

## Oral Abstract Presentations 2

# #8 Effect of Same-Day ART Initiation on Early Retention in Rakai, Uganda

Jesca Basiima, Uganda

# Effect of same-day ART initiation on early retention in Rakai, Uganda .

Jesca Basiima<sup>1</sup>, Victor Ssempijja<sup>1,2</sup>, Anthony Ndyababo<sup>1</sup>, Alice Kisakye<sup>1</sup>, Grace Mong Bua<sup>1</sup>, Denis Bbaale<sup>1</sup>, Larry Chang<sup>1,3</sup>, Nelson Sewankambo<sup>1,5</sup>, David Serwadda<sup>1,5</sup>, Lisa Mills<sup>6</sup>, Joseph Kagaayi<sup>1</sup>, Patrick Komakech<sup>6</sup>, Gertrude Nakigozi<sup>1</sup>, Michelle R Adler<sup>6</sup>

<sup>1</sup>Rakai Health Sciences Program, Rakai, Uganda. <sup>2</sup>Clinical Monitoring Research Program Directorate, Frederick National Laboratory for Cancer Research sponsored by the National Cancer Institute. <sup>3</sup>Johns Hopkins School of Medicine, Baltimore, Maryland

Presenter : Jesca Basiima

# Introduction

Retention in care is key to achieving good clinical outcomes. Data on clients who return on the first follow up appointment after same day ART initiation in uganda is limited.

## Objective

We assessed differences in retention at the first ART initiation follow-up within one-month of ART initiation and subsequent retention after the first ART follow-up. HIV infected patients who start ART on the day of HIV diagnosis, and those who delayed initiation by 1-7 or 8+ days after HIV diagnosis.

## Study Population :

HIV infected adults 18 years and older who initiated ART during the test and start program between April 2016 –September 2019 in 20 HIV clinics of Rakai district.

## Methods

We conducted a retrospective longitudinal analysis .

The primary exposure was time from testing HIV positive to initiation of ART classified as same day initiation, 1-7 days or  $\geq 8$  days post-HIV test.

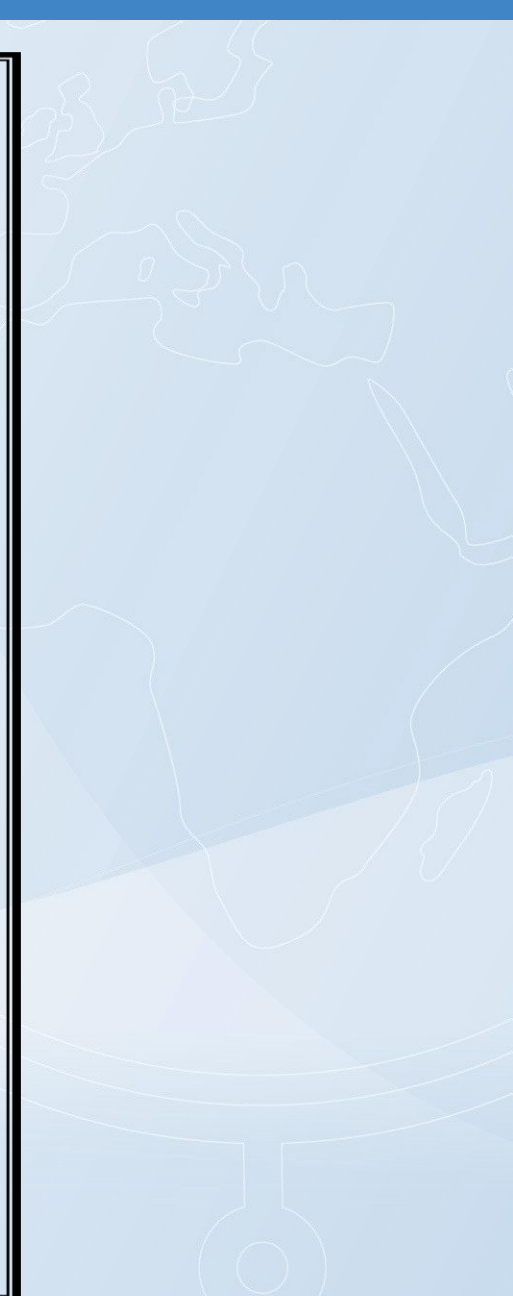
The primary outcome was return to the clinic within 1 month of ART initiation for follow-up.

