# Topical or Oral Ibuprofen

Submission date Prospectively registered Recruitment status 25/04/2003 No longer recruiting [X] Protocol [ ] Statistical analysis plan Registration date Overall study status 25/04/2003 Completed [X] Results [ ] Individual participant data Last Edited Condition category 24/08/2009 Musculoskeletal Diseases

### 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 HTA 01/09/02

## Study information

#### Scientific Title

Are topical or oral ibuprofen equally effective for the treatment of chronic knee pain in older people?

### **Acronym**

**TOIB** 

### **Study objectives**

- 1. To ascertain, for older people with knee pain, if oral and topical ibuprofen are equally effective at reducing pain and disability in a randomised controlled trial
- 2. To compare the incidence of adverse effects from oral and topical ibuprofen used to treat older people with knee pain
- 3. To compare the cost effectiveness of oral and topical ibuprofen used for treatment of older people with knee pain
- 4. To compare expected and actual satisfaction with treatment, with effectiveness of oral and topical ibuprofen for older people with knee pain
- 5. To explore how older people's expressed preferences for, and previous use of, oral or topical medication for chronic knee pain influences treatment effectiveness
- 6. To explore older people's beliefs about and expectations of treatments for chronic knee pain

### 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

## Secondary study design

Randomised controlled trial

## Study setting(s)

Hospital

## Study type(s)

Treatment

### Participant information sheet

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

Knee pain

### **Interventions**

The two interventions being compared are the GP's recommendation (either a prescription or advice to get an over-the-counter preparation) to use either topical or oral ibuprofen. For those whose chosen/allocated treatment is oral ibuprofen, practices are asked to use no more than 1.2 g per day. Treatments for knee pain other than NSAIDs may be used as each patient's doctor thinks appropriate.

Participants are sent postal questionnaires three, six, 12 and 24 months after randomisation. One year and two years after randomisation participants are asked to visit the practice to have their blood pressure and respiratory function measured and blood taken for full blood count, serum ferritin, creatinine and liver function tests. The medical records are examined one year after randomisation to identify unplanned hospital admissions, and after two years (or at the end of the study) to collect health service activity data and confirm reported changes in medication and adverse effects.

### Intervention Type

Drug

#### Phase

**Not Specified** 

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

Ibuprofen

### Primary outcome measure

The Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) questionnaire, which measures pain and disability in the preceding 48 hours.

### Secondary outcome measures

- 1. The postal version of the Chronic Pain Grade, which measures pain and disability over the preceding six months
- 2. The Euro Quality of Life questionnaire (EQ-5D), a measure of health-related quality of life
- 3. The 36-item Short Form health survey (SF-36) version 2, a different measure of health related quality of life
- 4. A question assessing satisfaction with treatment

## Overall study start date

01/07/2002

## Completion date

31/08/2006

## **Eligibility**

### Key inclusion criteria

- 1. Aged 50 or over
- 2. Have ever had pain in or around the knee on most days for at least a month and have experienced knee pain for more than three months out of the preceding year
- 3. General Practitioner (GP) consultation, or treatment, for knee pain in the preceding three vears
- 4. Informed consent

- 5. Agreement to use chosen or allocated treatment
- 6. GP agreement to prescribe oral/topical ibuprofen
- 7. Ability to complete postal questionnaires

### Participant type(s)

Patient

### Age group

Senior

### Sex

Both

### Target number of participants

283

### Key exclusion criteria

- 1. Peptic ulceration (past or current)
- 2. Current moderate or severe indigestion
- 3. Previous severe adverse reaction to Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)
- 4. Hypertension (systolic Blood Pressure [BP] of 155 mmHg or more or a diastolic BP of 105 mmHg or more)
- 5. Uncontrolled heart failure
- 6. Creatinine greater than 140 mmol/L
- 7. Abnormal liver function sufficient to contraindicate use of NSAIDs (as liver function tests performed and reference ranges vary between different laboratories, this decision is at the discretion of the participant's GP)
- 8. GP request not to include
- 9. Serious psychological or psychiatric disorders (including dementia)
- 10. Previous knee replacement/s or awaiting knee surgery
- 11. Inflammatory arthropathy
- 12. Pain referred from hip or back
- 13. Serious injury within six months
- 14. Currently on anticoagulants or oral steroids
- 15. Anaemia (Haemoglobin [Hb] less than 12.4 g/L for men or less than 11.8 g/L for women)
- 16. Disseminated malignancy

To meet the American College of Rheumatologists (ACR) clinical criteria for osteoarthritis of the knee, patients need to have knee pain, as defined for this study, and meet three out of the following six criteria:

- 1. Aged over fifty
- 2. Less than 30 minutes morning stiffness
- 3. Crepitus
- 4. Bony tenderness
- 5. Bony enlargement
- 6. No palpable warmth

#### Date of first enrolment

01/07/2002

#### Date of final enrolment

## Locations

### Countries of recruitment

England

**United Kingdom** 

Study participating centre Queen Mary's School of Medicine & Dentistry London United Kingdom E1 2AT

## Sponsor information

## Organisation

Department of Health (UK)

## Sponsor details

Quarry House Quarry Hill Leeds United Kingdom LS2 7UE +44 (0)1132 545 843 Sheila.Greener@doh.gsi.gov.uk

## Sponsor type

Government

### Website

http://www.dh.gov.uk/en/index.htm

### ROR

https://ror.org/03sbpja79

## Funder(s)

## Funder type

Government

### Funder Name

NIHR Health Technology Assessment Programme - HTA (UK)

## **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?
Protocol article	protocol	07/11/2005		Yes	No
Results article	main results publication at	19/01/2008		Yes	No
Other publications	HTA monograph at	01/05/2008		Yes	No
Results article	cost-effectiveness results	01/07/2008		Yes	No