# Diastolic RV EvAluation with Millar catheter to investigate the effect of Glucagon-Like Peptide-1 (GLP-1) on right ventricular function during elective coronary angioplasty and stenting

Submission date 22/10/2014	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively registered</li> <li>Protocol</li> </ul>
<b>Registration date</b> 22/10/2014	<b>Overall study status</b> Completed	<ul> <li>Statistical analysis plan</li> <li>Results</li> </ul>
Last Edited 07/06/2019	<b>Condition category</b> Circulatory System	<ul> <li>Individual participant data</li> <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

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### **Contact details**

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# Additional identifiers

### EudraCT/CTIS number

### IRAS number

ClinicalTrials.gov number NCT02236299

## Study information

### Scientific Title

Diastolic RV EvAluation with Millar catheter to investigate the effect of Glucagon-Like Peptide-1 (GLP-1) on right ventricular function during elective coronary angioplasty and stenting

### Acronym

DREAM GLP-1

### **Study objectives**

The heart requires nutrients and oxygen carried in the blood to generate energy for healthy pump function. Blood is supplied via heart vessels called coronary arteries. When the arteries narrow we call this coronary artery disease. Narrowing and blockage of the coronary arteries can cause chest pain (angina), breathlessness (due to a reduction in pump function) and if prolonged even irreversible muscle damage known as a heart attack. We can treat patients with coronary artery disease with drugs that reduce the workload on the heart or with balloons and hollow metal tubes (stents) to open the narrowed coronary arteries and improve the blood supply. These treatments can relieve angina, improve breathlessness and avert heart muscle damage during a heart attack. A potential new mechanistic effect is emerging by modulating the type of fuel used by the heart to generate energy more efficiently has been tested in the left ventricle. This study is designed to see if mechanistic effect provides the same protection in the right ventricle. It is hoped that this may further improve heart pump function and reduce the size of a heart attack in patients with coronary artery disease.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

East of England - Cambridge South Research Ethics Committee, 13/06/2014, ref: 14/EE/0141

### Study design

Randomised; Interventional; Design type: Treatment

**Primary study design** Interventional

**Secondary study design** Randomised controlled trial

**Study setting(s)** Hospital

**Study type(s)** Treatment

### Participant information sheet

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

Topic: Cardiovascular disease; Subtopic: Cardiovascular (all Subtopics); Disease: Cardiovascular

Interventions GLP-1, GLP-1

**Intervention Type** Other

**Phase** Not Applicable

**Primary outcome measure** Improvement in RV diastolic dysfunction

**Secondary outcome measures** Not provided at time of registration

Overall study start date 22/09/2014

**Completion date** 22/03/2016

# Eligibility

### Key inclusion criteria

1. Age over 18

- 2. Able to give informed consent
- 3. Elective percutaneous intervention for a single vessel right coronary artery stenosis >75%

4. Normal right ventricular function

### Participant type(s)

Patient

**Age group** Adult

**Lower age limit** 18 Years

**Sex** Both

Target number of participants

Planned Sample Size: 30; UK Sample Size: 30

### Key exclusion criteria

1. Severe comorbidity expected life (<6months)

2. Nicorandil or a GLP1 receptor agonist or DPP4 inhibitor use

- 3. Women of child bearing age
- 4. Myocardial infarction within the previous 3 months
- 5. Previous coronary artery bypass graft to the RCA
- 6. Significant known left to right shunt
- 7. Permanent pacemaker
- 8. Atrial fibrillation

# Date of first enrolment

22/09/2014

# **Date of final enrolment** 22/03/2016

### Locations

### **Countries of recruitment** England

United Kingdom

**Study participating centre Papworth Everard** Cambridge United Kingdom CB3 8RE

### Sponsor information

### **Organisation** Papworth Hospital NHS Trust (UK)

#### **Sponsor details** Papworth Everard Cambridge England United Kingdom CB3 8RE

**Sponsor type** Hospital/treatment centre

### ROR

https://ror.org/01qbebb31

# Funder(s)

**Funder type** Government

**Funder Name** NIHR CSO Healthcare Science Fellowship; Grant Codes: NIHRHCSD120314

## **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

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No