Clinical trial results:
Bictegravir concentrations and antiviral activity in genital fluids and rectal compartment in HIV-1 infected individuals ("BIGER Study").

Summary

EudraCT number	2018-002310-12
Trial protocol	ES
Global end of trial date	03 December 2019

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-380-4663

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	Ctra Canyet s/n, Badalona/Barcelona, Spain, 08916
Public contact	Unidad de VIH, Hospital Universitari de Bellvitge, 0034 9333590112876, dpodzamczer@bellvitgehospital.cat
Scientific contact	Unidad de VIH, Hospital Universitari de Bellvitge, 0034 9333590112876, anavarroa@bellvitgehospital.cat

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	03 March 2020
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	03 December 2019
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

-To evaluate HIV viral kinetics in seminal plasma and rectal fluid, and cervicovaginal fluid in HIV-1 infected ART naïve male and female individuals, respectively, initiating Bictegravir/FTC/TAF.

- To determine Bictegravir concentrations in fluid and tissue from the male and female genital tract (seminal plasma and cervicovaginal fluid) and rectal compartment (rectal tissue and rectal fluid) in HIV-1 infected male and female individuals receiving ART with Bictegravir/FTC/TAF.

Protection of trial subjects:

Although assessed treatment is approved and is used in routine care, 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	01 October 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: 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 months)	0
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:

Subjects who met inclusion criteria and accepted to sign the informed consent to participate will be cited for a screening visit. A total of 25 HIV-infected patients were selected at the screening phase, and 1 patient was screening failure. Recruitment was started 01-feb-2019 and the last patient recruited was 28-may-2019. First

Pre-assignment

Screening details:

25 patient were screened. 1 patient was screening failure.

Pre-assignment period milestones

Number of subjects started	25[1]
Number of subjects completed	24

Pre-assignment subject non-completion reasons

Reason: Number of subjects	Screening failure: 1

Notes:

[1] - The number of subjects reported to have started the pre-assignment period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same. Justification: 25 patients were screened. 1 patient was screening failure

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/Tenofovir Alafenamide Fumarate/Emtricitabine treatment

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 Bictegravir /200 mg Emtracitibine/Tenofovir alafenamide fumarate 25 mg

Number of subjects in period 1	BIC/TAF/FTC
Started	24
Completed	23
Not completed	1
Protocol deviation	1

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	24	24	
Age categorical Units: Subjects			
Age continuous Units: years median inter-quartile range (Q1-Q3)	 30 20 to 57	 -	
Gender categorical Units: Subjects			
Female	8	8	
Male	16	16	

Subject analysis sets

Subject analysis set title	Overall analysis
Subject analysis set type	Full analysis

Subject analysis set description:

All patients were included in this analysis. Full analysis assessed the differences in viral suppression efficacy on the different reservoirs evaluated

Reporting group values	Overall analysis		
Number of subjects	23		
Age categorical Units: Subjects			
Age continuous Units: years median inter-quartile range (Q1-Q3)			
Gender categorical Units: Subjects			
Female	8		
Male	15		

End points

End points reporting groups

Reporting group title	BIC/TAF/FTC
Reporting group description:	
Bictegravir/Tenofovir Alafenamide Fumarate/Emtricitabine treatment	
Subject analysis set title	Overall analysis
Subject analysis set type	Full analysis
Subject analysis set description:	
All patients were included in this analysis. Full analysis assessed the differences in viral suppression efficacy on the different reservoirs evaluated	

Primary: HIV-1 RNA decay in seminal plasma from baseline and up to 24 weeks

End point title	HIV-1 RNA decay in seminal plasma from baseline and up to 24 weeks[1]
End point description:	
End point type	Primary
End point timeframe:	
week 24	

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 Bictegravir concentration in different anatomical reservoirs

End point values	BIC/TAF/FTC	Overall analysis		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	15[2]	15		
Units: log10 copies/ml				
median (inter-quartile range (Q1-Q3))	-2.23 (-2.49 to -1.11)	-2.23 (-2.49 to -1.11)		

Notes:

[2] - Only male participants were assessed on this endpoint

Statistical analyses

No statistical analyses for this end point

Primary: Concentration of Bictegravir in seminal plasma, at week4 after initiation a first ART regimen with Bictegravir/FTC/TAF.

End point title	Concentration of Bictegravir in seminal plasma, at week4 after initiation a first ART regimen with Bictegravir/FTC/TAF.[3]
End point description:	
End point type	Primary
End point timeframe:	
week 4	

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 Bictegravir concentration

in different anatomical reservoirs

End point values	BIC/TAF/FTC	Overall analysis		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	15[4]	15		
Units: ng/ml or ng/g				
median (inter-quartile range (Q1-Q3))	65.5 (20.1 to 923)	65.5 (20.1 to 923)		

Notes:

[4] - Only male participants were assessed on this endpoint

Statistical analyses

No statistical analyses for this end point

Primary: HIV-1 RNA decay in rectal fluid from baseline and up to 24 weeks

End point title	HIV-1 RNA decay in rectal fluid from baseline and up to 24 weeks[5]

End point description:

End point type	Primary

End point timeframe:

week 24

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 RNA decay in different anatomical reservoirs

End point values	BIC/TAF/FTC	Overall analysis		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	15[6]	15		
Units: log10 copies/mL				
median (inter-quartile range (Q1-Q3))	-2.89 (-3.4 to -1.68)	-2.89 (-3.4 to -1.68)		

Notes:

[6] - Only male participants were assessed on this endpoint

Statistical analyses

No statistical analyses for this end point

Primary: Concentration of Bictegravir in rectal fluid at weeks 4 after initiation a first ART regimen with Bictegravir/FTC/TAF.

End point title	Concentration of Bictegravir in rectal fluid at weeks 4 after initiation a first ART regimen with Bictegravir/FTC/TAF.[7]

End point description:

End point type	Primary

End point timeframe:

weeks 4.

Notes:

[7] - 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 Bictegravir concentration in different anatomical reservoirs

End point values	BIC/TAF/FTC	Overall analysis		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	15[8]	15		
Units: ng/g				
median (inter-quartile range (Q1-Q3))	74.1 (6 to 478.5)	74.1 (6 to 478.5)		

Notes:

[8] - Only male participants were assessed on this endpoint

Statistical analyses

No statistical analyses for this end point

Primary: Concentration of Bictegravir in cervicovaginal fluid at weeks 12 after initiation a first ART regimen with Bictegravir/FTC/TAF.

End point title	Concentration of Bictegravir in cervicovaginal fluid at weeks 12 after initiation a first ART regimen with Bictegravir/FTC/TAF.[9]

End point description:

End point type	Primary

End point timeframe:

Bictegravir concentration was assessed at week 12

Notes:

[9] - 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 Bictegravir concentration in different anatomical reservoirs

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	8[10]			
Units: ng/mL				
median (inter-quartile range (Q1-Q3))	61.6 (14.4 to 1760.2)			

Notes:

[10] - Only female participants were assessed on this endpoint

Statistical analyses

No statistical analyses for this end point

Secondary: HIV-1 RNA decay in blood plasma from baseline and up to 24 weeks

End point title	HIV-1 RNA decay in blood plasma from baseline and up to 24 weeks

End point description:

End point type	Secondary

End point timeframe:

HIV RNA decay in blood plasma was assessed at: Day 3, Day 7, Day 14, week 4, week 12 and week 24

End point values	Overall analysis			
Subject group type	Subject analysis set			
Number of subjects analysed	23			
Units: log10 copies/mL				
median (inter-quartile range (Q1-Q3))	-3.48 (-3.68 to -3.17)			

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of Bictegravir in blood plasma at week 12 after initiation a first ART regimen with Bictegravir/FTC/TAF in male participants

End point title	Concentration of Bictegravir in blood plasma at week 12 after initiation a first ART regimen with Bictegravir/FTC/TAF in male participants

End point description:

End point type	Secondary

End point timeframe:

week 12

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	15[11]			
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	2640 (424 to 10300)			

Notes:

[11] - Male participants data

Statistical analyses

No statistical analyses for this end point

Secondary: Concentration of Bictegravir in blood plasma at week 12 after initiation a first ART regimen with Bictegravir/FTC/TAF in female participants

End point title	Concentration of Bictegravir in blood plasma at week 12 after

	initiation a first ART regimen with Bictegravir/FTC/TAF in female participants

End point description:

End point type	Secondary

End point timeframe:

week 12

End point values	BIC/TAF/FTC			
Subject group type	Reporting group			
Number of subjects analysed	8[12]			
Units: ng/ml				
median (inter-quartile range (Q1-Q3))	2320 (834 to 5770)			

Notes:

[12] - Female participants

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information[1]	
Timeframe for reporting adverse events:	
Adverse event were reported since baseline visit to w24 and follow-up visit	
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 event were reported during the 24 weeks of follow up

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/32945851