



**Clinical trial results:
randomized, double-blind, placebo-controlled,
parallel group study evaluating efficacy and safety of
QAW039 in the treatment of patients with moderate to
severe atopic dermatitis**

Due to the EudraCT – Results system being out of service between 31 July 2015 and 12 January 2016, these results have been published in compliance with revised timelines.

Summary

| | |
|--------------------------|------------------|
| EudraCT number | 2012-005321-78 |
| Trial protocol | AT DE BE NL |
| Global end of trial date | 12 November 2014 |

Results information

| | |
|--------------------------------|--------------|
| Result version number | v1 (current) |
| This version publication date | 28 May 2016 |
| First version publication date | 28 May 2016 |

Trial information

Trial identification

| | |
|-----------------------|--------------|
| Sponsor protocol code | CQAW039X2201 |
|-----------------------|--------------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT01785602 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Novartis Pharma AG |
| Sponsor organisation address | CH-4002, Basel, Switzerland, |
| Public contact | Clinical Disclosure Office, Novartis Pharma AG, 41 613241111 X, |
| Scientific contact | Clinical Disclosure Office, Novartis Pharma AG, 41 613241111 X, |

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 | 12 November 2014 |
| Is this the analysis of the primary completion data? | No |
| Global end of trial reached? | Yes |
| Global end of trial date | 12 November 2014 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

To evaluate the efficacy of once daily doses of QAW039 as measured by Eczema Area and Severity Index (EASI) after 12 weeks of treatment relative to placebo in adult patients with moderate to severe atopic dermatitis (AD); To evaluate safety and tolerability of once daily doses of QAW039 over 12 weeks of treatment in adult patients with moderate to severe AD as expressed in terms of frequency of adverse events (AEs).

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and the International Conference on Harmonization (ICH) Good Clinical Practice (GCP) guidelines. All the local regulatory requirements pertinent to safety of trial subjects were also followed during the conduct of the trial.

Background therapy: -

Evidence for comparator: -

| | |
|---|--------------|
| Actual start date of recruitment | 26 June 2013 |
| Long term follow-up planned | No |
| Independent data monitoring committee (IDMC) involvement? | No |

Notes:

Population of trial subjects

Subjects enrolled per country

| | |
|--------------------------------------|-----------------|
| Country: Number of subjects enrolled | Australia: 19 |
| Country: Number of subjects enrolled | Austria: 8 |
| Country: Number of subjects enrolled | Belgium: 12 |
| Country: Number of subjects enrolled | Bulgaria: 9 |
| Country: Number of subjects enrolled | Germany: 24 |
| Country: Number of subjects enrolled | Netherlands: 18 |
| Country: Number of subjects enrolled | Romania: 11 |
| Country: Number of subjects enrolled | South Africa: 2 |
| Worldwide total number of subjects | 103 |
| EEA total number of subjects | 82 |

Notes:

Subjects enrolled per age group

| | |
|--|---|
| In utero | 0 |
| Preterm newborn - gestational age < 37 | 0 |

| | |
|--|-----|
| wk | |
| 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) | 101 |
| From 65 to 84 years | 2 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Following a screening period of up to 28 days (from Day -28) and a baseline period (Day 1), patients who met the inclusion and exclusion criteria were randomized to receive QAW039 450 mg (3 x 150 mg capsules) administered orally once daily or matching placebo for 12 weeks.

Period 1

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

Arms

| | |
|------------------------------|--------|
| Are arms mutually exclusive? | Yes |
| Arm title | QAW039 |

Arm description:

Participants received QAW039 450 mg daily by mouth.

| | |
|--|--------------|
| Arm type | Experimental |
| Investigational medicinal product name | QAW039 |
| Investigational medicinal product code | QAW039 |
| Other name | |
| Pharmaceutical forms | Capsule |
| Routes of administration | Oral use |

Dosage and administration details:

450 mg by mouth once daily

| | |
|------------------|---------|
| Arm title | Placebo |
|------------------|---------|

Arm description:

Participants received matching placebo to QAW039.

| | |
|--|----------|
| Arm type | Placebo |
| Investigational medicinal product name | Placebo |
| Investigational medicinal product code | Placebo |
| Other name | |
| Pharmaceutical forms | Capsule |
| Routes of administration | Oral use |

Dosage and administration details:

matching placebo to QAW039 given by mouth once daily

| Number of subjects in period 1 | QAW039 | Placebo |
|---------------------------------------|--------|---------|
| Started | 76 | 27 |
| Completed | 63 | 18 |
| Not completed | 13 | 9 |
| Consent withdrawn by subject | 2 | - |
| Adverse event, non-fatal | 3 | 5 |
| Administrative problems | 7 | 3 |
| Lost to follow-up | 1 | 1 |

Baseline characteristics

Reporting groups

| | |
|-----------------------|--------|
| Reporting group title | QAW039 |
|-----------------------|--------|

Reporting group description:

Participants received QAW039 450 mg daily by mouth.

