

# Clinical Performance of Elecsys® Troponin T hs Gen 6 in Subjects with Symptoms of Acute Coronary Syndrome

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To determine the clinical performance of Elecsys® Troponin T hs Gen 6 relative to the clinical diagnosis at different time points after patient admission (T0, T1, T2, T3, T6) using the previously determined universal or combined sex-specific cut-off...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Completed
<b>Health condition type</b>	Coronary artery disorders
<b>Study type</b>	Observational invasive

## Summary

### ID

NL-OMON56428

### Source

ToetsingOnline

### Brief title

PERFORM-TSIX Study

### Condition

- Coronary artery disorders

### Synonym

acute coronoaire syndrome, myocardial infarction

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Roche Diagnostics GmbH

**Source(s) of monetary or material Support:** Roche Diagnostics GmbH

## Intervention

**Keyword:** acute coronary syndrome, clinical evaluation, troponin T

## Outcome measures

### Primary outcome

primary endpoint: Negative predictive value (NPV) of troponin T<sub>hs</sub> measured by the 6th generation test at T3

### Secondary outcome

clinical performance of troponin T<sub>hs</sub> gene 6 at other time points after admission  
Performance of the troponin T<sub>hs</sub> gene 6 assay when the assay is used in the rapid rule-out algorithm as described by the European Society of Cardiology (ESC)

## Study description

### Background summary

The Elecsys® Troponin T<sub>hs</sub> generation 6 assay is an immunoassay utilizing the electrochemiluminescence »ECLIA« technology for the quantitative, highly sensitive in vitro measurement of human cardiac troponin T (hcTnT) in human serum and plasma. The test uses two monoclonal antibodies specifically directed against hcTnT. The Elecsys® Troponin T<sub>hs</sub> Gen 6 assay has improved analytical sensitivity compared to the previous assay generation, detecting both free troponin T and binary and ternary complexes of troponin.

This study is being conducted to obtain approval for use of Elecsys® Troponin T<sub>hs</sub> Gen 6 in clinical practice by the regulatory authorities, including the US FDA, for CE Marking (EU), by the NMPA (China) and by the PMDA (Japan).

### Study objective

To determine the clinical performance of Elecsys® Troponin T<sub>hs</sub> Gen 6 relative to the clinical diagnosis at different time points after patient admission (T0, T1, T2, T3, T6) using the previously determined universal or combined sex-specific cut-off value (the 99th percentile URL of a healthy reference

population).

### **Study design**

Prospective, non-interventional, single-arm, longitudinal cohort multicenter study enrolling patients with signs and symptoms of ACS

### **Study burden and risks**

The burden is a maximum of 4 extra venipunctures during admission, a maximum of 5 x blood sampling (19 mL) and 2 x follow-up by telephone. The only risks of the study are the possible side effects of a venipunctures.

## **Contacts**

### **Public**

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### **Scientific**

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## **Trial sites**

### **Listed location countries**

Netherlands

## **Eligibility criteria**

### **Age**

Adults (18-64 years)

Elderly (65 years and older)

## Inclusion criteria

Signed Informed Consent

Age  $\geq 20$  Years

Subjects demonstrating symptoms suggestive of acute coronary syndrome and/or myocardial ischemia, such as any of the following:

Chest pain, pressure, or a burning sensation across the precordium and epigastrium

Pain that radiates to neck, shoulder, jaw, back, upper abdomen, or either arm

Acute onset or worsening dyspnea

Nausea, vomiting, or indigestion

Lightheadedness or syncope

Diaphoresis

Generalized weakness or fatigue

Troponin or other cardiac marker determination planned as part of suspected ACS routine care

Asymptomatic subjects with atypical symptoms in whom myocardial infarction is being suspected

## Exclusion criteria

none

## Study design

### Design

**Study type:** Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Diagnostic

### Recruitment

NL

Recruitment status: Completed

Start date (anticipated): 25-01-2023

Enrollment: 100

Type: Actual

## Medical products/devices used

Generic name: Elecsys Troponin T hs Gen 6  
Registration: No

## Ethics review

Approved WMO  
Date: 29-11-2022  
Application type: First submission  
Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

Approved WMO  
Date: 06-09-2023  
Application type: Amendment  
Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

Approved WMO  
Date: 04-10-2023  
Application type: Amendment  
Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

Approved WMO  
Date: 31-07-2024  
Application type: Amendment  
Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

Approved WMO  
Date: 30-10-2024  
Application type: Amendment  
Review commission: MEC-U: Medical Research Ethics Committees United (Nieuwegein)

## Study registrations

## **Followed up by the following (possibly more current) registration**

No registrations found.

## **Other (possibly less up-to-date) registrations in this register**

No registrations found.

## **In other registers**

<b>Register</b>	<b>ID</b>
CCMO	NL82227.000.22