# An optical coherence tomography study to determine stent coverage in polymer coated versus bare metal rapamycin eluting stents

Submission date Recruitment status Prospectively registered 16/06/2007 No longer recruiting [ ] Protocol [ ] Statistical analysis plan Registration date Overall study status 25/06/2007 Completed [X] Results [ ] Individual participant data Last Edited Condition category Circulatory System 02/12/2010

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Miles Dalby

#### Contact details

Harefield Hospital Hill End Road Harefield United Kingdom UB9 6JH +44 (0)1895828990 m.dalby@rbht.nhs.uk

# Additional identifiers

Protocol serial number N/A

# Study information

Scientific Title

#### **Study objectives**

The hypothesis of this study is that there is more complete stent strut coverage in the polymer free rapamycin eluting 'Yukon' stent (Translumina), compared with the durable polymer based rapamycin eluting stent 'Cypher' (Cordis) using optical coherence tomography at 3 months post implantation.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Approval from UK Central Office of Research Ethics Committees (COREC) on 4th October 2006 (ref: 06/Q0404/61)

#### Study design

Single-centre two-arm randomised controlled trial

#### Primary study design

Interventional

## Study type(s)

Not Specified

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

Coronary artery disease

#### **Interventions**

In brief all patients will be undergoing drug eluting intracoronary stent deployment as clinically indicated. Patients will be randomly allocated to receive a Yukon (rapamicin eluting polymer free) or Cypher (rapamicin eluting polymer coated) stent using standard clinical protocols according to the discretion of the implanting cardiologist. Patients will be systematically recatheterised at 90 days and undergo optical coherence tomography.

## Intervention Type

Other

#### Phase

**Not Specified** 

## Primary outcome(s)

Comparison of binary stent strut coverage between the Yukon (rapamicin eluting polymer free) and Cypher (rapamicin eluting polymer coated) groups at 90 day optical coherence tomography.

# Key secondary outcome(s))

Comparison of mean neointimal thickness between the Yukon (rapamicin eluting polymer free) and Cypher (rapamicin eluting polymer coated) groups at 90 day optical coherence tomography.

## Completion date

01/08/2007

# Eligibility

#### Key inclusion criteria

- 1. Age 18-75
- 2. Stable or unstable angina, Non-ST Elevation Myocardial Infarction (NSTEMI) but not ST-Elevation Myocardial Infarction (STEMI; primary Percutaneous Coronary Intervention (PCI) or rescue angioplasty) who have been pain-free for > 24h
- 3. Single or multiple lesions in a native coronary artery
- 4. 50-99% diameter stenosis
- 5. Lesion length 8-28mm (visually estimated)
- 6. Vessel diameter 2.5-3.5mm (visually estimated)

#### Participant type(s)

Patient

#### Healthy volunteers allowed

No

#### Age group

Adult

#### Lower age limit

18 years

#### Upper age limit

75 years

#### Sex

ΔII

#### Key exclusion criteria

- 1. Unprotected left mainstem lesion
- 2. Ostial lesion
- 3. Bifurcation lesion requiring side branch intervention
- 4. Severely calcified lesion that cannot be successfully pre-dilated
- 5. Marked tortuosity or angulation of target vessel
- 6. STEMI
- 7. Left Ventricular (LV) ejection fraction <20%
- 8. Pregnancy or breast feeding
- 9. Coexisting comorbidity limiting life expectancy to <24 months
- 10. Renal impairment with Creatinine (Cr) >200 µmol/L

## Date of first enrolment

20/10/2006

#### Date of final enrolment

01/08/2007

# Locations

#### Countries of recruitment

United Kingdom

Study participating centre Harefield Hospital Harefield United Kingdom UB9 6JH

# Sponsor information

# Organisation

Royal Brompton and Harefield NHS Trust (UK)

#### **ROR**

https://ror.org/02218z997

# Funder(s)

# Funder type

Not defined

#### **Funder Name**

Translumina (Hechingen, Germany)

# **Results and Publications**

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?
Results article	results	01/05/2009		Yes	No