## SUPPLEMENTARY MATERIAL

## The Combination of Pill Count and Self-Reported Adherence is a Strong Predictor of First-Line ART Failure for Adults in South Africa

Peng Wu<sup>1</sup>, Brent A. Johnson<sup>1</sup>, Jean B. Nachega<sup>2,3,4</sup>, Baohua Wu<sup>1</sup>, Claudia E. Ordóñez<sup>5</sup>, Anna Q. Hare<sup>6</sup>, Rachel Kearns<sup>1</sup>, Richard Murphy<sup>7</sup>, Henry Sunpath<sup>5,8</sup> and Vincent C. Marconi<sup>1,6,9</sup>

<sup>1</sup>Rollins School of Public Health, Emory University, Atlanta, Georgia, USA; <sup>2</sup>Department of Epidemiology, Pittsburgh University Graduate School of Public Health, Pittsburgh, Pennsylvania, USA; <sup>3</sup>Departments of Epidemiology and International Health, Johns Hopkins Bloomberg School of Public Health, Baltimore, Maryland, USA; <sup>4</sup>Department of Medicine and Centre for Infectious Diseases, Stellenbosch University, Faculty of Medicine & Health Sciences, Cape Town, South Africa; <sup>5</sup>McCord Hospital, Durban, South Africa; <sup>6</sup>Emory University School of Medicine, Atlanta, Georgia, USA; <sup>7</sup>Albert Einstein College of Medicine and Medical Unit, Doctors Without Borders, New York, New York, USA; <sup>8</sup>Infectious Diseases Unit, Nelson Mandela School of Medicine, University of KwaZulu-Natal, Durban, South Africa; <sup>9</sup>Atlanta Veterans Affairs Medical Center, Atlanta, Georgia, USA

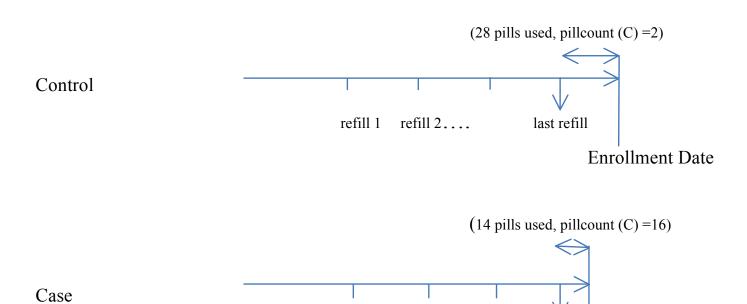
## Supplemental Table 1. "Antiretroviral Hierarchy".

Drugs <sup>£</sup>	Name			
1. EFV	Efavirenz			
2. TDF	Tenofovir DisoproxilFumarate			
3. FTC/TDF	Emtricitabine and Tenofovir			
4. FTC	Emtricitabine			
5. 3TC	Lamivudine			
6. 3TC/ZDV	Lamivudine and Zidovudine			
7. ZDV	Zidovudine (Azidothymidine)			
8. 3TC/ABC	Lamivudine and Abacavir			
9. d4T	Stavudine			
10. ddI	Didanosine			
11. LPV/r	Lopinavir and Rionavir			
12. ABC	Abacavir			

<sup>£</sup> Antiretroviral in order by hierarchy rank.

## **Supplemental Table 2. Self-reported questions.**

Questions		Response Options (Score Recorded)			
1. How many doses have you missed in the last week?					
2. How many doses have you missed in the last month?					
3. How many doses did you take more than 1 hour late in the last week?					
4. How many doses did you take more than 1 hour late in the last month?					
5. How do you remember to take your meds? (choice=Cell phone (3))	No (0)		Yes (1)		
6. How do you remember to take your meds? (choice=Media (TV/Radio) (7))	No (0)		Yes (1)		
7. How do you remember to come for your drug collection appointment? (choice=Cellphone (3))	No (0)		Yes (1)		
In the past 6 months, which of the following reasons make it difficult for you to take ARVs (show scale and rank)?					
8. You were away from home?	Never (0)	Rarely (1)	Sometimes (2)	Frequently (3)	
9. You were busy with other things?	Never (0)	Rarely (1)	Sometimes (2)	Frequently (3)	
10. You fell asleep through dose time?	Never (0)	Rarely (1)	Sometimes (2)	Frequently (3)	
11. You ran out of pills?	Never (0)	Rarely (1)	Sometimes (2)	Frequently (3)	
12. You forgot to take pills?	Never (0)	Rarely (1)	Sometimes (2)	Frequently (3)	
13. You had wanted to avoid side effects?	Never (0)	Rarely (1)	Sometimes (2)	Frequently (3)	



refill 1

refill 2....

last refill

**Enrollment Date** 

Supplemental Fig. (1). Pharmacy Refill Claims.