HIV testing was conducted using rapid HIV tests according to Uganda Ministry of Health guidelines.

## Statistical Analysis

We used multivariable modified Poisson regression to estimate adjusted prevalence ratios (aPR) and 95% CI of returning to the clinic within one month of ART initiation

Characteristics	Overall	Time after confirmed HIV positive to Initiating ART			p-value
		≥8 days	1-7 days	0 days	
	n(%)	n(%)	n(%)		
<b>Overall</b>	<b>1873(100%)</b>	<b>329(18%)</b>	<b>397(21%)</b>	<b>1147(61%)</b>	
<b>Gender</b>					
Female	1089(58%)	204(62%)	242(61%)	643(56%)	0.069
Male	784(42%)	125(38%)	155(39%)	504(44%)	
<b>Age in years:</b>					
18-24	382(20%)	69(21%)	85(21%)	228(20%)	0.091
25-34	752(40%)	145(44%)	159(40%)	448(39%)	
35-44	496(26%)	65(20%)	109(27%)	322(28%)	
≥45	242(13%)	49(15%)	44(11%)	149(13%)	
<b>Rural_urban setting</b>					
Rural	507(27%)	91(28%)	74(19%)	342(30%)	<0.001
Rural-Urban	1081(58%)	184(56%)	243(61%)	654(57%)	
Fishing/Landing site	285(15%)	54(16%)	80(20%)	151(13%)	
<b>Year of HIV testing</b>					
2016	592(32%)	194(59%)	166(42%)	232(20%)	<0.001
2017	475(25%)	80(24%)	124(31%)	271(24%)	
2018	616(33%)	50(15%)	92(23%)	474(41%)	
2019	190(10%)	5(2%)	15(4%)	170(15%)	
<b>Care entry point</b>					
Health facility	618(33%)	127(39%)	146(37%)	345(30%)	<0.001
Community	334(18%)	20(6%)	20(5%)	294(26%)	
Walki-ns/Transfer-ins/PMTCT/referrals	921(49%)	182(55%)	231(58%)	508(44%)	



