



Clinical trial results:

Long-Term, Open-Label Extension Study to Evaluate the Safety and Tolerability of NBI-827104 in Pediatric Subjects With Epileptic Encephalopathy With Continuous Spike-and-Wave During Sleep

Summary

EudraCT number	2021-006788-11
Trial protocol	DK ES DE
Global end of trial date	27 January 2025

Results information

Result version number	v1 (current)
This version publication date	14 August 2025
First version publication date	14 August 2025

Trial information

Trial identification

Sponsor protocol code	NBI-827104-CSWS2025
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT05301894
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Neurocrine Biosciences, Inc.
Sponsor organisation address	6027 Edgewood Bend Court , San Diego, United States, 92130
Public contact	Neurocrine Medical Information Call Center, Neurocrine Biosciences, Inc., 1 8776413461, medinfo@neurocrine.com
Scientific contact	Neurocrine Medical Information Call Center, Neurocrine Biosciences, Inc. , 1 8776413461, medinfo@neurocrine.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?	Yes

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	27 January 2025
Is this the analysis of the primary completion data?	Yes
Primary completion date	27 January 2025
Global end of trial reached?	Yes
Global end of trial date	27 January 2025
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

The primary objective for this study is to evaluate the long-term safety and tolerability of NBI-827104 in pediatric participants with epileptic encephalopathy with continuous spike-and-wave during sleep (EECSWS).

Protection of trial subjects:

The study was conducted in accordance with Good Clinical Practice (GCP), International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) GCP guidelines, and the laws and regulations of the countries in which the study was conducted

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	07 June 2022
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	United States: 11
Country: Number of subjects enrolled	United Kingdom: 1
Country: Number of subjects enrolled	Denmark: 3
Country: Number of subjects enrolled	Spain: 3
Country: Number of subjects enrolled	Switzerland: 1
Worldwide total number of subjects	19
EEA total number of subjects	6

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)	18
Adolescents (12-17 years)	1

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 terminated early by the Sponsor; therefore, no participants completed the study.

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	NBI-827104
Arm description: NBI-827104 administered orally	
Arm type	Experimental
Investigational medicinal product name	NBI-827104
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

NBI-827104 was administered per dose and schedule specified in the arm description.

Number of subjects in period 1	NBI-827104
Started	19
Received at Least 1 Dose of Study Drug	19
Completed	0
Not completed	19
Consent withdrawn by subject	2
Study Terminated by Sponsor	15
Lack of efficacy	2

Baseline characteristics

Reporting groups

Reporting group title	NBI-827104
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Reporting group description:

NBI-827104 administered orally

Reporting group values	NBI-827104	Total	
Number of subjects	19	19	
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)	18	18	
Adolescents (12-17 years)	1	1	
Adults (18-64 years)	0	0	
From 65-84 years	0	0	
85 years and over	0	0	
Age Continuous			
Units: years			
arithmetic mean	9.04		
standard deviation	± 1.78	-	
Sex: Female, Male			
Units: participants			
Female	9	9	
Male	10	10	
Ethnicity (NIH/OMB)			
Units: Subjects			
Hispanic or Latino	2	2	
Not Hispanic or Latino	17	17	
Unknown or Not Reported	0	0	
Race/Ethnicity, Customized			
Units: Subjects			
White	18	18	
Other	1	1	

End points

End points reporting groups

Reporting group title	NBI-827104
Reporting group description: NBI-827104 administered orally	

Primary: The Number of Participants with Serious Treatment-emergent Adverse Events (TEAEs)

End point title	The Number of Participants with Serious Treatment-emergent Adverse Events (TEAEs) ^[1]
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End point description:

A TEAE is an adverse event (AE) that was not present prior to the initiation of study treatment or was an already present condition that worsened either in intensity or frequency following the initiation of study treatment.

Safety Analysis Set: All enrolled participants who took at least 1 dose of NBI-827104.

End point type	Primary
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End point timeframe:

Up to 884 days of treatment and 4-week safety follow-up (mean duration of exposure was 649.7 days)

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: As per protocol, the endpoint is descriptive in nature.

End point values	NBI-827104			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: participants	2			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Up to 884 days of treatment and 4-week safety follow-up (mean duration of exposure was 649.7 days)

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
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Dictionary version	26.0
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Reporting groups

Reporting group title	NBI-827104
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Reporting group description:

NBI-827104 administered orally

Serious adverse events	NBI-827104		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 19 (10.53%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Nervous system disorders			
Seizure cluster			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Seizure			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Osteomyelitis acute			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	NBI-827104		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	17 / 19 (89.47%)		
General disorders and administration site conditions			
Thirst			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Pyrexia			
subjects affected / exposed	3 / 19 (15.79%)		
occurrences (all)	5		
Influenza like illness			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	2		
Gait disturbance			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Fatigue			
subjects affected / exposed	4 / 19 (21.05%)		
occurrences (all)	6		
Respiratory, thoracic and mediastinal disorders			
Epistaxis			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Oropharyngeal pain			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Throat irritation			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Psychiatric disorders			
Aggression			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Anxiety			
subjects affected / exposed	3 / 19 (15.79%)		
occurrences (all)	3		

Change in sustained attention subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Emotional disorder subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Insomnia subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Irritability subjects affected / exposed occurrences (all)	2 / 19 (10.53%) 2		
Mood altered subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Nervousness subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Perseveration subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Regressive behaviour subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Tic subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Product issues Device dislocation subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Investigations Neutrophil count decreased subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Injury, poisoning and procedural complications			

Fall			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	3		
Foot fracture			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Head injury			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Limb injury			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Skin abrasion			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Skin laceration			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Wrist fracture			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Nervous system disorders			
Dizziness			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Dyspraxia			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Fine motor skill dysfunction			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Headache			
subjects affected / exposed	4 / 19 (21.05%)		
occurrences (all)	7		
Lethargy			

subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Memory impairment			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Seizure			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Somnolence			
subjects affected / exposed	3 / 19 (15.79%)		
occurrences (all)	3		
Tremor			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	3		
Eye disorders			
Ocular hyperaemia			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Gastrointestinal disorders			
Abdominal pain upper			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Abdominal pain			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Vomiting			
subjects affected / exposed	6 / 19 (31.58%)		
occurrences (all)	8		
Gastrooesophageal reflux disease			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Diarrhoea			
subjects affected / exposed	4 / 19 (21.05%)		
occurrences (all)	5		
Skin and subcutaneous tissue disorders			

Rash			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Dermatitis contact			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Erythema			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Renal and urinary disorders			
Pollakiuria			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Musculoskeletal and connective tissue disorders			
Muscle spasms			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Neck pain			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Pain in extremity			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Infections and infestations			
Conjunctivitis bacterial			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Upper respiratory tract infection			
subjects affected / exposed	4 / 19 (21.05%)		
occurrences (all)	11		
Ear infection			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Eye infection			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		

Gastroenteritis			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Helicobacter gastritis			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Influenza			
subjects affected / exposed	2 / 19 (10.53%)		
occurrences (all)	2		
Lymphangitis			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Nasopharyngitis			
subjects affected / exposed	3 / 19 (15.79%)		
occurrences (all)	6		
Parainfluenzae virus infection			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Pharyngitis			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Pharyngitis streptococcal			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	2		
Respiratory syncytial virus infection			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Streptococcal infection			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Tonsillitis			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		
Conjunctivitis			
subjects affected / exposed	1 / 19 (5.26%)		
occurrences (all)	1		

Coronavirus infection subjects affected / exposed occurrences (all)	2 / 19 (10.53%) 2		
Viral myositis subjects affected / exposed occurrences (all)	1 / 19 (5.26%) 1		
Metabolism and nutrition disorders Decreased appetite subjects affected / exposed occurrences (all)	3 / 19 (15.79%) 3		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
29 November 2021	- Study assessments revised - Procedures related to COVID-19 were added
30 March 2023	- Increased doses of NBI-827104 - The maximum duration of the study was revised. - An interim analysis was added. - PK blood sample collection was revised. - Primary endpoint was revised. - Secondary objectives were recategorized. - Enrollment criteria were revised.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

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

The study was terminated early by the Sponsor; therefore, no participants completed the study.

Notes: