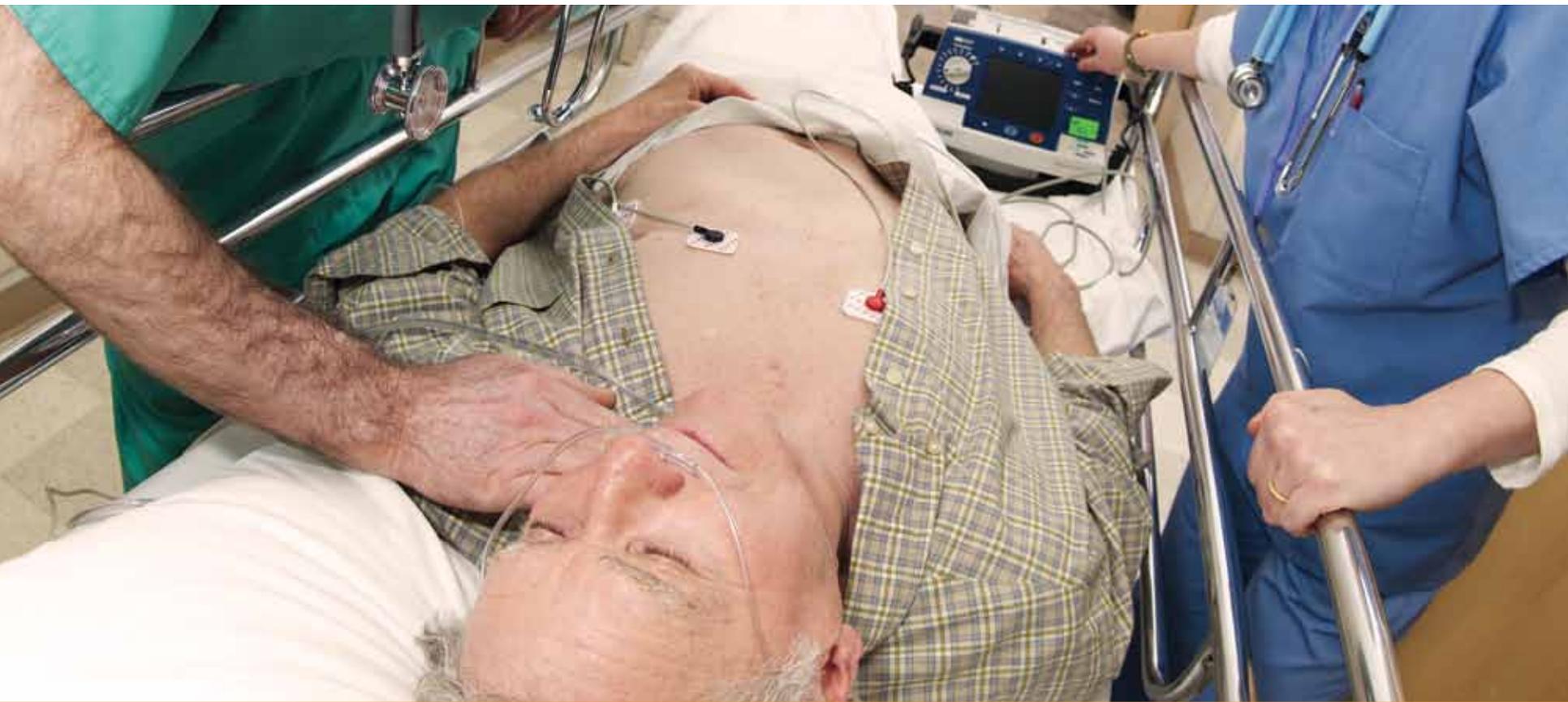


Troponin testing with the i-STAT® System:

# Facilitating Decisions and Actions for patients with chest pain

The *i-STAT* System helps emergency departments (EDs) address complex clinical challenges while satisfying evidence-based guidelines





Today's complex clinical scenarios in the ED call for efficiency gained through use of a single testing platform.

#### Intended Use

The *i-STAT cTnl* test is an *in vitro* diagnostic test for the quantitative measurement of cardiac troponin I (cTnl) in whole blood or plasma samples. Measurements of cardiac troponin I are used in the diagnosis and treatment of myocardial infarction and as an aid in the risk stratification of patients with acute coronary syndromes with respect to their relative risk of mortality.

The *i-STAT BNP* test is an *in vitro* diagnostic test for the quantitative measurement of B-type natriuretic peptide (BNP) in whole blood or plasma samples using EDTA as the anticoagulant. BNP measurements can be used as an aid in the diagnosis and assessment of the severity of congestive heart failure.

