

Appendix 1 | Detailed data on demographics and laboratory findings in COVID-19 infected patients.

Code	SEX	Age (Y)	Onset to test	PCR at admission	LDH (U/L)	PT (Sec)	PTT (Sec)	INR	Hb level	WBC 10 ³ /μL	PMN (%)	LYMPH (%)	ESR (mm/h)	CRP (mg/L)	D-DIMER (μg/ml)
M-01	M	42	12	+	716	14.3	47	1.4	12.9	8.5	70	24	145	19	630
M-02	M	37	10	-	468	NA	NA	NA	14.6	4.2	48	40	32	6	60
M-03	M	65	10	+	559	13	30	1	16.7	6.9	61	27	104	45	540
M-04	M	63	11	+	NA	12.7	33	1.1	11.7	4.2	60	33	75	3	NA
M-06	M	69	10	+	NA	14.4	58	1.43	9.4	6.1	94	5	125	26	NA
M-07	M	51	6	+	351	12.2	35	1.03	16.3	12.8	82	11	3	9	130
M-08	F	62	10	+	449	13	>100	1.17	16.2	4.8	70	20	4	5	799
M-09	F	66	7	-	647	12.5	49	1.08	12	2.1	75	15	32	12	1520
M-10	F	55	7	+	370	13	44	1.2	13.5	5.3	73	24	22	8	320
M-11	M	59	11	+	460	12	40	1.01	14.3	5.5	71	27	36	16	540
M-13	M	25	2	-	295	13	36	1.2	11.9	5.7	75	18	4	1	NA
M-14	M	72	7	+	881	13	30	1.1	14.2	5.8	85	10	65	31	540
M-15	M	85	4	-	NA	13.1	32	1.19	13	6.5	79	16	NA	NA	5770
M-16	F	81	14	+	332	13.8	30	1.32	11.8	6.9	65	30	17	4	700
M-17	F	22	3	-	NA	13.8	45	1.3	13.9	10.3	67	25	85	NA	NA
M-18	M	35	11	-	377	12	28	1	16.4	11.1	60	22	41	50	350
M-19	M	70	14	+	574	12.9	44	1.15	14.8	8.4	82	12	69	39	1329
M-20	M	59	4	-	259	13.4	29	1.24	15.3	10.1	61	29	61	2	0.2 -
M-21	F	30	7	+	455	12.4	41	1.07	13.4	4.4	40	53	54	9	160
M-22	M	63	5	+	617	12	45	1	14.5	2.7	61	37	60	11	410

M-23	M	47	10	+	479	12.9	37	1.15	14.4	6.6	73	22	100	36	4250
M-24	F	20	30	+	319	12.8	31	1.14	15.4	6.2	68.5	26	12	1	250
M-25	F	39	20	-	260	13.3	33	1.22	13.2	6.8	58	34	13	NA	130 -
M-26	F	60	13	-	339	11.5	26.7	1	16	11.2	61	29	25	27.5	130 -
M-27	F	55	20	+	315	12.1	35	1.02	13.7	22.5	30	13	66	28	410 -
M-28	F	56	10	+	571	12	38	1	11.3	4.3	72	24	71	107	1249 +
M-29	M	40	7	+	462	12	45	1	14.3	2.6	62	27	24	53	320 -
M-30	M	33	5	+	831	12	40	1	14	7.1	81	18	25	107	150 -
M-31	M	49	2	+	341	12	57	1.39	11.9	15.4	83	11	128	17	2600
M-32	F	21	7	+	345	12	40	1	11.7	3.2	75	20	22	1	20>
M-33	F	49	7	+	425	12.4	44	1.07	12.3	5.1	48	43	42	8	510
M-35	M	51	30	+	440	12.1	39	1.02	13.6	4.3	45	39	96	8	1550
M-36	M	75	14	+	557	13.6	50	1.28	9.2	9.6	80	11	125	35	4250
M-37	M	64	2	+	454	13	37	113	14	8.3	64	23	17	12	1030
M-39	F	37	12	+	479	12.8	47	1.14	8.7	5.8	85	10	54	38	690
M-40	F	26	5	+	458	12.1	31	1.02	15.5	5.8	81	17	4	1	290
M-42	M	29	5	+	NA	12.2	1.03	31	14.2	5.8	74	14	NA	NA	250
M-43	M	54	10	+	328	13.3	36	1.22	12	8.1	75	18	120	1	850
M-44	F	33	10	-	647	14	40	1.3	12.5	6.4	84	13	120	24	350
M-46	M	55	6	+	278	12.1	30	1.02	15.2	4.2	65	31	26	20	130
M-47	F	55	10	+	363	12	40	1	11.2	4.5	63.5	26.2	125	6	600
M-48	M	27	2	-	326	13	40	1.1	14.5	26.2	90	6	3	29	NA
M-49	M	21	7	-	637	13.2	46	1.21	11	11.7	NA	NA	62	35	NA
M-50	M	29	10	+	519	13.1	35	1.19	6.03	15.2	69	23	39	15	250

