**Primary Haemostasis**

The primary Haemostasis corresponds to the reactions occurring after vascular damage and leads to the formation of a stable platelet clot. This is the first stage of the Haemostasis. To be effective, primary Haemostasis requires the optimal function of Von Willebrand Factor and platelets.

**Haemostasis activation**

Following platelet activation and plasmatic coagulation, new molecules appear circulating in the plasma and the platelet membrane proteins are modified. An increase of these markers can reveal a prothrombotic state.

**Thrombosis**

The onset of plasma coagulation is an explosive event that triggers the generation of thrombin. Various control pathways involving a number of different inhibitors regulate thrombin generation and ensure that homeostasis is maintained. Anomalies regarding these inhibitors are the chief cause of venous and/or arterial thrombosis. However, thrombosis may also result from the presence of antiphospholipid antibodies.

**Fibrinolysis**

Fibrinolysis is the enzymatic process which, along with vascular repair, leads to the destruction of the clot to restore normal blood circulation. An imbalance of the stability in anti-fibrinolytic factors results in a Haemostasis disorder.

**Therapeutic monitoring**

Haemostasis disorders can be regulated by a broad panel of anti-thrombotic or anti-haemorrhagic treatments. Many assays are available to measure the activity of these molecules.