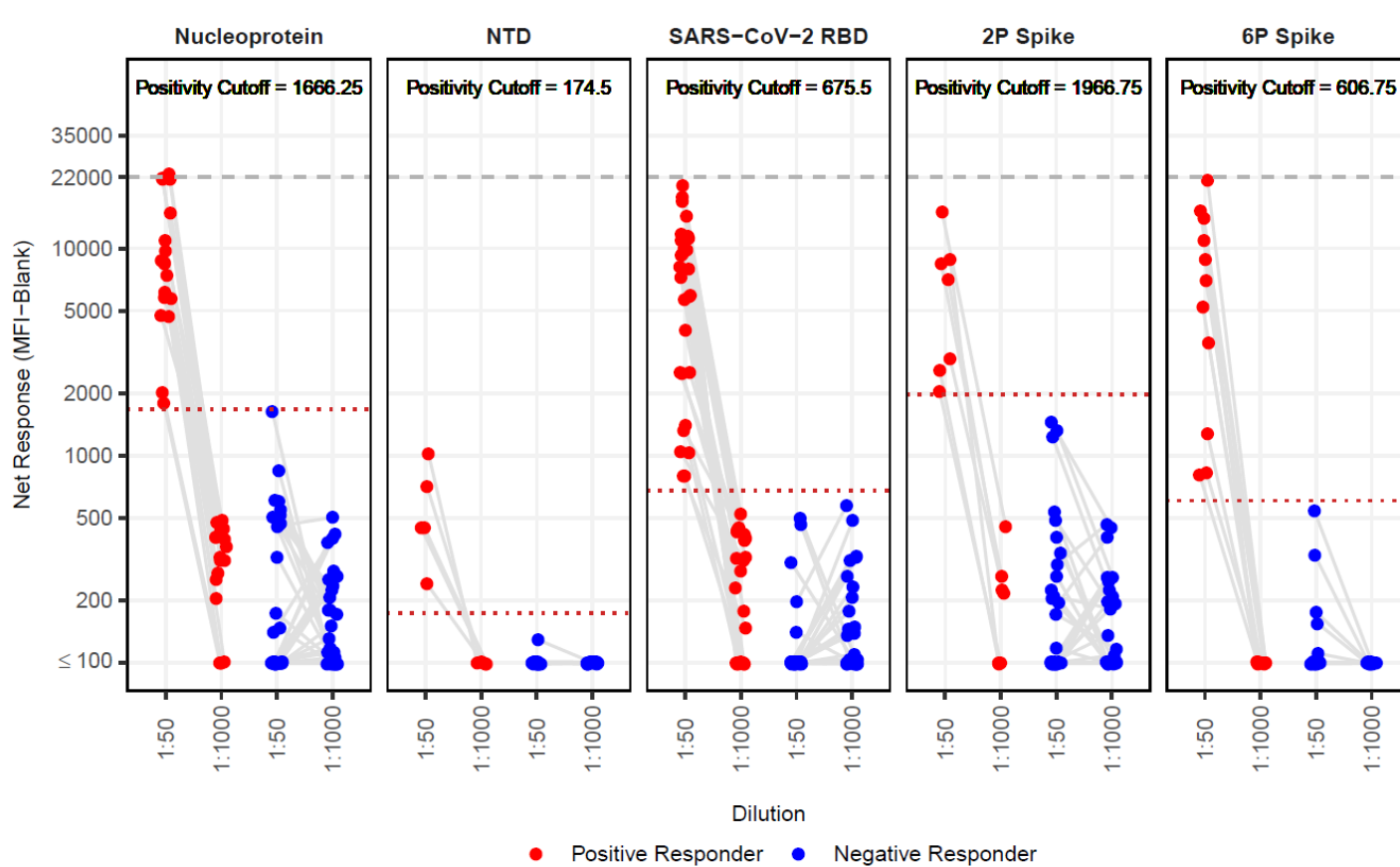


1 **Supplemental Figure S1: SARS-CoV-2-specific IgG1 Response Magnitudes at Enrollment by Responder Status Relative to**
2 **the Positivity Cutoff** IgG1 magnitudes are shown for positive (red) and negative (blue) responders in Figure 1A. Pre-specified
3 positivity cutoffs are displayed for each antigen at the top of each panel and with a red dashed line. Clear separation is present at the
4 1:50 dilution used to make the positivity calls. At the 1:1000 dilution, the visual overlap with non-responders is below the antigen
5 specific cutoff.



7 **Supplemental Figure S2: SARS-CoV-2-specific IgA Response Rates and Magnitudes at Enrollment by HIV Serostatus**

8 SARS-CoV-2-specific antigens are listed at the top of each column. Response rates are shown at the top of each box plot along with

9 the number tested. Positive responders are depicted by colored dots (PWOH in red, PLWH in blue), and non-responders are

10 depicted by gray triangles. Boxplots represent the distribution of magnitudes for the positive responders only. Response magnitude

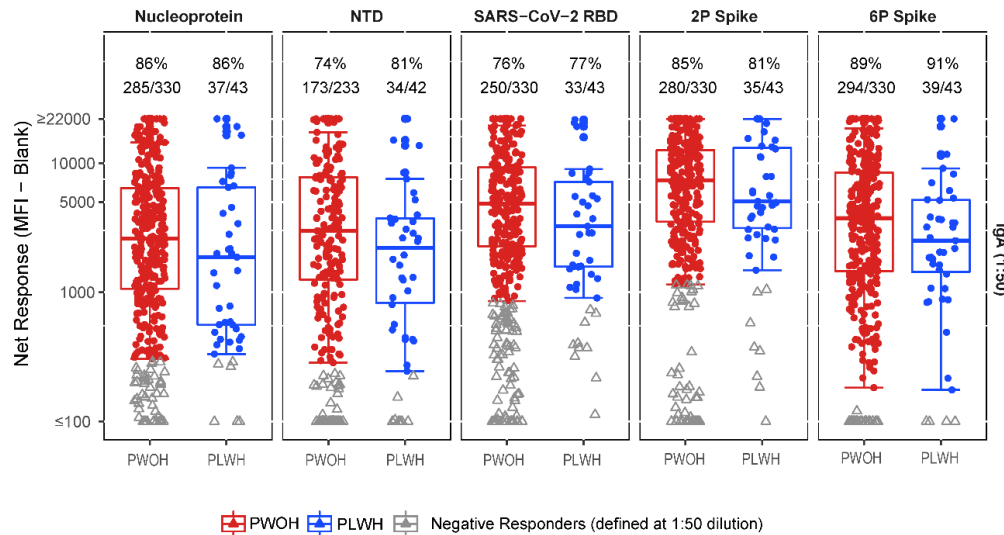
11 is shown as Net Response in mean fluorescent intensity (MFI). Log-linear regression adjusting for peak COVID-19 symptom severity,

12 diabetes, hypertension, COPD/emphysema/asthma, current and ever smoking, age, sex, BMI race/ethnicity, region, and days since

13 SARS-CoV-2 diagnosis was used. Significant differences in the response rates and magnitudes were not detected at the $p \leq 0.05$

14 and $q \leq 0.2$ levels.

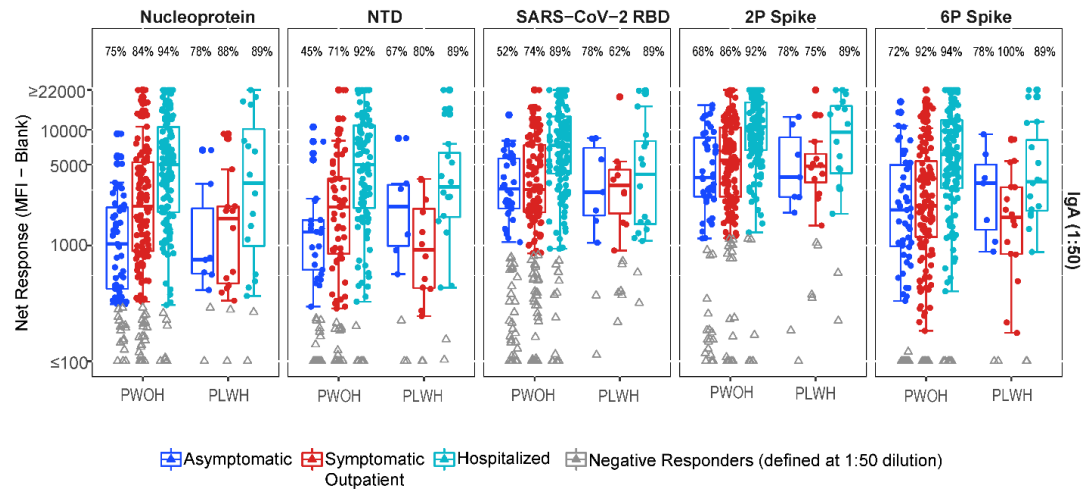
15



16 **Supplemental Figure S3: SARS-CoV-2-specific IgA Response Rates and Magnitudes at Enrollment by HIV Serostatus and**
17 **Peak COVID-19 Symptom Severity**

18 SARS-CoV-2-specific antigens are listed at the top of each column. Response rates are shown at the top of each box-and-whisker
19 plot along with the number tested. PWOH are shown on the left of each subpanel, and PLWH are shown on the right. Colored
20 dots/boxes designate peak symptom severity (asymptomatic = blue, symptomatic outpatient = red, hospitalized = teal). Gray
21 triangles = non-responders. Boxplots represent the distribution for the positive responders only (number tested - PLWH IgA
22 Asymptomatic/Symptomatic Outpatient/Hospitalized: N 9/16/18, NTD 9/15/18, RBD 9/16/18, 2P 9/16/18, 6P 9/16/18; PWOH IgA
23 Asymptomatic/Symptomatic Outpatient/ Hospitalized: N 65/133/132 , NTD 55/75/103, RBD 65/133/132, 2P 65/133/132, 6P
24 65/133/132). Response magnitude is shown as Net Response in mean fluorescent intensity (MFI). Log-linear regression adjusting for
25 peak COVID-19 symptom severity, diabetes, hypertensions, COPD/emphysema/asthma, current and ever smoking, age, sex, BMI
26 race/ethnicity, region, and days since SARS-CoV-2 diagnosis was used. Significant differences in the response rates and

27 magnitudes were not detected at the $p \leq 0.05$ and $q \leq 0.2$ levels. For within group significances between peak COVID-19 symptom
 28 severities, see Tables S5 and S6.

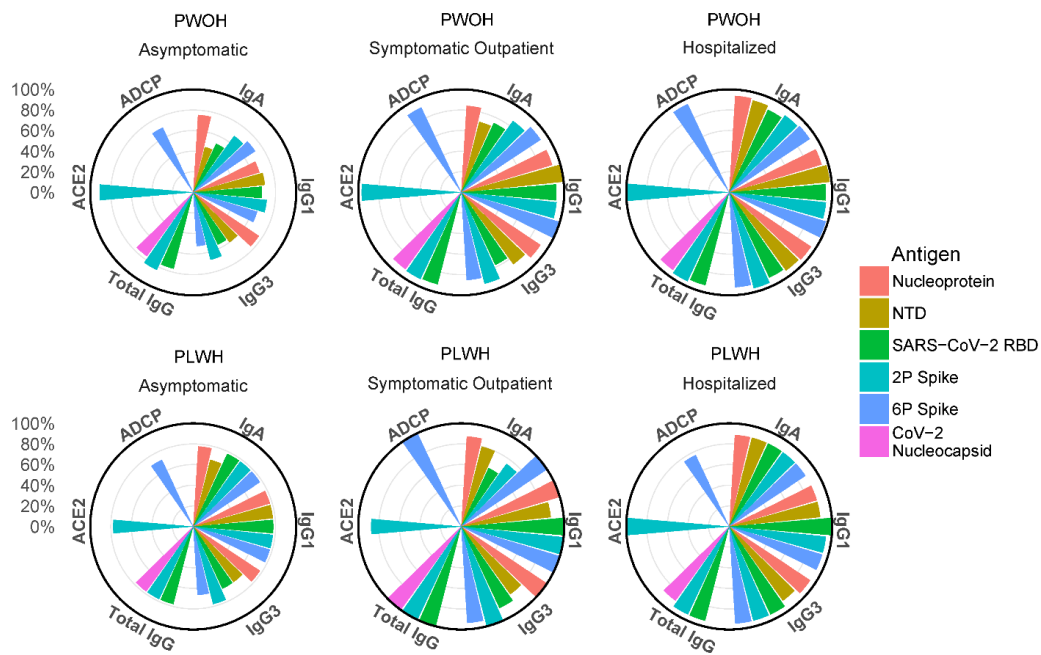


29

30 **Supplemental Figure S4: Polar Plots of Response Rates to SARS-CoV-2 Antigens at Enrollment by HIV Serostatus and Peak**
31 **COVID-19 Severity**

32 Each plot represents a specific HIV serostatus and peak COVID-19 symptom severity. Isotypes/subclasses, ACE2 blocking, and
33 ADCP are shown around the perimeter. Response rate (%) towards antigens are represented by colored rays. All participant data is
34 included.

35



36

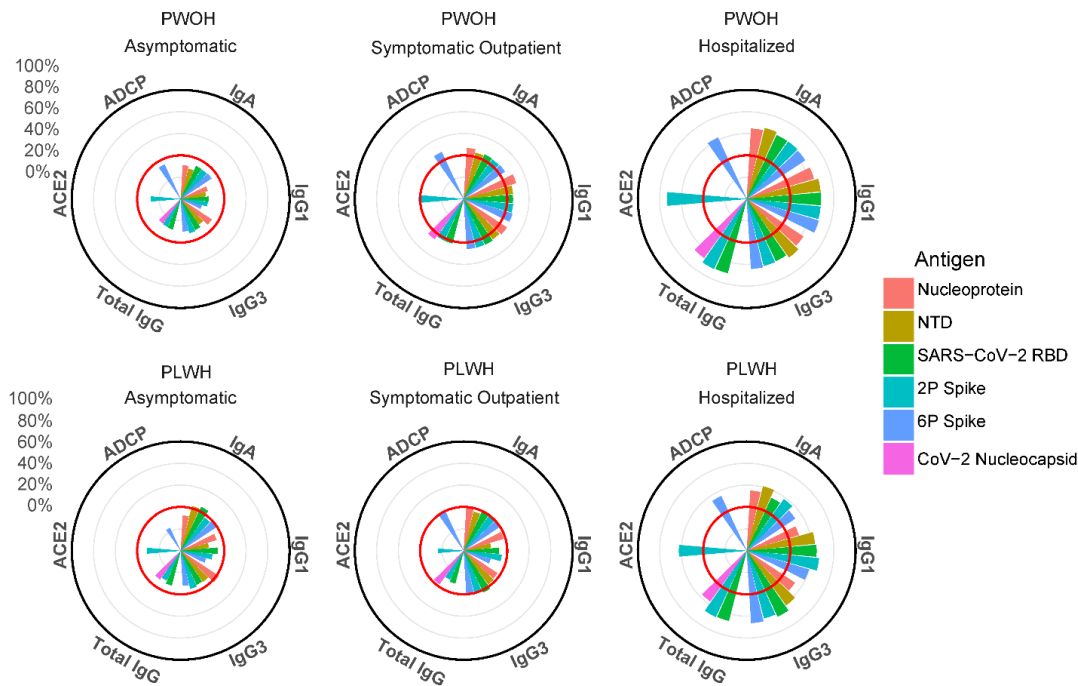
37

38

39 **Supplemental Figure S5: Polar Plots of Mean Percentile of Response Magnitudes to SARS-CoV-2 Antigens at Enrollment by**
40 **HIV Serostatus and COVID-19 Severity**

41 Each plot represents a specific HIV serostatus and peak COVID-19 symptom severity. Isotypes/subclasses, ACE2 blocking, and
42 ADCP are shown around the perimeter. Group mean percentile response magnitudes towards antigens are represented by colored
43 rays. Response magnitudes were first ranked and then scaled from 0 to 1 for each antigen-antibody combination. Red circles at the
44 0.4 ring emphasize differences between asymptomatic and symptomatic outpatient group responses. All participant data is included.

45



46

47 **Supplemental Table 1: Association of HIV status with binding antibody responses adjusting for COVID-19**
 48 **severity, demographics, pre-existing medical conditions, smoking history, region, and days since SARS-CoV-2**
 49 **diagnosis**

Isotype	Antigen	Response Rate				Response Magnitudes among Positive Responders			
		OR*	95% CI	P-value	Q-value	GMR*	95% CI	P-value	Q-value
IgG1	SARS-CoV-2 RBD	3.65	[0.97, 20.51]	0.057	0.245	0.75	[0.5, 1.14]	0.184	0.307
	SARS-CoV-2 Nucl	2.41	[0.75, 9.42]	0.147	0.245	0.65	[0.42, 1.01]	0.055	0.138
	SARS-CoV-2 2P Spike	2.18	[0.64, 9.66]	0.226	0.282	0.99	[0.72, 1.37]	0.969	0.969
	SARS-CoV-2-NTD	0.69	[0.16, 3.1]	0.616	0.616	0.73	[0.43, 1.25]	0.252	0.315
	SARS-CoV-2 6P Spike	3.6	[0.67, 25.58]	0.141	0.245	0.63	[0.4, 1]	0.05	0.138
IgG3	SARS-CoV-2 RBD	2.81	[1.05, 8.68]	0.039	0.097	0.95	[0.71, 1.29]	0.758	0.809
	SARS-CoV-2 Nucl	2.25	[0.66, 9.99]	0.207	0.259	0.88	[0.64, 1.21]	0.429	0.809
	SARS-CoV-2 2P Spike	2.88	[0.84, 12.87]	0.097	0.162	0.97	[0.73, 1.28]	0.809	0.809
	SARS-CoV-2-NTD	1.46	[0.55, 4.27]	0.459	0.459	0.89	[0.58, 1.34]	0.573	0.809
	SARS-CoV-2 6P Spike	3.23	[1.09, 11.39]	0.033	0.097	0.8	[0.57, 1.12]	0.195	0.809
IgG	CoV-2 Nucleoprotein	2.21	[0.64, 9.41]	0.221	0.332	0.64	[0.4, 1.04]	0.071	0.106
	CoV-2 RBD	2.59	[0.7, 12.47]	0.163	0.332	0.63	[0.42, 0.96]	0.031	0.093
	CoV-2 2P Spike	1.83	[0.48, 8.89]	0.394	0.394	0.71	[0.45, 1.14]	0.155	0.155

IgA	SARS-CoV-2 RBD	1.12	[0.46, 2.89]	0.803	0.927	0.8	[0.6, 1.05]	0.112	0.281
	SARS-CoV-2 Nucl	0.83	[0.3, 2.52]	0.73	0.927	0.9	[0.63, 1.3]	0.586	0.645
	SARS-CoV-2 2P Spike	0.96	[0.38, 2.6]	0.927	0.927	0.94	[0.73, 1.21]	0.645	0.645
	SARS-CoV-2-NTD	1.79	[0.65, 5.46]	0.27	0.833	0.86	[0.59, 1.26]	0.445	0.645
	SARS-CoV-2 6P Spike	1.78	[0.57, 6.69]	0.333	0.833	0.76	[0.54, 1.05]	0.098	0.281

50 *: OR=Odds Ratio, †: GMR=Geometric Mean Ratio; Nucl is short for Nucleoprotein; Bold values are significant (p-value≤0.05 and q-value≤0.2)

51

52 **Supplemental Table 2: Association of HIV status with binding antibody responses stratified by COVID-19**
53 **severity adjusting for demographics, pre-existing medical conditions, smoking history, region, and days since**
54 **SARS-CoV-2 diagnosis**

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
IgG1	SARS-CoV-2 RBD	PLWH vs PWOH in	1.59	[0.26,	0.612	0.921	2.7	[1.02,	0.046	0.138
		Asymptomatic		9.69]				7.15]		
	SARS-CoV-2 Nucleoprotein	PLWH vs PWOH in	5.66	[0.28,	0.256	0.73	0.41	[0.22,	0.005	0.02
		Symptomatic		112.66]				0.77]		
	SARS-CoV-2 Spike	PLWH vs PWOH in	5.18	[0.27,	0.276	0.73	0.84	[0.47,	0.577	0.665
		Hospitalized		100.16]				1.53]		
IgG1	SARS-CoV-2 RBD	PLWH vs PWOH in	1.98	[0.32,	0.465	0.921	2.17	[0.79,	0.133	0.284
		Asymptomatic		12.47]				5.98]		
	SARS-CoV-2 Nucleoprotein	PLWH vs PWOH in	8.3	[0.42,	0.166	0.73	0.38	[0.2,	0.004	0.02
		Symptomatic		165.7]				0.74]		
	SARS-CoV-2 Spike	PLWH vs PWOH in	0.93	[0.16,	0.936	0.936	0.7	[0.37,	0.266	0.467
		Hospitalized		5.36]				1.32]		
IgG1	SARS-CoV-2 2P	PLWH vs PWOH in	1.33	[0.22,	0.755	0.936	1.86	[0.88,	0.103	0.257
		Asymptomatic		8.17]				3.93]		

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		PLWH vs PWOH in Symptomatic	4.91	[0.25, 94.87]	0.292	0.73	0.8	[0.49, 1.3]	0.372	0.503
		PLWH vs PWOH in Hospitalized	1.43	[0.2, 10.53]	0.723	0.936	0.97	[0.61, 1.54]	0.888	0.951
	SARS-CoV-2-NTD	PLWH vs PWOH in Asymptomatic	2	[0.22, 18.48]	0.54	0.921	1.68	[0.5, 5.66]	0.402	0.503
		PLWH vs PWOH in Symptomatic	0.13	[0.01, 1.48]	0.101	0.73	0.23	[0.1, 0.51]	<0.001	0.003
		PLWH vs PWOH in Hospitalized	0.78	[0.09, 6.92]	0.82	0.936	1.4	[0.67, 2.91]	0.373	0.503
	SARS-CoV-2 6P Spike	PLWH vs PWOH in Asymptomatic	4.32	[0.5, 37.11]	0.183	0.73	1.81	[0.62, 5.3]	0.28	0.467
		PLWH vs PWOH in Symptomatic	1.19	[0.04, 31.63]	0.916	0.936	0.25	[0.13, 0.5]	<0.001	0.001
		PLWH vs PWOH in Hospitalized	1.89	[0.16, 22.18]	0.614	0.921	1.01	[0.54, 1.9]	0.975	0.975
IgG3	SARS-CoV-2 RBD	PLWH vs PWOH in Asymptomatic	2.44	[0.47, 12.55]	0.286	0.66	0.92	[0.44, 1.94]	0.83	0.89

