

# Validation of Treating to Non-Fasting Lipid Targets in Comparison to Fasting Lipid Targets

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Current treatment targets for LDL-C, non-HDL-C and apo B can be used as accurately in the non-fasting state as in the fasting state. The measurement of LDL-C, non-HDL-C and apo B in the non-fasting state does not confer to an increased risk of...

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

## Samenvatting

### ID

NL-OMON26747

### Bron

Nationaal Trial Register

### Verkorte titel

NoFastLipidStudy

### Aandoening

hyperlipidemia

hypercholesterolemia

secondary cardiovascular prevention

Fasting

non-fasting

### Ondersteuning

**Primaire sponsor:** Albert Schweitzer Ziekenhuis

**Overige ondersteuning:** Initiator

### Onderzoeksproduct en/of interventie

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

The number of patients that reach the set treatment target of LDL-C <2.5 mmol/l when using non-fasting blood samples while their fasting LDL is >2.5mmol/l.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

Background: Current guidelines recommend to measure the lipid profile in the fasting state although evidence is growing that a non-fasting lipid profile is sufficient most of the time and more convenient for both physicians and patients. However, comparisons between the absolute difference in fasting and non-fasting lipid profiles within individuals is lacking. Therefore, it is unknown whether current lipid treatment targets are suitable when using non-fasting lipid profiles.

Objective: To investigate whether a non-fasting lipid profile is as accurate and of equal clinical value as a fasting lipid profile for guiding lipid lowering therapy for secondary cardiovascular risk reduction.

Study design: Open randomized, cross-over trial where subjects are randomized between first measuring a fasting lipid profile followed by a non-fasting lipid profile on a separate day or vice versa.

Study population: Patients on lipid lowering therapy as secondary prevention for cardiovascular disease.

Main study endpoint: The number of re-classified patients that reach the treatment target of LDL-C <2.5 mmol/l when using non-fasting blood samples while their fasting LDL is >2.5mmol/l.

Risks, burden and benefits on participation: No major risks are involved besides a hematoma from the venipunctures or hypoglycemia due to fasting. Subjects need to visit the hospital two times, once fasting and, on another day, any time the subjects wish. During the two measurements it is not allowed to change lipid lowering therapy. Subjects receive an expense allowance of 10 euro's upon participation. The potential benefit of the study is to demonstrate that a non-fasting lipid profile is accurate enough in comparison to a fasting lipid profile, which will ease the measurement of lipid levels for a large patient population worldwide.

### **Doel van het onderzoek**

Current treatment targets for LDL-C, non-HDL-C and apo B can be used as accurately in the

non-fasting state as in the fasting state. The measurement of LDL-C, non-HDL-C and apo B in the non-fasting state does not confer to an increased risk of falsely reaching the recommended treatment target.

### **Onderzoeksopzet**

Not-applicable

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

Open randomized, cross-over trial where subjects are randomized between first measuring a fasting lipid profile followed by a non-fasting lipid profile on a separate day or vice versa.

## **Contactpersonen**

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## **Deelname eisen**

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

Male and female patients, aged 18 years or older, from the outpatient department of Cardiology and Internal Medicine receiving lipid lowering therapy as secondary cardiovascular prevention are suitable for inclusion. Lipid lowering therapy is defined as the use of statins, fibrates, ezetimibe or nicotinic acid or a combination of these

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

A change in lipid lowering therapy within the last 4 weeks is an exclusion criterium for study participation.

## **Onderzoeksopzet**

### **Opzet**

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

### **Deelname**

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-09-2015
Aantal proefpersonen:	350
Type:	Verwachte startdatum

## **Ethische beoordeling**

Positief advies	
Datum:	20-07-2015

## Registraties

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

ID: 41824

Bron: ToetsingOnline

Titel:

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

Geen registraties gevonden.

## In overige registers

Register	ID
NTR-new	NL4819
NTR-old	NTR5321
CCMO	NL51908.101.14
OMON	NL-OMON41824

## Resultaten

### Samenvatting resultaten

1. Bansal, S., Buring, J. E., Rifai, N., Mora, S., Sacks, F. M., and Ridker, P. M. (2007) Fasting compared with nonfasting triglycerides and risk of cardiovascular events in women. *JAMA*.298, 309-316<br>
3. Eberly, L. E., Stamler, J., and Neaton, J. D. (2003) Relation of triglyceride levels, fasting and nonfasting, to fatal and nonfatal coronary heart disease. *Arch Intern Med*.163, 1077-1083<br>
4. Mora, S., Rifai, N., Buring, J. E., and Ridker, P. M. (2008) Fasting compared with nonfasting lipids and apolipoproteins for predicting incident cardiovascular events. *Circulation*.118, 993-1001<br>
5. Nordestgaard, B. G., Benn, M., Schnohr, P., and Tybjaerg-Hansen, A. (2007) Nonfasting triglycerides and risk of myocardial infarction, ischemic heart disease, and death in men and women. *JAMA*.298, 299-308<br>
6. Langsted, A., and Nordestgaard, B. G. (2011) Nonfasting Lipids, Lipoproteins, and Apolipoproteins in Individuals with and without Diabetes: 58 434 Individuals from the Copenhagen General Population Study. *Clin Chem*.57, 482-489<br>

7. Klop, B., Cohn, J. S., van Oostrom, A. J., van Wijk, J. P., Birnie, E., and Castro Cabezas, M. (2011) Daytime triglyceride variability in men and women with different levels of triglyceridemia. *Clin Chim Acta.* 412, 2183-2189<br>
8. Sidhu, D., and Naugler, C. (2012) Fasting time and lipid levels in a community-based population: a cross-sectional study. *Arch Intern Med.* 172, 1707-1710<br>
9. de Vries, M., Klop, B., and Castro Cabezas, M. (2014) The use of the non-fasting lipid profile for lipid-lowering therapy in clinical practice - point of view. *Atherosclerosis.* 234, 473-475<br>
10. Khera, A. V., and Mora, S. (2012) Fasting for lipid testing: is it worth the trouble?: comment on "fasting time and lipid levels in a community-based population". *Arch Intern Med.* 172, 1710-1711