

Supplemental Digital Content-1: The 190 variables used in the analysis. Discrete variables are given as n (%), continuous variables are given as Md (IQR). They were compared between responders and non-responders by Fisher's exact test and Mann-Whitney U test, respectively.

	Variable	Responders (N=12)	Non-responders (N=10)	p- value	
1	Demographics and clinical history	Female sex	3 (25.0)	2 (20.9)	1.000
2		Age (years)	40.5 (40.0; 46.5)	41.5 (39.0; 44.8)	0.573
3		Tobacco smoking	8 (66.7)	3 (37.5)	0.362
4		Alcoholism	2 (16.7)	0 (0.0)	0.495
5		Pre-ART viral load (copies/mL)	110250.0 (71968.3; 275750.0)	28600.0 (18737.0; 39365.0)	0.003
6		HIV duration (years)	8.0 (5.0; 8.3)	13.0 (7.5;14.5)	0.144
7		Homosexual risk group	6 (50.0)	7 (70.9)	0.415
8		PI based ART	6 (50.0)	5 (50.0)	1.000
9		Vaccinated	10 (83.3)	5 (50.0)	0.172
10		HCV+	1 (8.3)	3 (30.0)	0.293
11		PPD+	2 (25.0)	1 (25.0)	1.000
12		Hypertension	2 (16.7)	2 (20.0)	1.000
13		Hypercholesterolemia	1 (8.3)	1 (10.0)	1.000
14		Hypertriglyceridemia	3 (25.0)	4 (40.0)	0.652
15		Diabetes mellitus	0 (0.0)	1 (10.0)	0.455
16		Depression	5 (41.7)	1 (10.0)	0.162
17		Hepatobiliary disorder	0 (0.0)	2 (20.0)	0.195
18	Pre-vaccine general biochemistry	Glucose (mg/dL)	96.5 (91.3; 110.5)	92.5 (82.3; 99.8)	0.355
19		Creatinine (mg/dL)	0.96 (0.86; 1.02)	0.94 (0.81; 1.07)	0.791
20		Glomerular filtration rate (mL/min/1.73 m ²)	60 (60; 60)	60 (60; 60)	0.411
21		Total cholesterol (mg/dL)	191.0 (180.0; 231.0)	168.5 (150.5; 197.0)	0.140
22		LDL cholesterol (mg/dL)	122.0 (105.5; 135.8)	94.5 (77.3; 123.3)	0.099
23		HDL cholesterol (mg/dL)	41.0 (38.0; 47.0)	44.5 (40.3; 47.8)	0.792
24		Triglyceride (mg/dL)	132.0 (103.5; 178.3)	94.5 (71.0; 280.0)	0.717
25		Aspartate transaminase (U/L)	22.0 (20.5; 26.0)	26.5 (22.8; 31.0)	0.098
26		Alanine transaminase (U/L)	25.5 (22.5; 29.0)	29.5 (23.0; 32.0)	0.407
27		Gamma glutamyltransferase (U/L)	32.5 (25.8; 61.8)	38.0 (22.0; 42.3)	1.000
28		Total bilirubin (mg/dL)	0.80 (0.30; 1.75)	0.60 (0.43; 2.73)	0.741
29		Conjugated bilirubin (mg/dL)	0.25 (0.10; 0.50)	0.20 (0.13; 0.48)	0.892
30		Alkaline phosphatase (U/L)	190.5 (168.3; 219.8)	200.0 (174.8; 213.3)	0.821
31		Lactate dehydrogenase (U/L)	334.0 (309.0; 356.5)	334.0 (307.5; 377.5)	0.817
32		Protein (g/L)	74.5 (71.8; 78.3)	73.0 (72.0; 76.5)	0.574
33	Pre-vaccine complete blood count	Hemoglobin (g/L)	147.0 (137.8; 159.3)	148.0 (144.3; 154.3)	0.792
34		Hematocrit (%)	44.5 (41.8; 47.3)	44.5 (43.0; 45.0)	0.842
35		Thrombocytes (10 ⁹ /L)	242.0 (224.8; 274.3)	216.0 (175.0; 262.0)	0.156
36		Leukocytes (10 ⁹ /L)	7.15 (6.04; 9.66)	6.95 (6.63; 8.19)	0.792
37		Neutrophils (10 ⁹ /L)	4.35 (3.38; 6.33)	4.15 (3.23; 4.88)	0.488
38		Lymphocytes (10 ⁹ /L)	2.05 (1.75; 2.53)	2.35 (2.03; 2.75)	0.222
39		Monocytes (10 ⁹ /L)	0.40 (0.30; 0.53)	0.40 (0.40; 0.50)	0.633
40		Eosinophils (10 ⁹ /L)	0.10 (0.10; 0.30)	0.20 (0.10; 0.20)	1.000
41		Basophils (10 ⁹ /L)	0.00 (0.00; 0.00)	0.00 (0.00; 0.00)	0.947

