

**Clinical trial results:**

A multicenter, randomized, double-blind, placebo-controlled 12-week, parallel-group study with a 6 week follow up period to demonstrate efficacy and safety of subcutaneous Omalizumab in patients with urticaria factitia refractory to standard treatment

Summary

| | |
|--------------------------|----------------|
| EudraCT number | 2011-005615-87 |
| Trial protocol | DE |
| Global end of trial date | 25 March 2015 |

Results information

| | |
|-----------------------------------|--|
| Result version number | v1 (current) |
| This version publication date | 16 September 2021 |
| First version publication date | 16 September 2021 |
| Summary attachment (see zip file) | Symptomatic dermographism patients (04 Maurer et al Suppl Figure E1 UFO.pptx) Symptomatic dermographism patients (06 Maurer et al Suppl Table E2 UFO.docx) Publication (Maurer et al, JACI 2017.pdf) |

Trial information**Trial identification**

| | |
|-----------------------|---------------|
| Sponsor protocol code | CIGE025EDE17T |
|-----------------------|---------------|

Additional study identifiers

| | |
|------------------------------------|---|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | - |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Allergie-Centrum-Charité, Charité - Universitätsmedizin Berlin |
| Sponsor organisation address | Charitéplatz 1, Berlin, Germany, 10117 |
| Public contact | Hesna Gözlükaya, Allergie-Centrum-Charité, Charité - Universitätsmedizin Berlin, 49 30450518296, hesna.goezluékaya@charite.de |
| Scientific contact | Hesna Gözlükaya, Allergie-Centrum-Charité, Charité - Universitätsmedizin Berlin, 49 30450518296, hesna.goezluékaya@charite.de |

Notes:

Paediatric regulatory details

| | |
|--|----|
| Is trial part of an agreed paediatric investigation plan (PIP) | No |
| Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial? | No |
| Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial? | No |

Notes:

Results analysis stage

| | |
|--|------------------|
| Analysis stage | Final |
| Date of interim/final analysis | 01 December 2014 |
| Is this the analysis of the primary completion data? | No |
| Global end of trial reached? | Yes |
| Global end of trial date | 25 March 2015 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

To assess the effects of 150 and 300 mg omalizumab on wheal development in patients with urticaria factitia

Protection of trial subjects:

Omalizumab (Xolair®) is a recombinant humanized monoclonal antibody that binds to IgE at its binding site to FcεRI. Omalizumab is currently indicated in patients with moderate to severe allergic asthma, 12 years and older. Up to now, more than 100,000 patients have been treated with omalizumab worldwide. Free IgE levels fall between 89-98% over 16 to 24 weeks of therapy. Associated with the fall in free IgE levels is a down-regulation in the expression of FcεRI receptors on basophils and mast cells. This mechanism of action is postulated to account for the reduction of exacerbations and symptoms of allergic asthma. In the EU, omalizumab is licensed for severe allergic asthma, while there is an expanded indication to moderate allergic asthma in the USA.

Safety parameters were documented at each study visit and reported accordingly. Safety parameters included adverse events, laboratory values, clinical monitoring, and prescribed clinic visits. There were no significant differences in the frequency of occurrence of adverse events or other unexpected events between the omalizumab groups and the placebo group.

Background therapy:

No background therapy

Evidence for comparator: -

| | |
|---|--------------|
| Actual start date of recruitment | 02 July 2012 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | Yes |

Notes:

Population of trial subjects

Subjects enrolled per country

| | |
|--------------------------------------|-------------|
| Country: Number of subjects enrolled | Germany: 61 |
| Worldwide total number of subjects | 61 |
| EEA total number of subjects | 61 |

Notes:

Subjects enrolled per age group

| | |
|----------|---|
| In utero | 0 |
|----------|---|

| | |
|---|----|
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 0 |
| Infants and toddlers (28 days-23 months) | 0 |
| Children (2-11 years) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 50 |
| From 65 to 84 years | 11 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

The study was conducted at 3 study centers in Germany, between December 2012 (first patient first visit) and December 2014 (last patient last visit).

Pre-assignment

Screening details:

60 patients with chronic urticaria factitia were planned, 61 were randomized, all 61 were analyzed regarding safety and 55 regarding efficacy.

A total of 61 subjects entered the screening period (up to 2 weeks). All 61 subjects were randomized and received at least (two) dose of study drug.

