# Intra-articular hyaluronic acid and chondroitin sulfate in osteoarthritis of the knee

Submission date	Recruitment status	Prospectively registered
16/12/2011	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
04/04/2012	Completed	[X] Results
<b>Last Edited</b> 13/10/2016	<b>Condition category</b> Musculoskeletal Diseases	Individual participant data

#### Plain English summary of protocol

Background and study aims

Osteoarthritis is a condition that causes joints to become painful and stiff. In the treatment of osteoarthritis, it is now agreed that surgical procedures should be at least delayed, and even avoided as far as possible. Hyaluronic acid is found in the synovial fluid in joints and acts as both a lubricant and shock absorber. Hyaluronic acid can be injected into the joint (intra-articular injections) to improve joint lubrication. Structovial CS is the only one of the currently available solutions to treat knee osteoarthritis that combines chondroitin sulphate and hyaluronic acid (HA /CS). Chondroitin sulfate is a chemical that is normally found in cartilage around joints in the body. The aim of this study is to assess the effectiveness of three weekly intra-articular injections of HA/CS in knees affected by osteoarthritis.

Who can participate?

Patients aged between 45 and 80 with osteoarthritis of the knee

What does the study involve?

All participants receive three intra-articular injections of HA/CS over a 3-week period. Pain and knee function are assessed over a period of 12 weeks.

What are the possible benefits and risks of participating?

HA/CS may improve participants' health and physical function. There are no known risks to participants.

Where is the study run from?

The study takes place at various rheumatological clinics at hospitals and at private centres in France and Belgium

When is the study starting and how long is it expected to run for? March to October 2008

Who is funding the study? Pierre Fabre Research Institute (France)

# Contact information

#### Type(s)

Scientific

#### Contact name

**Prof Thierry Appelboom** 

#### Contact details

Erasme Hospital Ethics Committee University Libre of Bruxelles [Le Comite dEthique Hopital Erasme] 808 Route de Lennik Brussels Belgium 1070

# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

V00220 IA 402

# Study information

#### Scientific Title

Evaluation of a medical device comprising hyaluronic acid and chondroitin sulfate for intraarticular use in patients suffering from femorotibial osteoarthritis of the knee

# Study objectives

Evaluate the efficacy of three weekly intra-articular injections of hyaluronic acid/chondroitin sulfate in knees affected by femoro-tibial osteoarthritis over a period of 12 weeks

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Erasme Hospital Ethics Committee, University Libre of Bruxelles, Belgium [Le Comite dEthique Hopital Erasme], 20/12/2007

# Study design

Single-center open-label phase IV study

#### Primary study design

Interventional

#### Secondary study design

Non randomised study

#### Study setting(s)

Hospital

#### Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

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

Osteoarthritis of the knee

#### **Interventions**

Three weekly intra-articular injections of HA/CS in knees affected by femoro-tibial osteoarthritis over a 3 week period

#### Intervention Type

Drug

#### Phase

Phase IV

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

Chondroitin sulphate, hyaluronic acid

#### Primary outcome measure

Pain (VAS) and function (Lequesnes Algo-Functional Knee Index) over a period of 12 weeks

# Secondary outcome measures

- 1. Ultrasound parameters (joint effusion, synovial and popliteal cysts)
- 2. OA biomarkers of inflammation [IL-6], degradation [Coll2-1] and synthesis [CPII] of collagen type II, degradation of aggrecan [CS846], and markers of oxidative stress [Coll2-1NO2]

# Overall study start date

10/03/2008

#### Completion date

13/10/2008

# **Eligibility**

#### Key inclusion criteria

- 1. Male or female patients aged between 45 and and 80 years
- 2. Suffering from internal and/or external femoro tibial OA:
- 2.1. Meeting the criteria of the American College of Rheumatology (ACR)
- 2.2. Lasting for at least 6 months
- 2.3. Pain > = 40mm as measured on a visual analogue scale (VAS)
- 2.4. Stage Kellgren and Lawrence II or III
- 3. OA deemed to justify a treatment with intra articular HA according to the investigator
- 4. Patients written informed consent

#### Participant type(s)

Patient

#### Age group

Adult

#### Sex

Both

#### Target number of participants

30

#### Key exclusion criteria

- 1. Symptomatic femoro-patellar arthrosis or hip arthrosis on the same side, concomitant skeletal disease (Paget disease, rheumatoid arthritis, ankylosing spondylitis)
- 2. Former or concomitant treatment (intra-articular corticosteroids, topical or oral NSAIDs, anti-arthritis slow acting treatment, recent surgery)
- 3. Individual characteristics incompatible with a drug trial (pregnancy or lack of contraception, serious concomitant disease, participation in a clinical trial within the preceding 30 days)

#### Date of first enrolment

10/03/2008

#### Date of final enrolment

13/10/2008

# Locations

#### Countries of recruitment

Belgium

### Study participating centre Erasme Hospital Ethics Committee

Brussels Belgium 1070

# Sponsor information

#### Organisation

Pierre Fabre Research Institute [Institut de Recherche Pierre Fabre] (France)

#### Sponsor details

3 Avenue Hubert Curien Toulouse France 31035

#### Sponsor type

Research organisation

#### Website

http://www.pierre-fabre.com/

#### **ROR**

https://ror.org/04hdhz511

# Funder(s)

## Funder type

Industry

#### **Funder Name**

Pierre Fabre Research Institute (France)

# **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 04/08/2012 Yes

No