



## Clinical trial results:

## THE EFFECT OF STATINS TREATMENT ON HIV-1-INFECTED PATIENTS INTERRUPTING ANTIRETROVIRAL THERAPY

### Summary

EudraCT number	2004-004802-26
Trial protocol	ES
Global end of trial date	31 December 2005

### Results information

Result version number	v1 (current)
This version publication date	16 February 2018
First version publication date	16 February 2018

### Trial information

#### Trial identification

Sponsor protocol code	SIM-ATOR
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#### Additional study identifiers

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

Notes:

#### Sponsors

Sponsor organisation name	Fundació Lluita contra la SIDA
Sponsor organisation address	Crta de Canyet s/n, Badalona, Spain, 08916
Public contact	CRA, Fundació Lluita contra la SIDA, +34 93 497 84 14, <a href="mailto:sgel@flsida.org">sgel@flsida.org</a>
Scientific contact	CRA, Fundació Lluita contra la SIDA, +34 93 497 84 14,

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:

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**Results analysis stage**

Analysis stage	Final
Date of interim/final analysis	31 December 2005
Is this the analysis of the primary completion data?	Yes
Primary completion date	31 December 2005
Global end of trial reached?	Yes
Global end of trial date	31 December 2005
Was the trial ended prematurely?	No

Notes:

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**General information about the trial**

Main objective of the trial:

To evaluate if treatment with statins (atorvastatina or simvastatina), in the short (4 weeks) term inhibits the viral replication of the VIH after the interruption of the highly active antiretroviral treatment (HAART).

Protection of trial subjects:

not specific

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 June 2005
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

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**Population of trial subjects**

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**Subjects enrolled per country**

Country: Number of subjects enrolled	Spain: 41
Worldwide total number of subjects	41
EEA total number of subjects	41

Notes:

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**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)	41
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

Eligible subjects were chronically HIV-1-infected patients with viral loads of less than 50 copies/ml and CD4 cell counts of 500 cells/ml or greater during the past 6 months of HAART.

### Pre-assignment

Screening details:

41 patients were enrolled in the clinical trial.

### Period 1

Period 1 title	overall (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Control group

Arm description:

interrupted HAART

Arm type	No intervention
No investigational medicinal product assigned in this arm	

<b>Arm title</b>	Ator40 group
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Arm description:

interrupted HAART + atorvastatin 40mg/day

Arm type	Active comparator
Investigational medicinal product name	atorvastatine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

40 mg/day

<b>Arm title</b>	Ator80 group
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Arm description:

interrupted HAART + atorvastatine 80mg/day

Arm type	Active comparator
Investigational medicinal product name	atorvastatine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Tablet
Routes of administration	Oral use

Dosage and administration details:

80 mg/day

<b>Number of subjects in period 1</b>	Control group	Ator40 group	Ator80 group
Started	15	13	13
Completed	10	6	9
Not completed	5	7	4
safety reasons	4	3	3
Adverse event, non-fatal	-	4	1
Lost to follow-up	1	-	-

## Baseline characteristics

### Reporting groups

Reporting group title	Control group
Reporting group description: interrupted HAART	
Reporting group title	Ator40 group
Reporting group description: interrupted HAART + atorvastatin 40mg/day	
Reporting group title	Ator80 group
Reporting group description: interrupted HAART + atorvastatine 80mg/day	

Reporting group values	Control group	Ator40 group	Ator80 group
Number of subjects	15	13	13
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	15	13	13
From 65-84 years	0	0	0
85 years and over	0	0	0
Age continuous Units: years			
median	41	39	40
inter-quartile range (Q1-Q3)	32 to 54	34 to 46	33 to 61
Gender categorical Units: Subjects			
Female	3	4	1
Male	12	9	12

Reporting group values	Total		
Number of subjects	41		
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)	41		

From 65-84 years	0		
85 years and over	0		

  

Age continuous			
Units: years			
median			
inter-quartile range (Q1-Q3)	-		
Gender categorical			
Units: Subjects			
Female	8		
Male	33		

## End points

### End points reporting groups

Reporting group title	Control group
Reporting group description: interrupted HAART	
Reporting group title	Ator40 group
Reporting group description: interrupted HAART + atorvastatin 40mg/day	
Reporting group title	Ator80 group
Reporting group description: interrupted HAART + atorvastatine 80mg/day	

### Primary: plasma HIV-1-RNA level

End point title	plasma HIV-1-RNA level
End point description:	
End point type	Primary
End point timeframe: from baseline to week 4 and from baseline to week 12	

End point values	Control group	Ator40 group	Ator80 group	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	15	13	13	
Units: copies/ml				
median (inter-quartile range (Q1-Q3))				
baseline	50 (50 to 50)	50 (50 to 50)	50 (50 to 50)	
week 4	20000 (2500 to 100000)	130000 (40000 to 200000)	12000 (8000 to 125000)	
week 12	16500 (6000 to 18000)	8600 (2000 to 20000)	18000 (8500 to 25000)	

### Statistical analyses

Statistical analysis title	Comparing medians differences between groups
Statistical analysis description: Comparing medians differences: BI vs week 4	
Comparison groups	Ator40 group v Ator80 group

Number of subjects included in analysis	26
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	< 0.05
Method	Wilcoxon (Mann-Whitney)

### Secondary: total serum cholesterol

End point title	total serum cholesterol
End point description:	
End point type	Secondary
End point timeframe: from baseline to week 12	

End point values	Control group	Ator40 group	Ator80 group	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	15	13	13	
Units: mg/dl				
number (not applicable)				
baseline	201	213	217	
week 12	168	109	128	

### Statistical analyses

<b>Statistical analysis title</b>	Comparing medians differences between groups
Statistical analysis description: Comparing medians differences : BL vs week 12	
Comparison groups	Control group v Ator40 group
Number of subjects included in analysis	28
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	< 0.05
Method	Wilcoxon (Mann-Whitney)

<b>Statistical analysis title</b>	Comparing medians differences between groups
Statistical analysis description: Comparing medians differences : BL - week 12	
Comparison groups	Ator80 group v Control group



Number of subjects included in analysis	28
Analysis specification	Pre-specified
Analysis type	equivalence
P-value	< 0.05
Method	Wilcoxon (Mann-Whitney)

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:  
from baseline to week 12

Assessment type	Non-systematic
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### Dictionary used

Dictionary name	DAIDS AE GRADING TAB
Dictionary version	1.0

### Reporting groups

Reporting group title	Ator40 group
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Reporting group description: -

Reporting group title	Ator80 group
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Reporting group description: -

Serious adverse events	Ator40 group	Ator80 group	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 13 (0.00%)	0 / 13 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	

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

Non-serious adverse events	Ator40 group	Ator80 group	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	5 / 13 (38.46%)	1 / 13 (7.69%)	
Nervous system disorders			
cephalea			
subjects affected / exposed	1 / 13 (7.69%)	0 / 13 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	0 / 13 (0.00%)	1 / 13 (7.69%)	
occurrences (all)	0	1	
Constipation			
subjects affected / exposed	1 / 13 (7.69%)	0 / 13 (0.00%)	
occurrences (all)	1	0	
Nausea			

subjects affected / exposed occurrences (all)	1 / 13 (7.69%) 1	0 / 13 (0.00%) 0	
Renal and urinary disorders Renal colic subjects affected / exposed occurrences (all)	1 / 13 (7.69%) 1	0 / 13 (0.00%) 0	
Endocrine disorders Pancreatitis subjects affected / exposed occurrences (all)	1 / 13 (7.69%) 1	0 / 13 (0.00%) 0	
Infections and infestations Sputum purulent subjects affected / exposed occurrences (all)	1 / 13 (7.69%) 1	0 / 13 (0.00%) 0	

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
12 September 2005	Protocol amendment according to EC clarifications

Notes:

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported