

# Discovery of novel biomarkers in peripheral arterial disease/metabolic syndrome

<b>Submission date</b> 28/03/2007	<b>Recruitment status</b> Stopped	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 19/06/2007	<b>Overall study status</b> Stopped	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 21/06/2017	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

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

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
PADBelch07

# Study information

## Scientific Title

Discovery of novel biomarkers in peripheral arterial disease/metabolic syndrome

## Acronym

PAD Wyeth

## Study objectives

The overall objective of the research proposal is to determine the occurrence of biomarkers with proven links to future cardiovascular events in patients with Peripheral Arterial Disease (PAD) and type 2 diabetes receiving various standards of care medicines including pioglitazone.

On 21/06/2007 the target number of participants was changed from 70 to 80.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Tayside Ethics Committee, 13/06/2007, ref: 07/S1401/43

## Study design

Randomised double-blind placebo-controlled trial

## Primary study design

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Not specified

## Study type(s)

Not Specified

## 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

Type 2 diabetes and peripheral arterial disease

## Interventions

In the Phase 1 section of this trial, blood and urine samples will be collected for the following analyses:

1. Transcriptional analysis
2. Other assays:
  - 2.1. E selectin
  - 2.2. P selectin

- 2.3. Endothelin
- 2.4. C-Reactive Protein (CRP)
- 2.5. Isoprostanes
- 2.6. Intercellular Adhesion Molecules (ICAM)

Laser Doppler imaging and iontophoresis will also be performed, as well as measuring the flow mediated dilatation and arterial stiffness using the SphygmoCor pulse wave analysis system and Intima-Media Thickness.

In the Phase 2 section of this trial either 45 mg pioglitazone (orally) or a placebo will be given for 30 days to study its effect on vascular behaviour.

### **Intervention Type**

Drug

### **Phase**

Not Applicable

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

Pioglitazone

### **Primary outcome measure**

Development of new biomarkers

### **Secondary outcome measures**

Correlate clinical parameters (e.g. walking distances) in patients with PAD and type 2 diabetes treated with various standard of care medicines to genes and protein profiling in muscle biopsies.

### **Overall study start date**

01/04/2007

### **Completion date**

30/06/2008

### **Reason abandoned (if study stopped)**

Lack of funding/sponsorship

## **Eligibility**

### **Key inclusion criteria**

For Phase 1 study subjects with PAD and type 2 diabetes will be included. PAD will be defined as patients with classical symptoms of intermittent claudication plus an Ankle brachial Blood Pressure Index (ABPI) of  $<0.9$ , the accepted cut off level for such a diagnosis.

For Phase 2 study patients with short distance claudication ( $<200$  yards) will be selected for the walking study, as their walking distances are more reproducible (i.e. using the standardized Gardner walking treadmill protocol no more than 25% variation from 2 consecutive treadmill tests performed at least a week apart during the screening period). Patients for this second study will be type 2 diabetic patients not receiving insulin.

**Participant type(s)**

Patient

**Age group**

Not Specified

**Sex**

Both

**Target number of participants**

80

**Key exclusion criteria**

1. Contraindication to thiazolidinedione group of drugs
2. Subjects taking sulphonylureas
3. Subjects with cardiovascular disease event within last three months (such as Myocardial Infarction [MI], unstable angina and stroke)
4. For Phase 2 study, subjects having more than 25% variation from 2 consecutive treadmill tests performed at least a week apart

**Date of first enrolment**

01/04/2007

**Date of final enrolment**

30/06/2008

**Locations****Countries of recruitment**

Scotland

United Kingdom

**Study participating centre**

The Institute of Cardiovascular Research

Dundee

United Kingdom

DD1 9SY

**Sponsor information****Organisation**

University of Dundee (UK)

**Sponsor details**

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**Sponsor type**

University/education

**ROR**

<https://ror.org/03h2bxq36>

## **Funder(s)**

**Funder type**

Industry

**Funder Name**

Wyeth Pharmaceuticals (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