A comparison between rivaroxabanbased strategy and antiplatelet-based strategy following successful TAVR for prevention of leaflet thickening and reduced leaflet motion as evaluated by four-dimensional, volume-rendered computed tomography (4DCT) in a population of patients coming from the GALILEO randomized trial

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Evaluate whether a rivaroxaban-based strategy, following successful TAVR, compared to an antiplatelet-based strategy, is superior in reducing subclinical valve leaflet thickening and motion abnormalities - as evaluated by 4DCT imaging at three...

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typeCardiac valve disordersStudy typeObservational invasive

Summary

ID

NL-OMON45677

Source

ToetsingOnline

Brief titleGALILEO-4D

Condition

Cardiac valve disorders

Synonym

new valve leaflet, valve leaflet thickening/movement

Research involving

Human

Sponsors and support

Primary sponsor: European Cardiovascular Research Institute (ECRI) **Source(s) of monetary or material Support:** Bayer, only via grant

Intervention

Keyword: 4DC, antiplatelet-based, rivaroxaban-based, TAVR

Outcome measures

Primary outcome

The rate of patients with at least one prosthetic leaflet with > 50% motion reduction as assessed by cardiac 4DCT-scan (total N = 300).

Secondary outcome

- The rate of prosthetic leaflets with > 50% motion reduction as assessed by cardiac 4DCT-scan (based on a total of 900 observations in N = 300 patients).
- The rate of patients with at least one prosthetic leaflet with thickening as assessed by cardiac 4DCT-scan (total N=300).
- The rate of prosthetic leaflets with thickening as assessed by cardiac 4 DCT-scan (based on a total of 900 observations in N = 300 patients).
- Aortic transvalvular mean pressure gradient and effective orifice area (cm2) as determined by transthoracic echocardiography.
- Functional NYHA class.

- Death, first thromboembolic event (DTE), and safety endpoints (see GALILEO trial) will be assessed in the main GALILEO study and analyzed in the GALILEO-4D substudy with regards to occurence of the leaflet abnormalities - as exploratory analysis.

Study description

Background summary

An optimal therapy for TAVR patients is not known and only based on consensus, there is an unmet need to identify the best medical treatment in patients undergoing TAVR.

Study objective

Evaluate whether a rivaroxaban-based strategy, following successful TAVR, compared to an antiplatelet-based strategy, is superior in reducing subclinical valve leaflet thickening and motion abnormalities - as evaluated by 4DCT imaging at three months following TAVR.

Study design

Within the GALILEO main study, patients will be randomized 1:1 to an antiplatelet-based strategy vs. rivaroxaban-based strategy. At selected sites participating subjects will be offered to additionally take part in the GALILEO-4D sub study. For the GALILEO-4D sub study the following additional assessments will be performed at 90 days (+/- 15) after randomization in the main study: 4DCT scan, tECG and functional NYHA classification.

Intervention

during visit main Galileo studie: 4DCT, tECG and NYHA functional class

Study burden and risks

Subjects will have an additional radiation burden of 5-15 mSv for the GALILEO-4D sub study. This corresponds to 2-6 times the background radiation in the Netherlands (ca. 2.5 mSv annually).

Contacts

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Scientific

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years) Elderly (65 years and older)

Inclusion criteria

- 1. Patient included in the randomized GALILEO trial
- 2. Written informed consent

Exclusion criteria

- 1. Severe renal insufficiency (eGFR < 30 ml/min/1.73 m2) or on dialysis, or post-TAVR unresolved acute kidney injury with renal dysfunction >= stage 2
- 2. Iodinate contrast media allergy or other conditions that prohibit CT imaging (i.e. multiple myeloma, etc.)

Study design

Design

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 03-10-2017

Enrollment: 5

Type: Actual

Ethics review

Approved WMO

Date: 01-06-2017

Application type: First submission

Review commission: METC Amsterdam UMC

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

In other registers

Register

ClinicalTrials.gov CCMO ID

NCT02833948 NL59279.018.17