Clinical trial results:
Phase I/II Open-Label, Pharmacokinetic and Safety Study of a Novel Protease Inhibitor (BMS-232632, ATAZANAVIR, ATV, REYATAZ™) in Combination Regimens in Antiretroviral Therapy (ART)-Naïve and Experienced HIV-Infected Infants, Children, and Adolescents

Summary

EudraCT number	2014-005134-64
Trial protocol	Outside EU/EEA
Global end of trial date	15 September 2014

Results information

Result version number	v1 (current)
This version publication date	29 July 2016
First version publication date	29 July 2016

Trial information

Trial identification

Sponsor protocol code	AI424-020

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00006604
WHO universal trial number (UTN)	U1111-1164-4424

Notes:

Sponsors

Sponsor organisation name	Bristol-Myers Squibb
Sponsor organisation address	Chaussee de la Hulpe 185, Brussels, Belgium, 1170
Public contact	Bristol-Myers Squibb Study Director, Bristol-Myers Squibb, Clinical.Trials@bms.com
Scientific contact	Bristol-Myers Squibb Study Director, Bristol-Myers Squibb, Clinical.Trials@bms.com
Sponsor organisation name	Bristol-Myers Squibb
Sponsor organisation address	Chaussee de la Hulpe 185, Brussels, Belgium, 1170
Public contact	Bristol-Myers Squibb Study Director, Bristol-Myers Squibb, 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?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	15 September 2014
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	15 September 2014
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The main objective of the trial was to determine the safety, pharmacokinetic profile and tolerability of atazanavir with or without ritonavir plus 2 nucleoside analog reverse-transcriptase inhibitors (NRTIs) in infants, children, and adolescents infected with HIV.

Protection of trial subjects:

The study was conducted 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:

Nucleoside analog reverse-transcriptase inhibitors, (NRTIs) such as zidovudine, stavudine, zalcitabine, didanosine, or lamivudine, were used in combinations as recommended in the Guidelines for the Use of Antiretroviral Agents in Pediatric and Adolescent HIV Infection, 2000. NRTIs such as abacavir sulfate and tenofovir disoproxil fumarate were prohibited. Nucleoside backbone therapy was determined on the basis of the subject's genotypic and phenotypic resistance profile.

Evidence for comparator: -

Actual start date of recruitment	16 November 2000
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	South Africa: 70
Country: Number of subjects enrolled	United States: 125
Worldwide total number of subjects	195
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)	41
Children (2-11 years)	92
Adolescents (12-17 years)	52
Adults (18-64 years)	10
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Subjects were enrolled at 36 sites (34 in the United States and 2 in South Africa).

Pre-assignment

Screening details:

A total of 195 subjects were enrolled and 193 subjects were treated in the study.

Period 1

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

Blinding implementation details:

The study was open label, hence blinding was not applicable.

Arms

Are arms mutually exclusive?	Yes
Arm title	Atazanavir

Arm description:

Subjects received atazanavir at a starting dose of 310 milligram per square meter (mg/m^2) in powder or capsule, orally, once daily in the morning, administered in combination with 2 nucleoside analog reverse-transcriptase inhibitors (NRTIs). The dose of atazanavir was modified to 205 mg/m^2, 415 mg/m^2, 520 mg/m^2, and 620 mg/m^2 during the study based on body surface area and body weight. Capsule formulation was limited by age of the subjects.

Arm type	Experimental
Investigational medicinal product name	Atazanavir
Investigational medicinal product code	BMS-232632
Other name	
Pharmaceutical forms	Capsule, Powder for oral solution
Routes of administration	Oral use

Dosage and administration details:

Atazanavir 205 mg/m^2, 310 mg/m^2, 415 mg/m^2, 520 mg/m^2, and 620 mg/m^2, as capsule and in powder formulation, was administered orally, once daily in the morning.

Arm title	Atazanavir + Ritonavir

Arm description:

Subjects received atazanavir at a starting dose of 205 mg/m^2 or 310 mg/m^2, powder or capsule, orally, once daily in the morning in combination with ritonavir 100 mg/m^2, capsule or oral solution, orally, once daily in the morning, along with 2 nucleoside analog reverse-transcriptase inhibitors.

Arm type	Experimental
Investigational medicinal product name	Ritonavir
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Capsule, hard, Powder for oral solution
Routes of administration	Oral use

Dosage and administration details:

Ritonavir 100 mg/m^2 as capsule or oral solution was administered.

Investigational medicinal product name	Atazanavir
Investigational medicinal product code	BMS-232632
Other name	
Pharmaceutical forms	Capsule, Powder for oral solution
Routes of administration	Oral use

Dosage and administration details:

Atazanavir 205 mg/m^2, 310 mg/m^2 as capsule or in powder formulation was administered orally, once daily in the morning.

Number of subjects in period 1[1]	Atazanavir	Atazanavir + Ritonavir
Started	85	108
Completed	16	49
Not completed	69	59
Clinical events or progression	20	8
Request treatment discontinuation	10	9
Toxicity	12	7
Death	-	2
Protocol compliance	18	29
Disallowed medications	4	4
Other reasons	5	-

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: The number of subjects reported to be in the baseline period are not the same as the worldwide number enrolled in the trial as out of 195 subjects who were enrolled, 193 subjects were treated in the study.

Baseline characteristics

Reporting groups	
Reporting group title	Atazanavir
Reporting group description:	
Subjects received atazanavir at a starting dose of 310 milligram per square meter (mg/m^2) in powder or capsule, orally, once daily in the morning, administered in combination with 2 nucleoside analog reverse-transcriptase inhibitors (NRTIs). The dose of atazanavir was modified to 205 mg/m^2, 415 mg/m^2, 520 mg/m^2, and 620 mg/m^2 during the study based on body surface area and body weight. Capsule formulation was limited by age of the subjects.	
Reporting group title	Atazanavir + Ritonavir
Reporting group description:	
Subjects received atazanavir at a starting dose of 205 mg/m^2 or 310 mg/m^2, powder or capsule, orally, once daily in the morning in combination with ritonavir 100 mg/m^2, capsule or oral solution, orally, once daily in the morning, along with 2 nucleoside analog reverse-transcriptase inhibitors.	

Reporting group values	Atazanavir	Atazanavir + Ritonavir	Total
Number of subjects	85	108	193
Age categorical Units: Subjects			
3 months - 21 years	85	108	193
Age continuous Units: years			
median	10.75	5.74	
full range (min-max)	0.54 to 20.65	0.29 to 21.02	-
Gender categorical Units: Subjects			
Female	45	51	96
Male	40	57	97
Race Units: Subjects			
Black/Mixed	49	81	130
White	23	20	43
Other	13	6	19
Asian	0	1	1

End points

End points reporting groups

Reporting group title	Atazanavir
Reporting group description:	
Subjects received atazanavir at a starting dose of 310 milligram per square meter (mg/m^2) in powder or capsule, orally, once daily in the morning, administered in combination with 2 nucleoside analog reverse-transcriptase inhibitors (NRTIs). The dose of atazanavir was modified to 205 mg/m^2, 415 mg/m^2, 520 mg/m^2, and 620 mg/m^2 during the study based on body surface area and body weight. Capsule formulation was limited by age of the subjects.	
Reporting group title	Atazanavir + Ritonavir
Reporting group description:	
Subjects received atazanavir at a starting dose of 205 mg/m^2 or 310 mg/m^2, powder or capsule, orally, once daily in the morning in combination with ritonavir 100 mg/m^2, capsule or oral solution, orally, once daily in the morning, along with 2 nucleoside analog reverse-transcriptase inhibitors.	
Subject analysis set title	Atazanavir 205 mg/m^2
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Subjects received atazanavir 205 mg/m^2, powder or capsule administered once daily with or without ritonavir, stratified by age.	
Subject analysis set title	Atazanavir 310 mg/m^2
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Subjects received atazanavir 310 mg/m^2, powder or capsule administered once daily with or without ritonavir, stratified by age.	
Subject analysis set title	Atazanavir 415 mg/m^2
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Subjects received Atazanavir 415 mg/m^2, powder or capsule administered once daily with or without ritonavir, stratified by age.	
Subject analysis set title	Atazanavir 520 mg/m^2
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Subjects received atazanavir 520 mg/m^2, powder or capsule administered once daily with or without ritonavir, stratified by age.	
Subject analysis set title	Atazanavir 620 mg/m^2
Subject analysis set type	Sub-group analysis
Subject analysis set description:	
Subjects received Atazanavir 620 mg/m^2, powder or capsule administered once daily with or without ritonavir, stratified by age.	

Primary: Area under the plasma concentration-time curve from time 0 to 24 hours postdose (AUC[0-24])

End point title	Area under the plasma concentration-time curve from time 0 to 24 hours postdose (AUC[0-24])[1]
End point description:	
AUC(0-24) was determined from concentration time data using trapezoidal method. The analysis was performed in pharmacokinetic concentration data set, defined as treated subjects with any plasma concentration data. Here, 'n' signifies evaluable subjects for specified categories in respective treatment arms, and '99999' represents not estimable data for specified categories in respective arms. ATV=Atazanavir; RTV=ritonavir.	
End point type	Primary
End point timeframe:	
Predose, 1, 2, 3, 4, 6, 8, 12 and 24 hours post dose on Day 7 and Week 56	

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 descriptive summary statistics were planned for this outcome measure.

End point values	Atazanavir 205 mg/m^2	Atazanavir 310 mg/m^2	Atazanavir 415 mg/m^2	Atazanavir 520 mg/m^2
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	31	63	2	22
Units: nanogram*hour/mL (ng*hr/mL)				
geometric mean (geometric coefficient of variation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	99999 (± 99999)	13141.5 (± 96)	99999 (± 99999)	99999 (± 99999)
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	99999 (± 99999)	15331.39 (± 64)	99999 (± 99999)	99999 (± 99999)
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)	28882.81 (± 37)	25823.62 (± 78)	32883.27 (± 54)
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	99999 (± 99999)	11213.42 (± 69)	99999 (± 99999)	16218.21 (± 85)
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)	43218.99 (± 56)	99999 (± 99999)	99999 (± 99999)
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (± 99999)	50388.41 (± 49)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	44807.03 (± 33)	84636.71 (± 39)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	44969.95 (± 34)	54989.27 (± 11)	99999 (± 99999)	99999 (± 99999)

End point values	Atazanavir 620 mg/m^2			
Subject group type	Subject analysis set			
Number of subjects analysed	24			
Units: nanogram*hour/mL (ng*hr/mL)				
geometric mean (geometric coefficient of variation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	7954.54 (± 100)			
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	32898.27 (± 40)			
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)			
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	49224.46 (± 47)			
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)			
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	99999 (± 99999)			

Statistical analyses

No statistical analyses for this end point

Primary: Trough observed plasma concentrations at 24 hours postdose for Atazanavir and Ritonavir (Cmin)

End point title	Trough observed plasma concentrations at 24 hours postdose for Atazanavir and Ritonavir (Cmin)[2]

End point description:

Cmin was observed directly from 24-hour post-dose concentration. The analysis was performed in pharmacokinetic concentration data set, defined as treated subjects with any plasma concentration data. Here, 'n' signifies evaluable subjects for specified categories in respective treatment arms, and '99999' represents not estimable data for specified categories in respective arms. ATV=atazanavir; RTV=ritonavir.

End point type	Primary

End point timeframe:

Predose, 1, 2, 3, 4, 6, 8, 12 and 24 hours post dose (Week 56)

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 descriptive summary statistics were planned for this outcome measure.

End point values	Atazanavir 205 mg/m^2	Atazanavir 310 mg/m^2	Atazanavir 415 mg/m^2	Atazanavir 520 mg/m^2
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	31	63	2	22
Units: nanogram per milliliter (ng/mL)				
geometric mean (geometric coefficient of variation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	99999 (± 99999)	78.63 (± 174)	99999 (± 99999)	99999 (± 99999)
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	99999 (± 99999)	131.16 (± 73)	99999 (± 99999)	99999 (± 99999)
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)	265.88 (± 47)	211.66 (± 35)	161.26 (± 129)
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	99999 (± 99999)	65.2 (± 59)	99999 (± 99999)	90.49 (± 140)
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)	388.92 (± 67)	99999 (± 99999)	99999 (± 99999)
ATV (powder)+RTV, >2yrs-13yrs (n=0,21,0,0,0)	99999 (± 99999)	779.1 (± 64)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	572.68 (± 61)	1932.77 (± 49)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >13yrs-18yrs (n=9,3,0,0,0)	1090.01 (± 60)	790.57 (± 36)	99999 (± 99999)	99999 (± 99999)

End point values	Atazanavir 620 mg/m^2			
Subject group type	Subject analysis set			
Number of subjects analysed	24			
Units: nanogram per milliliter (ng/mL)				
geometric mean (geometric coefficient of variation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	20.27 (± 45)			

ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	148.88 (± 82)			
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)			
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	370.8 (± 122)			
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)			
ATV (powder)+RTV, >2yrs-13yrs (n=0,21,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >13yrs-18yrs (n=9,3,0,0,0)	99999 (± 99999)			

Statistical analyses

No statistical analyses for this end point

Secondary: Time to reach the maximum plasma concentration (Tmax)

End point title	Time to reach the maximum plasma concentration (Tmax)

End point description:

Time to reach the maximum plasma concentration was directly determined from concentration time data. The analysis was performed in Pharmacokinetic concentration data set, defined as treated subjects with any plasma concentration data. Here, 'n' signifies evaluable subjects for specified categories in respective treatment arms, and '99999' represents not estimable data for specified categories in respective arms. ATV=atazanavir; RTV=ritonavir.

End point type	Secondary

End point timeframe:

Predose, 1, 2, 3, 4, 6, 8, 12 and 24 hours postdose (Week 56)

End point values	Atazanavir 205 mg/m^2	Atazanavir 310 mg/m^2	Atazanavir 415 mg/m^2	Atazanavir 520 mg/m^2
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	31	63	2	22
Units: hour				
median (full range (min-max))				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	99999 (99999 to 99999)	2 (1 to 4)	99999 (99999 to 99999)	99999 (99999 to 99999)
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	99999 (99999 to 99999)	2.54 (2 to 8)	99999 (99999 to 99999)	99999 (99999 to 99999)
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (99999 to 99999)	2 (1 to 6)	4.04 (4 to 4.08)	2 (0.92 to 3.08)
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	99999 (99999 to 99999)	4.51 (2 to 11.92)	99999 (99999 to 99999)	1.99 (1.02 to 2.05)
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (99999 to 99999)	2 (1 to 3)	99999 (99999 to 99999)	99999 (99999 to 99999)
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (99999 to 99999)	2.04 (1 to 6)	99999 (99999 to 99999)	99999 (99999 to 99999)
ATV (capsule)+RTV, >2yrs-13yrs (n=21,5,0,0,0)	3 (1 to 11.5)	4.02 (2.25 to 6.08)	99999 (99999 to 99999)	99999 (99999 to 99999)
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	3 (1 to 6.08)	2 (1.08 to 4.08)	99999 (99999 to 99999)	99999 (99999 to 99999)

End point values	Atazanavir 620 mg/m^2			
Subject group type	Subject analysis set			
Number of subjects analysed	24			
Units: hour				
median (full range (min-max))				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	1.67 (1.17 to 2.17)			
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	2 (2 to 6)			
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (99999 to 99999)			
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	3 (1 to 8.02)			
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (99999 to 99999)			
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (99999 to 99999)			
ATV (capsule)+RTV, >2yrs-13yrs (n=21,5,0,0,0)	99999 (99999 to 99999)			
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	99999 (99999 to 99999)			

Statistical analyses

No statistical analyses for this end point

Secondary: Apparent oral clearance (CL/F)

End point title	Apparent oral clearance (CL/F)

End point description:

Apparent oral clearance of the drug was calculated as the drug dose divided by area under the plasma concentration-time curve from time 0 to
24 hours postdose (AUC [0-24]). CL/F was normalized to body surface area and body weight. The analysis was performed in Pharmacokinetic concentration data set, defined as treated subjects with any plasma concentration data. Here, 'n' signifies evaluable subjects for specified categories in respective treatment arms, and '99999' represents not estimable data for specified categories in respective arms. ATV=atazanavir; RTV=ritonavir.

End point type	Secondary

End point timeframe:

Predose, 1, 2, 3, 4, 6, 8, 12 and 24 hours post dose (Week 56)

End point values	Atazanavir 205 mg/m^2	Atazanavir 310 mg/m^2	Atazanavir 415 mg/m^2	Atazanavir 520 mg/m^2
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	31	63	2	22
Units: liter per hour (L/h)				
geometric mean (geometric coefficient of variation)				

ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	99999 (± 99999)	9.05 (± 94)	99999 (± 99999)	99999 (± 99999)
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	99999 (± 99999)	14.49 (± 100)	99999 (± 99999)	99999 (± 99999)
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)	11.46 (± 40)	18.16 (± 92)	14.04 (± 67)
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	99999 (± 99999)	35.67 (± 69)	99999 (± 99999)	36.2 (± 122)
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)	3.03 (± 83)	99999 (± 99999)	99999 (± 99999)
ATV (powder)+RTV, >2yrs-13yrs (n=0,21,0,0,0)	99999 (± 99999)	4.18 (± 58)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	4.6 (± 42)	4.4 (± 42)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	7.96 (± 37)	8.97 (± 28)	99999 (± 99999)	99999 (± 99999)

End point values	Atazanavir 620 mg/m^2			
Subject group type	Subject analysis set			
Number of subjects analysed	24			
Units: liter per hour (L/h)				
geometric mean (geometric coefficient of variation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	37.71 (± 100)			
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	15.01 (± 67)			
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)			
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	16.87 (± 216)			
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)			
ATV (powder)+RTV, >2yrs-13yrs (n=0,21,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	99999 (± 99999)			

Statistical analyses

No statistical analyses for this end point

Secondary: Terminal phase half-life in plasma (T-half)

End point title	Terminal phase half-life in plasma (T-half)

End point description:

T-half was defined as the time required for half of the drug to be eliminated from the plasma and determined from formula: ln2/K, where K=absolute value of the slope of the terminal phase of plasma profile as determined by log-linear regression of at least 3 data points. The analysis was performed in pharmacokinetic concentration data set, defined as treated subjects with any plasma concentration data. Here, ‘n’ signifies evaluable subjects for specified categories in respective treatment arms, and '99999' represents not estimable data for specified categories in respective arms. ATV=atazanavir;

RTV=ritonavir.

End point type	Secondary

End point timeframe:

Pre dose, 1, 2, 3, 4, 6, 8, 12 and 24 hours post dose (Week 56)

End point values	Atazanavir 205 mg/m^2	Atazanavir 310 mg/m^2	Atazanavir 415 mg/m^2	Atazanavir 520 mg/m^2
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	31	63	2	22
Units: hour				
arithmetic mean (standard deviation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	99999 (± 99999)	6.03 (± 2.17)	99999 (± 99999)	99999 (± 99999)
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	99999 (± 99999)	8.04 (± 5.16)	99999 (± 99999)	99999 (± 99999)
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)	8.34 (± 2.7)	5.55 (± 1.53)	5.8 (± 2.4)
ATV capsule, >13 yrs - 18 yrs (n=0, 3, 0, 4, 16)	99999 (± 99999)	4.06 (± 0.54)	99999 (± 99999)	6.3 (± 3.29)
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)	6.83 (± 1.54)	99999 (± 99999)	99999 (± 99999)
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (± 99999)	9.8 (± 3.98)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	8.75 (± 4.11)	15.09 (± 2)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	59.79 (± 139.64)	10.29 (± 5.73)	99999 (± 99999)	99999 (± 99999)

End point values	Atazanavir 620 mg/m^2			
Subject group type	Subject analysis set			
Number of subjects analysed	24			
Units: hour				
arithmetic mean (standard deviation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	4.83 (± 0.85)			
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	5.26 (± 2.18)			
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)			
ATV capsule, >13 yrs - 18 yrs (n=0, 3, 0, 4, 16)	6.13 (± 1.8)			
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)			
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >2yrs-13yrs (n=20,5,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	99999 (± 99999)			

Statistical analyses

No statistical analyses for this end point

Secondary: Maximum observed plasma concentration (Cmax)

End point title	Maximum observed plasma concentration (Cmax)

End point description:

Cmax was defined as the peak plasma concentration of a drug after administration, obtained directly from the plasma concentration-time curve. The analysis was performed in pharmacokinetic concentration data set, defined as treated subjects with any plasma concentration data. Here, 'n' signifies evaluable subjects for specified categories in respective treatment arms, and '99999' represents not estimable data for specified categories in respective arms. ATV=atazanavir; RTV=ritonavir.

End point type	Secondary

End point timeframe:

Predose, 1, 2, 3, 4, 6, 8, 12 and 24 hours postdose (Week 56)

End point values	Atazanavir 205 mg/m^2	Atazanavir 310 mg/m^2	Atazanavir 415 mg/m^2	Atazanavir 520 mg/m^2
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	31	63	2	22
Units: ng/mL				
geometric mean (geometric coefficient of variation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	99999 (± 99999)	2096.32 (± 99)	99999 (± 99999)	99999 (± 99999)
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	99999 (± 99999)	1782.18 (± 92)	99999 (± 99999)	99999 (± 99999)
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)	3996.76 (± 45)	3629.79 (± 76)	5584.98 (± 43)
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	99999 (± 99999)	1297.23 (± 94)	99999 (± 99999)	2418.39 (± 70)
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)	5757.91 (± 54)	99999 (± 99999)	99999 (± 99999)
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (± 99999)	5230.03 (± 48)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >2yrs-13yrs (n=21,5,0,0,0)	4784.54 (± 32)	7402.63 (± 24)	99999 (± 99999)	99999 (± 99999)
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	3710.91 (± 46)	5566.24 (± 32)	99999 (± 99999)	99999 (± 99999)

End point values	Atazanavir 620 mg/m^2			
Subject group type	Subject analysis set			
Number of subjects analysed	24			

Units: ng/mL				
geometric mean (geometric coefficient of variation)				
ATV powder, >6 months - 2 yrs (n=0, 4, 0, 0, 2)	1598.66 (± 111)			
ATV powder, >2 yrs - 13 yrs (n=0, 6, 0, 0, 5)	4954.64 (± 50)			
ATV capsule, >2 yrs - 13 yrs (n=0, 4, 2, 18, 0)	99999 (± 99999)			
ATV capsule, >13 yrs - 18 yrs (n=0, 4, 0, 4, 17)	6358.02 (± 48)			
ATV (powder)+RTV, >6 months-2yrs (n=0,15,0,0,0)	99999 (± 99999)			
ATV (powder)+RTV, >2yrs-13yrs (n=0,22,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >2yrs-13yrs (n=21,5,0,0,0)	99999 (± 99999)			
ATV (capsule)+RTV, >13yrs-18yrs (n=10,3,0,0,0)	99999 (± 99999)			

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of subjects who achieved at least a 1 Log 10 reduction from baseline in HIV RNA level at Week 48

End point title	Percentage of subjects who achieved at least a 1 Log 10 reduction from baseline in HIV RNA level at Week 48

End point description:

Subjects with HIV RNA < 1.0 log 10 decrease from baseline and HIV RNA >= 400 c/mL, or who discontinued for any reason prior to Week 48 visit were considered failures in this analysis. HIV RNA was measured using Roche Amplicor polymerase chain reaction technique. The analysis was performed in the efficacy set, defined as subjects who received at least 1 dose of study drug by Week 48. Here 'number of subjects analysed' signifies evaluable subjects for this end point. Only subjects with evaluable data at Week 48 were included.

End point type	Secondary

End point timeframe:

Baseline, Week 48

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	97		
Units: Percentage of subjects				
number (not applicable)	48	67		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of subjects with virologic response of HIV RNA <400 copies/mL at Week 48

End point title	Percentage of subjects with virologic response of HIV RNA <400 copies/mL at Week 48

End point description:

Virologic response classified responders as subjects with a single HIV RNA measurement <400 c/mL closest to the scheduled visit and within a predefined visit window. HIV RNA was measured using Roche Amplicor Polymerase Chain Reaction technique. The analysis was performed in efficacy set, defined as subjects who received at least 1 dose of study drug by Week 48. Here 'number of subjects analysed' signifies evaluable subjects for this end point.

End point type	Secondary

End point timeframe:

Baseline, Week 48

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	97		
Units: Percentage of subjects				
number (not applicable)	40	61		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of subjects with virologic response of HIV RNA <50 copies/mL at Week 48

End point title	Percentage of subjects with virologic response of HIV RNA <50 copies/mL at Week 48

End point description:

Virologic response classified responders as subjects with a single HIV RNA measurement <50 copies/mL closest to the scheduled visit and within a predefined visit window. HIV RNA was measured using Roche Amplicor Polymerase Chain Reaction technique. The analysis was performed in the efficacy set, defined as subjects who received at least 1 dose of study drug by Week 48. Here 'number of subjects analysed' signifies evaluable subjects for this end point.

End point type	Secondary

End point timeframe:

Baseline, Week 48

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	97		
Units: Percentage of subjects				
number (not applicable)	26	46		

Statistical analyses

No statistical analyses for this end point

Secondary: Change in HIV RNA levels (log 10) c/mL from baseline to Week 48

End point title	Change in HIV RNA levels (log 10) c/mL from baseline to Week 48

End point description:

Virologic suppression was determined in terms of change in HIV RNA levels (log 10) c/mL compared with baseline. Negative change from baseline indicated complete virologic suppression. The analysis was performed in the efficacy set, defined as subjects who received at least 1 dose of study drug by Week 48. Here 'n' signifies evaluable subjects for this measure at in each arm, respectively.

End point type	Secondary

End point timeframe:

Baseline, Week 48

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	97		
Units: copies/mL				
arithmetic mean (standard error)				
Change at Week 48 (n=53, 71)	-1.84 (± 0.157)	-2.46 (± 0.115)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of responder to time to loss of virologic response (TLOVR) at Week 48

End point title	Percentage of responder to time to loss of virologic response (TLOVR) at Week 48

End point description:

The TLOVR algorithm was based on the Food and drug Administration guidance and defined responder at Week 48 as subjects with confirmed HIV RNA <50 c/mL or <400 c/mL through week 48 without intervening virologic rebound or treatment discontinuation. Responder included all the subjects who achieved and maintained at least 2 consecutive HIV RNA <50 c/mL or <400 c/mL to Week 48.The analysis was performed in the efficacy set, defined as subjects who received at least 1 dose of study drug by Week 48. Here 'number of subjects analysed' signifies evaluable subjects for this end point.

End point type	Secondary

End point timeframe:

Baseline, Week 48

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	97		
Units: Percentage of subjects				
number (not applicable)				
HIV RNA < 50 c/mL	31	45		
HIV RNA < 400 c/mL	44	63		

Statistical analyses

No statistical analyses for this end point

Secondary: Change from baseline in Cluster of Differentiation 4 (CD4) percent and Cluster of Differentiation 8 (CD8) percent

End point title	Change from baseline in Cluster of Differentiation 4 (CD4) percent and Cluster of Differentiation 8 (CD8) percent

End point description:

Changes in immunologic function as measured by change from baseline in CD4 percent and CD8 percent at week 48 were determined. The analysis was performed in the efficacy set, defined as subjects who received at least 1 dose of study drug by Week 48. Here 'number of subjects analysed' signifies evaluable subjects for this end point.

End point type	Secondary

End point timeframe:

Baseline, Week 48

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	97		
Units: Percentage				
arithmetic mean (standard error)				
CD4 percent, change at Week 48 (n=49, 68)	7 (± 1)	9 (± 0.9)		
CD8 percent, change at Week 48 (n=49, 68)	-8 (± 1.2)	-10 (± 1.1)		

Statistical analyses

No statistical analyses for this end point

Secondary: Change from baseline in Cluster of Differentiation 4 (CD4) count and Cluster of Differentiation 8 (CD8) count

End point title	Change from baseline in Cluster of Differentiation 4 (CD4) count and Cluster of Differentiation 8 (CD8) count

End point description:

Changes in immunologic function as measured by change from baseline in CD4 count (cells/mm^3) and CD8 count (cells/mm^3) at week 48 were summarized. The analysis was performed in the efficacy set, defined as subjects who received at least 1 dose of study drug by Week 48. Here 'number of subjects analysed' signifies evaluable subjects for this end point.

End point type	Secondary

End point timeframe:

Baseline, Week 48

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	97		
Units: cells/mm^3				
arithmetic mean (standard error)				
CD4 Count, change at Week 48 (n=49, 68)	185 (± 32.2)	288 (± 51)		
CD8 Count, change at Week 48 (n=49, 68)	-233 (± 76.6)	-540 (± 108.3)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of subjects with serious adverse events (SAEs), and death

End point title	Number of subjects with serious adverse events (SAEs), and death

End point description:

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. Death was a fatal event leading to permanent cessations of all vital functions of the body. The analysis was performed in the safety set, defined as all treated subjects.

End point type	Secondary

End point timeframe:

Baseline up to 56 days after the last dose of the study drug

End point values	Atazanavir	Atazanavir + Ritonavir		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	85	108		
Units: Subjects				
SAEs	54	71		
Death	0	2		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Baseline up to 56 days after the last dose of study drug

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	17.1

Reporting groups

Reporting group title	Atazanavir + Ritonavir

Reporting group description:

Subjects received atazanavir at a starting dose of 205 mg/m^2 or 310 mg/m^2, powder or capsule, orally, once daily in the morning in combination with ritonavir 100 mg/m^2, capsule or oral solution, orally, once daily in the morning, along with 2 nucleoside analog reverse-transcriptase inhibitors.

Reporting group title	Atazanavir

Reporting group description:

Subjects received atazanavir at a starting dose of 310 milligram per square meter (mg/m^2) in powder or capsule, orally, once daily in the morning, administered in combination with 2 nucleoside analog reverse-transcriptase inhibitors (NRTIs). The dose of atazanavir was modified to 205 mg/m^2, 415 mg/m^2, 520 mg/m^2, and 620 mg/m^2 during the study based on body surface area and body weight. Capsule formulation was limited by age of the subjects.

Serious adverse events	Atazanavir + Ritonavir	Atazanavir	
Total subjects affected by serious adverse events			
subjects affected / exposed	71 / 108 (65.74%)	54 / 85 (63.53%)	
number of deaths (all causes)	2	0	
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Anogenital warts			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hodgkin's disease			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Vascular disorders			
Hypotension			

subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Venous occlusion			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Surgical and medical procedures			
Hospitalisation			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pregnancy, puerperium and perinatal conditions			
Abortion spontaneous			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
General disorders and administration site conditions			
Pyrexia			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory, thoracic and mediastinal disorders			
Haemoptysis			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Psychiatric disorders			
Attention deficit/hyperactivity disorder			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Conduct disorder			

subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Suicidal ideation			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Major depression			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Investigations			
Aspartate aminotransferase increased			
subjects affected / exposed	1 / 108 (0.93%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	1 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Alanine aminotransferase increased			
subjects affected / exposed	1 / 108 (0.93%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	1 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood alkaline phosphatase increased			
subjects affected / exposed	2 / 108 (1.85%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	2 / 2	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Bilirubin conjugated increased			
subjects affected / exposed	0 / 108 (0.00%)	2 / 85 (2.35%)	
occurrences causally related to treatment / all	0 / 0	2 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood bilirubin			
subjects affected / exposed	6 / 108 (5.56%)	3 / 85 (3.53%)	
occurrences causally related to treatment / all	6 / 6	3 / 3	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood bilirubin abnormal			

subjects affected / exposed	7 / 108 (6.48%)	6 / 85 (7.06%)	
occurrences causally related to treatment / all	7 / 7	6 / 6	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood bilirubin increased			
subjects affected / exposed	34 / 108 (31.48%)	30 / 85 (35.29%)	
occurrences causally related to treatment / all	33 / 34	30 / 30	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood bilirubin unconjugated			
subjects affected / exposed	2 / 108 (1.85%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	2 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood bilirubin unconjugated increased			
subjects affected / exposed	32 / 108 (29.63%)	15 / 85 (17.65%)	
occurrences causally related to treatment / all	31 / 32	15 / 15	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood creatinine increased			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood glucose increased			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood potassium increased			
subjects affected / exposed	4 / 108 (3.70%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 4	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood sodium decreased			
subjects affected / exposed	4 / 108 (3.70%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 4	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Electrocardiogram PR prolongation			

subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gamma-glutamyltransferase abnormal			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Electrocardiogram QT prolonged			
subjects affected / exposed	2 / 108 (1.85%)	2 / 85 (2.35%)	
occurrences causally related to treatment / all	2 / 2	2 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gamma-glutamyltransferase increased			
subjects affected / exposed	2 / 108 (1.85%)	2 / 85 (2.35%)	
occurrences causally related to treatment / all	2 / 2	2 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatic enzyme increased			
subjects affected / exposed	2 / 108 (1.85%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	2 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Liver function test abnormal			
subjects affected / exposed	0 / 108 (0.00%)	2 / 85 (2.35%)	
occurrences causally related to treatment / all	0 / 0	1 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lipase increased			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Neutrophil count decreased			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pancreatic enzymes increased			

subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Injury, poisoning and procedural complications			
Femur fracture			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hand fracture			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Head injury			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Thermal burn			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cardiac disorders			
Atrioventricular block first degree			
subjects affected / exposed	0 / 108 (0.00%)	5 / 85 (5.88%)	
occurrences causally related to treatment / all	0 / 0	5 / 5	
deaths causally related to treatment / all	0 / 0	0 / 0	
Atrioventricular block second degree			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cardiomyopathy			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Cardiac failure congestive			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Left atrial dilatation			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Defect conduction intraventricular			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nervous system disorders			
Hyporeflexia			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Convulsion			
subjects affected / exposed	3 / 108 (2.78%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 3	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Neuropathy peripheral			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Paraesthesia			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Syncope			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Peripheral sensory neuropathy			

subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood and lymphatic system disorders			
Neutropenia			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Eye disorders			
Uveitis			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrointestinal disorders			
Constipation			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Diarrhoea			
subjects affected / exposed	2 / 108 (1.85%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Dysphagia			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pancreatitis			
subjects affected / exposed	1 / 108 (0.93%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 1	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pancreatitis acute			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Stomatitis			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Vomiting			
subjects affected / exposed	2 / 108 (1.85%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	1 / 2	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatobiliary disorders			
Jaundice			
subjects affected / exposed	1 / 108 (0.93%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	1 / 1	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hyperbilirubinaemia			
subjects affected / exposed	14 / 108 (12.96%)	14 / 85 (16.47%)	
occurrences causally related to treatment / all	14 / 14	14 / 14	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin and subcutaneous tissue disorders			
Hyperkeratosis			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Facial wasting			
subjects affected / exposed	1 / 108 (0.93%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 1	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin hyperpigmentation			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lipoatrophy			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Rash			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Renal and urinary disorders			
Glycosuria			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Proteinuria			
subjects affected / exposed	1 / 108 (0.93%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Cellulitis			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Bronchopneumonia			
subjects affected / exposed	2 / 108 (1.85%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 2	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastroenteritis			
subjects affected / exposed	2 / 108 (1.85%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lower respiratory tract infection			

subjects affected / exposed	2 / 108 (1.85%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Meningitis			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Meningitis aseptic			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pneumonia			
subjects affected / exposed	4 / 108 (3.70%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	1 / 4	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Pneumonia bacterial			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Subcutaneous abscess			
subjects affected / exposed	1 / 108 (0.93%)	0 / 85 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pulmonary tuberculosis			
subjects affected / exposed	1 / 108 (0.93%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urinary tract infection			
subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metabolism and nutrition disorders			
Hyperlipasaemia			

subjects affected / exposed	0 / 108 (0.00%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hyperkalaemia			
subjects affected / exposed	2 / 108 (1.85%)	1 / 85 (1.18%)	
occurrences causally related to treatment / all	0 / 2	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hyponatraemia			
subjects affected / exposed	2 / 108 (1.85%)	2 / 85 (2.35%)	
occurrences causally related to treatment / all	0 / 2	1 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	

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

Non-serious adverse events	Atazanavir + Ritonavir	Atazanavir	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	108 / 108 (100.00%)	85 / 85 (100.00%)	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Skin papilloma			
subjects affected / exposed	7 / 108 (6.48%)	5 / 85 (5.88%)	
occurrences (all)	7	9	
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	1 / 108 (0.93%)	7 / 85 (8.24%)	
occurrences (all)	1	9	
Chest pain			
subjects affected / exposed	13 / 108 (12.04%)	15 / 85 (17.65%)	
occurrences (all)	15	21	
Peripheral swelling			
subjects affected / exposed	9 / 108 (8.33%)	6 / 85 (7.06%)	
occurrences (all)	9	6	
Pain			

subjects affected / exposed	5 / 108 (4.63%)	5 / 85 (5.88%)	
occurrences (all)	5	6	
Fatigue			
subjects affected / exposed	9 / 108 (8.33%)	7 / 85 (8.24%)	
occurrences (all)	12	8	
Pyrexia			
subjects affected / exposed	56 / 108 (51.85%)	46 / 85 (54.12%)	
occurrences (all)	123	108	
Reproductive system and breast disorders			
Vaginal discharge			
subjects affected / exposed	4 / 108 (3.70%)	5 / 85 (5.88%)	
occurrences (all)	4	8	
Respiratory, thoracic and mediastinal disorders			
Asthma			
subjects affected / exposed	10 / 108 (9.26%)	9 / 85 (10.59%)	
occurrences (all)	16	15	
Dyspnoea			
subjects affected / exposed	14 / 108 (12.96%)	5 / 85 (5.88%)	
occurrences (all)	19	6	
Bronchial hyperreactivity			
subjects affected / exposed	7 / 108 (6.48%)	5 / 85 (5.88%)	
occurrences (all)	10	11	
Cough			
subjects affected / exposed	87 / 108 (80.56%)	65 / 85 (76.47%)	
occurrences (all)	185	178	
Nasal congestion			
subjects affected / exposed	43 / 108 (39.81%)	31 / 85 (36.47%)	
occurrences (all)	76	60	
Epistaxis			
subjects affected / exposed	10 / 108 (9.26%)	5 / 85 (5.88%)	
occurrences (all)	13	6	
Pharyngeal erythema			
subjects affected / exposed	14 / 108 (12.96%)	11 / 85 (12.94%)	
occurrences (all)	16	12	
Rales			

subjects affected / exposed	15 / 108 (13.89%)	5 / 85 (5.88%)	
occurrences (all)	17	7	
Oropharyngeal pain			
subjects affected / exposed	30 / 108 (27.78%)	25 / 85 (29.41%)	
occurrences (all)	43	43	
Rhonchi			
subjects affected / exposed	7 / 108 (6.48%)	3 / 85 (3.53%)	
occurrences (all)	10	3	
Rhinorrhoea			
subjects affected / exposed	51 / 108 (47.22%)	38 / 85 (44.71%)	
occurrences (all)	87	58	
Sneezing			
subjects affected / exposed	7 / 108 (6.48%)	4 / 85 (4.71%)	
occurrences (all)	8	4	
Tonsillar hypertrophy			
subjects affected / exposed	6 / 108 (5.56%)	5 / 85 (5.88%)	
occurrences (all)	8	5	
Upper respiratory tract congestion			
subjects affected / exposed	2 / 108 (1.85%)	6 / 85 (7.06%)	
occurrences (all)	3	6	
Wheezing			
subjects affected / exposed	20 / 108 (18.52%)	10 / 85 (11.76%)	
occurrences (all)	34	18	
Psychiatric disorders			
Depression			
subjects affected / exposed	4 / 108 (3.70%)	5 / 85 (5.88%)	
occurrences (all)	5	6	
Attention deficit/hyperactivity disorder			
subjects affected / exposed	8 / 108 (7.41%)	2 / 85 (2.35%)	
occurrences (all)	9	8	
Investigations			
Alanine aminotransferase increased			
subjects affected / exposed	58 / 108 (53.70%)	50 / 85 (58.82%)	
occurrences (all)	58	50	
Blood alkaline phosphatase increased			

subjects affected / exposed	27 / 108 (25.00%)	23 / 85 (27.06%)	
occurrences (all)	27	23	
Aspartate aminotransferase increased			
subjects affected / exposed	63 / 108 (58.33%)	55 / 85 (64.71%)	
occurrences (all)	63	55	
Bilirubin conjugated increased			
subjects affected / exposed	68 / 108 (62.96%)	47 / 85 (55.29%)	
occurrences (all)	68	47	
Blood bilirubin increased			
subjects affected / exposed	98 / 108 (90.74%)	72 / 85 (84.71%)	
occurrences (all)	98	72	
Blood calcium increased			
subjects affected / exposed	9 / 108 (8.33%)	6 / 85 (7.06%)	
occurrences (all)	9	6	
Blood bilirubin unconjugated increased			
subjects affected / exposed	100 / 108 (92.59%)	77 / 85 (90.59%)	
occurrences (all)	100	77	
Blood creatine phosphokinase increased			
subjects affected / exposed	8 / 108 (7.41%)	13 / 85 (15.29%)	
occurrences (all)	8	13	
Blood calcium decreased			
subjects affected / exposed	2 / 108 (1.85%)	9 / 85 (10.59%)	
occurrences (all)	2	9	
Blood creatinine increased			
subjects affected / exposed	36 / 108 (33.33%)	38 / 85 (44.71%)	
occurrences (all)	36	38	
Blood cholesterol increased			
subjects affected / exposed	73 / 108 (67.59%)	44 / 85 (51.76%)	
occurrences (all)	73	44	
Blood glucose decreased			
subjects affected / exposed	63 / 108 (58.33%)	62 / 85 (72.94%)	
occurrences (all)	63	62	
Blood potassium abnormal			

subjects affected / exposed	50 / 108 (46.30%)	16 / 85 (18.82%)	
occurrences (all)	50	16	
Blood glucose increased			
subjects affected / exposed	34 / 108 (31.48%)	30 / 85 (35.29%)	
occurrences (all)	34	30	
Blood glucose abnormal			
subjects affected / exposed	13 / 108 (12.04%)	7 / 85 (8.24%)	
occurrences (all)	13	7	
Blood potassium decreased			
subjects affected / exposed	40 / 108 (37.04%)	27 / 85 (31.76%)	
occurrences (all)	40	27	
Blood potassium increased			
subjects affected / exposed	53 / 108 (49.07%)	25 / 85 (29.41%)	
occurrences (all)	53	25	
Blood magnesium decreased			
subjects affected / exposed	0 / 108 (0.00%)	5 / 85 (5.88%)	
occurrences (all)	0	5	
Blood sodium abnormal			
subjects affected / exposed	3 / 108 (2.78%)	5 / 85 (5.88%)	
occurrences (all)	3	5	
Blood triglycerides increased			
subjects affected / exposed	88 / 108 (81.48%)	68 / 85 (80.00%)	
occurrences (all)	88	68	
Blood sodium decreased			
subjects affected / exposed	77 / 108 (71.30%)	59 / 85 (69.41%)	
occurrences (all)	77	59	
Blood sodium increased			
subjects affected / exposed	13 / 108 (12.04%)	16 / 85 (18.82%)	
occurrences (all)	13	16	
Blood urea abnormal			
subjects affected / exposed	14 / 108 (12.96%)	13 / 85 (15.29%)	
occurrences (all)	14	13	
Gamma-glutamyltransferase increased			
subjects affected / exposed	47 / 108 (43.52%)	34 / 85 (40.00%)	
occurrences (all)	47	34	

Breath sounds abnormal			
subjects affected / exposed	4 / 108 (3.70%)	6 / 85 (7.06%)	
occurrences (all)	4	8	
Neutrophil count decreased			
subjects affected / exposed	68 / 108 (62.96%)	43 / 85 (50.59%)	
occurrences (all)	68	43	
Haemoglobin decreased			
subjects affected / exposed	59 / 108 (54.63%)	40 / 85 (47.06%)	
occurrences (all)	59	40	
Weight decreased			
subjects affected / exposed	12 / 108 (11.11%)	10 / 85 (11.76%)	
occurrences (all)	12	12	
Pancreatic enzymes abnormal			
subjects affected / exposed	14 / 108 (12.96%)	5 / 85 (5.88%)	
occurrences (all)	14	5	
Nervous system disorders			
Headache			
subjects affected / exposed	20 / 108 (18.52%)	31 / 85 (36.47%)	
occurrences (all)	27	78	
Dizziness			
subjects affected / exposed	3 / 108 (2.78%)	8 / 85 (9.41%)	
occurrences (all)	3	12	
Paraesthesia			
subjects affected / exposed	0 / 108 (0.00%)	6 / 85 (7.06%)	
occurrences (all)	0	9	
Blood and lymphatic system disorders			
Iron deficiency anaemia			
subjects affected / exposed	6 / 108 (5.56%)	1 / 85 (1.18%)	
occurrences (all)	9	2	
Splenomegaly			
subjects affected / exposed	9 / 108 (8.33%)	5 / 85 (5.88%)	
occurrences (all)	21	5	
lymphadenopathy			
subjects affected / exposed	32 / 108 (29.63%)	28 / 85 (32.94%)	
occurrences (all)	58	58	
Ear and labyrinth disorders			

Ear pain			
subjects affected / exposed	18 / 108 (16.67%)	23 / 85 (27.06%)	
occurrences (all)	27	29	
Otorrhoea			
subjects affected / exposed	16 / 108 (14.81%)	8 / 85 (9.41%)	
occurrences (all)	19	13	
Eye disorders			
Eye discharge			
subjects affected / exposed	21 / 108 (19.44%)	9 / 85 (10.59%)	
occurrences (all)	24	9	
Eye pruritus			
subjects affected / exposed	13 / 108 (12.04%)	7 / 85 (8.24%)	
occurrences (all)	15	7	
Eye pain			
subjects affected / exposed	8 / 108 (7.41%)	4 / 85 (4.71%)	
occurrences (all)	8	4	
Ocular hyperaemia			
subjects affected / exposed	14 / 108 (12.96%)	7 / 85 (8.24%)	
occurrences (all)	19	10	
Ocular icterus			
subjects affected / exposed	31 / 108 (28.70%)	26 / 85 (30.59%)	
occurrences (all)	50	65	
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	20 / 108 (18.52%)	20 / 85 (23.53%)	
occurrences (all)	28	35	
Abdominal pain upper			
subjects affected / exposed	14 / 108 (12.96%)	15 / 85 (17.65%)	
occurrences (all)	16	17	
Mouth ulceration			
subjects affected / exposed	4 / 108 (3.70%)	5 / 85 (5.88%)	
occurrences (all)	6	6	
Diarrhoea			
subjects affected / exposed	46 / 108 (42.59%)	28 / 85 (32.94%)	
occurrences (all)	65	48	
Nausea			

subjects affected / exposed	15 / 108 (13.89%)	14 / 85 (16.47%)	
occurrences (all)	24	24	
Oral disorder			
subjects affected / exposed	7 / 108 (6.48%)	4 / 85 (4.71%)	
occurrences (all)	13	4	
Tooth ache			
subjects affected / exposed	8 / 108 (7.41%)	3 / 85 (3.53%)	
occurrences (all)	9	3	
Vomiting			
subjects affected / exposed	53 / 108 (49.07%)	43 / 85 (50.59%)	
occurrences (all)	100	77	
Hepatobiliary disorders			
Jaundice			
subjects affected / exposed	9 / 108 (8.33%)	15 / 85 (17.65%)	
occurrences (all)	9	23	
Hepatomegaly			
subjects affected / exposed	19 / 108 (17.59%)	5 / 85 (5.88%)	
occurrences (all)	38	14	
Skin and subcutaneous tissue disorders			
Dry skin			
subjects affected / exposed	10 / 108 (9.26%)	9 / 85 (10.59%)	
occurrences (all)	12	10	
Acne			
subjects affected / exposed	5 / 108 (4.63%)	7 / 85 (8.24%)	
occurrences (all)	6	10	
Dermatitis diaper			
subjects affected / exposed	9 / 108 (8.33%)	0 / 85 (0.00%)	
occurrences (all)	10	0	
Eczema			
subjects affected / exposed	20 / 108 (18.52%)	7 / 85 (8.24%)	
occurrences (all)	23	8	
Erythema			
subjects affected / exposed	6 / 108 (5.56%)	7 / 85 (8.24%)	
occurrences (all)	7	9	
Pruritus			

subjects affected / exposed	15 / 108 (13.89%)	7 / 85 (8.24%)	
occurrences (all)	16	9	
Facial wasting			
subjects affected / exposed	14 / 108 (12.96%)	3 / 85 (3.53%)	
occurrences (all)	14	4	
Rash			
subjects affected / exposed	53 / 108 (49.07%)	37 / 85 (43.53%)	
occurrences (all)	71	55	
Skin lesion			
subjects affected / exposed	33 / 108 (30.56%)	14 / 85 (16.47%)	
occurrences (all)	36	17	
Rash generalised			
subjects affected / exposed	23 / 108 (21.30%)	11 / 85 (12.94%)	
occurrences (all)	32	12	
Rash papular			
subjects affected / exposed	6 / 108 (5.56%)	4 / 85 (4.71%)	
occurrences (all)	7	4	
Swelling face			
subjects affected / exposed	6 / 108 (5.56%)	1 / 85 (1.18%)	
occurrences (all)	7	1	
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	6 / 108 (5.56%)	10 / 85 (11.76%)	
occurrences (all)	8	12	
Back pain			
subjects affected / exposed	0 / 108 (0.00%)	5 / 85 (5.88%)	
occurrences (all)	0	6	
Pain in extremity			
subjects affected / exposed	15 / 108 (13.89%)	16 / 85 (18.82%)	
occurrences (all)	18	23	
Clubbing			
subjects affected / exposed	13 / 108 (12.04%)	6 / 85 (7.06%)	
occurrences (all)	17	11	
Infections and infestations			

Acarodermatitis			
subjects affected / exposed	18 / 108 (16.67%)	7 / 85 (8.24%)	
occurrences (all)	22	7	
Body tinea			
subjects affected / exposed	12 / 108 (11.11%)	4 / 85 (4.71%)	
occurrences (all)	12	4	
Bronchitis			
subjects affected / exposed	10 / 108 (9.26%)	1 / 85 (1.18%)	
occurrences (all)	12	1	
Acute sinusitis			
subjects affected / exposed	4 / 108 (3.70%)	18 / 85 (21.18%)	
occurrences (all)	7	26	
Chronic sinusitis			
subjects affected / exposed	0 / 108 (0.00%)	5 / 85 (5.88%)	
occurrences (all)	0	8	
Cellulitis			
subjects affected / exposed	6 / 108 (5.56%)	6 / 85 (7.06%)	
occurrences (all)	7	6	
Bronchopneumonia			
subjects affected / exposed	6 / 108 (5.56%)	2 / 85 (2.35%)	
occurrences (all)	6	2	
Gastroenteritis			
subjects affected / exposed	17 / 108 (15.74%)	6 / 85 (7.06%)	
occurrences (all)	17	7	
Gingivitis			
subjects affected / exposed	4 / 108 (3.70%)	5 / 85 (5.88%)	
occurrences (all)	5	5	
Conjunctivitis			
subjects affected / exposed	17 / 108 (15.74%)	11 / 85 (12.94%)	
occurrences (all)	20	13	
Impetigo			
subjects affected / exposed	17 / 108 (15.74%)	7 / 85 (8.24%)	
occurrences (all)	19	7	
Oral candidiasis			
subjects affected / exposed	8 / 108 (7.41%)	11 / 85 (12.94%)	
occurrences (all)	10	17	

Oral herpes			
subjects affected / exposed	9 / 108 (8.33%)	5 / 85 (5.88%)	
occurrences (all)	10	6	
Herpes zoster			
subjects affected / exposed	3 / 108 (2.78%)	5 / 85 (5.88%)	
occurrences (all)	5	6	
Otitis externa			
subjects affected / exposed	6 / 108 (5.56%)	5 / 85 (5.88%)	
occurrences (all)	7	6	
Otitis media acute			
subjects affected / exposed	26 / 108 (24.07%)	26 / 85 (30.59%)	
occurrences (all)	38	50	
Otitis media			
subjects affected / exposed	17 / 108 (15.74%)	5 / 85 (5.88%)	
occurrences (all)	18	5	
Parotitis			
subjects affected / exposed	2 / 108 (1.85%)	5 / 85 (5.88%)	
occurrences (all)	3	14	
Pharyngitis			
subjects affected / exposed	28 / 108 (25.93%)	15 / 85 (17.65%)	
occurrences (all)	31	18	
Pneumonia			
subjects affected / exposed	19 / 108 (17.59%)	15 / 85 (17.65%)	
occurrences (all)	18	19	
Pharyngitis streptococcal			
subjects affected / exposed	5 / 108 (4.63%)	7 / 85 (8.24%)	
occurrences (all)	6	9	
Purulent discharge			
subjects affected / exposed	9 / 108 (8.33%)	5 / 85 (5.88%)	
occurrences (all)	9	6	
Tinea capitis			
subjects affected / exposed	17 / 108 (15.74%)	5 / 85 (5.88%)	
occurrences (all)	17	6	
Tonsillitis			
subjects affected / exposed	21 / 108 (19.44%)	9 / 85 (10.59%)	
occurrences (all)	25	14	

Tinea infection			
subjects affected / exposed	13 / 108 (12.04%)	12 / 85 (14.12%)	
occurrences (all)	17	13	
Tinea faciei			
subjects affected / exposed	7 / 108 (6.48%)	3 / 85 (3.53%)	
occurrences (all)	7	3	
Upper respiratory tract infection			
subjects affected / exposed	0 / 108 (0.00%)	12 / 85 (14.12%)	
occurrences (all)	0	15	
Varicella			
subjects affected / exposed	6 / 108 (5.56%)	3 / 85 (3.53%)	
occurrences (all)	6	3	
Urinary tract infection			
subjects affected / exposed	0 / 108 (0.00%)	7 / 85 (8.24%)	
occurrences (all)	0	7	
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	28 / 108 (25.93%)	11 / 85 (12.94%)	
occurrences (all)	30	12	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
23 September 2005	The purpose of this amendment was to inform clinical site and pharmacy staff that ritonavir solution was temporarily not available through the National Institute of Allergy and Infectious Diseases Clinical Research Products Management Center (CRPMC). New supplies of ritonavir were expected at the CRPMC the week of September 26, 2005.
26 September 2005	The purpose of this amendment was to modify the pharmacokinetic criteria for continuing to evaluate a dose of atazanavir in combination with ritonavir in infants, children, and adolescents through Paediatric Acquired Immuno Deficiency Syndrome (AIDS) Clinical Trials Group (PACTG) 1020A.
19 December 2005	The purpose of this amendment was to provide additional directions to National Institute of Child Health and Human Development sites participating in PACTG P1020 related to storage of blood specimens.
13 December 2006	The purpose of this amendment was to provide directions and justification to sites participating in P1020A related to allowing subjects to switch from the powder to the capsule formulation of atazanavir, depending on subject's age and ability to swallow tablets and capsules.
04 December 2009	The purpose of this amendment was to allow for modifications in a subject's treatment regimen if required by toxicity to 1 of the 2 nucleoside analog reverse-transcriptase inhibitor agents. This amendment applied only to subjects who had completed at least 56 weeks of therapy, and had successfully completed the 56 week intensive pharmacokinetic evaluation.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported