

A woman with brown hair tied back, wearing a white lab coat over a pink button-down shirt, is smiling and holding a light-colored folder. She is standing in a clinical setting. In the background, a large, white, modern hemostasis analyzer (Sysmex CS-2500) is visible on a counter. The machine has a screen and several sample slots with blue caps. The Siemens logo is in the top left corner.

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Excel with Confidence

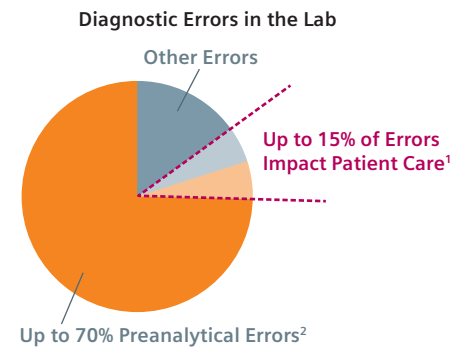
Sysmex CS-2500 Hemostasis System

Smartly designed technologies maximize the efficiency and productivity of your lab.



An estimated 9–15% of diagnostic errors have an impact on patient care. Many of these errors are due to the inappropriate collection, handling, or processing of samples referred for testing.¹

Siemens Healthcare has a proven record of providing hemostasis solutions that help busy labs to automate processes. In recent years, the Sysmex® CS family of systems has streamlined preanalytical sample-quality checks using PSI™ technology to help labs manage unsuitable samples prior to analysis and provide accurate results on the first run. This feature is especially important because preanalytical errors and unsuitable samples account for up to 70% of mistakes in the lab.² In around 15% of the instances, these errors have a significant impact on patient care.¹



Siemens is pleased to take hemostasis testing to the next level with the Sysmex CS-2500 System, built on proven PSI technology employed in the Sysmex CS family of systems.

The Sysmex CS-2500 System’s smartly designed technologies include assay-based preanalytical sample-quality checks using PSI technology, automated mixing studies, automated platelet aggregation,* and clot waveform analysis (CWA)† for improved efficiency, exceptional accuracy, and reliable first-run results.

Designed to increase operational efficiency and streamline workflow, the Sysmex CS-2500 System utilizes advanced technology that enable labs to:

- Raise the quality of test results
- Minimize the need for repeat testing
- Achieve cost-effective method consolidation
- Simplify operations and increase diagnostic confidence

Excel with assay-based preanalytical checks that improve sample management for accurate and consistent results.

The Sysmex CS-2500 System helps mid-volume labs achieve improved first-run accuracy by identifying and automatically managing potentially problematic test samples prior to analysis. Simultaneous multiwavelength analysis and proven PSI technologies—including assay-based hemolysis, icterus, and lipemia interference (HIL), primary-tube sample-volume checks and clog detection—minimize repeat testing and manual reviews.

- Assay-based preanalytical sample-quality checks using PSI technology for HIL

interference provide accurate and reliable results on the first run.

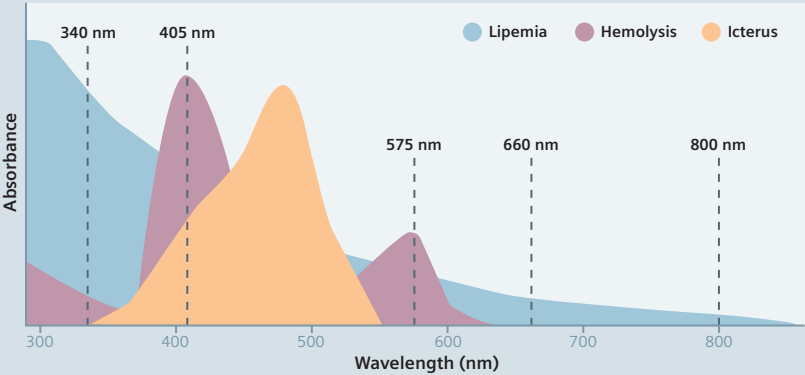
- Simultaneous multiwavelength scanning of clotting reactions at 340, 405, 575, 660, and 800 nm helps to reduce the effects of interfering substances by automatically selecting optimal wavelengths.
- Ten flexible reaction detectors enable high-capacity performance for a variety of test profiles to maximize productivity of the lab.

The level of hemolysis causing clinically important changes is test-specific; therefore, test-specific thresholds should be used to assess patient samples that have hemolyzed during collection and/or processing.³

Preanalytical interferences associated with diagnostic errors in hemostasis^{1,5,‡}

	Hemolysis	Icterus	Lipemia	Improper Tube Filling
Falsely Increased Results	PT, D-dimer, FV, FVII, FX	PT, Fibrinogen	Antithrombin	PT, APTT
Unaffected Results		APTT	PT, APTT	
Falsely Decreased Results	APTT, Fibrinogen, Antithrombin, Thrombin Time	Antithrombin	Fibrinogen	D-dimer

Accurate test results from simultaneous multiwavelength scanning



*Sysmex CE-marked application.
†Research use only.
‡Effect of preanalytical interferences vary. Please refer to instrument-specific reagent application/reference guide for more information.

Smartly designed technologies improve sample management, increase efficiency, and streamline lab workflow.



Excel with simultaneous multiwavelength analysis and proven PSI technologies to identify and automatically manage potentially problematic test samples prior to analysis.

- Assay-based preanalytical sample-quality checks using PSI technology for HIL interference, primary-tube sample-volume checks and clog detection provide accurate and reliable results on the first run.
- Simultaneous multiwavelength analytical scanning detects and manages unsuitable samples to minimize retests and reflex testing.
- Ten flexible reaction detectors enable high-capacity performance for a variety of test profiles.



Excel with unlimited potential for high-capacity performance and extended walkaway time.

- Reagent capacity of up to 3000 tests,[§] with onboard capacity of up to 40 reagents and five additional buffer positions.
- Approximately 180 simultaneous PT/APTT tests/hour.**
- Anti-evaporation caps and refrigerated reagent table at approximately 10°C maximize onboard reagent stability.
- Tilted vials and SLD mini cups reduce reagent dead volume to maximize tests per vial.



Excel with uninterrupted workflow delivered in a compact, affordable footprint.

- Cap-piercing technology allows mix of capped and uncapped tubes and cups for dependable throughput.
- Simultaneous processing of primary samples and micro mode for precious pediatric samples increase productivity.
- Accessible reagent table provides continuous reagent-, consumable-, and sample-loading.
- Automated QC checks are performed at user-defined intervals and daily maintenance requires less than 5 minutes.



Excel with automated mixing studies, platelet aggregation,* and CWA† for cost-effective instrument and staff consolidation.

- Automated mixing studies help clinicians make decisions regarding factor deficiencies and circulating inhibitor patterns.
- Automated platelet aggregation* simplifies and automates assessment of inherited, acquired, or drug-induced platelet disorders.
- CWA† illustrates optical reaction profile during PT or APTT measurement and provides qualitative and sensitive waveform patterns.
- Simplifies operations with powerful, easy-to-use graphical analysis tools.



Excel with operational efficiency via a wide spectrum of assay parameters, testing methodologies, and sophisticated software.

- Optical methodology displays clot formation for evaluation of fragile clots.
- Multidilution analysis (MDA), automated repeat, redilution, and reflex testing are consolidated on one platform.
- 24-in. touchscreen and Windows 7-based software provide an easily customizable and user-friendly interface.
- High test throughput using four measurement principles along with traceability of sample results and audit trails.

Measurement Info	
Name	
Temperature	37.0
Channel No.	2
Management ID	14024
Reagent Lot	OVE/PT INH536208
Dilution Rate	1 / 1
Elapsed Time	OVE/PT INH536208
Mean Detection Level	2
Std Detection Level	0
Lia Detection Level	1
Vol Detection Level	45.4
Calibration Curve ID	2
QC Performed Date	2015/06/05 11:25
Reagent Table Temp	10.8

Excel with true lab-to-lab consistency for confident multisite patient monitoring.

