



Clinical trial results:

A Prospective Single Arm, Open-label, International, Multicenter Study to Evaluate the Safety of Atazanavir (ATV) Capsule Boosted with Ritonavir (RTV) with an Optimized NRTI Background Therapy, in HIV Infected, Antiretroviral Naive and Experienced Subjects Greater Than or Equal to 6 Years to Less Than 18 Years

Summary

EudraCT number	2011-003300-21
Trial protocol	Outside EU/EEA
Global end of trial date	20 February 2017

Results information

Result version number	v2 (current)
This version publication date	31 August 2017
First version publication date	27 April 2016
Version creation reason	

Trial information

Trial identification

Sponsor protocol code	AI424-452
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Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Bristol-Myers Squibb
Sponsor organisation address	Chaussée de la Hulpe 185 1170, Brussels, Belgium, 1170
Public contact	Bristol-Myers Squibb Study Director, EU Study Start-Up Unit, Bristol-Myers Squibb International Corporation, clinical.trials@bms.com, clinical.trials@bms.com
Scientific contact	Bristol-Myers Squibb Study Director, Bristol-Myers Squibb, Clinical.Trials@bms.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?	Yes

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	20 February 2017
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	20 February 2017
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective was to assess the safety and tolerability of ATV/RTV regimens in pediatric subjects 6 to < 18 years of age treated for 24 weeks.

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and in compliance with all International Conference on Harmonization Good Clinical Practice Guidelines. All the local regulatory requirements pertinent to safety of trial subjects were followed.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	29 November 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	Argentina: 6
Country: Number of subjects enrolled	Brazil: 14
Country: Number of subjects enrolled	Chile: 3
Country: Number of subjects enrolled	Mexico: 6
Country: Number of subjects enrolled	Peru: 14
Country: Number of subjects enrolled	Russian Federation: 1
Country: Number of subjects enrolled	South Africa: 59
Country: Number of subjects enrolled	United States: 5
Worldwide total number of subjects	108
EEA total number of subjects	0

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)	50
Adolescents (12-17 years)	58
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Overall, 108 subjects were enrolled, and 59 received treatment.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to <20 kg)

Arm description:

Participants with baseline weight of 15 to <20 kg received 150 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 nucleoside reverse transcriptase inhibitors (NRTIs) for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.

Arm type	Active comparator
Investigational medicinal product name	Ritonavir, 100 mg
Investigational medicinal product code	
Other name	Norvir
Pharmaceutical forms	Capsule, Tablet
Routes of administration	Oral use

Dosage and administration details:

RTV capsules (100 mg) and tablets (100 mg) for once-daily oral administration. ATV capsules boosted with RTV capsules or tablets were to be given for at least 24 weeks.

Investigational medicinal product name	Atazanavir, 150 mg
Investigational medicinal product code	BMS-232632
Other name	Atazanavir (ATV) Reyataz
Pharmaceutical forms	Capsule
Routes of administration	Oral use

Dosage and administration details:

ATV capsules (150 mg) for once-daily oral administration. ATV capsules boosted with RTV capsules or tablets were to be given for at least 24 weeks.

Arm title	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to <40 kg)
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Arm description:

Participants with baseline weight of 20 to <40 kg received 200 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.

Arm type	Active comparator
Investigational medicinal product name	Atazanavir, 200 mg
Investigational medicinal product code	BMS-232632
Other name	Atazanavir (ATV) Reyataz
Pharmaceutical forms	Capsule
Routes of administration	Oral use

Dosage and administration details:

ATV capsules (200 mg) for once-daily oral administration. ATV capsules boosted with RTV capsules or tablets were to be given for at least 24 weeks.

Arm title	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥ 40 kg)
Arm description:	
Participants with baseline weight ≥ 40 kg received 300 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.	
Arm type	Active comparator
Investigational medicinal product name	ATV capsules, 300 mg
Investigational medicinal product code	BMS-232632
Other name	Atazanavir (ATV) Reyataz
Pharmaceutical forms	Capsule
Routes of administration	Oral use

Dosage and administration details:

ATV capsules (300 mg) for once-daily oral administration. ATV capsules boosted with RTV capsules or tablets were to be given for at least 24 weeks.

