# Automatic Weaning Using Adaptive Support Ventilation (ASV) – Effect of an Early Weaning Protocol on Time till Extubation of Post-Coronary Artery Bypass Surgery Patients.

No registrations found.

Ethical review	Positive opinion
Status	Recruiting
Health condition type	-
Study type	Interventional

# Summary

### ID

NL-OMON21744

Source NTR

**Brief title** N/A

#### **Health condition**

- 1. Mechanical ventilation;
- 2. weaning;
- 3. Coronary Artery Bypass Grafting (CABG).

### **Sponsors and support**

**Primary sponsor:** Academic Medical Center (AMC), Department of Intensive Care **Source(s) of monetary or material Support:** N/A

### Intervention

### **Outcome measures**

#### **Primary outcome**

1. Duration of ventilation.

#### Secondary outcome

- 1. Length of stay in the ICU;
- 2. Number of failed extubations;
- 3. Number of ABG-analysis.

# **Study description**

#### **Background summary**

Adaptive support ventilation (ASV) is a microprocessor-controlled mode of mechanical ventilation that maintains an operator preset minimum minute ventilation, independent of activity of the patient. ASV provides automatic selection of ventilatory settings and continuous – breath by breath – adaptation. In addition, it's closed-loop control switches automatically from pressure controlled (PC) mechanical ventilation to pressure support (PS) mechanical ventilation, according to the patient status.

Previous studies have tested the efficiency, safety, and adaptability of ASV. A weaning protocol based on ASV simplifies ventilatory management; in addition, ASV shortens duration of tracheal intubation after fast-track cardiothoracic surgery. We recently studied ASV in post-coronary artery bypass surgery (CABG) patients in our setting and found a reduction of the number of ventilatory-alarms and ventilator-manipulations [ISRCTN31808827; yet unpublished data]. However, weaning with ASV was not faster as compared to standard weaning. Indeed, mean duration of intubation and mechanical ventilation (i.e., time till extubation) was 17 hours – this is very much opposite to other studies on this subject, in which mean duration of time till extubation is ~ 10 hours3;4.

#### Aim of the study

We hypothesize time till extubation of post-CABG patients can be shortened by using an early weaning protocol with ASV.

#### **Study objective**

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We hypothesize time till extubation of post-CABG patients can be shortened by using an early weaning protocol with ASV.

#### Study design

N/A

#### Intervention

Patients will be weaned from the ventilator using a standard protocol and an early weaning protocol.

# Contacts

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# **Eligibility criteria**

### **Inclusion criteria**

1. Planned and uneventful CABG;

2. Following receipt of verbal and written information about the trial, the patient must provide signed and dated informed consent before any trial related activity is carried out.

### **Exclusion criteria**

- 1. History of any pulmonary disease;
- 2. History of any previous pulmonary surgery;
- 3. Valve surgery;

4. Arrival at the ICU with intra-aortic balloon pump, or inotropes at a more then usual rate (maximum dosages in ml per hour: dopamine [4], norepinephrine [4], dobutamin [4] or epinephrine [any rate]).

# Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	Active

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	22-11-2007
Enrollment:	128
Туре:	Anticipated

# **Ethics review**

Positive opinion	
Date:	20-11-2007
Application type:	First submission

# **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
NTR-new	NL1101
NTR-old	NTR1136
Other	: incomplete
ISRCTN	ISRCTN wordt niet meer aangevraagd

# **Study results**

# Summary results N/A