



Clinical trial results:

Multicenter, double-blind, placebo-controlled, randomized withdrawal trial with Tadekinig alfa (r-hIL-18BP) in patients with IL-18 driven monogenic autoinflammatory conditions: NLRC4 mutation and XIAP deficiency

Summary

| | |
|--------------------------|-----------------|
| EudraCT number | 2018-003297-27 |
| Trial protocol | DE |
| Global end of trial date | 31 October 2023 |

Results information

| | |
|--------------------------------|--------------|
| Result version number | v1 (current) |
| This version publication date | 17 May 2024 |
| First version publication date | 17 May 2024 |

Trial information

Trial identification

| | |
|-----------------------|---------------------|
| Sponsor protocol code | NLRC4/XIAP.2016.001 |
|-----------------------|---------------------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT03113760 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | AB2 Bio Ltd. |
| Sponsor organisation address | EPFL Innovation Park, Building B, 4th floor, Lausanne, Switzerland, 1015 |
| Public contact | Eduardo Schiffrin, AB2 Bio Ltd., 0041 216940043, eduardo.schiffrin@ab2bio.com |
| Scientific contact | Eduardo Schiffrin, AB2 Bio Ltd., 0041 216940043, eduardo.schiffrin@ab2bio.com |

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 | 31 October 2023 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 31 October 2023 |
| Global end of trial reached? | Yes |
| Global end of trial date | 31 October 2023 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

- To assess clinical efficacy of Tadekinig alfa in monogenic autoinflammatory diseases with ongoing inflammation and deleterious mutations of NLRC4-MAS or XIAP
- To assess laboratory/biological evidence of efficacy

Protection of trial subjects:

Patient safety and comfort were guiding principles for this clinical trial with Tadekinig alfa. The following measures have been defined in the study protocol:

1. In order to enhance subjects' compliance and avoid subjects' discomfort, local skin treatment were proposed to the parents/patients to mitigate local inflammatory reactions.
2. Collected blood volumes were taking into account the maximum limits for certain age groups.
3. Emergency cards with relevant data on the IMP and clinical trial including the contact data for availability in case of emergencies were provided to the patients.

Background therapy:

N/A

Evidence for comparator:

N/A

| | |
|---|--------------|
| Actual start date of recruitment | 21 July 2017 |
| 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 | Canada: 3 |
| Country: Number of subjects enrolled | United States: 11 |
| Country: Number of subjects enrolled | Germany: 1 |
| Worldwide total number of subjects | 15 |
| EEA total number of subjects | 1 |

Notes:

Subjects enrolled per age group

| | |
|---|---|
| In utero | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 1 |

| | |
|--|---|
| Infants and toddlers (28 days-23 months) | 4 |
| Children (2-11 years) | 6 |
| Adolescents (12-17 years) | 4 |
| Adults (18-64 years) | 0 |
| From 65 to 84 years | 0 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

Recruitment in 11 sites in USA, Canada and Germany

Pre-assignment

Screening details:

A total of 24 patients were screened in the study.

8 patients were screening failures.

1 patient was a screening failure and was re-enrolled upon next disease flare with subsequent patient number (counted twice for consistency in total number of patients above).

Period 1

| | |
|------------------------------|--|
| Period 1 title | Initial 18 week Treatment - SAOL/RDBPC |
| Is this the baseline period? | Yes |
| Allocation method | Not applicable |
| Blinding used | Not blinded |

Arms

| | |
|------------------------------|---------------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Tadekinig alfa SAOL |

Arm description:

Including patients treated with Tadekinig alfa from randomized double-blind placebo controlled phase (RDBPC) up to protocol version 3 and from single arm open-label phase (SAOL) from protocol version 4 and subsequent amendments. Both populations had the same treatment schedule and are analysed together in the final analysis.

| | |
|--|------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | Tadekinig alfa |
| Investigational medicinal product code | |
| Other name | r-hIL-18BP |
| Pharmaceutical forms | Solution for injection |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

2 mg/kg s.c. every 2 days \pm 5 hours

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

Arm description:

Including patients from randomized double-blind placebo controlled phase (RDBPC) up to protocol version 3 randomized to placebo treatment.

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

Dosage and administration details:

Equivalent volume of Placebo s.c. every 2 days \pm 5 hours

| Number of subjects in period 1 | Tadekinig alfa SAOL | Placebo RDBPC |
|--------------------------------|---------------------|---------------|
| Started | 14 | 1 |
| Completed | 10 | 0 |
| Not completed | 4 | 1 |
| Consent withdrawn by subject | 2 | - |
| Adverse event, non-fatal | 1 | - |
| Disease relapse | 1 | 1 |

Period 2

| | |
|------------------------------|---|
| Period 2 title | Randomized Withdrawal Phase |
| Is this the baseline period? | No |
| Allocation method | Randomised - controlled |
| Blinding used | Double blind |
| Roles blinded | Subject, Investigator, Monitor, Data analyst, Carer, Assessor |

Arms

| | |
|------------------------------|----------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Tadekinig alfa |

Arm description:

Active treatment arm in Randomized Withdrawal Phase

| | |
|--|------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | Tadekinig alfa |
| Investigational medicinal product code | |
| Other name | r-hIL-18BP |
| Pharmaceutical forms | Solution for injection |
| Routes of administration | Subcutaneous use |

Dosage and administration details:

2 mg/kg s.c. every 2 days \pm 5 hours

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

Arm description:

Placebo treatment arm in Randomized Withdrawal Phase

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

Dosage and administration details:

Equivalent volume of Placebo s.c. every 2 days \pm 5 hours

| Number of subjects in period 2 | Tadekinig alfa | Placebo |
|---------------------------------------|----------------|---------|
| Started | 5 | 5 |
| Completed | 5 | 5 |

