Clinical trial results:
A single-arm interventional Phase IV, post-authorisation study evaluating the safety of pediatric patients with transfusional hemosiderosis treated with deferasirox crushed film coated tablets

Summary

EudraCT number	2016-003482-25
Trial protocol	GB IT
Global end of trial date	05 December 2019

Results information

Result version number	v2 (current)
This version publication date	09 August 2020
First version publication date	21 June 2020
Version creation reason	

Trial information

Trial identification

Sponsor protocol code	CICL670F2429

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT03372083
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Novartis Pharma AG
Sponsor organisation address	CH-4002, Basel, Switzerland,
Public contact	Clinical Disclosure Office, Novartis Pharma AG, 41 613241111, Novartis.email@novartis.com
Scientific contact	Clinical Disclosure Office, Novartis Pharma AG, 41 613241111, Novartis.email@novartis.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	05 December 2019
Is this the analysis of the primary completion data?	Yes
Primary completion date	05 December 2019
Global end of trial reached?	Yes
Global end of trial date	05 December 2019
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective of the study was to assess the safety of crushed deferasirox FCT with respect to selected gastrointestinal (GI) disorders in pediatric patients aged ≥2 to < 6 years with transfusional iron overload up to 24 weeks including 30 days safety follow up.

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and the International Conference on Harmonization (ICH) Good Clinical Practice (GCP) guidelines. All the local regulatory requirements pertinent to safety of trial subjects were also followed during the conduct of the trial.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	16 January 2018
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	Oman: 15
Country: Number of subjects enrolled	Egypt: 12
Country: Number of subjects enrolled	Italy: 5
Country: Number of subjects enrolled	Thailand: 5
Country: Number of subjects enrolled	Lebanon: 3
Country: Number of subjects enrolled	United Arab Emirates: 2
Country: Number of subjects enrolled	United Kingdom: 2
Worldwide total number of subjects	44
EEA total number of subjects	7

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	0

months)	
Children (2-11 years)	44
Adolescents (12-17 years)	0
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

The study was conducted in 10 sites in 7 countries (one in Egypt, three in Italy, one in Lebanon, one in Oman, two in Thailand, one in the United Arab Emirates, and one in the United Kingdom).

Period 1

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

Arms

Arm title	Deferasirox

Arm description:

Crushed deferasirox (ICL670) FCT for oral use daily. Deferasirox FCT dosing was based on subject's weight.

Arm type	Experimental
Investigational medicinal product name	Deferasirox
Investigational medicinal product code	
Other name	ICL670
Pharmaceutical forms	Film-coated tablet
Routes of administration	Oral use

Dosage and administration details:

Deferosirox was provided in tablet forms of 90, 180 and 360 mg. Tablets were crushed in the home environment and administered by sprinkling the full dose on to soft food to be consumed immediately.

Number of subjects in period 1	Deferasirox
Started	44
Completed	39
Not completed	5
Physician decision	1
Consent withdrawn by subject	1
Adverse event, non-fatal	3

Baseline characteristics

Reporting groups	
Reporting group title	Deferasirox
Reporting group description:	
Crushed deferasirox (ICL670) FCT for oral use daily. Deferasirox FCT dosing was based on subject's weight.	

Reporting group values	Deferasirox	Total	
Number of subjects	44	44	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	44	44	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	0	0	
From 65-84 years	0	0	
85 years and over	0	0	
Age Continuous Units: Years			
arithmetic mean	3.05		
standard deviation	± 1.056	-	
Sex: Female, Male Units: Participants			
Female	17	17	
Male	27	27	
Race/Ethnicity, Customized Units: Subjects			
Caucasian	36	36	
Asian	8	8	
Baseline iron chelation naive participants Units: Subjects			
Chelation naive = Yes	10	10	
Chelation naive = No	34	34	
Baseline Body Mass Index Units: kilogram per square metre (kg/m^2)			
arithmetic mean	16.40		
standard deviation	± 2.009	-	

End points

End points reporting groups

Reporting group title	Deferasirox

Reporting group description:

Crushed deferasirox (ICL670) FCT for oral use daily. Deferasirox FCT dosing was based on subject's weight.

Primary: Number of Participants with selected gastrointestinal disorders up to 24 weeks

End point title	Number of Participants with selected gastrointestinal disorders up to 24 weeks[1]

End point description:

To assess the safety of crushed deferasirox FCT with respect to selected gastrointestinal (GI) disorders (esophagitis, stomatitis, mouth ulceration, gastric ulcers, haemorrhage, abdominal pain, diarrhea, nausea, and vomiting). Only descriptive analysis performed.

End point type	Primary

End point timeframe:

Baseline (Week 1 Day 1) up to Week 24, plus 30 day safety follow-up.

Notes:

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

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Participants				
Oesophagitis	0			
Barrett's esophagitis	0			
Stomatitis	0			
Mouth ulceration	0			
Gastric ulcer	0			
Gastrointestinal haemorrhage	0			
Abdominal pain	2			
Diarrhoea	4			
Nausea	0			
Vomiting	2			

Statistical analyses

No statistical analyses for this end point

Secondary: Adverse Events profile

End point title	Adverse Events profile

End point description:

Analysis of frequencies for treatment emergent Adverse Event (TEAEs), Serious Adverse Event TEAEs

and Deaths due to AEs, through the monitoring of relevant clinical and laboratory safety parameters. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (Week 1 Day 1) up to Week 24, plus 30 day safety follow-up.

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Participants				
On treatment-related AE	22			
On treatment related SAE	0			
On treatment Deaths	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants with Notable Changes in ECG values from baseline

End point title	Number of Participants with Notable Changes in ECG values from baseline

End point description:

Safety measured by the notable post-baseline changes in ECG values (PR, QRS, QT, QTcF and HR intervals) compared to baseline. Baseline was defined as the last non-missing value on or prior to the first dose. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (Week 1 Day 1) up to Week 24, plus 30 day safety follow-up.

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Participants	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Absolute change from baseline in serum ferritin (SF)

End point title	Absolute change from baseline in serum ferritin (SF)

End point description:

Absolute change from baseline over time in SF values up to 24 weeks of treatment were to be provided. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 4, Week 8, Week 12, Week 16, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: ug/L				
arithmetic mean (standard deviation)				
Baseline (BL)	2152.7 (± 1039.06)			
Change from BL @ Week 4	-118.4 (± 590.20)			
Change from BL @ Week 8	-17.5 (± 665.68)			
Change from BL @ Week 12	-52.8 (± 790.26)			
Change from BL @ Week 16	71.9 (± 988.30)			
Change from BL @ Week 20	-64.3 (± 791.92)			
Change from BL @ EOT (Week 24)	-140.7 (± 824.01)			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants with worst post-baseline values in selected Chemistry parameters

End point title	Number of Participants with worst post-baseline values in selected Chemistry parameters

End point description:

Safety measured by the worst post-baseline severity grade observed in a patient calculated using the normal/low/high classifications based on local laboratory normal ranges, regardless of the baseline status. Baseline was defined as the last non-missing value on or prior to the first dose. The selected chemistry parameters were: Alanine aminotransferase (ALT), Alkaline phosphatase (ALP), Aspartate aminotransferase (AST), total bilirubin, direct bilirubin, serum creatinine and Urine protein creatinine ratio (UPCR) (Protein/Creatinine represented UPCR). Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (Week 1 Day 1) up to Week 24, plus 30 day safety follow-up.

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Participants				
Alanine Aminotransferase|Normal	16			
Alkaline Phosphatase|Normal	25			
Aspartate Aminotransferase|Normal	14			
Bilirubin|Normal	16			
Creatinine|Normal	6			
Direct Bilirubin|Normal	16			
Protein/Creatinine|Normal	20			
Alanine Aminotransferase|Low	0			
Alkaline Phosphatase|Low	2			
Aspartate Aminotransferase|Low	0			
Bilirubin|Low	0			
Creatinine|Low	29			
Direct Bilirubin|Low	0			
Protein/Creatinine|Low	1			
Alanine Aminotransferase|High	28			
Alkaline Phosphatase|High	17			
Aspartate Aminotransferase|High	30			
Bilirubin|High	28			
Creatinine|High	6			
Direct Bilirubin|High	28			
Protein/Creatinine|High	17			
Alanine Aminotransferase|High & Low	0			
Alkaline Phosphatase|High & Low	0			
Aspartate Aminotransferase|High & Low	0			
Bilirubin|High & Low	0			
Creatinine|High & Low	3			
Direct Bilirubin|High & Low	0			
Protein/Creatinine|High & Low	6			
Alanine Aminotransferase|Missing	0			
Alkaline Phosphatase|Missing	0			
Aspartate Aminotransferase|Missing	0			
Bilirubin|Missing	0			
Creatinine|Missing	0			
Direct Bilirubin|Missing	0			
Protein/Creatinine|Missing	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants with clinically significant auditory assessments changes from baseline

End point title	Number of Participants with clinically significant auditory assessments changes from baseline

End point description:

Safety measured by notable post-baseline changes in Auditory assessments (comprehensive audiometry threshold examination and speech recognition). Baseline was defined as the last non-missing value on or prior to the first dose. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (Week 1 Day 1) up to Week 24, plus 30 day safety follow-up.

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Participants	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants with clinically significant ocular assessments changes from baseline

End point title	Number of Participants with clinically significant ocular assessments changes from baseline

End point description:

Safety measured by notable post-baseline changes in Ocular assessments (Distance visual acuity test, Applanation tonometry, lens photography, wide angle fundus photography of the retina and optic nerve). Ocular assessment were required at screening and end of Treatment; during treatment, they were to be performed at the discretion of the investigator based on patient reporting symptoms. Baseline was defined as the last non-missing value on or prior to the first dose. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (Week 1 Day 1) up to Week 24, plus 30 day safety follow-up.

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Participants	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Absolute change from baseline in systolic and diastolic blood pressures (mmHg)

End point title	Absolute change from baseline in systolic and diastolic blood pressures (mmHg)

End point description:

Absolute change from baseline over time in systolic and diastolic blood pressures measurements were to be provided. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 2, Week 3, Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: millimetre of mercury (mmHg)				
arithmetic mean (standard deviation)				
Systolic BP-Baseline (BL)	100.0 (± 10.10)			
Systolic BP-Change from BL @ Week 2	-0.1 (± 11.27)			
Systolic BP-Change from BL @ Week 3	-2.3 (± 7.93)			
Systolic BP-Change from BL @ Week 4	-0.3 (± 12.56)			
Systolic BP-Change from BL @ Week 8	0.3 (± 8.53)			
Systolic BP-Change from BL @ Week 12	-1.4 (± 12.16)			
Systolic BP-Change from BL @ Week 16	-1.9 (± 11.76)			
Systolic BP-Change from BL @ Week 20	-0.6 (± 11.67)			
Systolic BP-Change from BL @ EOT (Week 24)	-2.6 (± 11.54)			
Diastolic BP-Baseline (BL)	60.0 (± 7.85)			
Diastolic BP-Change from BL @ Week 2	0.7 (± 6.13)			
Diastolic BP-Change from BL @ Week 3	-2.1 (± 9.60)			
Diastolic BP-Change from BL @ Week 4	1.0 (± 10.24)			
Diastolic BP-Change from BL @ Week 8	-0.6 (± 13.21)			
Diastolic BP-Change from BL @ Week 12	1.7 (± 11.42)			
Diastolic BP-Change from BL @ Week 16	-0.5 (± 10.28)			
Diastolic BP-Change from BL @ Week 20	-0.1 (± 11.70)			
Diastolic BP-Change from BL @ EOT (Week 24)	-0.4 (± 7.89)			

Statistical analyses

No statistical analyses for this end point

Secondary: Absolute change from baseline in pulse rate (bpm)

End point title	Absolute change from baseline in pulse rate (bpm)

End point description:

Absolute change from baseline over time in supine pulse rate was to be provided. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 2, Week 3, Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: beats per minute (bpm)				
arithmetic mean (standard deviation)				
Baseline (BL)	102.4 (± 10.73)			
Change from BL @ Week 2	-1.1 (± 10.51)			
Change from BL @ Week 3	-2.7 (± 16.18)			
Change from BL @ Week 4	-3.1 (± 12.85)			
Change from BL @ Week 8	-1.0 (± 15.47)			
Change from BL @ Week 12	-0.3 (± 12.69)			
Change from BL @ Week 16	-2.2 (± 8.99)			
Change from BL @ Week 20	0.8 (± 12.55)			
Change from BL @ EOT (Week 24)	1.1 (± 12.10)			

Statistical analyses

No statistical analyses for this end point

Secondary: Absolute change from baseline in body temperature (°C)

End point title	Absolute change from baseline in body temperature (°C)

End point description:

Absolute change from baseline over time in body temperature measurements was to be provided. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 2, Week 3, Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: Celsius degree (°C)				
arithmetic mean (standard deviation)				
Baseline (BL)	36.43 (± 0.416)			
Change from BL @ Week 2	-0.03 (± 0.285)			
Change from BL @ Week 3	-0.10 (± 0.353)			
Change from BL @ Week 4	0.00 (± 0.360)			
Change from BL @ Week 8	0.02 (± 0.336)			
Change from BL @ Week 12	-0.03 (± 0.413)			

Change from BL @ Week 16	0.10 (± 0.400)			
Change from BL @ Week 20	0.03 (± 0.372)			
Change from BL @ EOT (Week 24)	0.08 (± 0.453)			

Statistical analyses

No statistical analyses for this end point

Secondary: Absolute change from baseline in body weight (kg)

End point title	Absolute change from baseline in body weight (kg)

End point description:

Absolute change from baseline over time in body weight measurements was to be provided. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	44			
Units: kilogram (kg)				
arithmetic mean (standard deviation)				
Baseline (BL)	15.26 (± 3.109)			
Change from BL @ Week 4	0.08 (± 0.290)			
Change from BL @ Week 8	0.19 (± 0.460)			
Change from BL @ Week 12	0.31 (± 0.482)			
Change from BL @ Week 16	0.25 (± 0.433)			
Change from BL @ Week 20	0.43 (± 0.532)			
Change from BL @ EOT (Week 24)	0.44 (± 0.600)			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in participants pre-treated with deferasirox: Mean Change from Baseline in Adherence

End point title	Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in participants pre-treated with deferasirox: Mean Change from Baseline in Adherence

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT adherence domain consisted of 6 items from the child's perspective and 6 items from the caregiver's perspective, each with a possible score of 1 to 5, for an overall possible score range of 6 to

30. A higher score indicates poorer adherence. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Score				
arithmetic mean (confidence interval 95%)				
Child's perspective overall score-Week 4	-2.4 (-3.8 to -1.0)			
Child's perspective overall score-Week 12	-2.6 (-4.5 to -0.7)			
Child's perspective overall score-EOT	-1.9 (-3.5 to -0.2)			
Caregiver's perspective overall score-Week 4	-1.4 (-2.9 to 0.1)			
Caregiver's perspective overall score-Week 12	-1.4 (-3.3 to 0.4)			
Caregiver's perspective overall score-EOT	-1.0 (-2.6 to 0.6)			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified SICT in participants pre-treated with deferasirox: Number of Participants with Type of Medicine child like scoring

End point title	Modified SICT in participants pre-treated with deferasirox: Number of Participants with Type of Medicine child like scoring

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT preference domain consisted of 3 items including the type of medicine the child said he/she liked best (tablet to dissolve in liquid, tablet (taken once a day), tablet (taken 3 times a day), tablet crushed, sprinkle powder on food, injection and I don't know). These items were presented descriptively using frequency counts.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Participants				
BL|Tablet to dissolve in liquid	0			
Wk 4|Tablet to dissolve in liquid	0			
Wk 12|Tablet to dissolve in liquid	1			
EOT|Tablet to dissolve in liquid	0			
BL|Tablet (taken once a day)	4			
Wk 4|Tablet (taken once a day)	1			
Wk 12|Tablet (taken once a day)	1			
EOT|Tablet (taken once a day)	4			
BL|Tablet (taken 3 times a day)	0			
Wk 4|Tablet (taken 3 times a day)	0			
Wk 12|Tablet (taken 3 times a day)	0			
EOT|Tablet (taken 3 times a day)	0			
BL|Tablet crushed	11			
Wk 4|Tablet crushed	14			
Wk 12|Tablet crushed	13			
EOT|Tablet crushed	9			
BL|Sprinkle powder on food	14			
Wk 4|Sprinkle powder on food	14			
Wk 12|Sprinkle powder on food	12			
EOT|Sprinkle powder on food	15			
BL|Injection	0			
Wk 4|Injection	0			
Wk 12|Injection	0			
EOT|Injection	0			
BL|I don't know	3			
Wk 4|I don't know	1			
Wk 12|I don't know	0			
EOT|I don't know	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified SICT in participants pre-treated with deferasirox: Number of Participants with Reasons child preferred crushed medicine scoring

End point title	Modified SICT in participants pre-treated with deferasirox: Number of Participants with Reasons child preferred crushed medicine scoring

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT preference domain consisted of 3 items including the reason child preferred crushed medicine (taste, aftertaste, convenience, number of pills, no/less side effects, can correctly prepare the medicine, easier to remember to take the medicine, number of times he/she has to take the medicine, no/less pain on the injection site, gain personal time with their family and friends, and other). These items were presented descriptively using frequency counts.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Participants				
BL|Taste	6			
Wk 4|Taste	0			
Wk 12|Taste	0			
EOT|Taste	0			
BL|Aftertaste	5			
Wk 4|Aftertaste	0			
Wk 12|Aftertaste	0			
EOT|Aftertaste	0			
BL|Convenience	5			
Wk 4|Convenience	4			
Wk 12|Convenience	2			
EOT|Convenience	0			
BL|Number of pills	0			
Wk 4|Number of pills	0			
Wk 12|Number of pills	0			
EOT|Number of pills	0			
BL|No/Less side effects	0			
Wk 4|No/Less side effects	0			
Wk 12|No/Less side effects	0			
EOT|No/Less side effects	0			
BL|Can correctly prepare the medicine	0			
Wk 4|Can correctly prepare the medicine	0			
Wk 12|Can correctly prepare the medicine	0			
EOT|Can correctly prepare the medicine	0			
BL|Easier to remember to take the medicine	1			
Wk 4|Easier to remember to take the medicine	0			
Wk 12|Easier to remember to take the medicine	0			
EOT|Easier to remember to take the medicine	0			
BL|No of times he/she has to take the medicine	0			
Wk 4|No of times he/she has to take the medicine	0			
Wk 12|No of times he/she has to take the medicine	0			
EOT|No of times he/she has to take the medicine	0			
BL|No/Less pain on the injection site	0			
Wk 4|No/Less pain on the injection site	0			

Wk 12|No/Less pain on the injection site	0			
EOT|No/Less pain on the injection site	0			
BL|Gain personal time with family&friends	2			
Wk 4|Gain personal time with family&friends	2			
Wk 12|Gain personal time with family&friends	3			
EOT|Gain personal time with family&friends	7			
BL|Other	1			
Wk 4|Other	8			
Wk 12|Other	8			
EOT|Other	3			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified SICT in participants pre-treated with deferasirox: Number of Participants with Rank based on child's preference scoring

End point title	Modified SICT in participants pre-treated with deferasirox: Number of Participants with Rank based on child's preference scoring

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT preference domain consisted of 3 items including the rank of the medicine (tablet to dissolve in liquid, tablet taken once a day, tablet taken 3 times a day, tablet crushed, sprinkle powder on food and injection), with a range of 1 to 6 (1 being most preferred and 6 being least preferred), based on what the child prefers. These items were presented descriptively using frequency count.

End point type	Secondary

End point timeframe:

Baseline (BL), Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Participants				
BL -Tablet to dissolve in liquid|1	0			
Week 4 -Tablet to dissolve in liquid|1	0			
Week 12-Tablet to dissolve in liquid|1	1			
EOT-Tablet to dissolve in liquid|1	0			
BL-Tablet (taken once a day)|1	6			
Week 4-Tablet (taken once a day)|1	3			
Week 12-Tablet (taken once a day)|1	1			
EOT-Tablet (taken once a day)|1	4			
BL-Tablet (taken 3 times a day)|1	0			
Week 4-Tablet (taken 3 times a day)|1	0			

Week 12-Tablet (taken 3 times a day)|1	0			
EOT-Tablet (taken 3 times a day)|1	0			
BL-Tablet crushed|1	12			
Week 4-Tablet crushed|1	10			
Week 12-Tablet crushed|1	8			
EOT-Tablet crushed|1	8			
BL-Sprinkle powder on food|1	16			
Week 4-Sprinkle powder on food|1	19			
Week 12-Sprinkle powder on food|1	15			
EOT-Sprinkle powder on food|1	16			
BL-Injection|1	0			
Week 4-Injection|1	0			
Week 12-Injection|1	1			
EOT-Injection|1	0			
BL -Tablet to dissolve in liquid|2	1			
Week 4 -Tablet to dissolve in liquid|2	11			
Week 12-Tablet to dissolve in liquid|2	7			
EOT-Tablet to dissolve in liquid|2	8			
BL-Tablet (taken once a day)|2	3			
Week 4-Tablet (taken once a day)|2	0			
Week 12-Tablet (taken once a day)|2	0			
EOT-Tablet (taken once a day)|2	0			
BL-Tablet (taken 3 times a day)|2	0			
Week 4-Tablet (taken 3 times a day)|2	1			
Week 12-Tablet (taken 3 times a day)|2	2			
EOT-Tablet (taken 3 times a day)|2	1			
BL-Tablet crushed|2	14			
Week 4-Tablet crushed|2	9			
Week 12-Tablet crushed|2	9			
EOT-Tablet crushed|2	9			
BL-Sprinkle powder on food|2	13			
Week 4-Sprinkle powder on food|2	8			
Week 12-Sprinkle powder on food|2	8			
EOT-Sprinkle powder on food|2	10			
BL-Injection|2	0			
Week 4-Injection|2	0			
Week 12-Injection|2	0			
EOT-Injection|2	0			
BL -Tablet to dissolve in liquid|3	12			
Week 4 -Tablet to dissolve in liquid|3	8			
Week 12-Tablet to dissolve in liquid|3	7			
EOT-Tablet to dissolve in liquid|3	8			
BL-Tablet (taken once a day)|3	15			
Week 4-Tablet (taken once a day)|3	9			
Week 12-Tablet (taken once a day)|3	11			
EOT-Tablet (taken once a day)|3	11			
BL-Tablet (taken 3 times a day)|3	0			
Week 4-Tablet (taken 3 times a day)|3	1			
Week 12-Tablet (taken 3 times a day)|3	1			
EOT-Tablet (taken 3 times a day)|3	1			
BL-Tablet crushed|3	3			
Week 4-Tablet crushed|3	11			

Week 12-Tablet crushed|3	6			
EOT-Tablet crushed|3	8			
BL-Sprinkle powder on food|3	1			
Week 4-Sprinkle powder on food|3	0			
Week 12-Sprinkle powder on food|3	1			
EOT-Sprinkle powder on food|3	0			
BL-Injection|3	0			
Week 4-Injection|3	0			
Week 12-Injection|3	0			
EOT-Injection|3	0			
BL -Tablet to dissolve in liquid|4	7			
Week 4 -Tablet to dissolve in liquid|4	3			
Week 12-Tablet to dissolve in liquid|4	4			
EOT-Tablet to dissolve in liquid|4	7			
BL-Tablet (taken once a day)|4	6			
Week 4-Tablet (taken once a day)|4	18			
Week 12-Tablet (taken once a day)|4	13			
EOT-Tablet (taken once a day)|4	13			
BL-Tablet (taken 3 times a day)|4	14			
Week 4-Tablet (taken 3 times a day)|4	6			
Week 12-Tablet (taken 3 times a day)|4	6			
EOT-Tablet (taken 3 times a day)|4	3			
BL-Tablet crushed|4	3			
Week 4-Tablet crushed|4	0			
Week 12-Tablet crushed|4	2			
EOT-Tablet crushed|4	2			
BL-Sprinkle powder on food|4	1			
Week 4-Sprinkle powder on food|4	1			
Week 12-Sprinkle powder on food|4	1			
EOT-Sprinkle powder on food|4	2			
BL-Injection|4	0			
Week 4-Injection|4	1			
Week 12-Injection|4	0			
EOT-Injection|4	1			
BL -Tablet to dissolve in liquid|5	11			
Week 4 -Tablet to dissolve in liquid|5	5			
Week 12-Tablet to dissolve in liquid|5	7			
EOT-Tablet to dissolve in liquid|5	4			
BL-Tablet (taken once a day)|5	2			
Week 4-Tablet (taken once a day)|5	0			
Week 12-Tablet (taken once a day)|5	1			
EOT-Tablet (taken once a day)|5	0			
BL-Tablet (taken 3 times a day)|5	17			
Week 4-Tablet (taken 3 times a day)|5	21			
Week 12-Tablet (taken 3 times a day)|5	17			
EOT-Tablet (taken 3 times a day)|5	23			
BL-Tablet crushed|5	0			
Week 4-Tablet crushed|5	0			
Week 12-Tablet crushed|5	0			
EOT-Tablet crushed|5	1			
BL-Sprinkle powder on food|5	1			
Week 4-Sprinkle powder on food|5	2			

Week 12-Sprinkle powder on food|5	1			
EOT-Sprinkle powder on food|5	0			
BL-Injection|5	0			
Week 4-Injection|5	1			
Week 12-Injection|5	0			
EOT-Injection|5	0			
BL -Tablet to dissolve in liquid|6	1			
Week 4 -Tablet to dissolve in liquid|6	3			
Week 12-Tablet to dissolve in liquid|6	0			
EOT-Tablet to dissolve in liquid|6	1			
BL-Tablet (taken once a day)|6	0			
Week 4-Tablet (taken once a day)|6	0			
Week 12-Tablet (taken once a day)|6	0			
EOT-Tablet (taken once a day)|6	0			
BL-Tablet (taken 3 times a day)|6	1			
Week 4-Tablet (taken 3 times a day)|6	1			
Week 12-Tablet (taken 3 times a day)|6	0			
EOT-Tablet (taken 3 times a day)|6	0			
BL-Tablet crushed|6	0			
Week 4-Tablet crushed|6	0			
Week 12-Tablet crushed|6	1			
EOT-Tablet crushed|6	0			
BL-Sprinkle powder on food|6	0			
Week 4-Sprinkle powder on food|6	0			
Week 12-Sprinkle powder on food|6	0			
EOT-Sprinkle powder on food|6	0			
BL-Injection|6	32			
Week 4-Injection|6	28			
Week 12-Injection|6	25			
EOT-Injection|6	27			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in participants pre-treated with deferasirox: Mean Change from Baseline in Concerns

End point title	Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in participants pre-treated with deferasirox: Mean Change from Baseline in Concerns

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT concerns domain scale for child's response had a possible range from 2 to 10, based on two questions and the mSICT concerns domain scale for caregiver's responses had the possible range of 1 to 5 based on one question. A higher score indicated fewer concerns. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Score				
arithmetic mean (confidence interval 95%)				
Child's perspective overall score-Week 4	1.1 (0.6 to 1.7)			
Child's perspective overall score-Week 12	1.2 (0.5 to 1.9)			
Child's perspective overall score-EOT	0.8 (0.0 to 1.5)			
Caregiver's perspective overall score-Week 4	0.4 (-0.1 to 0.8)			
Caregiver's perspective overall score-Week 12	0.4 (-0.2 to 0.9)			
Caregiver's perspective overall score-EOT	0.2 (-0.3 to 0.7)			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Mean Change from Baseline in Adherence

End point title	Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Mean Change from Baseline in Adherence

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT adherence domain consisted of 6 items from the child's perspective and 6 items from the caregiver’s perspective, each with a possible score of 1 to 5, for an overall possible score range of 6 to 30. A higher score indicates poorer adherence. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Score				
arithmetic mean (standard deviation)				
Child's perspective overall score-Week 4	10.4 (± 2.98)			
Child's perspective overall score-Week 12	9.8 (± 2.99)			
Child's perspective overall score-EOT	10.3 (± 3.43)			

Caregiver's perspective overall score-Week 4	9.0 (± 3.97)			
Caregiver's perspective overall score-Week 12	9.9 (± 5.30)			
Caregiver's perspective overall score-EOT	10.6 (± 5.03)			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Number of Participants with Type of Medicine child like scoring

End point title	Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Number of Participants with Type of Medicine child like scoring

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT preference domain consisted of 3 items including the type of medicine the child said he/she liked best (tablet to dissolve in liquid, tablet (taken once a day), tablet (taken 3 times a day), tablet crushed, sprinkle powder on food, injection and I don't know). These items were presented descriptively using frequency counts.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Participants				
Wk 4|Tablet to dissolve in liquid	0			
Wk 12|Tablet to dissolve in liquid	1			
EOT|Tablet to dissolve in liquid	4			
Wk 4|Tablet (taken once a day)	1			
Wk 12|Tablet (taken once a day)	0			
EOT|Tablet (taken once a day)	0			
Wk 4|Tablet (taken 3 times a day)	0			
Wk 12|Tablet (taken 3 times a day)	0			
EOT|Tablet (taken 3 times a day)	0			
Wk 4|Tablet crushed	5			
Wk 12|Tablet crushed	5			
EOT|Tablet crushed	3			
Wk 4|Sprinkle powder on food	3			
Wk 12|Sprinkle powder on food	3			
EOT|Sprinkle powder on food	2			
Wk 4|Injection	0			
Wk 12|Injection	0			

EOT|Injection	0			
Wk 4|I don't know	2			
Wk 12|I don't know	0			
EOT|I don't know	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Number of Participants with Reasons child preferred crushed medicine scoring

End point title	Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Number of Participants with Reasons child preferred crushed medicine scoring

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT preference domain consisted of 3 items including the reason child preferred crushed medicine (taste, aftertaste, convenience, number of pills, no/less side effects, can correctly prepare the medicine, easier to remember to take the medicine, number of times he/she has to take the medicine, no/less pain on the injection site, gain personal time with their family and friends, and other). These items were presented descriptively using frequency counts.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Participants				
Wk 4|Taste	0			
Wk 12|Taste	0			
EOT|Taste	0			
Wk 4|Aftertaste	1			
Wk 12|Aftertaste	0			
EOT|Aftertaste	0			
Wk 4|Convenience	2			
Wk 12|Convenience	2			
EOT|Convenience	1			
Wk 4|Number of pills	1			
Wk 12|Number of pills	0			
EOT|Number of pills	0			
Wk 4|No/Less side effects	0			
Wk 12|No/Less side effects	0			
EOT|No/Less side effects	1			
Wk 4|Can correctly prepare the medicine	1			

Wk 12|Can correctly prepare the medicine	0			
EOT|Can correctly prepare the medicine	1			
Wk 4|Easier to remember to take the medicine	1			
Wk 12|Easier to remember to take the medicine	0			
EOT|Easier to remember to take the medicine	2			
Wk 4|No of times he/she has to take the medicine	1			
Wk 12|No of times he/she has to take the medicine	0			
EOT|No of times he/she has to take the medicine	0			
Wk 4|No/Less pain on the injection site	0			
Wk 12|No/Less pain on the injection site	1			
EOT|No/Less pain on the injection site	1			
Wk 4|Gain personal time with family&friends	1			
Wk 12|Gain personal time with family&friends	2			
EOT|Gain personal time with family&friends	2			
Wk 4|Other	1			
Wk 12|Other	1			
EOT|Other	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Number of Participants with Rank based on child's preference scoring

End point title	Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Number of Participants with Rank based on child's preference scoring

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT preference domain consisted of 3 items including the rank of the medicine (tablet to dissolve in liquid, tablet taken once a day, tablet taken 3 times a day, tablet crushed, sprinkle powder on food and injection), with a range of 1 to 6 (1 being most preferred and 6 being least preferred), based on what the child prefers. These items were presented descriptively using frequency counts.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Participants				
Wk 4 -Tablet to dissolve in liquid|1	2			
Wk 12-Tablet to dissolve in liquid|1	2			
EOT-Tablet to dissolve in liquid|1	4			
Wk 4-Tablet (taken once a day)|1	1			
Wk 12-Tablet (taken once a day)|1	0			
EOT-Tablet (taken once a day)|1	0			
Wk 4-Tablet (taken 3 times a day)|1	1			
Wk 12-Tablet (taken 3 times a day)|1	0			
EOT-Tablet (taken 3 times a day)|1	0			
Wk 4-Tablet crushed|1	1			
Wk 12-Tablet crushed|1	1			
EOT-Tablet crushed|1	1			
Wk 4-Sprinkle powder on food|1	5			
Wk 12-Sprinkle powder on food|1	5			
EOT-Sprinkle powder on food|1	4			
Wk 4-Injection|1	0			
Wk 12-Injection|1	1			
EOT-Injection|1	0			
Wk 4 -Tablet to dissolve in liquid|2	1			
Wk 12-Tablet to dissolve in liquid|2	3			
EOT-Tablet to dissolve in liquid|2	2			
Wk 4-Tablet (taken once a day)|2	3			
Wk 12-Tablet (taken once a day)|2	0			
EOT-Tablet (taken once a day)|2	1			
Wk 4-Tablet (taken 3 times a day)|2	0			
Wk 12-Tablet (taken 3 times a day)|2	1			
EOT-Tablet (taken 3 times a day)|2	0			
Wk 4-Tablet crushed|2	6			
Wk 12-Tablet crushed|2	5			
EOT-Tablet crushed|2	4			
Wk 4-Sprinkle powder on food|2	0			
Wk 12-Sprinkle powder on food|2	0			
EOT-Sprinkle powder on food|2	2			
Wk 4-Injection|2	0			
Wk 12-Injection|2	0			
EOT-Injection|2	0			
Wk 4 -Tablet to dissolve in liquid|3	2			
Wk 12-Tablet to dissolve in liquid|3	2			
EOT-Tablet to dissolve in liquid|3	1			
Wk 4-Tablet (taken once a day)|3	5			
Wk 12-Tablet (taken once a day)|3	2			
EOT-Tablet (taken once a day)|3	3			
Wk 4-Tablet (taken 3 times a day)|3	1			
Wk 12-Tablet (taken 3 times a day)|3	2			
EOT-Tablet (taken 3 times a day)|3	0			
Wk 4-Tablet crushed|3	1			
Wk 12-Tablet crushed|3	2			

EOT-Tablet crushed|3	4			
Wk 4-Sprinkle powder on food|3	0			
Wk 12-Sprinkle powder on food|3	1			
EOT-Sprinkle powder on food|3	1			
Wk 4-Injection|3	1			
Wk 12-Injection|3	0			
EOT-Injection|3	0			
Wk 4 -Tablet to dissolve in liquid|4	4			
Wk 12-Tablet to dissolve in liquid|4	0			
EOT-Tablet to dissolve in liquid|4	2			
Wk 4-Tablet (taken once a day)|4	1			
Wk 12-Tablet (taken once a day)|4	6			
EOT-Tablet (taken once a day)|4	5			
Wk 4-Tablet (taken 3 times a day)|4	3			
Wk 12-Tablet (taken 3 times a day)|4	1			
EOT-Tablet (taken 3 times a day)|4	0			
Wk 4-Tablet crushed|4	1			
Wk 12-Tablet crushed|4	0			
EOT-Tablet crushed|4	0			
Wk 4-Sprinkle powder on food|4	1			
Wk 12-Sprinkle powder on food|4	2			
EOT-Sprinkle powder on food|4	2			
Wk 4-Injection|4	0			
Wk 12-Injection|4	0			
EOT-Injection|4	0			
Wk 4 -Tablet to dissolve in liquid|5	1			
Wk 12-Tablet to dissolve in liquid|5	2			
EOT-Tablet to dissolve in liquid|5	0			
Wk 4-Tablet (taken once a day)|5	0			
Wk 12-Tablet (taken once a day)|5	1			
EOT-Tablet (taken once a day)|5	0			
Wk 4-Tablet (taken 3 times a day)|5	4			
Wk 12-Tablet (taken 3 times a day)|5	5			
EOT-Tablet (taken 3 times a day)|5	9			
Wk 4-Tablet crushed|5	1			
Wk 12-Tablet crushed|5	0			
EOT-Tablet crushed|5	0			
Wk 4-Sprinkle powder on food|5	3			
Wk 12-Sprinkle powder on food|5	1			
EOT-Sprinkle powder on food|5	0			
Wk 4-Injection|5	1			
Wk 12-Injection|5	0			
EOT-Injection|5	0			
Wk 4 -Tablet to dissolve in liquid|6	0			
Wk 12-Tablet to dissolve in liquid|6	0			
EOT-Tablet to dissolve in liquid|6	0			
Wk 4-Tablet (taken once a day)|6	0			
Wk 12-Tablet (taken once a day)|6	0			
EOT-Tablet (taken once a day)|6	0			
Wk 4-Tablet (taken 3 times a day)|6	1			
Wk 12-Tablet (taken 3 times a day)|6	0			
EOT-Tablet (taken 3 times a day)|6	0			

Wk 4-Tablet crushed|6	0			
Wk 12-Tablet crushed|6	1			
EOT-Tablet crushed|6	0			
Wk 4-Sprinkle powder on food|6	1			
Wk 12-Sprinkle powder on food|6	0			
EOT-Sprinkle powder on food|6	0			
Wk 4-Injection|6	8			
Wk 12-Injection|6	8			
EOT-Injection|6	9			

Statistical analyses

No statistical analyses for this end point

Secondary: Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Mean Change from Baseline in Concerns

End point title	Modified Satisfaction With Iron Chelation Therapy (Modified SICT) in Chelation naive participants: Mean Change from Baseline in Concerns

End point description:

The mSICT questionnaire was to be completed at screening visit 1, week 4, week 12 and EOT. The responses from screening visit 1 for mSICT questionnaire were to be considered as baseline. The modified SICT consisted of 20 items that represented 3 domains: Adherence, Preference and Concerns. The mSICT concerns domain scale for child's response had a possible range from 2 to 10, based on two questions and the mSICT concerns domain scale for caregiver's responses had the possible range of 1 to 5 based on one question. A higher score indicated fewer concerns. Only descriptive analysis performed.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Score				
arithmetic mean (standard deviation)				
Child's perspective overall score-Week 4	9.7 (± 0.65)			
Child's perspective overall score-Week 12	9.4 (± 0.88)			
Child's perspective overall score-EOT	8.9 (± 1.36)			
Caregiver's perspective overall score-Week 4	3.7 (± 1.42)			
Caregiver's perspective overall score-Week 12	3.9 (± 1.76)			
Caregiver's perspective overall score-EOT	3.4 (± 1.59)			

Statistical analyses

No statistical analyses for this end point

Secondary: Palatability score in Chelation naive participants

End point title	Palatability score in Chelation naive participants

End point description:

The palatability (taste and ability to consume medicine) questionnaire consisted of 4 items, three items measuring taste or ability to consume medicine and one item measuring aftertaste. The aftertaste item was treated separately. Among the taste items, first one measured taste on a five point response scale. The last two items measured what happened after taking the medicine, i.e., swallowed or vomited etc. and how the perceived amount of liquid taken with the medicine was, enough, not enough or too much. The palatability summary score was calculated from these three items using a scoring matrix and the score ranges from 0 to 11. A higher score indicates better palatability. Only descriptive analysis was performed.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Score				
arithmetic mean (standard deviation)				
Week 4	10.4 (± 0.97)			
Week 12	10.9 (± 0.33)			
EOT (Week 24)	10.8 (± 0.67)			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of chelation naive Participants with Palatability After taste item scoring

End point title	Number of chelation naive Participants with Palatability After taste item scoring

End point description:

The palatability (taste and ability to consume medicine) questionnaire consisted of 4 items, three items measuring taste or ability to consume medicine and one item measuring aftertaste. The aftertaste item was treated as a separate item and scored on a 5-point response scale with the response format Very good = 1 (best), Good = 2, Neither good nor bad = 3, Bad = 4, Very bad = 5 (worst). Only descriptive analysis performed using frequency counts.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Participants				
Wk 4|Very Good	3			
Wk 12|Very Good	2			
EOT|Very Good	1			
Wk 4|Good	4			
Wk 12|Good	5			
EOT|Good	4			
Wk 4|Neither good nor bad	3			
Wk 12|Neither good nor bad	2			
EOT|Neither good nor bad	3			
Wk 4|Bad	1			
Wk 12|Bad	0			
EOT|Bad	1			
Wk 4|Very bad	0			
Wk 12|Very bad	0			
EOT|Very bad	0			

Statistical analyses

No statistical analyses for this end point

Secondary: Palatability score in participants pre-treated with deferasirox

End point title	Palatability score in participants pre-treated with deferasirox

End point description:

The palatability (taste and ability to consume medicine) questionnaire consisted of 4 items, three items measuring taste or ability to consume medicine and one item measuring aftertaste. The aftertaste item was treated separately. Among the taste items, first one measured taste on a five point response scale. The last two items measured what happened after taking the medicine, i.e., swallowed or vomited etc. and how the perceived amount of liquid taken with the medicine was, enough, not enough or too much. The palatability summary score was calculated from these three items using a scoring matrix and the score ranges from 0 to 11. A higher score indicates better palatability. Only descriptive analysis was performed.

End point type	Secondary

End point timeframe:

Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Score				
arithmetic mean (standard deviation)				
Week 4	10.7 (± 1.29)			
Week 12	10.3 (± 2.13)			
EOT (Week 24)	10.6 (± 1.57)			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants pre-treated with deferasirox with Palatability After taste item scoring

End point title	Number of Participants pre-treated with deferasirox with Palatability After taste item scoring

End point description:

The palatability (taste and ability to consume medicine) questionnaire consisted of 4 items, three items measuring taste or ability to consume medicine and one item measuring aftertaste. The aftertaste item was treated as a separate item and scored on a 5-point response scale with the response format Very good = 1 (best), Good = 2, Neither good nor bad = 3, Bad = 4, Very bad = 5 (worst). Only descriptive analysis performed using frequency counts.

End point type	Secondary

End point timeframe:

Baseline, Week 4, Week 12, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Participants				
BL|Very Good	5			
Wk 4|Very Good	1			
Wk 12|Very Good	4			
EOT|Very Good	0			
BL|Good	5			
Wk 4|Good	13			
Wk 12|Good	9			
EOT|Good	11			
BL|Neither good nor bad	15			
Wk 4|Neither good nor bad	16			
Wk 12|Neither good nor bad	12			
EOT|Neither good nor bad	14			
BL|Bad	7			
Wk 4|Bad	0			
Wk 12|Bad	2			
EOT|Bad	3			
BL|Very bad	0			
Wk 4|Very bad	0			
Wk 12|Very bad	0			
EOT|Very bad	0			

Statistical analyses

No statistical analyses for this end point

Secondary: GI Symptom Score in Chelation naive participants

End point title	GI Symptom Score in Chelation naive participants

End point description:

The GI symptom score was calculated from responses to 5 questions, each with a possible score of 1 to 5, for an overall possible score range of 5 to 25, where a lower score represents a less severe GI symptom and a higher score represents a more severe GI symptom. GI symptom scores were summarized using descriptive statistics at week 2, week 3, week 4, week 8, week 12, week 16, week 20 and EOT.

End point type	Secondary

End point timeframe:

Week 2, Week 3, Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Score				
arithmetic mean (standard deviation)				
Week 2	6.8 (± 2.82)			
Week 3	7.1 (± 2.85)			
Week 4	7.0 (± 3.52)			
Week 8	6.8 (± 2.64)			
Week 12	6.2 (± 1.79)			
Week 16	7.0 (± 2.18)			
Week 20	5.9 (± 1.29)			
EOT (Week 24)	6.8 (± 1.92)			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants with GI Bowel Movements item scoring in Chelation naive participants

End point title	Number of Participants with GI Bowel Movements item scoring in Chelation naive participants

End point description:

The GI symptom questionnaire consisted of 6 items, 5 of which were scored using a 1-5 rating scale. The sixth item assessed bowel movement frequency during the past week, using 7 response options 0 = 0 (“None”), 1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = “5 – 10” and 6 = “11 or more”. The GI bowel movements

item score was presented descriptively using frequency counts.

End point type	Secondary

End point timeframe:

Week 2, Week 3, Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	12			
Units: Participants				
Week 2|3	1			
Week 3|3	1			
Week 4|3	0			
Week 8|3	0			
Week 12|3	0			
Week 16|3	0			
Week 20|3	0			
EOT (Week 24)|3	2			
Week 2|4	1			
Week 3|4	0			
Week 4|4	1			
Week 8|4	3			
Week 12|4	2			
Week 16|4	2			
Week 20|4	1			
EOT (Week 24)|4	0			
Week 2|5 to 10	8			
Week 3|5 to 10	7			
Week 4|5 to 10	8			
Week 8|5 to 10	6			
Week 12|5 to 10	6			
Week 16|5 to 10	5			
Week 20|5 to 10	7			
EOT (Week 24)|5 to 10	6			
Week 2|11 or more	2			
Week 3|11 or more	2			
Week 4|11 or more	2			
Week 8|11 or more	2			
Week 12|11 or more	1			
Week 16|11 or more	2			
Week 20|11 or more	2			
EOT (Week 24)|11 or more	1			

Statistical analyses

No statistical analyses for this end point

Secondary: GI Symptom Score in Participants pre-treated with deferasirox

End point title	GI Symptom Score in Participants pre-treated with deferasirox

End point description:

The GI symptom score was calculated from responses to 5 questions, each with a possible score of 1 to 5, for an overall possible score range of 5 to 25, where a lower score represents a less severe GI symptom and a higher score represents a more severe GI symptom. GI symptom scores were summarized using descriptive statistics at week 2, week 3, week 4, week 8, week 12, week 16, week 20 and EOT.

End point type	Secondary

End point timeframe:

Baseline, Week 2, Week 3, Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Score				
arithmetic mean (standard deviation)				
Week 2	6.3 (± 1.91)			
Week 3	6.0 (± 1.63)			
Week 4	6.4 (± 1.81)			
Week 8	6.4 (± 2.34)			
Week 12	6.5 (± 1.83)			
Week 16	6.7 (± 2.10)			
Week 20	7.3 (± 2.37)			
EOT (Week 24)	7.6 (± 2.95)			

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants with GI Bowel Movements item scoring in Participants pre-treated with deferasirox

End point title	Number of Participants with GI Bowel Movements item scoring in Participants pre-treated with deferasirox

End point description:

The GI symptom questionnaire consisted of 6 items, 5 of which were scored using a 1-5 rating scale. The sixth item assessed bowel movement frequency during the past week, using 7 response options 0 = 0 (“None”), 1 = 1, 2 = 2, 3 = 3, 4 = 4, 5 = “5 – 10” and 6 = “11 or more”. The GI bowel movements item score was presented descriptively using frequency counts.

End point type	Secondary

End point timeframe:

Baseline, Week 2, Week 3, Week 4, Week 8, Week 12, Week 16, Week 20, EOT (Week 24)

End point values	Deferasirox			
Subject group type	Reporting group			
Number of subjects analysed	32			
Units: Participants				
Baseline (BL)|3	0			
Week 2|3	0			
Week 3|3	0			
Week 4|3	0			
Week 8|3	1			
Week 12|3	1			
Week 16|3	0			
Week 20|3	0			
EOT (Week 24)|3	0			
Baseline (BL)|4	1			
Week 2|4	1			
Week 3|4	1			
Week 4|4	1			
Week 8|4	1			
Week 12|4	0			
Week 16|4	1			
Week 20|4	1			
EOT (Week 24)|4	1			
Baseline (BL)|5 to 10	30			
Week 2|5 to 10	29			
Week 3|5 to 10	26			
Week 4|5 to 10	28			
Week 8|5 to 10	29			
Week 12|5 to 10	26			
Week 16|5 to 10	29			
Week 20|5 to 10	28			
EOT (Week 24)|5 to 10	25			
Baseline (BL)|11 or more	1			
Week 2|11 or more	2			
Week 3|11 or more	1			
Week 4|11 or more	1			
Week 8|11 or more	1			
Week 12|11 or more	0			
Week 16|11 or more	1			
Week 20|11 or more	2			
EOT (Week 24)|11 or more	2			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events:	
Treatment-emergent adverse events (TEAEs) were collected from first dose of study treatment until end of study treatment plus 30 days post-treatment, assessed for approximately 28 weeks.	
Assessment type	Systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	22.1

Reporting groups	
Reporting group title	All Patients
Reporting group description:	
All Patients	

Serious adverse events	All Patients		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 44 (4.55%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
General disorders and administration site conditions			
Pyrexia			
subjects affected / exposed	1 / 44 (2.27%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Bronchitis			
subjects affected / exposed	1 / 44 (2.27%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

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

Non-serious adverse events	All Patients		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	29 / 44 (65.91%)		
Investigations			

Urine protein/creatinine ratio increased subjects affected / exposed occurrences (all)	12 / 44 (27.27%) 14		
Blood creatinine increased subjects affected / exposed occurrences (all)	9 / 44 (20.45%) 12		
Alanine aminotransferase increased subjects affected / exposed occurrences (all)	7 / 44 (15.91%) 11		
Bilirubin conjugated increased subjects affected / exposed occurrences (all)	6 / 44 (13.64%) 6		
General disorders and administration site conditions Pyrexia subjects affected / exposed occurrences (all)	5 / 44 (11.36%) 5		
Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all)	4 / 44 (9.09%) 4		
Respiratory, thoracic and mediastinal disorders Cough subjects affected / exposed occurrences (all)	6 / 44 (13.64%) 8		
Rhinorrhoea subjects affected / exposed occurrences (all)	3 / 44 (6.82%) 5		
Infections and infestations Gastroenteritis subjects affected / exposed occurrences (all)	4 / 44 (9.09%) 5		
Upper respiratory tract infection subjects affected / exposed occurrences (all)	10 / 44 (22.73%) 13		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
25 April 2018	Deferasirox FCT 90 mg, 180 mg, and 360 mg (Deferasirox FCT), was commercially available in some participating countries but not in all countries. The purpose of this amendment was to enable Novartis Drug Supply Management to supply labeled study drug to countries where Deferasirox FCT was not commercially available and also to enable countries where Deferasirox FCT was commercially available to follow their local processes for using commercial products in clinical studies. Two guidances were provided related to collection of Observer Reported Outcomes (ObsROs). In addition, some updates were made to provide further clarification on some aspects of the study.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported