



Clinical trial results:

Phase 3, Randomized, Placebo-Controlled, Double-blind, Multi-Center, Two-Part Study of Patritumab (U3-1287) in Combination with Erlotinib in EGFR Wild-type Subjects with Locally Advanced or Metastatic Non-Small Cell Lung Cancer (NSCLC) Who Have Progressed on at Least One Prior Systemic Therapy

Summary

| | |
|--------------------------|-------------------------|
| EudraCT number | 2013-004371-12 |
| Trial protocol | BE GB IT DE HU ES CZ PL |
| Global end of trial date | 11 November 2016 |

Results information

| | |
|--------------------------------|---|
| Result version number | v2 (current) |
| This version publication date | 14 December 2017 |
| First version publication date | 26 November 2017 |
| Version creation reason | <ul style="list-style-type: none">• Correction of full data set One unclear endpoint was supposed to be deleted because the information is clearly presented in another endpoint. |

Trial information

Trial identification

| | |
|-----------------------|---------------|
| Sponsor protocol code | U31287-A-U301 |
|-----------------------|---------------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT02134015 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|--|
| Sponsor organisation name | Daiichi Sankyo, Inc. |
| Sponsor organisation address | 211 Mt. Airy Road, Basking Ridge, United States, 07920 |
| Public contact | Clinical Trial Information , Daiichi Sankyo Development Limited, 44 1753 482800, euregaffairs@dsd-eu.com |
| Scientific contact | Clinical Trial Information , Daiichi Sankyo Development Limited, 44 1753 482800, euregaffairs@dsd-eu.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 | 23 January 2017 |
| Is this the analysis of the primary completion data? | No |
| Global end of trial reached? | Yes |
| Global end of trial date | 11 November 2016 |
| Was the trial ended prematurely? | Yes |

Notes:

General information about the trial

Main objective of the trial:

The primary objective for Part A of the study is to confirm that the combination regimen of patritumab with erlotinib will improve PFS in HRG-high, EGFR-inhibitor-naïve, EGFR-wild type subjects with locally advanced or metastatic NSCLC who progressed on at least one prior systemic therapy.

The primary objective for Part B of the study is to determine if the combination regimen of patritumab with erlotinib will improve OS in EGFR-inhibitor-naïve subjects with locally advanced or metastatic, HRG-high, EGFR-wild type NSCLC who have progressed on at least one prior systemic therapy.

Protection of trial subjects:

This trial was conducted in accordance with the ethical principles of Good Clinical Practice (GCP), according to the ICH Harmonized Tripartite Guideline.

Background therapy: -

Evidence for comparator: -

| | |
|---|---------------|
| Actual start date of recruitment | 31 March 2014 |
| 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 | United States: 26 |
| Country: Number of subjects enrolled | Canada: 2 |
| Country: Number of subjects enrolled | Poland: 30 |
| Country: Number of subjects enrolled | Spain: 19 |
| Country: Number of subjects enrolled | United Kingdom: 11 |
| Country: Number of subjects enrolled | Belgium: 3 |
| Country: Number of subjects enrolled | Germany: 16 |
| Country: Number of subjects enrolled | Hungary: 18 |
| Country: Number of subjects enrolled | Italy: 20 |
| Worldwide total number of subjects | 145 |
| EEA total number of subjects | 117 |

Notes:

| Subjects enrolled per age group | |
|---|----|
| In utero | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 0 |
| Infants and toddlers (28 days-23 months) | 0 |
| Children (2-11 years) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 78 |
| From 65 to 84 years | 67 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

The first patient was randomized on 11 Jun 2014, and the last patient's last visit occurred on 11 Nov 2016. All randomized subjects received study treatment and were included in both the Full Analysis Set and the Safety Analysis Set.

Pre-assignment

Screening details:

Of 537 patients screened, a total of 145 patients were randomized into this trial in 9 countries: United States (26 at 12 sites), Spain (19 at 5 sites), Hungary (18 at 4 sites), Italy (20 at 6 sites), Great Britain (11 at 5 sites), Poland (30 at 3 sites), Germany (16 at 6 sites), Canada (2 at 1 site) and Belgium (3 at 1 site).

Period 1

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

Arms

| | |
|------------------------------|---------------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Placebo + Erlotinib |

Arm description:

Placebo infusion every 3 weeks and oral erlotinib 150 mg/day

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

Dosage and administration details:

Placebo was administered as a continuous IV infusion

| | |
|--|-----------|
| Investigational medicinal product name | Erlotinib |
| Investigational medicinal product code | |
| Other name | Tarceva |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Oral erlotinib tablets 150 mg/day

| | |
|------------------|------------------------|
| Arm title | Patritumab + Erlotinib |
|------------------|------------------------|

Arm description:

Infusion of Patritumab (loading dose of 18 mg/kg, followed by 9 mg/kg every 3 weeks) and oral erlotinib 150 mg/day

| | |
|--|-----------------------|
| Arm type | Experimental |
| Investigational medicinal product name | Patritumab |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Solution for infusion |
| Routes of administration | Intravenous use |

Dosage and administration details:

Infusion of Patritumab (loading dose of 18 mg/kg, followed by 9 mg/kg every 3 weeks)

| | |
|--|-----------|
| Investigational medicinal product name | Erlotinib |
| Investigational medicinal product code | |
| Other name | Tarceva |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Oral erlotinib tablets 150 mg/day

| Number of subjects in period 1 | Placebo + Erlotinib | Patritumab + Erlotinib |
|---------------------------------------|---------------------|------------------------|
| Started | 71 | 74 |
| Completed | 0 | 0 |
| Not completed | 71 | 74 |
| Clinical progression | 14 | 7 |
| Consent withdrawn by subject | 3 | 7 |
| Adverse event, non-fatal | 9 | 10 |
| Death | 2 | 1 |
| Study terminated by sponsor | 2 | 3 |
| Progressive disease (per RECIST 1.1) | 40 | 43 |
| Reason not provided | 1 | 2 |
| Protocol deviation | - | 1 |

Baseline characteristics

Reporting groups

| | |
|--|------------------------|
| Reporting group title | Placebo + Erlotinib |
| Reporting group description: | |
| Placebo infusion every 3 weeks and oral erlotinib 150 mg/day | |
| Reporting group title | Patritumab + Erlotinib |
| Reporting group description: | |
| Infusion of Patritumab (loading dose of 18 mg/kg, followed by 9 mg/kg every 3 weeks) and oral erlotinib 150 mg/day | |

| Reporting group values | Placebo + Erlotinib | Patritumab + Erlotinib | Total |
|---|---------------------|------------------------|-------|
| Number of subjects | 71 | 74 | 145 |
| Age categorical | | | |
| Units: Subjects | | | |
| Adults (18-64 years) | 38 | 40 | 78 |
| From 65-84 years | 33 | 34 | 67 |
| Age continuous | | | |
| Units: years | | | |
| arithmetic mean | 63.3 | 63.9 | |
| standard deviation | ± 9.15 | ± 8.25 | - |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 22 | 30 | 52 |
| Male | 49 | 44 | 93 |
| Histology subtype | | | |
| Units: Subjects | | | |
| Adenocarcinoma | 39 | 40 | 79 |
| Squamous | 28 | 28 | 56 |
| Large cell | 1 | 1 | 2 |
| Other | 3 | 5 | 8 |
| Histology Subtype (for Randomization) | | | |
| NOS=not otherwise specified | | | |
| Units: Subjects | | | |
| Adenocarcinoma | 38 | 40 | 78 |
| Squamous-cell carcinoma/NOS | 33 | 34 | 67 |
| ECOG Score | | | |
| ECOG=Eastern Cooperative Oncology Group | | | |
| Units: Subjects | | | |
| 0 - Fully Active | 24 | 25 | 49 |
| 1 - Restricted in Physically Strenuous Activity | 47 | 49 | 96 |
| HRG Expression from IXRS | | | |
| HRG=heregulin; IXRS=Interactive Web/Voice Response System | | | |
| Units: Subjects | | | |
| High | 48 | 47 | 95 |
| Low | 23 | 27 | 50 |

End points

End points reporting groups

| | |
|--|------------------------|
| Reporting group title | Placebo + Erlotinib |
| Reporting group description: Placebo infusion every 3 weeks and oral erlotinib 150 mg/day | |
| Reporting group title | Patritumab + Erlotinib |
| Reporting group description: Infusion of Patritumab (loading dose of 18 mg/kg, followed by 9 mg/kg every 3 weeks) and oral erlotinib 150 mg/day | |

Primary: Part A: Progression Free Survival (PFS) in Heregulin-high Patients

| | |
|-----------------|---|
| End point title | Part A: Progression Free Survival (PFS) in Heregulin-high Patients ^[1] |
|-----------------|---|

End point description:

PFS is defined as the time from the date of randomization to the earlier of the dates of first objective documentation of radiographic disease progression (as per RECIST Version 1.1 per investigator assessment) or death resulting from any cause.

Kaplan-Meier Estimate. Confidence interval (CI) for median was computed using the Brookmeyer-Crowley method.

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

End point timeframe:

by trial termination (at 20 months)

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: 80% confidence interval is included in the data table.

| End point values | Placebo + Erlotinib | Patritumab + Erlotinib | | |
|----------------------------------|---------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 48 | 47 | | |
| Units: months | | | | |
| number (confidence interval 80%) | 2.7 (1.7 to 2.9) | 1.9 (1.4 to 3.5) | | |

Statistical analyses

No statistical analyses for this end point

Primary: Part A: PFS in Heregulin-low Patients

| | |
|-----------------|--|
| End point title | Part A: PFS in Heregulin-low Patients ^[2] |
|-----------------|--|

End point description:

PFS is defined as the time from the date of randomization to the earlier of the dates of first objective documentation of radiographic disease progression (as per RECIST Version 1.1 per investigator assessment) or death resulting from any cause.

Kaplan-Meier Estimate. Confidence interval (CI) for median was computed using the Brookmeyer-Crowley method.

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

End point timeframe:

by trial termination (at 20 months)

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: 80% confidence interval is included in the data table.

| End point values | Placebo + Erlotinib | Patritumab + Erlotinib | | |
|----------------------------------|---------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 23 | 27 | | |
| Units: Months | | | | |
| number (confidence interval 80%) | 2.8 (1.4 to 4.2) | 1.5 (1.4 to 2.7) | | |

Statistical analyses

No statistical analyses for this end point

Primary: Part B: Primary Endpoint Overall Survival

| | |
|-----------------|--|
| End point title | Part B: Primary Endpoint Overall Survival ^[3] |
|-----------------|--|

End point description:

No patients were analyzed in Part B endpoints because the trial was terminated at the end of Part A.

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

End point timeframe:

Various Timepoints

Notes:

[3] - 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: There were no subjects analyzed because the trial was terminated at the end of Part A.

| End point values | Placebo + Erlotinib | Patritumab + Erlotinib | | |
|-------------------------------|---------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 0 ^[4] | 0 ^[5] | | |
| Units: Percentage of patients | | | | |
| number (not applicable) | | | | |

Notes:

[4] - No patients were analyzed in Part B endpoints because the trial was terminated at the end of Part A.

[5] - No patients were analyzed in Part B endpoints because the trial was terminated at the end of Part A.

Statistical analyses

No statistical analyses for this end point

Secondary: Part A: Key secondary efficacy endpoint: Overall Survival

| | |
|-----------------|---|
| End point title | Part A: Key secondary efficacy endpoint: Overall Survival |
|-----------------|---|

End point description:

Percentage of participants who survived for the length of the trial

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

End point timeframe:
during Part A

| End point values | Placebo + Erlotinib | Patritumab + Erlotinib | | |
|-----------------------------------|---------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 71 | 74 | | |
| Units: Percentage of participants | | | | |
| number (not applicable) | | | | |
| HRG High (n=48, 47) | 31.3 | 36.2 | | |
| HRG Low (n=23,27) | 30.4 | 29.6 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Part B: Key secondary efficacy endpoints: PFS; TTD

| | |
|------------------------|--|
| End point title | Part B: Key secondary efficacy endpoints: PFS; TTD |
| End point description: | No patients were analyzed in Part B endpoints because the trial was terminated at the end of Part A. |
| End point type | Secondary |
| End point timeframe: | |
| Various timepoints | |

| End point values | Placebo + Erlotinib | Patritumab + Erlotinib | | |
|-------------------------------|---------------------|------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 0 ^[6] | 0 ^[7] | | |
| Units: Percentage of patients | | | | |
| number (not applicable) | | | | |

Notes:

[6] - No patients were analyzed in Part B endpoints because the trial was terminated at the end of Part A.

[7] - No patients were analyzed in Part B endpoints because the trial was terminated at the end of Part A.

Statistical analyses

No statistical analyses for this end point

Secondary: Part A: Key secondary efficacy endpoint: Objective Response Rate (ORR)

| | |
|------------------------|--|
| End point title | Part A: Key secondary efficacy endpoint: Objective Response Rate (ORR) |
| End point description: | Objective response is defined as complete response or partial response |
| End point type | Secondary |

End point timeframe:

12 months

| End point values | Placebo + Erlotinib | Patritumab + Erlotinib | | |
|----------------------------------|------------------------|---------------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 71 | 74 | | |
| Units: Percentage of patients | | | | |
| number (confidence interval 80%) | | | | |
| HRG High (n=48,47) | 6.3 (2.4 to 13.7) | 2.2 (0.2 to 8.6) | | |
| HRG Low (n=23,27) | 13.6 (5.3 to 28.6) | 3.7 (0.4 to 14.3) | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

53 days after the last dose of patritumab/placebo or 30 days after the last dose of erlotinib, whichever is later

Adverse event reporting additional description:

Treatment emergent (TE) adverse events (AEs) are reported for patritumab only. If relatedness is missing, the AE is counted as related to patritumab.

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

Dictionary used

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

| | |
|--------------------|------|
| Dictionary version | 16.1 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|-------------------|
| Reporting group title | Placebo+Erlotinib |
|-----------------------|-------------------|

Reporting group description:

Placebo infusion every 3 weeks and oral erlotinib 150 mg/day

| | |
|-----------------------|----------------------|
| Reporting group title | Patritumab+Erlotinib |
|-----------------------|----------------------|

Reporting group description:

Infusion of Patritumab (loading dose of 18 mg/kg, followed by 9 mg/kg every 3 weeks) and oral erlotinib 150 mg/day

| Serious adverse events | Placebo+Erlotinib | Patritumab+Erlotinib | |
|---|-------------------|----------------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 29 / 71 (40.85%) | 27 / 74 (36.49%) | |
| number of deaths (all causes) | 5 | 5 | |
| number of deaths resulting from adverse events | 0 | 0 | |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | |
| Cancer pain | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Tumour pain | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Vascular disorders | | | |
| Deep vein thrombosis | | | |

| | | | |
|--|----------------|----------------|--|
| subjects affected / exposed | 1 / 71 (1.41%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| General disorders and administration site conditions | | | |
| General physical health deterioration | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 2 / 74 (2.70%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Asthenia | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pain | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Respiratory, thoracic and mediastinal disorders | | | |
| Dyspnoea | | | |
| subjects affected / exposed | 3 / 71 (4.23%) | 5 / 74 (6.76%) | |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 6 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Haemoptysis | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 2 / 74 (2.70%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 3 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Respiratory failure | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 2 / 74 (2.70%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 1 | |
| Acute respiratory failure | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

| | | | |
|---|----------------|----------------|--|
| Chronic obstructive pulmonary disease | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hydropneumothorax | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 1 | |
| Pleural effusion | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pneumonitis | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | |
| Pneumothorax | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | |
| Pulmonary embolism | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pulmonary haemorrhage | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Respiratory arrest | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 1 | |
| Investigations | | | |

| | | | |
|---|----------------|----------------|--|
| Alanine aminotransferase increased subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Aspartate aminotransferase increased | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| C-reactive protein increased | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Electrocardiogram QT prolonged | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hepatic enzyme increased | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Transaminases increased | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Injury, poisoning and procedural complications | | | |
| Craniocerebral injury | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Cardiac disorders | | | |
| Cardiac failure | | | |

| | | | |
|---|----------------|----------------|--|
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | |
| Cardiac tamponade | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 1 | |
| Cardiopulmonary failure | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 1 | |
| Tachycardia | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Nervous system disorders | | | |
| Dizziness | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Headache | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 1 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Transient ischaemic attack | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Blood and lymphatic system disorders | | | |
| Anaemia | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | |
| Gastrointestinal disorders | | | |

| | | | |
|---|----------------|----------------|--|
| Diarrhoea | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 2 / 74 (2.70%) | |
| occurrences causally related to treatment / all | 0 / 0 | 2 / 3 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Aphagia | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Dysphagia | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Large intestinal obstruction | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Swollen tongue | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hepatobiliary disorders | | | |
| Cholecystitis | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Skin and subcutaneous tissue disorders | | | |
| Eczema | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Skin disorder | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 1 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

| | | | |
|---|----------------|----------------|--|
| Skin fissures | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Musculoskeletal and connective tissue disorders | | | |
| Bone pain | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Infections and infestations | | | |
| Pneumonia | | | |
| subjects affected / exposed | 3 / 71 (4.23%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Bronchitis | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 2 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | |
| Empyema | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 3 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Lung abscess | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Neutropenic sepsis | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Respiratory tract infection | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 0 / 74 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

| | | | |
|---|----------------|----------------|--|
| Staphylococcal sepsis | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Metabolism and nutrition disorders | | | |
| Hypercalcaemia | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Hypokalaemia | | | |
| subjects affected / exposed | 0 / 71 (0.00%) | 1 / 74 (1.35%) | |
| occurrences causally related to treatment / all | 0 / 0 | 2 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

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

| Non-serious adverse events | Placebo+Erlotinib | Patritumab+Erlotinib | |
|---|-------------------|----------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 66 / 71 (92.96%) | 68 / 74 (91.89%) | |
| Investigations | | | |
| Weight decreased | | | |
| subjects affected / exposed | 8 / 71 (11.27%) | 10 / 74 (13.51%) | |
| occurrences (all) | 9 | 11 | |
| Vascular disorders | | | |
| Pruritus | | | |
| subjects affected / exposed | 4 / 71 (5.63%) | 6 / 74 (8.11%) | |
| occurrences (all) | 6 | 7 | |
| Nervous system disorders | | | |
| Dizziness | | | |
| subjects affected / exposed | 5 / 71 (7.04%) | 0 / 74 (0.00%) | |
| occurrences (all) | 5 | 0 | |
| Dysgeusia | | | |
| subjects affected / exposed | 3 / 71 (4.23%) | 4 / 74 (5.41%) | |
| occurrences (all) | 3 | 4 | |
| General disorders and administration site conditions | | | |

| | | | |
|---|------------------------|------------------------|--|
| Fatigue subjects affected / exposed occurrences (all) | 17 / 71 (23.94%) 23 | 11 / 74 (14.86%) 12 | |
| Oedema peripheral subjects affected / exposed occurrences (all) | 6 / 71 (8.45%) 6 | 5 / 74 (6.76%) 5 | |
| Asthenia subjects affected / exposed occurrences (all) | 5 / 71 (7.04%) 6 | 5 / 74 (6.76%) 5 | |
| Chest pain subjects affected / exposed occurrences (all) | 4 / 71 (5.63%) 5 | 2 / 74 (2.70%) 2 | |
| Blood and lymphatic system disorders Anaemia subjects affected / exposed occurrences (all) | 4 / 71 (5.63%) 5 | 6 / 74 (8.11%) 10 | |
| Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all) | 22 / 71 (30.99%) 41 | 39 / 74 (52.70%) 62 | |
| Nausea subjects affected / exposed occurrences (all) | 16 / 71 (22.54%) 18 | 15 / 74 (20.27%) 19 | |
| Stomatitis subjects affected / exposed occurrences (all) | 2 / 71 (2.82%) 2 | 11 / 74 (14.86%) 18 | |
| Vomiting subjects affected / exposed occurrences (all) | 7 / 71 (9.86%) 8 | 10 / 74 (13.51%) 13 | |
| Constipation subjects affected / exposed occurrences (all) | 2 / 71 (2.82%) 2 | 9 / 74 (12.16%) 9 | |
| Dyspepsia subjects affected / exposed occurrences (all) | 3 / 71 (4.23%) 3 | 5 / 74 (6.76%) 7 | |
| Respiratory, thoracic and mediastinal disorders | | | |

| | | | |
|--|------------------------|------------------------|--|
| Dyspnoea subjects affected / exposed occurrences (all) | 16 / 71 (22.54%) 21 | 9 / 74 (12.16%) 11 | |
| Cough subjects affected / exposed occurrences (all) | 11 / 71 (15.49%) 11 | 10 / 74 (13.51%) 14 | |
| Haemoptysis subjects affected / exposed occurrences (all) | 5 / 71 (7.04%) 7 | 5 / 74 (6.76%) 7 | |
| Dysphonia subjects affected / exposed occurrences (all) | 0 / 71 (0.00%) 0 | 4 / 74 (5.41%) 4 | |
| Skin and subcutaneous tissue disorders | | | |
| Rash subjects affected / exposed occurrences (all) | 26 / 71 (36.62%) 46 | 28 / 74 (37.84%) 57 | |
| Dermatitis acneiform subjects affected / exposed occurrences (all) | 6 / 71 (8.45%) 7 | 13 / 74 (17.57%) 23 | |
| Dry skin subjects affected / exposed occurrences (all) | 7 / 71 (9.86%) 7 | 13 / 74 (17.57%) 14 | |
| Alopecia subjects affected / exposed occurrences (all) | 3 / 71 (4.23%) 4 | 6 / 74 (8.11%) 6 | |
| Rash maculo-papular subjects affected / exposed occurrences (all) | 4 / 71 (5.63%) 4 | 3 / 74 (4.05%) 5 | |
| Psychiatric disorders | | | |
| Insomnia subjects affected / exposed occurrences (all) | 3 / 71 (4.23%) 3 | 4 / 74 (5.41%) 4 | |
| Infections and infestations | | | |
| Paronychia subjects affected / exposed occurrences (all) | 3 / 71 (4.23%) 4 | 7 / 74 (9.46%) 16 | |
| Rhinitis | | | |

| | | | |
|--|---------------------|---------------------|--|
| subjects affected / exposed occurrences (all) | 0 / 71 (0.00%) 0 | 4 / 74 (5.41%) 4 | |
| Metabolism and nutrition disorders | | | |
| Decreased appetite | | | |
| subjects affected / exposed | 13 / 71 (18.31%) | 17 / 74 (22.97%) | |
| occurrences (all) | 16 | 21 | |
| Hypomagnesaemia | | | |
| subjects affected / exposed | 4 / 71 (5.63%) | 7 / 74 (9.46%) | |
| occurrences (all) | 7 | 17 | |
| Hypokalaemia | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 6 / 74 (8.11%) | |
| occurrences (all) | 1 | 6 | |
| Dehydration | | | |
| subjects affected / exposed | 1 / 71 (1.41%) | 4 / 74 (5.41%) | |
| occurrences (all) | 1 | 4 | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date | Amendment |
|------------------|--|
| 24 February 2014 | The protocol was modified to clarify packaging and safety requirements, to describe new assessments and time windows, and correct footnotes and formatting. |
| 12 May 2015 | The study design was modified to create a smaller, more efficient Part A, designed to focus upon efficacy in the high HRG subgroup, for which the primary objective is part of this study. |

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

Since there was an unplanned follow up with a patient on 11 Nov 2016, the global end of trial date is actually later than previously reported to health authorities (18-May-2016). The actual global end of trial date is 11-November-2016.

Notes: