# Adalimumab in low back pain

Submission	Recruitment	Retrospectively registered
<b>date</b> 01/09/2016	<b>status</b> No longer	? Protocol not yet added
Registration	recruiting	? SAP not yet added
<b>date</b> 21/09/2016	Overall study 9/2016 status Completed	Results not yet added and study completed for more than 2 years
Last Edited		? Raw data not yet added
29/05/2020	Condition category Signs and	Study completed
	Symptoms	

## **Plain English Summary**

Background and study aims

Lower back pain is a common problem, which affects most people at some point in their lives. Many people who experience LBP will recover quickly with no significant impact to their lives, but for some people the pain turns into a long term condition which can affect their ability to work. When a sufferer experiences episodes which last for at least three months, it is known as chronic lower back pain (CLBP). For some patients, their CLBP is caused by inflammation (swelling) in the vertebrae (small bones which make up the spite). Adalimumab is a medication used in patients with inflammatory conditions such as arthritis, as it works by reducing inflammation. The aim of this study is to investigate the effectiveness of treating patients who have CLBP caused by inflammation with adalimumab.

## Who can participate?

Adults with CLBP which is caused by inflammation.

## What does the study involve?

All participants receive a subcutaneous injection (injection under the skin) of 40mg Adalimumab every other week for 12 weeks. During this time, and for two weeks after the end of treatment, participants are askedto keep a record of any pain medication they take, which is reviewed at the start of the study, each time they have an injection and two weeks after the end of treatment. At the start of the study and then after 12 weeks, participants complete a number of questionnaires to assess their pain levels and disability. In addition, participants also have an MRI scan at the start of the study and after 12 weeks to measure the swelling (inflammation) in their spine).

What are the possible benefits and risks of participating?

Participants may benefit from a reduction in pain and disability. There is a small risk that participants may be more vulnerable to developing an infection while taking the study drug.

Where is the study run from?

- 1. University Hospital of Geneva (Switzerland)
- 2. HFR- Fribourg Cantonal Hospital (Switzerland)

When is the study starting and how long is it expected to run for? July 2010 to January 2015

Who is funding the study?

- 1. University Hospital of Geneva (Switzerland)
- 2. AbbVie (USA)

Who is the main contact? Dr Stéphane Genevay stephane.genevay@hcuge.ch

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Stéphane Genevay

#### **ORCID ID**

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#### Contact details

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# Additional identifiers

EudraCT/CTIS number

**IRAS** number

ClinicalTrials.gov number

Protocol/serial number

CE 10 139

# Study information

Scientific Title

Anti-TNF treatment in patients with chronic low back pain associated with Modic I changes: An exploratory trial

## Study hypothesis

Adalimumab could be a potential treatment for low back pain patient with Modic I endplate changes.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

- 1. Ethical committee of Geneva University Hospital, 09/11/2011, ref: 10-139
- 2. Swissmedic, 16/12/2011, ref: 2011DR2213

## Study design

Pilot one-arm non-randomised 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 below to request a patient information sheet

#### Condition

Chronic low back pain patient with inflammatory pain pattern and Modic I endplate changes

#### **Interventions**

All patients receive a subcutaneous injection of Adalimumab 40mg every other week for 12 weeks.

Participants are asked to keep a pain medication diary from baseline until 2 weeks after the intervention, which is reviewed at baseline and then every 2 weeks until the final follow up 2 weeks after the intervention ends. Participants complete follow up questionnaires and undergo MRI scanning at 12 weeks.

#### Intervention Type

Drug

#### Phase

Phase IV

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

Adalimumab (Humira)

#### Primary outcome measure

Pain is measured using a numerical rating scale (NRS) and the Roland Disability Questionnaire (RDQ) at baseline and 12 weeks.

#### Secondary outcome measures

- 1. Morning stiffness is measured using a numerical rating scale (NRS) at baseline and 12 weeks
- 2. Quality of sleep is measured using a numerical rating scale (NRS) at baseline and 12 weeks
- 3. Patient Global Improvement is measured using a numerical rating scale (NRS) at baseline and 12 weeks
- 4. Function is measured using Bath Ankylosing Spondilitis disease activity index (BASDAI) at baseline and 12 weeks
- 5. Health related quality of life is measured using the EuroQol-5 dimensions (EQ-5D) at baseline and 12 weeks
- 6. Pain medication taken is measured using the Pain Medication Diary at baseline and then every 2 weeks until 2 weeks post-intervention
- 7. Duration of sick listing is measured by questionnaire at baseline and 2 weeks post-intervention
- 8. Size of bone oedema is measured using MRI (Modic I) at baseline and 12 weeks

## Overall study start date

07/07/2010

## Overall study end date

23/01/2015

# Eligibility

## Participant inclusion criteria

- 1. Age 18-65 years
- 2. Signed Informed Consent
- 3. Common low back pain
- 4. The presence of 2 out of 3 of the following points, indicating inflammatory back pain:
- 4.1. Insidious onset
- 4.2. Morning stiffness
- 4.3. Improvement with exercise
- 5. Continuous pain for more than 3 months
- 6. Failure of at least one full course of non steroidal anti-inflammatory drug
- 7. Pain > 3/10 on a 0 to 10 numeric rating scale over the last 24 hours
- 8. At least one Modic I modification on lumbar MRI

## Participant type(s)

Patient

#### Age group

Adult

## Lower age limit

## Upper age limit

65 Years

#### Sex

Both

# Target number of participants

25

#### Participant exclusion criteria

- 1. A diagnosis of spondylarthropathy following standard definition
- 2. Either: Presence of sacroillitis on imaging
- or At least 2 of the following

Inflammatory Bowel Disease, Arthritis, Enthesitis, Dactylitis, Uveitis, Psoriasis, Family history of spondylarthropathy, Elevated CRP or sedimentation rate

- 3. Radicular pain related to disc herniation
- 4. Neurogenic claudication related to lumbar stenosis
- 5. Comorbidities impairing with the evaluation of pain or function
- 6. Concomitant infection
- 6.1. In case of tuberculosis (positive TBspot) at least one month of antituberculosis treatment is required before considering inclusion
- 6.2. Active Hepatitis B infection (screening for active HBV infection will be performed)
- 7. Women of child-bearing age refusing to use contraceptive measure during the study, Pregnancy (pregnancy test will be performed before inclusion), breastfeeding
- 8. Heart failure (NYHA III and IV)
- 9. Current treatment with corticosteroids
- 10. Prior exposure to anti-TNF agents, including adalimumab
- 11. Inability to comply with the protocol requirements
- 12. Past history of cancer
- 13. Demyelinating diseases
- 14. Allergy to adalimumab or one of its components
- 15. Unable to read and understand the questionnaires (in French)
- 16. Poor motivation or other emotional or intellectual problems that are likely to limit the ability of the patient to comply with the protocol requirements

#### Recruitment start date

02/06/2013

#### Recruitment end date

24/10/2014

# Locations

#### Countries of recruitment

Switzerland

# Study participating centre

## **University Hospital of Geneva**

Division of Rheumatology Geneva Switzerland 1211

# Study participating centre HFR- Fribourg Cantonal Hospital

Department of Rheumatology, Physical Medicine and Rehabilitation Fribourg Switzerland 1708

# Sponsor information

## Organisation

University Hospital of Geneva

## Sponsor details

Perret-Gentil 4 Geneva Switzerland 1211

#### Sponsor type

Hospital/treatment centre

#### Website

http://www.hug-ge.ch/

#### **ROR**

https://ror.org/01m1pv723

# Funder(s)

# Funder type

Hospital/treatment centre

#### Funder Name

University Hospital of Geneva

#### Funder Name

AbbVie

# Alternative Name(s)

AbbVie Inc., AbbVie U.S., AbbVie US, Allergan

## **Funding Body Type**

Government organisation

# Funding Body Subtype

For-profit companies (industry)

#### Location

United States of America

# **Results and Publications**

# Publication and dissemination plan

Results will be presented in rheumatology and back pain congress. They will then be published in peer-reviewed journals.

Intention to publish date

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Available on request