Clinical trial results:
Bictegravir concentrations and antiviral activity in cerebrospinal fluid in HIV-1 Infected individuals

Summary

EudraCT number	2018-000302-39
Trial protocol	ES
Global end of trial date	25 September 2018

Results information

Result version number	v1 (current)
This version publication date	17 October 2021
First version publication date	17 October 2021

Trial information

Trial identification

Sponsor protocol code	IN-ES-380-4475

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Fight AIDS and Infectious diseases foundation
Sponsor organisation address	Cta de Canyet s/n, Badalona, Spain,
Public contact	Albert Tuldrà, Fight AIDS and Infectious diseases foundation, 0034 934657897, atuldra@flsida.org
Scientific contact	Albert Tuldrà, Fight AIDS and Infectious diseases foundation, 0034 934657897, atuldra@flsida.org

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 November 2018
Is this the analysis of the primary completion data?	Yes
Primary completion date	25 September 2018
Global end of trial reached?	Yes
Global end of trial date	25 September 2018
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

- To assess Bictegravir concentrations in CSF and to estimate penetration into the CNS.
-To evaluate antiviral activity of a combination of TAF/FTC/BIC in CSF.

Protection of trial subjects:

The sponsor contracted an insurance as a mandatory aspect defined in the legal framework of the country site due a different procedures performed during the clinical trial out of routine clinical practice.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	09 April 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	Spain: 15
Worldwide total number of subjects	15
EEA total number of subjects	15

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)	15
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Subjects who met inclusion criteria and accepted to sign the informed consent to participate will be cited for a screening visit. A total of 16 HIV-infected patients were selected at the screening phase. Recruitment started on 23/Jul/2018, last patient recurited was on 31/Jul/2018.

Pre-assignment

Screening details:

16 patients were screened. One patient didn't meet all inclusion criteria

Pre-assignment period milestones

Number of subjects started	15
Number of subjects completed	15

Period 1

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

Arms

Arm title	BIC/TAF/FTC

Arm description:

Bictegravir/Emtricitabine/Tenofovir alafenamide fumarate

Arm type	Experimental
Investigational medicinal product name	Bictegravir/Emtricitabine/Tenofovir alafenamide fumarate
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

50 mg of Bictegravir/ 200 mg of Emtricitabine/25 mg of Tenofovir alafenamide fumarate

Number of subjects in period 1	BIC/TAF/FTC
Started	15
Completed	15

Baseline characteristics

Reporting groups

Reporting group title	Overall trial (overall period)

Reporting group description: -

Reporting group values	Overall trial (overall period)	Total	
Number of subjects	15	15	
Age categorical Units: Subjects			
In utero		0	
Preterm newborn infants (gestational age < 37 wks)		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)		0	
From 65-84 years		0	
85 years and over		0	
Age continuous Units: years			
median	42		
inter-quartile range (Q1-Q3)	37 to 56	-	
Gender categorical Units: Subjects			
Female	2	2	
Male	13	13	

End points

End points reporting groups

Reporting group title	BIC/TAF/FTC
Reporting group description:	
Bictegravir/Emtricitabine/Tenofovir alafenamide fumarate	

Primary: Total Bictegravir concentrations in cerebrospinal fluid.

End point title	Total Bictegravir concentrations in cerebrospinal fluid.[1]
End point description:	
End point type	Primary
End point timeframe:	
w12	

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: Data reported has been a descriptive analysis, which shows the total Bictegravir concentration in CSF

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	6.9 (4.8 to 10.9)			

Statistical analyses

No statistical analyses for this end point

Primary: Unbound Bictegravir concentrations in cerebrospinal fluid.

End point title	Unbound Bictegravir concentrations in cerebrospinal fluid.[2]
End point description:	
End point type	Primary
End point timeframe:	
w12	

Notes:

[2] - 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: Data reported has been a descriptive analysis, which shows the unbound Bictegravir concentration in CSF

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	2.48 (1.6 to 3.7)			

Statistical analyses

No statistical analyses for this end point

Primary: Total Bictegravir concentrations in blood plasma

End point title	Total Bictegravir concentrations in blood plasma[3]

End point description:

End point type	Primary

End point timeframe:

w12

Notes:

[3] - 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: Data reported has been a descriptive analysis, which shows the total Bictegravir concentration in blood plasma

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	1837.1 (1237.2 to 2586.7)			

Statistical analyses

No statistical analyses for this end point

Primary: Bictegravir CSF/plasma ratio

End point title	Bictegravir CSF/plasma ratio[4]

End point description:

End point type	Primary

End point timeframe:

w12

Notes:

[4] - 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: Data reported has been a descriptive analysis, which shows the Bictegravi-CSF/blood plasma ratio

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: Ratio				
median (inter-quartile range (Q1-Q3))	0.003 (0.002 to 0.004)			

Statistical analyses

No statistical analyses for this end point

Primary: CSF HIV-1 RNA copies

End point title	CSF HIV-1 RNA copies[5]

End point description:

End point type	Primary

End point timeframe:

w12

Notes:

[5] - 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: Data reported has been a descriptive analysis, which shows the HIV-1 viral load in CSF

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: copies/ml	39			

Statistical analyses

No statistical analyses for this end point

Primary: HIV-1 RNA in blood plasma.

End point title	HIV-1 RNA in blood plasma.[6]

End point description:

End point type	Primary

End point timeframe:

w12

Notes:

[6] - 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: Data reported has been a descriptive analysis, which shows the HIV-1 viral load in blood plasma

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: copies/ml	39			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information[1]	
Timeframe for reporting adverse events: w12	
Assessment type	Systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	22.1

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

Notes:

[1] - There are no non-serious adverse events recorded for these results. It is expected that there will be at least one non-serious adverse event reported.
Justification: Non-serious adverse events were reported

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

None reported

Online references

http://www.ncbi.nlm.nih.gov/pubmed/31784745