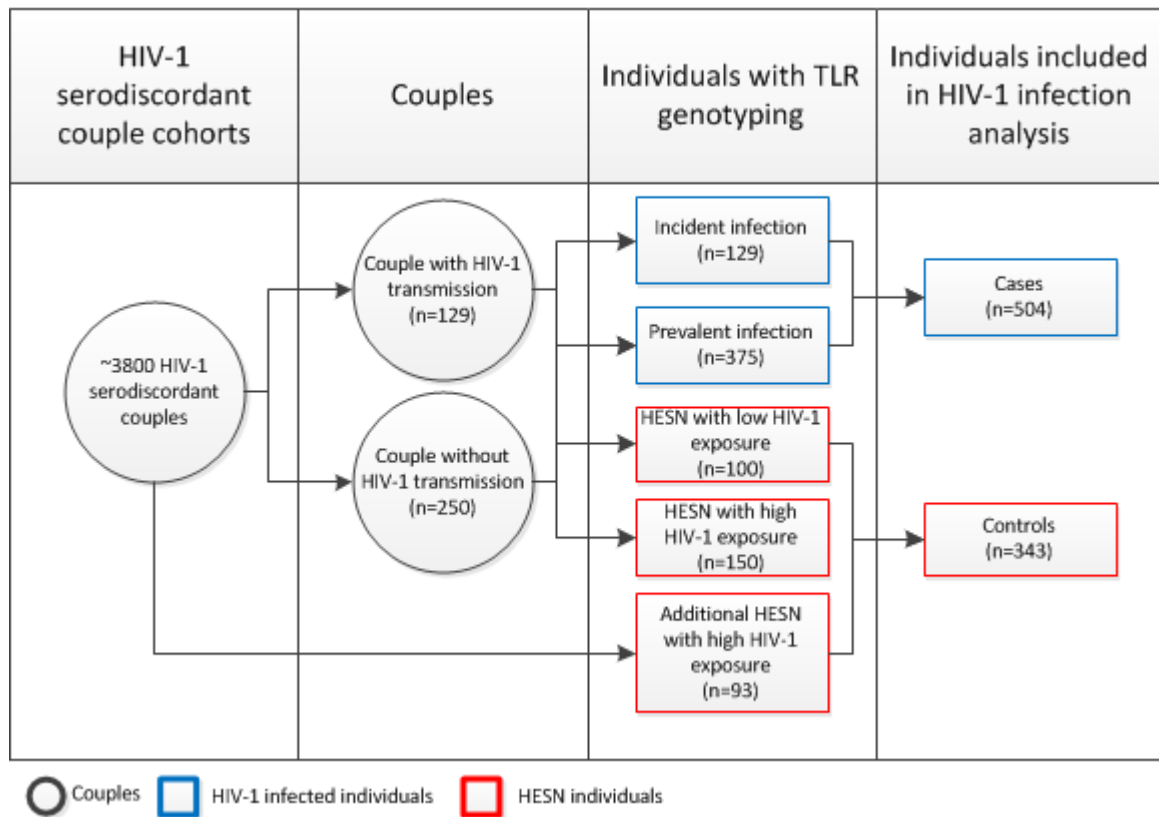


Figure S1. Nested case-control study for selected HIV-1 infected cases and HIV-1 exposed seronegative controls from HIV-1 serodiscordant couples. Couples with HIV-1 transmission were matched to couples without transmission based on variables representing exposure to HIV-1, and 97 HIV-1 exposed seronegative individuals with the highest levels of HIV-1 risk (exposure) were also included.



**Supplementary Table 2. Description of the cohort<sup>a</sup>**

	Cases Seroprevalent (n=375)	Cases Seroconverters (n=129)	Controls High exposure (n=243)	Controls Low exposure (n=100)
<b>All participants</b>				
East African	283 (76%)	97 (75%)	187 (79%)	74 (74%)
Female	206 (55%)	59 (46%)	120 (50%)	40 (40%)
Age (years)	32 (26-38)	30 (25-37)	30 (25-38)	31 (26-38)
Male circumcision <sup>b</sup>	47 (34%)	30 (43%)	38 (33%)	24 (41%)
<b>HIV-1 seronegative at enrollment</b>				
Any unprotected sex with study partner <sup>c</sup>		57 (44%)	118 (50%)	22 (22%)
HIV-1 exposure score <sup>d</sup>		5 (3-5)	5 (5-6)	2 (1-3)
Follow-up months as seronegative		9 (3-15)	21 (15-24)	21 (18-24)
<b>HIV-1 infected at enrollment</b>				
Enrollment CD4+ count (cells/mm <sup>3</sup> )	419 (328-578)			
Enrollment CD4<200	91 (24%)			
Death during follow-up	13 (4%)			
<b>All HIV-1 seropositive cases</b>				
HIV-1 RNA set-point (log <sub>10</sub> c/ml)	4.8 (4.4-5.3) <sup>e</sup>	4.5 (3.6-5) <sup>e</sup>		
Follow-up months with HIV-1	22 (17-24)	12 (12-12)		

a: Numbers (%) are provided for categorical variables and medians (inter-quartile ranges) are provided for continuous covariates.

b: Among men with data describing male circumcision status at study enrollment. Numbers and percentages may not sum to totals shown in table due to missing data.

c: Unprotected sex with study partner includes any acts reported by either partner during study follow-up. For couples with HIV-1 transmission, this only includes self-reports prior to the first evidence of infection.

d: HIV-1 exposure scores were estimated using Cox proportional hazards models on enrollment data and increased with increasing HIV-1 plasma RNA levels of the infected partner, increased frequency of unprotected sex, decreasing age, female gender, and lack of male circumcision as previously described [25,27].

e: For HIV-1 seroprevalent cases, set-point is defined as the mean plasma HIV-1 RNA level after excluding measurements taken at or after initiation of antiretroviral therapy (ART) or when CD4 count was <200 cells/mm<sup>3</sup>. For HIV-1 seroconverters, set-point is the average of all log<sub>10</sub> plasma HIV-1 RNA measurements taken 4-18 months after the estimated date of infection.