# Quality of life and benefit for patients: bipolar radiofrequency-induced thermotherapy (RFITT) versus crossectomy and stripping

#### Plain English summary of protocol

Background and study aims

Varicose veins are swollen and enlarged veins that usually occur on the legs. They can be treated with surgery to remove the affected veins or with thermotherapy, in which the affected veins are burned and closed. At the moment there is not enough evidence regarding the benefits of the different treatments for varicose veins, especially for thermotherapy. The aim of our study is to find out whether thermotherapy provides better results compared with surgery.

Who can participate?

Patients aged 18 - 70 with varicose veins.

What does the study involve?

Participants will be randomly allocated to undergo either thermotherapy or surgery. The participants will be followed-up regularly for 5 years after the treatment.

What are the possible benefits and risks of participating? By entering the study participants get the chance to try a new treatment for free.

Where is the study run from? Krankenhaus Tabea (Germany).

When is the study starting and how long is it expected to run for? From November 2014 to October 2019.

Who is funding the study? Artemed SE (Germany).

Who is the main contact? Dr Guido Bruning

#### Contact information

#### Type(s)

Scientific

#### Contact name

Dr Guido Bruning

#### Contact details

Krankenhaus Tabea GmbH & Co. KG Kösterbergstr. 32 Hamburg Germany 22587

#### Additional identifiers

**EudraCT/CTIS** number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

# Study information

#### Scientific Title

Quality of life and benefit for patients: bipolar radiofrequency-induced thermotherapy (RFITT) versus crossectomy and stripping: a prospective randomized multi-centre trial

#### **Acronym**

CelArt

#### **Study objectives**

Quality of life and benefit for the patient is higher 5 years after bipolar radio frequency induced thermotherapy (RFITT) compared with high ligation (crossectomy) and stripping.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Medical Council of Hamburg (Ärztekammer Hamburg), Germany, approved 10/06/2014 (confirmed amendments on 04/04/2014 and 13/05/2014), identification no. PV4495

#### Study design

Randomized controlled prospective multi-centre trial

#### 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

Great saphenous vein insufficiency

#### **Interventions**

Group A: ultrasound-guided bipolar radio frequency induced thermotherapy (RFITT) is performed under tumescent local anaesthesia. The additional phlebectomy of side branches is allowed.

Group B: High Ligation (Crossectomy) and Stripping (HLS): Standard surgical procedures are performed, consisting of transection of all groin tributaries, flush ligation of the saphenofemoral junction with resorbable sutures and neoreflux protection with a continuous stump suture, followed by invagination stripping of the great saphenous vein just below knee under tumescent local anaesthesia. The additional phlebectomy of side branches is allowed.

#### Intervention Type

#### Phase

Not Applicable

#### Primary outcome measure

Quality of life, benefit for the patients and patients' satisfaction is measured using visual analogue scale (VAS) based questionnaires, pain scale according to VAS, Venous Clinical Severity Score (VCSS), Patient Benefit Index (PBI-v[prä] and PBI-v[post]) and Freiburger quality of life questionnaire for veins (FLAQvs) and open-ended questionnaire. Measured at preoperative visit and after 3 months, 1 year, 2 years, 3 years, 4 years and 5 years.

#### Secondary outcome measures

- 1. Minor and major complications
- 2. Recurrent varices after treatment (REVAT) evaluated at 3, 6, 12, 24, 36, 48 and 60 months follow-up visit

#### Overall study start date

10/11/2014

#### Completion date

## Eligibility

#### Key inclusion criteria

- 1. Great saphenous vein (GSV) insufficiency with saphenofemoral incompetence and reflux at least down to the knee level
- 2. Chronic venous insufficiency and/or symptoms caused by GSV incompetence
- 3. Diameter of GSV at measuring point 3 cm distal of the junction vena epigastrica superficialis (VES) maximal 15 mm in standing position
- 4. Performance status according to American Society of Anesthesiology (ASA) I-II
- 5. Surgical procedure in tumescent local anesthesia (TLA) or total intravenous anesthseia (TIVA) in combination with TLA
- 6. Written consent
- 7. Distance of place of residence to study centre <= 150 km
- 8. Age 18 70 years (at randomisation)

#### Participant type(s)

Patient

#### Age group

Adult

#### Lower age limit

18 Years

#### Sex

Both

#### Target number of participants

200

#### Key exclusion criteria

- 1. Incompetence of vena saphena parva (VSP) requiring treatment at the same limb, anterior accessory vein incompetence requiring treatment at the same limb
- 2. Previous sclerotherapy of VSM, previous endovenous treatment of VSM, previous surgical interventions in the groin area
- 3. Recurrences in the groin area
- 4. Permanent oral anticoagulation with e.g, Marcumar, Warfarin, Rivaroxaban
- 5. Acute thrombophlebitis, deep venous thrombosis or post-thrombotic syndrome (post-thrombotic syndrome), incompetence of deep veins (vena femoralis superficialis and vena poplitea)
- 6. Known thrombophilia associated with a high risk of thromboembolism
- 7. Arterial occlusive disease > Fontaine IIA
- 8. Polyneuropathia
- 9. Performance status according to American Society of Anesthesiology (ASA) III VI
- 10. Active malignancy (diagnosed during the past 5 years)
- 11. Females pregnant or nursing
- 12. Distance of place of residence to study centre > 150 km
- 13. No written consent
- 14. Age <18 or >70 years (at randomisation)

# Date of first enrolment 01/12/2014

Date of final enrolment 01/12/2015

#### Locations

# **Countries of recruitment**Germany

Study participating centre Krankenhaus Tabea GmbH & Co. KG Hamburg Germany 22587

# Sponsor information

#### Organisation

Artemed SE (Germany)

#### Sponsor details

Bahnhofstraße 7 Munich Germany 82327

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benjamin.behar@artemed.de

#### Sponsor type

Industry

#### Website

http://www.artemed.de

# Funder(s)

### Funder type

Other

#### Funder Name

Investigator initiated and funded (Germany)

## **Results and Publications**

Publication and dissemination plan

To be confirmed at a later date

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available