SUPPLEMENTAL DIGITAL CONTENT

Resistance Testing Procedures

Supplemental Digital Content 1. Table S1. Serious Adverse Events

Resistance Testing Procedures

Resistance testing was assessed for those with virologic failure, defined as an incomplete virologic response to therapy or viral rebound after virologic suppression or who discontinued from study medications for any reason (except withdrawal of consent or the last plasma HIV-1 RNA measurement being >400 copies/mL). Incomplete virologic response to therapy was defined as either <1 $\log_{10}$ HIV-1 RNA decrease from baseline by Week 16, confirmed by a second test; or HIV-1 RNA >200 copies/mL after Week 24, confirmed by a second test; or repeated HIV-1 RNA ≥50 copies/mL after Week 48. Viral rebound was defined as HIV-1 RNA ≥400 copies/mL, confirmed by a second test at any time in a patient who had previously achieved an HIV-1 RNA <50 copies/mL.

HIV-1 isolates were tested for phenotypic resistance to selected PIs, NRTIs, and non-nucleoside reverse transcriptase inhibitors using the Phenosense™ HIV assay (Monogram Biosciences, Inc., South San Francisco, CA, USA). HIV substitutions in the reverse transcriptase and protease genomes were determined using GeneSeq™ HIV assay (Monogram Biosciences Inc.)

Newly emergent genotypic substitutions were summarized using all on-treatment substitutions not detected at baseline. Newly emergent phenotypic resistance to a drug, which was performed only on blood samples from treatment-experienced patients, was defined as a baseline fold change ≤ the cut-off for the reduced susceptibility, and an on-treatment fold change > the cut-off for reduced susceptibility.

Supplemental Table S1. Serious Adverse Events*

Body Weight at Baseline (kg)	**5 to <10**	**5 to <10**	**10 to <15**	**15 to <25**	**25 to <35**	**Total**
ATV/RTV Dose, mg/mg	**150/80**	**200/80**	**200/80**	**250/80**	**300/100**	
Number with available safety data, *N*	23	12	21	35	8	99
Total patients with a serious adverse event, *n* (%)	3 (13.0)	3 (25.0)	6 (28.6)	7 (20.0)	1 (12.5)	20 (20.2)
Dysentery	0	0	1 (4.8)	0	0	1 (1.0)
Gastroenteritis	0	1 (8.3)	0	0	0	1 (1.0)
Otitis media	0	0	1 (4.8)	0	0	1 (1.0)
Pertussis	0	1 (8.3)	0	0	0	1 (1.0)
Pulmonary tuberculosis	0	1 (8.3)	0	0	0	1 (1.0)
Sinusitis	0	0	1 (4.8)	0	0	1 (1.0)
Tonsillitis	0	0	0	1 (2.9)	0	1 (1.0)
Varicella	0	0	1 (4.8)	0	0	1 (1.0)
Alanine aminotransferase increased	0	0	1 (4.8)	1 (2.9)	1 (12.5)	3 (3.0)
Aspartate aminotransferase increased	0	0	1 (4.8)	0	0	1 (1.0)
Blood bilirubin increased	0	0	0	1 (2.9)	0	1 (1.0)
Transaminases increased	1 (4.3)	0	0	0	0	1 (1.0)
Overdose	0	0	0	2 (5.7)	0	2 (2.0)
Accidental exposure to product	1 (4.3)	0	0	0	0	1 (1.0)
Pancreatitis acute	1 (4.3)	0	0	0	0	1 (1.0)
Vomiting	0	0	1 (4.8)	0	0	1 (1.0)
Lymphadenopathy	0	0	1 (4.8)	0	0	1 (1.0)
Ulcerative keratitis	0	0	1 (4.8)	0	0	1 (1.0)
Hyperbilirubinemia	0	0	0	1 (2.9)	0	1 (1.0)
Immune reconstitution inflammatory syndrome	0	0	0	1 (2.9)	0	1 (1.0)

N, total number of patients; *n*, number of patients with each event. *Defined as death, life-threatening event, hospitalization, persistent or significant disability/incapacity, congenital anomaly/birth defect, or other important medical event.