Does routine peri-operative continuous cell salvage in cardiac surgery reduce exposure to allogeneic blood? A randomised controlled trial

Submission date	Recruitment status	Prospectively registered		
20/04/2005	No longer recruiting	Protocol		
Registration date	Overall study status	Statistical analysis plan		
24/05/2005	Completed	[X] Results		
Last Edited	Condition category	[] Individual participant data		
22/10/2008	Surgery			

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr Andrew Klein

Contact details

Papworth Hospital NHS Trust Papworth Everard Cambridge United Kingdom CB3 8RE

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers PO1003

Study information

Scientific Title

Study objectives

Widespread use of new cell salvage technology will reduce the numbers of patients receiving red cells as well as the total units used.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics approval received from Peterborough and Fenland Local Research Ethics Committee on the 22nd April 2005.

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Prevention

Participant information sheet

Health condition(s) or problem(s) studied

Blood transfusion following cardiac surgery

Interventions

Patients will be randomised to either the cell saver or control group. A Continuous Auto-Transfusion System (CATS, Fresenius Hemocare) cell saver will be used intra- and post-operatively with the aim of using all processed blood prior to the use of donor blood. Patients in the control group will be managed according to the Papworth hospital protocol.

Please note that as of 06/11/2007 the anticipated end date of this trial was changed from 31st December 2007 to 21st May 2007. This trial has now finished recruiting.

Intervention Type

Procedure/Surgery

Phase

Not Specified

Primary outcome measure

The proportion of patients exposed to allogeneic blood. All outcomes measured at 30 days post surgery.

Secondary outcome measures

- 1. The number of units of allogeneic red blood cells transfused during first-time cardiac surgery
- 2. The use of blood products such as fresh frozen plasma and platelet concentrates
- 3. Adverse events
- 4. Resource use and cost savings of using CATS in this specific group of patients

All outcomes measured at 30 days post surgery.

Overall study start date

01/05/2005

Completion date

21/05/2007

Eligibility

Key inclusion criteria

Patients for non-emergency first-time Coronary Artery Bypass Grafting (CABG) with planned use of cardiopulmonary bypass, and patients for valve repair or replacement, or combined CABG and valve procedure.

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

206

Key exclusion criteria

- 1. Refusal to receive blood or blood products
- 2. Previous cardiac or thoracic surgery
- 3. Having an unacceptable risk, as per investigator judgement
- 4. Known serious coagulation disorders
- 5. Known blood disorder (thalassemia, chronic anaemia, lymphoproliferative disorder etc.)
- 6. Any contra-indication to antifibrinolytics
- 7. The receipt of any investigational drug or participation in a device trial during the course of this trial
- 8. Where a specific request for cell salvage has been made by the surgeon

Date of first enrolment

01/05/2005

Date of final enrolment

21/05/2007

Locations

Countries of recruitment

England

United Kingdom

Study participating centre
Papworth Hospital NHS Trust
Cambridge

Cambridge United Kingdom CB3 8RE

Sponsor information

Organisation

Papworth Hospital NHS Trust (UK)

Sponsor details

Papworth Hospital Papworth Everard Cambridge England United Kingdom CB3 8RE

Sponsor type

Hospital/treatment centre

ROR

https://ror.org/01qbebb31

Funder(s)

Funder type

Industry

Funder Name

Devices and consumables are being provided free of charge by Fresenius Hemocare (UK). No other source of funding secured to date.

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?
Results article	Results	01/11/2008		Yes	No