# RApid Diagnosis And Risk stratification of Acute Coronary Syndrome with novel biochip array

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
08/04/2010	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
09/02/2011	Completed	Results
Last Edited	Condition category	Individual participant data
04/10/2017	Circulatory System	<ul><li>Record updated in last year</li></ul>

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Mrs Irene Knox

#### Contact details

Craigavon Area Hospital 68 Lurgan Road Portadown United Kingdom BT63 5QQ

# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

5.2

# Study information

Scientific Title

RApid Diagnosis And Risk stratification of Acute Coronary Syndrome with novel biochip array: an observational cohort study

#### Acronym

**RADAR-ACS** 

#### **Study objectives**

Measurement at 4 or 6 hours after symptom onset of a panel of early biomarkers of myocardial necrosis and plaque instability with a biochip assay array will be superior to measurement of the current gold standard diagnostic assay for myocardial infarction, Troponin T in patients presenting with acute coronary syndrome (ACS).

This biomarker array will also demonstrate greater independent predictive accuracy than troponin for recurrent cardiac events at 30 days and 1 year.

#### Ethics approval required

Old ethics approval format

## Ethics approval(s)

Office for Research Ethics Committees Northern Ireland (ORECNI) approved on 08/05/2009 (ref: 09/NIR01/22). Protocol revision (version 5.2) and subsequent favourable opinion given on 11/11/2009.

#### Study design

Observational cohort study

## Primary study design

Observational

# Secondary study design

Cohort study

# Study setting(s)

Hospital

# Study type(s)

Diagnostic

# Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

# Health condition(s) or problem(s) studied

Acute coronary syndrome

#### Interventions

Patients will have blood sampled at admission then subsequently at time intervals 1, 2, 3, 6, 12 and 24 hours after admission. Blood will be spun and serum/plasma aliquoted then frozen at -80 degrees celsius until batch analysis. Analysis with a biochip panel consisting of Troponin I, Heart

type fatty acid binding protein, Glycogenphosphorylase BB, Myoglobin, Carbonic anhydrase III and creatine kinase myocardial bands (CKMB) will be compared with 4th and 5th generation troponin T assays at each time point.

## Intervention Type

Device

#### Primary outcome measure

- 1. Sensitivity and specificity of investigational biomarkers when compared to troponin T at two prespecified time points after symptom onset: 4 hours, 6 hours
- 2. Major adverse cardiac events (MACE) defined as in hospital reinfarction (defined as further clinical signs and/or symptoms and greater than or equal to 20% increase in Troponin value 6 9 hours after the event), stroke, revascularisation, further admission with ACS heart failure hospitalisation, death

## Secondary outcome measures

- 1. Bleeding complications (assessed according to the TIMI bleeding classification)
- 2. In hospital revascularistion. Within this subset presenting coronary anatomy and revascularisation type will be assessed
- 3. Length of hospital stay

#### Overall study start date

27/10/2009

#### Completion date

04/08/2012

# Eligibility

#### Key inclusion criteria

Consecutive male and female patients over 18 years of age with a clinical diagnosis of possible acute coronary syndrome.

# Participant type(s)

**Patient** 

## Age group

Adult

#### Lower age limit

18 Years

#### Sex

Both

#### Target number of participants

650

#### Key exclusion criteria

- 1. Unable to provide informed consent
- 2. Terminal malignancy
- 3. Patient received anticogulant treatment or fibrinolysis prior to enrolment

## Date of first enrolment

27/10/2009

#### Date of final enrolment

04/08/2012

# Locations

#### Countries of recruitment

Northern Ireland

United Kingdom

# Study participating centre Craigavon Area Hospital

Portadown United Kingdom BT63 5QQ

# Sponsor information

#### Organisation

Southern Health and Social Care Trust (UK)

# Sponsor details

Craigavon Area Hospital 68 Lurgan Road Portadown Northern Ireland United Kingdom BT63 5QQ

#### Sponsor type

Hospital/treatment centre

#### Website

http://www.southerntrust.hscni.net/

#### **ROR**

https://ror.org/02fjtnt35

# Funder(s)

# Funder type

Industry

#### Funder Name

Randox Laboratories (UK)

#### Funder Name

Southern Health and Social Care Trust (UK)

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration