# Efficacy of Aflapin® in the treatment of osteoarthritis of knee

Recruitment status Submission date Prospectively registered 05/09/2009 No longer recruiting [ ] Protocol [ ] Statistical analysis plan Registration date Overall study status 06/04/2010 Completed [X] Results [ ] Individual participant data **Last Edited** Condition category 14/02/2012 Musculoskeletal Diseases

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Amar Anand Vishal

#### Contact details

Department of Orthopaedics ASR Academy of Medical Sciences Eluru India 534 002

# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers 09-002/Aflapin®/OA

# Study information

Scientific Title

Efficacy of Aflapin® in the treatment of osteoarthritis of knee: a randomised, double-blind placebo controlled clinical study

## Study objectives

Aflapin® is an improved novel composition of Boswellia serrata extract standardised to 30% 3-O-acetyl-11-keto-beta-boswellic acid (BE-30). Pre-clinical studies demonstrate that Aflapin® is up to 25% more bioavailable than BE-30. Therefore, we hypothesise that Aflapin® would provide faster relief form clinical symptoms of osteoarthritis (OA).

Results of a related study with BE-30 against osteoarthritis can be found at: http://www.ncbi.nlm.nih.gov/pubmed/18667054 (this trial is registered with ISRCTN05212803).

## Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Institutional Review Board (IRB) of Alluri Sitarama Raju Academy of Medical Sciences (ASRAM) approved on the 1st August 2009.

#### Study design

Randomised placebo-controlled trial

#### Primary study design

Interventional

## Secondary study design

Randomised controlled trial

# 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

Osteoarthritis

#### Interventions

60 subjects randomised into 2 groups (n = 30):

- 1. Aflapin® (oral) 50 mg twice daily (bid)
- 2. Placebo

Ibuprofen will be used as a rescue medication for both groups. The study duration is 30 days and evaluations will be at baseline, 5, 15 and 30 days.

#### Intervention Type

Drug

#### Phase

**Not Specified** 

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

**Aflapin®** 

#### Primary outcome measure

- 1. Pain, assessed by VAS
- 2. LFI
- 3. Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC)-pain, WOMAC-stiffness and WOMAC-physical ability

Measured at baseline, 5, 15 and 30 days of the study.

#### Secondary outcome measures

- 1. Tumor necrosis factor alpha (TNFa)
- 2. C-reactive protein (CRP)
- 3. Matrix metelloproteinase-3 (MMP-3)

Measured at baseline, 5, 15 and 30 days of the study.

#### Overall study start date

01/09/2009

#### Completion date

01/11/2009

# **Eligibility**

#### Key inclusion criteria

- 1. Participants must understand risks and benefits of the protocol and able to give informed consent
- 2. Male and female subjects of 40 80 years of age
- 3. Females of child bearing potential must agree to use an approved form of birth control and have a negative pregnancy test result
- 4. Unilateral or bilateral OA of the knee for more than 3 months
- 5. Visual Analogue Scale (VAS) score during the most painful knee movement between 40 70 mm after 7 day withdrawal of usual medication
- 6. Lequesne's Functional Index (LFI) score greater than 7 points after 7 days of withdrawal of usual medication
- 7. Ability to walk
- 8. Availability for the duration of the entire study period

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Sex

Both

# Target number of participants

Sixty (60)

#### Key exclusion criteria

- 1. History of underlying inflammatory arthropathy or severe rheumatoid arthritis (RA)
- 2. Hyperuricemia (greater than 440 umol/L) and/or past history of gout
- 3. Recent injury in the area affected by OA of the knee (past 4 months) and expectation of surgery in the next 4 months
- 4. Intra-articular corticosteroid injections within the last 3 months
- 5. Hypersensitivity to non-steroidal anti-inflammatory drugs (NSAIDs), abnormal liver or kidney function tests, history of peptic ulceration and upper gastrointestinal (GI) haemorrhage, congestive heart failure, hypertension, hyperkalemia
- 6. Major abnormal findings on complete blood count, history of coagulopathies, haematological or neurological disorders
- 7. High alcohol intake (greater than 2 standard drinks per day)
- 8. Pregnant, breastfeeding or planning to become pregnant during the study
- 9. Use of concomitant prohibited medication other than ibuprofen
- 10. Obesity: body mass index (BMI) more than 30 kg/m^2

#### Date of first enrolment

01/09/2009

#### Date of final enrolment

01/11/2009

# Locations

## Countries of recruitment

India

# Study participating centre Department of Orthopaedics

Eluru India 534 002

# Sponsor information

#### Organisation

Laila Impex R&D Center (India)

#### Sponsor details

Unit 1 Phase III Jawahar Autonagar Vijayawada India 520007

## Sponsor type

Industry

#### Website

http://lailaimpex.tradeindia.com/

#### **ROR**

https://ror.org/05q6g7072

# Funder(s)

## Funder type

Industry

#### **Funder Name**

Laila Impex R&D Center (India)

# **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?
Results article	results	01/11/2011		Yes	No