

Supplementary Appendix

SUPPLEMENTARY FIGURES

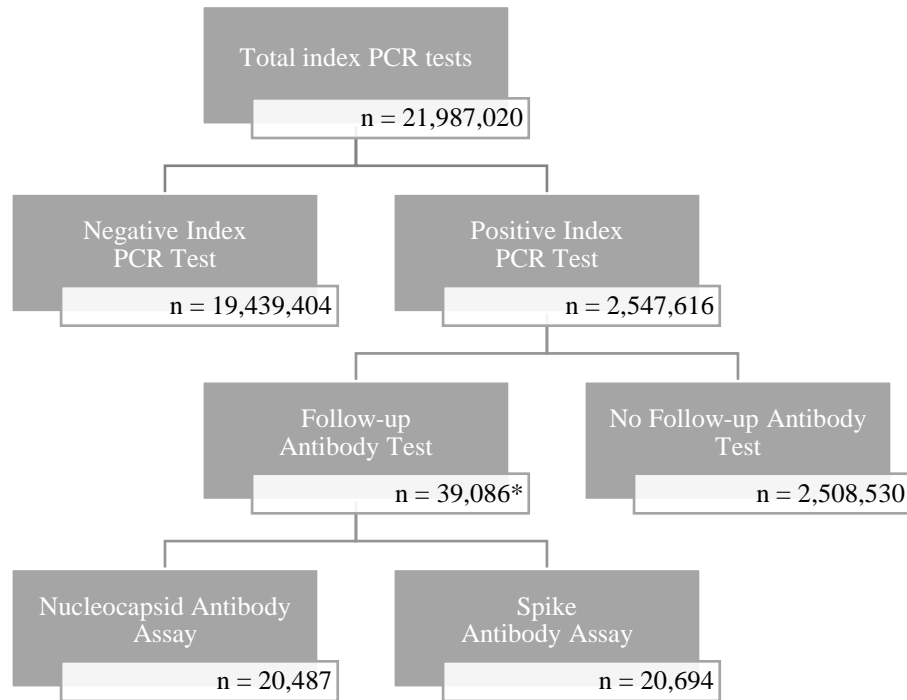


Figure S1. Flowchart of Test Orders and Sample Sizes of Patients with Labcorp®.

The flowchart represents the manner of test ordering used in the analysis, with an index PCR test for SARS-CoV-2 between March 1, 2020 and January 31, 2021, with sample sizes reflecting counts of unique patients only. 11.6% of patients tested positive for COVID-19 at index, but only a small fraction received a follow-up antibody test at some point after. *Some patients with multiple follow-up antibody tests received an assay for both Nucleocapsid and Spike proteins, and therefore counts in the last tier overlap.

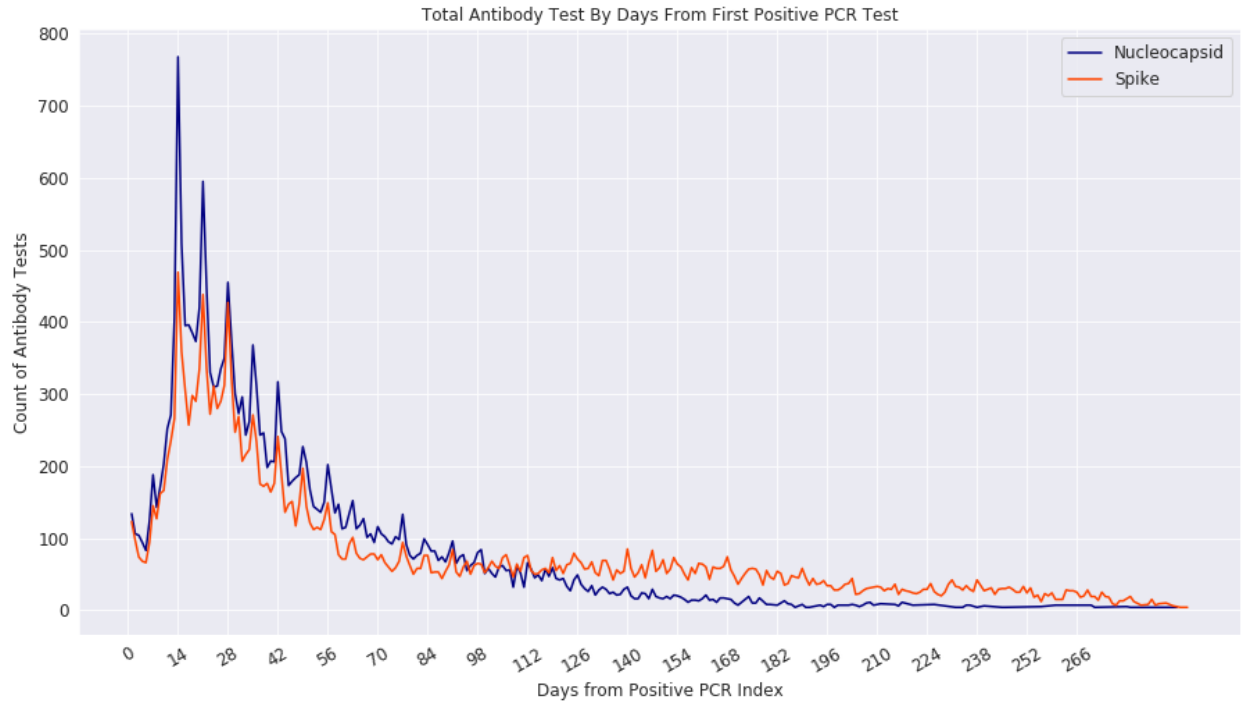


Figure S2. Counts of total Nucleocapsid and Spike protein-based IgG assays after PCR at Labcorp®. Counts for total assays done per protein type, Nucleocapsid (blue) and S (orange) proteins, days after initial PCR test for COVID-19. Both peak at 14 post initial PCR test and there is a higher volume of nucleocapsid tests, but spike becomes more common after about 100 days (only registering about 10% of peak volume).

SUPPLEMENTARY TABLES

Table S1. Count of Nucleocapsid and Spike Antibody Tests by Weeks After First Positive PCR Test

Weeks Post-Index	Days Post-Index	All	Nucleocapsid	Spike
0	1 - 7	1146	642	520
1	8 - 14	2897	1620	1300
2	15 - 21	5473	3227	2293
3	22 - 28	4848	2657	2224
4	29 - 35	4065	2190	1903
5	36 - 42	3113	1773	1360
6	43 - 49	2629	1526	1116
7	50 - 56	2070	1163	921
8	57 - 63	1666	1002	671
9	64 - 70	1337	805	546
10	71 - 77	1150	705	453
11	78 - 84	1090	623	471
12	85 - 91	928	540	394
13	92 - 98	904	490	423
14	99 - 105	850	428	427
15	106 - 112	790	347	449
16	113 - 119	746	357	394
17	120 - 126	729	288	445
18	127 - 133	637	221	418
19	134 - 140	575	181	397
20	141 - 147	556	146	415
21	148 - 154	576	134	444
22	155 - 161	493	105	391
23	162 - 168	506	109	402
24	169 - 175	450	87	365
25	176 - 182	401	61	343
26	183 - 189	371	62	314
27	190 - 196	333	38	295
28	197 - 203	265	39	227
29	204 - 210	262	54	209
30	211 - 217	246	37	209
31	218 - 224	209	33	181
32	225 - 231	217	25	194
33	232 - 238	246	25	222
34	239 - 245	226	29	201
35	246 - 252	224	22	203
36	253 - 259	170	23	147
37	260 - 266	195	33	164
38	267 - 273	164	23	141

39	274 - 280	116	14	103
40	281 - 287	93	20	74
41	288 - 294	67	9	59
42	295 - 301	28	12	16

Table S2. Count of Specific Assay Tests by Weeks After First Positive PCR Test

Weeks Post-Index	Days Post-Index	Assay A	Assay B	Assay C	Assay D
0	1 - 7	73	449	557	88
1	8 - 14	169	1141	1371	262
2	15 - 21	337	1977	2814	432
3	22 - 28	296	1942	2244	436
4	29 - 35	242	1670	1884	321
5	36 - 42	228	1140	1527	252
6	43 - 49	194	934	1315	212
7	50 - 56	158	768	988	181
8	57 - 63	142	532	852	163
9	64 - 70	179	373	685	126
10	71 - 77	156	298	600	111
11	78 - 84	207	266	527	98
12	85 - 91	155	240	450	95
13	92 - 98	166	258	392	103
14	99 - 105	170	257	347	83
15	106 - 112	136	313	271	79
16	113 - 119	112	286	283	79
17	120 - 126	122	326	235	56
18	127 - 133	100	319	175	49
19	134 - 140	72	326	125	56
20	141 - 147	80	335	107	40
21	148 - 154	72	375	83	54
22	155 - 161	53	338	69	36
23	162 - 168	39	365	58	53
24	169 - 175	41	324	38	49
25	176 - 182	46	297	24	37
26	183 - 189	47	269	22	42
27	190 - 196	51	245	10	28
28	197 - 203	39	189	18	21
29	204 - 210	39	170	22	33
30	211 - 217	38	171	13	24
31	218 - 224	22	161	14	19
32	225 - 231	28	167	8	17
33	232 - 238	20	204	11	14
34	239 - 245	21	181	6	23
35	246 - 252	15	189	3	19
36	253 - 259	6	143	4	20
37	260 - 266	1	167	1	32
38	267 - 273	0	142	5	18
39	274 - 280	0	104	1	13
40	281 - 287	0	74	3	18

41	288 - 294		0	61	3	6
42	295 - 301		0	17	3	10