42	Pre-vaccine lymphocyte phenotype subsets	CD4+ (% of lymphocytes)	34.47 (31.87; 39.37)	32.30 (28.84; 39.53)	0.628
43		CD4+ CD38+ (% of CD4+ cells)	45.75 (37.48; 55.48)	55.44 (45.44; 67.93)	0.346
44		CD4+ CD38+ HLADR+ (% of CD4+ cells)	2.36 (1.84; 2.76)	2.54 (2.40; 3.75)	0.235
45		CD4+ CD28+ (% of CD4+ cells)	98.84 (94.88; 99.60)	97.56 (92.49; 98.55)	0.228
46		CD4+ CD28- CD57+ (% of CD4+ cells)	0.86 (0.19; 3.67)	1.94 (0.83; 6.15)	0.198
47		CD4+ CD45RA+RO+ (% of CD4+ cells)	1.72 (0.61; 3.87)	7.47 (5.12; 13.26)	0.036
48		CD4+ CD45RA+RO- (% of CD4+ cells)	27.29 (23.22; 40.55)	28.22 (19.17; 45.78)	1.000
49		CD4+ CD45RA-RO+ (% of CD4+ cells)	58.01 (40.93; 70.35)	57.71 (45.46; 72.00)	0.872
50		CD4+ CD45RA+62L+ (% of CD4+ cells)	33.75 (21.72; 38.49)	40.04 (21.81; 52.04)	0.674
51		CD4+ CXCR4+ (% of CD4+ cells)	21.47 (15.21; 36.55)	33.83 (26.93; 44.22)	0.123
52		CD4+ CCR5+ (% of CD4+ cells)	4.25 (1.80; 5.76)	7.40 (5.94; 10.15)	0.011
53		CD8+ (% of lymphocytes)	35.29 (30.16; 38.83)	37.54 (35.19; 38.23)	0.248
54		CD8+ CD38+ (% of CD8+ cells)	39.10 (34.30; 47.35)	44.68 (39.22; 55.03)	0.314
55		CD8+ CD38+ HLADR+ (% of CD8+ cells)	12.37 (9.94; 15.39)	14.23 (9.30; 18.60)	0.674
56		CD8+ CD28+ (% of CD8+ cells)	60.04 (47.99; 73.08)	55.43 (48.56;69.25)	0.539
57		CD8+ CD28- CD57+ (% of CD8+ cells)	28.73 (18.73; 37.02)	33.04 (26.91; 42.09)	0.283
58		CD8+ CD45RA+RO+ (% of CD8+ cells)	7.92 (3.97; 12.77)	15.69 (14.19; 18.78)	0.017
59		CD8+ CD45RA+RO- (% of CD8+ cells)	38.71 (34.07; 46.85)	48.75 (39.27; 49.76)	0.346
60		CD8+ CD45RA-RO+ (% of CD8+ cells)	51.74 (34.45; 56.78)	34.72 (30.68; 47.20)	0.314
61		CD8+ CD45RA+62L+ (% of CD8+ cells)	27.86 (22.51; 33.17)	34.13 (27.36; 39.10)	0.346
62		CD8+ CXCR4+ (% of CD8+ cells)	12.76 (8.30; 25.57)	17.51 (11.52; 33.47)	0.283
63		CD8+ CCR5+ (% of CD8+ cells)	14.53 (11.65; 21.60)	27.30 (17.45; 29.93)	0.043
64	Pre-vaccine inflammatory markers	D-dimer (ng/mL)	263.0 (182.8; 365.5)	217.5 (139.5; 262.3)	0.314
65		High-sensitivity C-reactive protein (mg/dL)	0.180 (0.128; 0.805)	0.145 (0.075; 0.313)	0.509
66		Tumor necrosis factor alpha (pg/mL)	5.0 (4.8; 6.0)	4.5 (4.0; 5.8)	0.236
67		Interleukin 6 (pg/mL)	4.5 (1.0; 9.5)	1.0 (1.0; 1.0)	0.056
68		Soluble CD14 (ng/mL)	2377.4 (2231.8; 2624.3)	2362.4 (2109.4; 2402.4)	0.362
69		CD163 (ng/mL)	761.8 (553.3; 1043.3)	751.4 (599.3; 1691.4)	0.370
70		Endotoxin core IgM antibody (EndoCab) (MU/mL)	39.4 (33.2; 67.4)	30.1 (22.4; 53.3)	0.412
71		Lipopolysaccharide-binding protein (ng/mL)	15767.8 (12851.4; 21756.4)	13148.5 (12460.2; 14658.4)	0.201
72	Pre-vaccine reservoir	Total HIV-1 DNA (copies/ 10 ⁶ CD4+ cells)	756.5 (486.0; 2326.1)	600.9 (317.5; 1812.4)	0.809
73		Integrated HIV-1 DNA (copies/ 10 ⁶ CD4+ cells)	107.1 (509.5; 347.0)	111.9 (99.4; 382.0)	0.705
74	Pre-vaccine ELISPOT	ELISPOT Gag – p24 (SFC/10 ⁶ PBMC)	640.0 (527.0; 703.0)	482.0 (207.0; 774.3)	0.953
75		ELISPOT Gag – p17 (SFC/10 ⁶ PBMC)	253.5 (121.8; 938.5)	662.0 (234.3; 946.5)	0.605
76		ELISPOT Gag – small proteins (SFC/10 ⁶ PBMC)	623.0 (368.5; 878.5)	120.0 (108.5; 131.5)	0.056
77		ELISPOT Nef (SFC/10 ⁶ PBMC)	303.0 (73.0; 588.5)	356.5 (145.5; 572.8)	0.615
78		ELISPOT Env – gp41 (SFC/10 ⁶ PBMC)	183.0 (119.3; 565.5)	501.5 (268.5; 762.3)	0.282
79		ELISPOT total response (SFC/10 ⁶ PBMC)	1647.0 (848.5; 2443.5)	1225.0 (1021.8; 2543.5)	0.904
80		ELISPOT breadth (number)	8.0 (4.5; 9.0)	4.5 (3.0; 6.0)	0.229
81	Pre-vaccine lymphoproliferative responses	gp160 stimulus (counts/minutes)	2707.5 (1262.8; 5467.0)	1966.0 (1397.0; 2266.5)	0.539
82		p24 stimulus (counts/minutes)	2846.0 (1748.3; 6754.8)	1924.5 (1079.8; 2740.8)	0.069

