Economic Evaluation of HARTc 2.0 Trial: Prehospital ACS Triage Using Point-of-Care hs-cTnI

Anne Catherine M.H. van der Lande[1], Nina M. Diederiks[2], Enrico R. de Koning[1], Jan Bosch[5], Elske van den Akker-van Marle[3], Reza Alizadeh Dehnavi[6], Wouter J. Tietge[4], Bart J.A. Mertens[3], J. Wouter Jukema[1], Christa M. Cobbaert[2], Martin J. Schalij[1], Mark J. Boogers[1]

[1] Department of Cardiology, [2] Department of Clinical Chemistry and Laboratory Medicine, [3] Department of Biomedical Data Sciences Leiden University Medical Center, Leiden, The Netherlands, [4] Alrijne Hospital, Leiderdorp, The Netherlands, [5] Ambulance Service Hollands Midden, Leiden, The Netherlands, [6] Groene Hart Hospital, Gouda, The Netherlands

Leiden University Medical Center

Acceptance code **EE316**

ISPOR 2026
May 17-20, 2026 | Philadelphia, PA, USA

Multicenter RCT evaluating whether prehospital ACS triage using point-of-care troponin can reduce unnecessary hospital utilization and healthcare costs

1. WHY THIS STUDY

- Chest pain accounts for ~10% of ED visits
- Low ACS prevalence
- Current pathways may drive unnecessary utilization
- Earlier triage could improve efficiency and reduce costs

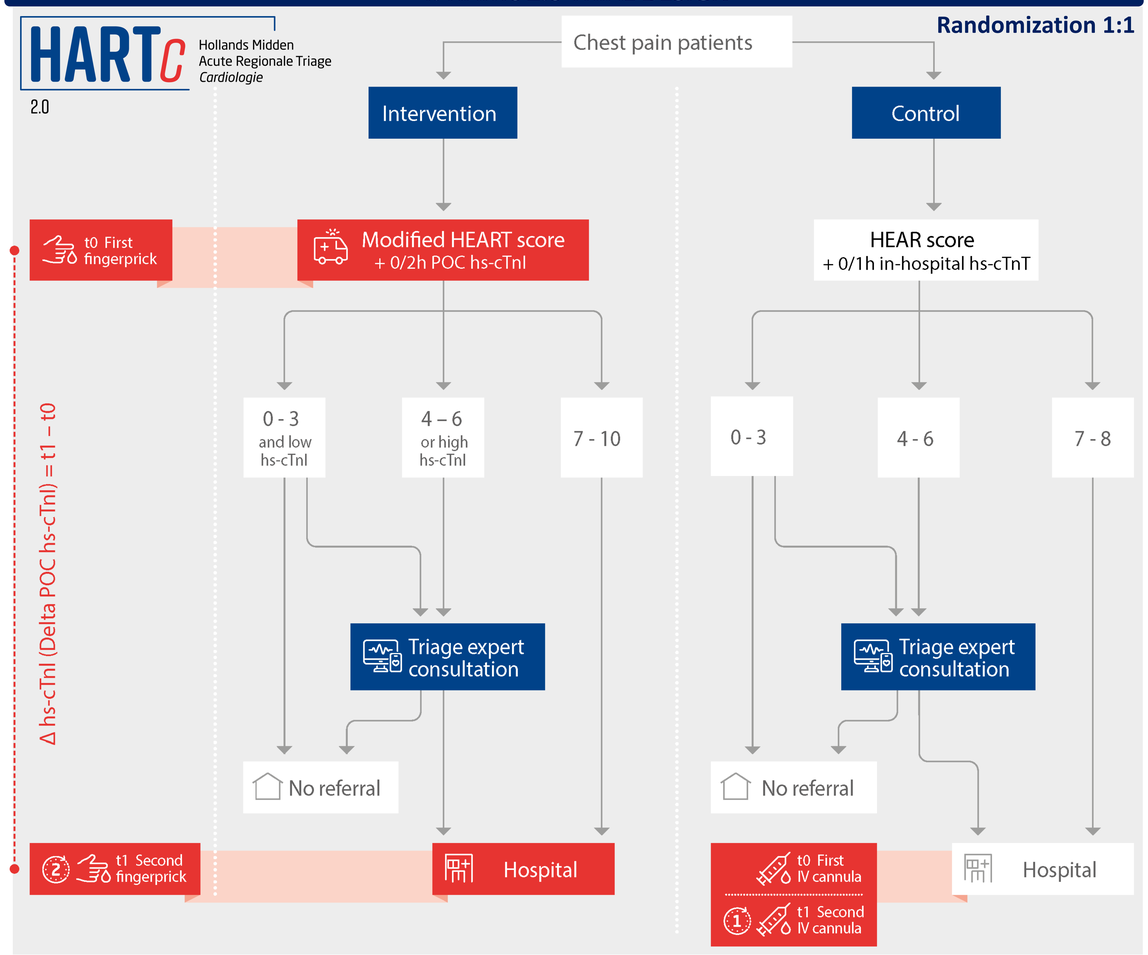
2. OBJECTIVE

To evaluate the economic impact of prehospital ACS triage using a modified HEART score with POC hs-cTnI compared with standard care.

3. ECONOMIC EVALUATION FRAMEWORK

- Societal perspective
- 30-day, 1-year follow-up
- EQ-5D-5L at baseline and 30 days and 1-year
- QALYs using area-under-the-curve method
- Dutch reference prices (2026)

4. HARTc 2.0 TRIAL DESIGN



5. TRIAL STATUS

- **> 1200** patients included
- Multicenter RCT in the Netherlands
- Ongoing follow-up
- Analyses ongoing

6. PLANNED ECONOMIC ANALYSES

- ☑ Incremental Cost-Effectiveness Ratio (ICER)
- ☑ Cost-Effectiveness Acceptability Curves (CEACs)
- ☑ Nonparametric bootstrapping

7. OUTCOMES

- Non-transport after EMS assessment
- ED visits and hospital admissions
- Time-to-diagnosis
- Downstream resource use (within 30 days)
- Total healthcare costs
- QALYs

8. POTENTIAL IMPACT

- Earlier triage decisions
- Reduction transports and admissions
- Faster time-to-diagnose and time to treatment
- Lower ED utilization and resource allocation
- Lower healthcare costs
- Enhanced patient safety and quality of care

CONTACT

Anne Catherine M.H. van der Lande
Leiden University Medical Center, Leiden, The Netherlands
E-mail: a.c.m.h.van_der_lande@lumc.nl