

ANYSIS

RHEO  Meditech

Platelet Function Test

Assessment of inherited, acquired, or drug induced platelet dysfunction.
ADP, EPI, Aspirin, P2Y12 inhibitor

Innovation	In Healthcare
Diagnostic	Screening device
POCT	Point of Care Technology
ANYSIS	Platelet dysfunction tests



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ANYSIS™ SYSTEM

/ 01



+ Anysis™ System

Platelet Function Test

The Anysis™ system test provides assessment for inherited, acquired, or drug-induced platelet dysfunction in various clinical environments.

Through in vivo vascular mimicking microfluidics, the system measures a realistic primary hemostasis associated with platelet aggregation.

Individual tests only require 200µL of citrated whole blood sample and are completed within 4 minutes of initiation.

Key Features of Anysis™

01

Screens platelet function for impaired primary hemostasis, such as von Willebrand Disease.

02

Provides high sensitivity for congenital platelet dysfunction, such as Glanzmann thrombasthenia

03

Evaluates platelet dysfunction in multiple clinical settings, such as presurgical screening.

04

Assesses platelet dysfunction caused by aspirin.

05

Detects platelet dysfunction caused by P2Y12-receptor inhibitors.

06

Aids in monitoring the progress of antiplatelet therapy by measuring the patient's antiplatelet response caused by aspirin and P2Y12-receptor inhibitors.

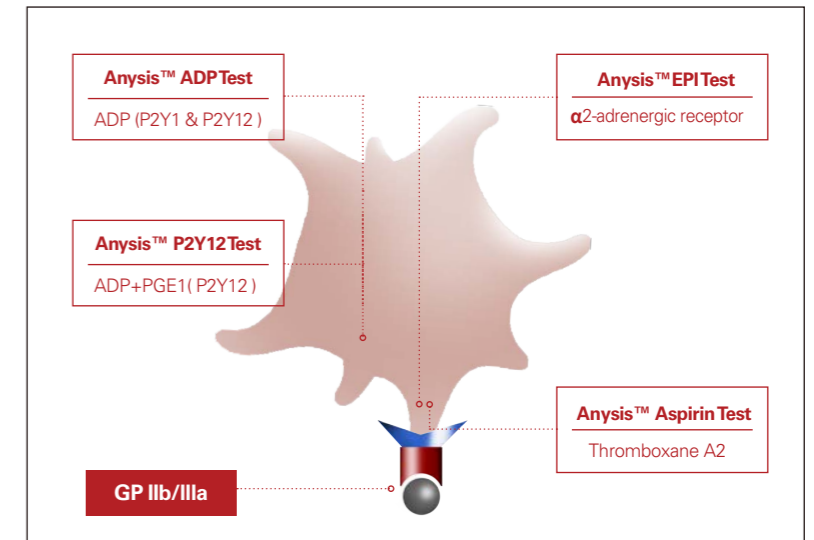
+ Precision tests for



Bleeding risk screening



Antiplatelet response monitoring



+ Bleeding Risk Screening

Anysis Epinephrine Anysis ADP

	Collagen-EPI Test	Collagen-ADP Test
Clinical uses	<ul style="list-style-type: none"> Routine screening Aspirin response test vWD detection Thrombocytopathies detection 	<ul style="list-style-type: none"> vWD detection Thrombocytopathies detection Abciximab, Eptifibatide, Tirofiban
Sample	<ul style="list-style-type: none"> Whole blood in 2mL vacuum tubes with 3.2% sodium citrate 	<ul style="list-style-type: none"> Whole blood in 2mL vacuum tubes with 3.2% sodium citrate

+ Antiplatelet Response Monitoring

Anysis Aspirin Anysis P2Y12

	Aspirin Test	P2Y12 Test
Clinical uses	<ul style="list-style-type: none"> Patient response to Aspirin 	<ul style="list-style-type: none"> Patient response to P2Y12-inhibitor
Sample	<ul style="list-style-type: none"> Whole blood in 2mL vacuum tubes with 3.2% sodium citrate 	<ul style="list-style-type: none"> Whole blood in 2mL vacuum tubes with 3.2% sodium citrate

HIGHLIGHTS

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+ Fully Automated and User Friendly System

With a single pipetting, the whole test is automatically operated.



