

# Autologous conditioned serum (Orthokine®) compared with hyaluronic acid and placebo injections for the treatment of osteoarthritis. A prospective, randomized, placebo-controlled, double-blind, parallel-design, multicenter trial.

<b>Submission date</b> 13/09/2005	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 19/10/2005	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 21/03/2012	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

## Secondary identifying numbers

1

# Study information

## Scientific Title

### Acronym

Orthokine Osteoarthritis Trial

### Study objectives

We tested the hypothesis that there are no significant differences between intra-articular injections with either autologous conditioned serum (ACS), hyaluronic acid (HA) and placebo in terms of pain relief or improvement in function or life quality, as determined by validated scoring systems.

### 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

Multi-centre

### Study setting(s)

Not specified

### Study type(s)

Treatment

## Participant information sheet

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

Osteoarthritis of the knee.

### Interventions

To compare the efficiency and safety of intra-articular injections of ACS (Orthokine®), HA (Hya-Ject®) and placebo (saline) in patients with unilateral knee osteoarthritis.

### Intervention Type

Drug

**Phase**

Not Specified

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

Autologous conditioned serum (Orthokine®), hyaluronic acid

**Primary outcome measure**

The primary efficacy parameters were the mean changes from baseline in the global Western Ontario MacMaster (WOMAC) score, weight-bearing pain using a visual analogue pain scale (VAS) and global patient assessment (GPA) at weeks 13 and 26.

**Secondary outcome measures**

Secondary endpoints were the success of therapies measured according to the changes in the different health-related quality-of-life profiles in the SF-8 with regard to baseline scores during the 26 weeks, the changes in the global patient assessment after 7 and 13 weeks and changes on the WOMAC score and the VAS pain score after 7 weeks. In addition the number of adverse events and serious adverse events was used to compare the safety profile of the three treatments groups.

**Overall study start date**

01/10/2003

**Completion date**

01/10/2005

**Eligibility****Key inclusion criteria**

1. Age: over 30 years old
2. Chronic knee pain for at least 3 months measured according to American College of Rheumatology (ACR) criteria (Altman, Asch, et al. 1986)
3. X-ray signs of uni- or bi-lateral osteoarthritis of the knee joint (Kellgren 2 or 3; Ravaud & Dougados 1997)
4. Signed written informed consent
5. At least pain grade 5 (measured on a visual analogue pain scale 0-10)

**Participant type(s)**

Patient

**Age group**

Adult

**Sex**

Both

**Target number of participants**

400

**Key exclusion criteria**

**Pathologies:**

1. Systemic disease of the musculoskeletal system
2. Bone cancer, metastasis or tumor-like lesions in the immediate proximity to the treated joint
3. Fracture in the last 3 months
4. Acute bacterial infection of the knee to be treated
5. Conditions, internal or oncological, which impair the patients general fitness (performance status [PS] >2; New York Heart Association [NYHA] >II)
6. Blood clotting disorders
7. Osteonecrosis of the knee to be treated

**Treatment:**

1. Treatment of the affected knee due to osteoarthritis with one of the three study medications in the last 6 months
2. Present psychiatric disease requiring therapy
3. Ongoing corticoid therapy

**Other:**

1. Operation on the affected knee within the last 3 months
2. Pregnant or breast-feeding patients
3. Drug dependency (alcohol, analgesics, opiates, etc.)
4. Lack of mental ability to understand the study procedures due to lack of optimal communication capacity (knowledge of the language, dementia, lack of time)

**Date of first enrolment**

01/10/2003

**Date of final enrolment**

01/10/2005

## **Locations**

**Countries of recruitment**

Germany

**Study participating centre**

Koenigsallee 53-55

Duesseldorf

Germany

40212

## **Sponsor information**

**Organisation**

Orthogen (Germany)

**Sponsor details**

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**Sponsor type**

Industry

**Website**

<http://www.orthogen.com>

**ROR**

<https://ror.org/01qwfvp91>

## Funder(s)

**Funder type**

Hospital/treatment centre

**Funder Name**

Department of Orthopedics, University Hospital Düsseldorf

## 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?
<a href="#">Results article</a>		01/06/2003		Yes	No
<a href="#">Results article</a>	results	01/10/2003		Yes	No
<a href="#">Results article</a>	results	01/02/2009		Yes	No