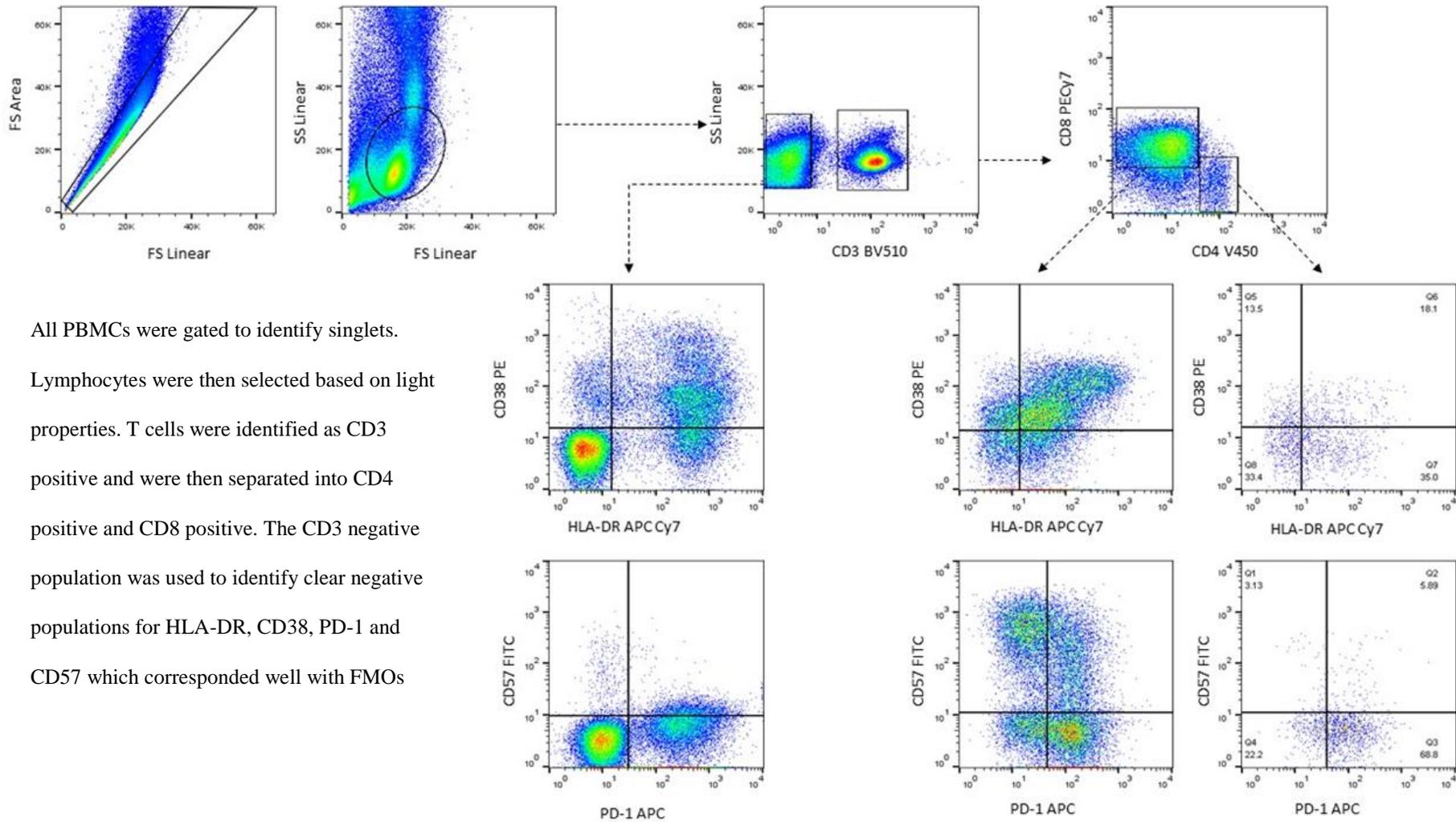
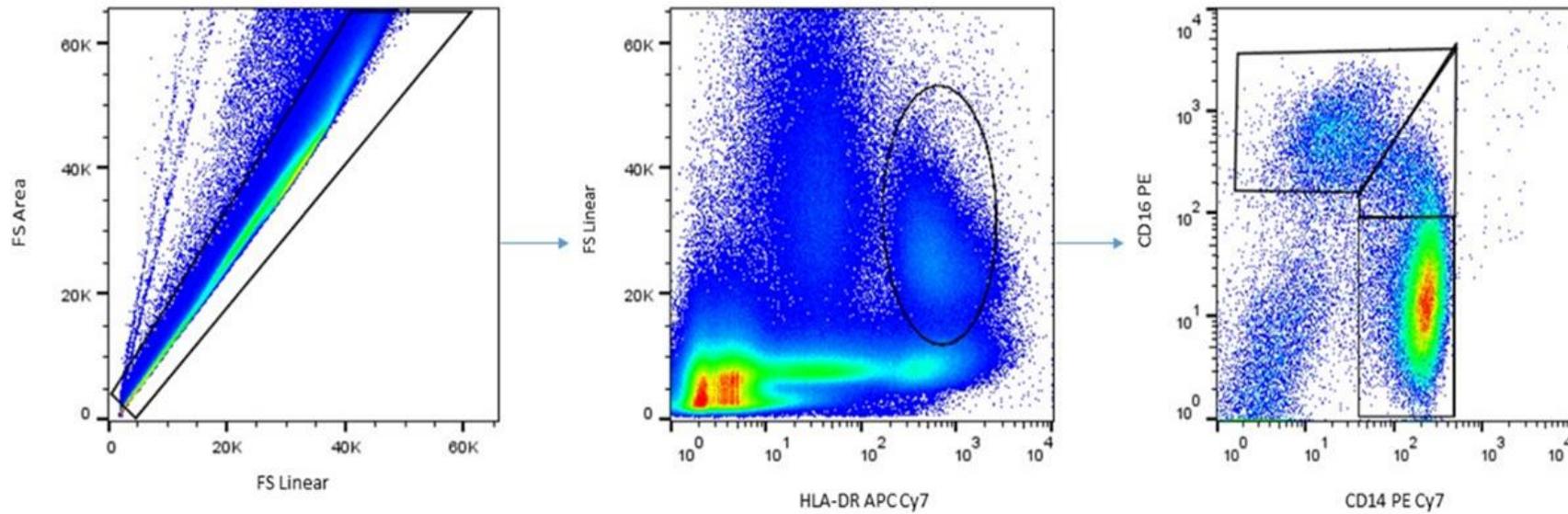