Number of subjects in period 1^[1]	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to <20 kg)	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to <40 kg)	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥ 40 kg)
Started	3	33	23
Completed	2	15	13
Not completed	1	18	10
Poor/Non-Compliance	1	4	1
Adverse event, non-fatal	-	1	1
Did Not Complete First 24 Weeks of Study	-	3	3
Death	-	-	1
Completed Only First 24 Weeks of Study	-	2	3
SUBJ REQUEST TO DISCONTINUE STUDY TRT	-	1	-
Lack of efficacy	-	7	1

Notes:

[1] - The number of subjects reported to be in the baseline period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.

Justification: Of the 108 subjects enrolled overall, only 59 received treatment.

Baseline characteristics

Reporting groups

Reporting group title	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to <20 kg)
Reporting group description: Participants with baseline weight of 15 to <20 kg received 150 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 nucleoside reverse transcriptase inhibitors (NRTIs) for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.	
Reporting group title	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to <40 kg)
Reporting group description: Participants with baseline weight of 20 to <40 kg received 200 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.	
Reporting group title	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥40 kg)
Reporting group description: Participants with baseline weight ≥40 kg received 300 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.	

Reporting group values	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to <20 kg)	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to <40 kg)	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥40 kg)
Number of subjects	3	33	23
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)	3	21	1
Adolescents (12-17 years)	0	12	22
Adults (18-64 years)	0	0	0
From 65-84 years	0	0	0
85 years and over	0	0	0
Age Continuous Units: years			
arithmetic mean	6	10.7	14.7
standard deviation	± 0	± 2.67	± 1.72
Gender, Male/Female Units: Subjects			
Female	2	17	11
Male	1	16	12
Ethnicity (NIH/OMB) Units: Subjects			
Hispanic or Latino	0	1	2
Not Hispanic or Latino	1	2	2

Unknown or Not Reported	2	30	19
Race/Ethnicity, Customized			
Units: Subjects			
White	1	5	4
Black/African American	2	24	9
Other	0	4	10
Region of Enrollment			
Units: Subjects			
Africa	2	24	8
Europe	0	1	0
North America	1	0	3
South America	0	8	12
Country			
Units: Subjects			
Argentina	0	3	0
Brazil	0	3	4
Chile	0	1	2
Mexico	1	0	1
Peru	0	1	6
Russia	0	1	0
South Africa	2	24	8
United States	0	0	2

Reporting group values	Total		
Number of subjects	59		
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)	25		
Adolescents (12-17 years)	34		
Adults (18-64 years)	0		
From 65-84 years	0		
85 years and over	0		
Age Continuous			
Units: years			
arithmetic mean			
standard deviation	-		
Gender, Male/Female			
Units: Subjects			
Female	30		
Male	29		
Ethnicity (NIH/OMB)			
Units: Subjects			
Hispanic or Latino	3		
Not Hispanic or Latino	5		
Unknown or Not Reported	51		
Race/Ethnicity, Customized			

Units: Subjects			
White	10		
Black/African American	35		
Other	14		
Region of Enrollment			
Units: Subjects			
Africa	34		
Europe	1		
North America	4		
South America	20		
Country			
Units: Subjects			
Argentina	3		
Brazil	7		
Chile	3		
Mexico	2		
Peru	7		
Russia	1		
South Africa	34		
United States	2		

End points

End points reporting groups

Reporting group title	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to <20 kg)
Reporting group description: Participants with baseline weight of 15 to <20 kg received 150 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 nucleoside reverse transcriptase inhibitors (NRTIs) for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.	
Reporting group title	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to <40 kg)
Reporting group description: Participants with baseline weight of 20 to <40 kg received 200 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.	
Reporting group title	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥40 kg)
Reporting group description: Participants with baseline weight ≥40 kg received 300 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, patients were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.	

Primary: Number of Subjects Who Died and With Serious Adverse Events (SAEs), Adverse Events (AEs) Leading to Discontinuation, Grade 2-4 Related AEs, Grade 3-4 AEs, and Centers for Disease Control (CDC) Class C AIDS Events

End point title	Number of Subjects Who Died and With Serious Adverse Events (SAEs), Adverse Events (AEs) Leading to Discontinuation, Grade 2-4 Related AEs, Grade 3-4 AEs, and Centers for Disease Control (CDC) Class C AIDS Events ^[1]
End point description: AE=any new unfavorable symptom, sign, or disease or worsening of a preexisting condition that may not have a causal relationship with treatment. SAE=a medical event that at any dose results in death, persistent or significant disability/incapacity, or drug dependency/abuse; is life-threatening, an important medical event, or a congenital anomaly/birth defect; or requires or prolongs hospitalization. Related=having certain, probable, possible, or unknown relationship to study drug. Grade 1=Mild, Grade 2=Moderate, Grade 3=Severe, Grade 4=Life-threatening or disabling, Grade 5=Death.	
End point type	Primary
End point timeframe: From first dose to last dose plus 30 days (assessed up to February 2017 approximately 42 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: Only summary statistics were planned for this endpoint.	

End point values	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to <20 kg)	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to <40 kg)	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥40 kg)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	3	33	23	
Units: Subjects				
Deaths	0	0	1	
SAEs	1	3	4	

Discontinuations due to AEs	0	1	2	
Treatment related AEs Grade 2-4	1	3	5	
AEs Grade 3-4	0	3	5	
CDC Class C AIDS events	0	1	0	

Statistical analyses

No statistical analyses for this end point

Primary: Number of Subjects With Laboratory Test Results Meeting the Criteria for Abnormal, Grades 1-4

End point title	Number of Subjects With Laboratory Test Results Meeting the Criteria for Abnormal, Grades 1-4 ^[2]
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End point description:

Hematocrit (%): Grade (Gr) 1= ≥ 28.5 - < 31.5 ; Gr 2= ≥ 24 - < 28.5 ; Gr 3= ≥ 19.5 - < 24 ; Gr 4= < 19.5 . Hemoglobin (g/dL): Grade (Gr) 1=8.5-10.0; Gr 2=7.5-8.4; Gr 3=6.50-7.4; Gr 4= < 6.5 . Platelets (/mm³): Gr 1=100,000-124,999; Gr 2=50,000-99,999; Gr 3=25,000-49,999; Gr 4= $< 25,000$. White blood cells (/mm³): Gr 1=2000-2500; Gr 2=1500-1999; Gr 3=1000-1499; Gr 4= < 1000 . Neutrophils (/mm³): Gr 1=1000-1500; Gr 2= ≥ 750 -1000; Gr 3= ≥ 500 -750; Gr 4= < 500 . Alanine transaminase (ALT), alkaline phosphatase (ALP), aspartate transaminase (AST) (*upper limit of normal [ULN]): Gr 1=1.5-2.5; Gr 2=2.6-5.0; Gr 3=5.1-10.0; Gr 4= > 10.0 . Total bilirubin (adult and pediatric > 14 days) (*ULN): Gr 1=1.1-1.5; Gr 2=1.6-2.5; Gr 3=2.6-5.0; Gr 4= > 5.0 . Albumin (g/dL): Gr 1= 3.1- $< \text{LLN}$; Gr 2=2.0-2.9; Gr 3= < 2.0 ; Gr 4=NA. Amylase (*ULN): Gr 1=1.10-1.39; Gr 2=1.40-2.09; Gr 3=2.10-5.0; Gr 4= > 5 . Lipase (*ULN): Gr 1=1.1-1.5; Gr 2=1.6-3.0; Gr 3=3.1-5.0; Gr 4= > 5.0 .

End point type	Primary
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End point timeframe:

After first dose to last dose plus 30 days (assessed up to February 2017 approximately 42 months)

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: Only summary statistics were planned for this endpoint

End point values	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to < 20 kg)	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to < 40 kg)	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥ 40 kg)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	3	33	23	
Units: Subjects				
Hematocrit	0	3	0	
Hemoglobin	0	5	0	
Platelets	0	0	1	
White blood cells	0	3	0	
Neutrophils+bands (absolute)	1	13	4	
ALT	1	6	9	
AST	0	6	5	
ALP	1	11	12	
Total bilirubin	3	26	17	
Albumin	2	15	6	
Amylase	2	27	14	
Lipase	0	15	8	

Statistical analyses

No statistical analyses for this end point

Primary: Number of Subjects With Laboratory Test Results Meeting the Criteria for Abnormal, Grades 1-4 (continued)

End point title	Number of Subjects With Laboratory Test Results Meeting the Criteria for Abnormal, Grades 1-4 (continued) ^[3]
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End point description:

Blood urea nitrogen (*upper limit of normal [ULN]): Grade (Gr) 1=1.25-2.5; Gr 2=2.6-5.0; Gr 3=5.1-10; Gr 4= >10. Uric acid (mg/dL): Gr 1=7.5-10.0; Gr 2=10.1-12; Gr 3=12.1-15.0; Gr 4= >15.0. Bicarbonate (mEq/L): Gr 1= 19.0-21.0; Gr 2=15.0-18.0; Gr 3=41-45; Gr 4= >45. Calcium, low (mg/dL): Gr 1=7.8-8.4; Gr 2=7.0-7.7; Gr 3=6.1-6.9; Gr 4= <6.1. Potassium (mEq/L), high: Gr 1=5.6-6.0; Gr 2=6.1-6.5; Gr 3=6.6-7.0; Gr 4= >7.0. Potassium (mEq/L), low: Gr 1=3.1-3.4; Gr 2=2.5-2.9; Gr 3=2.0-2.4; Gr 4= <2.0. Sodium (mEq/L), low: Gr 1=130-135; Gr 2=125-129; Gr 3=121-124; Gr 4= <1. Total cholesterol, fasting (mg/dL): Gr 1=200-239; Gr 2=240-300; Gr 3= >300; Gr 4=Not applicable (NA). Low-density lipoprotein (LDL) cholesterol, fasting (mg/dL): Gr 1=130-159; Gr 2=160-190; Gr 3= >190; Gr 4= NA. Glucose, low (mg/dL): Gr 1= 55-64; Gr 2=40-54; Gr 3=30-39; Gr 4= <30. Glucose, fasting (mg/dL): Gr 1=110-125; Gr 2=126-250; Gr 3=251-500; Gr 4 >500.

End point type	Primary
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End point timeframe:

After first dose to last dose plus 30 days (assessed up to February 2017 approximately 42 months)

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: Only summary statistics were planned for this endpoint

End point values	Atazanavir, 150 mg + Ritonavir, 100 mg (weight: 15 to <20 kg)	Atazanavir, 200 mg + Ritonavir, 100 mg (weight: 20 to <40 kg)	Atazanavir, 300 mg + Ritonavir, 100 mg (weight: ≥40 kg)	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	3	33	23	
Units: Subjects				
Blood urea nitrogen	0	3	0	
Creatinine	0	1	0	
Uric Acid	0	2	3	
Bicarbonate, Low	3	29	17	
Calcium, Low	0	2	3	
Calcium, High	0	2	0	
Chloride, Low	0	0	0	
Chloride, High	0	0	2	
Potassium, Low	0	2	0	
Potassium, High	0	2	1	
Sodium, Low	1	13	0	
Sodium, High	0	1	1	
Total Cholesterol, Fasting	0	10	6	
LDL Cholesterol, Fasting	0	7	3	
Triglycerides, Fasting	0	0	0	

Glucose, Low	0	3	0	
Glucose, Fasting, High	0	3	1	
Glucose, Non-Fasting, High	0	0	0	

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From first dose to last dose plus 30 days (assessed up to February 2017 approximately 42 months)

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
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Dictionary version	19.1
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Reporting groups

Reporting group title	Atazanavir, 150 mg + Ritonavir, 100 mg (Weight: 15 to <20 kg)
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Reporting group description:

Subjects with baseline weight of 15 to <20 kg received 150 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 nucleoside reverse transcriptase inhibitors (NRTIs) for 24 weeks. In countries without locally approved pediatric indication for atazanavir, subjects were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.

Reporting group title	Atazanavir, 300 mg + Ritonavir, 100 mg (Weight: ≥40 kg)
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Reporting group description:

Subjects with baseline weight ≥40 kg received 300 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, subjects were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.

