# What is the clinical relevance of exercise induced increases in cardiac troponin levels on survival and cardiovascular incidents?

No registrations found.

Ethical review	Positive opinion	
Status	Recruiting	
Health condition type	-	
Study type	Observational non invasive	

## Summary

### ID

NL-OMON21919

**Source** Nationaal Trial Register

**Brief title** N/A

#### **Health condition**

Endurance exercise, cardiac troponins, biomarkers, athletes, walking.

Duurinspanning, cardiaal troponine, biomarkers, sporters, wandelen.

### **Sponsors and support**

**Primary sponsor:** Radboud University Medical Centre, Nijmegen, The Netherlands **Source(s) of monetary or material Support:** Radboud University Medical Centre, Nijmegen, The Netherlands

### Intervention

### **Outcome measures**

#### **Primary outcome**

The survival / mortality status of subjects is checked annually, using national registers.

#### Secondary outcome

The annual incidence of cardiovascular events is scored with the ICD-10 I00-99 classifications using a validated internet based questionnaire (SNAP software).

# **Study description**

#### **Background summary**

Exercise-induced cardiac troponin elevations are frequently observed in athletes. The clinical relevance of this phenomenon is currently unknown. This study aims to determine the predictive capacity of exercise-induced cTn elevations for future cardiovascular events and mortality. Therefore we will include 500 participants in this trial and adopt a 5-year follow-up design. Data regarding the incidence of cardiovascular diseases, cardiovascular incidents and mortality (all-cause and CVD specific) will be collected annually.

#### **Study objective**

Baseline resting levels of cardiac troponin have been shown to be a predictor fur future cardiovascular events and mortality. We hypothesize that the exercise induced increases in cardiac troponins may be a superior predictor for survival and CVD events.

#### Study design

There will be an annual follow-up regarding the health status of each subject.

#### Intervention

To study the 5-year predictive power of exercise-induced cTn elevations, I will adopt a semiprospective follow-up design. Data regarding the incidence of cardiovascular diseases, cardiovascular incidents and mortality (all-cause and CVD specific) will be collected annually. Subjects that successfully completed the first day of the Nijmegen Four Days Marches will be eligible for inclusion. Blood samples are collected pre and post exercise and high sensitivity cardiac troponin I levels are determined accordingly. The incidence of cardiovascular events is scored with the ICD-10 I00-99 classifications using a validated internet based questionnaire (SNAP software). Furthermore, national registers will be used to determine survival/mortality status of participants.

# Contacts

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# **Eligibility criteria**

### **Inclusion criteria**

Age > 18 years

Participant of the Nijmegen Four Days Marches

### **Exclusion criteria**

There are no specific exclusion criteria.

# Study design

### Design

Study type:	Observational non invasive	
Intervention model:	Parallel	
Allocation:	Non controlled trial	
Masking:	Open (masking not used)	
Control:	N/A , unknown	

### Recruitment

#### NL

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Recruitment status:	Recruiting
Start date (anticipated):	01-01-2008
Enrollment:	500
Туре:	Anticipated

# **Ethics review**

Positive opinion Date: Application type:

26-11-2013 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-newNL4027NTR-oldNTR4295OtherDe klinische relevantie van inspanningsgeïnduceerde troponine stijging :<br/>TE/CMO/2013/402ISRCTNISRCTN wordt niet meer aangevraagd.

### **Study results**

#### Summary results

N/A