

# MEnopause and Raloxifen in ischaemic Coronary disease: effects on Endothelial Dysfunction

<b>Submission date</b> 31/01/2007	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 26/04/2007	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 09/05/2019	<b>Condition category</b> Circulatory System	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Magda Heras

**Contact details**  
Department of Cardiology  
Hospital Clínic of Barcelona  
Barcelona  
Spain  
08036

## Additional identifiers

**Protocol serial number**  
03-0579

## Study information

**Scientific Title**  
MEnopause and Raloxifen in ischaemic Coronary disease: effects on Endothelial Dysfunction

**Acronym**

MERCED

### **Study objectives**

Treatment with raloxifen improves vascular reactivity in menopausal patients with ischaemic coronary disease. This improvement can be measured reliably by non-invasive methods.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Approval received from the ethics committee of the Spanish Drug Agency (Agencia Espanola del Medicamento) on the 2nd March 2004 (ref: 03-0579).

### **Study design**

This study is a national, multicentre, double blind, cross-over study, with randomly assigned periods

### **Primary study design**

Interventional

### **Study type(s)**

Treatment

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

Ischaemic heart disease in postmenopausal women

### **Interventions**

Patients will be given 60 mg per day of raloxifen or placebo for three months, there is a one-month washing period and they are crossed to the other treatment (raloxifen for those who received placebo and placebo for those treated with raloxifen) for another three months. Patients and researchers will be blinded to the treatment throughout the trial. At the end of each period, the endothelial dependent vasodilatation will be measured together with several markers of disease (including inflammation and thrombosis).

### **Intervention Type**

Drug

### **Phase**

Not Specified

### **Drug/device/biological/vaccine name(s)**

Raloxifen

### **Primary outcome(s)**

To determine the effect of the three-months treatment with raloxifen versus placebo on endothelial function (humeral artery) in postmenopausal women with confirmed ischaemic heart disease.

### **Key secondary outcome(s)**

To determine the effect of raloxifen on:

1. Coagulation fibrinolysis system

2. Platelet aggregation
3. Adhesion molecules
4. Cytokines
5. C-Reactive Protein (CRP)
6. Lipid profile

**Completion date**

31/07/2005

## Eligibility

**Key inclusion criteria**

1. Postmenopausal women, aged less than 70 years
2. Estradiol and Follicle Stimulating Hormone (FSH) plasma concentrations less than 30 pg/mL and more than 40 UI/L, respectively
3. Confirmed coronary artery disease by coronary angiography (at least one vessel with stenosis more than 70%) and/or previous myocardial infarction
4. Signature of the informed consent to participate in the study and to undergo all the tests included in the trial

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

Female

**Total final enrolment**

33

**Key exclusion criteria**

1. History of gynaecological or other conditions that contraindicate treatment with raloxifen:
  - a. Deep vein thrombosis, pulmonary embolism, retina venous thrombosis
  - b. Hypersensitivity to raloxifen
  - c. Increase of hepatic enzymes including colestasis
  - d. Undiagnosed endometrial bleeding
  - e. Endometrial cancer
  - f. Breast cancer
2. Kidney failure (creatinine greater than 2 mg/dl)
3. Participation in another clinical study during 30 days prior to the randomisation
4. Hormone replacement therapy in the last six months

**Date of first enrolment**

01/01/2004

**Date of final enrolment**

31/07/2005

## Locations

**Countries of recruitment**

Spain

**Study participating centre**

**Department of Cardiology**

Barcelona

Spain

08036

## Sponsor information

**Organisation**

Hospital Clínic of Barcelona (Spain)

**ROR**

<https://ror.org/02a2kzf50>

## Funder(s)

**Funder type**

Government

**Funder Name**

This work was funded in part by the Ministerio de Sanidad y Consumo, Instituto de Salud Carlos III (Spain) (ref: Red HERACLES REDG03/045-0 and PI050038)

## 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?
<a href="#">Results article</a>	results	01/07/2011	09/05/2019	Yes	No