Baseline characteristics

Reporting groups

| | |
|---|--|
| Reporting group title | Initial 18 week Treatment - SAOL/RDBPC |
| Reporting group description: | |
| Patients receiving active treatment with Tadekinig alfa (14) or Placebo (1) during the first 18 weeks | |

| Reporting group values | Initial 18 week Treatment - SAOL/RDBPC | Total | |
|--|--|-------|--|
| Number of subjects | 15 | 15 | |
| Age categorical | | | |
| Units: Subjects | | | |
| In utero | 0 | 0 | |
| Preterm newborn infants (gestational age < 37 wks) | 0 | 0 | |
| Newborns (0-27 days) | 1 | 1 | |
| Infants and toddlers (28 days-23 months) | 4 | 4 | |
| Children (2-11 years) | 6 | 6 | |
| Adolescents (12-17 years) | 4 | 4 | |
| Adults (18-64 years) | 0 | 0 | |
| From 65-84 years | 0 | 0 | |
| 85 years and over | 0 | 0 | |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 4 | 4 | |
| Male | 11 | 11 | |

End points

End points reporting groups

| | |
|--|---------------------|
| Reporting group title | Tadekinig alfa SAOL |
| Reporting group description: Including patients treated with Tadekinig alfa from randomized double-blind placebo controlled phase (RDBPC) up to protocol version 3 and from single arm open-label phase (SAOL) from protocol version 4 and subsequent amendments. Both populations had the same treatment schedule and are analysed together in the final analysis. | |
| Reporting group title | Placebo RDBPC |
| Reporting group description: Including patients from randomized double-blind placebo controlled phase (RDBPC) up to protocol version 3 randomized to placebo treatment. | |
| Reporting group title | Tadekinig alfa |
| Reporting group description: Active treatment arm in Randomized Withdrawal Phase | |
| Reporting group title | Placebo |
| Reporting group description: Placebo treatment arm in Randomized Withdrawal Phase | |

Primary: Time to first occurrence of disease reactivation (including full and partial disease reactivation) during the RW phase

| | |
|--|--|
| End point title | Time to first occurrence of disease reactivation (including full and partial disease reactivation) during the RW phase |
| End point description: Median time to first occurrence of DR was 2.71 weeks for the placebo group, and was not applicable in the TA group due to the small number of patients (2 patients) with a disease reactivation. Therefore, 25th Percentile was entered below for results. Time to 80% event free was 1.93 weeks for placebo and 7.57 weeks for Tadekinig alfa. | |
| End point type | Primary |
| End point timeframe: Time to First Occurrence of Disease Reactivation during the RW Phase (up to 16 weeks) | |

| End point values | Tadekinig alfa | Placebo | | |
|----------------------------------|----------------------|---------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 5 | 5 | | |
| Units: Weeks | | | | |
| median (confidence interval 95%) | 11.43 (4.0 to 11.43) | 2.29 (1.86 to 2.71) | | |

| | |
|----------------------------|--|
| Attachments (see zip file) | 2018-003297-27_Primary Endpoint KaplanMeier/2018-003297- |
|----------------------------|--|

Statistical analyses

| | |
|--|-------------------------------|
| Statistical analysis title | Primary per protocol analysis |
| Statistical analysis description: Primary analysis adhering to per protocol criteria. | |
| Comparison groups | Tadekinig alfa v Placebo |
| Number of subjects included in analysis | 10 |
| Analysis specification | Pre-specified |
| Analysis type | superiority ^[1] |
| P-value | = 0.1492 |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 0.21 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0.02 |
| upper limit | 2.11 |

Notes:

[1] - Tadekinig alfa is compared to placebo using the log rank test. Kaplan-Meier (KM) estimates of the distribution of time-to-event are summarized and graphed by treatment group. Greenwood's formula is used to estimate the standard error of the KM statistic. The primary analysis endpoint is tested at a 2-sided alpha level of 0.05.

| | |
|---|--|
| Statistical analysis title | Sensitivity analysis for patient 14-001 (no DR) ^[2] |
| Statistical analysis description: Patient 14-001 was patient with XIAP-deficiency and frequent flares (>60) requiring increased corticosteroids prior to enrolment. Disease reactivation criteria in RW phase were met by transient abdominal symptoms of pain/colic & diarrhea and CRP exactly twice upper limit of normal; no additional usual disease manifestations observed. Disease reactivation was self-resolving without steroids, as opposed to prior flares. Sensitivity analysis reassesses this patient as not flaring in RW phase. | |
| Comparison groups | Tadekinig alfa v Placebo |
| Number of subjects included in analysis | 10 |
| Analysis specification | Post-hoc |
| Analysis type | superiority |
| P-value | = 0.0494 |
| Method | Logrank |
| Parameter estimate | Hazard ratio (HR) |
| Point estimate | 0 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | 0 |

Notes:

[2] - A low or upper value for the confidence interval may be missing. Values for both the lower and upper limit are expected to be provided with a 2-sided confidence interval.

Justification: The upper limit is reported as not applicable and therefore left empty.

Secondary: Response to therapy (including complete response and partial response) in the SAOL phase from Week 10 onwards and observed at least at 2 consecutive visits at least 2 weeks apart during the SAOL phase

| | |
|-----------------|---|
| End point title | Response to therapy (including complete response and partial response) in the SAOL phase from Week 10 onwards and observed at least at 2 consecutive visits at least 2 weeks apart during the SAOL phase ^[3] |
|-----------------|---|

End point description:

Key secondary efficacy endpoint; patients who discontinued prior to Week 10 are non-responders.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 week initial treatment phase for patients with active treatment with Tadekinig alfa

Notes:

[3] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| | | | | |
|-----------------------------|------------------------|--|--|--|
| End point values | Tadekinig alfa SAOL | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Patients | 10 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Best Response to Therapy During the SAOL Phase

| | |
|-----------------|---|
| End point title | Best Response to Therapy During the SAOL Phase ^[4] |
|-----------------|---|

End point description:

Complete response

- No major end organ damage (=objective mAIDAI components)
- No systemic inflammation
- Discontinuation of immunosuppressive therapy (systemic steroids or other)

Partial Response

- Resolution of at least 50% of major end organ damage
- and 50% of markers normalized or discontinuation of immunosuppressive therapy (systemic steroids or other)

Disease improvement

- Resolution of at least 1 major end-organ or normalization or 50% decrease of marker
- No dose increase of immunosuppressive therapies

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 week initial treatment phase with Tadekinig alfa

Notes:

[4] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| | | | | |
|-----------------------------|------------------------|--|--|--|
| End point values | Tadekinig alfa SAOL | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Patients | | | | |
| Complete response | 1 | | | |
| Partial response | 10 | | | |
| Disease improvement | 3 | | | |
| No improvement | 0 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Duration of Response to Therapy during the SAOL Phase

| | |
|-----------------|--|
| End point title | Duration of Response to Therapy during the SAOL Phase ^[5] |
|-----------------|--|

End point description:

Duration of response to therapy is only assessed for patients with a complete or partial response to therapy during SAOL as defined in the statistical analysis plan and is defined as the time from first assessment indicating partial or complete response until the time of subsequent disease reactivation. The median duration of response to therapy during the SAOL Phase was not estimable, due to the small percentage of patients who experienced a disease reactivation. Minimum duration of response was 2.1 weeks; maximum duration of response was 19.0 weeks.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 weeks in the initial treatment phase with Tadekinig alfa

Notes:

[5] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| | | | | |
|----------------------------------|------------------------|--|--|--|
| End point values | Tadekinig alfa SAOL | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Weeks | | | | |
| median (confidence interval 95%) | 0 (0 to 0) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Disease Reactivation Rate per Week during the SAOL Phase

| | |
|-----------------|---|
| End point title | Disease Reactivation Rate per Week during the SAOL Phase ^[6] |
|-----------------|---|

End point description:

Number of disease reactivations for treated patients
The mean disease reactivation rate per week was 0.0 (with SD 0.09) and min/max of 0.0/0.3.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 weeks initial treatment phase with Tadekinig alfa

Notes:

[6] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| End point values | Tadekinig alfa SAOL | | | |
|------------------------------|------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Disease reactivations | | | | |
| 0 Disease Reactivations | 11 | | | |
| 1 Disease Reactivations | 1 | | | |
| 2 Disease Reactivations | 2 | | | |
| 3 Disease Reactivations | 0 | | | |
| >3 Disease Reactivations | 0 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Treatment failures (i.e. patients who experience at least one disease reactivation) during the SAOL phase

| | |
|-----------------|--|
| End point title | Treatment failures (i.e. patients who experience at least one disease reactivation) during the SAOL phase ^[7] |
|-----------------|--|

End point description:

Treatment failures were defined as patients who experienced at least 1 disease reactivation. Disease reactivation includes full or partial disease reactivation after the first assessment indicating partial or complete response during the SAOL phase as defined in the statistical analysis plan.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 week initial treatment phase with Tadekinig alfa

Notes:

[7] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| End point values | Tadekinig alfa SAOL | | | |
|-----------------------------|------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Patients | 3 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Change from Baseline in Serum Ferritin during the SAOL Phase by Visit

| | |
|-----------------|--|
| End point title | Change from Baseline in Serum Ferritin during the SAOL Phase by Visit ^[8] |
|-----------------|--|

End point description:

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 week initial treatment phase with tadekinig alfa

Notes:

[8] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| End point values | Tadekinig alfa SAOL | | | |
|--------------------------------------|------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Serum Ferritin (ng/mL) | | | | |
| arithmetic mean (standard deviation) | | | | |
| Change from Baseline to Week 1 | -3333.1 (± 7008) | | | |
| Change from Baseline to Week 2 | -6061.1 (± 13168.11) | | | |
| Change from Baseline to Week 3 | -5488.0 (± 12882.6) | | | |
| Change from Baseline to Week 4 | -1970.6 (± 8216.18) | | | |
| Change from Baseline to Week 8 | -5761.1 (± 10439.98) | | | |
| Change from Baseline to Week 12 | -7032.6 (± 14345.88) | | | |
| Change from Baseline to Week 18 | -8558.7 (± 15700.51) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Change from Baseline in CRP during the SAOL Phase by Visit

| | |
|-----------------|---|
| End point title | Change from Baseline in CRP during the SAOL Phase by Visit ^[9] |
|-----------------|---|

End point description:

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 weeks initial treatment pahse with Tadekinig alfa

Notes:

[9] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| End point values | Tadekinig alfa SAOL | | | |
|--------------------------------------|------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: CRP (mg/dL) | | | | |
| arithmetic mean (standard deviation) | | | | |
| Change from Baseline to Week 1 | -2.35 (± 3.364) | | | |
| Change from Baseline to Week 2 | -1.46 (± 5.736) | | | |
| Change from Baseline to Week 3 | -2.53 (± 4.339) | | | |
| Change from Baseline to Week 4 | -2.26 (± 3.813) | | | |
| Change from Baseline to Week 8 | -2.04 (± 4.817) | | | |
| Change from Baseline to Week 12 | -2.21 (± 4.730) | | | |
| Change from Baseline to Week 18 | -2.28 (± 4.279) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Intensity of Disease Reactivations: Change from Baseline in mAIDAI Total Score in the SAOL phase

| | |
|-----------------|--|
| End point title | Intensity of Disease Reactivations: Change from Baseline in mAIDAI Total Score in the SAOL phase ^[10] |
|-----------------|--|

End point description:

The mAIDAI (modified autoinflammatory disease activity index) is an assessment of global disease activity that measures 14 different components for disease as either absent (0 points) or present (2 points for Uveitis 3+/4+ and 1 point for all other symptoms) at each visit. The mAIDAI total score is the sum of the points assigned across all components and ranges from 0 to 15, with a higher score indicating more severe disease activity.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 week initial treatment phase with Tadekinig alfa

Notes:

[10] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| | | | | |
|--------------------------------------|------------------------|--|--|--|
| End point values | Tadekinig alfa SAOL | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: mAIDAI | | | | |
| arithmetic mean (standard deviation) | | | | |
| Change from Baseline to Week 1 | -2.0 (± 1.62) | | | |
| Change from Baseline to Week 2 | -2.6 (± 1.45) | | | |
| Change from Baseline to Week 3 | -2.6 (± 1.28) | | | |
| Change from Baseline to Week 4 | -2.5 (± 1.22) | | | |
| Change from Baseline to Week 8 | -3.1 (± 1.73) | | | |
| Change from Baseline to Week 12 | -3.5 (± 1.37) | | | |
| Change from Baseline to Week 18 | -3.9 (± 0.74) | | | |

| | |
|-----------------------------------|--|
| Attachments (see zip file) | 2018-003297-27_Secondary Endpoint mAIDAI in SAOL/2018- |
|-----------------------------------|--|

Statistical analyses

No statistical analyses for this end point

Secondary: Change from Baseline in PGA Symptom Severity Score during the SAOL Phase

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|-----------------|--|
| End point title | Change from Baseline in PGA Symptom Severity Score during the SAOL Phase ^[11] |
|-----------------|--|

End point description:

The PGA (Physician Global Assessment) assesses the severity of disease-related (auto-inflammatory) symptoms by selecting an integer score from 0 (no symptoms) to 10 (highest severity of symptoms possible).

