# Vasodilators in cold type Complex Regional Pain Syndrome

Submission date	Recruitment status  No longer recruiting	Prospectively registered		
14/02/2006		☐ Protocol		
Registration date 14/02/2006	Overall study status Completed Condition category	Statistical analysis plan		
		[X] Results		
Last Edited		[] Individual participant data		
08/09/2011	Musculoskeletal Diseases			

### Plain English summary of protocol

Not provided at time of registration

### Contact information

### Type(s)

Scientific

#### Contact name

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### Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

**NTR571** 

### Study information

### Scientific Title

### **Acronym**

VasCoTyC study

### Study objectives

Nitric oxide dependent and independent vasodilation in patients with disused, cold type CRPS, will regenerate blood tissue distribution and consequently improve mobility and quality of life factors.

### 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

Randomised controlled trial

### Study setting(s)

Not specified

### Study type(s)

**Not Specified** 

### Participant information sheet

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

Cold type complex regional pain syndrome (CRPS)

#### **Interventions**

Subjects are assigned to receive either 1 g isosorbide dinitrate (ISDN) ointment 1% or placebo 4 times daily (groups 1 and 2) or 1 tablet of 10 mg tadalafil or placebo daily (groups 3 and 4). The treatment period will be 10 weeks.

### Intervention Type

Drug

#### Phase

**Not Specified** 

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

isosorbide dinitrate (ISDN), tadalafil

### Primary outcome measure

Tissue blood distribution (thermography and Doppler flow).

### Secondary outcome measures

Pain, mobility and quality of life.

### Overall study start date

01/02/2006

### Completion date

31/12/2007

### Eligibility

### Key inclusion criteria

- 1. Men and women between 18 and 65 years
- 2. Established diagnosis of CRPS-1 according to the Bruehl/Budapest criteria

### Participant type(s)

**Patient** 

### Age group

Adult

### Lower age limit

18 Years

### Sex

Both

### Target number of participants

76

### Key exclusion criteria

- 1. Coronary atherosclerosis or cerebral sclerosis
- 2. Recent heart infarction
- 3. Increased intracranial pressure
- 4. Severe hypotension
- 5. Myocardium insufficiency
- 6. Damage of the central nervous system
- 7. Contraindication of nitrates
- 8. Inflammation of joints
- 9. Use of corticosteroids or immunosuppressives
- 10. Unable to fill in questionnaires

### Date of first enrolment

01/02/2006

## Date of final enrolment 31/12/2007

### Locations

### Countries of recruitment

Netherlands

Study participating centre Erasmus Medical Center Rotterdam Netherlands 3000 CA

### Sponsor information

### Organisation

Erasmus Medical Center (The Netherlands)

### Sponsor details

Dr Molewaterplein 40/50 Rotterdam Netherlands 3000 CA

### Sponsor type

Not defined

#### **ROR**

https://ror.org/018906e22

### Funder(s)

### Funder type

Government

#### **Funder Name**

The Reflex Sympathetic Dystrophy Syndrome Association (RSDSA, USA), Eli Lilly, Ministry of Economic Affairs

### **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	20/10/2008		Yes	No