



## Clinical trial results:

**BI 695501 versus Humira® in patients with active Crohn's disease: a randomized, double-blind, multicenter, parallel group, exploratory trial comparing efficacy, endoscopic improvement, safety, and immunogenicity**

### Summary

|                          |                |
|--------------------------|----------------|
| EudraCT number           | 2016-000612-14 |
| Trial protocol           | DE GB CZ GR HR |
| Global end of trial date | 13 May 2019    |

### Results information

|                                |             |
|--------------------------------|-------------|
| Result version number          | v1          |
| This version publication date  | 15 May 2020 |
| First version publication date | 15 May 2020 |

### Trial information

#### Trial identification

|                       |        |
|-----------------------|--------|
| Sponsor protocol code | 1297.4 |
|-----------------------|--------|

#### Additional study identifiers

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

Notes:

### Sponsors

|                              |   |
|------------------------------|---|
| Sponsor organisation name    | Boehringer Ingelheim  |
| Sponsor organisation address | Binger Strasse 173, Ingelheim am Rhein, Germany, 55216  |
| Public contact               | Boehringer Ingelheim, Call Center, Boehringer Ingelheim, 001 8002430127, <a href="mailto:clintriage.rdg@boehringer-ingelheim.com">clintriage.rdg@boehringer-ingelheim.com</a> |
| Scientific contact           | Boehringer Ingelheim, Call Center, Boehringer Ingelheim, 001 8002430127, <a href="mailto:clintriage.rdg@boehringer-ingelheim.com">clintriage.rdg@boehringer-ingelheim.com</a> |

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                       | 07 June 2019  |
| Is this the analysis of the primary completion data? | Yes           |
| Primary completion date                              | 30 April 2019 |
| Global end of trial reached?                         | Yes           |
| Global end of trial date                             | 13 May 2019   |
| Was the trial ended prematurely?                     | No            |

Notes:

## General information about the trial

Main objective of the trial:

The primary objective of this trial was to compare the clinical efficacy of BI 695501 with EU-approved Humira at Week 4 in patients with active Crohn's disease.

Protection of trial subjects:

Only patients that met all the study inclusion and none of the exclusion criteria were to be randomized in the study. All patients were free to withdraw from the clinical trial at any time for any reason given. Close monitoring of all patients was adhered to throughout the trial conduct.

Background therapy: -

Evidence for comparator: -

|   |                  |
|---|------------------|
| Actual start date of recruitment                          | 15 December 2016 |
| 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 | Belarus: 9                |
| Country: Number of subjects enrolled | Bosnia and Herzegovina: 3 |
| Country: Number of subjects enrolled | Czech Republic: 51        |
| Country: Number of subjects enrolled | Germany: 2                |
| Country: Number of subjects enrolled | United Kingdom: 5         |
| Country: Number of subjects enrolled | Greece: 7                 |
| Country: Number of subjects enrolled | Croatia: 9                |
| Country: Number of subjects enrolled | Israel: 33                |
| Country: Number of subjects enrolled | Poland: 53                |
| Country: Number of subjects enrolled | Russian Federation: 49    |
| Country: Number of subjects enrolled | Serbia: 19                |
| Country: Number of subjects enrolled | Turkey: 14                |
| Country: Number of subjects enrolled | Ukraine: 34               |
| Country: Number of subjects enrolled | United States: 77         |
| Worldwide total number of subjects   | 365                       |
| EEA total number of subjects         | 127                       |

Notes:

| <b>Subjects enrolled per age group</b>    |     |
|---|-----|
| 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)                      | 352 |
| From 65 to 84 years                       | 13  |
| 85 years and over                         | 0   |

## Subject disposition

### Recruitment

#### Recruitment details:

This was an exploratory, randomized, 56-week, double-blind, parallel arm, multiple dose, active comparator trial of BI 695501 and EU-approved Humira, with a 48-week treatment period and a 10-week follow-up period (starting after last dose of trial medication at Week 46) in patients with moderately to severely active Crohn's Disease (CD)

### Pre-assignment

#### Screening details:

The trial consisted of a screening period of up to a maximum of 28 days, a 48-week treatment period consisting of an induction period from baseline to Week 4 and a maintenance period from Week 5 to Week 48, and a 10-week safety follow-up period (starting after last dose of trial medication at Week 46).

### Period 1

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

### Arms

|                              |           |
|------------------------------|-----------|
| Are arms mutually exclusive? | Yes       |
| <b>Arm title</b>             | BI 695501 |

#### Arm description:

Patients randomized to BI 695501 received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders (Crohn's Disease Activity Index (CDAI) decrease of  $\geq 70$  compared to baseline), patients continued to receive BI 695501 every 2 weeks until the end of the treatment (EoT) period (Week 46). Patients were administered with a loading dose of 160 milligram (mg) BI 695501 on Day 1, followed by 80 mg BI 695501 2 weeks later (Day 15), and thereafter 40 mg BI 695501 every 2 weeks until Week 46. Trial medication was administered by subcutaneous (SC) injection.

|  |  |
|--|--|
| Arm type                               | Experimental                                 |
| Investigational medicinal product name | BI 695501                                    |
| Investigational medicinal product code |  |
| Other name                             |  |
| Pharmaceutical forms                   | Solution for injection in pre-filled syringe |
| Routes of administration               | Subcutaneous use                             |

#### Dosage and administration details:

BI 695501 was provided in sterile, preservative-free, non-pyrogenic, single-use pre-filled syringes (PFS) containing 40 mg of BI 695501 per 0.8 milliliter (mL). On Day 1, 4 PFS were used (total of 160 mg); on Day 15 (Week 2), 2 PFS were used (total of 80 mg); and thereafter (Week 4, then every 2 weeks until Week 46 if the patient was eligible to enter the maintenance phase, 1 PFS was used per injection.

|                  |           |
|------------------|-----------|
| <b>Arm title</b> | Humira EU |
|------------------|-----------|

#### Arm description:

Patients randomized to EU-approved Humira received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders, patients continued to receive EU-approved Humira until Week 22 and then switched to receive BI 695501 every 2 weeks from Week 24 until the EoT period (Week 46). Patients were administered with a loading dose of 160 mg EU-approved Humira on Day 1, followed by 80 mg EU-approved Humira 2 weeks later (Day 15), and 40 mg EU-approved Humira every 2 weeks until Week 22. Patients were then switched to receive 40 mg BI 695501 every 2 weeks from Week 24 until Week 46. Trial medication was administered by SC injection.

