# Postprandial effects of alirocumab on lipemia and inflammtion

No registrations found.

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

## **Summary**

### ID

NL-OMON22535

**Source** Nationaal Trial Register

**Brief title** PLEIADES-pcsk9

#### Health condition

Diabetes Mellitus Type 2 (T2DM), postprandial lipemia

### **Sponsors and support**

Primary sponsor: Franciscus Gasthuis Source(s) of monetary or material Support: Regeneron

#### Intervention

### **Outcome measures**

#### **Primary outcome**

Primary endpoint is effect of alirocumab on postprandial leukocyte activation markers (CD11b, CD66b and CD35).

#### Secondary outcome

Secondary endponts are the effect of 9 weeks of treatment with alirocumab on postprandial lipemia (apoB48, triglycerides, free fatty acids and b-hydroxybutyrate), oxidative stress (myeloperoxidase) and vascular function (arterial pulse wave velocity and arterial pulse wave analysis).

# **Study description**

#### **Background summary**

Few studies have proven to be efficient in reducing cardiovascular risk in diabetes. Recently, treatment of patients at high cardiovascular risk with a pcks9-inhibito has proven to both significantly reduce LDL-cholesterol and cardiovascular risk. We aimed to explore the postprandial effects of alirocumab both on lipids and inflammation in male subjects with type 2 diabetes on intensive insulin treatment.

#### **Study objective**

Treatment with alirocumab will reduce postprandial hyperlipidemia and thus reduce postprandial leukocyte activation, diminish the generation of postprandial oxidative stress and improve postprandial vascular dysfunction in men with type 2 diabetes mellitus

#### Study design

0 and 12 weeks

#### Intervention

9 weeks treatment with either biweekly alirocumab 150 mg or bikweeekly matching placebo.

Before and after treatment oral fat loading test (OFLT).

# Contacts

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# **Eligibility criteria**

## Inclusion criteria

- Age of 18 years of older;
- Male

• Diabetes mellitus type 2 on intensive insulin treatment (three times short acting and once daily long acting) (unchanged for > 10 weeks prior to consent)

- Stable glucose regulation last 6 months (HbA1c > 6.5% < 9.0%)
- Stable lipid lowering therapy last 2 months (no changes in regiment or dose)

### **Exclusion criteria**

- Current smoking
- Impaired renal function (MDRD <60 ml/min/1.73 m2)

• Recent cardiovascular event (< 6 months) (myocardial infarction, coronary artery bypass grafting, stroke)

• Severe hyperglycemic events in the past 6 months (hyperglycemia >20 mmol/l requiring hospital admittance)

- Recent or current use of PCSK9 inhibitors
- HIV-infection
- Uncontrolled hypothyroidism

# Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo

### Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-10-2017
Enrollment:	20
Туре:	Anticipated

# **Ethics review**

Positive opinion	
Date:	19-09-2017
Application type:	First submission

# **Study registrations**

### Followed up by the following (possibly more current) registration

ID: 43374 Bron: ToetsingOnline Titel:

### Other (possibly less up-to-date) registrations in this register

No registrations found.

# In other registers

Register	ID
NTR-new	NL6521
NTR-old	NTR6709
ССМО	NL58836.101.16
OMON	NL-OMON43374

# **Study results**