

Table S1. Clinical characteristics according to groups.

	Moderate CV Risk (n= 172, 29.3%)	High CV Risk (n= 306, 52%)	Very High CV Risk (n= 73, 12.4%)	Extreme CV Risk (n= 37, 6.3%)	Overall (n= 588)	p
<i>Demographic/anthropometric and Clinical characteristics</i>						
Age (yrs)	56 [53-59.8]	61 [58-64]	67 [63-74]	64 [60-67]	60 [56-64]	p < 0.0001
BMI (kg/m ²)	24.2 [21.9-26.2]	24.9 [22.3-28.3]	24.3 [22.8-27.9]	23.7 [20.8-29.2]	24.5 [22.1-27.8]	p = 0.110
Male	101 (58.7%)	232 (75.8%)	56 (76.7%)	33 (89.2%)	422 (71.8%)	p < 0.0001
Diabetes	16 (9.3%)	42 (13.7%)	23 (31.5%)	14 (37.8%)	95 (16.2%)	p < 0.0001
Hypertension	41 (23.8%)	105 (34.3%)	34 (46.6%)	19 (51.4%)	199 (33.8%)	p < 0.0001
Current Smoking	23 (13.9)	88 (31.7)	31 (44.8)	14 (38.9)	156 (28.5%)	p < 0.0001
Waist circumference (cm)	90 [82-97]	95 [84.5-105]	96 [88.5-101.5]	90.5 [81.3-106.3]	92.5 [85-102]	p < 0.0001
Waist/Height ratio	0.53 [0.48-0.57]	0.55 [0.5-0.6]	0.57 [0.52-0.61]	0.54 [0.5-0.64]	0.54 [0.49-0.6]	p < 0.0001
<i>HIV infection related characteristics</i>						
Time since HIV diagnosis	27 [23-35]	29 [18-35]	31 [27-36]	32 [24-36]	29 [22-35]	p = 0.003
Nadir CD 4 (cells/mL)	263 [128-317.5]	161 [55-304]	167 [46.8-360.8]	225 [23.8-297.5]	200 [80-300]	p = 0.195
CD4 absolute cells count (cells/mL)	694 [537-802.5]	657 [512-810]	654 [503-936.3]	785.5 [616.8-989]	743 [550-954]	p = 0.627
CD4/CD8	0.91 [0.6-1.5]	0.83 [0.55-1.43]	0.88 [0.53-1.59]	0.94 [0.73-1.18]	0.92 [0.65-1.43]	p = 0.738
HIV undetectable	169 (98.3%)	295 (96.4%)	72 (98.6%)	37 (100%)	573 (97.4%)	p = 0.366
<i>Antiretroviral therapy at baseline</i>						
Current exposure to NRTI	106 (61.6%)	166 (54.2%)	48 (65.8%)	26 (70.3%)	346 (58.8%)	p = 0.084
Current exposure to PI	12 (7%)	32 (10.5%)	9 (12.3%)	5 (13.5%)	58 (9.9%)	p = 0.426
Current exposure to NNRTI	73 (42.4%)	112 (36.6%)	18 (24.7%)	10 (27%)	213 (36.2%)	p = 0.034
Current exposure to INSTI	122 (70.9%)	216 (70.6%)	56 (76.7%)	33 (89.2%)	427 (72.6%)	p = 0.086
<i>Antiretroviral therapy at follow-up</i>						
Current exposure to NRTI	108 (62.8%)	172 (56.2%)	50 (68.5%)	27 (73%)	357 (60.7%)	p = 0.069
Current exposure to PI	13 (7.6%)	25 (8.2%)	7 (9.6%)	2 (5.4%)	47 (8%)	p = 0.886
Current exposure to NNRTI	67 (39%)	112 (36.6%)	19 (26%)	11 (29.7%)	209 (35.5%)	p = 0.216

Current exposure to INSTI	125 (72.5%)	221 (72.2%)	58 (79.5%)	35 (94.6%)	439 (74.7%)	p = 0.019
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ASMI= appendicular skeletal muscle mass index, BMI=body mass index, BSA= body surface area, INSTI= Integrase Strand Transfer Inhibitors, NRTI= Nucleoside Reverse Transcriptase Inhibitors, NNRTI= Non-Nucleoside Reverse Transcriptase Inhibitors, PI= protease inhibitor. **Tenofovir disoproxil fumarate was used only in combination with doravirine plus lamivudine, otherwise tenofovir alafenamide was used.**

Table S2. Dyslipidemia laboratory data and treatment characteristics between groups.

	Moderate CV Risk (n= 172)	High CV Risk (n= 306)	Very High CV Risk (n= 73)	Extreme CV Risk (n= 37)	Overall (n= 588)	p
Primary prevention	172 (100%)	306 (100%)	58 (79.5%)	0	536 (91.2%)	p < 0.0001
Baseline HDL (mg/dL)	57 [47-68.8]	48 [42-57]	45 [40-57]	44 [37.5-54]	50 [43-60]	p < 0.0001
Baseline LDL (mg/dL)	113.5 [92.3-133.8]	105 [80-135]	99.5 [77.8-124.6]	76 [66-105.5]	106 [82.3-133]	p < 0.0001
Baseline Total cholesterol (mg/dL)	185.5 [161-226.8]	174 [135.8-212.3]	167.5 [133.5-196.3]	133 [112.5-174]	176 [140-208]	p < 0.0001
Follow-up HDL (mg/dL)	58 [45-68]	48 [42-58]	45 [40-57]	44 [37.5-54]	50 [42-60]	p < 0.0001
Follow-up LDL (mg/dL)	104 [81-131]	95.5 [71-119]	99.5 [77.8-124.3]	76 [66-105.5]	96 [71.3-120]	p < 0.0001
Follow-up Total cholesterol (mg/dL)	175 [142.3-205]	157 [124-189]	155.5 [116-177]	129 [104.5-153.5]	159 [128-190]	p < 0.0001
LDL on target at baseline	54 (31.4%)	50 (16.3%)	6 (8.2%)	5 (13.5%)	115 (19.6%)	p < 0.0001
LDL on target at follow-up	80 (46.5%)	70 (22.9%)	11 (15.1%)	8 (21.6%)	169 (28.7%)	p < 0.0001
LDL variation	3.2% [-7.9;19]	5.3% [-7.5;22]	1% [-9;20.2]	7.5% [-2.9;23.8]	3.6% [-7.2;21.4]	p = 0.673
<i>Lipid lowering therapy at the time of first clinical evaluation</i>						
Statins	52 (30.2%)	159 (52%)	44 (60.3%)	28 (75.7%)	283 (48.1%)	p < 0.0001
• High intensity statins	13 (24.5%)	43 (26.7%)	18 (40%)	21 (72.4%)	95 (33%)	p < 0.0001
• Moderate intensity statins	37 (69.8%)	112 (69.6%)	24 (53.3%)	6 (20.7%)	179 (62.2%)	p < 0.0001
• Low intensity statins	2 (3.8%)	3 (1.9%)	2 (4.4%)	1 (3.4%)	8 (2.8%)	p = 0.568
Atorvastatin	23 (13.4%)	67 (21.9%)	25 (34.2%)	12 (32.4%)	127 (21.6%)	p = 0.001
Rosuvastatin	27 (15.7%)	90 (29.4%)	18 (24.7%)	16 (43.2%)	151 (25.7%)	p = 0.001
Bempedoic Acid	1 (0.6%)	5 (1.6%)	2 (2.7%)	3 (8.1%)	11 (1.9%)	p = 0.078
Ezetimibe	23 (13.4%)	72 (23.5%)	20 (27.4%)	19 (51.4%)	134 (22.8%)	p < 0.0001
Evolocumab	0	3 (1%)	2 (2.7%)	3 (8.1%)	8 (1.4%)	p = 0.008
Single lipid lowering agent	34 (19.8%)	113 (36.9%)	35 (47.9%)	16 (43.2%)	198 (33.7%)	p < 0.0001
Two lipid lowering agents	21 (12.2%)	59 (19.3%)	15 (20.5%)	14 (37.8%)	109 (33.7%)	p = 0.005
Three lipid lowering agents	0	3 (1%)	1 (1.4%)	3 (8.4%)	7 (1.2%)	p = 0.013
Statin and Ezetimibe	20 (11.6%)	59 (19.3%)	15 (20.5%)	16 (43.2%)	110 (18.7%)	p < 0.0001

Statin and Bempedoic Acid plus Ezetimibe	0	3 (1%)	1 (1.4%)	2 (5.4%)	6 (1%)	p = 0.068
Statin and Bempedoic Acid	0	3 (1%)	1 (1.4%)	2 (5.4%)	6 (1%)	p = 0.068
Bempedoic Acid and Ezetimibe	1 (0.6%)	5 (1.6%)	2 (2.7%)	3 (8.1%)	11 (1.9%)	p = 0.078
Evolocumab and other lipid lowering agents	0	1 (0.3%)	1 (1.4%)	1 (2.7%)	3 (0.5%)	p = 0.217
<i>Lipid lowering therapy at the time of last clinical evaluation</i>						
Statins dose escalation	3 (1.7%)	9 (2.9%)	3 (4.1%)	2 (5.4%)	17 (2.9%)	p = 0.567
New LLT prescription	27 (15.7%)	36 (11.8%)	6 (8.2%)	0	69 (11.7)	p = 0.059
Statins	72 (41.9%)	189 (61.8%)	47 (64.4%)	30 (80.1%)	338 (57.5%)	p < 0.0001
• High intensity statins	20 (27.8%)	58 (30.7%)	22 (46.8%)	25 (83.3%)	125 (34%)	p < 0.0001
• Moderate intensity statins	50 (69.4%)	127 (67.2%)	25 (53.2%)	3 (10%)	205 (60.7%)	p < 0.0001
• Low intensity statins	2 (2.8%)	4 (2.1%)	0	2 (6.7%)	8 (2.4%)	p = 0.742
Atorvastatin	29 (16.9%)	71 (23.2%)	25 (34.2%)	12 (32.4%)	138 (23.5%)	p = 0.001
Rosuvastatin	41 (23.8%)	118 (38.6%)	18 (24.7%)	16 (43.2%)	197 (33.5%)	p = 0.001
Bempedoic Acid	6 (3.5%)	19 (6.2%)	2 (2.7%)	3 (8.1%)	37 (6.3%)	p = 0.020
Ezetimibe	45 (26.2%)	113 (36.9%)	20 (27.4%)	19 (51.4%)	212 (36.1%)	p < 0.0001
Evolocumab	1 (0.6%)	4 (1.3%)	2 (2.7%)	3 (8.1%)	11 (1.9%)	p = 0.020
Single lipid lowering agent	40 (23.3%)	102 (33.3%)	35 (47.9%)	16 (43.2%)	182 (31%)	p = 0.041
Two lipid lowering agents	39 (22.7%)	92 (30.1%)	26 (35.6%)	18 (48.6%)	175 (29.8%)	p = 0.009
Three lipid lowering agents	2 (1.2%)	13 (4.2%)	2 (2.7%)	5 (13.5%)	22 (3.7%)	p = 0.004
Combination LLT	41 (23.8%)	105 (34.3%)	28 (38.4%)	23 (62.2%)	197 (33.5%)	p < 0.0001
Combination LLT new	12 (7%)	36 (11.8%)	15 (20.5%)	8 (21.6%)	71 (12.1%)	p = 0.008
Statin and Ezetimibe	38 (22.1%)	98 (32%)	15 (20.5%)	16 (43.2%)	181 (30.8%)	p < 0.0001
Statin and Bempedoic Acid plus Ezetimibe	2 (1.2%)	12 (3.9%)	1 (1.4%)	2 (5.4%)	20 (3.4%)	p = 0.031
Statin and Bempedoic Acid	2 (1.2%)	11 (3.6%)	1 (1.4%)	2 (5.4%)	19 (3.2%)	p = 0.031
Bempedoic Acid and Ezetimibe	6 (3.5%)	18 (5.9%)	2 (2.7%)	3 (8.1%)	36 (6.1%)	p = 0.020
Evolocumab and other lipid lowering agents	6 (3.5%)	19 (6.2%)	1 (1.4%)	1 (2.7%)	37 (6.3%)	p = 0.130

Combination LLT refers to PWH treated with either two or three LLT; Combination LLT new refers to PWH that were not on LLT combination regimens at baseline and were on combination LLT at the time of last clinical evaluation; LDL variation = $((\text{LDL baseline} - \text{LDL follow-up}) / \text{LDL baseline}) * 100$.