Load 200uL of citrated whole blood sample.

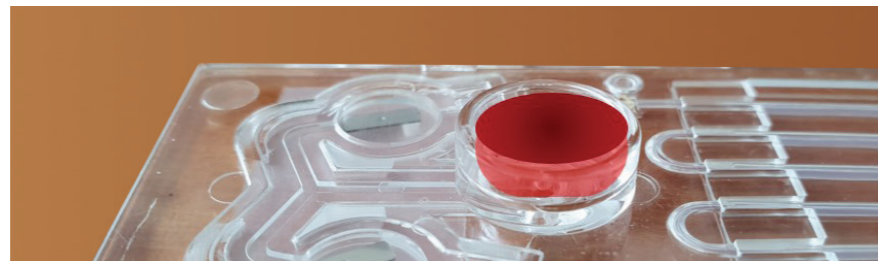
Push the test cartridge, and initiate testing.

Anysis™ system automatically engages in and completes the test within 4 minutes.

Once completed, test cartridge is ejected out and the test result is printed.

+ Bubble-Free Test

Air bubbles in blood sample are naturally excluded in the test



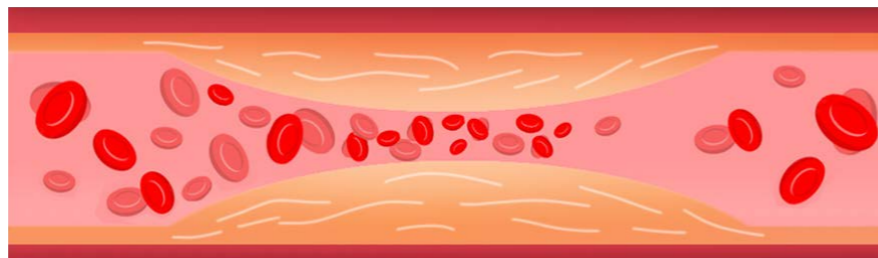
+ Operator-Independent Results

Measurements are not affected by operator's skillfulness.



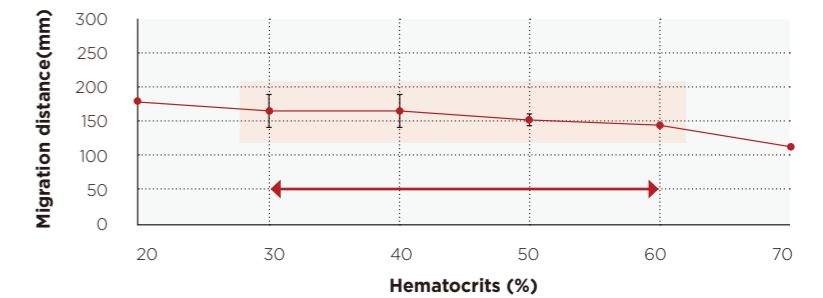
+ Stenosed Thrombosis Model

Flow through microbeads mimics stenosed vascular thrombosis.



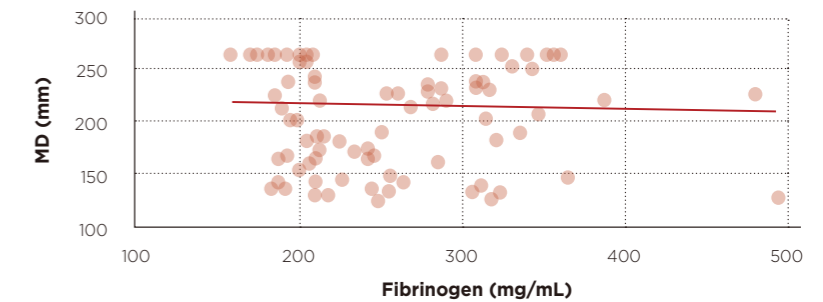
+ Hematocrits-Independent

Hematocrit variations do not affect the result of Anysis.



