

Supplementary Table 1: Odds Ratios and Interaction Terms

Body Composition Variable	aOR (95% CI) Pre-Frailty All Participants	aOR (95% CI) Pre-Frailty Men with HIV	aOR (95% CI) Frailty All Participants	aOR (95% CI) Frailty Men with HIV	Interaction Term (P Value) HIV and Body Composition Variable for Pre-Frailty	Interaction Term (P Value) HIV and Body Composition Variable for Frailty
BMI	1.59 (0.91,2.79)	1.06 (0.42,2.68)	1.68 (0.61,4.63)	2.84 (0.6,13.36)	0.46 (0.17)	0.67 (0.71)
WC	2.23 (1.25,3.98)	2.01 (0.77,5.23)	4.18 (1.47,11.9)	7.28 (1.6,33.21)	0.64 (0.44)	0.40 (0.48)
VAT	1.57 (0.88,2.81)	1.75 (0.71,4.32)	4.45 (1.41,14.04)	3.71 (0.71,19.24)	1.01 (0.98)	1.24 (0.85)
SAT	1.85 (1.05,3.27)	2.26 (0.8,6.36)	1.54 (0.54,4.42)	1.05 (0.19,5.82)	0.80 (0.71)	2.11 (0.50)
Sarcopenia	1.07 (0.66,1.75)	1.23 (0.57,2.67)	4.15 (1.61, 10.7)	4.66 (1.17, 18.58)	2.24 (0.093)	1.38 (0.713)
Femoral Neck Osteoporosis	2.17 (0.62,7.58)	2.02 (0.24,17.02)	13.6 (2.51,73.57)	7.96 (0.47,133.99)	0.66 (0.74)	0.21 (0.35)
Lumbar Spine Osteoporosis	0.74 (0.31,1.77)	1.31 (0.36,4.71)	2.59 (0.71,9.39)	0.85 (0.1,7.55)	2.33 (0.35)	0.24 (0.29)

Supplementary Table 1: Odds Ratio (with Confidence Intervals) of Pre-Frail vs Non-Frail and Non-Frail vs Pre-Frail for Different Body Composition Measures and interaction terms (with P values) of HIV and different body composition measures for pre-frailty and frailty. The group of all participants was adjusted for HIV serostatus and the group of men with HIV only were additionally adjusted for HIV-specific variables. All models were adjusted for age, cohort, race/ethnicity, education, physical activity level, smoking, alcohol and other substance use, depression, viral hepatitis (HBV/HCV), diabetes, kidney disease, and hypertension. The HIV-specific model also included CD4, CD4 nadir, cumulative exposure to ART, PI, D4T, AZT, and/or TDF. \*BMI, WC, VAT and SAT are reported as odds of being in the highest tertile compared to the middle tertile. The tertile cut points are as follows: BMI: 1st  $\leq 23.7$ , 2nd 23.7-27.7, 3rd  $> 27.7$  ( $\text{kg}/\text{m}^2$ ), WC: 1st  $\leq 91.9$ , 2nd 91.9-101.5, 3rd  $> 101.5$  (cm), VAT: 1st  $\leq 94.6$ , 2nd 94.6-172.2, 3rd  $> 172.2$  ( $\text{mm}^2$ ), SAT: 1st  $\leq 160.4$ , 2nd 160.4-245.6, 3rd  $> 245.6$  ( $\text{mm}^2$ ). Sarcopenia is reported as odds of being sarcopenic vs. not sarcopenic by Baumgartner's criteria (see text). Similarly, femoral neck and lumbar spine osteoporosis are reported as the odds of being osteoporotic vs. not osteoporotic by WHO criteria (see text).