# Clinical trial results:
# A Dose-Blinded, 2-Dose Level, Parallel-Group, Multicenter, Long-Term Extension Study to Evaluate the Long-Term Safety, Efficacy, and Immunogenicity of BIIB023 in Subjects with Lupus Nephritis

## Summary

| | |
|---|---|
| EudraCT number | 2013-000594-69 |
| Trial protocol | BE ES IT HU PL DE |
| Global end of trial date | 15 January 2016 |

### Results information

| | |
|---|---|
| Result version number | v1 (current) |
| This version publication date | 08 December 2016 |
| First version publication date | 08 December 2016 |

## Trial information

### Trial identification

| | |
|---|---|
| Sponsor protocol code | 211LE202 |

### Additional study identifiers

| | |
|---|---|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT01930890 |
| WHO universal trial number (UTN) | - |

Notes:

### Sponsors

| | |
|---|---|
| Sponsor organisation name | Biogen |
| Sponsor organisation address | 225 Binney Street, Cambridge, Massachusetts, United States, 02142 |
| Public contact | Biogen Study Medical Director, Biogen, clinicaltrials@biogen.com |
| Scientific contact | Biogen Study Medical Director, Biogen, clinicaltrials@biogen.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 | 15 January 2016 |
| Is this the analysis of the primary completion data? | No |

| | |
|---|---|
| Global end of trial reached? | Yes |
| Global end of trial date | 15 January 2016 |
| Was the trial ended prematurely? | Yes |

Notes:

## General information about the trial

Main objective of the trial:

The primary objective of the study was to evaluate the long-term safety and tolerability of BIIB023 in subjects with lupus nephritis (LN).

This was an extension study for all subjects who completed study 211LE201 (2011-002159-32) through Week 52 and did not discontinue BIIB023 or placebo. Eligible subjects from Study 211LE201 were followed for up to 108 weeks.

Subjects who received BIIB023 low dose or high dose in 211LE201 continued to receive the same dosing in this study (211LE202; 2013-000594-69) in addition to background therapy. Subjects who received placebo in 211LE201 were randomized to receive either BIIB023 low dose or high dose in addition to background therapy.

Protection of trial subjects:

Written informed consent was obtained from each subject prior to evaluations being performed for eligibility. Subjects were given adequate time to review the information in the informed consent and were allowed to ask, and have answered, questions concerning all portions of the conduct of the study. Through the informed consent process each subject was made aware of the purpose of the study, the procedures, the benefits and risks of the study, the discomforts and the precautions taken. Any side effects or other health issues occurring during the study were followed up by the study doctor. Subjects were able to stop taking part in the study at any time without giving any reason.

Background therapy:

Open-label mycophenolate mofetil (MMF) and oral corticosteroids were used at the Investigator’s discretion. MMF could be increased to a maximum of 3 g/day or reduced/discontinued in response to peripheral neutrophil counts and/or serious infection. Corticosteriod therapy was specified as prednisone doses, but equivalent doses of other corticosteroids were permitted. The subjects were to obtain corticosteroid therapy by prescription.

Evidence for comparator: -

| | |
|---|---|
| Actual start date of recruitment | 22 November 2013 |
| 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 | Argentina: 21 |
| Country: Number of subjects enrolled | Philippines: 14 |
| Country: Number of subjects enrolled | Malaysia: 8 |
| Country: Number of subjects enrolled | Colombia: 7 |
| Country: Number of subjects enrolled | Peru: 7 |
| Country: Number of subjects enrolled | United States: 7 |
| Country: Number of subjects enrolled | Australia: 3 |

| | |
|---|---|
| Country: Number of subjects enrolled | Hungary: 3 |
| Country: Number of subjects enrolled | Thailand: 3 |
| Country: Number of subjects enrolled | Belgium: 2 |
| Country: Number of subjects enrolled | Brazil: 2 |
| Country: Number of subjects enrolled | France: 2 |
| Country: Number of subjects enrolled | Mexico: 2 |
| Country: Number of subjects enrolled | Hong Kong: 1 |
| Country: Number of subjects enrolled | Italy: 1 |
| Country: Number of subjects enrolled | Poland: 1 |
| Country: Number of subjects enrolled | Korea, Republic of: 1 |
| Country: Number of subjects enrolled | Russian Federation: 1 |
| Country: Number of subjects enrolled | Spain: 1 |
| Worldwide total number of subjects | 87 |
| EEA total number of subjects | 10 |

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) | 87 |
| From 65 to 84 years | 0 |
| 85 years and over | 0 |

## Subject disposition

### Recruitment

Recruitment details:

Subjects who completed Week 52 of Study 211LE201 and did not discontinue BIIB023 or placebo study treatment were eligible for this study.