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		PLWH vs PWOH in Symptomatic	2.81	[0.59, 13.42]	0.194	0.66	0.69	[0.43, 1.1]	0.122	0.452
		PLWH vs PWOH in Hospitalized	2.3	[0.34, 15.66]	0.396	0.66	1.25	[0.82, 1.92]	0.3	0.643
	SARS-CoV-2 Nucleoprotein	PLWH vs PWOH in Asymptomatic	1.05	[0.17, 6.54]	0.958	0.964	1.9	[0.89, 4.02]	0.095	0.452
		PLWH vs PWOH in Symptomatic	6.67	[0.32, 138.28]	0.22	0.66	0.68	[0.41, 1.11]	0.12	0.452
		PLWH vs PWOH in Hospitalized	1.7	[0.21, 13.75]	0.618	0.843	0.85	[0.53, 1.35]	0.484	0.726
	SARS-CoV-2 2P Spike	PLWH vs PWOH in Asymptomatic	1.91	[0.32, 11.52]	0.481	0.721	1.08	[0.56, 2.11]	0.818	0.89
		PLWH vs PWOH in Symptomatic	8.41	[0.42, 168.18]	0.164	0.66	0.73	[0.47, 1.12]	0.151	0.452
		PLWH vs PWOH in Hospitalized	1.15	[0.14, 9.36]	0.893	0.964	1.19	[0.79, 1.8]	0.402	0.726
	SARS-CoV-2-NTD	PLWH vs PWOH in Asymptomatic	2.25	[0.42, 12.12]	0.347	0.66	1.32	[0.48, 3.64]	0.597	0.814

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		PLWH vs PWOH in Symptomatic	1.09	[0.25, 4.78]	0.913	0.964	0.64	[0.33, 1.24]	0.183	0.458
		PLWH vs PWOH in Hospitalized	1.04	[0.19, 5.67]	0.964	0.964	1.02	[0.56, 1.87]	0.943	0.943
	SARS-CoV-2 6P Spike	PLWH vs PWOH in Asymptomatic	2.91	[0.54, 15.54]	0.212	0.66	0.72	[0.31, 1.69]	0.448	0.726
		PLWH vs PWOH in Symptomatic	3.23	[0.47, 22.12]	0.232	0.66	0.57	[0.34, 0.95]	0.033	0.452
		PLWH vs PWOH in Hospitalized	2.37	[0.33, 17.15]	0.393	0.66	1.11	[0.68, 1.81]	0.677	0.846
IgG	CoV-2 Nucleoprotein	PLWH vs PWOH in Asymptomatic	1.56	[0.21, 11.7]	0.664	0.904	1.03	[0.31, 3.35]	0.966	0.966
		PLWH vs PWOH in Symptomatic	7.03	[0.37, 133.39]	0.194	0.78	0.52	[0.25, 1.06]	0.072	0.217
		PLWH vs PWOH in Hospitalized	1.12	[0.19, 6.57]	0.904	0.904	0.67	[0.33, 1.37]	0.278	0.468
	CoV-2 RBD	PLWH vs PWOH in Asymptomatic	1.2	[0.16, 8.96]	0.857	0.904	1.59	[0.58, 4.34]	0.364	0.468

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		PLWH vs PWOH in Symptomatic	6.98	[0.36, 136.77]	0.201	0.78	0.43	[0.23, 0.78]	0.006	0.053
		PLWH vs PWOH in Hospitalized	1.99	[0.25, 15.67]	0.514	0.904	0.69	[0.38, 1.26]	0.227	0.468
	CoV-2 2P Spike	PLWH vs PWOH in Asymptomatic	0.85	[0.11, 6.6]	0.873	0.904	1.73	[0.56, 5.29]	0.337	0.468
		PLWH vs PWOH in Symptomatic	5.56	[0.28, 110.24]	0.26	0.78	0.41	[0.21, 0.82]	0.012	0.054
		PLWH vs PWOH in Hospitalized	1.34	[0.17, 10.76]	0.784	0.904	0.9	[0.46, 1.75]	0.747	0.84
IgA	SARS-CoV-2 RBD	PLWH vs PWOH in Asymptomatic	3.15	[0.53, 18.58]	0.206	0.947	1.27	[0.68, 2.37]	0.454	0.68
		PLWH vs PWOH in Symptomatic	0.62	[0.17, 2.22]	0.462	0.947	0.8	[0.49, 1.31]	0.381	0.68
		PLWH vs PWOH in Hospitalized	0.95	[0.19, 4.78]	0.947	0.947	0.68	[0.46, 0.99]	0.047	0.36
	SARS-CoV-2 Nucleoprotein	PLWH vs PWOH in Asymptomatic	0.81	[0.13, 5.15]	0.825	0.947	1.2	[0.54, 2.65]	0.657	0.758

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		PLWH vs PWOH in Symptomatic	1.07	[0.22, 5.22]	0.93	0.947	0.76	[0.43, 1.33]	0.331	0.68
		PLWH vs PWOH in Hospitalized	0.47	[0.09, 2.37]	0.359	0.947	0.94	[0.56, 1.59]	0.821	0.821
	SARS-CoV-2 2P Spike	PLWH vs PWOH in Asymptomatic	1.74	[0.3, 9.97]	0.536	0.947	1.19	[0.68, 2.09]	0.544	0.68
		PLWH vs PWOH in Symptomatic	0.64	[0.17, 2.44]	0.511	0.947	0.94	[0.61, 1.43]	0.761	0.816
		PLWH vs PWOH in Hospitalized	0.79	[0.15, 4.13]	0.782	0.947	0.87	[0.61, 1.24]	0.443	0.68
	SARS-CoV-2-NTD	PLWH vs PWOH in Asymptomatic	3.06	[0.52, 18.06]	0.218	0.947	2.27	[0.92, 5.59]	0.074	0.37
		PLWH vs PWOH in Symptomatic	1.71	[0.36, 8.04]	0.498	0.947	0.59	[0.32, 1.11]	0.103	0.387
		PLWH vs PWOH in Hospitalized	0.81	[0.14, 4.55]	0.808	0.947	0.85	[0.51, 1.42]	0.541	0.68
	SARS-CoV-2 6P Spike	PLWH vs PWOH in Asymptomatic	1.38	[0.23, 8.23]	0.725	0.947	1.48	[0.69, 3.2]	0.318	0.68

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		PLWH vs PWOH in Symptomatic	5.92	[0.31, 113.77]	0.238	0.947	0.6	[0.37, 1]	0.048	0.36
		PLWH vs PWOH in Hospitalized	0.8	[0.15, 4.42]	0.801	0.947	0.73	[0.45, 1.19]	0.213	0.638

55 *: OR=Odds Ratio, †: GMR=Geometric Mean Ratio; Bold values are significant (p-value≤0.05 and q-value≤0.2). Response magnitudes include
56 only positive responders.

57

58 **Supplemental Table 3: Association of Peak COVID-19 severity with binding antibody responses adjusting for**
 59 **demographics, pre-existing medical conditions, smoking history, region, and days since SARS-CoV-2 diagnosis**
 60 **in PWOH participants**

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
IgG1	SARS-CoV-2	Symptomatic vs	6.17	[2.27,	<0.001	0.001	2.63	[1.7, 4.09]	<0.001	<0.001
	RBD	Asymptomatic in PWOH		16.77]						
		Hospitalized vs	2.1	[0.75, 5.88]	0.156	0.229	2.29	[1.65,	<0.001	<0.001
		Symptomatic in PWOH					3.17]			
	SARS-CoV-2	Symptomatic vs	4.72	[1.75,	0.002	0.004	3.71	[2.37,	<0.001	<0.001
	Nucleoprotein	Asymptomatic in PWOH		12.69]				5.81]		
		Hospitalized vs	2.11	[0.74, 5.96]	0.16	0.229	1.59	[1.13,	0.007	0.007
		Symptomatic in PWOH					2.22]			
	SARS-CoV-2 2P	Symptomatic vs	5.8	[2.04, 16.5]	0.001	0.002	1.84	[1.32,	<0.001	<0.001
	Spike	Asymptomatic in PWOH						2.55]		
		Hospitalized vs	1.94	[0.67, 5.61]	0.218	0.273	1.73	[1.35,	<0.001	<0.001
		Symptomatic in PWOH					2.22]			
	SARS-CoV-2-	Symptomatic vs	60.27	[6.89,	<0.001	0.001	5.02	[2.68,	<0.001	<0.001
	NTD	Asymptomatic in PWOH		526.91]				9.39]		

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		Hospitalized vs Symptomatic in PWOH	0.88	[0.12, 6.58]	0.901	0.901	3.03	[1.97, 4.66]	<0.001	<0.001
	SARS-CoV-2 6P Spike	Symptomatic vs Asymptomatic in PWOH	45.32	[5.9, 348.3]	<0.001	0.001	4.61	[2.63, 8.06]	<0.001	<0.001
		Hospitalized vs Symptomatic in PWOH	1.17	[0.17, 8.21]	0.876	0.901	2.23	[1.53, 3.26]	<0.001	<0.001
IgG3	SARS-CoV-2 RBD	Symptomatic vs Asymptomatic in PWOH	2.64	[1.2, 5.84]	0.016	0.027	1.57	[1.12, 2.2]	0.009	0.011
		Hospitalized vs Symptomatic in PWOH	3.43	[1.52, 7.71]	0.003	0.007	1.46	[1.15, 1.85]	0.002	0.003
	SARS-CoV-2 Nucleoprotein	Symptomatic vs Asymptomatic in PWOH	3.77	[1.31, 10.91]	0.014	0.027	1.7	[1.22, 2.37]	0.002	0.003
		Hospitalized vs Symptomatic in PWOH	2.55	[0.87, 7.45]	0.088	0.088	1.78	[1.38, 2.29]	<0.001	<0.001
	SARS-CoV-2 2P Spike	Symptomatic vs Asymptomatic in PWOH	5.31	[1.95, 14.47]	0.001	0.006	1.37	[1.02, 1.85]	0.036	0.04
		Hospitalized vs Symptomatic in PWOH	3.32	[1.07, 10.24]	0.037	0.051	1.59	[1.27, 1.98]	<0.001	<0.001

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
	SARS-CoV-2-NTD	Symptomatic vs Asymptomatic in PWOH	3.83	[1.6, 9.15]	0.003	0.007	2.19	[1.4, 3.42]	0.001	0.001
		Hospitalized vs Symptomatic in PWOH	2.65	[1.04, 6.75]	0.041	0.051	2.51	[1.81, 3.47]	<0.001	<0.001
		SARS-CoV-2 6P Spike	Symptomatic vs Asymptomatic in PWOH	5.54	[2.32, 13.22]	<0.001	0.001	1.44	[0.98, 2.12]	0.064
IgG	CoV-2 Nucleoprotein	Hospitalized vs Symptomatic in PWOH	2.35	[0.97, 5.73]	0.06	0.066	1.87	[1.43, 2.44]	<0.001	<0.001
		Symptomatic vs Asymptomatic in PWOH	3.56	[0.95, 13.35]	0.059	0.178	2.7	[1.44, 5.06]	0.002	0.002
		Hospitalized vs Symptomatic in PWOH	1.42	[0.46, 4.42]	0.542	0.542	2.49	[1.64, 3.78]	<0.001	<0.001
	CoV-2 RBD	Symptomatic vs Asymptomatic in PWOH	3.6	[0.96, 13.54]	0.058	0.178	2.39	[1.4, 4.09]	0.001	0.002
		Hospitalized vs Symptomatic in PWOH	1.48	[0.47, 4.67]	0.506	0.542	3.53	[2.48, 5.03]	<0.001	<0.001
		CoV-2 2P Spike	Symptomatic vs Asymptomatic in PWOH	3.13	[0.74, 13.29]	0.122	0.244	3.41	[1.88, 6.18]	<0.001

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		Hospitalized vs Symptomatic in PWOH	1.88	[0.53, 6.7]	0.332	0.497	3.18	[2.14, 4.74]	<0.001	<0.001
IgA	SARS-CoV-2 RBD	Symptomatic vs Asymptomatic in PWOH	5	[2.19, 11.41]	<0.001	0.001	1.53	[1.15, 2.06]	0.004	0.005
		Hospitalized vs Symptomatic in PWOH	2.33	[1.07, 5.07]	0.034	0.042	1.65	[1.34, 2.03]	<0.001	<0.001
	SARS-CoV-2 Nucleoprotein	Symptomatic vs Asymptomatic in PWOH	3.2	[1.29, 7.94]	0.012	0.02	2.71	[1.9, 3.85]	<0.001	<0.001
		Hospitalized vs Symptomatic in PWOH	3.07	[1.2, 7.88]	0.02	0.028	2.07	[1.58, 2.71]	<0.001	<0.001
	SARS-CoV-2 2P Spike	Symptomatic vs Asymptomatic in PWOH	4.03	[1.65, 9.85]	0.002	0.007	1.55	[1.2, 1.99]	0.001	0.001
		Hospitalized vs Symptomatic in PWOH	2.29	[0.94, 5.53]	0.067	0.074	1.56	[1.29, 1.88]	<0.001	<0.001
	SARS-CoV-2-NTD	Symptomatic vs Asymptomatic in PWOH	4.12	[1.6, 10.61]	0.003	0.007	1.7	[1.06, 2.71]	0.027	0.027

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		Hospitalized vs Symptomatic in PWOH	6.42	[2.36, 17.5]	<0.001	0.001	2.45	[1.76, 3.43]	<0.001	<0.001
	SARS-CoV-2 6P	Symptomatic vs Asymptomatic in PWOH	4.67	[1.68, 12.99]	0.003	0.007	1.7	[1.22, 2.39]	0.002	0.002
	Spike	Hospitalized vs Symptomatic in PWOH	1.64	[0.59, 4.54]	0.34	0.34	1.85	[1.43, 2.39]	<0.001	<0.001

61 †: OR=Odds Ratio, ‡: GMR=Geometric Mean Ratio; Bold values are significant (p-value≤0.05 and q-value≤0.2). Response magnitudes include
62 only positive responders

63

64 **Supplemental Table 4: Association of Peak COVID-19 severity with binding antibody responses adjusting for**
 65 **demographics, pre-existing medical conditions, smoking history, region, and days since SARS-CoV-2 diagnosis**
 66 **in PLWH**

Isotype	Antigen	Comparison	OR	Response Rate			Response Magnitudes			
				95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
IgG1	SARS-CoV-2	Symptomatic vs	34.89	[1.77,	0.02	0.065	1.08	[0.54,	0.836	0.836
	RBD	Asymptomatic in PLWH		688.11]				2.15]		
		Hospitalized vs Symptomatic in PLWH	3.07	[0.03, 271.63]	0.624	0.775	12.77	[3.62,	<0.001	<0.001
								45.03]		
	SARS-CoV-2	Symptomatic vs	39.14	[1.98,	0.016	0.065	1.43	[0.7,	0.33	0.472
	Nucleoprotein	Asymptomatic in PLWH		774.7]				2.91]		
		Hospitalized vs Symptomatic in PLWH	0.47	[0.01, 21.36]	0.697	0.775	6.25	[1.69,	0.006	0.012
								23.09]		
	SARS-CoV-2 2P	Symptomatic vs	28.52	[1.49,	0.026	0.066	1.47	[0.87,	0.153	0.255
	Spike	Asymptomatic in PLWH		547.21]				2.5]		

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
		Hospitalized vs Symptomatic in PLWH	0.76	[0.02, 37.51]	0.889	0.889	3.89	[1.48, 10.23]	0.006	0.012
	SARS-CoV-2-NTD	Symptomatic vs Asymptomatic in PLWH	7.95	[1.05, 60.29]	0.045	0.09	1.14	[0.46, 2.84]	0.784	0.836
		Hospitalized vs Symptomatic in PLWH	10.36	[0.31, 348.67]	0.193	0.321	31.39	[6.75, 145.92]	<0.001	<0.001
	SARS-CoV-2 6P Spike	Symptomatic vs Asymptomatic in PLWH	54.03	[2.44, 1194.36]	0.012	0.065	1.17	[0.53, 2.55]	0.7	0.836
		Hospitalized vs Symptomatic in PLWH	7.97	[0.11, 567.01]	0.34	0.486	16.09	[4.22, 61.36]	<0.001	<0.001
IgG3	SARS-CoV-2 RBD	Symptomatic vs Asymptomatic in PLWH	7.44	[1.52, 36.46]	0.013	0.045	1.08	[0.64, 1.82]	0.768	0.854
		Hospitalized vs Symptomatic in PLWH	6.82	[0.38, 122.66]	0.193	0.296	2.45	[0.94, 6.34]	0.066	0.164

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
SARS-CoV-2 Nucleoprotein		Symptomatic vs Asymptomatic in PLWH	25.18	[1.2, 526.8]	0.038	0.094	1.15	[0.68, 1.96]	0.605	0.756
		Hospitalized vs Symptomatic in PLWH	0.68	[0.01, 37.44]	0.851	0.945	4.21	[1.58, 11.23]	0.004	0.04
SARS-CoV-2 2P Spike		Symptomatic vs Asymptomatic in PLWH	44.62	[2.22, 898.4]	0.013	0.045	1	[0.62, 1.6]	0.998	0.998
		Hospitalized vs Symptomatic in PLWH	0.87	[0.02, 44.98]	0.945	0.945	2.81	[1.18, 6.66]	0.019	0.064
SARS-CoV-2-NTD		Symptomatic vs Asymptomatic in PLWH	4.16	[0.94, 18.52]	0.061	0.122	1.39	[0.67, 2.9]	0.373	0.622
		Hospitalized vs Symptomatic in PLWH	5.7	[0.38, 85.06]	0.207	0.296	5.3	[1.41, 19.86]	0.013	0.064

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
	SARS-CoV-2 6P Spike	Symptomatic vs Asymptomatic in PLWH	17.91	[2.58, 124.26]	0.004	0.035	0.82	[0.45, 1.47]	0.495	0.708
		Hospitalized vs Symptomatic in PLWH	5.01	[0.22, 114.8]	0.313	0.391	2.62	[0.88, 7.79]	0.082	0.164
IgG	CoV-2 Nucleoprotein	Symptomatic vs Asymptomatic in PLWH	25.06	[1.22, 515.38]	0.037	0.115	1.4	[0.59, 3.32]	0.441	0.529
		Hospitalized vs Symptomatic in PLWH	0.35	[0.01, 16.6]	0.596	0.738	3.32	[0.75, 14.69]	0.114	0.227
	CoV-2 RBD	Symptomatic vs Asymptomatic in PLWH	25.16	[1.19, 533.32]	0.038	0.115	1.02	[0.49, 2.12]	0.959	0.959
		Hospitalized vs Symptomatic in PLWH	0.51	[0.01, 27.31]	0.738	0.738	9.15	[2.58, 32.45]	0.001	0.002

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
	CoV-2 2P Spike	Symptomatic vs Asymptomatic in PLWH	17.4	[0.8, 379.67]	0.069	0.139	1.41	[0.62, 3.19]	0.407	0.529
		Hospitalized vs Symptomatic in PLWH	0.38	[0.01, 20.77]	0.637	0.738	11.9	[2.86, 49.48]	0.001	0.002
IgA	SARS-CoV-2 RBD	Symptomatic vs Asymptomatic in PLWH	3.1	[0.83, 11.53]	0.091	0.221	1.23	[0.73, 2.08]	0.439	0.548
		Hospitalized vs Symptomatic in PLWH	11.17	[0.78, 159.99]	0.075	0.221	1.77	[0.77, 4.1]	0.181	0.259
	SARS-CoV-2 Nucleoprotein	Symptomatic vs Asymptomatic in PLWH	3.44	[0.69, 17.19]	0.133	0.221	2.05	[1.14, 3.7]	0.017	0.061
		Hospitalized vs Symptomatic in PLWH	1.08	[0.07, 18.01]	0.955	0.955	3.08	[1.06, 8.94]	0.038	0.096

Isotype	Antigen	Comparison	Response Rate				Response Magnitudes			
			OR	95% CI	P-value	Q-value	GMR	95% CI	P-value	Q-value
	SARS-CoV-2 2P Spike	Symptomatic vs Asymptomatic in PLWH	2.57	[0.66, 10]	0.173	0.247	1.45	[0.93, 2.27]	0.103	0.207
		Hospitalized vs Symptomatic in PLWH	4.93	[0.34, 71.7]	0.243	0.304	1.72	[0.81, 3.65]	0.156	0.259
	SARS-CoV-2-NTD	Symptomatic vs Asymptomatic in PLWH	7.05	[1.45, 34.29]	0.016	0.137	1.01	[0.51, 1.98]	0.984	0.984
		Hospitalized vs Symptomatic in PLWH	9.27	[0.57, 151.61]	0.118	0.221	8.01	[2.55, 25.13]	<0.001	0.004
	SARS-CoV-2 6P Spike	Symptomatic vs Asymptomatic in PLWH	27.62	[1.45, 526.96]	0.027	0.137	1.03	[0.6, 1.77]	0.917	0.984
		Hospitalized vs Symptomatic in PLWH	0.31	[0.01, 13.22]	0.538	0.598	3.33	[1.22, 9.04]	0.018	0.061

67 *: OR=Odds Ratio, *: GMR=Geometric Mean Ratio; Bold values are significant (p-value≤0.05 and q-value≤0.2). Response magnitudes include
68 only positive responders

69 **Supplemental Table 5: Association of HIV serostatus and COVID19 severity with ACE-2 blocking to SARS-CoV-2**
70 **spike responses adjusting for COVID-19 severity (in the first row only), demographics, pre-existing medical**
71 **conditions, smoking history, region, and days since SARS-CoV-2 diagnosis**

Participants	Comparison	Response Rate			Percent Blocking Among Positive Responders		
		OR*	95% CI	P-value	OR*	95% CI	P-value
All	PLWH vs PWOH	0.67	[0.08, 6.12]	0.708	0.56	[0.22, 1.4]	0.219
All	PLWH vs PWOH in Asymptomatic	0.9	[0.07, 12.07]	0.935	2.11	[0.19, 22.98]	0.54
	PLWH vs PWOH in Symptomatic	0.55	[0.07, 4.14]	0.564	0.32	[0.07, 1.53]	0.153
	PLWH vs PWOH in Hospitalized	0.72	[0.03, 20.08]	0.844	0.73	[0.22, 2.49]	0.617
PWOH	Symptomatic vs Asymptomatic	2.78	[0.26, 29.35]	0.396	4.94	[0.8, 30.63]	0.086
	Hospitalized vs Symptomatic	6.56	[0.48, 88.89]	0.157	3.37	[1.43, 7.94]	0.005
PLWH	Symptomatic vs Asymptomatic	1.54	[0.13, 18.35]	0.735	1.59	[0.18, 13.83]	0.674
	Hospitalized vs Symptomatic	7.62	[0.16, 371.69]	0.306	16.18	[0.82, 320.83]	0.068

72 *: OR=Odds Ratio, Bold values are significant (p-value≤0.05).

73

74 **Supplemental Table 6: Spearman Correlation of CD4 Counts with Immune Responses^a**

Isotype-Antigen	Correlation Coefficient	P-value
IgA.Nucleoprotein	0.13	0.52
IgA.NTD	-0.05	0.83
IgA.SARS-CoV-2 RBD	0.02	0.91
IgA.2P Spike	-0.02	0.92
IgA.6P Spike	-0.11	0.58
IgG1.Nucleoprotein	0.07	0.75
IgG1.NTD	-0.19	0.35
IgG1.SARS-CoV-2 RBD	-0.22	0.27
IgG1.2P Spike	-0.19	0.34
IgG1.6P Spike	-0.25	0.22
IgG3.Nucleoprotein	-0.02	0.93
IgG3.NTD	-0.16	0.42
IgG3.SARS-CoV-2 RBD	-0.21	0.29
IgG3.2P Spike	-0.13	0.53
IgG3.6P Spike	-0.25	0.21
MSD IgG.CoV-2 Nucleocapsid	0.09	0.66
MSD IgG.SARS-CoV-2 RBD	-0.22	0.28
MSD IgG.2P Spike	-0.23	0.26

ACE2.2P Spike	-0.25	0.22
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75 ^a26 PLWH had recently available CD4 count data. Significant correlations were defined as $p \leq 0.05$.

76

77 **Supplemental Table 7: SARS-CoV-2-specific Immune Responses Stratified by HIV Viral Load Detection Status^a**

Isotype	Antigen	With Detectable VL	With undetectable VL	Fisher's Exact Test P-value
		Response Rate(95% CI)	Response Rate(95% CI)	
ACE2	2P Spike	2/3 = 66.7% (20.8%, 93.8%)	21/24 = 87.5% (69.0%, 95.7%)	0.395
IgA	Nucleoprotein	2/3 = 66.7% (20.8%, 93.8%)	21/24 = 87.5% (69.0%, 95.7%)	0.395
	NTD	3/3 = 100.0% (43.9%, 100.0%)	20/24 = 83.3% (64.1%, 93.3%)	1
	SARS-CoV-2 RBD	3/3 = 100.0% (43.9%, 100.0%)	19/24 = 79.2% (59.5%, 90.8%)	1
	2P Spike	3/3 = 100.0% (43.9%, 100.0%)	20/24 = 83.3% (64.1%, 93.3%)	1
	6P Spike	3/3 = 100.0% (43.9%, 100.0%)	22/24 = 91.7% (74.2%, 97.7%)	1
IgG1	Nucleoprotein	3/3 = 100.0% (43.9%, 100.0%)	22/24 = 91.7% (74.2%, 97.7%)	1
	NTD	3/3 = 100.0% (43.9%, 100.0%)	21/24 = 87.5% (69.0%, 95.7%)	1
	SARS-CoV-2 RBD	3/3 = 100.0% (43.9%, 100.0%)	23/24 = 95.8% (79.8%, 99.3%)	1
	2P Spike	3/3 = 100.0% (43.9%, 100.0%)	22/24 = 91.7% (74.2%, 97.7%)	1
	6P Spike	3/3 = 100.0% (43.9%, 100.0%)	22/24 = 91.7% (74.2%, 97.7%)	1
IgG3	Nucleoprotein	3/3 = 100.0% (43.9%, 100.0%)	23/24 = 95.8% (79.8%, 99.3%)	1
	NTD	3/3 = 100.0% (43.9%, 100.0%)	19/24 = 79.2% (59.5%, 90.8%)	1

	SARS-CoV-2 RBD	3/3 = 100.0% (43.9%, 100.0%)	21/24 = 87.5% (69.0%, 95.7%)	1
	2P Spike	3/3 = 100.0% (43.9%, 100.0%)	23/24 = 95.8% (79.8%, 99.3%)	1
	6P Spike	3/3 = 100.0% (43.9%, 100.0%)	21/24 = 87.5% (69.0%, 95.7%)	1
MSD IgG	SARS-CoV-2 RBD	3/3 = 100.0% (43.9%, 100.0%)	23/24 = 95.8% (79.8%, 99.3%)	1
	2P Spike	3/3 = 100.0% (43.9%, 100.0%)	23/24 = 95.8% (79.8%, 99.3%)	1
	CoV-2 Nucleocapsid	3/3 = 100.0% (43.9%, 100.0%)	22/24 = 91.7% (74.2%, 97.7%)	1

78 ^a27 PLWH had recently available VL data. Detectable VL was defined as ≥ 50 copies/mL and undetectable VL < 50 copies/mL. Significant

79 correlations were defined as $p \leq 0.05$.

80

81 **Supplemental Table 8: Association of HIV serostatus and COVID19 severity with ADCP response to SARS-CoV-2**
 82 **6P Spike adjusting for demographics, pre-existing medical conditions, smoking history, region, and days since**
 83 **SARS-CoV-2 diagnosis**

Participants	Comparison	Response Magnitude among Positive					
		Response Rate			Responders		
		OR [*]	95% CI	P-value	GMR [†]	95% CI	P-value
All	PLWH vs PWOH	0.76	[0.28, 2.3]	0.614	0.86	[0.72, 1.03]	0.106
All	PLWH vs PWOH in Asymptomatic	0.81	[0.13, 4.84]	0.814	0.77	[0.5, 1.19]	0.234
	PLWH vs PWOH in Symptomatic	4.35	[0.23, 83.54]	0.33	0.77	[0.59, 0.99]	0.045
	PLWH vs PWOH in Hospitalized	0.23	[0.06, 0.93]	0.039	1.02	[0.78, 1.33]	0.894
PWOH	Symptomatic vs Asymptomatic	4.44	[1.72, 11.44]	0.002	1.11	[0.93, 1.33]	0.236
	Hospitalized vs Symptomatic	2.19	[0.77, 6.19]	0.142	1.21	[1.07, 1.38]	0.003
PLWH	Symptomatic vs Asymptomatic	19.3	[1.01, 367.69]	0.049	0.85	[0.64, 1.14]	0.275
	Hospitalized vs Symptomatic	0.09	[0, 3.37]	0.195	1.24	[0.71, 2.17]	0.449

84 †: OR=Odds Ratio, †: GMR=Geometric Mean Ratio; Bold values are significant (p-value≤0.05).

85

86 **Supplemental Table 9:** Sensitivity analysis: Comparison of models adjusting for either the full list of factors (Primary
87 model: demographics, pre-existing medical conditions, smoking history, region, and days since SARS-CoV-2 diagnosis)
88 or a truncated list (Sensitivity analysis model: COVID-19 severity (except where this factor is the comparison), days since
89 SARS-CoV-2 diagnosis, age, sex assigned at birth, and region). Statistical differences are highlighted in the tables below
90 with addition information in the subheadings. *: OR=Odds Ratio, +: GMR=Geometric Mean Ratio; Bold values are
91 significant (p-value≤0.05 and q-value≤0.2)

Sensitivity Analysis							Primary Analysis			
<i>Binding Ab response rates comparison by HIV infection status (PLWH vs PWOH uninfected) overall</i>										
Isotype	Antigen	Participants	OR*	95% CI	P-value	Q-value	OR*	95% CI	P-value	Q-value
IgG1	SARS-CoV-2 RBD	All	4.28	[1.19, 23.32]	0.023	0.117	3.65	[0.97, 20.51]	0.057	0.245
IgG3	SARS-CoV-2 RBD	All	2.09	[0.85, 5.91]	0.114	0.19	2.81	[1.05, 8.68]	0.039	0.097
	SARS-CoV-2 6P	All	2.29	[0.84, 7.34]	0.11	0.19	3.23	[1.09, 11.39]	0.033	0.097
	Spike									
<i>Binding Ab response magnitudes comparison by HIV infection status (PLWH vs PWOH uninfected) overall</i>										
Isotype	Antigen	Participants	GMR+	95% CI	P-value	Q-value	GMR+	95% CI	P-value	Q-value
IgG1	SARS-CoV-2 RBD	All	0.66	[0.44, 0.99]	0.046	0.116	0.75	[0.5, 1.14]	0.184	0.307
	SARS-CoV-2 6P	All	0.64	[0.41, 0.98]	0.042	0.116	0.63	[0.4, 1]	0.05	0.138
	Spike									
IgG	CoV-2 RBD	All	0.67	[0.45, 1.01]	0.058	0.173	0.63	[0.42, 0.96]	0.031	0.093
<i>Binding Ab response magnitudes comparison by HIV infection status (PLWH vs PWOH uninfected) stratified by peak COVID-19 severity</i>										
Isotype	Antigen	Participants	GMR+	95% CI	P-value	Q-value	GMR+	95% CI	P-value	Q-value
IgG1	SARS-CoV-2 RBD	Asymptomatic	1.83	[0.69, 4.84]	0.227	0.496	2.7	[1.02, 7.15]	0.046	0.138
		Symptomatic	0.35	[0.19, 0.67]	0.001	0.008	0.41	[0.22, 0.77]	0.005	0.02
	SARS-CoV-2 Nucleoprotein	Symptomatic	0.39	[0.21, 0.74]	0.004	0.014	0.38	[0.2, 0.74]	0.004	0.02
	SARS-CoV-2-NTD	Symptomatic	0.27	[0.12, 0.61]	0.002	0.008	0.23	[0.1, 0.51]	<0.001	0.003
	SARS-CoV-2 6P	Symptomatic	0.26	[0.13, 0.49]	<0.001	0.001	0.25	[0.13, 0.5]	<0.001	0.001
	Spike									
IgG	CoV-2 RBD	Symptomatic	0.41	[0.22, 0.76]	0.004	0.028	0.43	[0.23, 0.78]	0.006	0.053
	CoV-2 2P Spike	Symptomatic	0.38	[0.19, 0.76]	0.006	0.028	0.41	[0.21, 0.82]	0.012	0.054

Binding Ab response rates comparison between peak COVID-19 severity stratified by HIV infection status

Isotype	Antigen	Comparison	OR*	95% CI	P-value	Q-value	OR*	95% CI	P-value	Q-value
IgG	CoV-2 Nucleoprotein	Symptomatic vs Asymptomatic in PWOH	4.85	[1.43, 16.48]	0.011	0.04	3.56	[0.95, 13.35]	0.059	0.178
		Symptomatic vs Asymptomatic in PLWH	16.1	[0.79, 328.28]	0.071	0.218	25.06	[1.22, 515.38]	0.037	0.115
	CoV-2 RBD	Symptomatic vs Asymptomatic in PWOH	4.72	[1.38, 16.1]	0.013	0.04	3.6	[0.96, 13.54]	0.058	0.178
	CoV-2 2P Spike	Symptomatic vs Asymptomatic in PWOH	4.09	[1.07, 15.64]	0.04	0.079	3.13	[0.74, 13.29]	0.122	0.244
IgG	CoV-2 Nucleoprotein	Symptomatic vs Asymptomatic in PLWH	16.1	[0.79, 328.28]	0.071	0.218	25.06	[1.22, 515.38]	0.037	0.115
	CoV-2 RBD	Symptomatic vs Asymptomatic in PLWH	15.82	[0.78, 322.63]	0.073	0.218	25.16	[1.19, 533.32]	0.038	0.115

Binding Ab response magnitudes comparison between peak COVID-19 severity stratified by HIV infection status

Isotype	Antigen	Comparison	GMR*	95% CI	P-value	Q-value	GMR*	95% CI	P-value	Q-value
IgG	CoV-2 Nucleoprotein	Hospitalized vs Symptomatic in PLWH	5.15	[1.2, 22.18]	0.028	0.056	3.32	[0.75, 14.69]	0.114	0.227
		Hospitalized vs Symptomatic in PLWH	12.23	[3.46, 43.25]	<0.001	<0.001	9.15	[2.58, 32.45]	0.001	0.002
	CoV-2 2P Spike	Hospitalized vs Symptomatic in PLWH	16.88	[4.07, 69.95]	<0.001	<0.001	11.9	[2.86, 49.48]	0.001	0.002

Percent ACE-2 receptor blocking comparison between peak COVID-19 severity stratified by HIV infection status

Marker	Participants	Comparison	OR*	95% CI	P-value	OR*	95% CI	P-value
ACE-2	PWOH	Hospitalized vs Symptomatic	3.18	[1.35, 7.52]	0.008	3.37	[1.43, 7.94]	0.005
	PLWH	Hospitalized vs Symptomatic	18.32	[0.99, 340.46]	0.051	16.18	[0.82, 320.83]	0.068

ADCP response rates comparison by HIV infection status and peak COVID-19 severity

Marker	Participants	Comparison	OR*	95% CI	P-value	OR*	95% CI	P-value
ADCP	Hospitalized	PLWH vs PWOH	0.23	[0.06, 0.91]	0.036	0.23	[0.06, 0.93]	0.039
	PWOH	Symptomatic vs Asymptomatic	4.53	[1.82, 11.3]	0.001	4.44	[1.72, 11.44]	0.002
	PLWH	Symptomatic vs Asymptomatic	17.29	[0.9, 331.01]	0.058	19.3	[1.01, 367.69]	0.049

ADCP response magnitudes comparison by HIV infection status and peak COVID-19 severity

Marker	Participants	Comparison	GMR ⁺	95% CI	P-value	GMR ⁺	95% CI	P-value
ADCP	Symptomatic	PLWH vs PWOH	0.78	[0.6, 1.01]	0.061	0.77	[0.59, 0.99]	0.045
	PWOH	Hospitalized vs Symptomatic	1.23	[1.08, 1.4]	0.001	1.21	[1.07, 1.38]	0.003
	PLWH	Hospitalized vs Symptomatic	1.24	[0.71, 2.17]	0.447	1.24	[0.71, 2.17]	0.449

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95 **Supplemental Table 10: BAMA and ADCP antigen panels**

Antigen Name (short)	Antigen Name (full)	Source
RBD	SARS-CoV-2 DB-His	Neil King/Lauren Baker, Institute for Protein Design, Seattle, Washington
2P Spike	SARS-CoV-2 spike (PreS Nexelis)	Nexelis
2P Spike	2019-nCoV S/293F	Duke Protein Production Facility
6P Spike	SARS-CoV-2 S Hexapro_293F_PPF	Duke Protein Production Facility
Nucleoprotein	SARS-CoV-2 Nucleoprotein His	Cedarlane, Burlington, NC; Cat# REC31812-500
NTD	SARS-CoV-2-NTD-AVI Biotin	NIH/NIAID/VRC, Peter Kwong

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