Reporting group title	Atazanavir, 200 mg + Ritonavir, 100 mg (Weight: 20 to <40 kg)
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Reporting group description:

Subjects with baseline weight of 20 to <40 kg received 200 mg of atazanavir plus 100 mg of ritonavir once daily with an optimized background therapy of 2 NRTIs for 24 weeks. In countries without locally approved pediatric indication for atazanavir, subjects were to continue to receive study treatment, with regular 12-week visits, until the age of 18 years.

Serious adverse events	Atazanavir, 150 mg + Ritonavir, 100 mg (Weight: 15 to <20 kg)	Atazanavir, 300 mg + Ritonavir, 100 mg (Weight: ≥40 kg)	Atazanavir, 200 mg + Ritonavir, 100 mg (Weight: 20 to <40 kg)
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 3 (33.33%)	4 / 23 (17.39%)	3 / 33 (9.09%)
number of deaths (all causes)	0	1	0
number of deaths resulting from adverse events			
Injury, poisoning and procedural complications			
Accidental overdose			
subjects affected / exposed	1 / 3 (33.33%)	0 / 23 (0.00%)	0 / 33 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Overdose			

subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	1 / 33 (3.03%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nervous system disorders			
Seizure			
subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	1 / 33 (3.03%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	0 / 3 (0.00%)	1 / 23 (4.35%)	0 / 33 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Psychiatric disorders			
Abnormal behaviour			
subjects affected / exposed	0 / 3 (0.00%)	1 / 23 (4.35%)	0 / 33 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Renal and urinary disorders			
Glomerulonephritis			
subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	1 / 33 (3.03%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Post streptococcal glomerulonephritis			
subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	1 / 33 (3.03%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Haematuria			
subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	1 / 33 (3.03%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Appendicitis			

subjects affected / exposed	0 / 3 (0.00%)	1 / 23 (4.35%)	0 / 33 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Meningitis bacterial			
subjects affected / exposed	0 / 3 (0.00%)	1 / 23 (4.35%)	0 / 33 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0

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

Non-serious adverse events	Atazanavir, 150 mg + Ritonavir, 100 mg (Weight: 15 to <20 kg)	Atazanavir, 300 mg + Ritonavir, 100 mg (Weight: ≥40 kg)	Atazanavir, 200 mg + Ritonavir, 100 mg (Weight: 20 to <40 kg)
Total subjects affected by non-serious adverse events			
subjects affected / exposed	3 / 3 (100.00%)	20 / 23 (86.96%)	26 / 33 (78.79%)
Injury, poisoning and procedural complications			
Head injury			
subjects affected / exposed	1 / 3 (33.33%)	0 / 23 (0.00%)	0 / 33 (0.00%)
occurrences (all)	1	0	0
Cardiac disorders			
Atrioventricular block first degree			
subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	3 / 33 (9.09%)
occurrences (all)	0	0	5
Sinus bradycardia			
subjects affected / exposed	0 / 3 (0.00%)	2 / 23 (8.70%)	2 / 33 (6.06%)
occurrences (all)	0	2	2
Nervous system disorders			
Headache			
subjects affected / exposed	0 / 3 (0.00%)	2 / 23 (8.70%)	4 / 33 (12.12%)
occurrences (all)	0	3	4
General disorders and administration site conditions			
Pyrexia			
subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	2 / 33 (6.06%)
occurrences (all)	0	0	2
Ear and labyrinth disorders			

Ear pain subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	0 / 23 (0.00%) 0	2 / 33 (6.06%) 2
Tympanic membrane perforation subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	0 / 23 (0.00%) 0	2 / 33 (6.06%) 2
Gastrointestinal disorders Diarrhoea subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	1 / 23 (4.35%) 1	3 / 33 (9.09%) 3
Abdominal pain subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	5 / 23 (21.74%) 7	1 / 33 (3.03%) 2
Nausea subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	4 / 23 (17.39%) 5	2 / 33 (6.06%) 2
Toothache subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	0 / 23 (0.00%) 0	3 / 33 (9.09%) 3
Vomiting subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	3 / 23 (13.04%) 3	7 / 33 (21.21%) 10
Hepatobiliary disorders Hyperbilirubinaemia subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	4 / 23 (17.39%) 4	2 / 33 (6.06%) 4
Jaundice subjects affected / exposed occurrences (all)	1 / 3 (33.33%) 1	6 / 23 (26.09%) 9	2 / 33 (6.06%) 6
Ocular icterus subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	3 / 23 (13.04%) 3	1 / 33 (3.03%) 1
Respiratory, thoracic and mediastinal disorders Asthma subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	2 / 23 (8.70%) 3	0 / 33 (0.00%) 0

Cough subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	4 / 23 (17.39%) 4	9 / 33 (27.27%) 13
Nasal congestion subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	2 / 23 (8.70%) 2	0 / 33 (0.00%) 0
Oropharyngeal pain subjects affected / exposed occurrences (all)	1 / 3 (33.33%) 1	0 / 23 (0.00%) 0	0 / 33 (0.00%) 0
Rhinorrhoea subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	1 / 23 (4.35%) 1	2 / 33 (6.06%) 2
Skin and subcutaneous tissue disorders			
Acne subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	2 / 23 (8.70%) 2	1 / 33 (3.03%) 2
Dermatitis subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	0 / 23 (0.00%) 0	4 / 33 (12.12%) 4
Eczema subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	0 / 23 (0.00%) 0	2 / 33 (6.06%) 3
Rash subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	2 / 23 (8.70%) 2	4 / 33 (12.12%) 6
Psychiatric disorders			
Depression subjects affected / exposed occurrences (all)	0 / 3 (0.00%) 0	1 / 23 (4.35%) 1	2 / 33 (6.06%) 2
Hallucination subjects affected / exposed occurrences (all)	1 / 3 (33.33%) 1	0 / 23 (0.00%) 0	0 / 33 (0.00%) 0
Infections and infestations			
Bronchitis subjects affected / exposed occurrences (all)	1 / 3 (33.33%) 1	0 / 23 (0.00%) 0	2 / 33 (6.06%) 2
Abscess			

subjects affected / exposed	0 / 3 (0.00%)	0 / 23 (0.00%)	2 / 33 (6.06%)
occurrences (all)	0	0	2
Conjunctivitis			
subjects affected / exposed	0 / 3 (0.00%)	2 / 23 (8.70%)	2 / 33 (6.06%)
occurrences (all)	0	2	3
Impetigo			
subjects affected / exposed	0 / 3 (0.00%)	2 / 23 (8.70%)	1 / 33 (3.03%)
occurrences (all)	0	2	1
Gastroenteritis			
subjects affected / exposed	1 / 3 (33.33%)	0 / 23 (0.00%)	3 / 33 (9.09%)
occurrences (all)	1	0	3
Nasopharyngitis			
subjects affected / exposed	1 / 3 (33.33%)	6 / 23 (26.09%)	3 / 33 (9.09%)
occurrences (all)	1	9	6
Influenza			
subjects affected / exposed	1 / 3 (33.33%)	3 / 23 (13.04%)	3 / 33 (9.09%)
occurrences (all)	2	4	3
Otitis media			
subjects affected / exposed	1 / 3 (33.33%)	2 / 23 (8.70%)	2 / 33 (6.06%)
occurrences (all)	1	2	4
Oral herpes			
subjects affected / exposed	0 / 3 (0.00%)	1 / 23 (4.35%)	4 / 33 (12.12%)
occurrences (all)	0	1	4
Tonsillitis			
subjects affected / exposed	1 / 3 (33.33%)	0 / 23 (0.00%)	4 / 33 (12.12%)
occurrences (all)	1	0	5
Pharyngotonsillitis			
subjects affected / exposed	1 / 3 (33.33%)	0 / 23 (0.00%)	0 / 33 (0.00%)
occurrences (all)	1	0	0
Pharyngitis			
subjects affected / exposed	1 / 3 (33.33%)	0 / 23 (0.00%)	1 / 33 (3.03%)
occurrences (all)	1	0	1
Urinary tract infection			
subjects affected / exposed	1 / 3 (33.33%)	0 / 23 (0.00%)	1 / 33 (3.03%)
occurrences (all)	1	0	1
Upper respiratory tract infection			

subjects affected / exposed	2 / 3 (66.67%)	4 / 23 (17.39%)	13 / 33 (39.39%)
occurrences (all)	6	4	24

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