# British study of Risedronate In Structure and symptoms of Knee osteoarthritis

Submission date	Recruitment status  No longer recruiting	<ul><li>Prospectively registered</li></ul>		
10/02/2005		☐ Protocol		
Registration date 14/02/2005	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	Individual participant data		
19/11/2007	Musculoskeletal Diseases			

## Plain English summary of protocol

Not provided at time of registration

# Contact information

## Type(s)

Scientific

#### Contact name

**Prof Tim Spector** 

#### Contact details

Consultant Rheumatologist Professor of Genetic Epidemiology Twin Research & Genetic Epidemiology Unit St Thomas Hospital London United Kingdom SE1 7EH

# Additional identifiers

Protocol serial number 2000024

# Study information

Scientific Title

**Acronym** 

#### Study objectives

To determine the efficacy and safety of risedronate in patients with knee Osteoarthritis (OA). The British study of Risedronate In Structure and symptoms of Knee osteoarthritis (BRISK), a 1-year prospective, double-blind, placebo-controlled study enrolled patients (40 - 80 years) with mild-to-moderate medial compartment knee OA. The primary aims were to detect differences in symptoms and function. Patients were randomised to once-daily risedronate (5 mg or 15 mg) or placebo.

#### Ethics approval required

Old ethics approval format

## Ethics approval(s)

The subjects gave their written, informed consent before entering the study, which was conducted in accordance with the International Conference on Harmonization (ICH) guidelines for Good Clinical Practice (GCP) and was approved by the UK Multicentre Research Ethical Committee (MREC).

#### Study design

Prospective, double-blind, placebo-controlled study

#### Primary study design

Interventional

#### Study type(s)

**Treatment** 

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

Osteoarthritis (OA)

#### **Interventions**

Patients were randomised to:

- 1. 5 mg of Risedronate
- 2. 15 mg of Risedronate
- 3. Placebo

Patients were treated once daily for one year.

Knee radiographs were performed at baseline and at one year, urine and serum samples were collected at baseline and at months three, six and twelve and the Western Ontario and McMaster Universities OA Index was also performed.

#### Intervention Type

Drug

#### Phase

**Not Specified** 

## Drug/device/biological/vaccine name(s)

Risedronate

#### Primary outcome(s)

The outcome instrument for assessment of OA symptoms was evaluation of risedronate efficacy on symptoms of OA was the Western Ontario and McMaster Universities (WOMAC) OA index. The visual analogue scale (VAS) of the index was used, in which patients assessed each question using a 100 mm scale, with a higher score representing greater symptom severity. The total index score for the signal knee corresponded to the weighted composite of the 24 question scores standardised to a 100 point scale; scores were also determined for the subscales of pain (five questions), stiffness (two questions) and physical function (17 questions).

The outcome measure for assessment of joint structural changes was mean change from baseline in minimum JSW of the medial compartment of the knee. Radiographs of the knee were taken at baseline and at 1 year using a standardised radiographic method with fluoroscopic positioning of the joint in a semi-flexed position.

#### Key secondary outcome(s))

Other symptom outcome measures included a Patient Global Assessment (PGA) of disease, consumption of pain medication and the use of walking aids. For the PGA, patients answered the following question using a VAS: Considering all the ways your OA affects you, how have you been in the last 48 hours? Results for the question were expressed as values on a 0 - 100 mm scale.

#### Completion date

01/01/2004

# **Eligibility**

#### Key inclusion criteria

- 1. Male and female subjects aged 40 80 years
- 2. Mild-to-moderate medial-compartment knee OA
- 3. Diagnosed according to the clinical and radiological criteria of the American College of Rheumatology
- 4. OA in at least one knee, designated as the signal knee, was required to meet the following clinical and radiographic criteria.

#### Clinical inclusion criteria:

- 1. Presence of daily knee pain for at least 1 month out of 3 months prior to the study
- 2. At least one of the following:
- 2.1. Age greater than 50 years old
- 2.2. Morning knee stiffness of less than 30 minutes
- 2.3. Knee crepitus

#### Radiographic criterion for inclusion:

- 1. A Joint-Space Width (JSW) of between 2 4 mm in the medial tibiofemoral compartment in the semi-flexed Anterior-Posterior (AP) view
- 2. A requirement for a narrower width than in the lateral compartment of the same knee
- 3. Patients were also required to have at least one osteophyte in either the medial or lateral compartments of the tibiofemoral joint

#### Participant type(s)

Patient

## Healthy volunteers allowed

No

#### Age group

Adult

#### Sex

All

## Key exclusion criteria

- 1. The presence of rheumatic diseases that could be responsible for secondary OA
- 2. Use of intra-articular hyaluronic acid in the signal knee
- 3. Knee injury or diagnostic arthroscopy of the signal knee in the 6 months prior to enrolment
- 4. History of knee surgery (including arthroscopy requiring an incision of internal joint components) in the signal knee at any time
- 5. Intra-articular corticosteroids in the 3 months preceding enrolment
- 6. The presence of non-OA causes of knee pain in the signal knee (e.g. anserine bursitis, fibromyalgia and osteonecrosis)
- 7. Use of bisphosphonates within 12 months prior to enrolment

#### Date of first enrolment

01/01/2003

#### Date of final enrolment

01/01/2004

# Locations

#### Countries of recruitment

United Kingdom

England

# Study participating centre Consultant Rheumatologist

London United Kingdom SE1 7EH

# Sponsor information

#### Organisation

Procter and Gamble Pharmaceuticals (USA)

**ROR** 

# Funder(s)

# Funder type

Industry

#### Funder Name

Procter and Gamble Pharmaceuticals (USA)

# **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?
Results article	Results	24/03/2005		Yes	No