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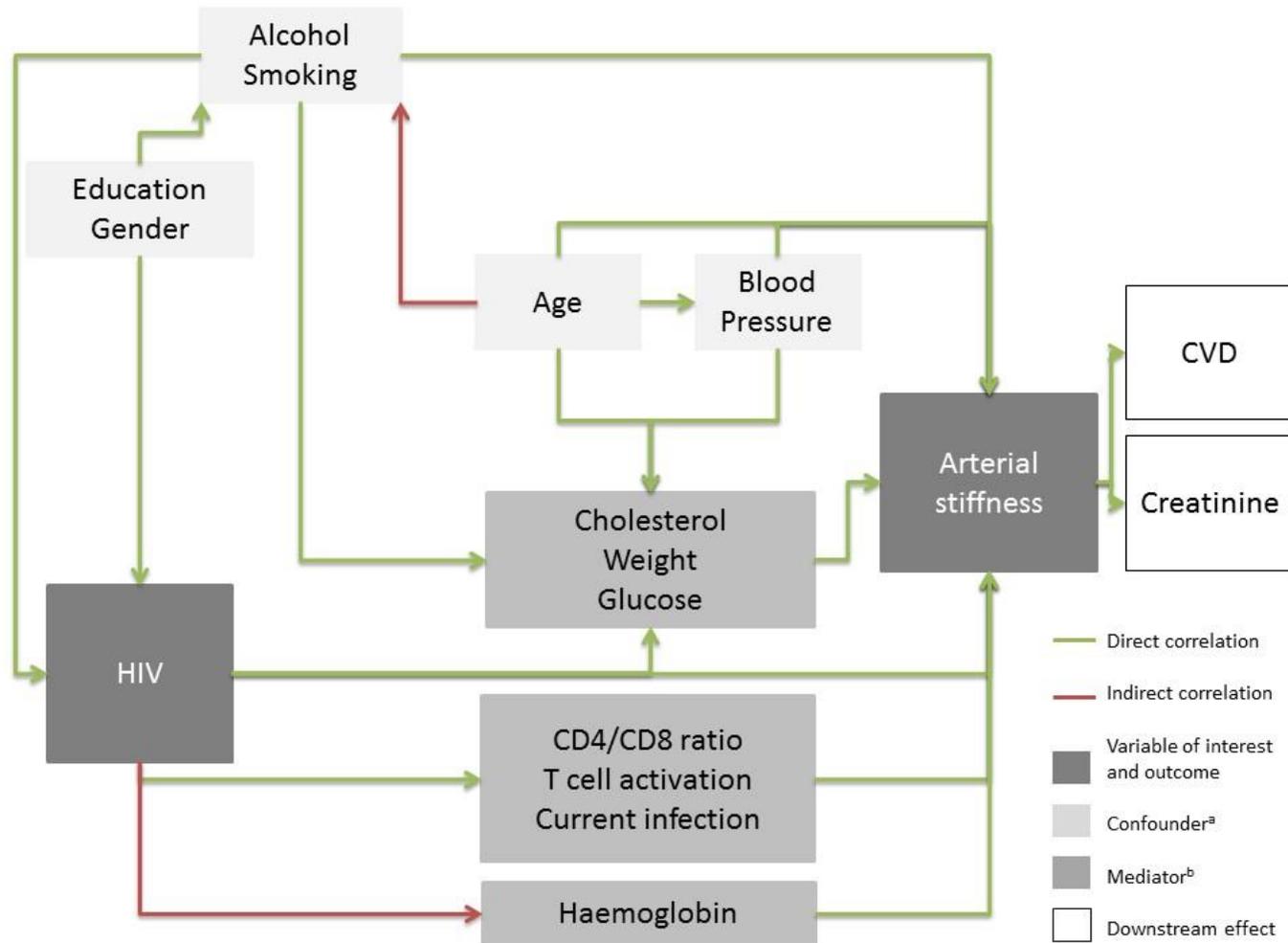
Supplementary Figure 1A. T cell gating strategy



Supplementary Figure 1B. Monocyte gating strategy

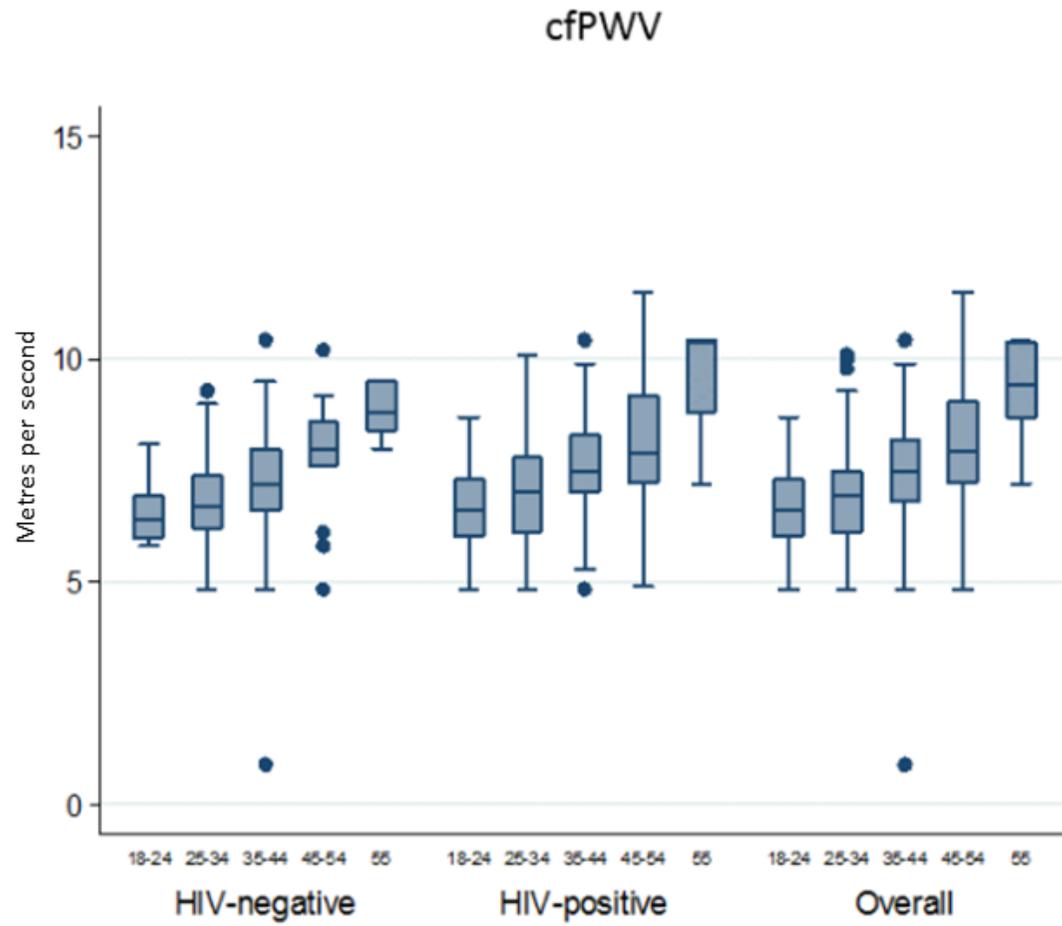
All PBMCs were gated to identify singlets. Monocytes were identified based on HLA-DR expression and size. Monocyte subsets were gated according to previously published guidance [Passlick et al. **Blood**. 1989]

Supplementary Material Figure 2. Direct Acyclic Graph for mediators of cfPWV



^aA confounder was judged to be any variable which was associated with both HIV and arterial stiffness but was not judged *a priori* to lie on the mechanistic pathway between them. ^bA mediator was a variable that was judged *a priori* to lie on the mechanistic pathway between HIV and arterial stiffness.

Supplementary Material Figure 3. Absolute cfPWV values by age and HIV status



Supplementary Material Table 1. Reasons screened but not recruited for HIV infected adults

Reason not recruited	Number screened but not recruited
CD4 >100	1477
Declined	117
Died before enrolment visit	42
Received ART from National Program before enrolment	39
Not a Blantyre resident	23
Laboratory Machine failure	16
Lost	14
Recruited to another study	12
Too unwell	9
Pregnant	8
Received ART from private system	2
Unknown	69
Total	1828

Supplementary Material Table 2. Immune activation markers at enrolment and week 44 by HIV status

		Enrolment			Week 44	
		HIV uninfected n=94	HIV infected n=202	p value ^a	HIV Infected n=190	p value ^b
Absolute CD4 count (cells/μL)		NA	42 (18 – 62)	NA	144 (99 – 219)	NA
HIV viral load (copies/ml)		NA	113,560 (41,747 – 293,663)	NA	NA	NA
CD4 T cells	CD4/CD8 ratio	1.39 (1.02 – 2.15)	0.09 (0.04 – 0.20)	<0.00001	0.14 (0.06 – 0.23)	0.007
	%CD4	58.1 (50.5 -68.3)	8.2 (4.1 – 16.5)	<0.0001	8.11 (4.1 – 12.4)	0.89
	CD4 Activated	53.5 (40.5 - 65.0)	74.5 (61.5 – 85.7)	<0.0001	60.7 (49.7 – 69.3)	<0.0001
	CD4 Exhausted	15.0 (9.3 – 23.6)	54.0 (31.3 – 66.9)	<0.0001	31.9 (21.9 – 48.1)	<0.0001
	CD4 Senescent	6.7 (3.6 – 9.03)	14.8 (9.0- 23.9)	<0.0001	14.7 (9.0 – 23.3)	0.99
CD8 T cells	%CD8	41.1 (31.7 – 50.0)	81.8 (83.5 – 95. 9)	<0.0001	60.4 (54.3 – 67.0)	<0.0001
	CD8 Activated	59.6 (39.8 – 72.7)	78.6 (64.5 – 87.6)	<0.0001	75.3 (66.7 – 83.8)	0.21
	CD8 Exhausted	20.9 (12.2 – 29.4)	37.7 (28.6 – 49.5)	<0.0001	31.7 (20.6 – 47.4)	0.007
	CD8 Senescent	39.7 (26.5 – 53.4)	53.6 (43.9 – 64.1)	<0.0001	61.0 (47.3 – 68.3)	0.001
Monocytes	Classical	75.4 (64.9 – 80.7)	75.5 (66.3 – 82.5)	0.79	74.8 (67.1 – 80.7)	0.90
	Intermediate	9.4 (6.7 – 14.4)	9.9 (6.0 – 13.1)	0.99	8.5 (6.0 – 12.7)	0.13
	Non-classical	13.1 (9.8 – 22.0)	13.6 (9.0 – 20.6)	0.59	15.3 (10.9 – 21.3)	0.07

^aComparing HIV infected versus HIV uninfected participants at enrolment (2 weeks post ART initiation), Wilcoxon Ranksum. ^bComparing HIV infected participants at enrolment to HIV infected participants at week 44, Paired Wilcoxon.

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