|          |                   |
|----------|-------------------|
| Arm type | Active comparator |
|----------|-------------------|

|  |  |
|--|--|
| Investigational medicinal product name | EU-approved Humira                           |
| Investigational medicinal product code |  |
| Other name                             |  |
| Pharmaceutical forms                   | Solution for injection in pre-filled syringe |
| Routes of administration               | Subcutaneous use                             |

Dosage and administration details:

The EU-approved Humira was provided in sterile, preservative-free, non-pyrogenic, single use PFS containing 40 mg of adalimumab per 0.8 mL or 40 mg of adalimumab per 0.4 mL (old and new formulations, respectively, approved to be comparable). On Day 1, 4 PFS were used (total of 160 mg); on Day 15 (Week 2), 2 PFS were used (total of 80 mg); and thereafter (Week 4, then every 2 weeks until Week 22 if the patient was eligible to enter the maintenance phase), 1 PFS was used per injection.

| <b>Number of subjects in period 1<sup>[1]</sup></b> | BI 695501 | Humira EU |
|---|-----------|-----------|
| Started   | 72        | 75        |
| Completed   | 54        | 56        |
| Not completed                                       | 18        | 19        |
| Physician decision                                  | 1         | 1         |
| Consent withdrawn by subject                        | 3         | 4         |
| Adverse event, non-fatal                            | 4         | 4         |
| Primary lack of efficacy                            | 4         | 4         |
| Secondary lack of efficacy                          | 2         | 1         |
| Pregnancy   | -         | 2         |
| Lost to follow-up                                   | 1         | 2         |
| Protocol deviation                                  | 3         | 1         |

Notes:

[1] - The number of subjects reported to be in the baseline period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.

Justification: Out of the 56 enrolled subjects, 365 were treated. Only these 147 subjects were analysed.

## Baseline characteristics

### Reporting groups

|   |           |
|---|-----------|
| Reporting group title   | BI 695501 |
| Reporting group description:  |           |
| Patients randomized to BI 695501 received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders (Crohn's Disease Activity Index (CDAI) decrease of $\geq 70$ compared to baseline), patients continued to receive BI 695501 every 2 weeks until the end of the treatment (EoT) period (Week 46). Patients were administered with a loading dose of 160 milligram (mg) BI 695501 on Day 1, followed by 80 mg BI 695501 2 weeks later (Day 15), and thereafter 40 mg BI 695501 every 2 weeks until Week 46. Trial medication was administered by subcutaneous (SC) injection.   |           |
| Reporting group title   | Humira EU |
| Reporting group description:  |           |
| Patients randomized to EU-approved Humira received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders, patients continued to receive EU-approved Humira until Week 22 and then switched to receive BI 695501 every 2 weeks from Week 24 until the EoT period (Week 46). Patients were administered with a loading dose of 160 mg EU-approved Humira on Day 1, followed by 80 mg EU-approved Humira 2 weeks later (Day 15), and 40 mg EU-approved Humira every 2 weeks until Week 22. Patients were then switched to receive 40 mg BI 695501 every 2 weeks from Week 24 until Week 46. Trial medication was administered by SC injection. |           |

| Reporting group values   | BI 695501   | Humira EU   | Total |
|--|-------------|-------------|-------|
| Number of subjects   | 72          | 75          | 147   |
| Age categorical  |             |             |       |
| The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication |             |             |       |
| Units: Subjects  |             |             |       |
| In utero   | 0           | 0           | 0     |
| Preterm newborn infants (gestational age < 37 wks)   | 0           | 0           | 0     |
| Newborns (0-27 days)   | 0           | 0           | 0     |
| Infants and toddlers (28 days-23 months)   | 0           | 0           | 0     |
| Children (2-11 years)  | 0           | 0           | 0     |
| Adolescents (12-17 years)  | 0           | 0           | 0     |
| Adults (18-64 years)   | 68          | 74          | 142   |
| From 65-84 years   | 4           | 1           | 5     |
| 85 years and over  | 0           | 0           | 0     |
| Age Continuous   |             |             |       |
| The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication |             |             |       |
| Units: years   |             |             |       |
| arithmetic mean  | 37.4        | 33.2        | -     |
| standard deviation   | $\pm 13.44$ | $\pm 11.52$ | -     |
| Sex: Female, Male  |             |             |       |
| Units: Participants  |             |             |       |
| Female   | 33          | 31          | 64    |
| Male   | 39          | 44          | 83    |
| Race (NIH/OMB)   |             |             |       |
| The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication |             |             |       |
| Units: Subjects  |             |             |       |
| American Indian or Alaska Native   | 0           | 0           | 0     |

|  |         |         |     |
|--|---------|---------|-----|
| Asian  | 1       | 0       | 1   |
| Native Hawaiian or Other Pacific Islander  | 0       | 0       | 0   |
| Black or African American  | 1       | 1       | 2   |
| White  | 69      | 74      | 143 |
| More than one race   | 0       | 0       | 0   |
| Unknown or Not Reported  | 1       | 0       | 1   |
| Ethnicity (NIH/OMB)  |         |         |     |
| The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication   |         |         |     |
| Units: Subjects  |         |         |     |
| Hispanic or Latino   | 1       | 0       | 1   |
| Not Hispanic or Latino   | 69      | 67      | 136 |
| Unknown or Not Reported  | 2       | 8       | 10  |
| Crohn's Disease Activity Index score at baseline   |         |         |     |
| Crohn's Disease Activity Index (CDAI) is a validated instrument to measure disease severity in Crohn's disease. The CDAI is composed of 8 factors (Number of liquid stools, abdominal pain, general well being, extra-intestinal complications, antidiarrheal drugs, abdominal mass, hematocrit, body weight) the score is calculated by adding up the scores of the 8 factors after adjustment with a weighting factor. Higher CDAI scores indicating more active disease. The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication |         |         |     |
| Units: Score   |         |         |     |
| arithmetic mean  | 307.3   | 303.6   |     |
| standard deviation   | ± 76.69 | ± 64.39 | -   |

## End points

### End points reporting groups

|   |           |
|---|-----------|
| Reporting group title   | BI 695501 |
| Reporting group description:  |           |
| Patients randomized to BI 695501 received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders (Crohn's Disease Activity Index (CDAI) decrease of $\geq 70$ compared to baseline), patients continued to receive BI 695501 every 2 weeks until the end of the treatment (EoT) period (Week 46). Patients were administered with a loading dose of 160 milligram (mg) BI 695501 on Day 1, followed by 80 mg BI 695501 2 weeks later (Day 15), and thereafter 40 mg BI 695501 every 2 weeks until Week 46. Trial medication was administered by subcutaneous (SC) injection.   |           |
| Reporting group title   | Humira EU |
| Reporting group description:  |           |
| Patients randomized to EU-approved Humira received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders, patients continued to receive EU-approved Humira until Week 22 and then switched to receive BI 695501 every 2 weeks from Week 24 until the EoT period (Week 46). Patients were administered with a loading dose of 160 mg EU-approved Humira on Day 1, followed by 80 mg EU-approved Humira 2 weeks later (Day 15), and 40 mg EU-approved Humira every 2 weeks until Week 22. Patients were then switched to receive 40 mg BI 695501 every 2 weeks from Week 24 until Week 46. Trial medication was administered by SC injection. |           |

### Primary: Percentage of Patients With a Clinical Response (CDAI Decrease of $\geq 70$ Compared With Baseline) at Week 4

|   |   |
|---|---|
| End point title   | Percentage of Patients With a Clinical Response (CDAI Decrease of $\geq 70$ Compared With Baseline) at Week 4 |
| End point description:  |   |
| The Crohn's Disease Activity Index (CDAI) is a validated instrument to measure disease severity in Crohn's Disease (CD). The CDAI score is a sum of the 8 factors (number of liquid stools, abdominal pain, general well-being, extra-intestinal complications, antidiarrheal drugs, abdominal mass, hematocrit and body weight) after adjustment with a weighting factor. Higher CDAI scores indicating more active disease. The CDAI decrease at Week 4 was assessed as the decrease relative to baseline measurement, patients with a decrease $\geq 70$ were responders. Percentage=least squares means per treatment group back transformed using inverse logit function. Missing data were imputed according to non-responder imputation (NRI) and last observation carried forward (LOCF). The full analysis set (FAS) contained all randomized patients who received at least 1 dose of trial medication, and had all efficacy measures relevant for the CDAI, measured at baseline and at least once postbaseline. |   |
| End point type  | Primary   |
| End point timeframe:  |   |
| Week 4  |   |

| End point values            | BI 695501       | Humira EU       |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 68              | 72              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     | 88.0            | 93.1            |  |  |

### Statistical analyses



|  |                            |
|--|----------------------------|
| <b>Statistical analysis title</b>  | Estimate for relative risk |
| Statistical analysis description:  |                            |
| Was analyzed using a log-linked binomial model, described as: response to treatment at Week 4 = treatment+prior infliximab exposure+screening Simple Endoscopic Score for Crohn's Disease (SES-CD) |                            |
| Comparison groups  | BI 695501 v Humira EU      |
| Number of subjects included in analysis  | 140                        |
| Analysis specification   | Pre-specified              |
| Analysis type  |                            |
| Parameter estimate   | Risk ratio (RR)            |
| Point estimate   | 0.945                      |
| Confidence interval  |                            |
| level  | 90 %                       |
| sides  | 2-sided                    |
| lower limit  | 0.87                       |
| upper limit  | 1.028                      |

|  |                            |
|--|----------------------------|
| <b>Statistical analysis title</b>  | Estimate for relative risk |
| Statistical analysis description:  |                            |
| Was to be analyzed using a log-linked binomial model, described as: response to treatment at Week 4 = treatment+prior infliximab exposure+screening Simple Endoscopic Score for Crohn's Disease (SES-CD) |                            |
| Comparison groups  | BI 695501 v Humira EU      |
| Number of subjects included in analysis  | 140                        |
| Analysis specification   | Pre-specified              |
| Analysis type  |                            |
| Parameter estimate   | Risk ratio (RR)            |
| Point estimate   | 0.945                      |
| Confidence interval  |                            |
| level  | 95 %                       |
| sides  | 2-sided                    |
| lower limit  | 0.856                      |
| upper limit  | 1.044                      |

|   |   |
|---|---|
| <b>Secondary: Percentage of Patients in Clinical Remission (CDAI &lt;150) at Week 24</b>  |   |
| End point title   | Percentage of Patients in Clinical Remission (CDAI <150) at Week 24 |
| End point description:  |   |
| The CDAI is a validated instrument to measure disease severity in CD. The CDAI score is a sum of the 8 factors (number of liquid stools, abdominal pain, general well-being, extra-intestinal complications, antidiarrheal drugs, abdominal mass, hematocrit and body weight) after adjustment with a weighting factor. Higher CDAI scores indicating more active disease. Patients with CDAI <150 at Week 24 were considered as clinical remission cases. Percentage=least squares means per treatment group back transformed using inverse logit function. Missing data were imputed according to NRI and LOCF. The full analysis set (FAS) contained all randomized patients who received at least 1 dose of trial medication, and had all efficacy measures relevant for the CDAI, measured at baseline and at least once postbaseline. |   |
| End point type  | Secondary   |
| End point timeframe:  |   |
| at Week 24  |   |

|                             |                 |                 |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| <b>End point values</b>     | BI 695501       | Humira EU       |  |  |
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 68              | 72              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     | 68.6            | 76.2            |  |  |

## Statistical analyses

|   |                            |
|---|----------------------------|
| <b>Statistical analysis title</b>   | Estimate for relative risk |
| Statistical analysis description:   |                            |
| Was to be analyzed using a log-linked binomial model, described as: response to treatment at Week 24 = treatment+prior infliximab exposure+screening Simple Endoscopic Score for Crohn's Disease (SES-CD) |                            |
| Comparison groups   | BI 695501 v Humira EU      |
| Number of subjects included in analysis   | 140                        |
| Analysis specification  | Pre-specified              |
| Analysis type   |                            |
| Parameter estimate  | Risk ratio (RR)            |
| Point estimate  | 0.9                        |
| Confidence interval   |                            |
| level   | 90 %                       |
| sides   | 2-sided                    |
| lower limit   | 0.751                      |
| upper limit   | 1.078                      |

|   |                            |
|---|----------------------------|
| <b>Statistical analysis title</b>   | Estimate for relative risk |
| Statistical analysis description:   |                            |
| Was to be analyzed using a log-linked binomial model, described as: response to treatment at Week 24 = treatment+prior infliximab exposure+screening Simple Endoscopic Score for Crohn's Disease (SES-CD) |                            |
| Comparison groups   | BI 695501 v Humira EU      |
| Number of subjects included in analysis   | 140                        |
| Analysis specification  | Pre-specified              |
| Analysis type   |                            |
| Parameter estimate  | Risk ratio (RR)            |
| Point estimate  | 0.9                        |
| Confidence interval   |                            |
| level   | 95 %                       |
| sides   | 2-sided                    |
| lower limit   | 0.725                      |
| upper limit   | 1.116                      |

## Secondary: Percentage of Patients With a Clinical Response (CDAI Decrease of $\geq 70$ Compared With Baseline) at Week 24

|   |  |
|---|--|
| End point title   | Percentage of Patients With a Clinical Response (CDAI Decrease of $\geq 70$ Compared With Baseline) at Week 24 |
| End point description:<br>The CDAI is a validated instrument to measure disease severity in CD. The CDAI score is a sum of the 8 factors (number of liquid stools, abdominal pain, general well-being, extra-intestinal complications, antidiarrheal drugs, abdominal mass, hematocrit and body weight) after adjustment with a weighting factor. Higher CDAI scores indicating more active disease. The CDAI decrease at Week 24 was assessed as the decrease relative to baseline measurement, patients with a decrease $\geq 70$ were responders. Percentage=least squares means per treatment group back transformed using inverse logit function. Missing data were imputed according to NRI and LOCF. The full analysis set (FAS) contained all randomized patients who received at least 1 dose of trial medication, and had all efficacy measures relevant for the CDAI, measured at baseline and at least once postbaseline. |  |
| End point type  | Secondary  |
| End point timeframe:<br>Week 24   |  |

| End point values            | BI 695501       | Humira EU       |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 68              | 72              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     | 87.4            | 87.4            |  |  |

## Statistical analyses

|  |                            |
|--|----------------------------|
| Statistical analysis title   | Estimate for relative risk |
| Statistical analysis description:<br>Was to be analyzed using a log-linked binomial model, described as: response to treatment at Week 24 = treatment+prior infliximab exposure+screening Simple Endoscopic Score for Crohn's Disease (SES-CD) |                            |
| Comparison groups  | BI 695501 v Humira EU      |
| Number of subjects included in analysis  | 140                        |
| Analysis specification   | Pre-specified              |
| Analysis type  |                            |
| Parameter estimate   | Risk ratio (RR)            |
| Point estimate   | 1                          |
| Confidence interval  |                            |
| level  | 90 %                       |
| sides  | 2-sided                    |
| lower limit  | 0.871                      |
| upper limit  | 1.148                      |

|   |                            |
|---|----------------------------|
| <b>Statistical analysis title</b>   | Estimate for relative risk |
| Statistical analysis description:   |                            |
| Was to be analyzed using a log-linked binomial model, described as: response to treatment at Week 24 = treatment+prior infliximab exposure+screening Simple Endoscopic Score for Crohn's Disease (SES-CD) |                            |
| Comparison groups   | BI 695501 v Humira EU      |
| Number of subjects included in analysis   | 140                        |
| Analysis specification  | Pre-specified              |
| Analysis type   |                            |
| Parameter estimate  | Risk ratio (RR)            |
| Point estimate  | 1                          |
| Confidence interval   |                            |
| level   | 95 %                       |
| sides   | 2-sided                    |
| lower limit   | 0.848                      |
| upper limit   | 1.178                      |

### Secondary: Percentage of Patients With Adverse Events (AEs), Serious AEs (SAEs), and AEs of Special Interest (AESIs)

|                 |   |
|-----------------|---|
| End point title | Percentage of Patients With Adverse Events (AEs), Serious AEs (SAEs), and AEs of Special Interest (AESIs) |
|-----------------|---|

End point description:

Analysis of AEs focused on treatment-emergent AEs (TEAEs). For the period 1 'Baseline – Week 24', TEAEs were defined as AEs that started or worsened on or after first dose of trial medication and prior to date of the Week 24 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients who discontinued treatment before Week 24. For the period 2 'Week 24 – Week 46', TEAEs were defined as AEs that started or worsened on Week 24 visit and prior to or on Week 56 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients discontinuing treatment prior to Week 46. TEAEs and SAEs (including investigator-assessed trial medication-related TEAEs) and AESIs are reported. The following were considered an AESI: hepatic injury, anaphylactic reactions, serious infection and hypersensitivity reactions. The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication.

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

End point timeframe:

From first administration of trial medication until 10 weeks after last administration, up to a maximum of 56 weeks.

| <b>End point values</b>     | BI 695501       | Humira EU       |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 72              | 75              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     |                 |                 |  |  |
| TEAE -Period 1              | 62.5            | 56.0            |  |  |
| serious TEAE - Period 1     | 8.3             | 10.7            |  |  |
| AESI TEAE - Period 1        | 2.8             | 2.7             |  |  |
| TEAE - Period 2             | 43.1            | 45.3            |  |  |
| serious TEAE - Period 2     | 2.8             | 12.0            |  |  |
| AESI TEAE - Period 2        | 2.8             | 2.7             |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Patients With Infections

|                 |  |
|-----------------|--|
| End point title | Percentage of Patients With Infections |
|-----------------|--|

End point description:

The percentage of patients with TEAEs for infections and serious infections are reported. For the period 1 'Baseline – Week 24', TEAEs were defined as AEs that started or worsened on or after first dose of trial medication and prior to date of the Week 24 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients who discontinued treatment before Week 24. For the period 2 'Week 24 – Week 46', TEAEs were defined as AEs that started or worsened on Week 24 visit and prior to or on Week 56 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients discontinuing treatment prior to Week 46. The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication.

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

End point timeframe:

From first administration of trial medication until 10 weeks after last administration, up to a maximum of 56 weeks.

| End point values            | BI 695501       | Humira EU       |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 72              | 75              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     |                 |                 |  |  |
| Period 1                    | 23.6            | 22.7            |  |  |
| Period 2                    | 19.4            | 22.7            |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Patients With Serious Infections

|                 |  |
|-----------------|--|
| End point title | Percentage of Patients With Serious Infections |
|-----------------|--|

End point description:

The percentage of patients with TEAEs for infections and serious infections are reported. For the period 1 'Baseline – Week 24', TEAEs were defined as AEs that started or worsened on or after first dose of trial medication and prior to date of the Week 24 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients who discontinued treatment before Week 24. For the period 2 'Week 24 – Week 46', TEAEs were defined as AEs that started or worsened on Week 24 visit and prior to or on Week 56 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients discontinuing treatment prior to Week 46. The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication.

|  |           |
|--|-----------|
| End point type   | Secondary |
| End point timeframe:   |           |
| From first administration of trial medication until 10 weeks after last administration, up to a maximum of 56 weeks. |           |

| End point values            | BI 695501       | Humira EU       |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 72              | 75              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     |                 |                 |  |  |
| Period 1                    | 2.8             | 2.7             |  |  |
| Period 2                    | 1.4             | 4.0             |  |  |

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percentage of Patients Who Experienced Hypersensitivity Reactions

|                 |   |
|-----------------|---|
| End point title | Percentage of Patients Who Experienced Hypersensitivity Reactions |
|-----------------|---|

End point description:

The percentage of patients with TEAEs for hypersensitivity reactions is reported. For the period 1 'Baseline – Week 24', TEAEs were defined as AEs that started or worsened on or after first dose of trial medication and prior to date of the Week 24 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients who discontinued treatment before Week 24. For the period 2 'Week 24 – Week 46', TEAEs were defined as AEs that started or worsened on Week 24 visit and prior to or on Week 56 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients discontinuing treatment prior to Week 46. The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication.

|  |           |
|--|-----------|
| End point type   | Secondary |
| End point timeframe:   |           |
| From first administration of trial medication until 10 weeks after last administration, up to a maximum of 56 weeks. |           |

| End point values            | BI 695501       | Humira EU       |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 72              | 75              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     |                 |                 |  |  |
| Period 1                    | 5.6             | 2.7             |  |  |
| Period 2                    | 2.8             | 6.7             |  |  |

## Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Patients Who Experienced Drug Induced Liver Injury (DILI)

|                 |   |
|-----------------|---|
| End point title | Percentage of Patients Who Experienced Drug Induced Liver Injury (DILI) |
|-----------------|---|

End point description:

The percentage of patients with TEAEs for DILIs is reported. For the period 1 'Baseline – Week 24', TEAEs were defined as AEs that started or worsened on or after first dose of trial medication and prior to date of the Week 24 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients who discontinued treatment before Week 24. For the period 2 'Week 24 – Week 46', TEAEs were defined as AEs that started or worsened on Week 24 visit and prior to or on Week 56 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients discontinuing treatment prior to Week 46. The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication.

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

End point timeframe:

From first administration of trial medication until 10 weeks after last administration, up to a maximum of 56 weeks.

| End point values            | BI 695501       | Humira EU       |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 72              | 75              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     |                 |                 |  |  |
| Period 1                    | 0.0             | 0.0             |  |  |
| Period 2                    | 0.0             | 0.0             |  |  |

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of Patients With Injection Site Reactions

|                 |  |
|-----------------|--|
| End point title | Percentage of Patients With Injection Site Reactions |
|-----------------|--|

End point description:

The percentage of patients with TEAEs for injection site reactions is reported. For the period 1 'Baseline – Week 24', TEAEs were defined as AEs that started or worsened on or after first dose of trial medication and prior to date of the Week 24 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients who discontinued treatment before Week 24. For the period 2 'Week 24 – Week 46', TEAEs were defined as AEs that started or worsened on Week 24 visit and prior to or on Week 56 visit or within 10 weeks (70 days, inclusive) after last dose of trial medication for patients discontinuing treatment prior to Week 46. The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication.

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

End point timeframe:

From first administration of trial medication until 10 weeks after last administration, up to a maximum of 56 weeks.

|                             |                 |                 |  |  |
|-----------------------------|-----------------|-----------------|--|--|
| <b>End point values</b>     | BI 695501       | Humira EU       |  |  |
| Subject group type          | Reporting group | Reporting group |  |  |
| Number of subjects analysed | 72              | 75              |  |  |
| Units: Percentage           |                 |                 |  |  |
| number (not applicable)     |                 |                 |  |  |
| Period 1                    | 0.0             | 6.7             |  |  |
| Period 2                    | 1.4             | 1.3             |  |  |

### Statistical analyses

No statistical analyses for this end point



## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

From first administration of trial medication until 10 weeks after last administration, up to a maximum of 56 weeks.

Adverse event reporting additional description:

The Safety Analysis Set (SAF) contained all randomized patients who received at least 1 dose (full or partial) of trial medication.

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

### Dictionary used

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

|                    |      |
|--------------------|------|
| Dictionary version | 22.0 |
|--------------------|------|

### Reporting groups

|                       |   |
|-----------------------|---|
| Reporting group title | BI 695501 (Baseline - Week 24 + 10 Weeks [70 days]) |
|-----------------------|---|

Reporting group description:

Patients randomized to BI 695501 received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders (CDAI decrease of  $\geq 70$  compared to baseline), patients continued to receive BI 695501 every 2 weeks until the end of the treatment (EoT) period (Week 46). Patients were administered with a loading dose of 160 milligram (mg) BI 695501 on Day 1, followed by 80 mg BI 695501 2 weeks later (Day 15), and thereafter 40 mg BI 695501 every 2 weeks until Week 46. Trial medication was administered by subcutaneous (SC) injection.

|                       |  |
|-----------------------|--|
| Reporting group title | Humira (Baseline - Week 24 + 10 Weeks [70 days]) |
|-----------------------|--|

Reporting group description:

Patients randomized to EU-approved Humira received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders, patients continued to receive EU-approved Humira until Week 22 and then switched to receive BI 695501 every 2 weeks from Week 24 until the EoT period (Week 46). Patients were administered with a loading dose of 160 mg EU-approved Humira on Day 1, followed by 80 mg EU-approved Humira 2 weeks later (Day 15), and 40 mg EU-approved Humira every 2 weeks until Week 22. Patients were then switched to receive 40 mg BI 695501 every 2 weeks from Week 24 until Week 46. Trial medication was administered by SC injection.

|                       |  |
|-----------------------|--|
| Reporting group title | BI 695501 (Week 24 - Week 46 + 10 Weeks [70 days]) |
|-----------------------|--|

Reporting group description:

Patients randomized to BI 695501 received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders (CDAI decrease of  $\geq 70$  compared to baseline), patients continued to receive BI 695501 every 2 weeks until the end of the treatment (EoT) period (Week 46). Patients were administered with a loading dose of 160 milligram (mg) BI 695501 on Day 1, followed by 80 mg BI 695501 2 weeks later (Day 15), and thereafter 40 mg BI 695501 every 2 weeks until Week 46. Trial medication was administered by subcutaneous (SC) injection.

|                       |   |
|-----------------------|---|
| Reporting group title | Humira (Week 24 - Week 46 + 10 Weeks [70 days]) |
|-----------------------|---|

Reporting group description:

Patients randomized to EU-approved Humira received treatment every 2 weeks until Week 4 when they were assessed for clinical response. If classified as responders, patients continued to receive EU-approved Humira until Week 22 and then switched to receive BI 695501 every 2 weeks from Week 24 until the EoT period (Week 46). Patients were administered with a loading dose of 160 mg EU-approved Humira on Day 1, followed by 80 mg EU-approved Humira 2 weeks later (Day 15), and 40 mg EU-approved Humira every 2 weeks until Week 22. Patients were then switched to receive 40 mg BI 695501 every 2 weeks from Week 24 until Week 46. Trial medication was administered by SC injection.

| <b>Serious adverse events</b>                        | BI 695501 (Baseline - Week 24 + 10 Weeks [70 days]) | Humira (Baseline - Week 24 + 10 Weeks [70 days]) | BI 695501 (Week 24 - Week 46 + 10 Weeks [70 days]) |
|--|---|--|--|
| Total subjects affected by serious adverse events    |   |  |  |
| subjects affected / exposed                          | 6 / 72 (8.33%)                                      | 8 / 75 (10.67%)                                  | 2 / 72 (2.78%)                                     |
| number of deaths (all causes)                        | 0   | 0  | 0  |
| number of deaths resulting from adverse events       | 0   | 0  | 0  |
| Injury, poisoning and procedural complications       |   |  |  |
| Joint injury   |   |  |  |
| subjects affected / exposed                          | 1 / 72 (1.39%)                                      | 0 / 75 (0.00%)                                   | 0 / 72 (0.00%)                                     |
| occurrences causally related to treatment / all      | 0 / 1   | 0 / 0  | 0 / 0  |
| deaths causally related to treatment / all           | 0 / 0   | 0 / 3  | 0 / 0  |
| Nervous system disorders                             |   |  |  |
| Multiple sclerosis                                   |   |  |  |
| subjects affected / exposed                          | 0 / 72 (0.00%)                                      | 0 / 75 (0.00%)                                   | 0 / 72 (0.00%)                                     |
| occurrences causally related to treatment / all      | 0 / 0   | 0 / 0  | 0 / 0  |
| deaths causally related to treatment / all           | 0 / 0   | 0 / 3  | 0 / 0  |
| Pregnancy, puerperium and perinatal conditions       |   |  |  |
| Ruptured ectopic pregnancy                           |   |  |  |
| subjects affected / exposed                          | 0 / 72 (0.00%)                                      | 1 / 75 (1.33%)                                   | 0 / 72 (0.00%)                                     |
| occurrences causally related to treatment / all      | 0 / 0   | 0 / 1  | 0 / 0  |
| deaths causally related to treatment / all           | 0 / 0   | 0 / 3  | 0 / 0  |
| General disorders and administration site conditions |   |  |  |
| Non-cardiac chest pain                               |   |  |  |
| subjects affected / exposed                          | 0 / 72 (0.00%)                                      | 0 / 75 (0.00%)                                   | 0 / 72 (0.00%)                                     |
| occurrences causally related to treatment / all      | 0 / 0   | 0 / 0  | 0 / 0  |
| deaths causally related to treatment / all           | 0 / 0   | 0 / 3  | 0 / 0  |
| Gastrointestinal disorders                           |   |  |  |
| Crohn's disease                                      |   |  |  |
| subjects affected / exposed                          | 2 / 72 (2.78%)                                      | 5 / 75 (6.67%)                                   | 1 / 72 (1.39%)                                     |
| occurrences causally related to treatment / all      | 0 / 2   | 0 / 5  | 0 / 1  |
| deaths causally related to treatment / all           | 0 / 0   | 0 / 3  | 0 / 0  |
| Anal fistula   |   |  |  |
| subjects affected / exposed                          | 1 / 72 (1.39%)                                      | 1 / 75 (1.33%)                                   | 0 / 72 (0.00%)                                     |
| occurrences causally related to treatment / all      | 0 / 1   | 0 / 1  | 0 / 0  |
| deaths causally related to treatment / all           | 0 / 0   | 0 / 3  | 0 / 0  |

|   |                |                |                |
|---|----------------|----------------|----------------|
| Large intestinal haemorrhage<br>subjects affected / exposed | 0 / 72 (0.00%) | 1 / 75 (1.33%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 1          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Small intestinal obstruction<br>subjects affected / exposed | 0 / 72 (0.00%) | 1 / 75 (1.33%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 1          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Dyspepsia<br>subjects affected / exposed                    | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Pancreatitis chronic<br>subjects affected / exposed         | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Skin and subcutaneous tissue disorders                      |                |                |                |
| Dermatitis<br>subjects affected / exposed                   | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Palmoplantar pustulosis<br>subjects affected / exposed      | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Pruritus<br>subjects affected / exposed                     | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Pyoderma gangrenosum<br>subjects affected / exposed         | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to<br>treatment / all          | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to<br>treatment / all               | 0 / 0          | 0 / 3          | 0 / 0          |
| Rash erythematous   |                |                |                |

|  |                |                |                |
|--|----------------|----------------|----------------|
| subjects affected / exposed                            | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all        | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |
| <b>Musculoskeletal and connective tissue disorders</b> |                |                |                |
| Joint swelling   |                |                |                |
| subjects affected / exposed                            | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all        | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |
| Musculoskeletal pain                                   |                |                |                |
| subjects affected / exposed                            | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all        | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |
| <b>Infections and infestations</b>                     |                |                |                |
| Acute sinusitis  |                |                |                |
| subjects affected / exposed                            | 1 / 72 (1.39%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all        | 0 / 1          | 0 / 0          | 0 / 0          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |
| Anal abscess   |                |                |                |
| subjects affected / exposed                            | 0 / 72 (0.00%) | 1 / 75 (1.33%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all        | 0 / 0          | 0 / 1          | 0 / 0          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |
| Postoperative wound infection                          |                |                |                |
| subjects affected / exposed                            | 0 / 72 (0.00%) | 1 / 75 (1.33%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all        | 0 / 0          | 0 / 1          | 0 / 0          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |
| Pulmonary tuberculosis                                 |                |                |                |
| subjects affected / exposed                            | 1 / 72 (1.39%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all        | 1 / 1          | 0 / 0          | 0 / 0          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |
| Psoas abscess  |                |                |                |
| subjects affected / exposed                            | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 1 / 72 (1.39%) |
| occurrences causally related to treatment / all        | 0 / 0          | 0 / 0          | 0 / 1          |
| deaths causally related to treatment / all             | 0 / 0          | 0 / 3          | 0 / 0          |

|   |                |                |                |
|---|----------------|----------------|----------------|
| Rotavirus infection                             |                |                |                |
| subjects affected / exposed                     | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to treatment / all      | 0 / 0          | 0 / 3          | 0 / 0          |
| Upper respiratory tract infection               |                |                |                |
| subjects affected / exposed                     | 0 / 72 (0.00%) | 0 / 75 (0.00%) | 0 / 72 (0.00%) |
| occurrences causally related to treatment / all | 0 / 0          | 0 / 0          | 0 / 0          |
| deaths causally related to treatment / all      | 0 / 0          | 0 / 3          | 0 / 0          |

|  |   |  |  |
|--|---|--|--|
| <b>Serious adverse events</b>                        | Humira (Week 24 - Week 46 + 10 Weeks [70 days]) |  |  |
| Total subjects affected by serious adverse events    |   |  |  |
| subjects affected / exposed                          | 9 / 75 (12.00%)                                 |  |  |
| number of deaths (all causes)                        | 0   |  |  |
| number of deaths resulting from adverse events       | 0   |  |  |
| Injury, poisoning and procedural complications       |   |  |  |
| Joint injury   |   |  |  |
| subjects affected / exposed                          | 0 / 75 (0.00%)                                  |  |  |
| occurrences causally related to treatment / all      | 0 / 0   |  |  |
| deaths causally related to treatment / all           | 0 / 0   |  |  |
| Nervous system disorders                             |   |  |  |
| Multiple sclerosis                                   |   |  |  |
| subjects affected / exposed                          | 1 / 75 (1.33%)                                  |  |  |
| occurrences causally related to treatment / all      | 0 / 1   |  |  |
| deaths causally related to treatment / all           | 0 / 0   |  |  |
| Pregnancy, puerperium and perinatal conditions       |   |  |  |
| Ruptured ectopic pregnancy                           |   |  |  |
| subjects affected / exposed                          | 0 / 75 (0.00%)                                  |  |  |
| occurrences causally related to treatment / all      | 0 / 0   |  |  |
| deaths causally related to treatment / all           | 0 / 0   |  |  |
| General disorders and administration site conditions |   |  |  |
| Non-cardiac chest pain                               |   |  |  |
| subjects affected / exposed                          | 1 / 75 (1.33%)                                  |  |  |
| occurrences causally related to treatment / all      | 0 / 1   |  |  |
| deaths causally related to treatment / all           | 0 / 0   |  |  |

|   |                |  |  |
|---|----------------|--|--|
| Gastrointestinal disorders                      |                |  |  |
| Crohn's disease                                 |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 0 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Anal fistula                                    |                |  |  |
| subjects affected / exposed                     | 0 / 75 (0.00%) |  |  |
| occurrences causally related to treatment / all | 0 / 0          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Large intestinal haemorrhage                    |                |  |  |
| subjects affected / exposed                     | 0 / 75 (0.00%) |  |  |
| occurrences causally related to treatment / all | 0 / 0          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Small intestinal obstruction                    |                |  |  |
| subjects affected / exposed                     | 0 / 75 (0.00%) |  |  |
| occurrences causally related to treatment / all | 0 / 0          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Dyspepsia                                       |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 0 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Pancreatitis chronic                            |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 0 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Skin and subcutaneous tissue disorders          |                |  |  |
| Dermatitis                                      |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 1 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Palmoplantar pustulosis                         |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 1 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |

|   |                |  |  |
|---|----------------|--|--|
| Pruritus  |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 0 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Pyoderma gangrenosum                            |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 0 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Rash erythematous                               |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 0 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Musculoskeletal and connective tissue disorders |                |  |  |
| Joint swelling                                  |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 1 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Musculoskeletal pain                            |                |  |  |
| subjects affected / exposed                     | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all | 0 / 1          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Infections and infestations                     |                |  |  |
| Acute sinusitis                                 |                |  |  |
| subjects affected / exposed                     | 0 / 75 (0.00%) |  |  |
| occurrences causally related to treatment / all | 0 / 0          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Anal abscess                                    |                |  |  |
| subjects affected / exposed                     | 0 / 75 (0.00%) |  |  |
| occurrences causally related to treatment / all | 0 / 0          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |
| Postoperative wound infection                   |                |  |  |
| subjects affected / exposed                     | 0 / 75 (0.00%) |  |  |
| occurrences causally related to treatment / all | 0 / 0          |  |  |
| deaths causally related to treatment / all      | 0 / 0          |  |  |

|  |                |  |  |
|--|----------------|--|--|
| Pulmonary tuberculosis<br>subjects affected / exposed            | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all                  | 1 / 1          |  |  |
| deaths causally related to treatment / all                       | 0 / 0          |  |  |
| Psoas abscess<br>subjects affected / exposed                     | 0 / 75 (0.00%) |  |  |
| occurrences causally related to treatment / all                  | 0 / 0          |  |  |
| deaths causally related to treatment / all                       | 0 / 0          |  |  |
| Rotavirus infection<br>subjects affected / exposed               | 1 / 75 (1.33%) |  |  |
| occurrences causally related to treatment / all                  | 0 / 1          |  |  |
| deaths causally related to treatment / all                       | 0 / 0          |  |  |
| Upper respiratory tract infection<br>subjects affected / exposed | 1 / 75 (1.33%) |  |  |
| 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 %

| <b>Non-serious adverse events</b>  | BI 695501 (Baseline - Week 24 + 10 Weeks [70 days]) | Humira (Baseline - Week 24 + 10 Weeks [70 days]) | BI 695501 (Week 24 - Week 46 + 10 Weeks [70 days]) |
|--|---|--|--|
| Total subjects affected by non-serious adverse events<br>subjects affected / exposed | 23 / 72 (31.94%)                                    | 16 / 75 (21.33%)                                 | 13 / 72 (18.06%)                                   |
| Investigations<br>Weight increased<br>subjects affected / exposed                    | 4 / 72 (5.56%)                                      | 1 / 75 (1.33%)                                   | 3 / 72 (4.17%)                                     |
| occurrences (all)  | 5   | 2  | 3  |
| Gastrointestinal disorders<br>Crohn's disease<br>subjects affected / exposed         | 4 / 72 (5.56%)                                      | 3 / 75 (4.00%)                                   | 0 / 72 (0.00%)                                     |
| occurrences (all)  | 4   | 3  | 0  |
| Abdominal pain<br>subjects affected / exposed  | 3 / 72 (4.17%)                                      | 2 / 75 (2.67%)                                   | 1 / 72 (1.39%)                                     |
| occurrences (all)  | 4   | 2  | 1  |
| Musculoskeletal and connective tissue disorders                                      |   |  |  |



|  |                     |                     |                     |
|--|---------------------|---------------------|---------------------|
| Arthralgia<br>subjects affected / exposed<br>occurrences (all)   | 6 / 72 (8.33%)<br>6 | 0 / 75 (0.00%)<br>0 | 2 / 72 (2.78%)<br>2 |
| Infections and infestations<br>Respiratory tract infection<br>subjects affected / exposed<br>occurrences (all) | 5 / 72 (6.94%)<br>5 | 3 / 75 (4.00%)<br>3 | 0 / 72 (0.00%)<br>0 |
| Upper respiratory tract infection<br>subjects affected / exposed<br>occurrences (all)                          | 3 / 72 (4.17%)<br>4 | 5 / 75 (6.67%)<br>6 | 2 / 72 (2.78%)<br>2 |
| Nasopharyngitis<br>subjects affected / exposed<br>occurrences (all)  | 2 / 72 (2.78%)<br>2 | 2 / 75 (2.67%)<br>2 | 5 / 72 (6.94%)<br>5 |

|  |   |  |  |
|--|---|--|--|
| <b>Non-serious adverse events</b>  | Humira (Week 24 -<br>Week 46 + 10<br>Weeks [70 days]) |  |  |
| Total subjects affected by non-serious<br>adverse events<br>subjects affected / exposed                              | 12 / 75 (16.00%)                                      |  |  |
| Investigations<br>Weight increased<br>subjects affected / exposed<br>occurrences (all)                               | 0 / 75 (0.00%)<br>0                                   |  |  |
| Gastrointestinal disorders<br>Crohn's disease<br>subjects affected / exposed<br>occurrences (all)                    | 2 / 75 (2.67%)<br>2                                   |  |  |
| Abdominal pain<br>subjects affected / exposed<br>occurrences (all)   | 5 / 75 (6.67%)<br>5                                   |  |  |
| Musculoskeletal and connective tissue<br>disorders<br>Arthralgia<br>subjects affected / exposed<br>occurrences (all) | 0 / 75 (0.00%)<br>0                                   |  |  |
| Infections and infestations<br>Respiratory tract infection<br>subjects affected / exposed<br>occurrences (all)       | 3 / 75 (4.00%)<br>3                                   |  |  |
| Upper respiratory tract infection  |   |  |  |

|                             |                |  |  |
|-----------------------------|----------------|--|--|
| subjects affected / exposed | 1 / 75 (1.33%) |  |  |
| occurrences (all)           | 2              |  |  |
| Nasopharyngitis             |                |  |  |
| subjects affected / exposed | 3 / 75 (4.00%) |  |  |
| occurrences (all)           | 3              |  |  |

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

| Date             | Amendment   |
|------------------|---|
| 15 March 2017    | <ul style="list-style-type: none"><li>• Number of sites and countries were updated to reflect the current trial status.</li><li>• It was clarified that the local hematocrit value was to be used to determine CDAI score at Week 4 (Visit 4) so that clinical response could be determined immediately, the hematocrit value from the central laboratory assessment at Week 8 (Visit 6) was to be used to determine CDAI at Week 12 (Visit 8), and weight was to be measured at all visits where physical examination was not being performed, for use in CDAI determination.</li><li>• Inclusion criterion 1c was amended to make the severity of disease, as defined by CDAI, consistent with endoscopic evaluation. Eligible patients had to have evidence of mucosal ulcers in at least 1 segment of the ileum or colon.</li><li>• The term "initial isolate ileitis" was updated to "isolated ileal disease".</li><li>• Inclusion criterion 2 was amended to clarify that only infliximab was allowed as first-line anti-tumor necrosis factor (TNF) therapy; previous treatment with other anti-TNF therapies (specifically certolizumab) were not permitted.</li><li>• The process to be used for primary analysis was clarified to state that efficacy data was to be included up to the Week 4 visit only and all available data for safety and other endpoints were to be included up to the data cut-off date.</li><li>• Appendix 10.1 (Medication Blinding Procedure for Third Party Blinding) was updated to align the protocol with instructions included in the trial Pharmacy Manual.</li></ul>  |
| 12 December 2017 | <ul style="list-style-type: none"><li>• Trial methodology and related statistical method, and sample size calculations were updated to reflect an exploratory trial design. The design change allowed trial objectives to be achieved with a smaller number of evaluable subjects (65 in each group) and reduced total sample size of approximately 130 (from approximately 286).</li><li>• Tuberculosis(TB) testing: Additional TB testing was included for Week 24 (Visit 14), before switching from Humira to BI 6995501, to clarify whether incidence of possible positive TB tests was linked to the comparator or test product. New text was included to clarify TB testing and subsequent follow up during the trial and exclusion criterion 8 was updated to emphasize that TNF inhibitor use was allowed.</li><li>• Exclusion criterion 10 was updated to remove reference to positive anti-adalimumab antibodies at baseline to clarify that results of antidrug antibodies were not available at time of inclusion.</li><li>• Description of CDAI assessment was amended to clarify the days patients were required to keep a symptom diary prior to each assessment.</li><li>• Text was added to End of Treatment visit description to state that in event of early discontinuation, a patient was to receive treatment as deemed appropriate by the investigator and in accordance with applicable guidance.</li><li>• Appendix 10.1 (Medication Blinding Procedure for Third Party Blinding) was updated to clarify how to handle used syringes in accordance with medical requirements and to align the protocol with instructions included in the trial Pharmacy Manual.</li><li>• Additional table footnote was added to Appendix 10.2 (List of Laboratory Tests) to clarify that pathogens other than mandatory list may have been identified.</li><li>• Due to trial design change, additional text was included in Appendix 10.3 (Details About the Statistical Considerations) to clarify that standard rules for noninferiority margin selection were not to be applied but, magnitude of preserved historical treatment effect was to be used.</li></ul> |

Notes:

### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported