

Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Violari A, Lindsey JC, Hughes MD, et al. Nevirapine versus ritonavir-boosted lopinavir for HIV-infected children. *N Engl J Med* 2012;366:2380-9.

Table of Contents

	Page
Details of Study Conduct	2
Figure S1	3
Table S1	4
Table S2	5
Table S3	6
Table S4	7-8
Table S5	9
Acknowledgements	10-11

Members of the P1060 study team designed the study, patient data were collected at the sites and transmitted to Frontier Science (FSTRF, Albany, NY), and data analyses were performed by the Harvard Statistical Data Analysis Center statisticians (JCL, MDH). The manuscript was initially drafted by the study co-chairs (AV, PP) and revised with input from all manuscript authors, who vouch for the data. The P1060 team decided to publish the paper.

Figure S1: Time to death; solid line = NVP, dashed line = LPV/r

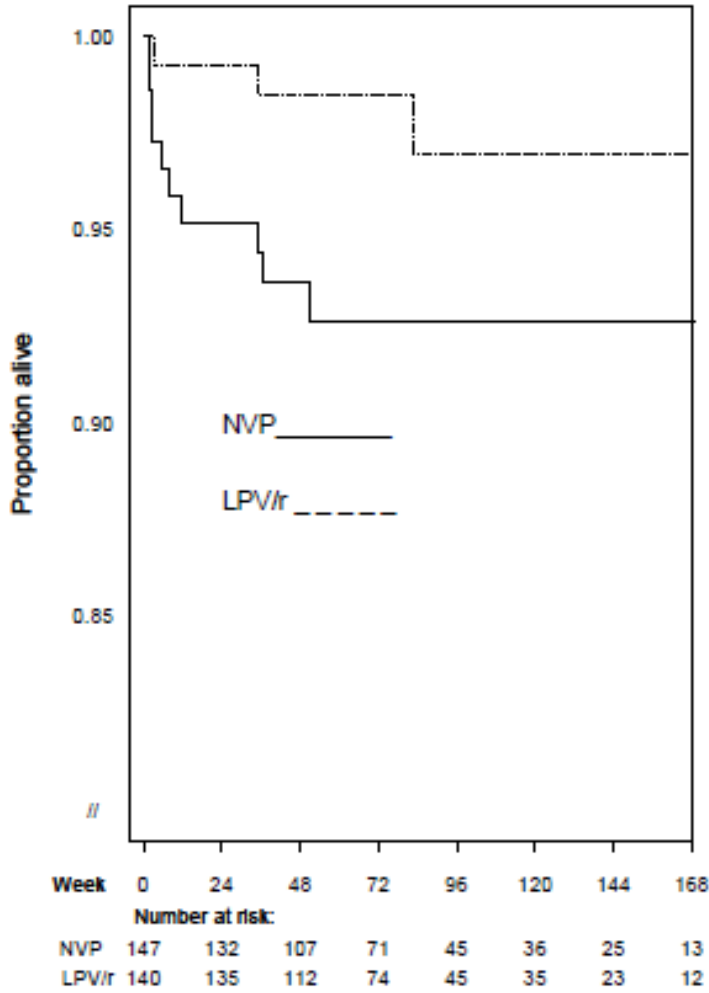


Table S2
Primary Endpoint: Off Study Treatment or Virologic Failure

			Type of endpoint met ¹				
			No endpnt	Primary endpnt	Off trt only	Virol Fail only	Both
Treatment	Age stratum	Total N	N	N	N	N	N
Total		287	200	87	42	43	2
LPV/r	2m - <12m	36	29	7	4	3	0
	≥12m	104	84	20	11	9	0
	Total	140	113	27	15	12	0
NVP	2m - <12m	41	24	17	9	8	0
	≥12m	106	63	43	18	23	2
	Total	147	87	60	27	31	2

¹ Counts indicate whether primary endpoint was from going off study treatment, experiencing virologic failure, or both at the same time

Table S3: Protocol-defined Toxicity Endpoints

	NVP	LPV/r
≥Grade 2B rash	5	
≥Grade 3 LFT	2 (2)	
Neutropenia	2 (2)	2 (1)
Anemia	1	1
Thrombocytopenia		(1)

Numbers depict events; Grade 3 events are numbers without parentheses;

Grade 4 events are numbers in parentheses.

Table S4: Numbers of deaths, new \geq grade 3 signs, symptoms or laboratory abnormalities, new targeted diagnoses and changes in lipids occurring on study treatment. Note that counts within categories may not add up to totals in category as subjects could experience more than one event within the category.

Event	NVP (n=147)	LPV/r (n=140)	Total (n=287)
Death (on or off study treatment)	10 (7%)	3 (2%)	13 (5%)
Grade \geq 3 laboratory abnormality	66 (45%)	50 (36%)	116 (40%)
Potassium	4	0	4
Sodium	1	0	1
Platelets	2	4	6
Hemoglobin	13	8	21
Absolute Neutrophil Count	49	41	90
White Blood Cells	1	0	1
SGOT	7	2	9
SGPT	13	3	16
Creatinine	1	0	1
Grade \geq 3 sign/symptom	31 (21%)	28 (20%)	59 (21%)
General body (fever/weight loss)	19	19	38
Respiratory (cough, difficulty breathing, SOB, abnormal breath sounds, respiratory system dysfunction)	8	4	12
Circulatory/cardiac (cardiovascular dysfunction, swollen)	2	1	3
Gastrointestinal (diarrhea, vomiting, appetite loss)	6	8	14
Reproductive (discharge)	1	0	1

Skin (allergic rash, inflammation, papules, rash-non allergic)	2	2	4
Neurologic (convulsion/seizure, weakness)	2	0	2
Other (dehydration)	1	0	1
Targeted new diagnoses			
Immune reconstitution syndrome (IRIS)	3	2	5
AIDS encephalopathy	0	2	2
Malaria	40	44	84
Tuberculosis (disseminated, meningitis, pulmonary, peripheral lymph nodes)	7	5	13
Lipids: mean (95% CI) change: week 48 minus baseline			Adjusted * p-value
Total cholesterol (mg/dl)	39.6 (29.1, 50.1) (n=67)	32.9 (23.3, 42.4) (n=95)	0.97
Triglycerides (mg/dl)	-48.1 (-78.3, -17.8) (n=65)	-41.8 (-64.6, -18.9) (n=95)	0.072

* p-value for treatment difference from linear regression on change from baseline adjusted for entry value

**Table S5: Change from Baseline to Weeks 24 and 48
Comparison of NVP versus LPV/r treatment**

Outcome	Treatment	Week	N	Mean (95% CI)	Ttest p-value	Adjusted p-value*
CD4 count (cells/mm3)	NVP	24	132	477 (378, 576)	0.89	0.74
	LPV/r	24	135	468 (378, 557)		
	NVP	48	109	599 (479, 719)	0.52	0.24
	LPV/r	48	119	541 (411, 671)		
CD4%	NVP	24	132	12.4 (11.0, 13.8)	0.17	0.14
	LPV/r	24	135	11.1 (9.9, 12.3)		
	NVP	48	109	15.2 (13.6, 16.9)	0.41	0.34
	LPV/r	48	119	14.3 (13.0, 15.7)		
Height z-score	NVP	24	133	0.21 (0.09, 0.32)	0.30	0.24
	LPV/r	24	134	0.12 (0.00, 0.24)		
	NVP	48	110	0.43 (0.28, 0.57)	0.10	0.10
	LPV/r	48	119	0.25 (0.10, 0.40)		
Weight z-score #	NVP	24	133	1.03 (0.84, 1.23)	0.084	0.007
	LPV/r	24	134	0.78 (0.58, 0.99)		
	NVP	48	108	1.36 (1.12, 1.60)	0.064	0.009
	LPV/r	48	117	1.04 (0.80, 1.27)		
BMI #	NVP	24	133	1.1 (0.8, 1.4)	0.13	0.020
	LPV/r	24	134	0.8 (0.5, 1.1)		
	NVP	48	111	1.1 (0.7, 1.4)	0.23	0.031
	LPV/r	48	119	0.8 (0.4, 1.1)		

* Adjusted for entry value and age stratum

Favoring the NVP treatment group

Acknowledgements: Overall support for the PACTG and the International Maternal Pediatric Adolescent AIDS Clinical Trials Group (IMPAACT) was provided by the National Institute of Allergy and Infectious Diseases (NIAID) [U01 AI068632], the *Eunice Kennedy Shriver* National Institute of Child Health and Human Development (NICHD), and the National Institute of Mental Health (NIMH). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH. This work was supported by the Statistical and Data Analysis Center at Harvard School of Public Health, under the National Institute of Allergy and Infectious Diseases cooperative agreement #5 U01 AI41110 with the Pediatric AIDS Clinical Trials Group (PACTG) and #1 U01 AI068616 and U01 AI068632 with the IMPAACT Group. Support of the sites was provided by the National Institute of Allergy and Infectious Diseases (NIAID). Additional support was provided with Federal funds from the National Institute of Allergies & Infectious Diseases, National Institutes of Health, Department of Health and Human Services, under Contract No. HHSN272200800014C.

The IMPAACT P1060 Study Team would like to sincerely thank the children, their families and care providers who agreed to participate in P1060 and place their trust in the Site Clinical Study Teams. We would also like to acknowledge the contributions of the following P1060 Study Team Members: Joan Coetzee, Emily Barr, Phillippa Musoke, Mutsawashe Bwakura-Dangarembizi, Tammy Meyers, Robert Bollinger, George Kafulafula, Namwinga Chintu, Tamara Kuryla, Carrie Fry, and Don Decker as well as Sandi Lehrman.

The Division of AIDS International Data Safety Monitoring Board members were: Haroon Saloojee (chair) (University of the Witwatersrand, Johannesburg); R. DerSimonian (executive secretary); Wafaa El-Sadr (Columbia University Mailman School of Public Health, New York City); David P. Harrington (Harvard School of Public Health, Boston); Jonathan Levin (MRC/UVRI Uganda Research Unit on AIDS; Entebbe, Uganda); Carl Jacobus Lombard (MRC South Africa, Cape Town); Mary Faith Marshall (University of Minnesota, Minneapolis); Lucky Mokgathe (University of Botswana, Gaborone); Paula Munderi (MRC Uganda Research Unit on AIDS, Entebbe); Alwyn Mwinga (Centers for Disease Control Zambia, Lusaka); Andrew Nunn (MRC CTU, London); and Jerome Amir Singh (Nelson Mandela School of Medicine, Durban).

Special thanks go to the following Pharmaceutical representatives and their companies for participation in the design of the trial and for generous provision of the antiretroviral agents used in the study: Lauren Petrella and Peter Piliero, Boehringer Ingelheim Pharmaceuticals; Marisol Martinez, M.D., Abbott Laboratories; Navdeep Thoofer and Wendy Snowden, GlaxoSmithKline.

Disclaimer

The content is solely the responsibility of the authors and does not necessarily represent the official policies of the Department of Health and Human Services; nor does mention of any trade names, commercial practices, or organizations imply endorsement by the U.S. Government.