Pre-assignment period milestones

| | |
|------------------------------|----|
| Number of subjects started | 61 |
| Number of subjects completed | 61 |

Period 1

| | |
|------------------------------|--------------------------------|
| Period 1 title | Overall trial (overall period) |
| Is this the baseline period? | Yes |
| Allocation method | Randomised - controlled |
| Blinding used | Double blind |
| Roles blinded | Subject, Investigator |

Arms

| | |
|------------------------------|------------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Omalizumab 150mg |

Arm description: -

| | |
|--|---------------------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | Omalizumab 150mg |
| Investigational medicinal product code | |
| Other name | Xolair |
| Pharmaceutical forms | Suspension for emulsion for injection |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

Drug: Omalizumab

150mg, s.c., every 4 weeks

| | |
|------------------|------------------|
| Arm title | Omalizumab 300mg |
|------------------|------------------|

Arm description: -

| | |
|--|--------------------------|
| Arm type | Active comparator |
| Investigational medicinal product name | Omalizumab |
| Investigational medicinal product code | |
| Other name | Xolair |
| Pharmaceutical forms | Suspension for injection |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

Omalizumab

150mg, s.c., every 4 weeks

| | |
|--|--------------------------|
| Arm title | Placebo |
| Arm description: - | |
| Arm type | Placebo |
| Investigational medicinal product name | Placebo |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Suspension for injection |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

Drug: Placebo

Placebo, s.c., every 4 weeks

| Number of subjects in period 1 | Omalizumab 150mg | Omalizumab 300mg | Placebo |
|---------------------------------------|------------------|------------------|---------|
| Started | 19 | 21 | 21 |
| Completed | 19 | 21 | 21 |

Baseline characteristics

Reporting groups

| | |
|--------------------------------|------------------|
| Reporting group title | Omalizumab 150mg |
| Reporting group description: - | |
| Reporting group title | Omalizumab 300mg |
| Reporting group description: - | |
| Reporting group title | Placebo |
| Reporting group description: - | |

| Reporting group values | Omalizumab 150mg | Omalizumab 300mg | Placebo |
|--------------------------------|------------------|------------------|---------|
| Number of subjects | 19 | 21 | 21 |
| Age categorical | | | |
| as described in the manuscript | | | |
| Units: Subjects | | | |
| Age 26-46 years | 0 | 0 | 21 |
| Age 34-52 years | 19 | 0 | 0 |
| Age 31-51 years | 0 | 21 | 0 |
| Gender categorical | | | |
| as described in the manuscript | | | |
| Units: Subjects | | | |
| Female | 13 | 9 | 12 |
| Male | 6 | 12 | 9 |

| Reporting group values | Total | | |
|--------------------------------|-------|--|--|
| Number of subjects | 61 | | |
| Age categorical | | | |
| as described in the manuscript | | | |
| Units: Subjects | | | |
| Age 26-46 years | 21 | | |
| Age 34-52 years | 19 | | |
| Age 31-51 years | 21 | | |
| Gender categorical | | | |
| as described in the manuscript | | | |
| Units: Subjects | | | |
| Female | 34 | | |
| Male | 27 | | |

End points

End points reporting groups

| | |
|------------------------------|------------------|
| Reporting group title | Omalizumab 150mg |
| Reporting group description: | - |
| Reporting group title | Omalizumab 300mg |
| Reporting group description: | - |
| Reporting group title | Placebo |
| Reporting group description: | - |

Primary: Change in Provocation Thresholds From Baseline to Day 70 in Urticaria Factitia Patients After Treatment With Omalizumab Compared to Placebo

| | |
|------------------------|--|
| End point title | Change in Provocation Thresholds From Baseline to Day 70 in Urticaria Factitia Patients After Treatment With Omalizumab Compared to Placebo ^[1] |
| End point description: | every 4 weeks |
| End point type | Primary |
| End point timeframe: | 70 days |

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: See manuskript

| End point values | Omalizumab 150mg | Omalizumab 300mg | Placebo | |
|--|------------------|------------------|-----------------|--|
| Subject group type | Reporting group | Reporting group | Reporting group | |
| Number of subjects analysed | 19 | 21 | 21 | |
| Units: wheal development up to four pins | | | | |
| geometric mean (standard deviation) | -1.8 (± 1.7) | -2.0 (± 1.8) | -0.6 (± 1.4) | |

Statistical analyses

No statistical analyses for this end point

Secondary: To assess the effects of omalizumab in urticaria factitia patients on quality of life

| | |
|------------------------|---|
| End point title | To assess the effects of omalizumab in urticaria factitia patients on quality of life |
| End point description: | every 4 weeks |
| End point type | Secondary |
| End point timeframe: | 70 days |

| End point values | Omalizumab 150mg | Omalizumab 300mg | Placebo | |
|--|-----------------------|-----------------------|-----------------------|--|
| Subject group type | Reporting group | Reporting group | Reporting group | |
| Number of subjects analysed | 19 | 21 | 21 | |
| Units: Dermatology quality of life score | | | | |
| geometric mean (standard error) | -6.611 (\pm 1.234) | -5.579 (\pm 1.478) | -2.316 (\pm 0.949) | |

