Clinical trial results:
A Two Part Study to Assess the Safety, Pharmacokinetics and Pharmacodynamics of SBT-020 in Patients with Early Stage Huntington's Disease.

Summary

EudraCT number	2016-003730-25
Trial protocol	NL
Global end of trial date	21 December 2017

Results information

Result version number	v1 (current)
This version publication date	29 November 2021
First version publication date	29 November 2021
Summary attachment (see zip file)	CSR Synopsis (CSR Synopsis.docx)

Trial information

Trial identification

Sponsor protocol code	SBT20-102

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Stealth BioTherapeutics Inc
Sponsor organisation address	140 Kendrick Street, Building C-West, Needham, United States, MA 02494
Public contact	Jim Carr, PharmD, Chief Clinical Development Officer, Stealth BioTherapeutics Inc, +1 617 600-6888, jim.carr@stealthbt.com
Scientific contact	Jim Carr, PharmD, Chief Clinical Development Officer, Stealth BioTherapeutics Inc, +1 617 600-6888, jim.carr@stealthbt.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 October 2021
Is this the analysis of the primary completion data?	Yes
Primary completion date	21 December 2017
Global end of trial reached?	Yes
Global end of trial date	21 December 2017
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

Part 1:
Primary Objective
-To assess the safety of SBT-020 in early stage HD patients

Part 2:
Primary Objective
-To assess the safety and tolerability of longer term treatment with SBT-020 in early stage HD patients.

Protection of trial subjects:

This study was performed in compliance with International Council for Harmonisation (ICH) Good Clinical Practices (GCP), including the archiving of essential documents as well as the ethical principles of the Declaration of Helsinki.

A Dose Escalation Committee analysed safety data before allowing dose escalations. The Dose Escalation Committee consisted of representatives from the investigational site and sponsor and included both the Principal Investigator and Sponsor Medical Monitor.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	14 April 2017
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	Netherlands: 24
Worldwide total number of subjects	24
EEA total number of subjects	24

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)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	24
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

One study center: Centre for Human Drug Research (CHDR), Zernikedreef 8 Leiden 2333 CL, the Netherlands
First subject, first dose: 14 Apr 2017;
Last subject, last visit: 21 Dec 2017

Pre-assignment

Screening details:

Male and female subjects aged at least 18 years with a DNA confirmed diagnosis of of mild to moderate Huntington Disease. In Part 1 a total of 24 subjects were randomized to 3 dosing cohorts. In Part 2, a total of 24 subjects were to be enrolled, however one subject did not continue into the second part of the study (23 subjects were analysed).

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	5 mg/day SBT020

Arm description:

6 subjects were randomised to 5 mg/day SBT020

Arm type	Experimental
Investigational medicinal product name	SBT-020
Investigational medicinal product code	SBT-020
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

SBT-020 as supplied as lyophilized powder (44 mg/vial) for reconstitution with sterile saline for injection. SBT-020 was administered as a once daily SC injection for 7 days.

Arm title	5 mg/day Placebo

Arm description:

2 subjects were randomised to 5 mg/day Placebo

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

The placebo for this trial was composed of sterile saline for injection. The placebo was handled and administered identically to the active drug.

Arm title	15 mg/day SBT020

Arm description:

6 subjects randomised to 15 mg/day SBT020

Arm type	Experimental

Investigational medicinal product name	SBT-020
Investigational medicinal product code	SBT-020
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

SBT-020 as supplied as lyophilized powder (44 mg/vial) for reconstitution with sterile saline for injection. SBT-020 was administered as a once daily SC injection for 7 days.

Arm title	15 mg/day Placebo

Arm description:

2 subjects randomised to 15 mg/day Placebo

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

The placebo for this trial was composed of sterile saline for injection. The placebo was handled and administered identically to the active drug.

Arm title	25 mg/day SBT020

Arm description:

6 subjects randomised to 25 mg/day SBT020

Arm type	Experimental
Investigational medicinal product name	SBT-020
Investigational medicinal product code	SBT-020
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

SBT-020 as supplied as lyophilized powder (44 mg/vial) for reconstitution with sterile saline for injection. SBT-020 was administered as a once daily SC injection for 7 days.

Arm title	25 mg/day Placebo

Arm description:

2 subjects randomised to 25 mg/day Placebo

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

The placebo for this trial was composed of sterile saline for injection. The placebo was handled and administered identically to the active drug.

Number of subjects in period 1	5 mg/day SBT020	5 mg/day Placebo	15 mg/day SBT020
Started	6	2	6
Completed	6	2	6

Number of subjects in period 1	15 mg/day Placebo	25 mg/day SBT020	25 mg/day Placebo
Started	2	6	2
Completed	2	6	2

Period 2

Period 2 title	Wash-out
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Monitor, Data analyst, Carer, Assessor

Arms

Arm title	Wash-out

Arm description:

A 28-day period when patients from Part 1 did not receive study drug (SBT020 or placebo)

Arm type	No intervention

No investigational medicinal product assigned in this arm

Number of subjects in period 2	Wash-out
Started	24
Completed	23
Not completed	1
Adverse event, non-fatal	1

Period 3

Period 3 title	Part 2
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Investigator, Monitor, Data analyst, Carer, Subject, Assessor

Arms

Are arms mutually exclusive?	Yes
Arm title	25 mg/day SBT020

Arm description:

11 subjects were randomised to SBT020 25 mg/day

Arm type	Experimental
Investigational medicinal product name	SBT-020
Investigational medicinal product code	SBT-020
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

SBT-020 as supplied as lyophilized powder (44 mg/vial) for reconstitution with sterile saline for injection. SBT-020 was administered as a once daily SC injection for 28 days.

Arm title	25 mg/day Placebo

Arm description:

12 subjects were randomised to Placebo 25 mg/day

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

The placebo for this trial was composed of sterile saline for injection. The placebo was handled and administered identically to the active drug.

Number of subjects in period 3	25 mg/day SBT020	25 mg/day Placebo
Started	11	12
Completed	11	12

Baseline characteristics

Reporting groups	
Reporting group title	Part 1
Reporting group description:	
Part 1 study population	

Reporting group values	Part 1	Total	
Number of subjects	24	24	
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)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	24	24	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous Units: years			
arithmetic mean	47.5		
standard deviation	± 9.3	-	
Gender categorical Units: Subjects			
Female	11	11	
Male	13	13	

End points

End points reporting groups

Reporting group title	5 mg/day SBT020
Reporting group description:	
6 subjects were randomised to 5 mg/day SBT020	
Reporting group title	5 mg/day Placebo
Reporting group description:	
2 subjects were randomised to 5 mg/day Placebo	
Reporting group title	15 mg/day SBT020
Reporting group description:	
6 subjects randomised to 15 mg/day SBT020	
Reporting group title	15 mg/day Placebo
Reporting group description:	
2 subjects randomised to 15 mg/day Placebo	
Reporting group title	25 mg/day SBT020
Reporting group description:	
6 subjects randomised to 25 mg/day SBT020	
Reporting group title	25 mg/day Placebo
Reporting group description:	
2 subjects randomised to 25 mg/day Placebo	
Reporting group title	Wash-out
Reporting group description:	
A 28-day period when patients from Part 1 did not receive study drug (SBT020 or placebo)	
Reporting group title	25 mg/day SBT020
Reporting group description:	
11 subjects were randomised to SBT020 25 mg/day	
Reporting group title	25 mg/day Placebo
Reporting group description:	
12 subjects were randomised to Placebo 25 mg/day	

Primary: General TEAEs

End point title	General TEAEs
End point description:	
End point type	Primary
End point timeframe:	
Part 1 and Part 2	

End point values	5 mg/day SBT020	5 mg/day Placebo	15 mg/day SBT020	15 mg/day Placebo
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	6	2	6	2
Units: Events	9	3	4	3

End point values	25 mg/day SBT020	25 mg/day Placebo	25 mg/day SBT020	25 mg/day Placebo
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	6	2	11	12
Units: Events	6	4	8	23

Statistical analyses

Statistical analysis title	TEAE Descriptive
Statistical analysis description: Descriptive	
Comparison groups	5 mg/day SBT020 v 5 mg/day Placebo v 15 mg/day SBT020 v 15 mg/day Placebo v 25 mg/day SBT020 v 25 mg/day Placebo v 25 mg/day SBT020 v 25 mg/day Placebo
Number of subjects included in analysis	47
Analysis specification	Pre-specified
Analysis type	other[1]
P-value	= 0.05 [2]
Method	No p-value analysis
Parameter estimate	Sum

Notes:

[1] - Descriptive numerical

[2] - No formal p-value analysis was performed for safety analysis

Primary: Injection Site Reactions

End point title	Injection Site Reactions
End point description:	
End point type	Primary
End point timeframe: Part 1 and Part 2	

End point values	5 mg/day SBT020	5 mg/day Placebo	15 mg/day SBT020	15 mg/day Placebo
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	6	2	6	2
Units: Events	32	1	61	2

End point values	25 mg/day SBT020	25 mg/day Placebo	25 mg/day SBT020	25 mg/day Placebo
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	6	2	11	12

Units: Events	93	2	423	42

Statistical analyses

Statistical analysis title	Decsriptive numerical
Statistical analysis description: Numerical comparison of events	
Comparison groups	5 mg/day SBT020 v 5 mg/day Placebo v 15 mg/day SBT020 v 15 mg/day Placebo v 25 mg/day SBT020 v 25 mg/day Placebo v 25 mg/day SBT020 v 25 mg/day Placebo
Number of subjects included in analysis	47
Analysis specification	Pre-specified
Analysis type	other[3]
P-value	= 0.05 [4]
Method	No p-value analysis
Parameter estimate	events

Notes:

[3] - Numerical comparison

[4] - No p-value analysis was performed

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From time of informed consent until completion of the study follow-up visit. Adverse events occurring at any time following the first administration of study drug were considered treatment emergent (TEAE).

Adverse event reporting additional description:

We report only the TEAEs

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	20

Reporting groups

Reporting group title	Part 1 - 5 mg/day SBT020

Reporting group description:

6 subjects were randomised to 5 mg/day SBT020

Reporting group title	Part 1 - 15 mg/day SBT020

Reporting group description:

6 subjects randomised to 15 mg/day SBT020

Reporting group title	Part 2 - 25 mg/day SBT020

Reporting group description:

6 subjects randomised to 25 mg/day SBT020

Reporting group title	Part 2 - 25 mg/day Placebo

Reporting group description:

12 subjects randomised to 25 mg/day Placebo

Reporting group title	Part 1 - 25 mg/day SBT020

Reporting group description:

25 mg SBT-020 per day

Reporting group title	Washout period

Reporting group description:

Off-drug period between Part 1 and Part 2

Reporting group title	Part 1 - Placebo

Reporting group description:

Placebo patients combined from all 3 Part 1 arms

Serious adverse events	Part 1 - 5 mg/day SBT020	Part 1 - 15 mg/day SBT020	Part 2 - 25 mg/day SBT020
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Infections and infestations			
Pneumonia			

subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Part 2 - 25 mg/day Placebo	Part 1 - 25 mg/day SBT020	Washout period
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	1 / 24 (4.17%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Infections and infestations			
Pneumonia			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	1 / 24 (4.17%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Part 1 - Placebo		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 6 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Infections and infestations			
Pneumonia			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 1 %

Non-serious adverse events	Part 1 - 5 mg/day SBT020	Part 1 - 15 mg/day SBT020	Part 2 - 25 mg/day SBT020
Total subjects affected by non-serious adverse events			
subjects affected / exposed	6 / 6 (100.00%)	6 / 6 (100.00%)	11 / 11 (100.00%)
Nervous system disorders			
Dizziness			
subjects affected / exposed	0 / 6 (0.00%)	1 / 6 (16.67%)	0 / 11 (0.00%)
occurrences (all)	0	2	0
Headache			

subjects affected / exposed	2 / 6 (33.33%)	1 / 6 (16.67%)	3 / 11 (27.27%)
occurrences (all)	3	1	3
Paraesthesia			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Somnolence			
subjects affected / exposed	1 / 6 (16.67%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	1	0	0
General disorders and administration site conditions			
Energy increased			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Fatigue			
subjects affected / exposed	1 / 6 (16.67%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	1	0	0
Feeling cold			
subjects affected / exposed	1 / 6 (16.67%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	1	0	0
Influenza like illness			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Injection site erythema			
subjects affected / exposed	6 / 6 (100.00%)	6 / 6 (100.00%)	11 / 11 (100.00%)
occurrences (all)	23	38	258
Injection site haematoma			
subjects affected / exposed	0 / 6 (0.00%)	1 / 6 (16.67%)	2 / 11 (18.18%)
occurrences (all)	0	1	2
Injection site pain			
subjects affected / exposed	0 / 6 (0.00%)	2 / 6 (33.33%)	3 / 11 (27.27%)
occurrences (all)	0	5	3
Injection site paraesthesia			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	2 / 11 (18.18%)
occurrences (all)	0	0	2
Injection site pruritus			

subjects affected / exposed	0 / 6 (0.00%)	2 / 6 (33.33%)	5 / 11 (45.45%)
occurrences (all)	0	6	78
Injection site swelling			
subjects affected / exposed	3 / 6 (50.00%)	4 / 6 (66.67%)	9 / 11 (81.82%)
occurrences (all)	9	11	78
Injection site warmth			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Chest pain			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Injection site irritation			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	1 / 11 (9.09%)
occurrences (all)	0	0	2
Malaise			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	1 / 11 (9.09%)
occurrences (all)	0	0	1
Immune system disorders			
Seasonal allergy			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Eye disorders			
Ocular hyperaemia			
subjects affected / exposed	1 / 6 (16.67%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	1	0	0
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Toothache			
subjects affected / exposed	0 / 6 (0.00%)	1 / 6 (16.67%)	0 / 11 (0.00%)
occurrences (all)	0	1	0
Frequent bowel movements			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Abdominal distension			

subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Skin and subcutaneous tissue disorders			
Dermatitis contact			
subjects affected / exposed	1 / 6 (16.67%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	1	0	0
Psychiatric disorders			
Flat affect			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Restlessness			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Musculoskeletal and connective tissue disorders			
Muscle strain			
subjects affected / exposed	1 / 6 (16.67%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	1	0	0
Myalgia			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Neck pain			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Infections and infestations			
Infection			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Gastroenteritis			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Lice infestation			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	1 / 11 (9.09%)
occurrences (all)	0	0	1
Nasopharyngitis			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	3 / 11 (27.27%)
occurrences (all)	0	0	3

Pharyngitis			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	0 / 11 (0.00%)
occurrences (all)	0	0	0
Root canal infection			
subjects affected / exposed	0 / 6 (0.00%)	0 / 6 (0.00%)	1 / 11 (9.09%)
occurrences (all)	0	0	1

Non-serious adverse events	Part 2 - 25 mg/day Placebo	Part 1 - 25 mg/day SBT020	Washout period
Total subjects affected by non-serious adverse events			
subjects affected / exposed	11 / 12 (91.67%)	6 / 6 (100.00%)	0 / 24 (0.00%)
Nervous system disorders			
Dizziness			
subjects affected / exposed	2 / 12 (16.67%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	2	0	0
Headache			
subjects affected / exposed	5 / 12 (41.67%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	10	1	0
Paraesthesia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	1	0
Somnolence			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
General disorders and administration site conditions			
Energy increased			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	1	0
Fatigue			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Feeling cold			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Influenza like illness			
subjects affected / exposed	1 / 12 (8.33%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	1	0	0

Injection site erythema			
subjects affected / exposed	7 / 12 (58.33%)	6 / 6 (100.00%)	0 / 24 (0.00%)
occurrences (all)	39	37	0
Injection site haematoma			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Injection site pain			
subjects affected / exposed	0 / 12 (0.00%)	3 / 6 (50.00%)	0 / 24 (0.00%)
occurrences (all)	0	12	0
Injection site paraesthesia			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	3	0
Injection site pruritus			
subjects affected / exposed	1 / 12 (8.33%)	5 / 6 (83.33%)	0 / 24 (0.00%)
occurrences (all)	1	18	0
Injection site swelling			
subjects affected / exposed	2 / 12 (16.67%)	5 / 6 (83.33%)	0 / 24 (0.00%)
occurrences (all)	2	22	0
Injection site warmth			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	1	0
Chest pain			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	1	0
Injection site irritation			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Malaise			
subjects affected / exposed	1 / 12 (8.33%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	1	0	0
Immune system disorders			
Seasonal allergy			
subjects affected / exposed	1 / 12 (8.33%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	1	0	0
Eye disorders			

Ocular hyperaemia			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	1	0
Toothache			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Frequent bowel movements			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Abdominal distension			
subjects affected / exposed	1 / 12 (8.33%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	1	0	0
Skin and subcutaneous tissue disorders			
Dermatitis contact			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Psychiatric disorders			
Flat affect			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	1	0
Restlessness			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Musculoskeletal and connective tissue disorders			
Muscle strain			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Myalgia			
subjects affected / exposed	2 / 12 (16.67%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	2	0	0
Neck pain			

subjects affected / exposed	1 / 12 (8.33%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	1	0	0
Infections and infestations			
Infection			
subjects affected / exposed	0 / 12 (0.00%)	1 / 6 (16.67%)	0 / 24 (0.00%)
occurrences (all)	0	1	0
Gastroenteritis			
subjects affected / exposed	2 / 12 (16.67%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	2	0	0
Lice infestation			
subjects affected / exposed	0 / 12 (0.00%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	0	0	0
Nasopharyngitis			
subjects affected / exposed	2 / 12 (16.67%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	2	0	0
Pharyngitis			
subjects affected / exposed	1 / 12 (8.33%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	1	0	0
Root canal infection			
subjects affected / exposed	1 / 12 (8.33%)	0 / 6 (0.00%)	0 / 24 (0.00%)
occurrences (all)	1	0	0

Non-serious adverse events	Part 1 - Placebo		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	5 / 6 (83.33%)		
Nervous system disorders			
Dizziness			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Headache			
subjects affected / exposed	3 / 6 (50.00%)		
occurrences (all)	7		
Paraesthesia			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Somnolence			

subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
General disorders and administration site conditions			
Energy increased			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Fatigue			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Feeling cold			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Influenza like illness			
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	1		
Injection site erythema			
subjects affected / exposed	2 / 6 (33.33%)		
occurrences (all)	2		
Injection site haematoma			
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	2		
Injection site pain			
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	1		
Injection site paraesthesia			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Injection site pruritus			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Injection site swelling			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Injection site warmth			

subjects affected / exposed occurrences (all) Chest pain subjects affected / exposed occurrences (all) Injection site irritation subjects affected / exposed occurrences (all) Malaise subjects affected / exposed occurrences (all)	0 / 6 (0.00%) 0 0 / 6 (0.00%) 0 0 / 6 (0.00%) 0 0 / 6 (0.00%) 0		
Immune system disorders Seasonal allergy subjects affected / exposed occurrences (all)	 0 / 6 (0.00%) 0		
Eye disorders Ocular hyperaemia subjects affected / exposed occurrences (all)	 0 / 6 (0.00%) 0		
Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all) Toothache subjects affected / exposed occurrences (all) Frequent bowel movements subjects affected / exposed occurrences (all) Abdominal distension subjects affected / exposed occurrences (all)	 0 / 6 (0.00%) 0 0 / 6 (0.00%) 0 1 / 6 (16.67%) 1 0 / 6 (0.00%) 0		
Skin and subcutaneous tissue disorders Dermatitis contact subjects affected / exposed occurrences (all)	 0 / 6 (0.00%) 0		
Psychiatric disorders			

Flat affect			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Restlessness			
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	1		
Musculoskeletal and connective tissue disorders			
Muscle strain			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Myalgia			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Neck pain			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Infections and infestations			
Infection			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Gastroenteritis			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Lice infestation			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Nasopharyngitis			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Pharyngitis			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		
Root canal infection			
subjects affected / exposed	0 / 6 (0.00%)		
occurrences (all)	0		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
23 May 2017	Non-substantial change: the expiry period of the reconstituted product was prolonged from 48 hours to 7 days Substantial change: Expiry period of screening results (including the medical screening, 31P-MRS scan and UHDRS assessment) prolonged from 28 to 90 days Substantial change: Addition of possibility to perform an X-ray in patients in whom it was not clear if they were safe for MRI scanning Non-substantial change: The day 7 blood sample for plasma PK was to be taken on 1h15m post dose instead of 1h30m post dose Substantial change: The minimal τPCr for inclusion was lowered from 40 to 32.4 seconds
02 October 2017	• Substantial change: Patients with history of photosensitive epilepsy to be excluded • Non-substantial: Switch of NeuroCart and MRI assessments between day 27 and 28 in Part 2 • Non-substantial change: Addition of physical examination on day 27 • Non-substantial change: Eligibility to be checked via telephone prior to Part 2 • Non-substantial change: Removal of exploratory plasma and urine biomarker from Part 2 • Substantial change: Statement regarding the administered dose in Part 2 and safety statement of Part 1 • Substantial change: Addition of PK analysis of SBT-020-related component, SBT-127, in plasma and SBT-020-related components, SBT-127 and SBT-098, in urine • Non-substantial change: Change in PK sample storage temperature • Non-substantial change: Clarification that PK analysis was not to be performed on patients receiving placebo

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported

Online references

http://www.ncbi.nlm.nih.gov/pubmed/33197078