

Guiding bleeding management for improved patient outcomes



werfen

Rapid results for real-time decisionmaking—and fewer unnecessary blood transfusions¹⁻³

The ROTEM *delta* viscoelastic testing system enables timely and comprehensive assessment of coagulopathy. Fast, easy-to-interpret TEMograms provide real-time, actionable results.

In patients exhibiting clinically significant bleeding, ROTEM testing guides appropriate clinical decisions toward individual and goal-directed therapy. This helps clinicians optimize hemostasis, while minimizing blood product exposure—a key goal of patient blood management (PBM) programs.





A complete viscoelastic testing system for effective PBM

Offering enhanced interpretation and reproducibility for timely and comprehensive assessment

Enables rapid clinical decisions

- Early parameters in <10–15 minutes, enabling clinical decisions up to 3x faster than traditional methods
- No incubation time—testing initiated in <1 minute
- Rapid activators for timely results
- Heparin neutralization allows testing during cardiopulmonary bypass

Enhanced interpretation

- Large TEMograms viewed at-a-glance
- · Reference ranges to assess hemostasis and inform therapeutic decisions
- Profile and patient overlays to compare in-process results to reference curves

Accurate, reproducible results

- System performance continuously monitored to ensure quality results
- Four independent channels for differential diagnosis of coagulopathy

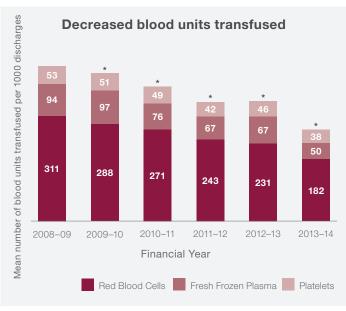
Easy to use

- Automated pipetting, with step-by-step onscreen guidance
- Intuitive, touchscreen interface
- Automated assay initiation upon sample introduction

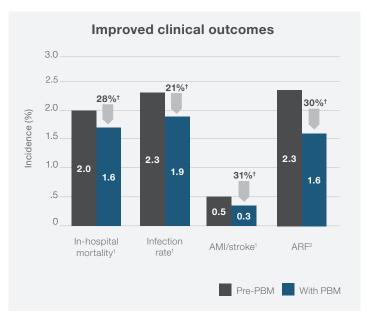
Evidence-based and validated. Viscoelastic testing is recommended in key clinical guidelines^{4,5} to inform patient-specific transfusion decisions and respond to patient needs.

An essential part of any PBM program

Studies show that PBM can reduce transfusions and improve patient outcomes^{1,2}



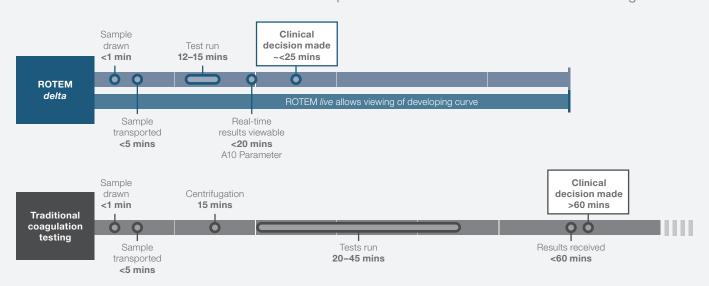




AMI=acute myocardial infarction; ARF=acute renal failure †Adjusted

ROTEM delta testing guides appropriate and timely decisions for effective bleeding management

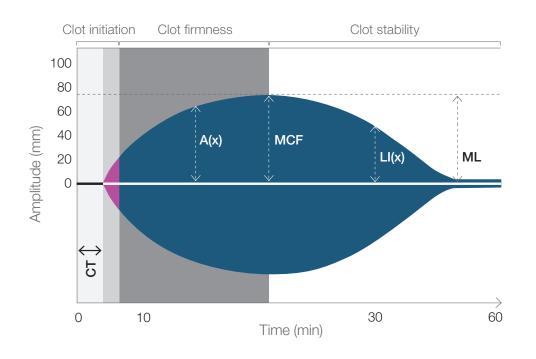
Enables clinical decisions within 25 minutes of sample draw vs. >60 minutes with traditional testing.



Enhanced interpretation with ROTEM TEMograms

A clear picture of coagulopathy

- Immediate, at-a-glance assessments of clot firmness and stability
- Enhanced clotting activators expedite TEMogram formation and results
- Shapes and published reference ranges inform hemostasis assessment and therapeutic decisions



CT: Clotting time

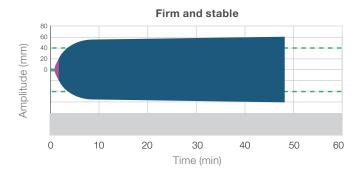
A(x): Amplitude x mins after CT

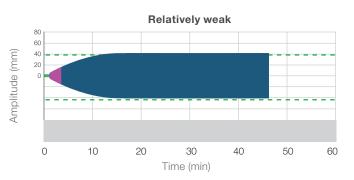
MCF: Maximum clot firmness

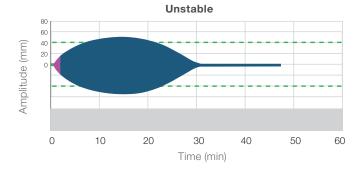
LI(x): Lysis index x mins

after CT

ML: Maximum lysis







Facilitates differential diagnosis. Comparing TEMograms from multiple

assays allows quick interpretation of results and targeted therapeutic decisions.

Flexible assay menu for broad indications

Assay	Analytical principle	Heparin neutralization
EXTEM	Assesses clot formation, firmness and stability through activation of extrinsic pathway	Up to 5 IU/mL
INTEM	Evaluates influence of heparin, clot formation, firmness and stability through activation of intrinsic pathway	N/A
FIBTEM	Assesses fibrinogen status and fibrin polymerization by blocking platelet contribution	Up to 5 IU/mL
НЕРТЕМ	Monitors intrinsic pathway after neutralizing influence of unfractionated heparin	Up to 7 IU/mL, used in cardiovascular surgery
APTEM	Monitors clot firmness after blocking hyperfibrinolysis	Up to 5 IU/mL, used in trauma

Enables individualized, goal-directed therapy guidance in a wide range of clinical scenarios











Remote viewing of results in real-time

- Web-based and secure data viewer
- TEMograms and numeric ROTEM measurement results displayed in real-time, from site of analysis to the point of care
- Searchable measurements by patient or sample ID

Advanced connectivity and training

Simple management of information, systems and operators

- GEMweb® Plus 500
- Full traceability from a single interface, accessed from anywhere
- Enhanced operator management and data analysis
- Simplified quality management of ROTEM delta systems
- Remote system configuration
- Open connectivity including Werfen and non-Werfen instruments*



Centrally support laboratory decision-making

- Connects ROTEM systems, Werfen Hemostasis systems and operators
- Critical results and system status displayed in real time
- Simple, efficient management of quality control (QC)
- Helps optimize operations and facilitate accreditation

HEMOHUB

Simplify education, training and certification

- Educational programs for ROTEM delta operators
- Point-of-care operator training for certification and accreditation
- Comprehensive online classes in PBM, Hemostasis, Acute Care and Autoimmunity
- Available online 24/7, from PC or mobile device

werfen academy



Guiding real-time decisions for fewer unnecessary transfusions



Acute Care Diagnostics

Integrative solutions at the speed of life

ROTEM systems are part of the broad Acute Care Diagnostics portfolio from Instrumentation Laboratory. Acute care requires timely, decisive action, based on accurate diagnostic assessment. That's why thousands of hospitals trust our Blood Gas, PBM and Whole Blood Hemostasis products for fast, quality results, enhancing efficiency and patient care.





References

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