

# Reinforcement of closure of stoma site using a biological mesh – extended follow-up

<b>Submission date</b> 28/04/2022	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 10/05/2022	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 12/08/2024	<b>Condition category</b> Surgery	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

An incisional hernia forms when a surgical wound fails to heal and a defect remains in the muscle wall. Closure of a stoma wound (stomas are formed when the bowel is brought to the tummy skin) is a frequent cause of incisional hernia, occurring in over 1,000 UK patients every year. Surgical repair of these hernias is hazardous and up to 1 in 2 repairs will fail. These patients can be elderly with multiple medical problems, so further attempts at repair may be too risky, meaning they must tolerate the symptoms of pain, swelling and discomfort and live with the risk of life-threatening complications. A treatment that reduces the occurrence of hernias after stoma closure would improve patients' quality of life, reduce surgical complications and remove the need for further operations. The ROCSS study sought to address this problem by the use of a mesh to support the wound while it heals. Meshes are widely used in hernia repair to support the muscles while they heal. However, the mesh increases the problems of infection when the wound is contaminated by bacteria (as is the case in stoma closure). In ROCSS a type of 'biological' mesh made from animal tissue which is incorporated into the body tissues was used. Animal and human studies indicate that long-term infection problems are, as a consequence, reduced. ROCSS showed that fewer patients in the mesh group had a detectable hernia after 2 years – nearly half the number of participants compared to those who did not get a mesh.

The ROCSS study was trying to find out if the mesh works or not at reducing the development of hernias. We believe that more people will form hernias over time, and these may require treatment and impact on people's quality of life. We aim to investigate this in the ROCSS-EX study.

### Who can participate?

Patients who took part in the original ROCSS study in the UK who successfully have their stoma reversed.

### What does the study involve?

ROCSS-EX does not involve any additional treatment, tests or hospital visits. The extended follow-up involves a one-off telephone consultation to ask questions about quality of life after the reversal.

operation and any symptoms related to the abdominal wall. It will also involve a review of health records to assess if any additional treatments may have been required in relation to the closed stoma site, reducing the number of questions asked during the telephone consultation.

What are the possible benefits and risks of participating?

There are no risks associated with taking part as this study involves only a telephone consultation.

Where is the study run from?

University of Birmingham (UK)

When is the study starting and how long is it expected to run for?

November 2020 to August 2022

Who is funding the study?

National Institute for Health and Care Research (NIHR) Research for Patient Benefit (RfPB) (NIHR212020) (UK).

Who is the main contact?

Ruth Evans, Trial Manager, rocss@trials.bham.ac.uk

### **Study website**

<https://www.birmingham.ac.uk/ROCSS-EX>

## **Contact information**

### **Type(s)**

Public

### **Contact name**

Mr James Brown

### **ORCID ID**

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### **Type(s)**

Scientific

### **Contact name**

Ms Ruth Benson

**ORCID ID**

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**Contact details**

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University of Birmingham  
Birmingham  
United Kingdom  
B15 2TT

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[ruth.benson@gmail.com](mailto:ruth.benson@gmail.com)

## Additional identifiers

**EudraCT/CTIS number**

Nil known

**IRAS number**

077075

**ClinicalTrials.gov number**

Nil known

**Secondary identifying numbers**

CPMS 49449, NIHR202011, IRAS 077075

## Study information

**Scientific Title**

Extended follow-up of the ROCSS trial

**Acronym**

ROCSS-EX

**Study objectives**

Is there a significant improvement in long-term quality of life for patients that have a biological mesh reinforcement of the abdominal wall at the time of closure of stoma site, and is the intervention cost-effective?

An extended follow up of the ROCSS study (<https://www.isrctn.com/ISRCTN46330337>)

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 07/01/2021, West Midlands - Coventry & Warwickshire Research Ethics Committee (The Old Chapel, Royal Standard Place, Nottingham, NG1 6FS, UK; +44 207 104 8009; [coventryandwarwick.rec@hra.nhs.uk](mailto:coventryandwarwick.rec@hra.nhs.uk)), ref: 12/WM/0187

**Study design**

Observational cohort study

**Primary study design**

Observational

**Secondary study design**

Cohort study

**Study setting(s)**

Not specified

**Study type(s)**

Treatment

**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**

Incisional hernia

**Interventions**

There is no intervention if ROCSS-EX as such as it extended follow-up – the intervention under investigation remains the same one as in the original ROCSS trial (Reinforcement of the stoma closure site using the Strattice® collagen mesh). (<https://www.isrctn.com/ISRCTN46330337>)

**Intervention Type**

Other

**Primary outcome measure**

Quality of life at 5 to 8 years following closure of stoma site comparing participants who had mesh reinforcement of their abdominal wall with participants that had a standard closure. This will be assessed using the HerQLes tool

**Secondary outcome measures**

At 5-8 years follow-up:

1. Participant reported incisional hernia rate
2. Number of hospital visits for any hernia related reason
3. Number of interventional procedures related to the stoma closure site or hernia
4. Longitudinal QoL assessed using EQ-5D
5. Cost analysis for all additional hernia related events

**Overall study start date**

01/11/2020

**Completion date**

31/08/2022

**Eligibility****Key inclusion criteria**

All participants included in the ROCSS trial are eligible to be included in ROCSS-EX unless they withdrew or did not have their stoma reversed during the duration of the original trial. those participants who have died, only routinely collected data will be used.

**Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Both

**Target number of participants**

Planned Sample Size: 702; UK Sample Size: 702

**Total final enrolment**

406

**Key exclusion criteria**

Does not meet inclusion criteria

**Date of first enrolment**

01/02/2021

**Date of final enrolment**

31/05/2021

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

England

Scotland

United Kingdom

**Study participating centre**

**Heartlands Hospital**

Bordesley Green East

Bordesley Green

Birmingham

United Kingdom

B9 5SS

**Study participating centre**

**Bristol Royal Infirmary**  
Marlborough Street  
Bristol  
United Kingdom  
BS2 8HW

**Study participating centre**  
**Broomfield Hospital**  
Court Road  
Broomfield  
Chelmsford  
United Kingdom  
CM1 7ET

**Study participating centre**  
**Chesterfield Royal Hospital**  
Chesterfield Road  
Calow  
Chesterfield  
United Kingdom  
S44 5BL

**Study participating centre**  
**Doncaster Royal Infirmary**  
Armthorpe Road  
Doncaster  
United Kingdom  
DN2 5LT

**Study participating centre**  
**Dorset County Hospital**  
Dorset County Hospital  
Princes Street  
Dorchester  
United Kingdom  
DT1 1TS

**Study participating centre**  
**James Paget University Hospital**  
Lowestoft Road  
Gorleston

Great Yarmouth  
United Kingdom  
NR31 6LA

**Study participating centre**

**King's Mill Hospital**

Sherwood Forest Hospitals NHS Foundation Trust  
Mansfield Road  
Sutton-in-Ashfield  
United Kingdom  
NG17 4JL

**Study participating centre**

**Leicester General Hospital**

Gwendolen Road  
Leicester  
United Kingdom  
LE5 4PW

**Study participating centre**

**Leicester Royal Infirmary**

Infirmary Square  
Leicester  
United Kingdom  
LE1 5WW

**Study participating centre**

**Macclesfield District General Hospital**

Macclesfield District Hospital  
Victoria Road  
Macclesfield  
United Kingdom  
SK10 3BL

**Study participating centre**

**Manor Hospital**

Moat Road  
Walsall  
United Kingdom  
WS2 9PS

**Study participating centre**  
**New Cross Hospital Royal Wolverhampton**  
Wolverhampton Road  
Heath Town  
Wolverhampton  
United Kingdom  
WV10 0QP

**Study participating centre**  
**Pilgrim Hospital**  
Sibsey Road  
Boston  
United Kingdom  
PE21 9QS

**Study participating centre**  
**Queen Elizabeth Hospital**  
Queen Elizabeth Medical Centre  
Edgbaston  
Birmingham  
United Kingdom  
B15 2TH

**Study participating centre**  
**Queen Elizabeth the Queen Mother Hospital**  
St. Peters Road  
Margate  
United Kingdom  
CT9 4AN

**Study participating centre**  
**Queens Medical Centre**  
Nottingham University Hospital  
Derby Road  
Nottingham  
United Kingdom  
NG7 2UH

**Study participating centre**



**Raigmore Hospital**  
Old Perth Rd  
Inverness  
United Kingdom  
IV2 3UJ

**Study participating centre**  
**Royal Albert Edward Infirmary**  
Wigan Lane  
Wigan  
United Kingdom  
WN1 2NN

**Study participating centre**  
**Royal Stoke University Hospital**  
Newcastle Road  
Stoke-on-trent  
United Kingdom  
ST4 6QG

**Study participating centre**  
**Royal United Hospital Peasedown**  
Roman Way  
Bath Business Park  
Peasedown St. John  
Bath  
United Kingdom  
BA2 8SG

**Study participating centre**  
**Salisbury District Hospital**  
Salisbury District Hospital  
Odstock Road  
Salisbury  
United Kingdom  
SP2 8BJ

**Study participating centre**  
**Sandwell General Hospital**  
Lyndon  
West Bromwich

United Kingdom  
B71 4HJ

**Study participating centre**

**St Marks Hospital**

Watford Road  
Harrow  
United Kingdom  
HA1 3UJ

**Study participating centre**

**St Richards Hospital Laboratory**

St. Richards Hospital  
Spitalfield Lane  
Chichester  
United Kingdom  
PO19 6SE

**Study participating centre**

**University Hospital Coventry & Warwickshire**

Clifford Bridge Road  
Walsgrave  
Coventry  
United Kingdom  
CV2 2DX

**Study participating centre**

**University Hospital of North Tees**

Hardwick Road  
Stockton-on-tees  
United Kingdom  
TS19 8PE

**Study participating centre**

**The Worcestershire Royal Hospital**

Newtown Road  
Worcester  
United Kingdom  
WR5 1ZL

**Study participating centre****Wythenshawe Hospital**

Southmoor Road  
Wythenshawe  
Manchester  
United Kingdom  
M23 9LT

**Study participating centre****Yeovil District Hospital NHS Foundation Trust**

Yeovil District Hospital  
Higher Kingston  
Yeovil  
United Kingdom  
BA21 4AT

**Study participating centre****York Hospital**

Wigginton Road  
York  
United Kingdom  
YO31 8HE

**Study participating centre****Norfolk & Norwich University Hospital**

Colney Lane  
Colney  
Norwich  
United Kingdom  
NR4 7UY

## **Sponsor information**

**Organisation**

University of Birmingham

**Sponsor details**

Edgbaston  
Birmingham  
England  
United Kingdom

B15 2TT

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researchgovernance@contacts.bham.ac.uk

**Sponsor type**

University/education

**Website**

<http://www.birmingham.ac.uk/index.aspx>

**ROR**

<https://ror.org/03angcq70>

## **Funder(s)**

**Funder type**

Government

**Funder Name**

NIHR Central Commissioning Facility (CCF)

**Funder Name**

Research for Patient Benefit Programme

**Alternative Name(s)**

NIHR Research for Patient Benefit Programme, RfPB

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

United Kingdom

## **Results and Publications**

**Publication and dissemination plan**

Planned publication in a high-impact peer-reviewed journal

**Intention to publish date**

30/06/2023

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Manjinder Kaur (m.kaur@bham.ac.uk/rocss@trials.bham.ac.uk) . Access to anonymised data may be granted following review.

## IPD sharing plan summary

Available on request

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol file</a>	version 8.0	12/01/2021	30/08/2022	No	No
<a href="#">Results article</a>		02/08/2024	12/08/2024	Yes	No