Clinical trial results:
A multi-centre 3-year follow-up study to assess the viral activity in patients who failed to achieve sustained virologic response in Novartis-sponsored alisporivir studies for chronic hepatitis C patients

Summary

EudraCT number	2011-006132-24
Trial protocol	ES HU GB PL IT DE
Global end of trial date	23 January 2014

Results information

Result version number	v1 (current)
This version publication date	13 July 2016
First version publication date	07 August 2015

Trial information

Trial identification

Sponsor protocol code	CDEB025A2313

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02465203
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,
Scientific contact	Clinical Disclosure Office, Novartis Pharma AG, 41 613241111,

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	23 January 2014
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	23 January 2014
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To determine the persistence of resistance associated variants associated with failure to previous alisporivir therapy in patients previously enrolled in three alisporivir Novartis trials who relapsed between end of treatment and twenty-four weeks later. The three trials were: CDEB025A2210, CDEB025A2211, CDEB025A2301.

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	03 April 2012
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	Poland: 9
Country: Number of subjects enrolled	Spain: 4
Country: Number of subjects enrolled	Germany: 15
Country: Number of subjects enrolled	Hungary: 1
Country: Number of subjects enrolled	Italy: 6
Country: Number of subjects enrolled	United States: 15
Country: Number of subjects enrolled	Australia: 3
Country: Number of subjects enrolled	Belgium: 1
Country: Number of subjects enrolled	India: 2
Country: Number of subjects enrolled	Korea, Republic of: 6
Country: Number of subjects enrolled	Romania: 20
Country: Number of subjects enrolled	Taiwan: 17
Country: Number of subjects enrolled	Thailand: 3
Country: Number of subjects enrolled	Vietnam: 2
Country: Number of subjects enrolled	Canada: 1
Worldwide total number of subjects	105
EEA total number of subjects	56

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)	97
From 65 to 84 years	8
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Patients from various Novartis studies
(feeder studies) who had been treated with alisporivir and had not achieveed sustained virologic response 24 weeks after end of treatment (SVR24), i.e.,
treatment failure patients, entered this study. No study treatment was involved.

Pre-assignment

Screening details:

The only screening criteria was > than or equal to 18 years of age, previous participation in Novartis hepatiitis C study and failure to achieve SVR24.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	Patients from Study 2210

Arm description:

Patients from Study 2210

Arm type	Patients from Study 2210
Investigational medicinal product name	Alisporivir
Investigational medicinal product code	DEB025
Other name	
Pharmaceutical forms	Capsule, soft
Routes of administration	Oral use

Dosage and administration details:

No drug administered in this trial.

Arm title	Patients from Study 2301

Arm description:

Patients from Study 2301

Arm type	Patients from Study 2301
Investigational medicinal product name	Alisporivir
Investigational medicinal product code	DEB025
Other name	
Pharmaceutical forms	Capsule, soft
Routes of administration	Oral use

Dosage and administration details:

No drug administered in this trial.

Arm title	Patients from Study 2211 Overall

Arm description:

Patients from Study 2211 Overall

Arm type	Patients from Study 2211 Overall

Investigational medicinal product name	Alisporivir
Investigational medicinal product code	DEB025
Other name	
Pharmaceutical forms	Capsule, soft
Routes of administration	Oral use

Dosage and administration details:

No drug administered in this trial.

Number of subjects in period 1	Patients from Study 2210	Patients from Study 2301	Patients from Study 2211 Overall
Started	56	36	13
Completed	0	0	0
Not completed	56	36	13
Consent withdrawn by subject	1	1	1
Study terminated by sponsor	50	34	11
New therapy for study indication	4	-	-
Protocol deviation	1	1	1

Baseline characteristics

Reporting groups	
Reporting group title	Patients from Study 2210
Reporting group description: Patients from Study 2210	
Reporting group title	Patients from Study 2301
Reporting group description: Patients from Study 2301	
Reporting group title	Patients from Study 2211 Overall
Reporting group description: Patients from Study 2211 Overall	

Reporting group values	Patients from Study 2210	Patients from Study 2301	Patients from Study 2211 Overall
Number of subjects	56	36	13
Age categorical Units: Subjects			
Adults (18-64 years)	51	33	13
From 65-84 years	5	3	0
Gender categorical Units: Subjects			
Female	23	22	4
Male	33	14	9

Reporting group values	Total		
Number of subjects	105		
Age categorical Units: Subjects			
Adults (18-64 years)	97		
From 65-84 years	8		
Gender categorical Units: Subjects			
Female	49		
Male	56		

End points

End points reporting groups

Reporting group title	Patients from Study 2210
Reporting group description: Patients from Study 2210	
Reporting group title	Patients from Study 2301
Reporting group description: Patients from Study 2301	
Reporting group title	Patients from Study 2211 Overall
Reporting group description: Patients from Study 2211 Overall	

Primary: There was no hypothesis testing in ths study.

End point title	There was no hypothesis testing in ths study.[1]
End point description: There was no hypothesis testing in this study.	
End point type	Primary
End point timeframe: 27 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: There was no hypothesis testing in this study.

End point values	Patients from Study 2210	Patients from Study 2301	Patients from Study 2211 Overall	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	0[2]	0[3]	0[4]	
Units: None				

Notes:

[2] - No hypothesis testing was done.

[3] - No hypothesis testing was done.

[4] - No hypothesis testing was done.

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse Events are collected from First Patient First Visit (FPFV) until Last Patient Last Visit (LPLV). All Adverse events are reported in this record from First Patient First Treatment until Last Patient Last Visit.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	16.1

Reporting groups

Reporting group title	From Study 2301
Reporting group description:	
From Study 2301	
Reporting group title	From Study 2211 Overall
Reporting group description:	
From Study 2211 Overall	
Reporting group title	From Study 2211 IFN-free
Reporting group description:	
From Study 2211 IFN-free	
Reporting group title	From Study 2210
Reporting group description:	
From Study 2210	

Serious adverse events	From Study 2301	From Study 2211 Overall	From Study 2211 IFN-free
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 33 (0.00%)	0 / 12 (0.00%)	0 / 6 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
HEPATOCELLULAR CARCINOMA			
subjects affected / exposed	0 / 33 (0.00%)	0 / 12 (0.00%)	0 / 6 (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
Injury, poisoning and procedural complications			
HAND FRACTURE			
subjects affected / exposed	0 / 33 (0.00%)	0 / 12 (0.00%)	0 / 6 (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

Hepatobiliary disorders			
CHOLECYSTITIS			
subjects affected / exposed	0 / 33 (0.00%)	0 / 12 (0.00%)	0 / 6 (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
CHOLELITHIASIS			
subjects affected / exposed	0 / 33 (0.00%)	0 / 12 (0.00%)	0 / 6 (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	From Study 2210		
Total subjects affected by serious adverse events			
subjects affected / exposed	3 / 53 (5.66%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
HEPATOCELLULAR CARCINOMA			
subjects affected / exposed	1 / 53 (1.89%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Injury, poisoning and procedural complications			
HAND FRACTURE			
subjects affected / exposed	1 / 53 (1.89%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hepatobiliary disorders			
CHOLECYSTITIS			
subjects affected / exposed	1 / 53 (1.89%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
CHOLELITHIASIS			
subjects affected / exposed	1 / 53 (1.89%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 2 %

Non-serious adverse events	From Study 2301	From Study 2211 Overall	From Study 2211 IFN-free
Total subjects affected by non-serious adverse events			
subjects affected / exposed	3 / 33 (9.09%)	4 / 12 (33.33%)	2 / 6 (33.33%)
Investigations			
BLOOD TRIGLYCERIDES INCREASED			
subjects affected / exposed	0 / 33 (0.00%)	1 / 12 (8.33%)	0 / 6 (0.00%)
occurrences (all)	0	1	0
TOTAL BILE ACIDS INCREASED			
subjects affected / exposed	0 / 33 (0.00%)	1 / 12 (8.33%)	0 / 6 (0.00%)
occurrences (all)	0	1	0
Nervous system disorders			
HEADACHE			
subjects affected / exposed	1 / 33 (3.03%)	0 / 12 (0.00%)	0 / 6 (0.00%)
occurrences (all)	1	0	0
General disorders and administration site conditions			
ASTHENIA			
subjects affected / exposed	1 / 33 (3.03%)	0 / 12 (0.00%)	0 / 6 (0.00%)
occurrences (all)	1	0	0
FATIGUE			
subjects affected / exposed	1 / 33 (3.03%)	0 / 12 (0.00%)	0 / 6 (0.00%)
occurrences (all)	1	0	0
Gastrointestinal disorders			
ABDOMINAL PAIN UPPER			
subjects affected / exposed	0 / 33 (0.00%)	1 / 12 (8.33%)	0 / 6 (0.00%)
occurrences (all)	0	1	0
Hepatobiliary disorders			
HEPATIC STEATOSIS			
subjects affected / exposed	1 / 33 (3.03%)	2 / 12 (16.67%)	1 / 6 (16.67%)
occurrences (all)	1	2	1
Respiratory, thoracic and mediastinal disorders			
RESPIRATORY TRACT CONGESTION			
subjects affected / exposed	1 / 33 (3.03%)	0 / 12 (0.00%)	0 / 6 (0.00%)
occurrences (all)	1	0	0
Skin and subcutaneous tissue disorders			

PRURITUS			
subjects affected / exposed	1 / 33 (3.03%)	0 / 12 (0.00%)	0 / 6 (0.00%)
occurrences (all)	1	0	0
Musculoskeletal and connective tissue disorders			
NECK PAIN			
subjects affected / exposed	0 / 33 (0.00%)	1 / 12 (8.33%)	1 / 6 (16.67%)
occurrences (all)	0	2	2
Infections and infestations			
UPPER RESPIRATORY TRACT INFECTION			
subjects affected / exposed	0 / 33 (0.00%)	0 / 12 (0.00%)	0 / 6 (0.00%)
occurrences (all)	0	0	0

Non-serious adverse events	From Study 2210		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	5 / 53 (9.43%)		
Investigations			
BLOOD TRIGLYCERIDES INCREASED			
subjects affected / exposed	0 / 53 (0.00%)		
occurrences (all)	0		
TOTAL BILE ACIDS INCREASED			
subjects affected / exposed	0 / 53 (0.00%)		
occurrences (all)	0		
Nervous system disorders			
HEADACHE			
subjects affected / exposed	0 / 53 (0.00%)		
occurrences (all)	0		
General disorders and administration site conditions			
ASTHENIA			
subjects affected / exposed	0 / 53 (0.00%)		
occurrences (all)	0		
FATIGUE			
subjects affected / exposed	2 / 53 (3.77%)		
occurrences (all)	2		
Gastrointestinal disorders			
ABDOMINAL PAIN UPPER			
subjects affected / exposed	0 / 53 (0.00%)		
occurrences (all)	0		

Hepatobiliary disorders HEPATIC STEATOSIS subjects affected / exposed occurrences (all)	 1 / 53 (1.89%) 1		
Respiratory, thoracic and mediastinal disorders RESPIRATORY TRACT CONGESTION subjects affected / exposed occurrences (all)	 0 / 53 (0.00%) 0		
Skin and subcutaneous tissue disorders PRURITUS subjects affected / exposed occurrences (all)	 0 / 53 (0.00%) 0		
Musculoskeletal and connective tissue disorders NECK PAIN subjects affected / exposed occurrences (all)	 0 / 53 (0.00%) 0		
Infections and infestations UPPER RESPIRATORY TRACT INFECTION subjects affected / exposed occurrences (all)	 2 / 53 (3.77%) 3		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

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

Study was terminated due to change in alisporivir development program strategy. Interferon (IFN) regimen no longer of interest as an effective treatment.

Notes: