



Clinical trial results:

A Study of Long-Term Recombinant Human Insulin-Like Growth Factor-1 (rhIGF-1) Treatment of Children With Short Stature Due to Severe Primary IGF-1 Deficiency

Summary

| | |
|--------------------------|------------------|
| EudraCT number | 2025-000222-34 |
| Trial protocol | Outside EU/EEA |
| Global end of trial date | 15 December 2011 |

Results information

| | |
|--------------------------------|------------------|
| Result version number | v1 (current) |
| This version publication date | 21 December 2025 |
| First version publication date | 21 December 2025 |

Trial information

Trial identification

| | |
|-----------------------|------|
| Sponsor protocol code | 1419 |
|-----------------------|------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT00571727 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|--|
| Sponsor organisation name | Ipsen Biopharmaceuticals Inc |
| Sponsor organisation address | 106 Allen Road, 3rd Floor, Basking Ridge, New Jersey, United States, 07920 |
| Public contact | Medical Director, Ipsen, clinical.trials@ipsen.com |
| Scientific contact | Medical Director, Ipsen, clinical.trials@ipsen.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? | Yes |

Notes:

Results analysis stage

| | |
|--|------------------|
| Analysis stage | Final |
| Date of interim/final analysis | 15 December 2011 |
| Is this the analysis of the primary completion data? | No |

| | |
|----------------------------------|------------------|
| Global end of trial reached? | Yes |
| Global end of trial date | 15 December 2011 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

The primary objective was to evaluate the safety and efficacy of long-term replacement therapy with mecasermin in children with growth failure due to severe primary insulin-like growth factor-1 (IGF-1) deficiency.

Protection of trial subjects:

The study was conducted in accordance with the ethical and regulatory national or international guidelines and requirements in place at the beginning of the study and updated as appropriate.

Background therapy: -

Evidence for comparator: -

| | |
|---|-------------|
| Actual start date of recruitment | 20 May 1991 |
| 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 | Argentina: 7 |
| Country: Number of subjects enrolled | Australia: 1 |
| Country: Number of subjects enrolled | Austria: 1 |
| Country: Number of subjects enrolled | Bahamas: 2 |
| Country: Number of subjects enrolled | Brazil: 4 |
| Country: Number of subjects enrolled | Canada: 2 |
| Country: Number of subjects enrolled | Egypt: 7 |
| Country: Number of subjects enrolled | France: 1 |
| Country: Number of subjects enrolled | Germany: 2 |
| Country: Number of subjects enrolled | Iran, Islamic Republic of: 4 |
| Country: Number of subjects enrolled | Israel: 1 |
| Country: Number of subjects enrolled | Italy: 10 |
| Country: Number of subjects enrolled | Kuwait: 4 |
| Country: Number of subjects enrolled | Pakistan: 1 |
| Country: Number of subjects enrolled | Poland: 1 |
| Country: Number of subjects enrolled | Russian Federation: 2 |
| Country: Number of subjects enrolled | Saudi Arabia: 25 |
| Country: Number of subjects enrolled | Spain: 1 |
| Country: Number of subjects enrolled | Sweden: 2 |
| Country: Number of subjects enrolled | Syria: 1 |

| | |
|--------------------------------------|------------------|
| Country: Number of subjects enrolled | Taiwan: 3 |
| Country: Number of subjects enrolled | Ukraine: 1 |
| Country: Number of subjects enrolled | United States: 8 |
| Country: Number of subjects enrolled | Yemen: 1 |
| Worldwide total number of subjects | 92 |
| EEA total number of subjects | 18 |

Notes:

Subjects enrolled per age group

| | |
|---|----|
| In utero | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 0 |
| Infants and toddlers (28 days-23 months) | 2 |
| Children (2-11 years) | 70 |
| Adolescents (12-17 years) | 20 |
| Adults (18-64 years) | 0 |
| From 65 to 84 years | 0 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

This Phase 3, open-label study was conducted in children with short stature due to severe primary insulin like growth factor-1 deficiency at 2 investigative sites in the US in conjunction with sites in 23 other countries.

Pre-assignment

Screening details:

Participants who had been treated with mecasermin in previous Genentech-sponsored studies (F0206s, F0375g, F0632g, F0671g), as well as new participants naïve to mecasermin treatment, were enrolled in this study.

Period 1

| | |
|------------------------------|--------------------------------|
| Period 1 title | Overall trial (overall period) |
| Is this the baseline period? | Yes |
| Allocation method | Not applicable |
| Blinding used | Not blinded |

Arms

| | |
|-----------|------------|
| Arm title | Mecasermin |
|-----------|------------|

Arm description:

Participants who were entered from previous studies continued to receive mecasermin 80 to 120 microgram per kilograms (mcg/kg) subcutaneously (SC) twice daily and naïve-to-treatment participants were administered mecasermin 60 to 80 mcg/kg SC twice daily for 1 to 2 weeks, and then increased to 120 mcg/kg as tolerated.

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

Dosage and administration details:

Mecasermin 80 to 120 mcg/kg SC twice daily was administered for participants who were already treated in previous studies and mecasermin 60 to 80 mcg/kg SC twice daily was administered for participants who were naïve to the treatment. For treatment naïve participants, the dose was administered for 1 to 2 weeks and then increased to 120 mcg/kg.

| Number of subjects in period 1 | Mecasermin |
|--------------------------------|------------|
| Started | 92 |
| Completed | 26 |
| Not completed | 66 |
| Poor growth | 1 |
| Unable to provide study drug | 6 |
| Did not enter in this study | 1 |
| Non-compliance | 4 |
| On-treatment at end of study | 8 |
| Parent/patient decision | 2 |

| | |
|--|----|
| Lost to follow-up | 30 |
| Participant transferred to commercial drug | 14 |

Baseline characteristics

Reporting groups

| | |
|-----------------------|------------|
| Reporting group title | Mecasermin |
|-----------------------|------------|

Reporting group description:

Participants who were entered from previous studies continued to receive mecasermin 80 to 120 microgram per kilograms (mcg/kg) subcutaneously (SC) twice daily and naïve-to-treatment participants were administered mecasermin 60 to 80 mcg/kg SC twice daily for 1 to 2 weeks, and then increased to 120 mcg/kg as tolerated.

| Reporting group values | Mecasermin | Total | |
|---|--------------|-------|--|
| Number of subjects | 92 | 92 | |
| Age categorical Units: Subjects | | | |
| Age continuous Units: years arithmetic mean standard deviation | 7.6 ± 4.3 | - | |
| Gender categorical Units: Subjects | | | |
| Female | 39 | 39 | |
| Male | 53 | 53 | |
| Race/Ethnicity Units: Subjects | | | |
| Caucasian | 77 | 77 | |
| African American | 3 | 3 | |
| Hispanic | 6 | 6 | |
| Asian | 4 | 4 | |
| Other | 2 | 2 | |

End points

End points reporting groups

| | |
|---|------------|
| Reporting group title | Mecasermin |
| Reporting group description: | |
| Participants who were entered from previous studies continued to receive mecasermin 80 to 120 microgram per kilograms (mcg/kg) subcutaneously (SC) twice daily and naïve-to-treatment participants were administered mecasermin 60 to 80 mcg/kg SC twice daily for 1 to 2 weeks, and then increased to 120 mcg/kg as tolerated. | |

Primary: Annualized Height Velocity Up to 12 Years

| | |
|---|--|
| End point title | Annualized Height Velocity Up to 12 Years ^[1] |
| End point description: | |
| Height velocity is the difference between 2 height measurements, divided by years elapsed between measurements. The intention-to-treat population consisted of all 92 participants. Only data from the participants naïve to exogenous recombinant human insulin-like growth factor-1 (rhIGF-1) and whose pre-treatment height velocity were available were reported. Here, n= number of participants analyzed at specific timepoint. | |
| End point type | Primary |
| End point timeframe: | |
| Baseline (Pre-dose) and up to 12 years | |
| 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: Only descriptive statistical analysis was performed for the primary endpoint. | |

