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# Value of Nexfin SVV and PPV to predict fluid responsiveness during anaesthesia

**Submission date**
26/07/2012

**Recruitment status**
Stopped

**Registration date**
16/08/2012

**Overall study status**
Stopped

**Last Edited**
09/11/2015

**Condition category**
Surgery

[ ] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] Record updated in last year

## Plain English summary of protocol

Background and study aims
Patients undergoing surgery often require fluids to be infused into their veins to compensate for blood loss. However, giving patients fluids is only beneficial if it increases the volume of blood pumped by the heart, but this 'fluid responsiveness' varies depending on the patient's blood volume. This is mostly assessed using invasive techniques, so current practice does not include this assessment in most patients under anesthetic. The Nexfin monitor uses a non-invasive finger cuff to assess blood parameters and can be used in all patients under general anesthetic. The aim of this study is to assess the value of using the Nexfin monitor to predict the fluid responsiveness of patients under anesthetic.

Who can participate?
Patients aged over 18 undergoing surgery under general anesthetic.

What does the study involve?
During normal routine clinical practice, we record the patients' hemodynamic parameters (e.g., blood pressure, volume of blood pumped by the heart, heart rate) using the Nexfin monitor during procedures where fluid administration was required. We evaluate the changes in these parameters during fluid administration and their value in predicting the patients' fluid responsiveness.

What are the possible benefits and risks of participating?
There are no benefits or risks involved.

Where is the study run from?
University Medical Center Groningen (Netherlands).

When is the study starting and how long is it expected to run for?
November 2011 to August 2012.

Who is funding the study?
Investigator initiated and funded

Who is the main contact?
Dr Alain Kalmar

# Contact information

### Type(s)
Scientific

### Contact name
Dr Alain Kalmar

### Contact details
University Medical Center Groningen
Hanzeplein 1
Groningen
Netherlands
9700 RB

# Additional identifiers

### EudraCT/CTIS number

### IRAS number

### ClinicalTrials.gov number

### Secondary identifying numbers
vol-001

# Study information

### Scientific Title
Value of Nexfin SVV and PPV to predict fluid responsiveness during anaesthesia

### Study objectives
The dynamic preload variables (SSV and PPV) assessed by Nexfin, are better predictors to assess fluid responsiveness than blood pressure or heart rate

### Ethics approval required
Old ethics approval format

### Ethics approval(s)
Medisch Ethische Toetsingscommissie (METc), Universitair Medisch Centrum Groningen, 19/04/012, ref: metc2012/107

### Study design
Retrospective data analysis

### Primary study design

Observational

**Secondary study design**
Cross sectional study

**Study setting(s)**
Hospital

**Study type(s)**
Other

**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**
Anaesthesia

**Interventions**
N/A

**Intervention Type**
Procedure/Surgery

**Phase**
Not Applicable

**Primary outcome measure**
We will evaluate the evolution of hemodynamic parameters during the period of fluid administration and the value of the dynamic preload-variables to predict fluid responsiveness

**Secondary outcome measures**
No secondary outcome measures

**Overall study start date**
01/11/2011

**Completion date**
08/08/2012

**Reason abandoned (if study stopped)**
Objectives no longer viable

# Eligibility

**Key inclusion criteria**
>18 years

**Participant type(s)**
Patient

**Age group**
Adult

**Lower age limit**
18 Years

**Sex**
Both

**Target number of participants**
80

**Key exclusion criteria**
Unable or unwilling to grant written informed consent for data analysis

**Date of first enrolment**
01/11/2011

**Date of final enrolment**
08/08/2012

# Locations

**Countries of recruitment**
Netherlands

**Study participating centre**
**University Medical Center Groningen**
Groningen
Netherlands
9700 RB

# Sponsor information

**Organisation**
University Medical Center Groningen (Netherlands)

**Sponsor details**
Hanzeplein 1
PO Box 30001
Groningen
Netherlands
9700 RB

**Sponsor type**

Hospital/treatment centre

**Website**
http://www.umcg.nl/

**ROR**
https://ror.org/03cv38k47

# Funder(s)

**Funder type**
Other

**Funder Name**
Investigator initiated and funded

# Results and Publications

**Publication and dissemination plan**
Not provided at time of registration

**Intention to publish date**

**Individual participant data (IPD) sharing plan**

**IPD sharing plan summary**
Not provided at time of registration