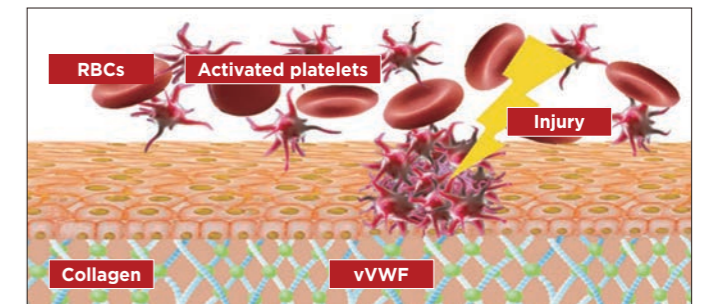
+ Fibrinogen-Independent

Blood fibrinogen concentrations do not affect the result of Anysis.



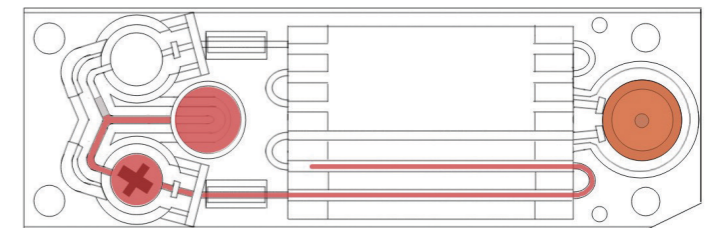
+ Platelet-Adhesion Characteristic

Adhesion characteristic is fully emphasized in microscale pores



+ Visible Results

Printed test result can visibly be confirmed by observing the ejected test cartridge.



OPERATING PRINCIPLES

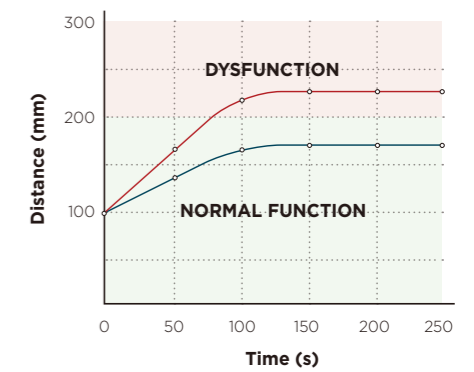
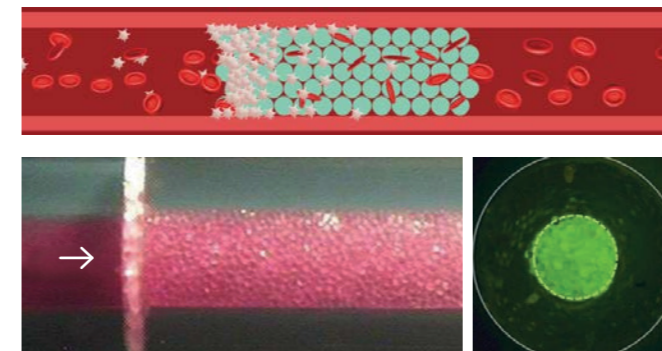
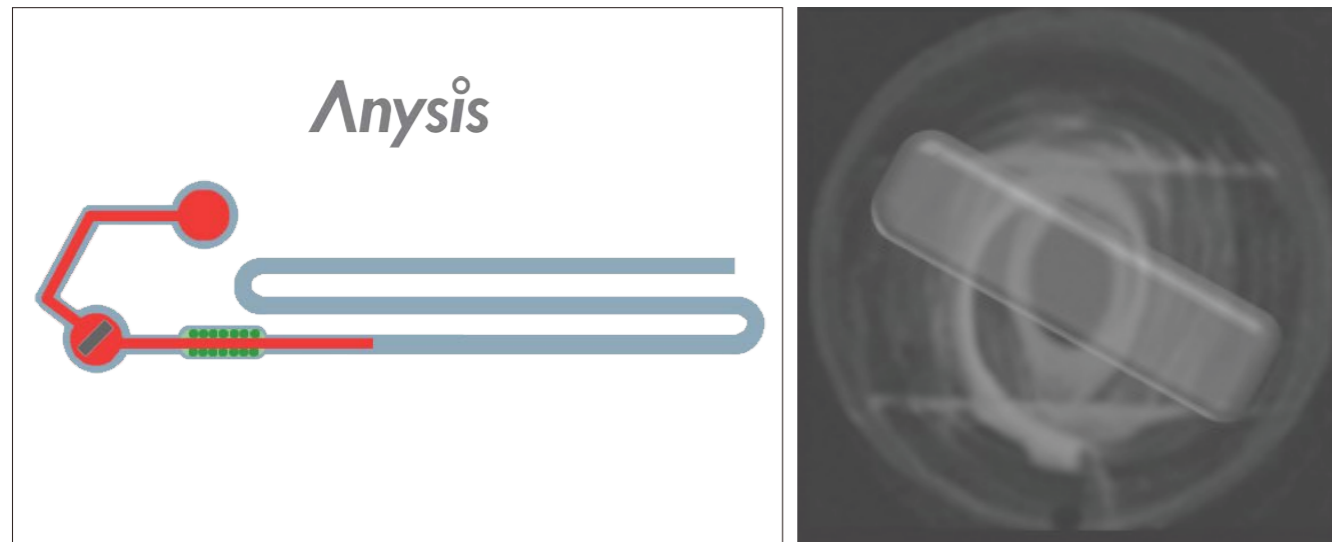
/ 03

01. Activation

02. Adhesion

03. Aggregation

04. Occlusion



Monitor Antiplatelet Therapy

ANYSIS supports user friendly point-of-care platelet function test system. Get the most rapid results at the patient bedside, and monitor the antiplatelet therapy.



+ Upstream Activation & Downstream Adhesion

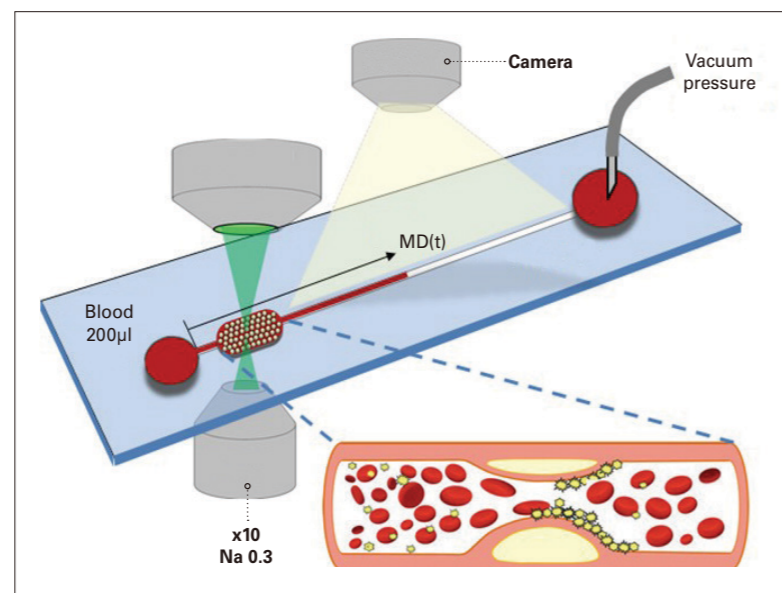
Upstream Activation and Downstream Adhesion technology was developed with a focus on simulating the in vivo environment of injured blood vessels.

Upstream

Specific agonist(s) is either mixed with blood in a microchamber or activated by shear force by a stirrer.

Downstream

Adhesion is induced as activated platelets pass through the packed microbeads coated with the same ECM material as the ECM material commonly found in wounded blood vessels (e.g. collagen or fibrinogen).



+ Aggregation, Occlusion & Detection

Aggregation

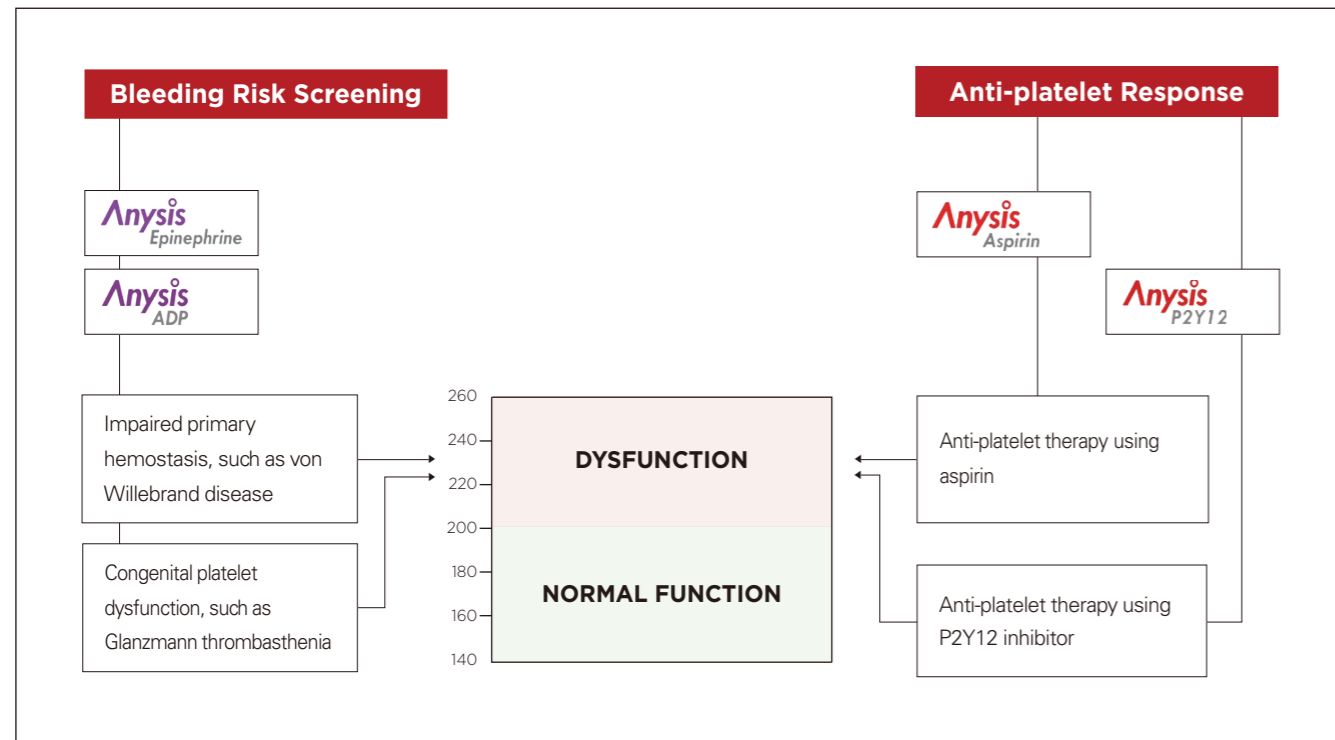
Adhesion of activated platelets and ECM material naturally recruits additional activated platelets to aggregate to one another.

Occlusion & Detection

Accumulated platelet aggregation in the microbeads section ultimately leads to occlusion of the blood flow. When the test has completed, the instrument measures and reports the final MD in a millimeter unit, which does not require any calculations or conversions.



MIGRATION DISTANCE

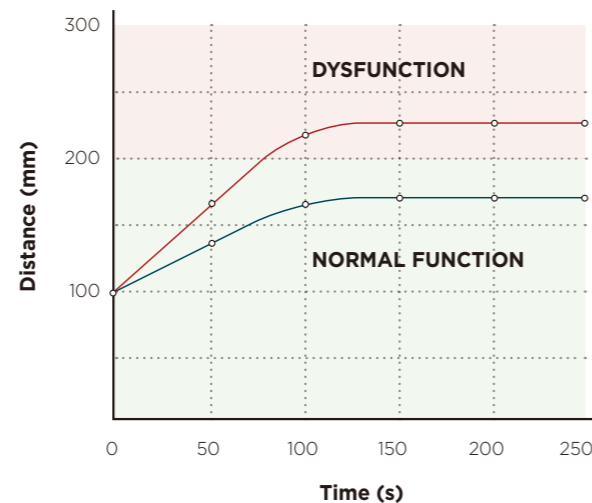


+ Elongated MD

Indicates that the platelets are not normally functioning. This implies impaired primary hemostasis, congenital platelet dysfunction, and/or effective anti-platelet therapy.

+ Shortened MD

Indicates that the platelets are normally functioning. This reflects normal platelet function and/or ineffective anti-platelet therapy.

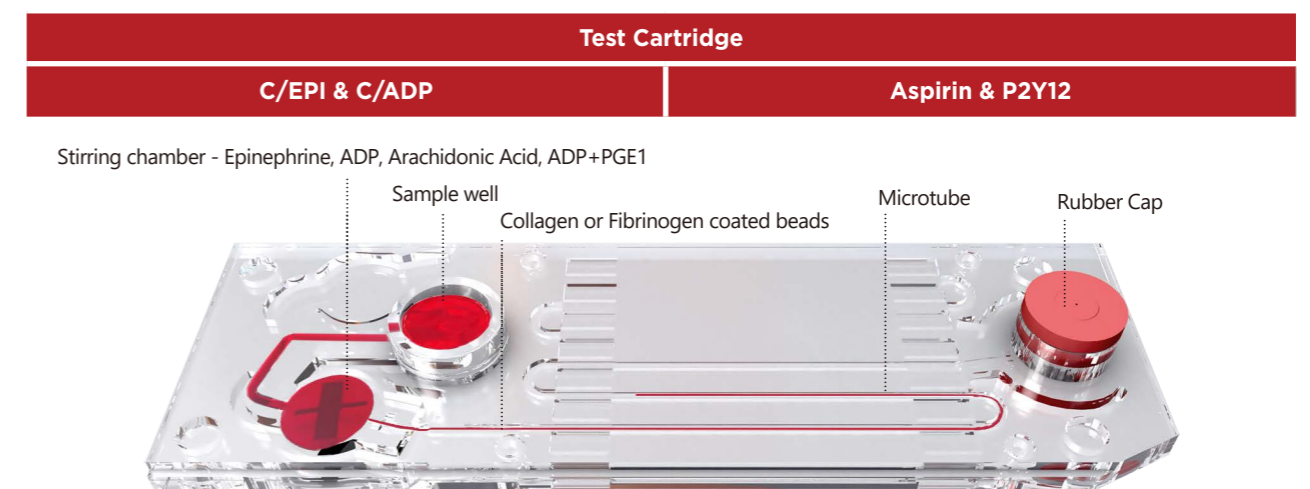


TECHNICAL SPECIFICATIONS

+ INSTRUMENT

Model	Anysis-300S			
Image				
Test Types	Epinephrine	ADP	Aspirin	P2Y12
Sample Volume	200 µL citrated whole blood			
Test Time	Less than 4 minutes			
Measuring Index	MD (Migration Distance, mm)			
Cartridge	A-1002	A-1003	A-1004	A-1005
Cut-off Values	210	190	205	225
Operation Mechanisms	Pressure-driven Microfluidics			

+ CONSUMABLES



RHEOMEDITECH



RHEO Meditech

RheoMeditech Inc. is a leading manufacturer of wide range of in vitro diagnostic analyzers, test kits, and consumables. Our line of instruments and test kits are specially designed to elevate the best performance to hospitals and laboratories. RheoMeditech offers early screening and diagnostics that provide health care professionals to make better decisions. With greater trust, we can help people achieve better health through our early diagnosis systems with innovative technology. The best treatment starts with early detection.

+ Certificate



We provide what patients need now.

References

Piao, Jinxiang, et al., "Performance comparison of the PFA-200 and Anysis-200: Assessment of bleeding risk screening in cardiology patients" *Clinical Hemorheology and Microcirculation* (2021) DOI 10.3233/CH-211185

Piao Jinxiang et al., "Performance comparison of aspirin assay between anysis and verifynow: Assessment of therapeutic platelet inhibition in patients with cardiac diseases" *Clinical Hemorheology and Microcirculation* (2021) DOI 10.3233/CH-211171

Piao, Jinxiang et al., "Assessment of therapeutic platelet inhibition in cardiac patients: Comparative study between VerifyNow-P2Y12 and Anysis-P2Y12 assay" *Clinical Hemorheology and Microcirculation* 78 (2021) 439–448. DOI 10.3233/CH-211104