### Pre-assignment

Screening details:

A total of 87 subjects were randomized.

### 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, Carer |

Blinding implementation details:

BIIB023 was prepared and dispensed by an unblinded Pharmacist or an unblinded medically qualified designee (other than the Investigator or co-Investigator). All subjects enrolled in Study 211LE202 were blinded to their dose level.

### Arms

| | |
|---|---|
| Are arms mutually exclusive? | Yes |
| **Arm title** | Placebo (211LE201) to BIIB023 3 mg/kg (211LE202) |

Arm description:

Subjects who received placebo every 4 weeks (Q4W) plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202.

| | |
|---|---|
| Arm type | Experimental |
| Investigational medicinal product name | BIIB023 |
| Investigational medicinal product code | BIIB023 |
| Other name | |
| Pharmaceutical forms | Solution for injection |
| Routes of administration | Intravenous use |

Dosage and administration details:

BIIB023 was administered by IV infusion over 1 hour, followed by a minimum of 1-hour observation period.

| | |
|---|---|
| Investigational medicinal product name | mycophenolate mofetil |
| Investigational medicinal product code | |
| Other name | MMF, Cellcept |
| Pharmaceutical forms | Film-coated tablet |
| Routes of administration | Oral use |

Dosage and administration details:

MMF was taken orally morning and evening, before meals, and with a glass of water. Subjects who experienced tolerability issues (e.g., nausea or diarrhea) were allowed to receive MMF 3 times daily. MMF could be increased to a maximum of 3 g/day or reduced/discontinued in response to peripheral neutrophil counts and/or serious infection.

| | |
|---|---|
| Investigational medicinal product name | oral corticosteroid (prednisone or equivalent) |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Use of oral corticosteroids was at the Investigator’s discretion.

| **Arm title** | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) |
|---|---|

Arm description:

Participants who received BIIB023 3 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202.

| | |
|---|---|
| Arm type | Experimental |
| Investigational medicinal product name | BIIB023 |
| Investigational medicinal product code | BIIB023 |
| Other name | |
| Pharmaceutical forms | Solution for injection |
| Routes of administration | Intravenous use |

Dosage and administration details:

BIIB023 was administered by IV infusion over 1 hour, followed by a minimum of 1-hour observation period.

| | |
|---|---|
| Investigational medicinal product name | mycophenolate mofetil |
| Investigational medicinal product code | |
| Other name | MMF, Cellcept |
| Pharmaceutical forms | Film-coated tablet |
| Routes of administration | Oral use |

Dosage and administration details:

MMF was taken orally morning and evening, before meals, and with a glass of water. Subjects who experienced tolerability issues (e.g., nausea or diarrhea) were allowed to receive MMF 3 times daily. MMF could be increased to a maximum of 3 g/day or reduced/discontinued in response to peripheral neutrophil counts and/or serious infection.

| | |
|---|---|
| Investigational medicinal product name | oral corticosteroid (prednisone or equivalent) |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Use of oral corticosteroids was at the Investigator’s discretion.

| **Arm title** | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|

Arm description:

Participants who received placebo every 4 weeks (Q4W) plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202.

| | |
|---|---|
| Arm type | Experimental |
| Investigational medicinal product name | BIIB023 |
| Investigational medicinal product code | BIIB023 |
| Other name | |
| Pharmaceutical forms | Solution for injection |
| Routes of administration | Intravenous use |

Dosage and administration details:

BIIB023 was administered by IV infusion over 1 hour, followed by a minimum of 1-hour observation period.

| | |
|---|---|
| Investigational medicinal product name | mycophenolate mofetil |
| Investigational medicinal product code | |
| Other name | MMF, Cellcept |
| Pharmaceutical forms | Film-coated tablet |
| Routes of administration | Oral use |

Dosage and administration details:

MMF was taken orally morning and evening, before meals, and with a glass of water. Subjects who experienced tolerability issues (e.g., nausea or diarrhea) were allowed to receive MMF 3 times daily. MMF could be increased to a maximum of 3 g/day or reduced/discontinued in response to peripheral neutrophil counts and/or serious infection.

| | |
|---|---|
| Investigational medicinal product name | oral corticosteroid (prednisone or equivalent) |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Use of oral corticosteroids was at the Investigator's discretion.

| **Arm title** | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|

Arm description:

Participants who received BIIB023 20 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202.

| | |
|---|---|
| Arm type | Experimental |
| Investigational medicinal product name | BIIB023 |
| Investigational medicinal product code | BIIB023 |
| Other name | |
| Pharmaceutical forms | Solution for injection |
| Routes of administration | Intravenous use |

Dosage and administration details:

BIIB023 was administered by IV infusion over 1 hour, followed by a minimum of 1-hour observation period.

| | |
|---|---|
| Investigational medicinal product name | mycophenolate mofetil |
| Investigational medicinal product code | |
| Other name | MMF, Cellcept |
| Pharmaceutical forms | Film-coated tablet |
| Routes of administration | Oral use |

Dosage and administration details:

MMF was taken orally morning and evening, before meals, and with a glass of water. Subjects who experienced tolerability issues (e.g., nausea or diarrhea) were allowed to receive MMF 3 times daily. MMF could be increased to a maximum of 3 g/day or reduced/discontinued in response to peripheral neutrophil counts and/or serious infection.

| | |
|---|---|
| Investigational medicinal product name | oral corticosteroid (prednisone or equivalent) |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Use of oral corticosteroids was at the Investigator's discretion.

| **Number of subjects in period 1** | Placebo (211LE201) to BIIB023 3 mg/kg (211LE202) | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|---|---|
| Started | 14 | 33 | 13 |
| Completed | 0 | 0 | 0 |
| Not completed | 14 | 33 | 13 |
| Adverse event, serious fatal | - | - | - |
| Study Termination | 14 | 28 | 13 |
| Adverse event, non-fatal | - | 1 | - |
| Investigator Decision | - | 1 | - |

| | | | |
|---|---|---|---|
| Consent Withdrawn | - | 3 | - |

| **Number of subjects in period 1** | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|
| Started | 27 |
| Completed | 0 |
| Not completed | 27 |
| Adverse event, serious fatal | 1 |
| Study Termination | 25 |
| Adverse event, non-fatal | - |
| Investigator Decision | - |
| Consent Withdrawn | 1 |

## Baseline characteristics

| Reporting groups | |
|---|---|
| Reporting group title | Placebo (211LE201) to BIIB023 3 mg/kg (211LE202) |
| Reporting group description: | |
| Subjects who received placebo every 4 weeks (Q4W) plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) |
| Reporting group description: | |
| Participants who received BIIB023 3 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
| Reporting group description: | |
| Participants who received placebo every 4 weeks (Q4W) plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) |
| Reporting group description: | |
| Participants who received BIIB023 20 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |

| Reporting group values | Placebo (211LE201) to BIIB023 3 mg/kg (211LE202) | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|---|---|
| Number of subjects | 14 | 33 | 13 |
| Age, Customized<br>Units: participants | | | |
| 18 to 19 years | 0 | 0 | 1 |
| 20 to 29 years | 6 | 15 | 6 |
| 30 to 39 years | 6 | 11 | 3 |
| 40 to 49 years | 2 | 6 | 2 |
| 50 to 55 years | 0 | 0 | 1 |
| > 55 years | 0 | 1 | 0 |
| Gender, Male/Female<br>Units: | | | |
| Female | 11 | 29 | 10 |
| Male | 3 | 4 | 3 |

| Reporting group values | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) | Total | |
|---|---|---|---|
| Number of subjects | 27 | 87 | |
| Age, Customized<br>Units: participants | | | |
| 18 to 19 years | 1 | 2 | |
| 20 to 29 years | 9 | 36 | |
| 30 to 39 years | 14 | 34 | |
| 40 to 49 years | 1 | 11 | |
| 50 to 55 years | 2 | 3 | |
| > 55 years | 0 | 1 | |

| Gender, Male/Female<br>Units: | | | |
|---|---|---|---|
| Female | 25 | 75 | |
| Male | 2 | 12 | |

## End points

### End points reporting groups

| | |
|---|---|
| Reporting group title | Placebo (211LE201) to BIIB023 3 mg/kg (211LE202) |
| Reporting group description: | |
| Subjects who received placebo every 4 weeks (Q4W) plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) |
| Reporting group description: | |
| Participants who received BIIB023 3 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
| Reporting group description: | |
| Participants who received placebo every 4 weeks (Q4W) plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) |
| Reporting group description: | |
| Participants who received BIIB023 20 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |

### Primary: Number of Participants Experiencing Adverse Events (AEs) and Serious Adverse Events (SAEs)

| | |
|---|---|
| End point title | Number of Participants Experiencing Adverse Events (AEs) and Serious Adverse Events (SAEs)[1] |
| End point description: | |
| AEs with a start date on or after the first dose date in study 211LE202. AE: any untoward medical occurrence that does not necessarily have a causal relationship with this treatment. SAE: any untoward medical occurrence that at any dose: results in death; in the view of the Investigator, places the subject at immediate risk of death (a life-threatening event); requires inpatient hospitalization or prolongation of existing hospitalization; results in persistent or significant disability/ incapacity; or results in a congenital anomaly/birth defect. An SAE may also be any other medically important event that, in the opinion of the Investigator, may jeopardize the subject or may require intervention to prevent one of the other outcomes listed above. | |
| End point type | Primary |
| End point timeframe: | |
| Up to Week 108 | |
| 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.<br>Justification: Descriptive statistics are presented, per protocol. | |

| End point values | Placebo (211LE201) to BIIB023 3 mg/kg (211LE202) | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|---|---|---|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 14 | 33 | 13 | 27 |
| Units: participants | | | | |
| number (not applicable) | | | | |
| Any event | 4 | 23 | 7 | 19 |

| | | | | |
|---|---|---|---|---|
| Moderate or severe event | 2 | 12 | 3 | 6 |
| Severe event | 0 | 4 | 1 | 3 |
| Event related to dose-blinded treatment | 1 | 5 | 1 | 4 |
| Event related to MMF | 2 | 8 | 2 | 9 |
| Serious event | 1 | 7 | 4 | 3 |
| Serious event related to dose-blinded treatment | 0 | 2 | 1 | 1 |
| Serious event related to MMF | 0 | 3 | 1 | 2 |
| Fatal event | 0 | 0 | 0 | 1 |

## Statistical analyses

No statistical analyses for this end point

## Primary: Number of Subjects Who Discontinued Study Treatment or Withdrew From Study Due to an AE

| End point title | Number of Subjects Who Discontinued Study Treatment or Withdrew From Study Due to an AE[2] |
|---|---|

End point description:

AEs with a start date on or after the first dose date in study 211LE202. AE: any untoward medical occurrence that does not necessarily have a causal relationship with this treatment. SAE: any untoward medical occurrence that at any dose: results in death; in the view of the Investigator, places the subject at immediate risk of death (a life-threatening event); requires inpatient hospitalization or prolongation of existing hospitalization; results in persistent or significant disability/ incapacity; or results in a congenital anomaly/birth defect. An SAE may also be any other medically important event that, in the opinion of the Investigator, may jeopardize the subject or may require intervention to prevent one of the other outcomes listed above.

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

End point timeframe:

Up to week 108

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: Descriptive statistics are presented, per protocol.

| **End point values** | Placebo (211LE201) to BIIB023 3 mg/kg (211LE202) | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|---|---|---|
| Subject group type | Reporting group | Reporting group | Reporting group | Reporting group |
| Number of subjects analysed | 14 | 33 | 13 | 27 |
| Units: subjects | | | | |
| Discontinued treatment due to an AE | 0 | 0 | 0 | 0 |
| Withdrew from study due to an AE | 0 | 2 | 0 | 1 |

## Statistical analyses

No statistical analyses for this end point

## Adverse events

| Adverse events information | |
|---|---|
| Timeframe for reporting adverse events: | |
| Up to Week 108 | |
| Assessment type | Systematic |

| Dictionary used | |
|---|---|
| Dictionary name | MedDRA |
| Dictionary version | 18.1 |

| Reporting groups | |
|---|---|
| Reporting group title | Placebo (211LE201) to BIIB023 3 mg/ kg (211LE202) |
| Reporting group description: | |
| Subjects who received placebo Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) |
| Reporting group description: | |
| Subjects who received BIIB023 3 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 3 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
| Reporting group description: | |
| Subjects who received placebo Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |
| Reporting group title | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) |
| Reporting group description: | |
| Subjects who received BIIB023 20 mg/kg Q4W plus MMF and oral corticosteroids in 211LE201 and received BIIB023 20 mg/kg IV Q4W plus MMF and oral corticosteroids through Week 100 in 211LE202. | |

| Serious adverse events | Placebo (211LE201) to BIIB023 3 mg/ kg (211LE202) | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|---|---|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 7 / 33 (21.21%) | 4 / 13 (30.77%) |
| number of deaths (all causes) | 0 | 0 | 0 |
| number of deaths resulting from adverse events | | | |
| Investigations | | | |
| Hepatic enzyme abnormal | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 0 / 13 (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 |
| Nervous system disorders | | | |
| Tension headache | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Blood and lymphatic system disorders | | | |
| Neutropenia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 1 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| General disorders and administration site conditions | | | |
| Multi-organ failure | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 0 / 13 (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 |
| Eye disorders | | | |
| Aphakia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Cataract | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 0 / 13 (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 |
| Hepatobiliary disorders | | | |
| Drug-induced liver injury | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 33 (0.00%) | 0 / 13 (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 |
| Skin and subcutaneous tissue disorders | | | |
| Stevens-johnson syndrome | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 33 (0.00%) | 0 / 13 (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 |
| Psychiatric disorders | | | |
| Psychotic disorder | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Renal and urinary disorders | | | |
| Lupus nephritis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 3 / 33 (9.09%) | 0 / 13 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 1 / 3 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Infections and infestations | | | |
| Appendicitis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Gastroenteritis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 0 / 13 (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 |
| Gastroenteritis norovirus | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 1 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Pneumonia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Septic shock | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 0 / 13 (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 |

| | | | |
|---|---|---|---|
| Tuberculosis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 1 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |
| Metabolism and nutrition disorders | | | |
| Hyperkalaemia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | 0 / 0 |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | 0 / 0 |

| **Serious adverse events** | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) | | |
|---|---|---|---|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 3 / 27 (11.11%) | | |
| number of deaths (all causes) | 1 | | |
| number of deaths resulting from adverse events | | | |
| Investigations | | | |
| Hepatic enzyme abnormal | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences causally related to treatment / all | 1 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Nervous system disorders | | | |
| Tension headache | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Blood and lymphatic system disorders | | | |
| Neutropenia | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| General disorders and administration site conditions | | | |
| Multi-organ failure | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 1 | | |

| | | | |
|---|---|---|---|
| Eye disorders | | | |
| Aphakia | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Cataract | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences causally related to treatment / all | 0 / 1 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Hepatobiliary disorders | | | |
| Drug-induced liver injury | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Skin and subcutaneous tissue disorders | | | |
| Stevens-johnson syndrome | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Psychiatric disorders | | | |
| Psychotic disorder | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Renal and urinary disorders | | | |
| Lupus nephritis | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences causally related to treatment / all | 0 / 0 | | |
| deaths causally related to treatment / all | 0 / 0 | | |
| Infections and infestations | | | |

| | | | | |
|---|---|---|---|---|
| Appendicitis | | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | | |
| occurrences causally related to treatment / all | 0 / 0 | | | |
| deaths causally related to treatment / all | 0 / 0 | | | |
| Gastroenteritis | | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | | |
| occurrences causally related to treatment / all | 0 / 1 | | | |
| deaths causally related to treatment / all | 0 / 1 | | | |
| Gastroenteritis norovirus | | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | | |
| occurrences causally related to treatment / all | 0 / 0 | | | |
| deaths causally related to treatment / all | 0 / 0 | | | |
| Pneumonia | | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | | |
| occurrences causally related to treatment / all | 0 / 0 | | | |
| deaths causally related to treatment / all | 0 / 0 | | | |
| Septic shock | | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | | |
| occurrences causally related to treatment / all | 0 / 1 | | | |
| deaths causally related to treatment / all | 0 / 1 | | | |
| Tuberculosis | | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | | |
| occurrences causally related to treatment / all | 0 / 0 | | | |
| deaths causally related to treatment / all | 0 / 0 | | | |
| Metabolism and nutrition disorders | | | | |
| Hyperkalaemia | | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | | |
| occurrences causally related to treatment / all | 0 / 0 | | | |
| deaths causally related to treatment / all | 0 / 0 | | | |

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

| **Non-serious adverse events** | Placebo (211LE201) to BIIB023 3 mg/ kg (211LE202) | BIIB023 3 mg/kg (211LE201) to BIIB023 3 mg/kg (211LE202) | Placebo (211LE201) to BIIB023 20 mg/kg (211LE202) |
|---|---|---|---|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 4 / 14 (28.57%) | 19 / 33 (57.58%) | 7 / 13 (53.85%) |
| Vascular disorders | | | |
| Hypertension | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 2 / 33 (6.06%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 3 | 0 |
| General disorders and administration site conditions | | | |
| Face oedema | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 2 |
| Oedema | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences (all) | 2 | 1 | 0 |
| Oedema peripheral | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 2 | 0 |
| Reproductive system and breast disorders | | | |
| Menopausal symptoms | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Respiratory, thoracic and mediastinal disorders | | | |
| Cough | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences (all) | 2 | 1 | 0 |
| Rhinorrhoea | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 3 / 33 (9.09%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 3 | 0 |
| Investigations | | | |
| Blood alkaline phosphatase increased | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Gamma-glutamyltransferase increased | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 1 | 0 |
| Haemoglobin decreased | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Hepatic enzyme increased | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 3 / 33 (9.09%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 3 | 0 |
| Red blood cell count decreased | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Spleen palpable | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Transaminases increased | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 0 | 0 |
| Injury, poisoning and procedural complications | | | |
| Contusion | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Foot fracture | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 1 | 0 |
| Road traffic accident | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Nervous system disorders | | | |
| Dysgeusia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Headache | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 4 / 13 (30.77%) |
| occurrences (all) | 0 | 1 | 4 |
| Post herpetic neuralgia | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 33 (0.00%) | 0 / 13 (0.00%) |
| occurrences (all) | 2 | 0 | 0 |
| Tension headache | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Ear and labyrinth disorders | | | |
| Vertigo | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 2 / 13 (15.38%) |
| occurrences (all) | 0 | 1 | 2 |
| Constipation | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Diarrhoea | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 1 | 1 |
| Gastritis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 2 | 0 |
| Mouth ulceration | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 2 | 5 |
| Nausea | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Hepatobiliary disorders | | | |
| Cholelithiasis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Granulomatous liver disease | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Hypertransaminasaemia | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Skin and subcutaneous tissue disorders | | | |
| Butterfly rash | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Dermatitis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 33 (0.00%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Livedo reticularis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Rash | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 1 | 1 |
| Rash pruritic | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Systemic lupus erythematosus rash | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 33 (0.00%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |
| Renal and urinary disorders | | | |
| Acute kidney injury | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Dysuria | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 2 |
| Renal impairment | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 3 / 33 (9.09%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 3 | 0 |
| Arthritis | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 14 (0.00%) | 1 / 33 (3.03%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 1 | 2 |
| Back pain | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Muscle spasms | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 2 / 13 (15.38%) |
| occurrences (all) | 0 | 0 | 2 |
| Osteoporosis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Pain in extremity | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Infections and infestations | | | |
| Bronchitis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 5 / 33 (15.15%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 5 | 0 |
| Gastroenteritis norovirus | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 2 |
| Herpes zoster | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 1 | 0 |
| Influenza | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 2 | 1 |
| Nasopharyngitis | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 1 / 33 (3.03%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 1 | 0 |
| Onychomycosis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 2 | 0 |
| Oral herpes | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 6 | 0 |

| | | | |
|---|---|---|---|
| Pharyngitis | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 2 |
| Upper respiratory tract infection | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 5 / 33 (15.15%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 8 | 0 |
| Urinary tract infection | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 4 / 13 (30.77%) |
| occurrences (all) | 0 | 2 | 5 |
| Viral upper respiratory tract infection | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 2 / 33 (6.06%) | 0 / 13 (0.00%) |
| occurrences (all) | 0 | 3 | 0 |
| Metabolism and nutrition disorders | | | |
| Hyperkalaemia | | | |
| subjects affected / exposed | 0 / 14 (0.00%) | 0 / 33 (0.00%) | 1 / 13 (7.69%) |
| occurrences (all) | 0 | 0 | 1 |
| Hyperlipidaemia | | | |
| subjects affected / exposed | 1 / 14 (7.14%) | 0 / 33 (0.00%) | 0 / 13 (0.00%) |
| occurrences (all) | 1 | 0 | 0 |

| **Non-serious adverse events** | BIIB023 20 mg/kg (211LE201) to BIIB023 20 mg/kg (211LE202) | | |
|---|---|---|---|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 13 / 27 (48.15%) | | |
| Vascular disorders | | | |
| Hypertension | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| General disorders and administration site conditions | | | |
| Face oedema | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Oedema | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Oedema peripheral | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Reproductive system and breast disorders | | | |
| Menopausal symptoms | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Respiratory, thoracic and mediastinal disorders | | | |
| Cough | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Rhinorrhoea | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Investigations | | | |
| Blood alkaline phosphatase increased | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | | |
| occurrences (all) | 2 | | |
| Gamma-glutamyltransferase increased | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | | |
| occurrences (all) | 2 | | |
| Haemoglobin decreased | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Hepatic enzyme increased | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences (all) | 2 | | |
| Red blood cell count decreased | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Spleen palpable | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Transaminases increased | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | | |
| occurrences (all) | 2 | | |

| | | | |
|---|---|---|---|
| Injury, poisoning and procedural complications | | | |
| Contusion | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences (all) | 1 | | |
| Foot fracture | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Road traffic accident | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Nervous system disorders | | | |
| Dysgeusia | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Headache | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences (all) | 3 | | |
| Post herpetic neuralgia | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Tension headache | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Ear and labyrinth disorders | | | |
| Vertigo | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences (all) | 1 | | |
| Constipation | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Diarrhoea | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Gastritis | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences (all) | 1 | | |
| Mouth ulceration | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Nausea | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Hepatobiliary disorders | | | |
| Cholelithiasis | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Granulomatous liver disease | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Hypertransaminasaemia | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Skin and subcutaneous tissue disorders | | | |
| Butterfly rash | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Dermatitis | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Livedo reticularis | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Rash | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Rash pruritic | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Systemic lupus erythematosus rash | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Renal and urinary disorders | | | |
| Acute kidney injury | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Dysuria | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | | |
| occurrences (all) | 2 | | |
| Renal impairment | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences (all) | 4 | | |
| Arthritis | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Back pain | | | |
| subjects affected / exposed | 1 / 27 (3.70%) | | |
| occurrences (all) | 1 | | |
| Muscle spasms | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Osteoporosis | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Pain in extremity | | | |
| subjects affected / exposed | 2 / 27 (7.41%) | | |
| occurrences (all) | 3 | | |
| Infections and infestations | | | |

| | | | |
|---|---|---|---|
| Bronchitis<br>subjects affected / exposed<br>occurrences (all) | 5 / 27 (18.52%)<br>7 | | |
| Gastroenteritis norovirus<br>subjects affected / exposed<br>occurrences (all) | 0 / 27 (0.00%)<br>0 | | |
| Herpes zoster<br>subjects affected / exposed<br>occurrences (all) | 0 / 27 (0.00%)<br>0 | | |
| Influenza<br>subjects affected / exposed<br>occurrences (all) | 1 / 27 (3.70%)<br>1 | | |
| Nasopharyngitis<br>subjects affected / exposed<br>occurrences (all) | 2 / 27 (7.41%)<br>2 | | |
| Onychomycosis<br>subjects affected / exposed<br>occurrences (all) | 0 / 27 (0.00%)<br>0 | | |
| Oral herpes<br>subjects affected / exposed<br>occurrences (all) | 0 / 27 (0.00%)<br>0 | | |
| Pharyngitis<br>subjects affected / exposed<br>occurrences (all) | 0 / 27 (0.00%)<br>0 | | |
| Upper respiratory tract infection<br>subjects affected / exposed<br>occurrences (all) | 1 / 27 (3.70%)<br>1 | | |
| Urinary tract infection<br>subjects affected / exposed<br>occurrences (all) | 0 / 27 (0.00%)<br>0 | | |
| Viral upper respiratory tract infection<br>subjects affected / exposed<br>occurrences (all) | 1 / 27 (3.70%)<br>1 | | |
| Metabolism and nutrition disorders<br>Hyperkalaemia | | | |

| | | | |
|---|---|---|---|
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |
| Hyperlipidaemia | | | |
| subjects affected / exposed | 0 / 27 (0.00%) | | |
| occurrences (all) | 0 | | |

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

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

Study was terminated based on a pre-specified, blinded futility analysis of Study 211LE201 (2011-002159-32), which didn't demonstrate sufficient efficacy to warrant continuation of the studies. Study was not terminated based on safety considerations.

Notes: