Point-of-care Testing in the Emergency Department

siemens-healthineers.com/EmergencyDepartment







Approximately 70% of patients admitted to hospitals each day come from the emergency department. Each patient has needs you must address through immediate action.

In this environment, the basic evaluation of a patient may include high-sensitivity troponin testing to aid in promptly managing chest pain patients, helping to determine urgent cases that need immediate attention, and freeing beds for high-acuity care. On-site creatinine results and pregnancy status are also vital before initial evaluation and management can take place. In all cases, timely transmission of patient data to the laboratory information system (LIS) and different departments is essential when making critical decisions.

Siemens Healthineers understands these challenges and can help you transform care delivery by providing the right test in the right place at the right time.

Solutions for the Emergency Department

	Product Features	Benefits	Evidence
Atellica® VTLi Patient-side Immunoassay Analyzer	 True high-sensitivity troponin testing at the point of care. Lab-equivalent test results in just 8 minutes. CE-marked for use with a fingerstick sample, venous whole blood, and plasma. 	 Aids in disposition decisions in one patient interaction. May improve ED throughput. Enables results to providers faster. 	"hs-POC assays in the emergency department will provide objective evidence to clinicians to reduce the chance of missing falsely negative results that occur with contemporary POC assays, which miss 10–15% of true positives compared to central laboratory assays." Fred S. Apple, PhD, Karen Schulz, Christian W. Schmidt, et al.
epoc® Blood Analysis System with NXS Host	 A complete blood gas and basic metabolic panel with hematocrit and lactate on a single, room temperature-stable test card. Results available in <1 minute after sample introduction. 	 Provides a snapshot of a patient's health, indicating problems such as hyperglycemia, respiratory distress, sepsis and kidney failure. Helps drive faster diagnosis and treatment decisions. 	"The POC lactate test was added to the epoc device as part of the hospital's sepsis initiative. On the first floors where the sepsis program was introduced, mortality over the first three to six months decreased by almost 50%."2-4 Kristie Campbell Laboratory Director, Huntsville Hospital, Huntsville, Alabama
RAPIDPoint® 500e Blood Gas System	 Blood gas, pH, electrolytes, metabolites, and full CO-oximetry (including neonatal total bilirubin and total hemoglobin) in approximately 60 seconds. Small 100 µL sample is sufficient for a full panel. Quality and blood integrity checks before, during, and after every patient sample. 	 Analyzer allows you to spend more time improving patient outcomes and less time acquiring results. Automated Integri-sense™ Technology enables meticulous quality checks in the background, at every stage of analysis. Heightened system security enables protection against threats from hackers to help maintain and safeguard your institution's IT security. 	"The nurses who use the machine daily say it is fast and simple to operate, with minimal maintenance and instructions that are easy to follow. As an ICU physician, I know that the values I am handed during an emergency allow me to confidently make life-saving decisions. The RAPIDPoint 500 system allows me to not worry about the machine and focus my attention on my patients." Daniel Martin, BSc, MBChB, FRCA, FFICM, PhD Senior Lecturer/Honorary Consultant of Critical Care and Anesthesia, Division of Surgery and Interventional Science, University of Plymouth, UK



CLINITEST® hCG	
Pregnancy Test	



 Qualitative, instrument-read test for early detection of pregnancy using the CLINITEK Status family of analyzers.

Product Features

 Automated result interpretation to remove subjectivity and automatic transmission of results to minimize transcription errors.

Benefits

- Helps ED clinicians quickly evaluate patients for pregnancy prior to needed procedures.
- Frees staff for patient care with true walkaway operation—add sample and the analyzer does the rest.
- Provides results in 5 minutes or less less waiting for lab results.
- Optional barcode scanner saves time, simplifies data entry, and eliminates transcription errors.

"The nurses can run the semiquantitative test within the department, as it's read automatically by the CLINITEK Status® Connect System. If the results come back positive or require another check, a fully quantitative blood test is carried out in the laboratory to confirm. Operator and patient IDs are recorded using bar codes, which means less work for users and reduces the chance of incorrect data entry." 5

Laetitia Roubau

Evidence

Biological Specialist Technician, Saint-Joseph Hospital, Marseille, France

POCcelerator® Data Management System



- IT solution with more than 230 device interfaces across 70+ manufacturers.
- Quick transmission of POC results via a single interface to the information system.
- Automated management of operator training, permissions, and certifications to ensure maximum device performance in the ED.
- Connects your entire POCT network with a single, seamless IT solution.
- Easily manages operator training, permissions, and certifications with automatic operator recertification, an integrated eTrainer module, and customizable training plans.
- Controls remote Siemens Healthineers POC devices.
- Reduces IT costs and the burden of learning, training, and maintaining multiple middleware solutions.

"Since installing the POCcelerator system, Queensland Health has realized significant economic benefits, including a 5% increase in cost recovery through reimbursements.

"We've also gained back the equivalent of a full 8 hours a week of coordinator time."

Cameron Martin

Point of Care Coordinator, Queensland Health, Queensland, Australia



These are just a few examples of how we can help you address the pressures you face in the emergency department.

Our mission is to help you improve workflow and make faster diagnosis and treatment decisions to improve patient outcomes.

Contact us to demo our point-of-care testing solutions today.

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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.

Atellica VTLi System is not available for sale in the U.S.A. Future availability cannot be quaranteed.

References:

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- 4. Levy MM, Evans LE, Rhodes A.. The Surviving Sepsis Campaign bundle: 2018 update. Crit Care Med. 2018;46:997–1000. http://www.survivingsepsis.org/SiteCollectionDocuments/Surviving-Sepsis-Campaign-Hour-1-Bundle-2018.pdf
- Siemens Healthineers Customer Testimonial article "Implementation and monitoring of Clinitest hCG tests in an emergency department" Saint-Joseph Hospital, Marseille, France HOOD05162003362363.

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