

# VASCUlar no-REact® Graft Against INfection (VASC-REGAIN) Trial

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<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruiting
<b>Health condition type</b>	Hepatobiliary neoplasms malignant and unspecified
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON49830

### Source

ToetsingOnline

### Brief title

VASC-REGAIN trial

### Condition

- Hepatobiliary neoplasms malignant and unspecified
- Vascular therapeutic procedures
- Vascular disorders NEC

### Synonym

vascular infection

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Catharina-ziekenhuis

**Source(s) of monetary or material Support:** BioIntegral Surgical Inc.

## Intervention

**Keyword:** Bioprosthesis, Infection, Vascular

## Outcome measures

### Primary outcome

The primary endpoint of the study is graft infection at 3 months after implantation.

Related variables to be measured include:

1. Febrile or non-febrile status
  2. WBC count
  3. C-reactive protein (CRP) test
  4. Samson classification of the infection (grade I-V) (for peripheral situations)
    - I. Infections extend no deeper than the dermis
    - II. Infections involve subcutaneous tissues but do not come into grossly observable contact with the graft
    - III. Infections involve the body of the graft but not at an anastomosis
    - IV. Infections surround an exposed anastomosis but bacteremia or anastomotic bleeding has not occurred
    - V. Infections involve a graft-to-artery anastomosis and are associated with septicemia and/or bleeding at the time of presentation
- OR
- CT findings (for central situations)
5. Patient temperature
  6. Wound healing

7. Wound infection

8. If debridement was performed

9. Purulence

### **Secondary outcome**

The second endpoint to be determined is patency at 12 months.

Related variables to be measured include:

1. Clinical assessment at 3 and 12 months

2. Duplex ultrasound (for peripheral situations) or CTA (for central situations) at 3 and 12 months

## **Study description**

### **Background summary**

BioIntegral Surgical is a manufacturer of medical devices for cardiovascular surgery and produces products which are all-biological and have a long and demonstrated history in fighting infection in cardiac, vascular and general surgery settings.

The No-React® Non-Valved Conduit (NRVC) is composed of a bovine pericardium sutured into a single conduit or bifurcated conduit of variable diameters.

Like all BioIntegral products, the glutaraldehyde cross-linked conduit has been detoxified with a unique process. In contrast to conventional glutaraldehyde treatment, No-React® detoxified tissue does not leach detectable glutaraldehyde molecules and has been clinically proven to invite endothelial cells to its surfaces which are in contact with blood. What's more, the process also pacifies the tissue and creates a more permanent bond among the glutaraldehyde and collagen, ensuring improved long-term durability of the grafts. The No-React® process makes the xenograft vessel tissue biocompatible, anti-infective, avoids coagulation and biological degeneration, all while retaining all the positive physical attributes of glutaraldehyde-treated tissues.

The No-React® Non-Valved Conduit (NRVC) is intended for use when there is a need for a biocompatible and infection resistant graft to replace infected

prostheses or to treat patients at high risk of (re)infection in the following locations: descending aorta, aorto-iliac, aorto-femoral and above-knee peripheral vasculature. There is no restriction on the age indication for this product.

## **Study objective**

This study seeks to demonstrate the effectiveness and safety of the Non-Valved Conduit on the basis of infection. The rationale for infection resistance with the conduit is that Biointegral Surgical No-React® treated products have a well-documented history of infection resistance in hybrid vascular settings.

- Primary objective: Determine (re)-infection rate of the vascular conduit at 3 months following implantation in high infection risk patients or as a replacement for infected prosthetic graft.
- Secondary objective: Determine the patency rate of the vascular conduit at 12 months following implantation.
- Other objectives: Any adverse event \* morbidity or mortality \* is to be reported regardless if it is device or non-device related. In each case, the distinction between device and non-device related adverse event must be made.

## **Study design**

This is a multicenter prospective intervention study which will require the inclusion of 60 patients from 10 vascular centers in the Netherlands.

## **Intervention**

Included patients will have an operation for the implantation of the No-React® Non-Valved Conduit (NRVC) as vascular conduit.

## **Study burden and risks**

Subjects can expect to have a lower risk of (re)infection, amputation and mortality.

There are no anticipated adverse device effects.

Residual risks related to the device are due to the nature of the product or the manufacturing process and have been classified as residual risks due to the serious, critical or catastrophic consequence. However, all of these residual risks are acceptable as per the risk analysis; no further risk control is possible without sacrificing the integrity of the device.

The risks associated with participation in the clinical investigation include infection, thrombosis/thromboembolism, haemolysis, bleeding, stenosis, BSE and/or other possible contaminants and surgical risks. These risks can result in graft explantation, amputation, sepsis and/or death. However, the likelihood of these occurring is improbable or remote at worst. As per the risk analysis, the clinical benefits far outweigh the risks associated with participation, considering the expected urgent state of the subjects. The inherent design of the device and the implantation of all possible controls minimize the probability of any of these events but they must be included due to their serious, critical or catastrophic consequences to the subject. The manufacturer does not expect any of these to occur in relation to the device.

## Contacts

### **Public**

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NL

### **Scientific**

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NL

## Trial sites

### **Listed location countries**

Netherlands

## Eligibility criteria

### **Age**

Adults (18-64 years)

Elderly (65 years and older)

## Inclusion criteria

Infected prosthetic graft and/or bifurcation, or  
high risk of infection at graft implantation, or  
mycotic aneurysm, and  
no safe alternative available

## Exclusion criteria

Below-knee bypass  
AV access

## Study design

### Design

**Study type:** Interventional

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruiting

Start date (anticipated): 22-12-2017

Enrollment: 60

Type: Actual

### Medical products/devices used

Generic name: No-React® Non-valved Conduit

Registration: No

## Ethics review

Approved WMO

Date:	09-05-2017
Application type:	First submission
Review commission:	MEC-U: Medical Research Ethics Committees United (Nieuwegein)
Approved WMO	
Date:	18-08-2017
Application type:	Amendment
Review commission:	MEC-U: Medical Research Ethics Committees United (Nieuwegein)
Approved WMO	
Date:	07-12-2017
Application type:	Amendment
Review commission:	MEC-U: Medical Research Ethics Committees United (Nieuwegein)
Approved WMO	
Date:	19-01-2018
Application type:	Amendment
Review commission:	MEC-U: Medical Research Ethics Committees United (Nieuwegein)
Approved WMO	
Date:	11-07-2018
Application type:	Amendment
Review commission:	MEC-U: Medical Research Ethics Committees United (Nieuwegein)
Approved WMO	
Date:	02-01-2020
Application type:	Amendment
Review commission:	MEC-U: Medical Research Ethics Committees United (Nieuwegein)

## 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	ID
CCMO	NL59973.100.16