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 week initial treatment phase with Tadekinig alfa

Notes:

[11] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| | | | | |
|--------------------------------------|------------------------|--|--|--|
| End point values | Tadekinig alfa SAOL | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Physician Global Assessment | | | | |
| arithmetic mean (standard deviation) | | | | |
| Change from Baseline to Week 1 | -2.8 (± 2.19) | | | |
| Change from Baseline to Week 2 | -3.7 (± 2.43) | | | |
| Change from Baseline to Week 3 | -4.0 (± 2.11) | | | |
| Change from Baseline to Week 4 | -3.2 (± 2.52) | | | |
| Change from Baseline to Week 8 | -4.8 (± 2.42) | | | |
| Change from Baseline to Week 12 | -5.1 (± 2.39) | | | |

| | | | | |
|---------------------------------|---------------|--|--|--|
| Change from Baseline to Week 18 | -5.8 (± 2.10) | | | |
|---------------------------------|---------------|--|--|--|

| | |
|-----------------------------------|---|
| Attachments (see zip file) | 2018-003297-27_Secondary Endpoint PGA in SAOL/2018- |
|-----------------------------------|---|

Statistical analyses

No statistical analyses for this end point

Secondary: Resolution of individual disease components during SAOL phase, if present at Baseline

| | |
|-----------------|---|
| End point title | Resolution of individual disease components during SAOL phase, if present at Baseline ^[12] |
|-----------------|---|

End point description:

Resolution of Individual mAIDAI Components during the SAOL phase from Baseline to Week 18/early termination.

Number displays percentage of patients with resolution of individual disease component at Week 18 or early termination visit based on the number of patients with a baseline assessment for the component of interest.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 weeks initial treatment phase with Tadekinig alfa

Notes:

[12] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| End point values | Tadekinig alfa SAOL | | | |
|-----------------------------|------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Patients | | | | |
| Fever | 100 | | | |
| Abdominal Pain/Colic | 80 | | | |
| Nausea/Vomiting | 87 | | | |
| Diarrhea | 77 | | | |
| Transaminitis | 30 | | | |
| Organomegaly | 54 | | | |
| Rash | 75 | | | |
| Uveitis | 100 | | | |
| Arthralgia | 100 | | | |
| Arthritis | 0 | | | |
| Cytopenia | 20 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Change in Patient/Caregiver Qualitative Evaluation of Health Status in SAOL phase

| | |
|-----------------|---|
| End point title | Change in Patient/Caregiver Qualitative Evaluation of Health Status in SAOL phase ^[13] |
|-----------------|---|

End point description:

The Sum of individual disease-related symptoms score is the sum of (x) individual symptom scores within domain each ranging from 0 (None) to 5 (Very severe): general wellbeing (5), gastrointestinal (7), musculoskeletal (5), skin (2), eye (2), central nervous system (3), and lymphatic (2). Patient/Caregiver Qualitative Evaluation of Health Status was implemented in protocol version 6; thus only completed by 5 patients.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 weeks initial treatment phase with Tadekinig alfa

Notes:

[13] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| | | | | |
|---|------------------------|--|--|--|
| End point values | Tadekinig alfa SAOL | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 5 | | | |
| Units: Individual disease-related symptom score | | | | |
| arithmetic mean (standard deviation) | | | | |
| Mean at Baseline | 40.5 (± 7.78) | | | |
| Mean at Week 18 | 7.6 (± 8.08) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Hospitalizations during the SAOL Phase

| | |
|-----------------|--|
| End point title | Hospitalizations during the SAOL Phase ^[14] |
|-----------------|--|

End point description:

Hospitalization at SAOL Baseline was any hospitalization prior to the first dose of study drug during the SAOL Phase. Subsequent Hospitalizations during SAOL Phase included any additional hospitalization after study drug administration.

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

18 week initial treatment with with Tadekinig alfa

Notes:

[14] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started

with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| End point values | Tadekinig alfa SAOL | | | |
|---|------------------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Patients | | | | |
| Patients not Hospitalized at SAOL Baseline | 6 | | | |
| Patients Hospitalized at SAOL Baseline | 8 | | | |
| No Subsequent Hospitalizations during SAOL | 10 | | | |
| 1 Subsequent Hospitalization during SAOL | 1 | | | |
| 2 Subsequent Hospitalizations during SAOL | 2 | | | |
| 3 or more Subsequent Hospitalizations during SAOL | 1 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Change from Baseline to Week 34/ET in Serum Ferritin During the RW Phase

| | |
|------------------------|---|
| End point title | Change from Baseline to Week 34/ET in Serum Ferritin During the RW Phase |
| End point description: | |
| End point type | Secondary |
| End point timeframe: | Up to 16 weeks randomized withdrawal phase; change from Week 18 to Week 34 or Early termination visit |

| End point values | Tadekinig alfa | Placebo | | |
|--------------------------------------|------------------------|-----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 5 | 5 | | |
| Units: Serum Ferritin (ng/mL) | | | | |
| arithmetic mean (standard deviation) | -109.5 (\pm 167.40) | 211.8 (\pm 359.10) | | |

Statistical analyses

| | |
|----------------------------|----------------------------|
| Statistical analysis title | Mann-Whitney-Wilcoxon test |
|----------------------------|----------------------------|

Statistical analysis description:

P-values comparing change from RW Baseline among treatment groups were rank-based using the Mann-Whitney-Wilcoxon test

| | |
|---|--------------------------|
| Comparison groups | Tadekinig alfa v Placebo |
| Number of subjects included in analysis | 10 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.0317 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Change from Baseline to Week 34/ET in CRP During the RW Phase

| | |
|-----------------|---|
| End point title | Change from Baseline to Week 34/ET in CRP During the RW Phase |
|-----------------|---|

End point description:

| | |
|----------------|-----------|
| End point type | Secondary |
|----------------|-----------|

End point timeframe:

Up to 16 weeks randomized withdrawal phase; change from Week 18 to Week 34 or Early termination visit

| End point values | Tadekinig alfa | Placebo | | |
|--------------------------------------|----------------------|---------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 5 | 5 | | |
| Units: CRP (mg/dL) | | | | |
| arithmetic mean (standard deviation) | -0.02 (\pm 0.199) | 0.24 (\pm 1.354) | | |

Statistical analyses

| | |
|---|--------------------------|
| Statistical analysis title | Mann-Whitney- Wilcoxon |
| Comparison groups | Tadekinig alfa v Placebo |
| Number of subjects included in analysis | 10 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.4603 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Intensity of Disease Reactivations: Change from Baseline in mAIDAI Total Score in RW Phase

| | |
|-----------------|--|
| End point title | Intensity of Disease Reactivations: Change from Baseline in mAIDAI Total Score in RW Phase |
|-----------------|--|

End point description:

| | |
|---|-----------|
| End point type | Secondary |
| End point timeframe: | |
| Up to 16 weeks randomized withdrawal phase; change from Week 18 to Week 34 or Early termination visit | |

| | | | | |
|-----------------------------|-----------------|-----------------|--|--|
| End point values | Tadekinig alfa | Placebo | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 5 | 5 | | |
| Units: mAIDAI Total Score | | | | |
| median (standard deviation) | -0.4 (± 0.89) | 1.0 (± 1.73) | | |

Statistical analyses

| | |
|---|--------------------------|
| Statistical analysis title | Mann-Whitney- Wilcoxon |
| Comparison groups | Tadekinig alfa v Placebo |
| Number of subjects included in analysis | 10 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.111 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Change from Baseline to Week 34/ET in PGA During the RW Phase

| | |
|---|---|
| End point title | Change from Baseline to Week 34/ET in PGA During the RW Phase |
| End point description: | |
| The PGA (Physician Global Assessment) assesses the severity of disease-related (auto-inflammatory) symptoms by selecting an integer score from 0 (no symptoms) to 10 (highest severity of symptoms possible). | |
| End point type | Secondary |
| End point timeframe: | |
| Up to 16 weeks randomized withdrawal phase; change from Week 18 to Week 34 or Early termination visit | |

| | | | | |
|--------------------------------------|-----------------|-----------------|--|--|
| End point values | Tadekinig alfa | Placebo | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 5 | 5 | | |
| Units: Physician Global Assessment | | | | |
| arithmetic mean (standard deviation) | 0.4 (± 0.89) | 2.0 (± 3.39) | | |

Statistical analyses

| | |
|---|--------------------------|
| Statistical analysis title | Mann-Whitney- Wilcoxon |
| Comparison groups | Tadekinig alfa v Placebo |
| Number of subjects included in analysis | 10 |
| Analysis specification | Pre-specified |
| Analysis type | superiority |
| P-value | = 0.7619 |
| Method | Wilcoxon (Mann-Whitney) |

Secondary: Change in Patient/Caregiver Qualitative Evaluation of Health Status in RW Phase

| | |
|---|---|
| End point title | Change in Patient/Caregiver Qualitative Evaluation of Health Status in RW Phase |
| End point description: Change from Baseline to Week 34/ET in Sum of individual disease-related symptoms During the RW Phase The individual disease-related symptoms scores were the sum of (x) individual symptom scores within domain each ranging from 0 (None) to 5 (Very severe): general wellbeing (5), gastrointestinal (7), musculoskeletal (5), skin (2), eye (2), central nervous system (3), and lymphatic (2). | |
| End point type | Secondary |
| End point timeframe: Up to 16 weeks randomized withdrawal phase; change from Week 18 to Week 34 or Early termination visit | |

| | | | | |
|---|-----------------|-----------------|--|--|
| End point values | Tadekinig alfa | Placebo | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 3 | 2 | | |
| Units: Individual disease-related symptom score | | | | |
| arithmetic mean (standard deviation) | | | | |
| Mean at Week 18 (start of RW phase) | 11.3 (± 8.62) | 2.0 (± 2.83) | | |
| Mean at Week 34 or Early Termination | 7.7 (± 7.09) | 46.0 (± 14.14) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Hospitalizations during the RW Phase

| | |
|---|--------------------------------------|
| End point title | Hospitalizations during the RW Phase |
| End point description: | |
| End point type | Secondary |
| End point timeframe: Up to 16 weeks randomized withdrawal phase; change from Week 18 to Week 34 or Early termination visit | |

| | | | | |
|-----------------------------------|-----------------|-----------------|--|--|
| End point values | Tadekinig alfa | Placebo | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 5 | 5 | | |
| Units: Number of Hospitalizations | 0 | 0 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Length of Hospitalization in SAOL phase

| | |
|--|---|
| End point title | Length of Hospitalization in SAOL phase ^[15] |
| End point description: No hospitalizations occurred during the randomized withdrawal phase; thus endpoint only listed for SAOL phase. | |
| End point type | Secondary |
| End point timeframe: 18 weeks initial treatment phase with Tadekinig alfa | |

Notes:

[15] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.

Justification: The endpoint assesses all patients with active treatment in the initial 18 weeks treatment phase (SAOL = single arm open label phase). One patient enrolled in the early protocol version 3 started with placebo in the first treatment phase and is therefore excluded from the endpoint analysis for the SAOL phase.

| | | | | |
|---|------------------------|--|--|--|
| End point values | Tadekinig alfa SAOL | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 14 | | | |
| Units: Days | | | | |
| arithmetic mean (standard deviation) | | | | |
| Length of Baseline Hospitalization | 44.8 (± 25.57) | | | |
| Length of Subsequent Hospitalizations in SAOL | 18.0 (± 26.7) | | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events were monitored and recorded from the time the informed consent is signed until completion of the study (Visit 13) or premature withdrawal.

Adverse event reporting additional description:

Day to day fluctuations of the underlying disease of interest or other pre-existing disease or conditions present or detected at the start of the study were not to be reported as separate adverse events but assessed via the modified autoinflammatory disease index (mAIDAI) at scheduled or unscheduled visits in case of a disease reactivation.

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

Dictionary used

| | |
|-----------------|--------|
| Dictionary name | MedDRA |
|-----------------|--------|

| | |
|--------------------|----|
| Dictionary version | 22 |
|--------------------|----|

Reporting groups

| | |
|-----------------------|--|
| Reporting group title | Initial 18 week Tadekinig alfa Treatment |
|-----------------------|--|

Reporting group description:

All patients starting with active treatment during the initial 18 weeks treatment phase - Single arm open label full analysis set (SAOL-FAS)

| | |
|-----------------------|-----------------------------------|
| Reporting group title | Initial 18 week Placebo Treatment |
|-----------------------|-----------------------------------|

Reporting group description:

Patients received placebo in first treatment phase under protocol version 3

| | |
|-----------------------|--------------------------------------|
| Reporting group title | Randomized Withdrawal Phase - Active |
|-----------------------|--------------------------------------|

Reporting group description:

Patients receiving Tadekinig alfa during Randomized Withdrawal Phase

| | |
|-----------------------|---------------------------------------|
| Reporting group title | Randomized Withdrawal Phase - Placebo |
|-----------------------|---------------------------------------|

Reporting group description:

Patients receiving Placebo during Randomized Withdrawal Phase

| | |
|-----------------------|-----------------|
| Reporting group title | Screening phase |
|-----------------------|-----------------|

Reporting group description:

Adverse events reported prior to first dose of Tadekinig alfa or placebo.

| Serious adverse events | Initial 18 week Tadekinig alfa Treatment | Initial 18 week Placebo Treatment | Randomized Withdrawal Phase - Active |
|--|--|-----------------------------------|--------------------------------------|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 3 / 14 (21.43%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| number of deaths (all causes) | 0 | 0 | 0 |
| number of deaths resulting from adverse events | 0 | 0 | 0 |
| General disorders and administration site conditions | | | |
| Pyrexia | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences causally related to treatment / all | 0 / 4 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Hypothermia | | | |

| | | | |
|---|----------------|---------------|---------------|
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (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 |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Haematochezia | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (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 |
| Lower gastrointestinal haemorrhage | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

| Serious adverse events | Randomized Withdrawal Phase - Placebo | Screening phase | |
|--|---|-----------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) | |
| number of deaths (all causes) | 0 | 0 | |
| number of deaths resulting from adverse events | 0 | 0 | |
| General disorders and administration site conditions | | | |
| Pyrexia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hypothermia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |

| | | | |
|---|---------------|----------------|--|
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Haematochezia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Lower gastrointestinal haemorrhage | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

Frequency threshold for reporting non-serious adverse events: 0 %

| Non-serious adverse events | Initial 18 week Tadekinig alfa Treatment | Initial 18 week Placebo Treatment | Randomized Withdrawal Phase - Active |
|---|--|--------------------------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 14 / 14 (100.00%) | 1 / 1 (100.00%) | 4 / 5 (80.00%) |
| General disorders and administration site conditions | | | |
| Injection site bruising | | | |
| subjects affected / exposed | 5 / 14 (35.71%) | 0 / 1 (0.00%) | 2 / 5 (40.00%) |
| occurrences (all) | 41 | 0 | 9 |
| Injection site erythema | | | |
| subjects affected / exposed | 4 / 14 (28.57%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 10 | 0 | 1 |
| Injection site pain | | | |
| subjects affected / exposed | 4 / 14 (28.57%) | 0 / 1 (0.00%) | 2 / 5 (40.00%) |
| occurrences (all) | 15 | 0 | 5 |
| Pyrexia | | | |
| subjects affected / exposed | 4 / 14 (28.57%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 10 | 0 | 1 |
| Asthenia | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Condition aggravated | | | |

| | | | |
|---|-----------------|-----------------|----------------|
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 3 | 0 | 0 |
| Fatigue | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Injection site swelling | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 4 | 0 | 1 |
| Hypothermia | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Inflammation | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Injection site reaction | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Peripheral swelling | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Complication associated with device | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 1 | 0 |
| Secretion discharge | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Respiratory, thoracic and mediastinal disorders | | | |
| Cough | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 5 | 0 | 0 |
| Atelectasis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 1 | 0 |
| Epistaxis | | | |

| | | | |
|---|-----------------|---------------|----------------|
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Nasal congestion | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Oropharyngeal pain | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Pulmonary hypertension | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Rales | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Upper respiratory tract infection | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Wheezing | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Psychiatric disorders | | | |
| Depressed mood | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Insomnia | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Investigations | | | |
| C-reactive protein increased | | | |
| subjects affected / exposed | 4 / 14 (28.57%) | 0 / 1 (0.00%) | 2 / 5 (40.00%) |
| occurrences (all) | 6 | 0 | 2 |
| Red blood cell sedimentation rate increased | | | |
| subjects affected / exposed | 3 / 14 (21.43%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 5 | 0 | 0 |
| Alanine aminotransferase increased | | | |

| | | | |
|---------------------------------------|-----------------|-----------------|----------------|
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 3 | 0 | 0 |
| Aspartate aminotransferase increased | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 1 | 0 |
| Adenovirus test positive | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 1 | 0 |
| Blood lactate dehydrogenase increased | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Coronavirus test positive | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Cytomegalovirus test positive | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Human rhinovirus test positive | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Interleukin-2 receptor increased | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Sapovirus test positive | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Serum ferritin increased | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 2 | 0 | 1 |
| Transaminases increased | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Weight decreased | | | |

| | | | |
|--|---------------------|----------------------|---------------------|
| subjects affected / exposed occurrences (all) | 0 / 14 (0.00%) 0 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Vital signs measurement subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Injury, poisoning and procedural complications | | | |
| Contusion subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 1 / 5 (20.00%) 5 |
| Overdose subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Transfusion reaction subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Wrist fracture subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Cardiac disorders | | | |
| Coronary artery dilatation subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Tachycardia subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Nervous system disorders | | | |
| Dizziness subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Fontanelle bulging subjects affected / exposed occurrences (all) | 0 / 14 (0.00%) 0 | 1 / 1 (100.00%) 1 | 0 / 5 (0.00%) 0 |
| Headache subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 2 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Somnolence | | | |

| | | | |
|--|---------------------|--------------------|--------------------|
| subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Blood and lymphatic system disorders | | | |
| Anaemia | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Lymphadenopathy | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Splenomegaly | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 3 | 0 | 0 |
| Thrombocytopenia | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Ear and labyrinth disorders | | | |
| Ear pain | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Eye disorders | | | |
| Ocular hypertension | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Gastrointestinal disorders | | | |
| Diarrhoea | | | |
| subjects affected / exposed | 5 / 14 (35.71%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 7 | 1 | 0 |
| Constipation | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Colitis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 1 | 0 |
| Inflammatory bowel disease | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Lower gastrointestinal haemorrhage | | | |

| | | | |
|-----------------------------|--|-----------------|----------------|
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Haematochezia | | | |
| subjects affected / exposed | 4 / 14 (28.57%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 5 | 0 | 1 |
| Abdominal pain | | | |
| subjects affected / exposed | 3 / 14 (21.43%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 6 | 1 | 0 |
| Abdominal distension | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Abdominal pain upper | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Poisoning | Additional description: Food poisoning | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Frequent bowel movements | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Nausea | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Vomiting | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 1 | 0 | 1 |
| Teething | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Dental caries | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Mouth ulceration | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Hepatobiliary disorders | | | |

| | | | |
|--|-----------------------|--------------------|---------------------|
| Hepatosplenomegaly subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Skin and subcutaneous tissue disorders | | | |
| Rash subjects affected / exposed occurrences (all) | 4 / 14 (28.57%) 10 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Acne subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Alopecia subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 2 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Erythema subjects affected / exposed occurrences (all) | 0 / 14 (0.00%) 0 | 0 / 1 (0.00%) 0 | 1 / 5 (20.00%) 1 |
| Ingrowing nail subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Macule subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Palmar erythema subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia subjects affected / exposed occurrences (all) | 3 / 14 (21.43%) 5 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Pain in extremity subjects affected / exposed occurrences (all) | 3 / 14 (21.43%) 4 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Back pain subjects affected / exposed occurrences (all) | 1 / 14 (7.14%) 1 | 0 / 1 (0.00%) 0 | 0 / 5 (0.00%) 0 |
| Groin pain | | | |

| | | | |
|-------------------------------|----------------|---------------|----------------|
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Joint effusion | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Limb discomfort | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Muscle spasms | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Osteonecrosis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Osteoporosis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Synovitis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Infections and infestations | | | |
| Clostridium difficile colitis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Coronavirus infection | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Epstein-Barr viraemia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Otitis media | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Tinea infection | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |

| | | | |
|---|-----------------|---------------|----------------|
| Localised infection | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| External ear cellulitis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Groin abscess | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Furuncle | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Hordeolum | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Respiratory tract infection | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 2 | 0 | 1 |
| Upper respiratory tract infection | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 1 / 5 (20.00%) |
| occurrences (all) | 0 | 0 | 1 |
| Subcutaneous abscess | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Urinary tract infection | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Viral upper respiratory tract infection | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Metabolism and nutrition disorders | | | |
| Hypophosphataemia | | | |
| subjects affected / exposed | 2 / 14 (14.29%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Decreased appetite | | | |

| | | | |
|-----------------------------|----------------|-----------------|---------------|
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Fluid retention | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Hepatic steatosis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 1 | 0 |
| Hypercholesterolaemia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 1 | 0 |
| Hypertriglyceridaemia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 1 (100.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 0 | 1 | 0 |
| Hypocalcaemia | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Hypomagnesaemia | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 1 (0.00%) | 0 / 5 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |

| Non-serious adverse events | Randomized Withdrawal Phase - Placebo | Screening phase | |
|--|---|-----------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 4 / 5 (80.00%) | 7 / 15 (46.67%) | |
| General disorders and administration site conditions | | | |
| Injection site bruising | | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 1 | 0 | |
| Injection site erythema | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Injection site pain | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Pyrexia | | | |

| | | | |
|---|----------------|----------------|--|
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 3 | 0 | |
| Asthenia | | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 1 | 0 | |
| Condition aggravated | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Fatigue | | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 1 | 0 | |
| Injection site swelling | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Hypothermia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Inflammation | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Injection site reaction | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Peripheral swelling | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Complication associated with device | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Secretion discharge | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Respiratory, thoracic and mediastinal disorders | | | |
| Cough | | | |

| | | | |
|-----------------------------------|---------------|----------------|--|
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) | |
| occurrences (all) | 0 | 1 | |
| Atelectasis | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Epistaxis | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Nasal congestion | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Oropharyngeal pain | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Pulmonary hypertension | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Rales | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Upper respiratory tract infection | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Wheezing | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Psychiatric disorders | | | |
| Depressed mood | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Insomnia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Investigations | | | |
| C-reactive protein increased | | | |

| | | |
|---|---------------|-----------------|
| subjects affected / exposed | 0 / 5 (0.00%) | 3 / 15 (20.00%) |
| occurrences (all) | 0 | 3 |
| Red blood cell sedimentation rate increased | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 2 / 15 (13.33%) |
| occurrences (all) | 0 | 2 |
| Alanine aminotransferase increased | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) |
| occurrences (all) | 0 | 1 |
| Aspartate aminotransferase increased | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) |
| occurrences (all) | 0 | 1 |
| Adenovirus test positive | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Blood lactate dehydrogenase increased | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 2 / 15 (13.33%) |
| occurrences (all) | 0 | 3 |
| Coronavirus test positive | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Cytomegalovirus test positive | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Human rhinovirus test positive | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Interleukin-2 receptor increased | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Sapovirus test positive | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Serum ferritin increased | | |

| | | | |
|---|---------------------|----------------------|--|
| subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 3 / 15 (20.00%) 3 | |
| Transaminases increased subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 1 / 15 (6.67%) 2 | |
| Weight decreased subjects affected / exposed occurrences (all) | 1 / 5 (20.00%) 1 | 1 / 15 (6.67%) 1 | |
| Vital signs measurement subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Injury, poisoning and procedural complications Contusion subjects affected / exposed occurrences (all) | 1 / 5 (20.00%) 1 | 0 / 15 (0.00%) 0 | |
| Overdose subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Transfusion reaction subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Wrist fracture subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Cardiac disorders Coronary artery dilatation subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Tachycardia subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Nervous system disorders Dizziness subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Fontanelle bulging | | | |