- Results correlate with the entire Sysmex CA and CS family of hemostasis systems.
- Seamless integration of instruments, PSI technology, and assay reference ranges optimizes use across multisite labs.
- Standardized software, reagents, controls, and calibrators improve convenience, offer cost savings, and reduce waste for more efficient utilization of labor.

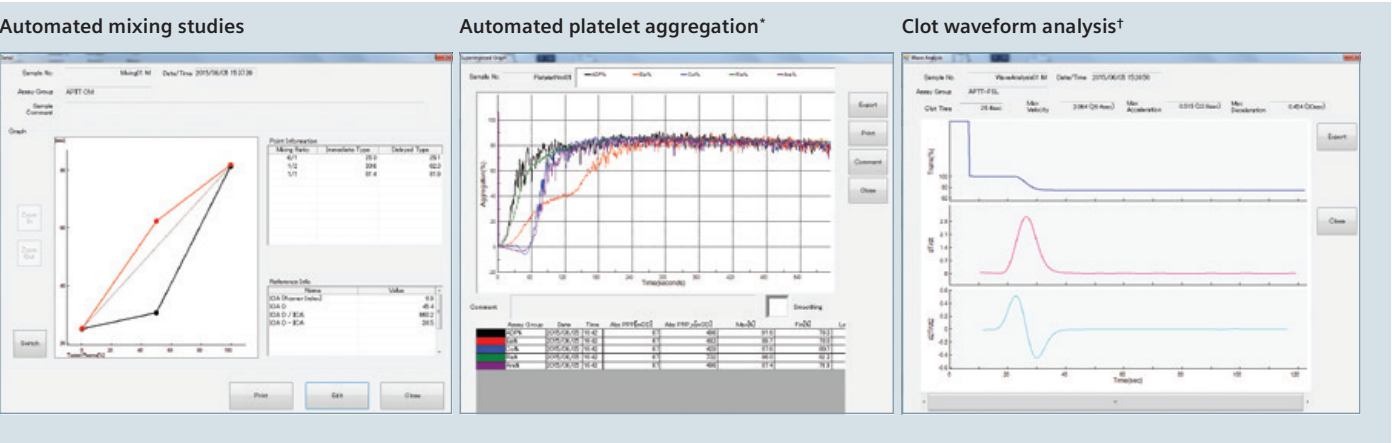


*Sysmex CE-marked application.
†Research use only.
§Test capacities: PT—3000; PT/APTT—2880; PT/APTT/Fbg—2840.
**Throughput values were determined by the time to first result using Siemens' study protocol with PT (Thromborel® S reagent), APTT (Pathromtin® SL reagent) test applications.

Excel with smartly designed technologies that simplify lab operations and allow cost-effective consolidation.

Excel with true lab-to-lab consistency for confident multisite patient monitoring.

As a leader in hemostasis testing, Siemens delivers a complete and integrated portfolio of solutions designed to maximize the efficiency and productivity of your lab. Siemens offers the only virtual competency-based education solution in the industry, our Personalized Education Plan (PEP), which helps ensure your lab's highest performance, every shift, every day.



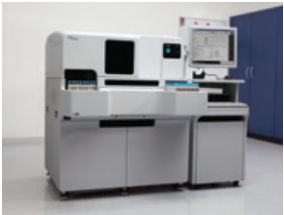
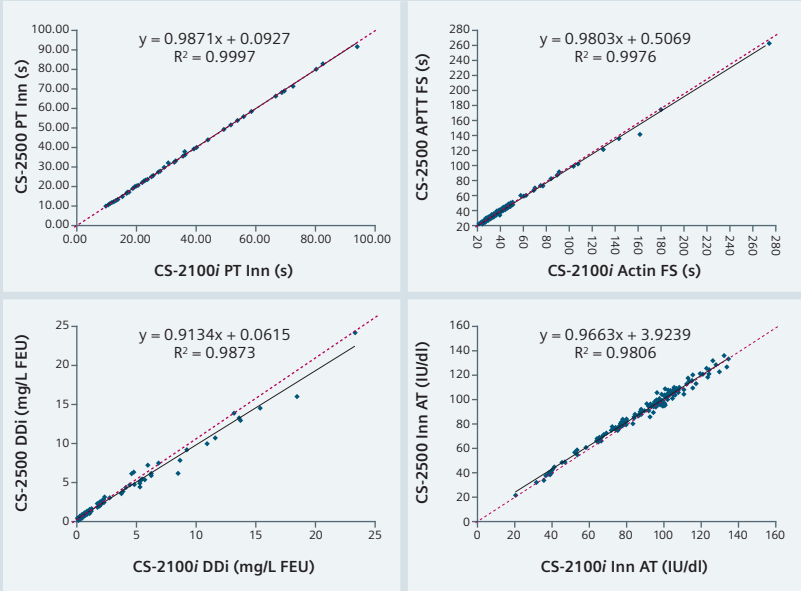
The Sysmex CS-2500 System streamlines workflow, saving valuable time and resources while enabling clinicians to make informed clinical decisions with powerful, easy-to-use graphical analysis tools.

- Automated mixing studies help clinicians make decisions regarding factor deficiencies and circulating inhibitor patterns.
 - Automated dilution of sample with graphical output allows easy analysis.
- Automated platelet aggregation* provides cost-effective system consolidation for detection of inherited, acquired, or drug-induced platelet disorders.
 - Streamlined workflow with fewer instruments and less specialized staff leads to significant time and resource savings.

- Clot waveform analysis† illustrates optical reaction profile during PT or APTT measurement, providing qualitative information as well as sensitive, quantitative waveform patterns.
 - Clinicians can dig deeper into certain underlying clinical conditions such as disseminated intravascular coagulation (DIC), sepsis, antiphospholipid antibodies (LA), factor deficiencies, and presence of heparin.
- Intuitive system interface helps streamline lab operations with onboard help, configurable maintenance, quality control procedures, and real-time monitoring of reagents and consumables.

The inclusion of innovative functionality in new analyzers is highly desirable, in addition to the prerequisites of sample throughput, result precision, and comparability. The Sysmex CS series of analyzers has made significant advances in addressing these issues.⁴

Figures 1–4: Correlation plots for Dade® Innovin®, Dade Actin® FS, INNOVANCE® D-Dimer, and INNOVANCE Antithrombin reagents⁴



Sysmex CS-5100 System
High-volume, fully automated solution featuring PSI technology, full automation connectivity, and third-generation cap-piercing technology



Sysmex CS-2000i and 2100i Systems
Unique, mid-volume solutions featuring PSI technology and optional third-generation cap-piercing technology



Sysmex CS-2500 System
Mid-volume, fully automated solution featuring assay-based HIL checks using PSI technology, automated mixing studies, automated platelet aggregation*, and clot waveform analysis†



Sysmex CA-600 Systems
Compact, fully automated coagulation analyzers offering a variety of configurations for clotting, chromogenic, and immunologic methods

*Sysmex CE-marked application.
†Research use only.

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Product availability may vary from country to country and is subject to varying regulatory requirements. Please contact your local representative for availability.

References:

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4. Irfan P, Lane P, Mackie I, Machin S. Evaluation of a novel, pioneering, intermediate throughput Sysmex coagulation analyser. Sysmex CS-2500 Poster. Haemostasis Research Unit, University College London, London, United Kingdom.
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Local Contact Information

Siemens Healthcare
Laboratory Diagnostics
511 Benedict Avenue
Tarrytown, NY 10591-5005
USA
Phone: +1 914-631-8000
siemens.com/healthcare

Siemens Healthcare Headquarters

Siemens Healthcare GmbH
Henkestr. 127
91052 Erlangen
Germany
Phone: +49 9131 84-0
siemens.com/healthcare