



Clinical trial results:

A Double-Blind, Placebo-Controlled, Parallel-Group, Multicentre, Multiregional, One Year Study to Assess the Efficacy and Safety of Twice Daily Oral Rifaximin Delayed Release Tablets for Induction of Clinical Remission with Endoscopic Response at 16 Weeks followed by Clinical and Endoscopic Remission at 52 Weeks in Subjects with Active Moderate Crohn's Disease

Summary

| | |
|--------------------------|-----------------|
| EudraCT number | 2014-001645-24 |
| Trial protocol | HU CZ DE PL FR |
| Global end of trial date | 06 October 2017 |

Results information

| | |
|--------------------------------|--------------|
| Result version number | v1 (current) |
| This version publication date | 19 July 2019 |
| First version publication date | 19 July 2019 |

Trial information

Trial identification

| | |
|-----------------------|----------|
| Sponsor protocol code | RECD3126 |
|-----------------------|----------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT02240108 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|--|
| Sponsor organisation name | Salix Pharmaceuticals, Inc |
| Sponsor organisation address | 400 Somerset Corporate Blvd, Bridgewater, United States, NJ 08807 |
| Public contact | Study Director, Clinical Affairs: John Lahey, Salix Pharmaceuticals, Inc, +1 908-541-8631, John.Lahey@bauschhealth.com |
| Scientific contact | Study Director, Clinical Affairs: John Lahey, Salix Pharmaceuticals, Inc, +1 908-541-8631, John.Lahey@bauschhealth.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 | 06 October 2017 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 06 October 2017 |
| Global end of trial reached? | Yes |
| Global end of trial date | 06 October 2017 |
| Was the trial ended prematurely? | Yes |

Notes:

General information about the trial

Main objective of the trial:

To determine the efficacy of Rifaximin EIR (extended intestinal release) 800 mg twice daily (BID) vs. placebo for the induction of clinical remission and endoscopic response following 16 weeks of treatment in subjects presenting with active moderate Crohn's disease.

Protection of trial subjects:

This study was conducted in compliance with the study protocol and in accordance with Declaration of Helsinki on Ethical Principles for Medical Research Involving Human Subjects, and with Good Clinical Practice (GCP), as required by the US Code of Federal Regulations applicable to clinical studies (21 CFR Parts 11, 50, 54, 56 and 312, 42 USC 282(j), International Conference on Harmonization, Harmonized Tripartite Guideline E6 (R1): GCP and E2A: Safety Data Management, and applicable local regulations.

To ensure the safety of patients on placebo, subjects were allowed to continue stable doses of oral 5-ASA, mercaptopurine, azathioprine, and/or methotrexate as concomitant therapies throughout the study.

Background therapy:

No background therapy was specified. Subjects were allowed to continue stable doses of oral 5-ASA, mercaptopurine, azathioprine, and/or methotrexate as concomitant therapies throughout the study.

Evidence for comparator:

The comparator in this study was an inactive placebo.

| | |
|---|-----------------|
| Actual start date of recruitment | 28 October 2014 |
| 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 | Czech Republic: 10 |
| Country: Number of subjects enrolled | France: 4 |
| Country: Number of subjects enrolled | Hungary: 2 |
| Country: Number of subjects enrolled | United States: 64 |
| Worldwide total number of subjects | 80 |
| EEA total number of subjects | 16 |

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) | 73 |
| From 65 to 84 years | 7 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

Men and women aged ≥ 18 years, with moderate, non-fistulising Crohn's disease in ileum or colon with a Crohn's Disease Activity Index (CDAI) score of ≥ 220 and ≤ 450 points prior to randomisation; and a Simple Endoscopic Score for Crohn's Disease (SES-CD) score of ≥ 7 . Exclusion criteria: ulcerative or indeterminate colitis, celiac disease.

Pre-assignment

Screening details:

During Screening, eligible subjects had an average daily score of >1.5 for abdominal pain (CDAI Item 2) and average daily count of >1.5 for liquid/very soft stools (CDAI Item 1).

Period 1

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

Blinding implementation details:

Rifaximin EIR was supplied as pink, coated, oval, biconvex tablets. Matching placebo was supplied as tablets that were identical in appearance to Rifaximin EIR tablets with inactive ingredients. Subjects were assigned to treatment groups by the means of a centralised electronic randomization system in a 1:1 allocation to either rifaximin or matching placebo.

Arms

| | |
|------------------------------|----------------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Rifaximin EIR 800 mg |

Arm description:

Two x 400 mg tablets twice a day (total daily dose 800 mg)

| | |
|--|---------------|
| Arm type | Experimental |
| Investigational medicinal product name | Rifaximin EIR |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

800 mg rifaximin EIR twice a day for up to 52 weeks

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

Arm description:

Placebo comparator arm

| | |
|--|--------------|
| Arm type | Experimental |
| Investigational medicinal product name | Placebo |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Placebo matching rifaximin EIR tablets administered twice daily for up to 52 weeks

| Number of subjects in period 1 | Rifaximin EIR 800 mg | Placebo |
|---------------------------------------|----------------------|---------|
| Started | 35 | 45 |
| Completed | 21 | 21 |
| Not completed | 14 | 24 |
| Consent withdrawn by subject | 5 | 10 |
| Physician decision | 3 | 2 |
| Adverse event, non-fatal | 1 | 9 |
| Not reported | 2 | 1 |
| Pregnancy | 1 | - |
| Lost to follow-up | 1 | 1 |
| Lack of efficacy | 1 | 1 |

Baseline characteristics

Reporting groups

| | |
|-----------------------|----------------------|
| Reporting group title | Rifaximin EIR 800 mg |
|-----------------------|----------------------|

Reporting group description:

Two x 400 mg tablets twice a day (total daily dose 800 mg)

| | |
|-----------------------|---------|
| Reporting group title | Placebo |
|-----------------------|---------|

Reporting group description:

Placebo comparator arm

| Reporting group values | Rifaximin EIR 800 mg | Placebo | Total |
|--|----------------------|---------|-------|
| Number of subjects | 35 | 45 | 80 |
| Age categorical Units: Subjects | | | |
| In utero | | | 0 |
| Preterm newborn infants (gestational age < 37 wks) | | | 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) | | | 0 |
| From 65-84 years | | | 0 |
| 85 years and over | | | 0 |
| Age continuous Units: years | | | |
| arithmetic mean | 43.5 | 43.2 | - |
| standard deviation | ± 14.85 | ± 12.97 | - |
| Gender categorical Units: Subjects | | | |
| Female | 19 | 24 | 43 |
| Male | 16 | 21 | 37 |
| CDAI score | | | |
| Crohn's Disease Activity Index at baseline | | | |
| Units: Score | | | |
| arithmetic mean | 305.4 | 300.0 | - |
| standard deviation | ± 69.51 | ± 56.39 | - |
| SES-CD score | | | |
| Simple endoscopic score for Crohn's disease at baseline. | | | |
| Units: Score | | | |
| arithmetic mean | 12.0 | 11.7 | - |
| standard deviation | ± 5.01 | ± 4.61 | - |
| Duration of disease | | | |
| Duration of Crohn's disease at baseline. | | | |
| Units: Years | | | |
| arithmetic mean | 10.5 | 9.6 | - |
| standard deviation | ± 8.57 | ± 9.53 | - |

End points

End points reporting groups

| | |
|--|----------------------|
| Reporting group title | Rifaximin EIR 800 mg |
| Reporting group description: Two x 400 mg tablets twice a day (total daily dose 800 mg) | |
| Reporting group title | Placebo |
| Reporting group description: Placebo comparator arm | |

Primary: Change in CDAI Item 1 (Week 16)

| | |
|---|--|
| End point title | Change in CDAI Item 1 (Week 16) ^[1] |
| End point description: Clinical symptom remission defined by (1) the total number of liquid/very soft stools for the 7 days prior to the Week 16 visit being ≤ 10 (from CDAI Item 1). | |
| End point type | Primary |
| End point timeframe: From baseline to Week 16. | |

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|------------------------------------|----------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| ≤ 10 liquid/ very soft stools | 6 | 8 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Abdominal pain rating (Week 16)

| | |
|--|--|
| End point title | Abdominal pain rating (Week 16) ^[2] |
| End point description: An abdominal pain rating of ≤ 1 on each day for the 7 days prior to the Week 16 visit | |
| End point type | Primary |
| End point timeframe: From baseline to Week 16. | |

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: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 planned overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|-----------------------------|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| pain rating of ≤ 1 | 19 | 15 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Change in CDAI Item 1 and abdominal pain rating (Week 16)

| | |
|-----------------|--|
| End point title | Change in CDAI Item 1 and abdominal pain rating (Week 16) ^[3] |
|-----------------|--|

End point description:

Number of liquid/very soft stools for the 7 days prior to the week 16 visit being ≤ 10 and an abdominal pain rating of ≤ 1 on each day for the 7 days prior to the week 16 visit.

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

End point timeframe:

From baseline to Week 16.

Notes:

[3] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 planned overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|--|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| ≤ 10 liquid/ soft stools and pain rating of ≤ 1 | 5 | 7 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Endoscopic response (Week 16)

| | |
|-----------------|--|
| End point title | Endoscopic response (Week 16) ^[4] |
|-----------------|--|

End point description:

Endoscopic response defined as a ≥ 3 -point decrease in the SES-CD from baseline to the SES-CD score obtained between Week 16 and Week 17.

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

End point timeframe:

From baseline up to Week 16/17.

Notes:

[4] - 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: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|------------------------------|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| ≥ 3-point decrease in SES-CD | 10 | 10 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Change in CDAI Item 1 (Week 52)

| | |
|-----------------|--|
| End point title | Change in CDAI Item 1 (Week 52) ^[5] |
|-----------------|--|

End point description:

Clinical symptom remission defined by (1) the total number of liquid/very soft stools for the 7 days prior to the Week 52 visit being ≤ 10 (from CDAI Item 1).

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

End point timeframe:

From baseline to Week 52.

Notes:

[5] - 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: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 planned overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|-------------------------------|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| ≤ 10 liquid/ very soft stools | 7 | 3 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Abdominal pain rating (Week 52)

| | |
|-----------------|--|
| End point title | Abdominal pain rating (Week 52) ^[6] |
|-----------------|--|

End point description:

An abdominal pain rating of ≤ 1 on each day for the 7 days prior to the Week 52 visit.

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

End point timeframe:

From baseline to Week 52.

Notes:

[6] - 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: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 planned overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|-----------------------------|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| pain rating of ≤ 1 | 9 | 5 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Change in CDAI Item 1 and abdominal pain rating (Week 52)

| | |
|-----------------|--|
| End point title | Change in CDAI Item 1 and abdominal pain rating (Week 52) ^[7] |
|-----------------|--|

End point description:

Number of liquid/very soft stools for the 7 days prior to the Week 52 visit being ≤ 10 and an abdominal pain rating of ≤ 1 on each day for the 7 days prior to the Week 52 visit.

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

End point timeframe:

From baseline to Week 52.

Notes:

[7] - 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: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 planned overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|--|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| ≤ 10 liquid/ soft stools and pain rating of ≤ 1 | 6 | 1 | | |

Statistical analyses

No statistical analyses for this end point

Primary: Endoscopic response (Week 52)

| | |
|-----------------|--|
| End point title | Endoscopic response (Week 52) ^[8] |
|-----------------|--|

End point description:

Endoscopic response defined as a ≥ 3 -point decrease in the SES-CD2 from baseline to the SES-CD score obtained at Week 52.

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

End point timeframe:

From baseline to Week 52.

Notes:

[8] - 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: No statistical analysis is presented because the study was terminated prematurely, at which point there were only 80 patients randomised (rather than the 660 overall).

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|------------------------------|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| ≥ 3-point decrease in SES-CD | 9 | 15 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Induction of Clinical Remission (Week 16)

| | |
|------------------------|---|
| End point title | Induction of Clinical Remission (Week 16) |
| End point description: | Induction of clinical remission defined as a CDAI score of less than 150 points at Week 16. |
| End point type | Secondary |
| End point timeframe: | From baseline to Week 16. |

| End point values | Rifaximin EIR 800 mg | Placebo | | |
|-----------------------------|-------------------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| CDAI score < 150 points | 17 | 12 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Total number of liquid/very soft stools and daily abdominal pain score (Week 52)

| | |
|------------------------|--|
| End point title | Total number of liquid/very soft stools and daily abdominal pain score (Week 52) |
| End point description: | The total number of liquid/very soft stools being ≤ 10 and a daily abdominal pain score of ≤ 1 for the 7 days prior to the visit in ≥ 80% of the study visits during the 52-week treatment period. |
| End point type | Secondary |
| End point timeframe: | From baseline to Week 52. |

| | | | | |
|---|-------------------------|-----------------|--|--|
| End point values | Rifaximin EIR 800 mg | Placebo | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| ≤ 10 liquid/very soft stools and pain score of ≤ 1 | 2 | 3 | | |

Statistical analyses

No statistical analyses for this end point

Secondary: SES-CD Score of 0 at Week 52

| | |
|--|------------------------------|
| End point title | SES-CD Score of 0 at Week 52 |
| End point description: Proportion of Subjects with SES-CD Score of 0 at Week 52 | |
| End point type | Secondary |
| End point timeframe: At Week 52. | |

| | | | | |
|-----------------------------|-------------------------|-----------------|--|--|
| End point values | Rifaximin EIR 800 mg | Placebo | | |
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 35 | 45 | | |
| Units: Subjects | | | | |
| Score of 0 | 0 | 3 | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events were reported from time of signing informed consent until the end of the follow-up period (2 weeks after last treatment).

Adverse event reporting additional description:

Occurrences of AEs or SAEs were reported during each study visit or by the subject outside of scheduled visits.

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

Dictionary used

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

| | |
|--------------------|------|
| Dictionary version | 21.0 |
|--------------------|------|

Reporting groups

| | |
|-----------------------|---------------------|
| Reporting group title | Rifaximin EIR 800mg |
|-----------------------|---------------------|

Reporting group description:

Two x 400 mg tablets twice a day (total daily dose 800 mg).

| | |
|-----------------------|---------|
| Reporting group title | Placebo |
|-----------------------|---------|

Reporting group description:

Inactive placebo tablets matching rifaximin EIR twice daily.

| Serious adverse events | Rifaximin EIR 800mg | Placebo | |
|---|---------------------|-----------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 6 / 35 (17.14%) | 9 / 45 (20.00%) | |
| number of deaths (all causes) | 0 | 0 | |
| number of deaths resulting from adverse events | 0 | 0 | |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | |
| Hodgkin's disease | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Lung adenocarcinoma | | | |
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Injury, poisoning and procedural complications | | | |
| Overdose | | | |

| | | | |
|---|----------------|----------------|--|
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Urinary retention postoperative | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Vascular disorders | | | |
| Peripheral ischaemia | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Cardiac disorders | | | |
| Coronary artery disease | | | |
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Myocardial infarction | | | |
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Nervous system disorders | | | |
| Seizure | | | |
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pregnancy, puerperium and perinatal conditions | | | |
| Pregnancy | | | |
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Blood and lymphatic system disorders | | | |
| Anaemia | | | |

| | | | |
|--|----------------|----------------|--|
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| General disorders and administration site conditions | | | |
| Fatigue | | | |
| subjects affected / exposed | 1 / 35 (2.86%) | 0 / 45 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Gastrointestinal disorders | | | |
| Abdominal pain | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Barrett's oesophagus | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Colitis | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Crohn's disease | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 3 / 45 (6.67%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 3 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Diarrhoea haemorrhagic | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Gastrointestinal haemorrhage | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

| | | | |
|---|----------------|----------------|--|
| Nausea | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Odynophagia | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Pancreatitis acute | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Small intestinal obstruction | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Vomiting | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 2 / 45 (4.44%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 2 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Reproductive system and breast disorders | | | |
| Prostatitis | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Infections and infestations | | | |
| Urinary tract infection | | | |
| subjects affected / exposed | 0 / 35 (0.00%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Metabolism and nutrition disorders | | | |
| Dehydration | | | |

| | | | |
|---|----------------|----------------|--|
| subjects affected / exposed | 1 / 35 (2.86%) | 1 / 45 (2.22%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

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

| Non-serious adverse events | Rifaximin EIR 800mg | Placebo | |
|---|------------------------|------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 25 / 35 (71.43%) | 25 / 45 (55.56%) | |
| Injury, poisoning and procedural complications | | | |
| Contusion | | | |
| subjects affected / exposed | 2 / 35 (5.71%) | 0 / 45 (0.00%) | |
| occurrences (all) | 4 | 0 | |
| Nervous system disorders | | | |
| Headache | | | |
| subjects affected / exposed | 3 / 35 (8.57%) | 5 / 45 (11.11%) | |
| occurrences (all) | 3 | 5 | |
| Blood and lymphatic system disorders | | | |
| Anaemia | | | |
| subjects affected / exposed | 3 / 35 (8.57%) | 1 / 45 (2.22%) | |
| occurrences (all) | 3 | 1 | |
| Lymphadenopathy | | | |
| subjects affected / exposed | 2 / 35 (5.71%) | 0 / 45 (0.00%) | |
| occurrences (all) | 3 | 0 | |
| General disorders and administration site conditions | | | |
| Fatigue | | | |
| subjects affected / exposed | 2 / 35 (5.71%) | 2 / 45 (4.44%) | |
| occurrences (all) | 2 | 2 | |
| Pain | | | |
| subjects affected / exposed | 2 / 35 (5.71%) | 0 / 45 (0.00%) | |
| occurrences (all) | 2 | 0 | |
| Pyrexia | | | |
| subjects affected / exposed | 2 / 35 (5.71%) | 2 / 45 (4.44%) | |
| occurrences (all) | 2 | 2 | |
| Gastrointestinal disorders | | | |

| | | | |
|--|----------------------|----------------------|--|
| Abdominal pain subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 7 / 45 (15.56%) 7 | |
| Abdominal pain upper subjects affected / exposed occurrences (all) | 4 / 35 (11.43%) 4 | 2 / 45 (4.44%) 3 | |
| Crohn's disease subjects affected / exposed occurrences (all) | 3 / 35 (8.57%) 3 | 7 / 45 (15.56%) 8 | |
| Diarrhoea subjects affected / exposed occurrences (all) | 4 / 35 (11.43%) 5 | 5 / 45 (11.11%) 6 | |
| Nausea subjects affected / exposed occurrences (all) | 3 / 35 (8.57%) 3 | 4 / 45 (8.89%) 4 | |
| Rectal haemorrhage subjects affected / exposed occurrences (all) | 0 / 35 (0.00%) 0 | 4 / 45 (8.89%) 4 | |
| Vomiting subjects affected / exposed occurrences (all) | 4 / 35 (11.43%) 4 | 4 / 45 (8.89%) 4 | |
| Skin and subcutaneous tissue disorders | | | |
| Alopecia subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 0 / 45 (0.00%) 0 | |
| Rash subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 4 / 45 (8.89%) 5 | |
| Musculoskeletal and connective tissue disorders | | | |
| Arthralgia subjects affected / exposed occurrences (all) | 3 / 35 (8.57%) 3 | 3 / 45 (6.67%) 3 | |
| Back pain subjects affected / exposed occurrences (all) | 3 / 35 (8.57%) 3 | 2 / 45 (4.44%) 3 | |
| Pain in extremity | | | |

| | | | |
|---|----------------------|---------------------|--|
| subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 0 / 45 (0.00%) 0 | |
| Infections and infestations | | | |
| Gastroenteritis viral subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 0 / 45 (0.00%) 0 | |
| Nasopharyngitis subjects affected / exposed occurrences (all) | 4 / 35 (11.43%) 7 | 1 / 45 (2.22%) 1 | |
| Pharyngitis streptococcal subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 0 / 45 (0.00%) 0 | |
| Sinusitis subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 0 / 45 (0.00%) 0 | |
| Upper respiratory tract infection subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 2 / 45 (4.44%) 2 | |
| Urinary tract infection subjects affected / exposed occurrences (all) | 0 / 35 (0.00%) 0 | 3 / 45 (6.67%) 3 | |
| Metabolism and nutrition disorders | | | |
| Hypokalaemia subjects affected / exposed occurrences (all) | 1 / 35 (2.86%) 1 | 3 / 45 (6.67%) 3 | |
| Type 2 diabetes mellitus subjects affected / exposed occurrences (all) | 2 / 35 (5.71%) 2 | 0 / 45 (0.00%) 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? Yes

| Date | Interruption | Restart date |
|-----------------|--|--------------|
| 06 October 2017 | The trial was prematurely discontinued due to difficulty in enrollment and lack of clinical study drug access. | - |

Notes:

Limitations and caveats

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

| |
|---|
| The study was terminated early due to difficulty in enrollment and lack of clinical study drug access. The efficacy results are not considered definitive and are considered for exploratory purposes only. |
|---|

Notes: