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**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.

Inventors: Denisa Wagner, Ph.D., Patrick Andre, Ph.D., Daqing Hartwell, Ph.D., Ingrid Hrachovinova, Ph.D.

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.

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Availability: Exclusive worldwide license

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