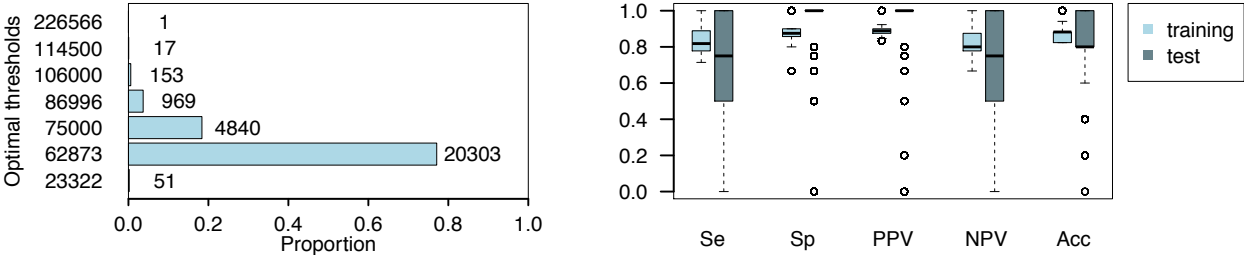
83	Post-vaccine general biochemistry	Glucose (mg/dL)	96.0 (89.3; 100.3)	90.0 (84.8; 98.5)	0.597
84		Creatinine (mg/dL)	0.99 (0.87; 1.09)	1.00 (0.89; 1.09)	0.792
85		Glomerular filtration rate (mL/min/1.73 m ²)	60 (60; 60)	60 (60; 60)	0.411
86		Total cholesterol (mg/dL)	192.5 (176.5; 210.3)	159.0 (141.0; 191.8)	0.138
87		LDL cholesterol (mg/dL)	118.0 (110.0; 145.0)	96.0 (80.0; 114.5)	0.102
88		HDL cholesterol (mg/dL)	41.5 (37.5; 55.3)	42.5 (39.0; 43.8)	0.910
89		Triglyceride (mg/dL)	111.5 (93.8; 160.5)	167.0 (78.5; 229.3)	0.821
90		Aspartate transaminase (U/L)	27.0 (20.0; 32.3)	28.0 (24.5; 30.8)	0.574
91		Alanine transaminase (U/L)	29.0 (22.0; 45.8)	29.0 (22.8; 32.8)	0.621
92		Gamma glutamyltransferase (U/L)	31.5 (19.8; 48.0)	38.0 (18.3; 54.8)	0.843
93		Total bilirubin (mg/dL)	0.50 (0.40; 0.60)	0.70 (0.43; 1.7)	0.464
94		Conjugated bilirubin (mg/dL)	0.20 (0.10; 0.20)	0.20 (0.10; 0.38)	0.531
95		Alkaline phosphatase (U/L)	186.0 (159.0; 217.3)	208.5 (163.5; 240.5)	0.448
96		Lactate dehydrogenase (U/L)	331.0 (314.8; 360.3)	369.0 (301.8; 423.8)	0.628
97		Protein (g/L)	73.0 (71.8; 77.5)	74.5 (73.3; 77.3)	0.551
98	Post-vaccine complete blood count	Hemoglobin (g/L)	143.0 (135.3; 154.0)	139.5 (130.8; 149.8)	0.644
99		Hematocrit (%)	43.5 (41.3; 46.3)	42.0 (40.3; 43.8)	0.320
100		Thrombocytes (10 ⁹ /L)	279.0 (248.0; 307.8)	239.0 (204.3; 285.5)	0.276
101		Leukocytes (10 ⁹ /L)	6.88 (6.55; 9.78)	6.50 (6.24; 7.36)	0.409
102		Neutrophils (10 ⁹ /L)	4.25 (3.33; 6.25)	3.25 (3.05; 4.10)	0.198
103		Lymphocytes (10 ⁹ /L)	2.15 (1.85; 2.50)	2.45 (2.23; 2.75)	0.145
104		Monocytes (10 ⁹ /L)	0.40 (0.30; 0.53)	0.45 (0.33; 0.50)	0.687
105		Eosinophils (10 ⁹ /L)	0.15 (0.10; 0.20)	0.10 (0.10; 0.20)	0.863
106		Basophils (10 ⁹ /L)	0.00 (0.00; 0.00)	0.00 (0.00; 0.10)	0.093
107	Post-vaccine lymphocyte phenotype subsets	CD4+ (% of lymphocytes)	28.97 (23.04; 38.41)	30.57 (26.03; 40.31)	0.628
108		CD4+ CD38+ (% of CD4+ cells)	49.66 (37.38; 57.47)	63.83 (39.40;68.59)	0.381
109		CD4+ CD38+ HLADR+ (% of CD4+ cells)	2.49 (1.97; 3.44)	2.90 (2.41; 3.95)	0.539
110		CD4+ CD28+ (% of CD4+ cells)	99.08 (93.54; 99.44)	98.33 (94.67; 99.27)	0.346
111		CD4+ CD28- CD57+ (% of CD4+ cells)	0.74 (0.32; 4.66)	1.09 (0.44; 4.13)	0.539
112		CD4+ CD45RA+RO+ (% of CD4+ cells)	5.48 (2.24; 22.33)	3.26 (1.38; 3.94)	0.539
113		CD4+ CD45RA+RO- (% of CD4+ cells)	26.23 (18.60; 30.46)	39.75 (15.95; 47.16)	0.391
114		CD4+ CD45RA-RO+ (% of CD4+ cells)	66.79 (41.02; 73.25)	51.17 (44.93; 69.43)	0.974
115		CD4+ CD45RA+62L+ (% of CD4+ cells)	27.81 (23.30; 40.10)	42.27 (19.96; 47.36)	0.771
116		CD4+ CXCR4+ (% of CD4+ cells)	12.44 (8.59; 23.07)	22.80 (20.69; 39.30)	0.021
117		CD4+ CCR5+ (% of CD4+ cells)	6.21 (4.09; 9.00)	6.96 (4.86; 11.40)	0.456
118		CD8+ (% of lymphocytes)	35.21 (25.18; 39.74)	36.80 (33.61; 47.79)	0.346
119		CD8+ CD38+ (% of CD8+ cells)	40.18 (34.34; 53.50)	49.17 (30.43; 66.15)	0.674
120		CD8+ CD38+ HLADR+ (% of CD8+ cells)	8.06 (6.71; 10.44)	14.17 (9.22; 14.70)	0.159
121		CD8+ CD28+ (% of CD8+ cells)	53.60 (43.76; 73.64)	49.16 (38.47; 64.23)	0.254
122		CD8+ CD28- CD57+ (% of CD8+ cells)	36.18 (17.86; 41.31)	32.75 (24.56; 48.45)	0.381
123		CD8+ CD45RA+RO+ (% of CD8+ cells)	11.41 (9.52; 16.80)	9.02 (7.67; 13.36)	0.497
124		CD8+ CD45RA+RO- (% of CD8+ cells)	38.43 (32.46; 53.02)	49.48 (37.25; 52.41)	0.497
125		CD8+ CD45RA-RO+ (% of CD8+ cells)	48.51 (33.88; 54.45)	37.98 (34.27; 46.23)	0.456
126		CD8+ CD45RA+62L+ (% of CD8+ cells)	28.79 (20.36; 32.44)	31.99 (23.06; 35.05)	0.674
127		CD8+ CXCR4+ (% of CD8+ cells)	5.23 (2.41; 12.34)	11.19 (7.18; 16.91)	0.159
128		CD8+ CCR5+ (% of CD8+ cells)	21.36 (15.50; 24.09)	31.08 (21.14; 36.37)	0.059

129	Post-vaccine inflammatory markers	D-dimer (ng/mL)	276.5 (226.3; 306.5)	202.5 (180.3; 340.0)	0.923
130		High-sensitivity C-reactive protein (mg/dL)	0.155 (0.075; 0.365)	0.215 (0.135; 0.438)	0.322
131		Tumor necrosis factor alpha (pg/mL)	5.0 (5.0; 5.3)	5.0 (4.0; 6.0)	0.807
132		Interleukin 6 (pg/mL)	1.0 (1.0; 6.0)	1.0 (1.0; 12.3)	0.905
133		Soluble CD14 (ng/mL)	2251.8 (2104.1; 2376.6)	2444.4 (2177.4; 2490.4)	0.412
134		CD163 (ng/mL)	905.7 (657.8; 1035.0)	797.6 (742.5; 1527.4)	0.456
135		Endotoxin core IgM antibody (EndoCab) (MU/mL)	39.2 (27.6; 62.7)	26.9 (21.3; 59.5)	0.503
136		Lipopolysaccharide-binding protein (ng/mL)	17266.8 (11771.3; 21559.2)	16499.6 (11981.6; 24455.5)	0.656
137	Post-vaccine reservoir	Total HIV-1 DNA (copies/ 10 ⁶ CD4+ cells)	905.7 (771.7; 2369.5)	833.5 (361.2; 1650.6)	0.705
138		Integrated HIV-1 DNA (copies/ 10 ⁶ CD4+ cells)	120.0 (42.9; 332.0)	107.4 (70.8; 307.7)	0.918
139	Post-vaccine ELISPOT	ELISPOT Gag – p24 (SFC/10 ⁶ PBMC)	627.0 (216.5; 855.0)	327.0 (237.0; 570.0)	0.639
140		ELISPOT Gag – p17 (SFC/10 ⁶ PBMC)	203.5 (69.5; 817.5)	257.0 (88.0; 788.5)	0.943
141		ELISPOT Gag – small proteins (SFC/10 ⁶ PBMC)	358.5 (234.5; 730.0)	91.5 (72.3; 110.8)	0.143
142		ELISPOT Nef (SFC/10 ⁶ PBMC)	201.5 (88.0; 577.0)	313.0 (287.0; 340.0)	0.340
143		ELISPOT Env – gp41 (SFC/10 ⁶ PBMC)	460.0 (233.0; 530.0)	326.5 (158.50; 424.8)	0.792
144		ELISPOT total response (SFC/10 ⁶ PBMC)	703.5 (195.0; 2682.8)	733.5 (424.5; 2562.8)	0.965
145		ELISPOT breadth (number)	6.0 (1.5; 9.0)	4.0 (2.5; 5.3)	0.342
146	Post-vaccine lymphoproliferative responses	gp160 stimulus (counts/minutes)	1102.5 (904.5; 1936.8)	1771.0 (1288.8; 2463.5)	0.381
47		p24 stimulus (counts/minutes)	1876.0 (1101.5; 2109.3)	2362.0 (1972.3; 3220.3)	0.069
148	“Delta” general biochemistry	Glucose (mg/dL)	-5.0 (-16.3; 8.0)	-2.0 (-9.0; 7.8)	0.575
149		Creatinine (mg/dL)	-0.01 (-0.06; 0.09)	0.04 (0.00; 0.10)	0.668
150		Glomerular filtration rate (mL/min/1.73 m ²)	0 (0; 0)	0 (0; 0)	0.411
151		Total cholesterol (mg/dL)	-5.5 (-14.8; 12.3)	-4.5 (-7.8; 10.8)	0.692
152		LDL cholesterol (mg/dL)	-4.0 (-12.0; 5.0)	8.5 (-12.5; 17.3)	0.391
153		HDL cholesterol (mg/dL)	-0.5 (-2.8; 2.3)	-1.0 (-6.0; 1.8)	0.519
154		Triglyceride (mg/dL)	5.0 (-20.0; 24.3)	5.0 (-27.0; 55.3)	0.869
155		Aspartate transaminase (U/L)	3.5 (0.5; 6.8)	-1.5 (-5.0; 8.0)	0.247
156		Alanine transaminase (U/L)	6.0 (-0.3; 16.8)	-2.0 (-3.8; 4.0)	0.098
157		Gamma glutamyltransferase (U/L)	-6.0 (-8.5; 1.8)	1.0 (-5.0; 16.3)	0.234
158		Total bilirubin (mg/dL)	-0.05 (-0.83; 0.13)	0.00 (-0.63; 0.00)	1.000
159		Conjugated bilirubin (mg/dL)	-0.05 (-0.30; 0.00)	0.00 (-0.18; 0.00)	0.758
160		Alkaline phosphatase (U/L)	-8.0 (-17.8; 8.8)	6.5 (-6.5; 23.5)	0.156
161		Lactate dehydrogenase (U/L)	-12.5 (-28.3; 23.8)	35.5 (-15.3; 72.3)	0.159
162		Protein (g/L)	-0.5 (-3.3; 0.3)	2.0 (-2.8; 2.8)	0.257
163	“Delta” complete blood count	Hemoglobin (g/L)	-4.5 (-7.5; -1.0)	-8.5 (-14.0; -4.5)	0.305
164		Hematocrit (%)	-1.0 (-2.8; 1.0)	-2.0 (-3.8; -1.3)	0.208
165		Thrombocytes (10 ⁹ /L)	31.0 (4.3; 37.3)	15.5 (-4.0; 29.0)	0.314
166		Leukocytes (10 ⁹ /L)	-0.28 (-0.67; 1.77)	0.10 (-0.62; 1.35)	1.000
167		Neutrophils (10 ⁹ /L)	-0.30 (-0.78; 2.05)	-0.15 (-0.63; 0.75)	0.947
168		Lymphocytes (10 ⁹ /L)	0.05 (-0.18; 0.25)	0.10 (-0.20; 0.28)	0.766
169		Monocytes (10 ⁹ /L)	0.00 (-0.10; 0.10)	-0.05 (-0.10; 0.18)	0.921
170		Eosinophils (10 ⁹ /L)	0.00 (-0.10; 0.03)	0.00 (-0.08; 0.00)	0.728
171		Basophils (10 ⁹ /L)	0.00 (0.00; 0.00)	0.00 (0.00; 0.08)	0.052

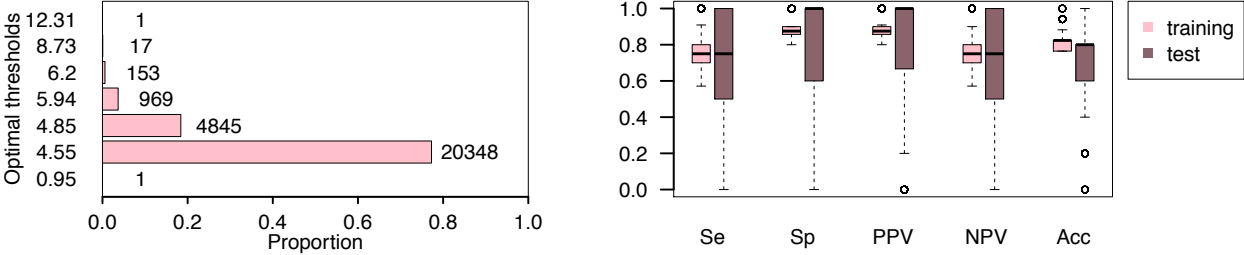
172	“Delta” inflammatory markers	D-dimer (ng/mL)	-47.0 (-88.5; 94.0)	34.0 (-18.5; 62.5)	0.356
173		High-sensitivity C-reactive protein (mg/dL)	-0.025 (-0.185; 0.060)	0.045 (-0.048; 0.265)	0.322
174		Tumor necrosis factor alpha (pg/mL)	0.0 (-1.0; 0.3)	0.0 (-0.8; 0.8)	0.631
175		Interleukin 6 (pg/mL)	0.0 (-4.3; 0.0)	0.0 (0.0; 0.0)	0.079
176		Soluble CD14 (ng/mL)	7.0 (-624.5; 101.5)	114.0 (-190.0; 311.0)	0.261
177		CD163 (ng/mL)	50.0 (-52.7; 155.1)	46.2 (24.5;148.1)	0.882
178		Endotoxin core IgM antibody (EndoCab) (MU/mL)	-0.9 (-7.7; 1.2)	-0.9 (-3.1; 0.6)	0.370
179	reservoir	Lipopolysaccharide-binding protein (ng/mL)	311.1 (-1851.6; 2417.5)	1542.5 (942.2; 11007.9)	0.201
180		Total HIV-1 DNA (copies/ 10 ⁶ CD4+ cells)	117.8 (-28.7; 337.3)	78.1 (-78.8; 621.1)	0.973
181	“Delta”	Integrated HIV-1 DNA (copies/ 10 ⁶ CD4+ cells)	1.7 (-35.1; 46.1)	-24.3 (-97.3; 4.9)	0.223
182	“Delta” ELISPOT	ELISPOT Gag – p24 (SFC/10 ⁶ PBMC)	-167.0 (-387.0; 7.0)	-157.0 (-187.0; 130.0)	0.639
183		ELISPOT Gag – p17 (SFC/10 ⁶ PBMC)	-304.5 (-351.8; -128.3)	33.0 (33.0; 33.0)	0.286
184		ELISPOT Gag – small proteins (SFC/10 ⁶ PBMC)	-180.0 (-284.5; -32.3)	17.0 (-320.0; 200.0)	0.420
185		ELISPOT Nef (SFC/10 ⁶ PBMC)	90.0 (-70.0; 197.0)	-108.0 (-267.0; 153.0)	0.792
186		ELISPOT Env – gp41 (SFC/10 ⁶ PBMC)	-70.0 (-73.0; -41.5)	-112.0 (-406.8; -49.0)	0.872
187		ELISPOT total response (SFC/10 ⁶ PBMC)	-411.5 (-911.8; -235.5)	-455.0 (-851.5; 322.0)	0.573
188		ELISPOT breadth (number)	-1.0 (-3.0; 0.0)	-0.5 (-2.3; 0.5)	0.589
189	lymphoproliferative responses	gp160 stimulus (counts/minutes)	-443.5 (-1553.5; 761.5)	-230.5 (-854.0; 494.0)	0.821
190		p24 stimulus (counts/minutes)	-238.0 (-1793.5; 643.5)	772.0 (474.5; 1255.8)	0.123

SFC=spot forming cells, PBMC= peripheral blood mononuclear cells, “Delta” values = The difference between pre- and post-vaccine values

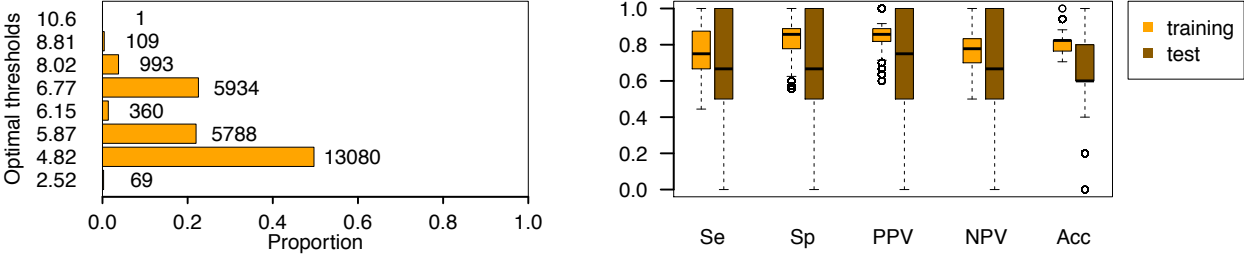
(a) Pre-ART VL



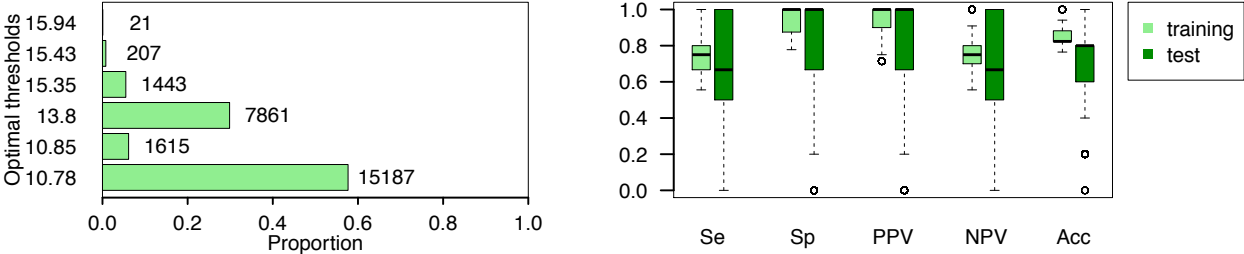
(b) Pre-vaccine CD4+CD45RA+RO+ lymphocytes



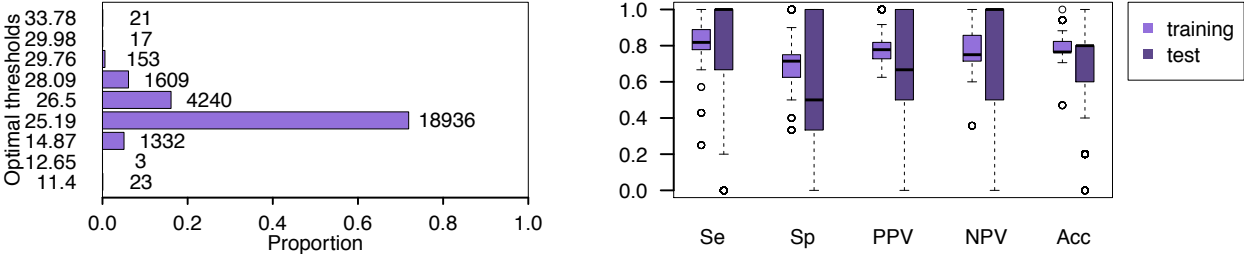
(c) Pre-vaccine CD4+CCR5+ lymphocytes



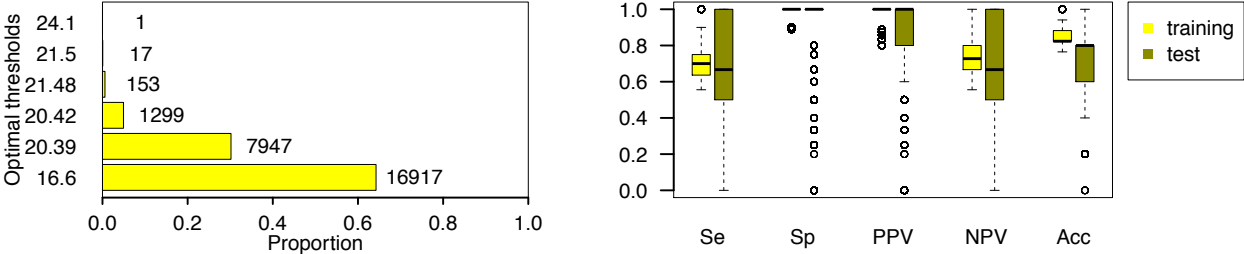
(d) Pre-vaccine CD8+CD45RA+RO+ lymphocytes



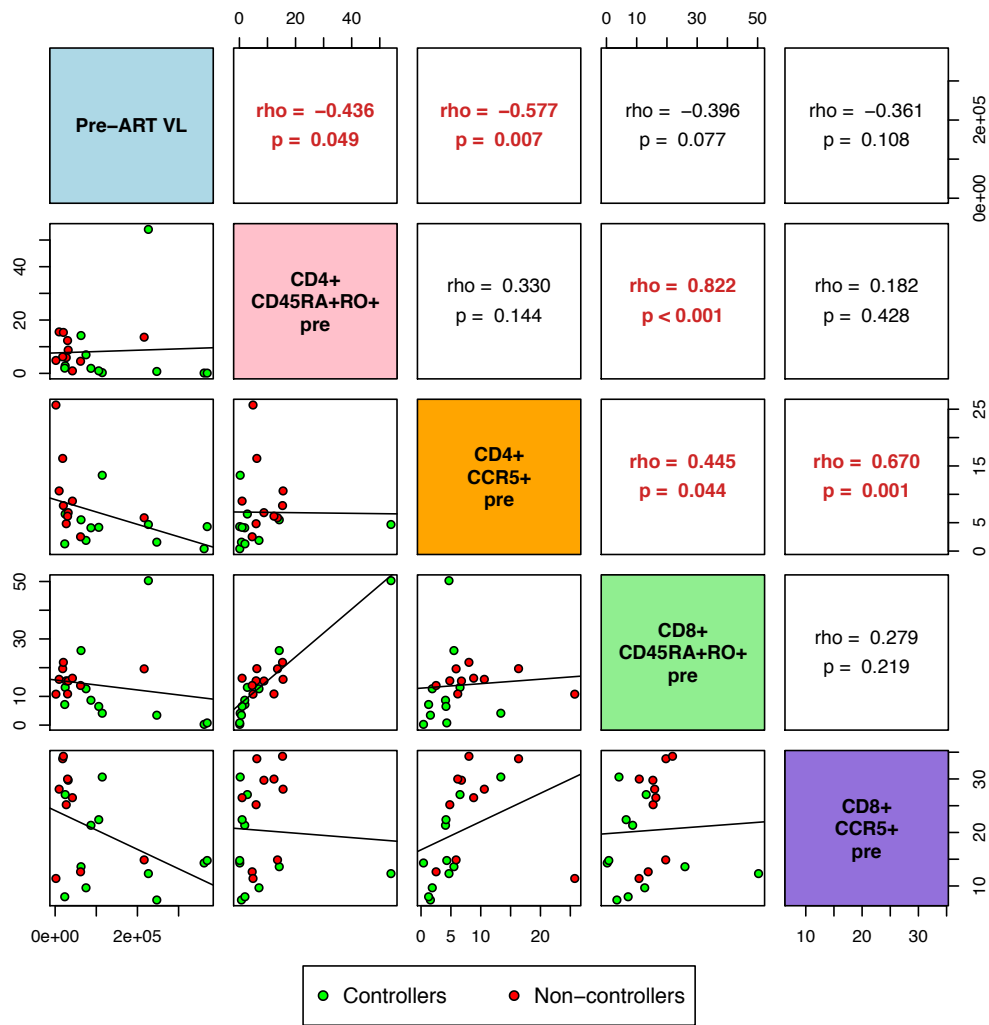
(e) Pre-vaccine CD4+CCR5+ lymphocytes



(f) Post-vaccine CD4+CXCR4+ lymphocytes



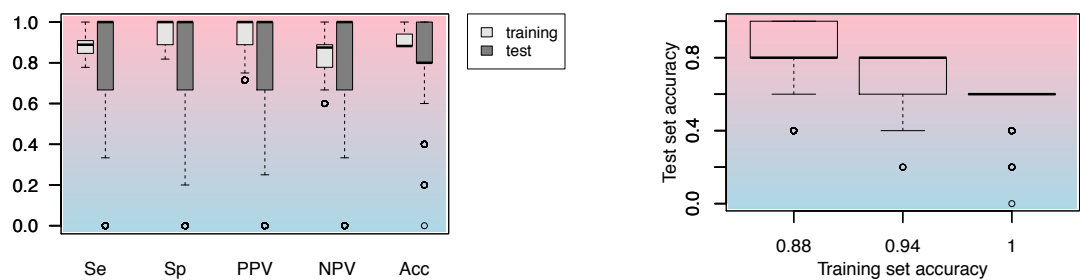
Supplemental Digital Content-3. Pairwise Spearman correlations between the 5 significant pre-vaccination predictors of viral control.



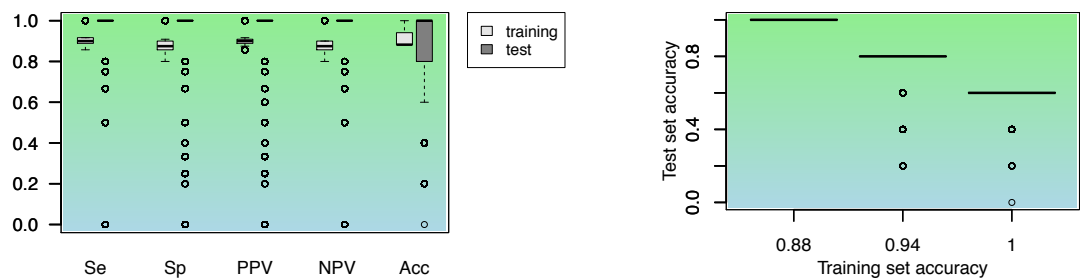
Combination	Se	Sp	PPV	NPV	Acc
Pre-ART VL	0.5455	-	1.0000	0.0000	0.5455
CD4+CD45RA+RO+	0.5455	-	1.0000	0.0000	0.5455
CD8+CD45RA+RO+	0.5455	-	1.0000	0.0000	0.5455
CD4+CCR5+	0.5455	-	1.0000	0.0000	0.5455
CD8+CCR5+	0.5455	-	1.0000	0.0000	0.5455
Pre-ART VL, CD4+CD45RA+RO+	0.8571	1.0000	1.0000	0.8000	0.9091
Pre-ART VL, CD8+CD45RA+RO+	0.9167	0.9000	0.9167	0.9000	0.9091
Pre-ART VL, CD4+CCR5+	0.8462	0.8889	0.9167	0.8000	0.8636
Pre-ART VL, CD8+CCR5+	0.9091	0.8182	0.8333	0.9000	0.8636
CD4+CD45RA+RO+, CD8+CD45RA+RO+	0.9000	0.7500	0.7500	0.9000	0.8182
CD4+CD45RA+RO+, CD4+CCR5+	0.8462	0.8889	0.9167	0.8000	0.8636
CD4+CD45RA+RO+, CD8+CCR5+	0.9000	0.7500	0.7500	0.9000	0.8182
CD8+CD45RA+RO+, CD4+CCR5+	0.9091	0.8182	0.8333	0.9000	0.8636
CD8+CD45RA+RO+, CD8+CCR5+	0.7857	0.8750	0.9167	0.7000	0.8182
CD4+CCR5+, CD8+CCR5+	0.7692	0.7778	0.8333	0.7000	0.7727
Pre-ART VL, CD4+CD45RA+RO+, CD8+CD45RA+RO+	1.0000	0.7143	0.6667	1.0000	0.8182
Pre-ART VL, CD4+CD45RA+RO+, CD4+CCR5+	0.9167	0.9000	0.9167	0.9000	0.9091
Pre-ART VL, CD4+CD45RA+RO+, CD8+CCR5+	0.9167	0.9000	0.9167	0.9000	0.9091
Pre-ART VL, CD8+CD45RA+RO+, CD4+CCR5+	0.9167	0.9000	0.9167	0.9000	0.9091
Pre-ART VL, CD8+CD45RA+RO+, CD8+CCR5+	0.9167	0.9000	0.9167	0.9000	0.9091
Pre-ART VL, CD4+CCR5+, CD8+CCR5+	0.8333	0.8000	0.8333	0.8000	0.8182
CD4+CD45RA+RO+, CD8+CD45RA+RO+, CD4+CCR5+	0.9000	0.7500	0.7500	0.9000	0.8182
CD4+CD45RA+RO+, CD8+CD45RA+RO+, CD8+CCR5+	1.0000	0.7143	0.6667	1.0000	0.8182
CD4+CD45RA+RO+, CD4+CCR5+, CD8+CCR5+	0.9000	0.7500	0.7500	0.9000	0.8182
CD8+CD45RA+RO+, CD4+CCR5+, CD8+CCR5+	0.9091	0.8182	0.8333	0.9000	0.8636
Pre-ART VL, CD4+CD45RA+RO+, CD8+CD45RA+RO+, CD4+CCR5+	1.0000	0.8333	0.8333	1.0000	0.9091
Pre-ART VL, CD4+CD45RA+RO+, CD8+CD45RA+RO+, CD8+CCR5+	0.9167	0.9000	0.9167	0.9000	0.9091
Pre-ART VL, CD4+CD45RA+RO+, CD4+CCR5+, CD8+CCR5+	0.8462	0.8889	0.9167	0.8000	0.8636
Pre-ART VL, CD8+CD45RA+RO+, CD4+CCR5+, CD8+CCR5+	0.8462	0.8889	0.9167	0.8000	0.8636
CD4+CD45RA+RO+, CD8+CD45RA+RO+, CD4+CCR5+, CD8+CCR5+	0.9091	0.8182	0.8333	0.9000	0.8636
Pre-ART VL, CD4+CD45RA+RO+, CD8+CD45RA+RO+, CD4+CCR5+, CD8+CCR5+	1.0000	0.8333	0.8333	1.0000	0.9091

Se= sensitivity, Sp= specificity, PPV= positive predictive value, NPV= negative predictive value, VL= viral load

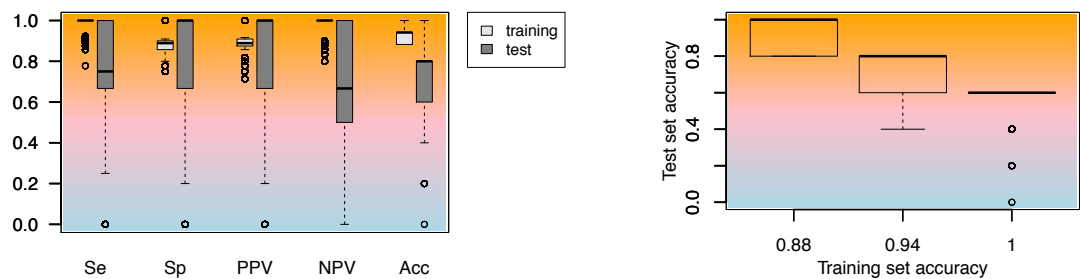
(a) Model 1 – Pre-ART VL and pre-vaccine CD4+CD45RA+RO+ lymphocytes



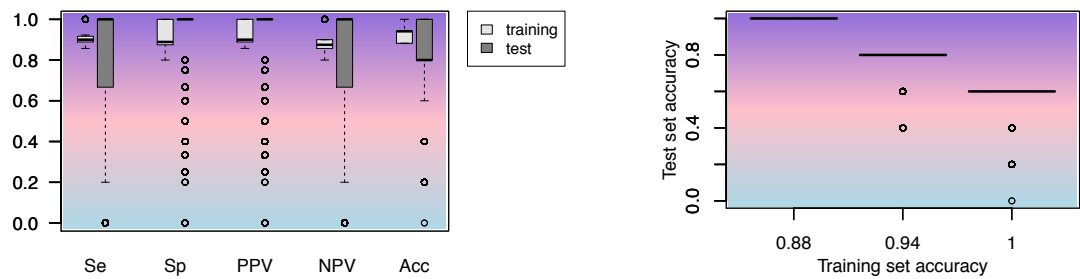
(b) Model 2 – Pre-ART VL and pre-vaccine CD8+CD45RA+RO+ lymphocytes



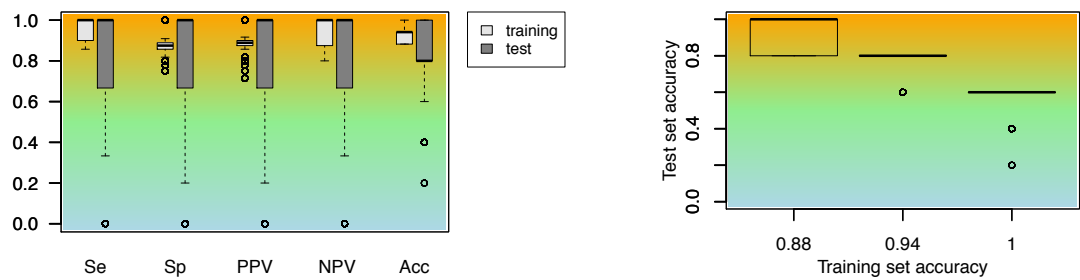
(c) Model 3 – Pre-ART VL, pre-vaccine CD4+CD45RA+RO+ and CD4+CCR5+ lymphocytes



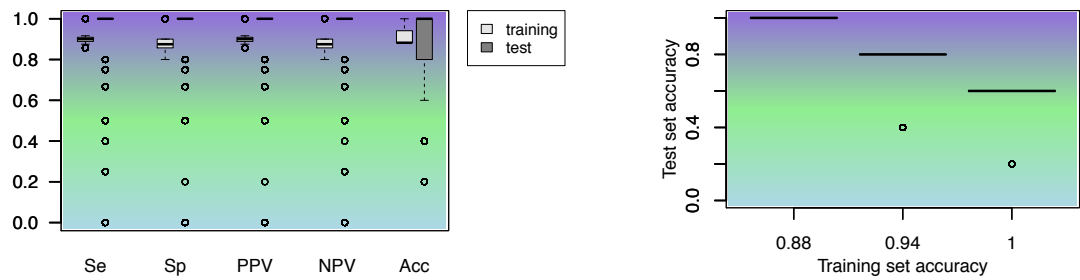
(d) Model 4 – Pre-ART VL, pre-vaccine CD4+CD45RA+RO+ and CD8+CCR5+ lymphocytes



(e) Model 5 – Pre-ART VL, pre-vaccine CD8+CD45RA+RO+ and CD4+CCR5+ lymphocytes



(f) Model 6 – Pre-ART VL, pre-vaccine CD8+CD45RA+RO+ and CD8+CCR5+ lymphocytes



Supplemental Digital Content-6. The distribution of performance measures in 1000 sub-samples of 47 cases of the validation cohort with a 36% controller prevalence, comprising of the 17 controllers and randomly selected samples of 30 non-controllers. Md= median value.