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

Reporting group description:

Participants received matching placebo to QAW039.

| Reporting group values | QAW039 | Placebo | Total |
|---|---------|---------|-------|
| Number of subjects | 76 | 27 | 103 |
| Age categorical Units: Subjects | | | |
| In utero | 0 | 0 | 0 |
| Preterm newborn infants (gestational age < 37 wks) | 0 | 0 | 0 |
| Newborns (0-27 days) | 0 | 0 | 0 |
| Infants and toddlers (28 days-23 months) | 0 | 0 | 0 |
| Children (2-11 years) | 0 | 0 | 0 |
| Adolescents (12-17 years) | 0 | 0 | 0 |
| Adults (18-64 years) | 74 | 27 | 101 |
| From 65-84 years | 2 | 0 | 2 |
| 85 years and over | 0 | 0 | 0 |
| Age Continuous Units: Years | | | |
| arithmetic mean | 35.5 | 38.7 | - |
| standard deviation | ± 13.08 | ± 9.95 | - |
| Gender, Male/Female Units: Participants | | | |
| Female | 27 | 12 | 39 |
| Male | 49 | 15 | 64 |

End points

End points reporting groups

| | |
|---|---------|
| Reporting group title | QAW039 |
| Reporting group description: | |
| Participants received QAW039 450 mg daily by mouth. | |
| Reporting group title | Placebo |
| Reporting group description: | |
| Participants received matching placebo to QAW039. | |

Primary: Change from baseline in Eczema Area and Severity Index (EASI)

| | |
|------------------------|--|
| End point title | Change from baseline in Eczema Area and Severity Index (EASI) ^[1] |
| End point description: | Investigators assessed presence and severity of erythema, induration/papulation, excoriation, and lichenification in four body areas: head/neck (H), upper limbs (UL), trunk (T), and lower limbs (LL). Investigators assigned a severity score from 0 – 3 for each area (none=0, mild=1, moderate=2, and severe=3). Investigators could assign half-points. Investigators also assigned an area score from 0 (no atopic dermatitis lesion in the area) to 6 (entire area is affected) for each area. The weighting factor was 0.1 for head/neck, 0.2 for upper limbs, 0.3 for trunk, and 0.4 for lower limbs. The total body score for each body region was obtained by multiplying the sum of the severity scores of the four key signs by the area score, then multiplying the result by the constant weighted value assigned to that body region. The sum of these scores gave the EASI total, ranging from 0 to 72. A higher score represented greater disease severity. A negative change from baseline indicates improvement. |
| End point type | Primary |
| End point timeframe: | |
| Baseline, 12 weeks | |

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: No statistical analysis was planned for this outcome measure.

| End point values | QAW039 | Placebo | | |
|----------------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 76 | 27 | | |
| Units: Score on a scale | | | | |
| arithmetic mean (standard error) | -8.65 (± 0.01) | -6.95 (± 0.017) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Change from baseline in Eczema Area and Severity Index

| | |
|---|--|
| End point title | Change from baseline in Eczema Area and Severity Index |
| End point description: | |
| Investigators assessed presence and severity of erythema, induration/papulation, excoriation, and lichenification in four body areas: head/neck (H), upper limbs (UL), trunk (T), and lower limbs (LL). Investigators assigned a severity score from 0 – 3 for each area (none=0, mild=1, moderate=2, and severe=3). Investigators could assign half-points. Investigators also assigned an area score from 0 (no | |

atopic dermatitis lesion in the area) to 6 (entire area is affected) for each area. The weighting factor was 0.1 for head/neck, 0.2 for upper limbs, 0.3 for trunk, and 0.4 for lower limbs. The total body score for each body region was obtained by multiplying the sum of the severity scores of the four key signs by the area score, then multiplying the result by the constant weighted value assigned to that body region. The sum of these scores gave the EASI total, ranging from 0 to 72. A higher score represented greater disease severity. A negative change from baseline indicates improvement.

