# PL CHIP FOR T-TAS® 01

A Flow Chamber System to Measure Primary Hemostatic Function

T-TAS

Total Thrombus-formation Analysis System

## WHERE CLINICALLY SIGNIFICANT BLEEDING IS POSSIBLE...









Comprehensive Hemophilia Treatment Center

...it's important to know if the patient's primary hemostasis is normal.

#### **PRIMARY HEMOSTASIS CAN HAVE A MAJOR IMPACT ON:**

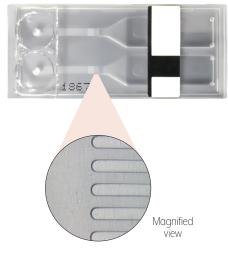
- Hospital resources and blood product management.<sup>1,2</sup>
- Pre-surgical wait times and surgical delays.<sup>3,4</sup>
- Treatment decisions and outcomes.<sup>1,5</sup>

## E MEASURING PRIMARY HEMOSTASIS CAN HELP EVALUATE IF:

- The patient might benefit from platelet transfusion.
- Pre-surgical primary hemostasis has been restored.
- Active bleeding is associated with impaired platelet activity.
- Platelet activity is significantly impaired in association with interventional procedures.
- Antiplatelet therapy is showing the desired effect

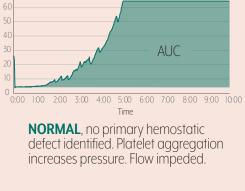
## ■ INTRODUCING THE PL CHIP FOR T-TAS 01

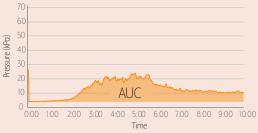
The first ex-vivo flow chamber model of in-vivo primary hemostasis available for clinical use.



The test measures primary hemostatic function as the area under the pressure-time curve (AUC). An AUC< 260 suggests abnormal primary hemostatic function.







**ABNORMAL**, abnormal primary hemostatic function. Lack of platelet aggregation. Flow uninterrupted.

## THE TECHNOLOGY

Uses physiological arterial shear stress to assess platelet thrombus formation (primary hemostasis) in whole blood.

Contains flow chamber with 26 collagen-coated microcapillaries.

Generates results within 40 minutes of sample collection.

Accommodates two samples per chip.

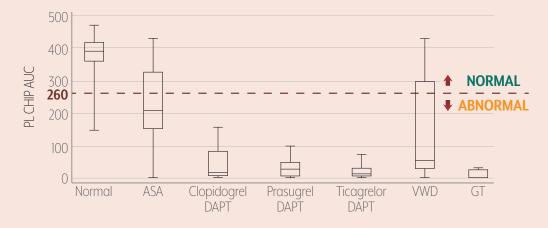




## E CLINICAL PERFORMANCE

The T-TAS 01 PL assay cutoff is sensitive and specific to abnormal primary hemostasis.<sup>69</sup>

## AUC RESULTS BY PATIENT TYPE



ASA, aspirin monotherapy, DAPT, dual antiplatelet therapy, VWD, von Willebrand disease, GT, Glanzmann's thrombasthenia

#### THE T-TAS 01 PL ASSAY SELECTIVELY MEASURES PRIMARY HEMOSTATIC FUNCTION

Not influenced by secondary hemostatic function<sup>10</sup>

Significant correlation with intensity of antiplatelet therapy, VWF antigen, VWF activity, and factor VIII activity levels<sup>10,11</sup>

Dose-response relationship with medications known to affect primary hemostatic function<sup>10</sup>

| PARAMETER          | VALUE  | 95% CI        |
|--------------------|--------|---------------|
| Normal*            | 95.8%  | 91.1 - 98.0%  |
| ASA**              | 68.4%  | 55.5 - 79.0%  |
| Clopidogrel DAPT** | 100.0% | 81.5 - 100.0% |
| Prasugrel DAPT**   | 100.0% | 78.2 - 100.0% |
| Ticagrelor DAPT**  | 100.0% | 76.8 - 100.0% |
| VWD**              | 72.0%  | 50.6 - 87.9%  |
| GT**               | 100.0% | 43.9 - 100.0% |

\*Negative agreement, \*\*Sensitivity

#### **PERFORMANCE CHARACTERISTICS**

| Reference Range   | 270.0 - 447.7 AUC                                       |
|-------------------|---|
| Cutoff            | AUC < 260   |
| Assay Imprecision | SD ≤ 39 AUC<br>2.8% CV (high AUC)<br>19.6% CV (low AUC) |
| Reportable Range  | 0.3 – 467.7 AUC   |

## SPECIFICATIONS

| Sample Type                          | BAPA-anticoagulated whole blood                               |
|--------------------------------------|---|
| Sample Volume                        | 320 µL  |
| Test Duration                        | ≤ 10 minutes  |
| Sample Stability                     | Up to 6 hours   |
| Reagent Storage                      | PL Chip: 4-8 °C<br>BAPA tube: 15-30 °C                        |
| Open Pouch Stability                 | Up to 8 hours   |
| Quality Control                      | Internal QC<br>External QC (donor blood samples)              |
| Instrument Dimensions<br>(L x W x H) | 14.2" x 12.6" x 9.7"<br>(36 x 32 x 24.7 cm)                   |
| Instrument Weight                    | 13.2 lbs (6.0 kg)   |
| Operating Conditions                 | Temperature: 68-86 °F (20-30 °C)<br>Relative Humidity: 20-80% |
| On-board Storage                     | Thousands of results  |
|                                      |   |

## ORDERING INFORMATION

| ITEM  | CATALOG<br>NUMBER |
|---|-------------------|
| T-TAS 01 Total Thrombus Formation<br>Analysis System Instrument | 18001             |
| PL Chip for T-TAS 01<br>20 Chips                                | 18002             |
| PL Chip Reservoir Set for T-TAS 01<br>100 sets                  | 18003             |
| BAPA Tube for T-TAS 01 (3 mL)<br>50 tubes                       | 18004             |

## FOR ADDITIONAL INFORMATION AND TO VIEW PRODUCT VIDEOS, PLEASE VISIT WWW.T-TAS.INFO

The T-TAS 01 PL chip is intended for use in the clinical laboratory for the analysis of the platelet thrombus formation process (primary hemostatic function) in patients age 21 and older with a history of conditions associated with impaired primary hemostatic function or use of antiplatelet therapy.

Physicians should use their clinical judgment and experience when deciding how to diagnose and treat patients and in the use of the PL Chip for T-TAS 0I in the treatment of the patient. Please refer to the PL Chip for T-TAS 0I Package Insert and T-TAS 0I User's Manual for full instructions on sample collection and handling, and all other test procedures.

#### REFERENCES

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- 10. PL Chip for T-TAS 01 package insert.
- 11. Arima Y., et al. Assessment of platelet-derived thrombogenicity with the total thrombus-formation analysis system in coronary artery disease patients receiving antiplatelet therapy. J Thromb Haemost. 2016 Apr;14(4):850-9.

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