An Open-Label Study to Evaluate the Efficacy and Safety of Alirocumab in Children and Adolescents with Homozygous Familial Hypercholesterolemia

Published: 16-05-2018
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Primary objective: To evaluate the efficacy of alirocumab, on low-density lipoprotein cholesterol (LDL-C) levels of treatment in children with homozygous familialhypercholesterolemia (hoFH) 8 to 17 years of age on top of background treatments....

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON48896

Source
ToetsingOnline

Brief title
A study of the effect of alirocumab in children with homozygote FH

Condition

- Other condition

Synonym
high cholesterol, Homozygous familial hypercholesterolemia

Health condition

Familiaire hypercholesterolemie

Research involving
Human

Sponsors and support

Primary sponsor: Clinical Study Unit
Source(s) of monetary or material Support: Sanofi

Intervention

Keyword: Alirocumab, Children, Familial hypercholesterolemia, Open-Label

Outcome measures

Primary outcome

Percent change in LDL-C from baseline to Week 12 in the intent-to-treat (ITT) population, using all LDL-C values regardless of adherence to treatment (ITT estimand).

Secondary outcome

- Percent change in LDL-C from baseline to Week 12 in the ITT population, using all LDL-C values during the treatment period (on-treatment estimand).
- Percent change in LDL-C from baseline to Weeks 24 and 48 (ITT and on-treatment estimands).
- Percent change in Apo B, non-HDL-C, total-C, Lp (a), HDL-C, fasting TG, and Apo A-1 (pre-apheresis, if applicable) from baseline to Weeks 12, 24, and 48 (ITT and on-treatment estimands).
- Proportion of patients with *15% reduction in LDL-C at Weeks 12, 24, and 48 (ITT and on-treatment estimands).
- The absolute change in LDL-C from baseline to Weeks 12, 24, and 48 (ITT and on-treatment estimands).

Study description

Background summary

Familial hypercholesterolemia (FH) is a hereditary disorder of lipid metabolism, characterized by severely elevated levels of low-density lipoprotein (LDL-C) leading to early onset of atherosclerosis and cardiovascular disease (CVD). It has been shown that these complications occur already in early childhood. To be treated effectively, prevention must begin decades prior to the onset of symptoms.

Alirocumab is an antibody that targets a specific protein (PCSK9) that reduces the number of LDL receptors on liver cells which remove LDL from the blood circulation. PCSK9 inhibition, results in more receptors being present on the surface of the liver cells resulting in lower levels of circulating LDL-C.

This study is designed to evaluate the efficacy, safety and pharmacokinetics (PK) of alirocumab in the pediatric population (ages 8 to 17) with homozygous familial hypercholesterolemia.

Study objective

Primary objective:
To evaluate the efficacy of alirocumab, on low-density lipoprotein cholesterol (LDL-C) levels of treatment in children with homozygous familialhypercholesterolemia (hoFH) 8 to 17 years of age on top of background treatments.

Secondary objectives:
-To evaluate the efficacy of alirocumab after treatment on LDL-C levels.
-To evaluate the effects of alirocumab on other lipid parameters.
-To evaluate the safety and tolerability of alirocumab.

Study design

Phase 3, open label, 75 or 150 mg/ml (depending on body weight)

Intervention

Alirocumab 75 or 150 mg/ml SC Q2W

Study burden and risks

Risks and burdens related to blood collection, study procedures and possible

adverse events.

Contacts

Public
Selecteer

Paasheuvelweg 25
Amsterdam 1105BP
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Scientific
Selecteer

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adolescents (12-15 years)
Adolescents (16-17 years)
Children (2-11 years)

Inclusion criteria

-Patients genetically diagnosed with homozygous familial hypercholesterolemia (hoFH)., -Patients treated with optimal dose of statin +/- other lipid modifying therapies (LMTs), or non-statin LMTs if statin-intolerant at stable dose(s) for at least 4 weeks prior to screening lipid sample., -A signed informed consent indicating parental permission with or without patient assent., -For patients on apheresis, currently undergoing stable low-density lipoprotein (LDL) apheresis therapy prior to the screening and have initiated

apheresis treatment for at least 6 months.

Exclusion criteria

-Patients with low-density lipoprotein - cholesterol (LDL-C) less than 130 mg/dL (3.37 mmol/L) obtained during the screening period after the patient has been on stable apheresis procedure or lipid modifying therapy (LMT) (i.e., stable optimal dose of statin ± other stable LMTs, or stable non statin LMTs in statin-intolerant patients) treatment for at least 4 weeks., -Patients with body weight less than 25 kg., -Patients aged 8 to 9 years not at Tanner Stage 1 and patients aged of 10 to 17 years not at least at Tanner Stage 2 in their development., -Patients with uncontrolled Type 1 or 2 diabetes mellitus., -Patients with known uncontrolled thyroid disease., -Patients with uncontrolled hypertension., -Fasting triglycerides >350 mg/dL., -Severe renal impairment (i.e., estimated glomerular filtration rate [eGFR] <30 mL/min/1.73m^2) at the screening visit., -Alanine aminotransferase (ALT) or aspartate aminotransferase (AST) >2 x upper limit of normal (ULN)., -Creatine phosphokinase (CPK) >3 x ULN.

Study design

Design

Study phase:	3
Study type:	Interventional
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	14-09-2018
Enrollment:	1
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Praluent
Generic name:	alirocumab
Registration:	Yes - NL outside intended use

Ethics review

Approved WMO Date:	16-05-2018
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	02-07-2018
Application type:	First submission
Review commission:	METC Amsterdam UMC
Approved WMO Date:	28-08-2018
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	30-08-2018
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	19-10-2018
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	15-11-2018
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	17-01-2019
Application type:	Amendment

Review commission:	METC Amsterdam UMC
Approved WMO Date:	30-01-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	13-03-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	22-03-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	03-04-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC
Approved WMO Date:	12-04-2019
Application type:	Amendment
Review commission:	METC Amsterdam UMC

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
Other	2017-002297-39
EudraCT	EUCTR2017-002297-39-NL
CCMO	NL65086.018.18