Statistical analyses

No statistical analyses for this end point

Secondary: To assess the effects of omalizumab in UF patients on physician global assessment of disease severity

| | |
|---|---|
| End point title | To assess the effects of omalizumab in UF patients on physician global assessment of disease severity |
| End point description: every 4 weeks | |
| End point type | Secondary |
| End point timeframe: 70 days | |

| End point values | Omalizumab 150mg | Omalizumab 300mg | Placebo | |
|---------------------------------|--------------------|---------------------|----------------------|--|
| Subject group type | Reporting group | Reporting group | Reporting group | |
| Number of subjects analysed | 18 | 19 | 20 ^[2] | |
| Units: units on a sclae | | | | |
| geometric mean (standard error) | 21.8 (\pm 3.63) | 28.33 (\pm 6.23) | 40.32 (\pm 6.162) | |

Notes:

[2] - Data were not collected

Statistical analyses

No statistical analyses for this end point

Secondary: To assess long-term effects of omalizumab in UF patients, change in friction thresholds from day 70 (week 10) to day 112 (week 16) will be assessed

| | |
|---|---|
| End point title | To assess long-term effects of omalizumab in UF patients, change in friction thresholds from day 70 (week 10) to day 112 (week 16) will be assessed |
| End point description: every 4 weeks | |
| End point type | Secondary |

End point timeframe:

112 days

| End point values | Omalizumab 150mg | Omalizumab 300mg | Placebo | |
|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|--|
| Subject group type | Reporting group | Reporting group | Reporting group | |
| Number of subjects analysed | 19 | 21 | 21 | |
| Units: Fric Test grades | | | | |
| geometric mean (standard deviation) | -1.0556 (\pm 1.39209) | -0.8421 (\pm 1.77210) | -0.8333 (\pm 1.50489) | |

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants with Serious Adverse Events and Adverse Events

End point title | Number of Participants with Serious Adverse Events and Adverse Events

End point description:
every 4 weeks

End point type | Secondary

End point timeframe:
112

| End point values | Omalizumab 150mg | Omalizumab 300mg | Placebo | |
|-----------------------------|---------------------|---------------------|-----------------|--|
| Subject group type | Reporting group | Reporting group | Reporting group | |
| Number of subjects analysed | 19 | 21 | 21 | |
| Units: participants | | | | |
| number (not applicable) | 1 | 1 | 1 | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

During the whole trial

| | |
|-----------------|----------------|
| Assessment type | Non-systematic |
|-----------------|----------------|

Dictionary used

| | |
|-----------------|--------------------|
| Dictionary name | no dictionary used |
|-----------------|--------------------|

| | |
|--------------------|---|
| Dictionary version | 0 |
|--------------------|---|

Reporting groups

| | |
|-----------------------|------------------|
| Reporting group title | Omalizumab 150mg |
|-----------------------|------------------|

Reporting group description: -

| | |
|-----------------------|------------------|
| Reporting group title | Omalizumab 300mg |
|-----------------------|------------------|

Reporting group description: -

| | |
|-----------------------|---------|
| Reporting group title | Placebo |
|-----------------------|---------|

Reporting group description: -

| Serious adverse events | Omalizumab 150mg | Omalizumab 300mg | Placebo |
|---|------------------|------------------|----------------|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 1 / 19 (5.26%) | 1 / 21 (4.76%) | 1 / 21 (4.76%) |
| number of deaths (all causes) | 0 | 0 | 0 |
| number of deaths resulting from adverse events | | | |
| Surgical and medical procedures | | | |
| Inguinal hernia | | | |
| subjects affected / exposed | 1 / 19 (5.26%) | 0 / 21 (0.00%) | 0 / 21 (0.00%) |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Renal and urinary disorders | | | |
| Unspecified renal colic | | | |
| subjects affected / exposed | 0 / 19 (0.00%) | 0 / 21 (0.00%) | 1 / 21 (4.76%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Acute Cystitis | | | |
| subjects affected / exposed | 0 / 19 (0.00%) | 1 / 21 (4.76%) | 0 / 21 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

Frequency threshold for reporting non-serious adverse events: 5 %

| Non-serious adverse events | Omalizumab 150mg | Omalizumab 300mg | Placebo |
|--|------------------------|----------------------|------------------------|
| Total subjects affected by non-serious adverse events subjects affected / exposed | 18 / 19 (94.74%) | 15 / 21 (71.43%) | 18 / 21 (85.71%) |
| General disorders and administration site conditions Headache subjects affected / exposed occurrences (all) | 6 / 19 (31.58%) 6 | 9 / 21 (42.86%) 9 | 10 / 21 (47.62%) 10 |
| Respiratory, thoracic and mediastinal disorders Upper respiratory tract infection subjects affected / exposed occurrences (all) | 12 / 19 (63.16%) 12 | 6 / 21 (28.57%) 6 | 8 / 21 (38.10%) 8 |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported