



## Clinical trial results:

**An open-label multi-center single agent panobinostat roll-over protocol for patients who have completed a previous Novartis-sponsored panobinostat study and are judged by the investigator to benefit from continued single agent panobinostat treatment**

### Summary

EudraCT number	2012-005252-41
Trial protocol	ES NL
Global end of trial date	19 November 2018

### Results information

Result version number	v1
This version publication date	18 December 2019
First version publication date	18 December 2019

### Trial information

#### Trial identification

Sponsor protocol code	CLBH589B2402B
-----------------------	---------------

#### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01802879
WHO universal trial number (UTN)	-

Notes:

### Sponsors

Sponsor organisation name	Novartis Pharma AG
Sponsor organisation address	CH-4002, Basel, Switzerland,
Public contact	Study Director, Novartis Pharma AG, 41 613241111, Novartis.email@novartis.com
Scientific contact	Study Director, 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	19 November 2018
Is this the analysis of the primary completion data?	Yes
Primary completion date	19 November 2018
Global end of trial reached?	Yes
Global end of trial date	19 November 2018
Was the trial ended prematurely?	No

Notes:

---

**General information about the trial**

---

Main objective of the trial:

To evaluate long term safety data (serious adverse events and adverse events)

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	24 June 2013
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	Israel: 1
Country: Number of subjects enrolled	Netherlands: 1
Country: Number of subjects enrolled	Spain: 2
Country: Number of subjects enrolled	United States: 4
Worldwide total number of subjects	8
EEA total number of subjects	3

Notes:

---

**Subjects enrolled per age group**

---

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	5
From 65 to 84 years	3

85 years and over	0
-------------------	---

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details:

There was no screening period. Patients enrolled into trial directly from the parent protocol.

### Period 1

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

### Arms

<b>Arm title</b>	Panobinostat - 10 to 40 mg/day TIW QoW
------------------	--

Arm description:

10 to 40mg/day TIW QoW (3 times/week every other week) as per parent protocol design

Arm type	Experimental
Investigational medicinal product name	Panobinostat
Investigational medicinal product code	LBH589
Other name	
Pharmaceutical forms	Capsule, hard
Routes of administration	Oral use

Dosage and administration details:

10 - 40 mg/day TIW QoW (three times a week every other week)

<b>Number of subjects in period 1</b>	Panobinostat - 10 to 40 mg/day TIW QoW
Started	8
Completed	0
Not completed	8
Disease progression	6
Administrative problems	2

## Baseline characteristics

### Reporting groups

Reporting group title	Panobinostat - 10 to 40 mg/day TIW QoW
Reporting group description: 10 to 40mg/day TIW QoW (3 times/week every other week) as per parent protocol design	

Reporting group values	Panobinostat - 10 to 40 mg/day TIW QoW	Total	
Number of subjects	8	8	
Age categorical Units: Subjects			
Adults (18-64 years)	5	5	
From 65-84 years	3	3	
Age Continuous Units: years arithmetic mean standard deviation	54 ± 14.5	-	
Sex: Female, Male Units: Subjects			
Female	4	4	
Male	4	4	
Parent protocol participants Units: Subjects			
CLBH589B2201	2	2	
CLBH589B2207	3	3	
CLBH589E2214	1	1	
CLBH589X2105	2	2	

## End points

### End points reporting groups

Reporting group title	Panobinostat - 10 to 40 mg/day TIW QoW
Reporting group description: 10 to 40mg/day TIW QoW (3 times/week every other week) as per parent protocol design	

### Primary: Overview of adverse events (Safety Set)

End point title	Overview of adverse events (Safety Set) <sup>[1]</sup>
End point description: Adverse events were collected from baseline up to 30 days post treatment at scheduled visits. Severity of adverse events was assessed according to the current version of Common Terminology Criteria for Adverse Events (CTCAE). If CTCAE grading did not exist for an adverse event, the severity of mild, moderate, severe, and life-threatening, corresponding to Grades 1 - 4, was used	
End point type	Primary
End point timeframe: Baseline up to approximately 60 months	

Notes:

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

Justification: No statistical analysis was done

<b>End point values</b>	Panobinostat - 10 to 40 mg/day TIW QoW			
Subject group type	Reporting group			
Number of subjects analysed	8			
Units: participants				
Any adverse event (AE)	6			
Any treatment related AE	2			
Any serious adverse event (SAE)	2			
Grade 3 or 4 AE	3			
Grade 3 or 4 AE - suspected to be related	1			
AEs leading discontinuation	0			
AEs leading to dose adjust/ temp dose interruption	2			
On-treatment death	0			

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percentage of patients with clinical benefit as assessed by the investigator.

End point title	Percentage of patients with clinical benefit as assessed by the investigator.
-----------------	---

---

End point description:

Patients were assessed by investigators at scheduled visits to determine if patient continued to benefit from panobinostat therapy.

---

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

---

End point timeframe:

baseline up to approximately 5 years

---

End point values	Panobinostat - 10 to 40 mg/day TIW QoW			
Subject group type	Reporting group			
Number of subjects analysed	8			
Units: participants				
Participants with clinical benefit	7			

### Statistical analyses

---

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

Adverse events were collected from first dose of study treatment until end of study treatment plus 30 days post treatment, up to maximum duration of 60 months

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

### Dictionary used

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

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

### Reporting groups

Reporting group title	Panobinostat - 10 to 40 mg/day TIW QoW
-----------------------	--

Reporting group description:

10 to 40mg/day TIW QoW (3 times/week every other week) as per parent protocol design

<b>Serious adverse events</b>	Panobinostat - 10 to 40 mg/day TIW QoW		
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 8 (25.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events			
Nervous system disorders			
Cerebrovascular accident			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
Non-cardiac chest pain			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

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

<b>Non-serious adverse events</b>	Panobinostat - 10 to 40 mg/day TIW QoW		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	4 / 8 (50.00%)		



Investigations			
Blood creatinine increased			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
Platelet count decreased			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Benign muscle neoplasm			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
Nervous system disorders			
Neuropathy peripheral			
subjects affected / exposed	2 / 8 (25.00%)		
occurrences (all)	1		
Blood and lymphatic system disorders			
Neutropenia			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
Gastric disorder			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
Skin and subcutaneous tissue disorders			
Pruritus			
subjects affected / exposed	1 / 8 (12.50%)		
occurrences (all)	1		
Psychiatric disorders			
Insomnia			

subjects affected / exposed occurrences (all)	1 / 8 (12.50%) 1		
Musculoskeletal and connective tissue disorders Bone pain subjects affected / exposed occurrences (all)  Osteoarthritis subjects affected / exposed occurrences (all)	1 / 8 (12.50%) 1  1 / 8 (12.50%) 1		
Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all)	1 / 8 (12.50%) 1		

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
11 March 2016	The main purpose of the amendment is to change the primary endpoint to safety to better characterize the long-term safety of the compound. In addition, the protocol has been amended to include the collection of all AEs (including nonserious AEs) and an investigator descriptive attestation of continued clinical benefit (Yes/No).

Notes:

---

### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported