

# The Effect of Coating of the Cardiopulmonary Bypass Circuit with Poly-2-methoxyethylacrylate (PMEA) on the Systemic Inflammatory Response

<b>Submission date</b> 30/09/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 30/09/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 18/10/2017	<b>Condition category</b> Surgery	<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

### Contact name

Mr Moninder Bhabra

### Contact details

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UHCW NHS Trust  
Clifford Bridge Road  
Coventry  
United Kingdom  
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## Additional identifiers

### Protocol serial number

N0295142271

## Study information

Scientific Title

Not provided at time of registration.

### **Study objectives**

To compare outcomes in patients undergoing coronary artery bypass grafting using either standard non-coated cardiopulmonary circuits or circuits in which all components have been coated with PMEA.

### **Ethics approval required**

Old ethics approval format

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

Not provided at time of registration

### **Study design**

Randomised controlled trial

### **Primary study design**

Interventional

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

Treatment

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

Surgery: Cardiopulmonary bypass

### **Interventions**

Prospective randomised controlled trial

### **Intervention Type**

Procedure/Surgery

### **Phase**

Not Specified

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

Post-operative blood loss and transfusion requirements, pulmonary, renal, neurological, cardiac and infective complications during hospitalisation, duration of ICU and hospital stay and thirty day mortality. The magnitude of the inflammatory response will be assessed by measuring plasma levels of inflammatory mediators. Platelet function and coagulation will be assessed by flow cytometry and thromboelastography.

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

Not provided at time of registration

### **Completion date**

30/10/2004

## **Eligibility**

### **Key inclusion criteria**

Patients undergoing first-time, isolated, elective coronary artery bypass grafting at UHCW, who have not taken any anti-platelet medication for five days previous to the operation, will be eligible for the study. We aim to recruit 40 patients.

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Not Specified

**Sex**

Not Specified

**Key exclusion criteria**

1. Patients undergoing repeated surgery
2. Patients undergoing emergency surgery
3. Patients taking antiplatelet medication

**Date of first enrolment**

19/04/2004

**Date of final enrolment**

30/10/2004

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

United Kingdom

England

**Study participating centre**

Cardiothoracic Unit, 3rd floor

Coventry

United Kingdom

CV2 2DX

**Sponsor information****Organisation**

Department of Health

# Funder(s)

## Funder type

Hospital/treatment centre

## Funder Name

University Hospitals Coventry and Warwickshire NHS Trust (UK)

## Funder Name

NHS R&D Support Funding (UK)

# 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="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes