

# Clinical trial to evaluate the safety and efficacy of a diclofenac epolamine (DHEP) plaster in minor soft tissue injuries

<b>Submission date</b> 04/03/2013	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 19/03/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 19/03/2013	<b>Condition category</b> Injury, Occupational Diseases, Poisoning	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

A DHEP medicated plaster contains 180 mg of a diclofenac salt, named diclofenac epolamine or DHEP, and it allows a continuous release of the drug from the plaster during the application period. This plaster has been marketed by many years in Europe and USA for the local treatment of pain and inflammation of traumatic and rheumatic origin. Our goal was to demonstrate how well the DHEP plaster works for the treatment of minor soft tissue injuries in the Chinese population.

### Who can participate?

Adult male and female patients (18-65 years) with a minor soft tissue injury, such as ankle or knee joint sprain, muscle strain or contusion, which has occurred within the last 72 hours.

### What does the study involve?

Participants were randomly allocated to one of two groups. One group of patients applied two DHEP plasters per day, each for 12 hours, for 7 days. The other group applied a placebo (dummy) plaster instead. During the study the severity of pain was measured using an established scale. The safety was also assessed by blood and urinalysis at the beginning and at the end of the study.

### What are the possible benefits and risks of participating?

The participants who received the DHEP plaster can expect an improvement of their pain symptoms. The most common side effects seen with DHEP plasters are skin reactions (including itching, inflamed skin, burning) at the site of treatment.

### Where is the study run from?

From 10 medical centres in China, with Peking University First Hospital in Beijing as lead centre.

### When is the study starting and how long is it expected to run for?

The study started in April 2010 and ended in November 2010 when the required number of 384 patients (192 for each group) was recruited and treated.

Who is funding the study?  
IBSA Institut Biochimique (Switzerland)

Who is the main contact?  
Dr Chunde Li  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Chunde Li

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
09RC-Fp14

## Study information

**Scientific Title**  
A multicentre, randomised, double-blind, placebo-controlled confirmatory clinical trial of the efficacy and safety of diclofenac epolamine medicated plaster in the treatment of minor soft tissue injuries

**Study objectives**  
To evaluate the efficacy and safety of DHEP medicated plaster for the treatment of minor soft tissue injury when compared to placebo.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**

Ethics Committee of Peking University First Hospital (China), 17 March 2010, Approval number: 2009L00819

### **Study design**

Multicenter double-blind placebo-controlled randomized confirmatory phase III study

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **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

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

Minor soft tissue injuries, such as ankle or knee joint sprains, muscle strains or contusions

### **Interventions**

Patients were randomised to receive either

1. DHEP medicated plaster (Flector®; IBSA Institut Biochimique SA): twice daily (morning and evening, every 12 hours) for 7 days
2. Placebo plaster: twice daily (morning and evening, every 12 hours) for 7 days

### **Intervention Type**

Drug

### **Phase**

Phase III

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

Diclofenac epolamine

### **Primary outcome measure**

Reduction in pain on movement (VAS score) at the end of treatment (Day 7), as compared to pre-treatment scores

### **Secondary outcome measures**

1. Pain on movement day-by-day evaluation (VAS score)
2. Summed pain intensity difference (SPID)
3. Rescue medication consumption (paracetamol)
4. Overall treatment efficacy as judged by patient and Investigator
5. Compliance to treatment
6. Overall treatment tolerability as judged by patient and Investigator

- 7. Adverse events
- 8. Pre-/post-treatment changes in haematology, blood chemistry, urinalysis or ECG tests

**Overall study start date**

01/04/2010

**Completion date**

30/11/2010

## Eligibility

**Key inclusion criteria**

- 1. Outpatients and emergency patients of both gender
- 2. Aged between 18 and 65 years
- 3. With a minor soft tissue injury occurred within the past 72 hours
- 4. With pain on movement greater than or equal to 50 mm on VAS

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

384

**Key exclusion criteria**

- 1. Severe injuries requiring orthopaedic, surgical or physiotherapeutic treatment
- 2. Open skin lesion or any dermatological condition at treated site
- 3. Administration of any topical medication within the past 24 hours
- 4. Administration of OTC analgesic or NSAIDs within the past 36-48 hours
- 5. Administration of long-acting NSAIDs within the past 72 hours
- 6. Administration of narcotic analgesics within the past 7 days
- 7. Administration of systemic anti-inflammatory steroidal drugs within the past 60 days

**Date of first enrolment**

01/04/2010

**Date of final enrolment**

30/11/2010

## Locations

**Countries of recruitment**

China

**Study participating centre**  
**Department of Orthopaedics**  
Beijing  
China  
100034

## Sponsor information

**Organisation**  
Institut Biochimique SA (IBSA) (Switzerland)

**Sponsor details**  
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**Sponsor type**  
Industry

**Website**  
<http://www.ibsa-international.com/>

**ROR**  
<https://ror.org/051tj3a26>

## Funder(s)

**Funder type**  
Industry

**Funder Name**  
IBSA Institut Biochimique SA (Switzerland)

## 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