



T-TAS® 01

Flow-Based system for measuring primary hemostasis in whole blood.

Assay principle

The microchip system based on flow-chamber technology replicates the processes of primary hemostasis as realistically as possible using a chip ("PL chip") with 26 collagen-coated microcapillaries. Each capillary has a width of 40 µm and a length of 40 µm. The whole blood is in a reservoir to which pressure is applied via a medium (mineral oil). This pressure causes the whole blood to enter the chip continuously. The collagen coated capillaries and physiological shear stress conditions results in platelet thrombus formation. Gradually the thrombus increase in size and eventually occlude the capillary resulting in an increase of the backpressure on the mineral oil. The change in pressure is registered by a sensor and recorded continuously over a period of 10 minutes.

To evaluate and assess, the "area under the curve" (AUC) is determined.

Characteristics

- Ex vivo flow-model of primary hemostasis based on flow-chamber technology
- PL chip with 26 collagen-coated microcapillaries
- BAPA- or hirudin-anticoagulated venous whole blood
- Results available within 40 minutes from blood draw (includes 10-minute analysis time)
- 2 samples per chip
- Identification of defects in primary hemostasis (acquired or inherited)
- Sensitive to defects of von Willebrand factor
- Suitable for testing antiplatelet therapies

