

Supplemental Digital Content

Supplemental Digital Content 1: Prevalence of HPV in Penile and Scrotal Samples^a

	Percent(Exact 95% Confidence Interval)		
	Penile (n=274)	Scrotal (n=262)	Penile or Scrotal (n=251)
Any HPV (consensus)	55 (49-61)	54 (48-60)	69 (62-74)
Oncogenic HPV^b	15 (11-19)	13 (10-18)	23 (18-28)
Non-oncogenic HPV^c	16 (11-20)	13 (9-17)	20 (15-25)
Unknown Type^d	31 (25-37)	33 (28-39)	48 (42-54)

^aExcludes samples negative for beta-globin DNA; for analysis of any penile or scrotal infection, both samples were required to be positive for beta-globin DNA

^bTypes 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 73, 82

^cTypes other than 16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 68, 73, 82

^dSamples positive with the consensus probe but negative when probed for specific types.

Supplemental Digital Content 2: Relationship between Penile HPV Infection and Scrotal HPV Infection for Any HPV Type and Oncogenic HPV Types^a

Any Type Penile HPV infection	Any Type Scrotal HPV Infection		
	Positive (%)	Negative (%)	Total
Positive	103(41)	36(14)	139
Negative	33(13)	79(31)	112
Total	136	115	251
Oncogenic Penile HPV infection	Oncogenic Scrotal HPV Infection		
	Positive (%)	Negative (%)	Total
Positive	194 (77)	17 (7)	211
Negative	22 (9)	18 (7)	40
Total	216	35	251

^aExcludes samples for which beta-globin DNA was negative for either penile or scrotal samples from a participant.

Supplemental Digital Content 3: Univariate Analysis of Risk Factors for Penile and Scrotal Non-Oncogenic HPV

	Non-Oncogenic Penile HPV					Non-Oncogenic Scrotal HPV				
	N	%	OR ^a	95% CI	P	%	OR ^a	95% CI	P	
Age in years			1							
18-25	41	10				5	1			
26-35	116	16	2.16	0.66-7.07	0.201	14	3.20	0.67-15.20	0.144	
>35	117	18	2.79	0.86-9.04	0.087	15	3.40	0.72-16.08	0.123	
Age at having 1st male partner (years)										
≤16	154	11	1			8	1			
≥17	120	22	2.78	1.36-5.68	0.005	20	2.98	1.35-6.55	0.007	
History of penile warts										
No	255	15	1			12	1			
Yes	19	32	4.87	1.30-18.17	0.019	37	14.75	2.91-74.87	0.001	
Circumcision										
No	229	17	1			16	1			
Yes	45	7	0.25	0.07-0.85	0.027	2	0.11	0.01-0.81	0.031	
Absolute CD4count										
<200	36	14	1			21	1			
200-500	128	18	1.15	0.38-3.53	0.807	13	0.47	0.17-1.43	0.189	
>500	108	13	0.88	0.27-2.83	0.824	11	0.41	0.13-1.28	0.126	
Nadir CD4 Count (per 50)^b	210	-	0.94	0.85-1.03	0.160		0.88	0.79-0.98	0.022	
Currently on HAART										
No	157	14	1			9	1			
Yes	117	18	1.61	0.80-3.26	0.178	19	2.41	1.11-5.21	0.025	
Viral load										
Detectable	178	15	1			12	1			
Undetectable	94	17	0.78	0.38-1.62	0.511	16	0.71	0.33-1.53	0.383	
Lifetime number of male partners with whom participant had insertive anal sex										
0	101	13	1			11	1			
1-100	108	12	0.94	0.40-2.23	0.896	12	1.16	0.48-2.83	0.745	
>100	63	27	3.51	1.44-8.58	0.006	19	3.19	1.17-8.73	0.024	
Participant's use of condoms during insertive anal sex										
Almost always/always	30	20	1			21	1			
Never/occasionally/half time	143	17	0.64	0.21-1.94	0.425	13	0.63	0.21-1.92	0.419	
Lifetime number of female vaginal sex partners										
0	106	12	1			12	1			
1-4	88	10	0.91	0.36-2.33	0.848	6	0.36	0.12-1.10	0.074	
≥5	79	27	4.26	1.82-9.95	0.001	24	3.29	1.34-8.04	0.009	
Smoking status			1							
Never	189	13				9	1			
Current	63	25	2.58	1.19-5.61	0.017	22	3.06	1.29-7.23	0.011	
Past	22	14	1.66	0.40-6.91	0.485	25	2.59	0.79-8.53	0.118	
Enrolling Site										
Christian Medical College	131	24				22				
Humsafar Trust	143	8	0.19	0.09-0.41	<0.001	6	0.23	0.10-0.54	0.001	
Total	274	16				13				

^a In all cases, odds ratios (OR) were calculated based on the group that is negative for any HPV; the reference group is indicated by OR=1.

^b Nadir CD4 was analyzed as a continuous variable with the odds ratio in terms of every 50 units increase in Nadir CD4. 64 participants were missing nadir CD4 data for Penile HPV analyses; median (IQR) nadir CD4 was 245 (150-420) for HPV negative and 286 (160-415) for non-oncogenic HPV groups. 70 participants were missing nadir CD4 data for scrotal analyses; median (IQR) nadir CD4 was 275 (150-433) for HPV negative and 197 (125-379) for non-oncogenic HPV groups.