See CTI sheets for full details at: [www.abbottpointofcare.com](http://www.abbottpointofcare.com)

## The Challenge: Chest Pain in the ED

Managing patients with chest pain is complex, requiring critical decision-making. Patient symptoms, diagnostic criteria, and **testing of cardiac troponin—the preferred marker for diagnosis of myocardial infarction (MI)—are necessary for a definitive diagnosis.**<sup>1,2</sup>

### Multiple troponin assay platforms are available<sup>3</sup>

- According to the US Food and Drug Administration and the Advanced Medical Technology Association, due to the lack of a standard troponin assay,<sup>3</sup> there is variability across platforms
- Because of this variability, troponin test results obtained from different assay platforms cannot be compared or used to track/evaluate the same patient<sup>3</sup>

### Troponin test results are often delayed

- Test results that take longer than 60 minutes can increase delays in decision-making and increase the length of stay of patients presenting with possible acute coronary syndromes (ACS), according to the authors of the DISPO-ACS study<sup>4</sup>

### Elevation in troponin levels requires interpretation

- Conditions other than MI can cause elevations in cardiac troponin levels, including myocarditis, renal failure, drug toxicities, heart failure, and pulmonary embolism<sup>5</sup>

**Serial testing facilitates diagnosis: A rise in cardiac troponin levels over time is necessary for a definitive diagnosis of MI<sup>5,6</sup>**

# The i-STAT Solution: Serial Cardiac Troponin Testing

The use of a serial testing protocol allows clinicians to identify temporal changes as well as clarify the clinical diagnosis for patients with low-level results.<sup>7</sup>

- ✓ **A single platform provides consistent troponin results**
  - Serial troponin testing avoids variability or the introduction of errors when comparing results from different testing platforms
- ✓ **The *i-STAT cTnI* (troponin) cartridge provides lab-quality test results at the patient's bedside in 10 minutes<sup>8</sup>**
  - Streamlined blood analysis reduces turnaround times (TATs)<sup>4</sup> and accelerates test result availability so clinicians can make critical therapy decisions
- ✓ **Nearly 100% of the time, bedside testing with the *i-STAT cTnI* (troponin) cartridge met guideline-recommended TATs<sup>4</sup>**
  - The DISPO-ACS trial shows the *i-STAT System* helps maintain compliance with guideline-recommended TATs<sup>4</sup>
- ✓ **In clinical trials, the *i-STAT System*:**
  - Shortened median time to discharge by 20 minutes<sup>4</sup>
  - Reduced median ED length of stay by 39 minutes<sup>9</sup>
- ✓ **Clinicians get the critical information they need to treat patients with MI—and facilitate rapid ED discharge for those not experiencing ischemia**

By providing faster results and streamlining the complexity of the blood analysis process, the *i-STAT System* helps facilitate adoption of serial testing protocols<sup>10</sup>



Bedside testing with the *i-STAT System* provides real-time, lab-quality test results that can expedite diagnosis, treatment, and disposition of patients.



For patients presenting with chest pain:

# The i-STAT System Is the Platform of Choice for Serial Cardiac Troponin Testing



## Recommendations

**Cardiac troponin is the preferred marker for diagnosis of MI<sup>1,2</sup>**

**The Challenge:** Variability across the many troponin assay platforms available<sup>3</sup>

**Troponin test results should be available as soon as possible—within 60 minutes of blood draw<sup>2</sup>**

**The Challenge:** Traditional blood analysis process is complex and can delay test results<sup>4</sup>

**One elevated troponin result is not sufficient evidence for a diagnosis of MI<sup>2</sup>**

**The Challenge:** Conditions other than MI can cause cardiac troponin elevations<sup>5</sup>

**Troponin must be measured serially<sup>1,2,6</sup>**

**The Challenge:** Complex traditional blood analysis process can make it difficult to facilitate serial testing protocols

## The *i-STAT* Solution



**The *i-STAT* System features a single troponin bedside platform** that delivers accurate, reliable, consistent results needed to diagnose patients presenting with chest pain



**Bedside testing with the *i-STAT* cTnI (troponin) cartridge delivers test results in 10 minutes<sup>8</sup>** and has been shown to meet guideline-recommended TATs nearly 100% of the time<sup>4</sup>



**The *i-STAT* System facilitates efficient serial troponin testing** to track its rise and/or fall and provide a definitive diagnosis



**Fast TAT with the *i-STAT* System can help facilitate serial troponin testing** and provide clinicians with the ability to identify patients with MI and those not experiencing ischemia

**With a comprehensive menu of tests, the *i-STAT* System provides the most common tests for your most common ED patients**

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© Abbott Point of Care Inc.  
400 College Road East Princeton, NJ 08540  
(609) 454-9000  
(609) 419-9370 (Fax)  
[www.abbottpointofcare.com](http://www.abbottpointofcare.com)

To learn more about the *i-STAT* System, visit [www.abbottpointofcare.com](http://www.abbottpointofcare.com)

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