

# A randomized clinical trial comparing the effectiveness of rotator cuff repair with or without augmentation with porcine small intestine submucosa (SIS) for large rotator cuff tears: Pilot study phase

<b>Submission date</b> 05/09/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 05/09/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 12/04/2021	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

### Contact name

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## Additional identifiers

EudraCT/CTIS number

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

MCT-63140

## **Study information**

### **Scientific Title**

A randomized clinical trial comparing the effectiveness of rotator cuff repair with or without augmentation with porcine small intestine submucosa (SIS) for large rotator cuff tears: Pilot study phase

### **Acronym**

RESTORE

### **Study objectives**

To compare the effectiveness of a standardized method of rotator cuff repair with or without augmentation using porcine small intestine submucosa (SIS) in patients with large rotator cuff tears.

### **Ethics approval required**

Old ethics approval format

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

Ethics approval received from the McMaster University Research Ethics Board on the 20th June 2003.

### **Study design**

Randomised controlled trial

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Hospital

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

Treatment

### **Participant information sheet**

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

Rotator cuff tears

### **Interventions**

1. Standard open rotator cuff repair
2. Standard open rotator cuff repair augmented with porcine small intestine submucosa (RESTORE patch)

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome measure**

Success or failure of the rotator cuff repair. Patients will undergo Magnetic Resonance Imaging (MRI) of the rotator cuff one year post-operatively to determine whether the defect has healed, and if not healed completely, whether the remaining full thickness defect is greater than 5 mm in any dimension. If such a defect remains, the patient is classified as having failed the repair.

**Secondary outcome measures**

1. The Western Ontario Rotator Cuff Index (WORC)
2. The American Shoulder and Elbow Surgeons standardized tool (ASES)
3. The Simple Shoulder Test (SST)
4. The Constant
5. The SF-36

**Overall study start date**

01/09/2003

**Completion date**

30/04/2007

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

Patients (18 - 65 years old, either sex) with large rotator cuff tears (Type 1B or Type 2) determined by clinical examination and diagnostic imaging. Criteria described by Harryman et al. (1991) will guide the classification of rotator cuff tears defined and reassessed at the time of surgery (Type 0 = intact cuff, Type 1A = thinned cuff or partial thickness defect, Type 1B = full thickness defect on one tendon, Type 2 = full thickness defect of two tendons, Type 3 = full thickness defect of three tendons).

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

60

**Total final enrolment**

62

**Key exclusion criteria**

1. Previous shoulder surgery, excluding acromioplasty or diagnostic arthroscopy
2. Inability of the surgeon to repair the tear with remaining defect no greater than 5 mm in diameter
3. Evidence of other significant shoulder pathology including, Type II-IV SLAP lesion, Bankart lesion
4. Active joint or systemic infection
5. Significant muscle paralysis of the shoulder girdle
6. Migration of the humeral head as demonstrated on plain radiograph
7. Major medical illness that would preclude undergoing surgery
8. Patients who are unwilling or unable to be assessed according to study protocol for one year following surgery
9. Major psychiatric illness, developmental handicap or inability to read and understand the English language

**Date of first enrolment**

01/09/2003

**Date of final enrolment**

30/04/2007

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

Canada

**Study participating centre**

Clinical Epidemiology & Biostatistics

Hamilton

Canada

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**Sponsor information****Organisation**

McMaster University (Canada)

**Sponsor details**

Office of the Associate Dean  
Research  
McMaster University  
Faculty of Health Sciences  
1200 Main Street West  
Room HSC-3N8  
Hamilton  
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L8N 3Z5

**Sponsor type**

University/education

**Website**

<http://www.mcmaster.ca/>

**ROR**

<https://ror.org/02fa3aq29>

## Funder(s)

**Funder type**

Research organisation

**Funder Name**

Canadian Institutes of Health Research (CIHR) (Canada) - <http://www.cihr-irsc.gc.ca> (ref: MCT-63140)

## 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?
<a href="#">Results article</a>		01/10/2016	12/04/2021	Yes	No