| | | | |
|---|---------------------|---------------------|--|
| subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Headache subjects affected / exposed occurrences (all) | 1 / 5 (20.00%) 1 | 0 / 15 (0.00%) 0 | |
| Somnolence subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Blood and lymphatic system disorders Anaemia subjects affected / exposed occurrences (all) | 1 / 5 (20.00%) 1 | 0 / 15 (0.00%) 0 | |
| Lymphadenopathy subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Splenomegaly subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Thrombocytopenia subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Ear and labyrinth disorders Ear pain subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Eye disorders Ocular hypertension subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Constipation subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Colitis | | | |

| | | | |
|------------------------------------|--|----------------|--|
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Inflammatory bowel disease | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Lower gastrointestinal haemorrhage | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) | |
| occurrences (all) | 0 | 1 | |
| Haematochezia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Abdominal pain | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Abdominal distension | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Abdominal pain upper | | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 2 | 0 | |
| Poisoning | Additional description: Food poisoning | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Frequent bowel movements | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Nausea | | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 2 | 0 | |
| Vomiting | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Teething | | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 2 | 0 | |
| Dental caries | | | |

| | | | |
|---|---------------------|---------------------|--|
| subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 1 / 15 (6.67%) 1 | |
| Mouth ulceration subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Hepatobiliary disorders Hepatosplenomegaly subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Skin and subcutaneous tissue disorders Rash subjects affected / exposed occurrences (all) | 1 / 5 (20.00%) 8 | 0 / 15 (0.00%) 0 | |
| Acne subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Alopecia subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Erythema subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Ingrowing nail subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Macule subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Palmar erythema subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Musculoskeletal and connective tissue disorders Arthralgia subjects affected / exposed occurrences (all) | 0 / 5 (0.00%) 0 | 0 / 15 (0.00%) 0 | |
| Pain in extremity | | | |

| | | | |
|-------------------------------|---------------|----------------|--|
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Back pain | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Groin pain | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Joint effusion | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Limb discomfort | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Muscle spasms | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Osteonecrosis | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Osteoporosis | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Synovitis | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Infections and infestations | | | |
| Clostridium difficile colitis | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Coronavirus infection | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Epstein-Barr viraemia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) | |
| occurrences (all) | 0 | 1 | |

| | | |
|---|----------------|----------------|
| Otitis media | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Tinea infection | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) |
| occurrences (all) | 0 | 1 |
| Localised infection | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 1 / 15 (6.67%) |
| occurrences (all) | 0 | 1 |
| External ear cellulitis | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Groin abscess | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Furuncle | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Hordeolum | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Respiratory tract infection | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Upper respiratory tract infection | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 1 | 0 |
| Subcutaneous abscess | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Urinary tract infection | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |
| Viral upper respiratory tract infection | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) |
| occurrences (all) | 0 | 0 |

| | | | |
|------------------------------------|----------------|----------------|--|
| Metabolism and nutrition disorders | | | |
| Hypophosphataemia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Decreased appetite | | | |
| subjects affected / exposed | 1 / 5 (20.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 1 | 0 | |
| Fluid retention | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Hepatic steatosis | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Hypercholesterolaemia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Hypertriglyceridaemia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Hypocalcaemia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |
| Hypomagnesaemia | | | |
| subjects affected / exposed | 0 / 5 (0.00%) | 0 / 15 (0.00%) | |
| occurrences (all) | 0 | 0 | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|-------------------|---|
| 21 February 2017 | Protocol version 2.0 - This first protocol amendment, resulting in Protocol version 2.0 dated 21 Feb 2017, implements some changes following FDA recommendations (Study May Proceed cover letter ref ID 4035810, dated January 3, 2017). Some suggestions as discussed during the investigator meeting were considered to allow better understanding and to further clarify the study requirements. |
| 07 April 2017 | Protocol version 3.0 - With reference to FDA correspondence dated 15 March 2017, this second protocol amendment (Protocol version 3.0 dated 07 April 2017) implements FDA' recommendation to incorporate a Randomized Withdrawal Phase after the first 18-week treatment phase (Randomized Double-Blind Placebo-Control phase) as an additional assessment of efficacy. |
| 02 October 2018 | Protocol version 4.0 - Recruitment rates for this rare genetic condition were lower than expected and after discussion with investigators the main reason for the low recruitment was the initial placebo-controlled part of the study which raises ethical concerns. Thus, the initial placebo arm of the study during the first 18-weeks treatment phase was changed to a single arm open label (SAOL) design. The subsequent 8 week randomized double blind placebo control phase remained as assessment of primary efficacy. |
| 17 May 2019 | Protocol version 4.1 - Minor changes in protocol in response to regulatory authority review (e.g. addition of exclusion criterion for patient with hypersensitivity towards active substance or excipients; clarification for use of permitted and prohibited concomitant medications; addition of creatinine and glomerular filtration rate to safety laboratory parameters measured) |
| 29 January 2021 | Protocol version 5 - Following a significant delay in recruitment during the COVID-19 pandemic and following a meeting with the FDA on 17 Dec 2020, this protocol amendment (Protocol version 5.0 dated 29 Jan 2021) allows the inclusion of adult patients with NLRC4 mutation and XIAP deficiency, for which the monogenic autoinflammatory condition is not well controlled. It also specifies that patients with XIAP deficiency and an unsuccessful previous bone marrow transplantation are allowed for inclusion. Furthermore, the duration of the double-blind placebo-controlled randomized withdrawal (RW) phase is prolonged from 8 weeks to a maximum of 16 weeks with a premature stop of blinded treatment in case of a disease flare. |
| 03 September 2021 | Protocol version 6 - Following a clinical outcome assessment focused type C meeting with the FDA on 23 Jun 2021 and a scientific advice discussion meeting with the EMA on 31 Aug 2021, this protocol amendment (Protocol version 6.0 dated 03 Sep 2021) implements changes to the assessment of response to therapy and disease reactivation. The implemented changes reflect the newly gained knowledge about the disease since the initial study design and take into consideration the individual disease severity of each patient and heterogeneity of the disease. Furthermore, a questionnaire exploring the patient's or caregiver's evaluation of the health status at baseline and at the end of each treatment phase was implemented for all patients treated under this protocol version. Finally, the selection criteria were slightly revised to lower the hurdles for enrolment for patients in a severe disease status requiring immediate start of study drug treatment. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported