Septal closure of patent foramen ovale: does it prevent migraine?

Submission date	Recruitment status Stopped	Prospectively registered		
11/04/2007		Protocol		
Registration date	Overall study status Stopped Condition category Nervous System Diseases	Statistical analysis plan		
11/04/2007		Results		
Last Edited		Individual participant data		
01/02/2019		Record updated in last year		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

ClinicalTrials.gov (NCT)

NCT00369499

Protocol serial number

N/A

Study information

Scientific Title

Septal closure of patent foramen ovale: does it prevent migraine?

Acronym

STOP PAIN

Study objectives

The primary objective of the study STOP PAIN is to compare the effect on migraine attack frequency of transcatheter device closure of atrial shunting with a non-closure group in migraine patients suffering severe migraine with aura.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approval pending from the LUMC ethics committee.

Study design

Randomised, placebo controlled, parallel group, double blind, multicentre trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Migraine, foramen ovale persistens, closure

Interventions

In migraine patients with aura who have a patent foramen ovale, transcatheter device closure PFO after randomisation will be performed, versus a sham procedure.

Intervention Type

Other

Phase

Not Specified

Primary outcome(s)

Number of patients experiencing 50% reduction of migraine in closure group compared with sham group.

Outcomes will be measured monthly from three to nine months after closure.

Key secondary outcome(s))

- 1. Mean values of monthly migraine periods
- 2. Quality of Life (QoL) using headache impact test questionaire

Outcomes will be measured monthly from three to nine months after closure.

Completion date

01/04/2008

Reason abandoned (if study stopped)

Participant recruitment issue

Eligibility

Key inclusion criteria

- 1. Migraine with aura
- 2. Migraine history of at least one year:
- a. at least two migraine attacks/month
- b. at least one migraine attack with aura
- 3. Failure or intolerance to two classes prophylactic migraine medication
- 4. Aged 18 to 50 years
- 5. Right to left shunt suitable for closure

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Not Specified

Key exclusion criteria

- 1. History of 15 or more headache days per month
- 2. Taking preventive medication for other conditions other than migraine
- 3. Eight or more non-migraine headache days/month
- 4. Overuse of acute headache medication (use on ten or more days/month)
- 5. Severe central nervous system disease
- 6. Previous surgical or device closure of Patent Foramen Ovale (PFO)/Atrial Septal Defect (ASD)
- 7. Atrial heart valve
- 8. Pacemaker or Implantable Cardioverter Defibrillator (ICD) implanted within past three months
- 9. History of atrial fibrillation
- 10. Undergoing dialysis
- 11. New York Heart Association (NYHA) class three or four cardiac failure
- 12. Pregnant
- 13. Anticoagulation

Date of first enrolment

01/04/2007

Date of final enrolment

01/04/2008

Locations

Countries of recruitment

Netherlands

Study participating centre Leiden University Medical Centre (LUMC) Leiden Netherlands 2300 RC

Sponsor information

Organisation

St Jude Medical Inc (Belgium)

ROR

https://ror.org/04x0p4p48

Funder(s)

Funder type

Industry

Funder Name

St Jude Medical Inc (Belgium)

Funder Name

Leiden University Medical Centre (LUMC) (The Netherlands)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summaryNot provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Study website	Study website	11/11/2025	11/11/2025	No	Yes