pro-coagulant state of an individual.

Publications: *PNAS*, Vol. 97, No. 25: 13835-13840, Dec. 2000
Nature Medicine, Vol. 9, No. 8: 1020-1025, Aug. 2003
Journal of the American Heart Association, *Circulation* 2001; 103: 491-495

Supporting Publications: *TRENDS Mol Med* Vol. 10: 9-12 (2004)
Circulation Abstracts Vol. 103: 491 (2001)

Patent Status: US Issued Patent # 7,387,777
Foreign Issued Patent # 1289552 for United Kingdom, France, Germany, and Italy
US Application # 09/860,618, Publication # 20020031508
US Application # 10/999,477; US Application # 12/030,576
PCT Application # PCT/US01/16021, Publication # WO 01/89564

Availability: Exclusive worldwide license

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