| End point values | Mecasermin | | | |
|--------------------------------------|-----------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 75 | | | |
| Units: centimeter per year (cm/y) | | | | |
| arithmetic mean (standard deviation) | | | | |
| Baseline (Pre-dose) (n=75) | 2.6 (± 1.7) | | | |
| >= 1 year (n=75) | 8.0 (± 2.3) | | | |
| >= 2 years (n=63) | 5.9 (± 1.7) | | | |
| >= 3 years (n=62) | 5.5 (± 1.8) | | | |
| >= 4 years (n=60) | 5.2 (± 1.5) | | | |
| >= 5 years (n=53) | 4.9 (± 1.5) | | | |
| >= 6 years (n=39) | 4.8 (± 1.4) | | | |
| >= 7 years (n=25) | 4.3 (± 1.5) | | | |
| >= 8 years (n=19) | 4.4 (± 1.5) | | | |
| >= 9 years (n=14) | 4.4 (± 1.7) | | | |
| >= 10 years (n=13) | 4.5 (± 2.0) | | | |
| >= 11 years (n=12) | 4.1 (± 2.0) | | | |
| >= 12 years (n=10) | 3.9 (± 2.0) | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Number of Naive Participants With Height Velocity <5 cm/y at the End of 1 Year of Study Treatment

| | |
|-----------------|--|
| End point title | Number of Naive Participants With Height Velocity <5 cm/y at the End of 1 Year of Study Treatment ^[2] |
|-----------------|--|

End point description:

Height measurements were performed using wall-mounted stadiometers for analysis of growth data. The intention-to-treat population consisted of all 92 participants. Only data from the participants naïve to exogenous rhIGF-1 were reported.

| | |
|----------------|---------|
| End point type | Primary |
|----------------|---------|

End point timeframe:

Baseline (Pre-dose) and 1 year

Notes:

[2] - 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: Only descriptive statistical analysis was performed for the primary endpoint.

| | | | | |
|-----------------------------|-----------------|--|--|--|
| End point values | Mecasermin | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 81 | | | |
| Units: participants | 7 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Height Velocity Standard Deviation Score Up to 12 Years

| | |
|-----------------|---|
| End point title | Height Velocity Standard Deviation Score Up to 12 Years |
|-----------------|---|

End point description:

Center for disease control growth charts from the US were used as reference for age and gender-dependent mean and standard deviation. Height velocity-standard deviation score was calculated as height velocity minus reference mean height velocity divided by standard deviation of the reference mean height velocity. Greater height velocity standard deviation score indicates better outcome. The intention-to-treat population consisted of all 92 participants. Only data from the participants naïve to exogenous rhIGF-1 and whose pre-treatment height velocity were available were reported. Here, n= number of participants analyzed at specific timepoint.

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

End point timeframe:

Baseline (Pre-dose) and up to 12 years

| | | | | |
|--------------------------------------|-----------------|--|--|--|
| End point values | Mecasermin | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 75 | | | |
| Units: standard deviation score | | | | |
| arithmetic mean (standard deviation) | | | | |
| Baseline (Pre-dose) (n=75) | -3.4 (± 1.6) | | | |
| >= 1 year (n=75) | 1.7 (± 2.8) | | | |

| | | | | |
|--------------------|--------------|--|--|--|
| >= 2 years (n=62) | -0.0 (± 1.7) | | | |
| >= 3 years (n=61) | -0.1 (± 1.9) | | | |
| >= 4 years (n=58) | -0.2 (± 1.9) | | | |
| >= 5 years (n=50) | -0.3 (± 1.7) | | | |
| >= 6 years (n=37) | -0.2 (± 1.6) | | | |
| >= 7 years (n=22) | -0.5 (± 1.7) | | | |
| >= 8 years (n=15) | -0.2 (± 1.6) | | | |
| >= 9 years (n=12) | -0.4 (± 0.8) | | | |
| >= 10 years (n=11) | 0.1 (± 1.6) | | | |
| >= 11 years (n=11) | 0.5 (± 2.6) | | | |
| >= 12 years (n=8) | -0.1 (± 1.5) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Height Standard Deviation Score Up to 12 Years

| | |
|---|--|
| End point title | Height Standard Deviation Score Up to 12 Years |
| End point description: | |
| Center for disease control growth charts from the US were used as reference for age and gender-dependent mean and standard deviation. Height standard deviation score was calculated as height minus reference mean height divided by standard deviation of the reference mean height. A higher height standard deviation score indicates a better outcome. The intention-to-treat population consisted of all 92 participants. Only data from the participants naïve to exogenous rhIGF-1 were reported. Here, n= number of participants analyzed at specific timepoint. | |
| End point type | Secondary |
| End point timeframe: | |
| Baseline (Pre-dose) and up to 12 years | |

| End point values | Mecasermin | | | |
|--------------------------------------|-----------------|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 81 | | | |
| Units: standard deviation score | | | | |
| arithmetic mean (standard deviation) | | | | |
| Baseline (Pre-dose) (n=81) | -6.9 (± 1.8) | | | |
| >= 1 year (n=81) | -6.1 (± 1.8) | | | |
| >= 2 years (n=67) | -5.6 (± 1.7) | | | |
| >= 3 years (n=66) | -5.3 (± 1.7) | | | |
| >= 4 years (n=64) | -5.1 (± 1.7) | | | |
| >= 5 years (n=57) | -5.0 (± 1.7) | | | |
| >= 6 years (n=41) | -4.9 (± 1.6) | | | |
| >= 7 years (n=26) | -4.9 (± 1.7) | | | |
| >= 8 years (n=19) | -5.1 (± 1.7) | | | |
| >= 9 years (n=14) | -5.0 (± 1.6) | | | |
| >= 10 years (n=13) | -5.0 (± 1.7) | | | |
| >= 11 years (n=12) | -4.7 (± 1.2) | | | |
| >= 12 years (n=10) | -4.4 (± 1.3) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Approximate Increase in Height Over Expected for Naïve Participants With Near-Adult Height

| | |
|-----------------|--|
| End point title | Approximate Increase in Height Over Expected for Naïve Participants With Near-Adult Height |
|-----------------|--|

End point description:
Height measurements were performed using wall-mounted stadiometers for analysis of growth data. The intention-to-treat population consisted of all 92 participants. Only data from the participants naïve to exogenous rhIGF-1 and who attained near adult height were reported.

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

End point timeframe:
Baseline (Pre-dose) and up to 19 years

| | | | | |
|--------------------------------------|-----------------|--|--|--|
| End point values | Mecasermin | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 21 | | | |
| Units: cm | | | | |
| arithmetic mean (standard deviation) | 13.3 (± 8.4) | | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Treatment-emergent adverse events were collected from first date of mecasermin intake until last dose, approximately 19 years

Adverse event reporting additional description:

The safety population consisted of all participants who had received at least 1 dose of mecasermin treatment. Adverse events were not collected per dose level as pre-specified.

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

Dictionary used

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

| | |
|--------------------|------|
| Dictionary version | 14.1 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|------------|
| Reporting group title | Mecasermin |
|-----------------------|------------|

Reporting group description:

Participants who were entered from previous studies continued to receive mecasermin 80 to 120 mcg/kg SC twice daily and naïve-to-treatment participants were administered mecasermin 60 to 80 mcg/kg SC twice daily for 1 to 2 weeks, and then increased to 120 mcg/kg as tolerated.

| Serious adverse events | Mecasermin | | |
|---|------------------|--|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 18 / 92 (19.57%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | 0 | | |
| Injury, poisoning and procedural complications | | | |
| Radius fracture | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Skull fracture | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Cardiac disorders | | | |
| Dilatation ventricular | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Nervous system disorders | | | |

| | | | |
|---|----------------|--|--|
| Benign intracranial hypertension subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Grand mal convulsion subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Febrile convulsion subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Gastrointestinal disorders | | | |
| Haematemesis subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Abdominal pain subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Respiratory, thoracic and mediastinal disorders | | | |
| Tonsillar hypertrophy subjects affected / exposed | 2 / 92 (2.17%) | | |
| occurrences causally related to treatment / all | 3 / 3 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Adenoidal hypertrophy subjects affected / exposed | 3 / 92 (3.26%) | | |
| occurrences causally related to treatment / all | 3 / 3 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Renal and urinary disorders | | | |
| Nephrolithiasis | | | |

| | | | |
|---|----------------|--|--|
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Musculoskeletal and connective tissue disorders | | | |
| Epiphysiolysis | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Flank pain | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Infections and infestations | | | |
| Infectious pleural effusion | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Appendicitis | | | |
| subjects affected / exposed | 2 / 92 (2.17%) | | |
| occurrences causally related to treatment / all | 0 / 2 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Bronchitis | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Metabolism and nutrition disorders | | | |
| Diabetes mellitus | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Hypoglycaemic seizure | | | |
| subjects affected / exposed | 1 / 92 (1.09%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |

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

| Non-serious adverse events | Mecasermin | | |
|---|------------------|--|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 73 / 92 (79.35%) | | |
| Surgical and medical procedures | | | |
| Ear tube insertion | | | |
| subjects affected / exposed | 7 / 92 (7.61%) | | |
| occurrences (all) | 11 | | |
| Dental operation | | | |
| subjects affected / exposed | 6 / 92 (6.52%) | | |
| occurrences (all) | 6 | | |
| General disorders and administration site conditions | | | |
| Injection site hypertrophy | | | |
| subjects affected / exposed | 32 / 92 (34.78%) | | |
| occurrences (all) | 211 | | |
| Pyrexia | | | |
| subjects affected / exposed | 19 / 92 (20.65%) | | |
| occurrences (all) | 77 | | |
| Fatigue | | | |
| subjects affected / exposed | 9 / 92 (9.78%) | | |
| occurrences (all) | 16 | | |
| Injection site haematoma | | | |
| subjects affected / exposed | 9 / 92 (9.78%) | | |
| occurrences (all) | 22 | | |
| Hypertrophy | | | |
| subjects affected / exposed | 8 / 92 (8.70%) | | |
| occurrences (all) | 52 | | |
| Asthenia | | | |
| subjects affected / exposed | 5 / 92 (5.43%) | | |
| occurrences (all) | 7 | | |
| Chest pain | | | |

| | | | |
|---|--|--|--|
| subjects affected / exposed occurrences (all) | 5 / 92 (5.43%) 10 | | |
| Reproductive system and breast disorders Gynaecomastia subjects affected / exposed occurrences (all) | 6 / 92 (6.52%) 18 | | |
| Respiratory, thoracic and mediastinal disorders Snoring subjects affected / exposed occurrences (all) Tonsillar hypertrophy subjects affected / exposed occurrences (all) Cough subjects affected / exposed occurrences (all) Adenoidal hypertrophy subjects affected / exposed occurrences (all) Nasal congestion subjects affected / exposed occurrences (all) | 20 / 92 (21.74%) 111 19 / 92 (20.65%) 102 16 / 92 (17.39%) 48 7 / 92 (7.61%) 12 9 / 92 (9.78%) 37 | | |
| Investigations Cardiac murmur subjects affected / exposed occurrences (all) | 7 / 92 (7.61%) 10 | | |
| Cardiac disorders Tachycardia subjects affected / exposed occurrences (all) | 6 / 92 (6.52%) 6 | | |
| Nervous system disorders Headache subjects affected / exposed occurrences (all) Dizziness | 25 / 92 (27.17%) 109 | | |

| | | | |
|--|------------------------|--|--|
| subjects affected / exposed occurrences (all) | 6 / 92 (6.52%) 9 | | |
| Blood and lymphatic system disorders Thymus enlargement subjects affected / exposed occurrences (all) | 9 / 92 (9.78%) 24 | | |
| Lymphadenopathy subjects affected / exposed occurrences (all) | 5 / 92 (5.43%) 9 | | |
| Ear and labyrinth disorders Conductive deafness subjects affected / exposed occurrences (all) | 11 / 92 (11.96%) 70 | | |
| Middle ear effusion subjects affected / exposed occurrences (all) | 10 / 92 (10.87%) 21 | | |
| Deafness subjects affected / exposed occurrences (all) | 6 / 92 (6.52%) 50 | | |
| Ear pain subjects affected / exposed occurrences (all) | 6 / 92 (6.52%) 9 | | |
| Ear discomfort subjects affected / exposed occurrences (all) | 5 / 92 (5.43%) 27 | | |
| Eye disorders Papilloedema subjects affected / exposed occurrences (all) | 5 / 92 (5.43%) 7 | | |
| Gastrointestinal disorders Vomiting subjects affected / exposed occurrences (all) | 16 / 92 (17.39%) 28 | | |
| Dental caries subjects affected / exposed occurrences (all) | 11 / 92 (11.96%) 45 | | |
| Abdominal pain | | | |

| | | | |
|---|------------------|--|--|
| subjects affected / exposed | 7 / 92 (7.61%) | | |
| occurrences (all) | 13 | | |
| Constipation | | | |
| subjects affected / exposed | 6 / 92 (6.52%) | | |
| occurrences (all) | 10 | | |
| Diarrhoea | | | |
| subjects affected / exposed | 6 / 92 (6.52%) | | |
| occurrences (all) | 14 | | |
| Abdominal pain upper | | | |
| subjects affected / exposed | 5 / 92 (5.43%) | | |
| occurrences (all) | 6 | | |
| Tooth crowding | | | |
| subjects affected / exposed | 5 / 92 (5.43%) | | |
| occurrences (all) | 24 | | |
| Toothache | | | |
| subjects affected / exposed | 5 / 92 (5.43%) | | |
| occurrences (all) | 11 | | |
| Skin and subcutaneous tissue disorders | | | |
| Acne | | | |
| subjects affected / exposed | 10 / 92 (10.87%) | | |
| occurrences (all) | 26 | | |
| Dry skin | | | |
| subjects affected / exposed | 10 / 92 (10.87%) | | |
| occurrences (all) | 31 | | |
| Skin hypertrophy | | | |
| subjects affected / exposed | 10 / 92 (10.87%) | | |
| occurrences (all) | 36 | | |
| Rash | | | |
| subjects affected / exposed | 6 / 92 (6.52%) | | |
| occurrences (all) | 9 | | |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia | | | |
| subjects affected / exposed | 8 / 92 (8.70%) | | |
| occurrences (all) | 24 | | |
| Pain in extremity | | | |

| | | | |
|-----------------------------------|------------------|--|--|
| subjects affected / exposed | 8 / 92 (8.70%) | | |
| occurrences (all) | 25 | | |
| Back pain | | | |
| subjects affected / exposed | 7 / 92 (7.61%) | | |
| occurrences (all) | 18 | | |
| Infections and infestations | | | |
| Upper respiratory tract infection | | | |
| subjects affected / exposed | 23 / 92 (25.00%) | | |
| occurrences (all) | 73 | | |
| Otitis media | | | |
| subjects affected / exposed | 19 / 92 (20.65%) | | |
| occurrences (all) | 76 | | |
| Nasopharyngitis | | | |
| subjects affected / exposed | 14 / 92 (15.22%) | | |
| occurrences (all) | 36 | | |
| Influenza | | | |
| subjects affected / exposed | 12 / 92 (13.04%) | | |
| occurrences (all) | 17 | | |
| Bronchitis | | | |
| subjects affected / exposed | 7 / 92 (7.61%) | | |
| occurrences (all) | 8 | | |
| Ear infection | | | |
| subjects affected / exposed | 7 / 92 (7.61%) | | |
| occurrences (all) | 19 | | |
| Gastroenteritis | | | |
| subjects affected / exposed | 7 / 92 (7.61%) | | |
| occurrences (all) | 9 | | |
| Pharyngitis | | | |
| subjects affected / exposed | 7 / 92 (7.61%) | | |
| occurrences (all) | 16 | | |
| Respiratory tract infection | | | |
| subjects affected / exposed | 6 / 92 (6.52%) | | |
| occurrences (all) | 7 | | |
| Tonsillitis | | | |
| subjects affected / exposed | 6 / 92 (6.52%) | | |
| occurrences (all) | 8 | | |

| | | | |
|---|-------------------------|--|--|
| Varicella subjects affected / exposed occurrences (all) | 5 / 92 (5.43%) 5 | | |
| Metabolism and nutrition disorders Hypoglycaemia subjects affected / exposed occurrences (all) | 41 / 92 (44.57%) 175 | | |
| Hypoglycaemic seizure subjects affected / exposed occurrences (all) | 5 / 92 (5.43%) 13 | | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|---------------|--|
| 11 April 2007 | Amended to update mecasecmin dose of up to 160 mcg/kg SC twice daily was used in some pubertal participants. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported