

# Investigational vertebroplasty efficacy and safety trial: a sham-controlled trial of percutaneous vertebroplasty

<b>Submission date</b> 10/10/2003	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered
<b>Registration date</b> 11/11/2003	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 11/04/2019	<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**  
Dr David Kallmes

**Contact details**  
200 1st Street SW  
SMH MB M-611  
Rochester, MN  
United States of America  
55905  
+1 (0)507 255 1964  
kallmes.david@mayo.edu

## Additional identifiers

**ClinicalTrials.gov (NCT)**  
NCT00068822

**Protocol serial number**  
AR49070-01

## Study information

**Scientific Title**

INvestigational Vertebroplasty Efficacy and Safety Trial: a sham-controlled trial of percutaneous vertebroplasty

**Acronym**

INVEST

**Study objectives**

Vertebroplasty is a procedure used to stabilise broken vertebrae, the bones that form the spine. This study will evaluate the effectiveness of vertebroplasty for the treatment of fractures due to osteoporosis.

**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**

Osteoporosis with painful, crushed or broken vertebra (1 or 2 levels)

**Interventions**

Participants in this study will be randomly assigned to receive either percutaneous vertebroplasty or a sham procedure (placebo control group). Participants may have up to 2 spinal levels treated. Participants will be enrolled in the study for 1 year and will have study visits at entry and Months 1 and 12. There will also be phone visits at Days 1, 2, 3, and 14 and Months 3 and 6. After Month 1, crossover from the placebo group to the vertebroplasty group will be allowed.

**Intervention Type**

Procedure/Surgery

**Primary outcome(s)**

Back-specific functional status using Roland Scale at the one-month time frame.

**Key secondary outcome(s)**

Health status outcome using 36-item Short Form health survey (SF-36).

**Completion date**

01/12/2008

# Eligibility

## Key inclusion criteria

1. Over 50 years old
2. Confirmed osteoporosis or osteopenia
3. Painful vertebral fracture
4. Refractory to medical therapy
5. No previous vertebroplasty or kyphoplasty
6. No infections or immunocompromised patients

## Participant type(s)

Patient

## Healthy volunteers allowed

No

## Age group

Adult

## Sex

All

## Key exclusion criteria

1. Malignant tumour or spinal canal compromise
2. Local or systemic infection
3. Pregnancy
4. Hip fracture

## Date of first enrolment

01/12/2003

## Date of final enrolment

01/12/2008

# Locations

## Countries of recruitment

United States of America

## Study participating centre

200 1st Street SW  
Rochester, MN  
United States of America  
55905

# Sponsor information

## Organisation

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) (National Institutes of Health [NIH]) (USA)

## ROR

<https://ror.org/006zn3t30>

## Funder(s)

### Funder type

Government

### Funder Name

National Institute of Arthritis and Musculoskeletal and Skin Diseases (NIAMS) (National Institutes of Health [NIH]) (USA) (ref: AR49373-01)

### Alternative Name(s)

The National Institute of Arthritis and Musculoskeletal and Skin Diseases, NIH National Institute of Arthritis and Musculoskeletal and Skin Diseases, NIH/National Institute of Arthritis and Musculoskeletal and Skin Diseases, National Institute of Arthritis & Musculoskeletal & Skin Diseases, Instituto Nacional de Artritis y Enfermedades Musculoesqueléticas y de la Piel, NIAMS

### Funding Body Type

Government organisation

### Funding Body Subtype

Research institutes and centers

### Location

United States of America

## 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="#">Results article</a>	results	06/08/2009	11/04/2019	Yes	No
	results				

[Results article](#)  
[Basic results](#)

01/10/2013

11/04/2019

Yes

No

No

No