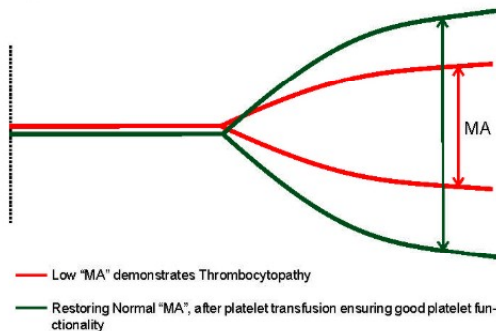


Platelet Functionality

THELM provides essential information about platelet functionality and determines its contribution to the formed clot's strength and stability.

- * Eliminate empirical usage of Platelet transfusions.
- * Eliminate guesswork about resistance and/or reversal of Anti-platelet therapy.
- * Guide appropriate anti-platelet course for safe and effective therapy.
- * **THELM** provide a quantitative model for the assay of GPIIb/IIIa dependent platelet function regarding receptor blockade.



THELM trace provides information about platelet functionality

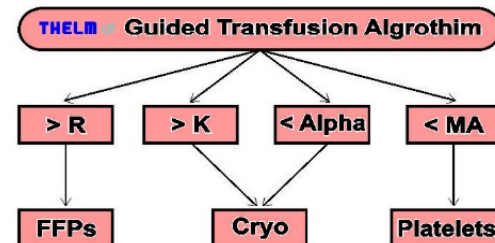
Key Features

- * Hartert based technology.
- * Modular System upto 4 analysis channels.
- * Auto uploading of Cup and Pin.
- * Microprocessor controlled.
- * Integrated notebook in the main unit.
- * Prefitted Torsion wire.
- * Auto Calibration before every test.
- * More protection for Torsion wire.
- * Auto Magnetic blocking system for Torsion wire.

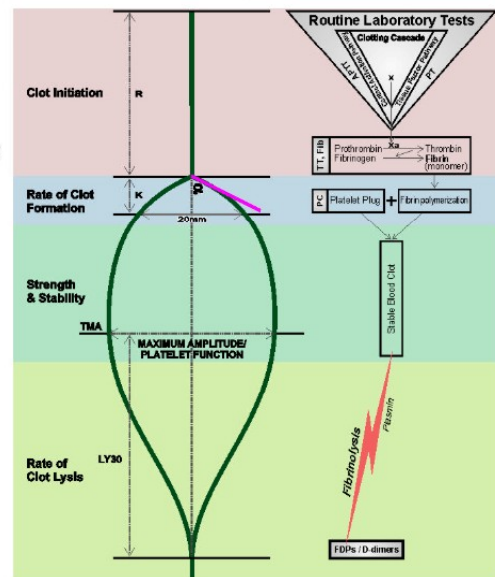
Manage Blood Product

Blood transfusion has become a mainstay of medical practice, due to the risks associated with allogenic blood transfusion and shortage of blood worldwide.

THELM provides a quick evaluation of platelet and coagulation defects and optimize the use of blood products and guides appropriate transfusion based therapy in patients with excessive bleeding.



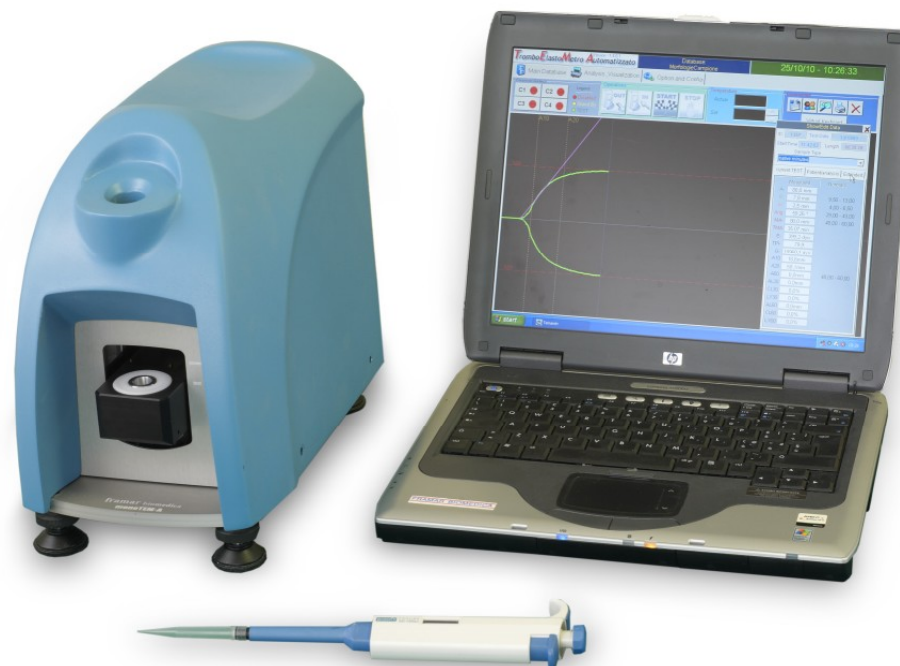
THELM vs RCT



THELM:a

THromboELastoMeter: automated

Coagulation to Fibrinolysis



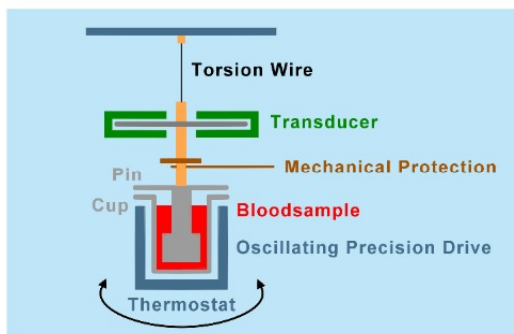
THromboELastoMeter: automated

Thromboelastometer-Automated **THELM** is a point-of-care analysis test and monitors hemostasis as a whole dynamic process instead of revealing information of isolated conventional coagulation screens. Intensive Care Units, Trauma Centers, Cardiac Catheterisation Labs, Liver Transplant Surgery and Cardiac Surgeries are key areas where **THELM** provides rapid, point-of-care assessment of hemostatic alterations and allows an appropriate and targeted therapy and optimize the administration of pharmacological and transfusion based therapy.

Hartert Technology

Microprocessor controlled **THELM** analyzer uses only 0.36ml of whole blood sample pipetted into a Cup and a coaxially suspended Pin with the help of Torsion wire. The Cup oscillates at $4^\circ 45'$ and an electro-magnetic transducer monitors various stages of in-vitro hemostasis from:

- * Clot formation characterized by fibrin formation.
- * Conventional strength of formed clot representing kinetics of fibrin build up.
- * Platelet function assessment.
- * Hyperfibrinolysis.

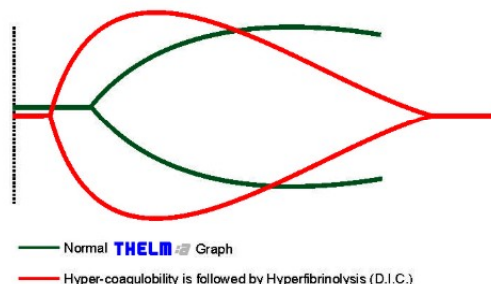


Disseminated Intravascular Coagulopathy (D.I.C.)

D.I.C. is the most important coagulopathy in Intensive Care Medicine and its diagnosis and treatment is one of the difficult management in medical science. Despite the presence of a significant secondary fibrinolysis, laboratory tests such as elevated FDP, prolonged PT and PTT, and screening assay for increased fibrinolysis such as diluted whole blood clot lysis test or euglobulin clot lysis test are usually normal in patients with D.I.C. This is a state of increased propensity for clot formation triggered by a variety of stimuli related to such diverse disorders as:

- * Infections like Gram-negative Sepsis
- * Obstetric complications like Amniotic fluid embolism, Eclampsia
- * Tissue trauma such as burns, accidents, surgery
- * Heat Stroke or Shock
- * Liver disease
- * Incompatible blood transfusion reactions or massive blood transfusion
- * AML-M3, Adenocarcinomas etc

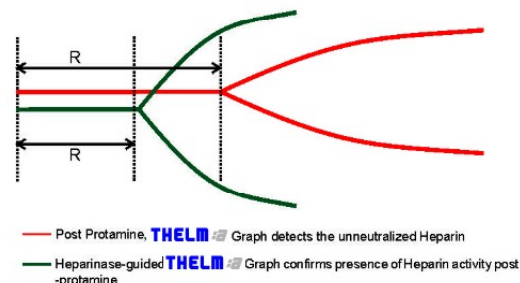
Thromboelastometer-Automated is the only device that recognizes stages I and II of D.I.C. and can prevent the development of D.I.C. stage II. It distinguishes between Primary and Secondary Fibrinolysis.



Early Detection of Disseminated Intravascular Coagulopathy (Stage I)

Heparin Management

THELM is the best predictor of trace amounts of heparin and assists a surgeon/anaesthesiologist in predicting abnormal post operative hemorrhage.



Post-operative, detection and effective Management of trace level of heparin

Information	ACT	THELM
Heparinization	YES	NO
Clot Initiation	YES	YES
Rate of Clot Formation	NO	YES
Strength and stability of Formed clot	NO	YES
Platelet functionality	NO	YES
Rate of Fibrinolysis	NO	YES
Sensitivity for trace levels of Heparin	NO	YES

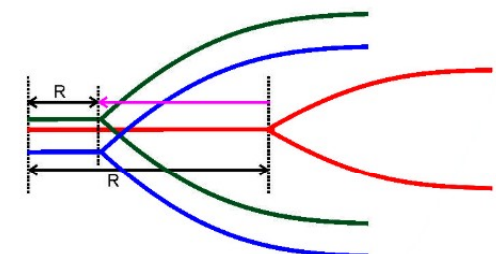


Obstetrics and Gynaecology

Normal and High risk pregnant like eclampsic, pre-eclampsic, HELLP syndrome, essential thrombocythemia and post-partum women are five times more likely to develop thromboembolic event in comparison to nonpregnant women of the same age and the implications of anticoagulation like increased risk of hemorrhage and Spinal-Epidural Hematoma in pregnant women present a challenge to both obstetrician and anaesthesiologist.

THELM is an essential tool for:

- * Assessment of anticoagulation in women on either Standard Heparin Therapy or LMWH.
- * Decision making of when to reverse the anticoagulation as delivery approaches.
- * Ensuring that the coagulation status has returned to normal before initiating regional anaesthesia in the patient on anticoagulation therapy.
- * Decision on choice of Regional versus General Anaesthesia for emergent cesarian delivery.
- * Detection of D.I.C.



THELM ensures the reversal of anticoagulation before considering the suitability of regional anaesthesia for labor analgesia.