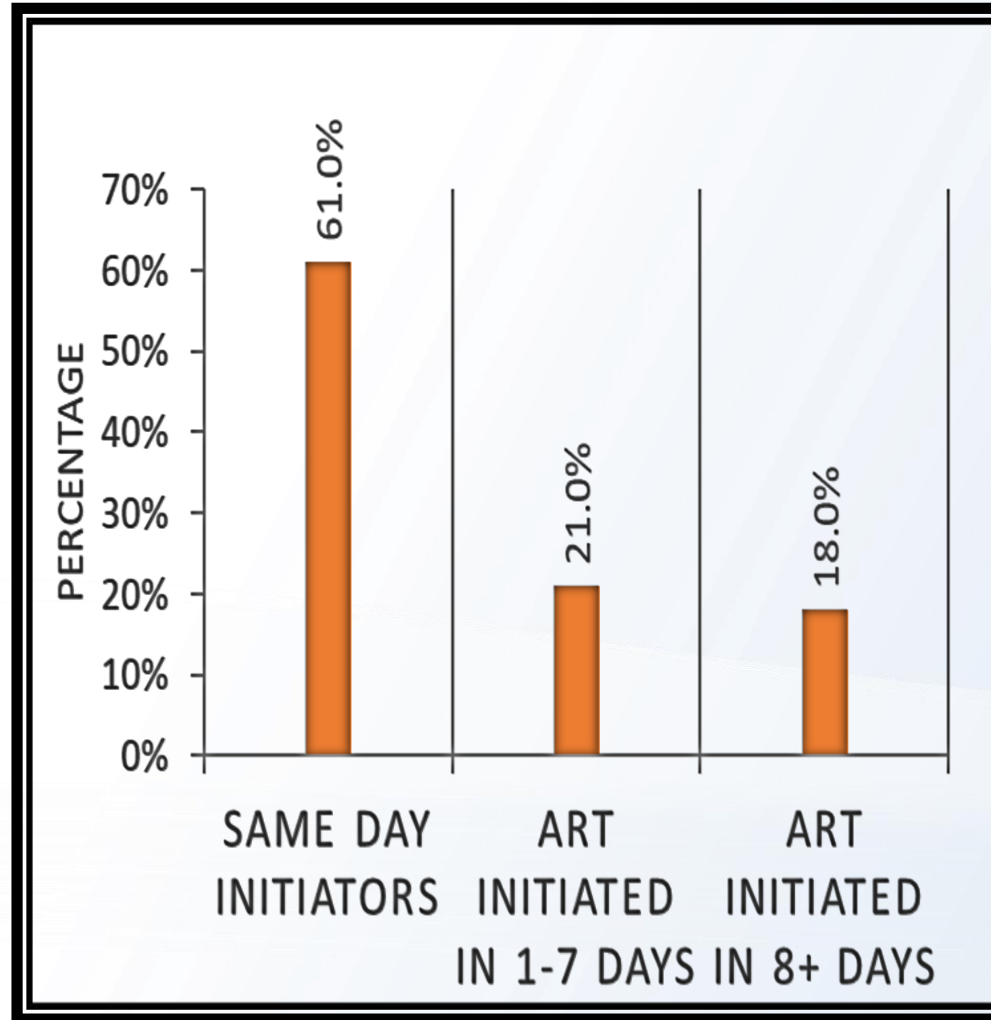


## Outcome

same day ART initiators were twice more likely not to return for the first follow up compared to 8+ days initiation (aPR= 1.8, 95% CI = 1.2- 2.9)

1-7 days initiators didn't significantly differ from 8+ days initiators .(aPR=1.3,95%CI =0.8-2.2).

**Table A: Distribution of clients by time of ART initiation after HIV testing**



**Table B: Proportion of clients that returned to the clinic for the first follow up by timing of ART initiation**

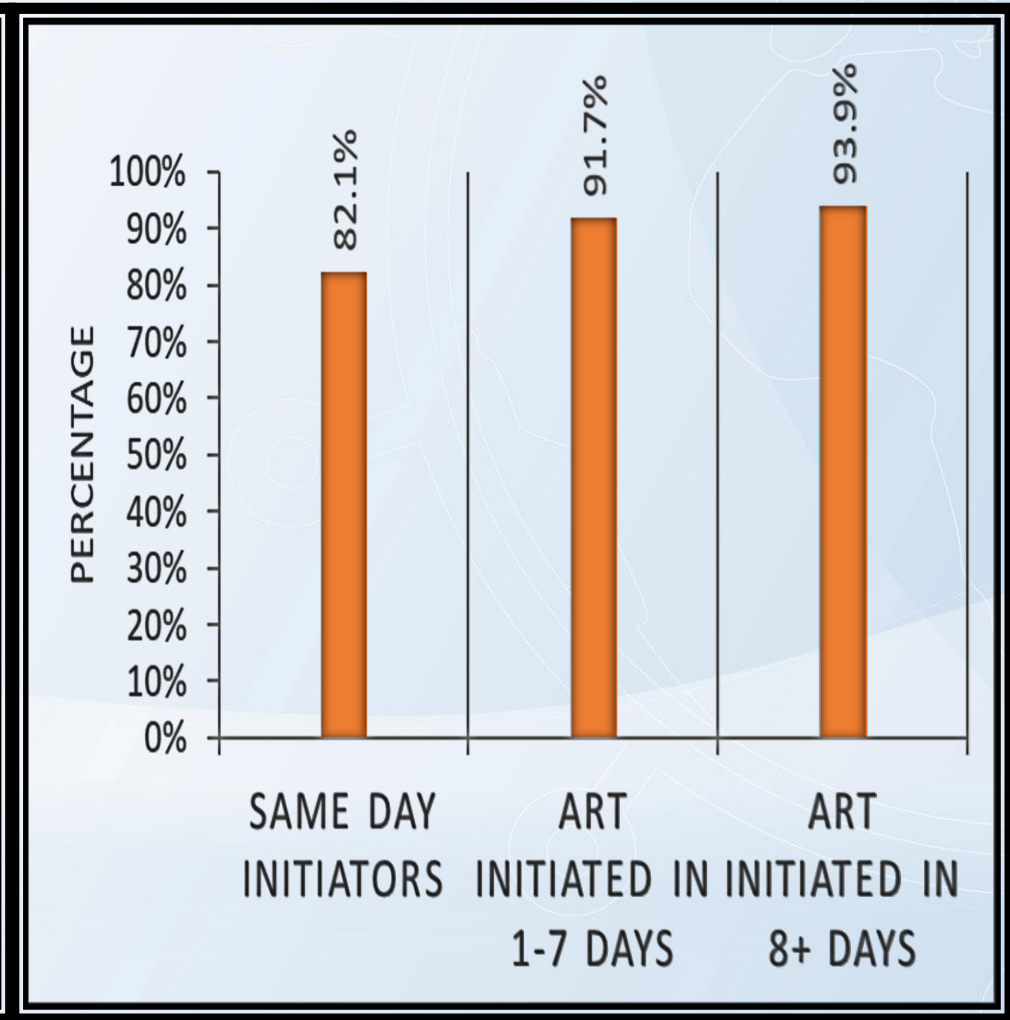
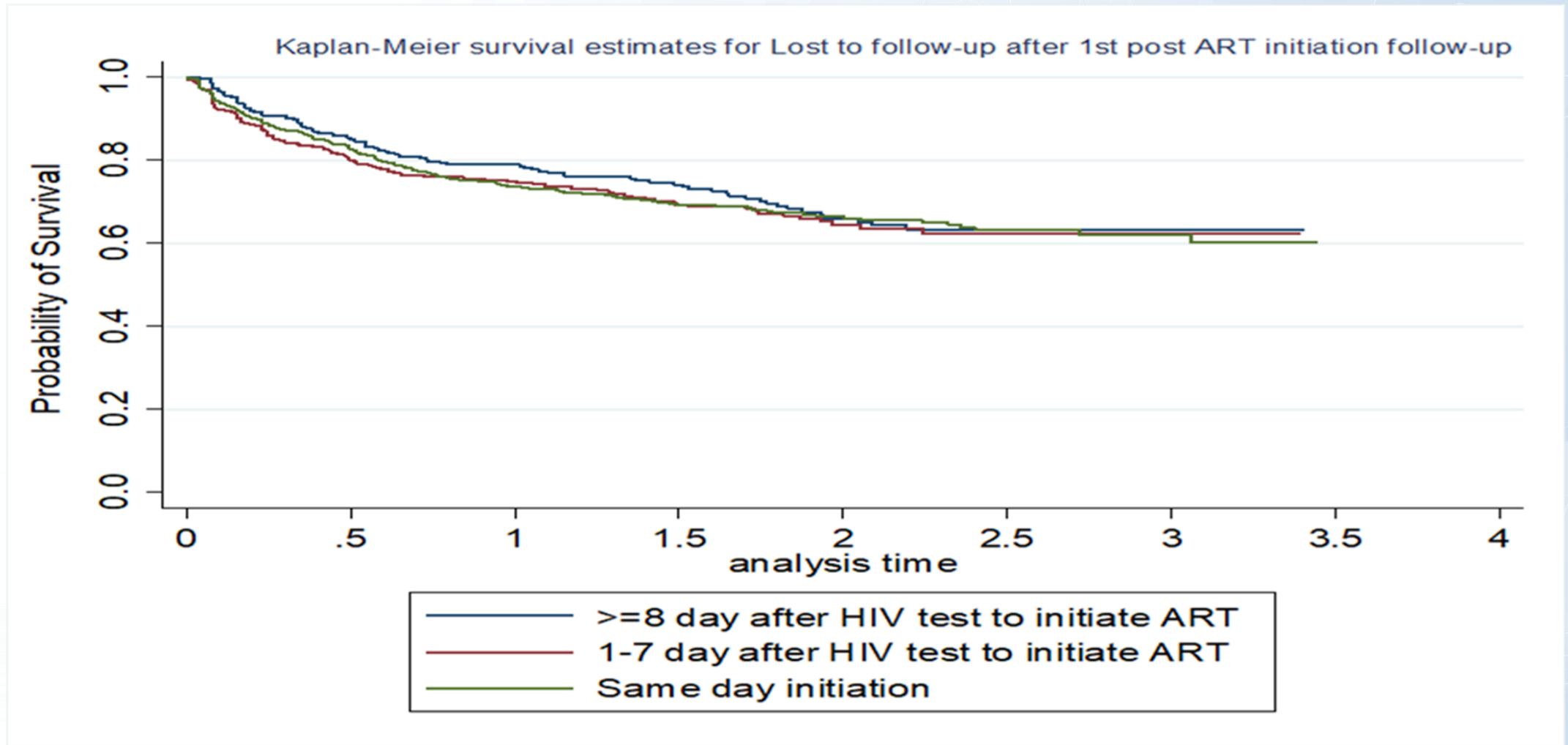


Table 3: Retention after 1st follow-up visit after ART initiation during Test and Start

Characteristics	Lost to follow-up/ person years	Lost to follow-up/100 person years (( 95% CI)	Univariate analysis		Multivariate Analysis	
			Hazard ratio ( 95% CI)	p-value	Hazard ratio ( 95% CI)	p-value
<b>Overall</b>	<b>418/1770.3</b>	<b>23.6(21.5-26)</b>				
<b>Time lapse from HIV test to ART initiation (days)</b>						
8+	86/416.8	20.6(16.7-25.5)	Ref		Ref	
1-7	108/453.7	23.8(19.7-28.7)	1.13(0.9-1.5)	0.395	1.21(0.9-1.6)	0.185
0	224/899.8	24.9(21.8-28.4)	1.10(0.9-1.4)	0.448	1.22(0.9-1.6)	0.131
<b>Gender</b>						
Female	235/1043.1	22.5(19.8-25.6)	Ref		Ref	
Male	183/727.2	25.2(21.8-29.1)	1.12(0.9-1.4)	0.266	1.22(1.0-1.5)	0.058
<b>Age in years:</b>						
18-24	92/279.5	32.9(26.8-40.4)	Ref		Ref	
25-34	186/718.8	25.9(22.4-29.9)	0.86(0.7-1.1)	0.251	0.84(0.7-1.1)	0.194
35-44	86/516.8	16.6(13.5-20.6)	0.57(0.4-0.8)	<0.001	0.50(0.4-0.7)	<0.001
≥45	54/255.2	21.2(16.2-27.6)	0.72(0.5-1.0)	0.052	0.59(0.4-0.8)	0.004
<b>Rural_urban setting</b>						
Rural	135/418.8	32.2(27.2-38.2)	Ref			
Rural-Urban	207/1183.7	17.5(15.3-20)	0.61(0.5-0.8)	<0.001	0.59(0.4-0.8)	<0.001
Fishing/Landing site	76/167.8	45.3(36.2-56.7)	1.35(1.0-1.8)	0.038	1.18(0.9-1.6)	0.275
<b>Year of HIV testing</b>						
2016	193/812.7	23.7(20.6-27.3)	Ref	<0.001	Ref	<0.001
2017	129/578.2	22.3(18.8-26.5)	0.83(0.7-1.0)	0.102	0.90(0.7-1.1)	0.358
2018	89/335.3	26.5(21.6-32.7)	0.76(0.6-1.0)	0.036	0.92(0.7-1.2)	0.570
2019	7/44.1	15.9(7.6-33.3)	0.32(0.1-0.7)	0.003	0.45(0.2-1.0)	0.047
<b>Care entry point</b>						
Health facility	160/459.2	34.8(29.8-40.7)	Ref			
Community	34/148.7	22.9(16.3-32)	0.60(0.4-0.9)	0.008	0.93(0.6-1.4)	0.733
Walki-ns/Transfer-ins/PMTCT/referrals	224/1162.5	19.3(16.9-22)	0.65(0.5-0.8)	<0.001	0.97(0.7-1.3)	0.807

Time lapse from HIV test to ART initiation was not a significant predictor of long term retention



## Conclusion and Implication:

Same day ART initiation may be a key driver of early loss to follow up.

Need strategies to optimize early retention in the context of same day ART initiation.

Further research for reasons for non return for refill is needed.

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