# StereoTactic Arrhythmia Radiotherapy in the NetherLands no. 1

No registrations found.

**Ethical review** Positive opinion **Status** Recruiting

Health condition type -

**Study type** Interventional

# **Summary**

#### ID

NL-OMON22142

Source

NTR

**Brief title** 

STARNL-1 trial

**Health condition** 

Ventricular tachycardia

## **Sponsors and support**

**Primary sponsor:** Amsterdam University Medical Centers

Source(s) of monetary or material Support: Government funding (university)

## Intervention

#### **Outcome measures**

#### **Primary outcome**

The main efficacy measure is a reduction in the number of ICD treated VT episodes by  $\geq$ 50% at one year after treatment compared to the year before treatment.

#### **Secondary outcome**

The secondary outcome measure is a ≥50% reduction in daily dose class 1 and 3 antiarrhythmic drugs at one year after treatment as compared to baseline

# **Study description**

#### **Background summary**

Ventricular tachycardia (VT) is a malignant cardiac arrhythmia subjecting our patients to a high risk of sudden death, increased morbidity and reduced quality of life. Recent advances in cardiac electrophysiology and radiotherapy have enabled the use of non-invasive 3-dimensional cardiac mapping of these arrhythmias and the subsequent delivery of precise stereotactic radiotherapy to treat ventricular tachycardia. This study is designed to evaluate the efficacy and safety of stereotactic arrhythmia radiotherapy in patients with ventricular tachycardia.

#### Study objective

We hypothesize that stereotactic radiotherapy for the treatment of the cardiac arrhythmia ventricular tachycardia is effective and safe in therapy refractory patients

## Study design

Outcomes will be assessed at 1, 3, 6 and 12 months after treatment

#### Intervention

The pro-arrhythmic cardiac region is identified by combining anatomical imaging with non-invasive body surface potential mapping during VT induction with non-invasive programmed stimulation. Radiotherapy simulation, planning and treatment is subsequently performed with the use of standard techniques. Patients are treated with a single radiotherapy fraction of 25 Gy at the determined pro-arrhythmic cardiac region.

## **Contacts**

#### **Public**

Amsterdam UMC, location AMC P.G. Postema

020 566 9111

#### **Scientific**

Amsterdam UMC, location AMC

# **Eligibility criteria**

## Inclusion criteria

- 1 Age >18 years
- 2 Implanted ICD
- 3 World Health Organization (WHO) / Eastern Cooperative Oncology Group (ECOG) performance status grade 0-3 in the past 3 months (from fully active to capable of limited self-care, see below for full explanation)
- 4 At least 3 episodes of treated VT within the last 3 months
- 5 Recurrence of VT after
- -Failed or intolerant to least one class 1 or class 3 anti-arrhythmic drug AND
- -At least one catheter ablation procedure OR considered to be unsuitable for a catheter ablation procedure (e.g. no
- sufficient vascular access, considered unfit to undergo prolonged general anesthesia, comorbid conditions resulting

in unacceptable peri-procedural risks)

6 Able and willing to undergo all necessary evaluations, treatment and follow-up for the study and of follow-up thereafter

7 Informed consent

## **Exclusion criteria**

- 1 Pregnancy
- 2 History of radiation treatment in the thorax or upper abdominal region
- 3 Interstitial pulmonary disease
- 4 Renal insufficiency with a glomerular filtration rate <30ml/min
- 5 Refusal or inability to provide informed consent or to undergo all necessary evaluations, treatment and follow-up for the
  - 3 StereoTactic Arrhythmia Radiotherapy in the NetherLands no. 1 8-05-2025

# Study design

## **Design**

Study type: Interventional

Intervention model: Other

Allocation: Non controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 01-04-2019

Enrollment: 6

Type: Anticipated

## **IPD** sharing statement

Plan to share IPD: Undecided

## **Ethics review**

Positive opinion

Date: 04-02-2019

Application type: First submission

# **Study registrations**

## Followed up by the following (possibly more current) registration

ID: 48498

Bron: ToetsingOnline

Titel:

# Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

NTR-new NL7510

CCMO NL68191.018.19
OMON NL-OMON48498

# **Study results**