Microfluidic Flow Assay for Measuring Hemostatic Phenotypes

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Summary: A microfluidic flow assay that measures the propensity to form a blood clot

Description: A deficiency in clinical hematology are techniques to diagnose a very broad range of both deficient and excessive clotting disorders and to monitor the effects of therapeutic interventions. The microfluidic flow assay is a method for measuring an individual’s propensity to form a blood clot. The assay consists of a micropatterned surface that induces clot formation and an array of microfluidic channels through which blood flows. The micropatterned surface contains two stimuli, one for inducing platelet adhesion and another for inducing the coagulation cascade. Most current bleeding assays test for either platelet function or coagulation, but not both. In addition most conventional assays are conducted under static conditions, rather than under the flow conditions of the microfluidic flow assay developed here. Since blood is moving fluid in the body, there are several advantages to study it under flow conditions in bleeding diagnostics.

Main Advantages of this Invention
- Tests both platelet function and coagulation under flow conditions

Potential Areas of Application
- Medical Devise Companies

ID number: 10004

Intellectual Property Status:
US 8,486,349


Opportunity: We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.

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