ISRCTN12525856 https://doi.org/10.1186/ISRCTN12525856

Multicenter, open-label trial of intra-articular injections of HADD®4-G into the glenohumeral articular space for the treatment of chronic painful shoulder with limitation of motion due to glenohumeral joint osteoarthritis

Submission date
25/02/2015

Recruitment status
No longer recruiting

Registration date
17/04/2015

Overall study status
Completed

Last Edited
08/04/2015

Condition category
Musculoskeletal Diseases

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

Plain English summary of protocol

Background and study aims
Osteoarthritis is a condition that causes the joints to become painful and stiff. HYMOVIS injections are approved in Europe for the treatment of pain in osteoarthritic joints and for the improvement of joint mobility. The aim of this study is to evaluate the feasibility, safety and effectiveness of HYMOVIS in patients with chronic painful shoulder with limitation of motion due to osteoarthritis.

Who can participate?
Patients aged 45 or older with chronic shoulder pain due to osteoarthritis.

What does the study involve?
Each participant will receive two injections. The first injection will be administered at the first visit and the second injection at the second visit in the following week. Participants will be evaluated before the first injection, and at three visits after the last injection (on Weeks 13, 17, 26). Rescue medication for pain, on demand and if allowed by the protocol, can be prescribed by the Investigator. Patients will not be allowed to take rescue medication within the 24 hours of the first visit and before any other subsequent clinical visit.

What are the possible benefits and risks of participating?
It is possible that the patient will benefit from a reduction in pain perceived during activity or at night, and an improvement in joint functionality and quality of life. The possible risks related to the clinical treatment are local undesirable effects such as pain, swelling/effusion, warmth and redness that may occur at the injection site. Such symptoms are usually mild and transient.

Where is the study run from?
IRCCS, Istituto Clinico Humanitas and Azienda Unità Sanitaria Locale di Rimini (Italy).

When is the study starting and how long is it expected to run for?
From October 2010 to February 2013.

Who is funding the study?
Fidia Farmaceutici S.p.A. (Italy).

Who is the main contact?
Nicola Giordan
ngiordan@fidiapharma.it

Contact information

Type(s)
Scientific

Contact name
Ms Nicola Giordan

ORCID ID
http://orcid.org/0000-0003-3104-800X

Contact details
Via Ponte della Fabbrica 3/A
Abano Terme (Padua)
Italy
35031
+39 (0)49 8232512
ngiordan@fidiapharma.it

Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers
R29-10-02

Study information

Scientific Title
Open-label trial of intra-articular injections of Hymovis nto the glenohumeral articular space for the treatment of chronic painful shoulder with limitation of motion due to glenohumeral joint osteoarthritis

Study objectives

Determine if two ultrasound-guided i.a. injections of Hymovis provide a significant reduction in pain during activity (using Visual Analogue Scale [VAS] 100 mm pain scale) up to 6 months from baseline in patient with OA of the shoulder (glenohumeral joint).

Ethics approval required
Old ethics approval format

Ethics approval(s)
As per Italian law, ethics approval has been obtained by two ethic committees:
1. Comitato Etico Indipendente; Istituto Clinico Humanitas - IRCCS, 04/05/2010, Prot. CE ICH - 76 /10
2. Comitato Etico di Area Vasta Romagna e I.R.S.T., 25/08/2010, Prot. 2640/2010_1.5/256

Study design
Prospective multi-centre open-label Phase III clinical study

Primary study design
Interventional

Secondary study design
Non randomised study

Study setting(s)
Hospital

Study type(s)
Treatment

Participant information sheet

Health condition(s) or problem(s) studied
Glenohumeral osteoarthritis

Interventions
Hymovis (8 mg/mL) approved in the European Economic Area (2009): two ultrasound-guided intra-articular injections of HYMOVIS 3 mL (8 mg/ml), first inj. Day 0, second injection Day 7

Intervention Type
Drug

Phase
Phase III

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

Primary outcome measure

The primary study objective in patients with chronic painful shoulder is to determine if two ultrasound-guided i.a. injections of Hymovis provide a significant reduction in pain during activity (using Visual Analogue Scale [VAS] 100 mm pain scale) up to 6 months from baseline in patient with OA of the shoulder (glenohumeral joint)

Secondary outcome measures
The secondary study objectives in patients with chronic painful shoulder due to OA are to determine if two ultrasound-guided i.a. injections of Hymovis:
1. Provide a reduction in pain perceived during the night up to 6 months from baseline
2. Provide an improvement of patient's quality of life up to 6 months from baseline
3. Provide an improvement in shoulder functionality up to 6 months from baseline
4. Provide a reduction in rescue medication intake up to 6 months from baseline
5. Provide an improvement in patient's status assessed by the physician (COGA) and the patient (PTGA) up to 6 months from baseline
6. Furthermore, as a secondary objective, the local and general safety of the treatment will be assessed

Overall study start date
22/10/2010

Completion date
15/02/2013

Eligibility

Key inclusion criteria
1. Male or female aged 45 years or older
2. Patient with chronic shoulder pain (due to OA). Chronic shoulder pain is defined as follows:
2.1. Persistence for a period of at least 6 months, but not greater than 5 years
2.2. Perceived by the patient with a frequency of at least 50% of the days in the month preceding the inclusion visit
3. Kellgren-Lawrence Grade 2 or 3 of glenohumeral joint confirmed by a X-ray performed within 3 months from the inclusion visit
4. Evidence of glenohumeral concentricity
5. At baseline, pain during activity of the target shoulder measured by VAS presenting a score included between 40 and 80 mm
6. At baseline, VAS pain of the contralateral shoulder needs to be at least 10 mm less than the target joint and no more than 40 mm
7. At inclusion, patient with a limitation of shoulder motion in at least one direction for the following active range of motions:
7.1. Abduction with scapula fixed must be ≤ 80°
7.2. Internal rotation in abduction must be ≤ 55°
7.3. External rotation in abduction must be ≤ 80°
These limitations of the shoulder are in comparison to normal expected ranges
8. Patient who failed to adequately respond to conservative non-pharmacologic therapy and simple analgesic intake
9. Willing and able to understand and sign an approved Informed Consent form
10. No pregnancy, nor breastfeeding. Females of childbearing potential (including those less than 1 year post-menopausal) must agree to maintain reliable birth control throughout the study

Participant type(s)
Patient

Age group
Adult

Sex
Both

Target number of participants
50

Key exclusion criteria
1. Presence of adhesive capsulitis by clinical evaluation
2. Evidence of rotator cuff lesions
3. Presence of primary extra-articular shoulder syndromes (e.g. impingement, bursitis, tendinitis)
4. Detection of clinically significant shoulder joint deformities
5. Shoulder X-ray findings of acute fractures, severe loss of bone density and/or severe deformity
6. Diagnosis of Calcium Pyrophosphate Dihydrate Crystal Deposition Disease (CPPD) or Chondrocalcinosis of the shoulder
7. Presence of cervical spine disorder (that could confound the clinical assessment) that have been symptomatic and required active treatment within the past 3 months from inclusion
8. Presence of any active musculoskeletal disease that could confound the diagnosis/evaluation of the painful shoulder, or any neurological ethiology of the pain and any acute infection of the joint
9. Presence of any major surgery, arthroplasty or arthroscopy in the target shoulder within 6 months of inclusion/or planned surgery within the duration of the study
10. Patient in treatment with local radiotherapy for breast cancer
11. Patient with rheumatic polymyalgia
12. Prior history of any malignancy (with the exception of basal cell carcinoma) of the skin treated less than 2 years ago
13. Medical history of recurrent severe allergic or immune-mediated reactions
14. Presence of infections and/or skin diseases in the area of the injection site; psoriasis
15. Presence of serious gastrointestinal, renal, hepatic, pulmonary, cardiovascular, neurological disease that might interfere with the outcome of the study or the patient’s incapacity to comply with study requirements
16. Known or suspected allergic reactions to hyaluronate preparations or paracetamol
17. Assumption of i.a. HA products, within 1 month prior to the inclusion visit
18. Assumption of bisphosphonates, and/or oral pharmaceutical products containing glucosamine and/or chondroitin sulphate and/or diacerein (e.g., Chondrosulf, Structum 500, Dona, Viatril, Fisiodar, Artrodar etc.) within 1 month prior to the inclusion visit unless on a stable dose for at least 2 months at inclusion visit
19. i.a. corticosteroid injections to the target joint in the 3 months prior to inclusion visit
20. i.a. corticosteroid injections to any other joint in the month prior to inclusion visit
21. Assumption of oral corticosteroid in the month prior to the inclusion visit (inhalator corticosteroid is allowed only)
22. Prior use of HA in the target shoulder joint in the 6 months prior to inclusion
23. Changes in the physical therapy in the month preceding the inclusion visit or unwillingness to maintain stable regimen
24. Patient with history of thyroid insufficiency
25. Patient under treatment with anticoagulant drugs

26. Patient under treatment with phenobarbital prior to inclusion in the study
27. Assumption of analgesic drug (NSAIDs, opioid analgesics, topical analgesics) for any other condition that may interfere with the evaluation of the target shoulder
28. Assumption of any other 'investigational' product within 1 month prior to the inclusion visit
29. Patient who, in the judgement of the clinical investigator, are likely to be non-compliant or uncooperative during the study
30. Female who is pregnant or breastfeeding or not using recognised contraceptive measures

Date of first enrolment
22/10/2010

Date of final enrolment
31/07/2012

Locations

Countries of recruitment
Italy

Study participating centre
IRCCS, Istituto Clinico Humanitas
Italy

Study participating centre
Azienda Unità Sanitaria Locale di Rimini
Italy

Sponsor information

Organisation
Fidia Farmaceutici S.p.A.

Sponsor details
Via Ponte della Fabbrica 3/A
Abano Terme (Padua)
Italy
35031

Sponsor type
Industry

ROR
https://ror.org/00dy5wm60

Funder(s)

Funder type
Industry

Funder Name
Fidia Farmaceutici S.p.A. (Italy)

Results and Publications

Publication and dissemination plan
We’re looking to submit the trial results for publication as soon as the registration is completed.

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Available on request