

# **Investigation of Claret cerebral embolic protection device in preventing cerebral lesions during Transcatheter Aortic Valve Replacement**

Gepubliceerd: 14-10-2013 Laatst bijgewerkt: 19-03-2025

The use of the Claret device in TAVI procedures reduces the incidence of ischemic cerebral lesions (detected by DW-MRI)

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestart
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## **Samenvatting**

### **ID**

NL-OMON22229

### **Bron**

Nationaal Trial Register

### **Verkorte titel**

MISTRAL-C

### **Aandoening**

Symptomatic severe Aortic Valve Stenosis (AS)  
Transcatheter Aortic Valve  
Implantation (TAVI)  
Cerebral infarctions (CVA)

### **Ondersteuning**

**Primaire sponsor:** University Medical center (Erasmus MC)

**Overige ondersteuning:** fund=initiator=sponsor

### **Onderzoeksproduct en/of interventie**

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

Brain imaging by MRI and detection of  
o Presence of new ischemic lesions  
o Number of new ischemic lesions per patient  
o Total volume of new ischemic lesions per patient

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

The TAVI experience is rapidly mounting worldwide. DW-MRI detects subclinical new ischemic cerebral lesions after TAVI in the majority of cases. Although the immediate clinical impact seems negligible, the implications on the longer term are unknown. These subclinical cerebral lesions may play a role in neurocognitive deterioration. If the use of the Claret device in TAVI procedures may reduce the incidence of these cerebral lesions this may have considerable clinical significance in the long run. Patients who are participating in this study may potentially have a significant clinical benefit.

### **Doel van het onderzoek**

The use of the Claret device in TAVI procedures reduces the incidence of ischemic cerebral lesions (detected by DW-MRI)

### **Onderzoeksopzet**

study duration for patients is a MRI at 3 days postprocedure, routine follow-up at 30 days, and MRI at 6 month

### **Onderzoeksproduct en/of interventie**

The Claret device is an Embolic Protection Device consisting of two nitinol baskets to be introduced through the right radial artery. One basket is positioned in the brachiocephalic trunk, the other in the left common carotid artery.

## **Contactpersonen**

## **Publiek**

Erasmus MC  
dept Intervention Cardiology  
PO Box 2040  
N. Mieghem, van  
Rotterdam 3000 CA  
The Netherlands

## **Wetenschappelijk**

Erasmus MC  
dept Intervention Cardiology  
PO Box 2040  
N. Mieghem, van  
Rotterdam 3000 CA  
The Netherlands

## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

- 1) Patients with severe AS at high operative risk who will undergo planned TAVI
- 2) Informed consent to participate in the study (i.e. use of Claret device yes or no) and undergo DW -MRI before and after the procedure.
- 3) Compatible left common carotid artery ( $\geq 5$  mm) and brachiocephalic artery ( $\geq 9$  mm) diameters without significant stenosis ( $> 70\%$ ) as determined by Multi-Slice Computed Tomography (MSCT) scan

### **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

- 1) No written informed consent
- 2) Standard exclusion criteria for MRI study
- 3) Transfemoral access not possible
- 4) Permanent Pacemaker/AICD in situ before TAVI

- 5) Planned implantation of a pacemaker implantation after TAVI.
- 6) Previous stroke with residual neurological symptoms or dementia
- 7) Significant common carotid artery stenosis (> 70%) by MSCT scan
- 8) Not native Dutch speaking

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

### Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	09-01-2013
Aantal proefpersonen:	54
Type:	Verwachte startdatum

## Ethische beoordeling

Positief advies	
Datum:	14-10-2013
Soort:	Eerste indiening

## Registraties

## **Opgevolgd door onderstaande (mogelijk meer actuele) registratie**

ID: 39581

Bron: ToetsingOnline

Titel:

## **Andere (mogelijk minder actuele) registraties in dit register**

Geen registraties gevonden.

## **In overige registers**

<b>Register</b>	<b>ID</b>
NTR-new	NL4092
NTR-old	NTR4236
CCMO	NL40999.078.12
ISRCTN	ISRCTN wordt niet meer aangevraagd.
OMON	NL-OMON39581

## **Resultaten**

### **Samenvatting resultaten**

N/A