| | |
|----------------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| Baseline, 4 weeks, 8 weeks | |

| End point values | QAW039 | Placebo | | |
|----------------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 76 | 27 | | |
| Units: Score on a scale | | | | |
| arithmetic mean (standard error) | | | | |
| Week 4 | -6.22 (± 0.01) | -5.89 (± 0.017) | | |
| Week 8 | -7.49 (± 0.01) | -5.61 (± 0.017) | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events are collected from First Patient First Visit (FPFV) until Last Patient Last Visit (LPLV). All adverse events reported in this record are from date of First Patient First Treatment until Last Patient Last Visit.

| | |
|-----------------|------------|
| Assessment type | Systematic |
|-----------------|------------|

Dictionary used

| | |
|--------------------|--------|
| Dictionary name | MedDRA |
| Dictionary version | 17.1 |

Reporting groups

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

Reporting group description:

Placebo

| | |
|-----------------------|---------------|
| Reporting group title | QAW039 450 mg |
|-----------------------|---------------|

Reporting group description:

QAW039 450 mg

| Serious adverse events | Placebo | QAW039 450 mg | |
|---|-----------------|----------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 4 / 27 (14.81%) | 1 / 76 (1.32%) | |
| number of deaths (all causes) | 0 | 0 | |
| number of deaths resulting from adverse events | 0 | 0 | |
| Cardiac disorders | | | |
| Atrial fibrillation | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | 1 / 76 (1.32%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Skin and subcutaneous tissue disorders | | | |
| Dermatitis atopic | | | |
| subjects affected / exposed | 3 / 27 (11.11%) | 0 / 76 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Infections and infestations | | | |
| Diverticulitis | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | 0 / 76 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

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

| Non-serious adverse events | Placebo | QAW039 450 mg | |
|---|------------------|------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 16 / 27 (59.26%) | 44 / 76 (57.89%) | |
| Vascular disorders | | | |
| Hot flush | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | 0 / 76 (0.00%) | |
| occurrences (all) | 2 | 0 | |
| Nervous system disorders | | | |
| Dizziness | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | 3 / 76 (3.95%) | |
| occurrences (all) | 2 | 3 | |
| Headache | | | |
| subjects affected / exposed | 4 / 27 (14.81%) | 7 / 76 (9.21%) | |
| occurrences (all) | 8 | 7 | |
| Hypoaesthesia | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | 0 / 76 (0.00%) | |
| occurrences (all) | 2 | 0 | |
| Tension headache | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | 1 / 76 (1.32%) | |
| occurrences (all) | 2 | 1 | |
| General disorders and administration site conditions | | | |
| Fatigue | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | 5 / 76 (6.58%) | |
| occurrences (all) | 1 | 5 | |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | 4 / 76 (5.26%) | |
| occurrences (all) | 1 | 5 | |
| Abdominal pain upper | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | 3 / 76 (3.95%) | |
| occurrences (all) | 4 | 3 | |

| | | | |
|--|-----------------------|------------------------|--|
| Diarrhoea subjects affected / exposed occurrences (all) | 2 / 27 (7.41%) 3 | 10 / 76 (13.16%) 11 | |
| Nausea subjects affected / exposed occurrences (all) | 3 / 27 (11.11%) 4 | 6 / 76 (7.89%) 6 | |
| Skin and subcutaneous tissue disorders Dermatitis atopic subjects affected / exposed occurrences (all) | 9 / 27 (33.33%) 19 | 24 / 76 (31.58%) 52 | |
| Pruritus subjects affected / exposed occurrences (all) | 2 / 27 (7.41%) 3 | 3 / 76 (3.95%) 4 | |
| Musculoskeletal and connective tissue disorders Back pain subjects affected / exposed occurrences (all) | 2 / 27 (7.41%) 2 | 1 / 76 (1.32%) 1 | |
| Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all) | 1 / 27 (3.70%) 1 | 11 / 76 (14.47%) 13 | |
| Oral herpes subjects affected / exposed occurrences (all) | 1 / 27 (3.70%) 1 | 4 / 76 (5.26%) 4 | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|------------------|--|
| 17 February 2014 | Amendment 1, issued approximately 33 weeks after study start (60 patients enrolled), introduced the following changes: additional 10 ml blood collected at FACS sampling (5 different time points) for PBMC; exploratory analysis of autoantibodies profiles at screening and/or baseline using the same samples as those collected for "Disease and mechanism biomarkers" assessment as a potential stratification biomarker; and potential use of the chip cytometry technology for analyzing skin biopsies. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported