Markers of Efficacy of Xolair (Omalizumab) in Chronic Spontaneous Urticaria

Published: 27-05-2015
Last updated: 14-04-2024

To relate the reduction of inflammatory characteristics in skin and in peripheral blood to clinical efficacy in patients with CSU. Major focusses of this study are the (early) effects on basophils and other Fc*RI-bearing leukocytes before, during,...

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Angioedema and urticaria
Study type	Interventional

Summary

ID

NL-OMON43836

Source
ToetsingOnline

Brief title
U-MEX

Condition

- Angioedema and urticaria

Synonym
hives, urticaria

Research involving
Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Utrecht
Source(s) of monetary or material Support: Novartis Pharma

Intervention

Keyword: basophils, complement, omalizumab, urticaria

Outcome measures

Primary outcome

The reduction of inflammatory characteristics in skin and blood in responders and non-responders of treatment with omalizumab, thereby exploring the reduction in inflammatory parameters by analysis of complement deposition and infiltration of basophils.

Secondary outcome

The secondary endpoint is the clinical efficacy of omalizumab, determined by the change from baseline in disease severity, quality of life and disease control.

Study description

Background summary

Omalizumab is effective in the treatment of CSU, but the exact mechanism of action of omalizumab in CSU patients is not fully elucidated so far. Sera from patients with CSU can induce degranulation of mast cells and basophils, and during this process the presence of intact complement is essential. The efficacy of omalizumab in CSU may be caused by influencing complement mediated inflammation in the skin. Furthermore, it is known that an effect on mast cells is seen after 1-2 months of treatment. The clinical effect of omalizumab occurs much faster: within days or weeks. This may indicate that other cell types such as basophils have a role in the pathogenesis of CSU.

Study objective

To relate the reduction of inflammatory characteristics in skin and in peripheral blood to clinical efficacy in patients with CSU. Major focusses of this study are the (early) effects on basophils and other Fc*RI-bearing leukocytes before, during, and after treatment with omalizumab in CSU patients.

Additionally, this study is designed to define complement activation and complement deposition in venous blood and skin, induced by omalizumab.

Study design

Exploratory prospective cohort study. All patients will receive 6 doses of 300 mg omalizumab per 4 weeks, followed by a follow-up period of up to 2 months. At pre-defined time-points venipunctures and biopsies will be performed to determine the main study parameters.

Intervention

omalizumab 6 x 300 mg, per 4 weeks

Study burden and risks

After screening for eligibility and signing informed consent, participants will be treated with 6 doses of 300 mg omalizumab per 4 weeks, as proven effective and safe, and as recommended by recent guidelines. During treatment, a total of 4 biopsies of 3mm and 14 venipunctures, of which 5 may be taken from an intervenous line, will be performed. The study comprises a flexible amount of 9-11 study visits. During these visits, a physical examination is performed, safety information is collected, and information about concomitant treatment is collected.
Possible side effects of treatment are sinusitis, headache, or arthralgia. Anaphylactic reactions are a known adverse reaction in asthma patients treated with omalizumab, however it is not reported in CSU patients. Nevertheless, when omalizumab is administered, a pre-defined observation time is maintained, during which patients fill in questionnaires regarding quality of life (four times) and disease control (every 4 weeks). Disease activity is measured daily throughout the study. A follow-up period of up to two months is maintained.

Contacts

Public
Universitair Medisch Centrum Utrecht

heidelberglaan 100
Utrecht 3508 GA
NL
Scientific
Universitair Medisch Centrum Utrecht

heidelberglaan 100

Utrecht 3508 GA
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)
Elderly (65 years and older)

Inclusion criteria

Age * 18 years
Diagnosis of CSU according to recent international guidelines
Moderate or severe disease activity (UAS7 * 16) despite current treatment with H1 antihistamines according to recent international guidelines
Sufficient washout of treatment with immunosuppressants (several washout periods are pre-defined).

Exclusion criteria

Other urticarias than CSU, including but not limited to CINDU
Hypersensitivity to omalizumab or any component of the formulation

Study design

Design

Study phase:	4
Study type:	Interventional
Masking:	Open (masking not used)

Control:	Uncontrolled
Primary purpose:	Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	02-07-2015
Enrollment:	30
Type:	Actual

Medical products/devices used

Product type:	Medicine
Brand name:	Xolair
Generic name:	omalizumab
Registration:	Yes - NL intended use

Ethics review

Approved WMO Date:	27-05-2015
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	29-05-2015
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)
Approved WMO Date:	26-08-2016
Application type:	Amendment
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)

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
EudraCT	EUCTR2014-005127-27-NL
CCMO	NL51642.041.15