M-51	M	54	5	+	348	12.8	33	1.14	13	8.9	65	21	69	NA	2630
M-53	F	50	7	+	410	12.5	36	1.08	11.9	2.3	51	46	29	39	190
M-54	F	62	7	+	614	NA	NA	NA	12.2	2.7	69	29	20	26	2050
M-55	M	85	7	+	441	12	55	1.07	12.8	4.7	82	9.9	92	41	4640
M-56	F	61	7	+	598	12	38	1	13.3	4.4	63	30	40	1	40
M-57	M	64	14	+	541	13.9	32	1.34	11.5	13.6	NA	NA	22	22	5180
M-58	M	35	9	+	380	12.7	1.12	40	13.6	8.1	NA	NA	31	70	290
M-59	F	71	30	-	787	12	26	1	14.1	7.5	70	25	39	7	2420
M-60	F	62	4	+	1	12.2	36	1.03	15.4	11.4	63.4	28.5	76	336	NA
M-61	M	59	11	-	704	12	39	1	13.8	4.6	63	28	76	NA	510 +
M-62	M	62	20	+	281	13.1	50	1.1	11.3	6.3	53	37	42	2	2600 +
M-63	M	69	7	+	700	12.8	30	1.14	10.5	6.2	38	58	125	30	440
M-64	M	89	10	+	477	14.4	46	1.43	12.2	6.8	63	30	86	9	540
M-65	F	59	14	+	795	12.4	36	1.07	14.7	10.2	87	8	45	30	2400
M-67	M	36	2	+	NA	12.5	34	1.08	12.7	4.0	52	43	51	NA	100
M-68	F	42	9	+	610	12.6	30	1.1	13.4	10.	80	17	103	NA	1410
M-69	M	59	10	+	593	12.6	38	1.1	11.8	4.2	75	22	NA	21 or 31	480
M-70	F	34	10	+	465	NA	NA	NA	15.4	7.1	66	30	36	1	380
M-71	F	47	10	+	676	NA	NA	NA	12.5	6.1	61	32	75	50	160
M-73	F	40	5	-	321	NA	NA	NA	14	12.3	65	25	55	46	1440
M-74	M	70	5	+	350	13.4	25	1.24	10.9	7.2	87	10	102	7	630
M-76	F	47	2	+	230	12	29	1	12.2	7.4	77	21	50	1	1030
M-77	M	48	2	+	431	13	29	1.17	14.3	5.2	63	28	15	5	190

M-78	M	70	12	+	686	14.7	48	1.49	13.6	5.0	70	21	39	29	2700
M-79	M	80	4	+	413	14.4	42	1.43	13.3	7.0	75	21	60	47	1920
M-80	F	59	14	+	538	12.2	38	1.03	13.3	3.3	65	27	111	10	160
M-81	F	55	7	+	420	15.3	37	1.61	9	21.6 5	87	8.3	66	90	590
M-82	F	51	7	+	460	12	32	1	14.1	5.3	58	35	50	12	30
M-83	F	59	7	+	598	12	49	1	11.6	5.4	84	13	62	20	380
M-84	M	49	10	+	404	12.3	34	1.05	14.5	9.4	63	18.6	31	1	350
M-85	M	81	4	+	561	21.7	62	3.21	10.6	5.7	70	28	30	31	260
M-87	M	39	12	-	712	12	35	1	14.8	4.4	66	26	56	65	440
M-88	M	39	13	+	501	NA	NA	NA	NA	7.6	64	26	102	18	320
M-89	F	58	14	+	NA	NA	NA	NA	12.1	10.1	88	10	67	1	250
M-90	M	36	14	+	327	14.7	45	1.49	10.8	10.1	74	21	125	47	8200
M-92	M	72	20	-	621	13.8	34	1.32	12.4	10.2	65	28	91	9	6050
M-93	M	49	7	+	823	12.7	38	1.12	12.1	7.7	87	11	105	1	540
M-94	F	46	7	+	348	13.4	45	1.24	13.9	6.3	75	21	61	8	2320
M-95	F	65	13	+	459	12	40	1	10.8	3.3	70	19	89	72	160 -
M-96	F	55	10	+	412	12	48	1	11.4	5.7	71	23	131	56	600 +
M-97	F	67	10	+	517	13.4	46	12	13.6	4.4	64	30	57	54	440
M-98	M	32	3	+	NA	12.1	32	1.02	15.1	21.7	64	22	70	39	NA
M-99	M	52	12	+	788	12	37	1	13.3	6.9	65	24	93	68	510
M-100	M	69	4	+	275	12.8	34	1.4	14.2	6.5	65	23	17	1	250
M-101	F	70	10	+	565	13	33	1.17	13.2	4.0	70	27	56	25	630
M-102	M	36	14	+	751	12	31	1	15.9	5.9	63	24	37	41	1000

M-103	F	39	10	-	361	12	29	1	11.9	4.4	65	28	65	19	130
M-104	M	49	11	+	1087	12	34	1	13.6	6.9	78	20	57	34	410
M-106	F	44	7	-	651	12.3	30	1.05	11	21.0	83	8	125	31	1000
M-107	F	40	14	+	834	12	29	1	14.7	2.2	47	43	92	33	2350
M-109	F	62	7	+	477	12.2	40	1.03	12.3	4.0	60	30	53	63	690
M-110	M	61	10	+	741	12.3	35	1.05	14.8	11.4	83	8	35	44	NA
M-111	M	50	14	-	507	13	35	1.02	13.2	5.8	70	22	71	68	510
M-113	F	56	7	+	681	13	30	1.02	13.7	3.8	69	29	84	33	190
M-114	M	29	12	+	378	12	43	1.5	14.4	4.8	65	33	59	23	180
M-115	F	28	5	+	684	12	41	1.14	11.7	12.8	68	24	51	31	7370
M-116	F	33	7	+	313	12.3	38	1.05	12.2	4.0	51	38	86	16	1350
M-117	F	76	7	+	348	12	43	1	10.2	6.2	78	15	94	45	160
M-118	F	35	9	+	592	12	49	1.5	13.1	4.9	54	37	61	NA	760
M-119	F	47	10	-	668	12	48	115	8.1	10.4	73	20	108	29	1490
M-120	F	52	10	-	420	13.1	41	1.19	9.7	10.7	NA	NA	120	25	2680
M-121	F	70	15	-	496	13.4	49	1.24	10.2	14.4	80	12	79	23	180
M-122	F	46	10	+	345	12	35	1.5	12	5.8	61	23	28	4	160
M-123	F	59	10	+	472	12.8	45	1.14	15.5	4.3	83	14	20	23	600
M-124	M		7	+	533	12	48	1.5	10.5	5.5	80	10	59	29	NA
M-125	M	71	10	+	1021	13	56	1.1	12.8	7.4	80	15	21	49	350 -
M-126	M	55	5	+	625	12.6	35	1.1	15.1	5.0	72	24	52	28	160 -
M-128	F	40	5	+	473	12.8	46	1.14	10.5	6.1	65	27	38	11	3270
M-138	M	64	8	+	651	13.5	53	1.26	10.8	6.8	80	13	76	26	820
M-146	F	58	2	-	393	12.7	57	1.1	12.3	7.7	71	14	NA	NA	NA

M-148	F	66	13	+	651	12	32	1	12.8	5.6	65	23	86	30	350 -
M-149	F	34	12	+	337	14	43	1.35	11.4	5.1	48	43	27	10	510
M-151	M	36	10	+	346	12.8	35	1.02	13.3	4.7	77	20	66	35	480
M-153	F	25	7	+	317	12.8	42	1.14	13.9	6.1	69	23	5	53	250
M-154	M	51	5	+	547	14.7	58	1.49	14.9	5.0	69.7	20.2	3	47	1660
M-155	F	62	12	+	470	13	46	1.17	11.3	6.0	46	47	85	11	570
M-156	M	37	10	+	653	13.6	53	1.28	12.3	3.3	74	21	66	49	4000
M-157	M	47	11	+	736	12.3	30	1.05	15.4	6.5	78	17	53	31	600
M-158	F	56	7	+	422	12.7	42	1.2	12.7	3.1	57	33	54	6	NA
M-164	F	60	12	+	571	12.3	33	1.05	13.5	4.2	65	30	62	16	790
M-165	M	40	7	+	604	13.5	39	1.26	14.3	6.0	76	17	110	58	100
M-166	M	57	10	+	655	12.4	49	1.07	12.5	6.3	80	17	47	59	190
M-168	F	59	7	+	411	12	44	1	10.9	3.4	63	31	57	16	250
M-170	F	34	12	+	688	12.1	35	1.02	13.1	5.4	56	36	121->74	48	1660
M-171	M	55	7	+	1045	13.5	44	1.26	11.9	7.4	71	21	114	41	6700
M-172	M	29	8	+	672	12.8	40	1.14	14.8	5.6	65	27	13	1	60
M-173	F	69	10	-	430	12.5	45	1.08	13.9	6.0	50	46	35	12	30
M-174	M	39	7	-	740	12.9	38	1.15	14.1	10.6	91	7	100	39	410
M-176	M	49	5	+	519	12.1	46	1.02	12.9	8.8	84	11	116	31	700
M-177	M	55	10	-	624	12.4	38	1.07	13.9	4.9	74	21	56	28	480

Appendix 2 | Clinical manifestations of studied COVID-19 infected patients

Code	Cough	Headache	Fever	Chills	Sore Throat	Shortness of Breath	Diarrhea	Anosmia	Ageusia	Nausea	vomit	Fatigue	Myalgia	Arthralgia	Drowsiness	Runny Nose	Chest Pain
M-01	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes
M-02	Yes	Yes	-	-	-	Yes	Yes	-	-	-	-	Yes	Yes	Yes	Yes	-	-
M-03	Yes	-	Yes	-	Yes	Yes	-	-	-	Yes	Yes	Yes	-	-	-	Yes	Yes
M-04	Yes	-	Yes	-	-	Yes	-	Yes	Yes	Yes	Yes	Yes	-	-	-	-	Yes
M-06	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes
M-07	Yes	-	-	Yes	Yes	Yes	-	Yes	Yes	-	-	Yes	Yes	-	-	-	Yes
M-08	Yes	Yes	Yes	-	Yes	Yes	-	-	Yes	-	-	Yes	Yes	Yes	-	Yes	Yes
M-09	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	Yes	-	Yes	Yes	Yes	-	-	-
M-10	-	Yes	Yes	Yes	-	-	Yes	-	-	Yes	-	Yes	Yes	Yes	-	Yes	Yes
M-11	Yes	-	-	Yes	-	-	-	-	-	-	-	Yes	Yes	-	-	-	Yes
M-13	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	Yes	-	-	Yes	Yes	Yes
M-14	Yes	-	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes	-	-
M-15	-	-	-	Yes	-	Yes	-	-	-	-	-	Yes	-	-	Yes	-	-
M-16	Yes	-	-	-	-	Yes	-	-	-	-	-	Yes	Yes	-	-	-	-
M-17	Yes	-	Yes	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
M-18	Yes	Yes	-	Yes	-	Yes	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-	-
M-19	Yes	-	-	-	-	-	Yes	-	Yes	Yes	-	Yes	-	-	Yes	-	Yes
M-20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-21	Yes	Yes	-	Yes	-	Yes	-	-	-	Yes	-	Yes	Yes	-	-	-	-
M-22	Yes	-	Yes	Yes	-	Yes	-	-	-	-	-	Yes	-	-	-	-	-
M-23	Yes	-	-	-	-	Yes	-	-	-	-	-	Yes	-	-	-	-	Yes
M-24	Yes	-	-	Yes	-	Yes	-	-	-	-	-	Yes	-	-	-	-	-
M-25	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	-	-	-	Yes

M-26	Yes	-	-	-	-	Yes	-	-	-	-	-	Yes	-	-	-	-	-
M-27	Yes	Yes	-	-	Yes	Yes	-	Yes	-	-	-	Yes	Yes	-	-	Yes	-
M-28	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	-	-	Yes	Yes	-	-	-	Yes
M-29	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	-	-	Yes	Yes	Yes	-	-	Yes
M-30	Yes	Yes	Yes	Yes	-	-	-	-	Yes	-	-	Yes	-	Yes	-	-	-
M-31	Yes	Yes	Yes	-	Yes	Yes	-	Yes	Yes	-	-	Yes	-	-	Yes	-	-
M-32	Yes	Yes	Yes	-	Yes	Yes	-	-	-	Yes	Yes	Yes	-	-	Yes	-	Yes
M-33	Yes	-	Yes	Yes	-	-	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-	-
M-35	Yes	Yes	-	-	Yes	Yes	-	-	-	-	-	Yes	Yes	-	-	-	-
M-36	-	Yes	Yes	Yes	-	Yes	-	-	-	-	-	Yes	-	-	-	-	Yes
M-37	yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-39	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-	Yes
M-40	Yes	Yes	-	-	Yes	Yes	Yes	-	-	-	-	Yes	Yes	-	-	-	Yes
M-42	Yes	Yes	-	Yes	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-
M-43	Yes	Yes	-	-	-	Yes	-	-	-	Yes	Yes	Yes	Yes	-	Yes	-	-
M-44	Yes	Yes	Yes	Yes	-	Yes	-	-	-	-	-	Yes	-	-	-	Yes	Yes
M-46	-	-	-	Yes	-	-	-	-	-	-	-	Yes	-	-	Yes	-	-
M-47	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	-	Yes	Yes	-	-	-	Yes
M-48	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-	-	-	-
M-49	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-	-	Yes	Yes	-	Yes	-	-
M-50	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes
M-51	-	Yes	Yes	-	-	Yes	-	-	-	Yes	Yes	Yes	Yes	-	Yes	-	-
M-53	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	Yes	Yes	Yes
M-54	Yes	-	Yes	Yes	-	Yes	-	-	-	-	-	Yes	-	-	-	-	-
M-55	Yes	Yes	-	-	Yes	-	Yes	-	-	-	-	Yes	-	-	Yes	-	Yes
M-56	-	Yes	Yes	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	-	Yes	-	-
M-57	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	Yes	Yes	Yes	-	-	Yes	-	-
M-58	Yes	Yes	Yes	-	-	Yes	Yes	-	-	-	-	Yes	Yes	-	Yes	-	Yes

M-59	Yes	-	-	-	-	Yes	-	-	-	-	-	Yes	Yes	-	Yes	Yes	-
M-60	-	Yes	-	-	Yes	-	-	-	-	-	-	Yes	Yes	-	-	-	-
M-61	-	Yes	-	-	-	-	Yes	-	-	Yes	-	Yes	Yes	Yes	-	-	-
M-62	-	-	Yes	Yes	-	Yes	-	Yes	Yes	-	-	Yes	Yes	-	-	-	-
M-63	Yes	-	Yes	-	-	Yes	-	-	-	-	-	Yes	Yes	-	-	-	-
M-64	Yes	-	-	-	-	Yes	-	-	-	-	-	Yes	-	-	-	-	-
M-65	Yes	-	Yes	Yes	-	-	-	-	-	-	-	Yes	Yes	-	-	-	Yes
M-67	Yes	Yes	Yes	Yes	Yes	-	Yes	-	-	-	-	Yes	Yes	-	-	-	-
M-68	-	Yes	Yes	Yes	Yes	-	-	-	-	Yes	-	Yes	Yes	-	-	-	Yes
M-69	Yes	-	Yes	Yes	-	-	Yes	-	-	-	-	Yes	Yes	-	Yes	-	-
M-70	yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-	Yes	-	-	-	Yes
M-71	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes	-	Yes	Yes	Yes
M-73	Yes	Yes	Yes	Yes	-	Yes	-	-	-	-	-	Yes	Yes	-	Yes	-	-
M-74	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-
M-76	Yes	-	-	-	-	-	-	Yes	-	-	-	Yes	-	-	-	-	-
M-77	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-78	-	Yes	Yes	Yes	-	-	-	-	-	-	-	Yes	Yes	Yes	-	-	-
M-79	Yes	Yes	Yes	Yes	-	Yes	-	-	-	-	-	Yes	Yes	-	Yes	-	-
M-80	-	Yes	Yes	Yes	Yes	-	-	Yes	Yes	-	-	Yes	Yes	-	-	-	-
M-81	Yes	-	Yes	Yes	-	Yes	-	-	-	-	-	Yes	Yes	-	-	-	-
M-82	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-	Yes
M-83	-	Yes	Yes	Yes	-	-	-	-	-	-	-	Yes	Yes	-	-	-	-
M-84	Yes	Yes	-	Yes	Yes	Yes	-	-	-	-	-	Yes	-	-	-	-	-
M-85	Yes	-	-	-	-	Yes	-	-	-	Yes	Yes	Yes	-	-	-	-	-
M-87	-	Yes	Yes	Yes	-	-	-	-	-	-	-	-	Yes	-	Yes	-	-
M-88	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	Yes	-	Yes	Yes	Yes	Yes	-	-
M-89	-	-	Yes	Yes	-	Yes	-	Yes	Yes	Yes	-	-	Yes	-	Yes	-	-
M-90	Yes	-	-	Yes	-	Yes	Yes	-	-	-	-	Yes	Yes	-	-	-	Yes

M-92	Yes	-	-	Yes	-	Yes	-	-	-	-	-	Yes	-	-	-	-	Yes
M-93	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-	-
M-94	Yes	Yes	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-	Yes
M-95	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes
M-96	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-	Yes
M-97	-	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-	-
M-98	yes	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-
M-99	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes
M-100	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-
M-101	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	Yes	-	Yes	Yes	-	Yes	-	Yes
M-102	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	-	-	Yes	Yes	-	Yes	-	Yes
M-103	Yes	Yes	-	-	Yes	Yes	-	Yes	Yes	Yes	-	Yes	Yes	-	-	-	Yes
M-104	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	-
M-106	-	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	-	-	-
M-107	-	Yes	Yes	Yes	-	-	-	-	-	-	-	Yes	Yes	-	-	-	-
M-109	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	Yes	Yes	-	Yes	Yes
M-110	-	-	Yes	-	-	Yes	-	-	-	-	-	Yes	Yes	-	-	-	-
M-111	Yes	-	Yes	-	Yes	-	-	-	-	-	-	Yes	-	-	-	-	-
M-113	-	Yes	-	Yes	-	Yes	-	-	-	Yes	-	Yes	Yes	-	-	-	Yes
M-114	Yes	Yes	p	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-	Yes
M-115	-	-	-	-	-	Yes	-	-	-	-	-	-	-	-	-	-	-
M-116	-	Yes	-	-	-	Yes	-	Yes	Yes	-	-	Yes	Yes	Yes	-	-	Yes
M-117	Yes	Yes	Yes	Yes	-	Yes	-	Yes	Yes	-	-	Yes	Yes	-	Yes	-	Yes
M-118	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	-	-
M-119	Yes	Yes	Yes	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	-	-	-	Yes
M-120	-	Yes	Yes	Yes	-	Yes	-	-	-	-	-	Yes	Yes	-	Yes	-	Yes
M-121	Yes	Yes	Yes	-	-	Yes	-	-	-	Yes	-	Yes	Yes	-	Yes	Yes	Yes
M-122	Yes	Yes	Yes	-	-	Yes	-	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-	Yes

M-123	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	-	-	-
M-124	yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	-	-	-	-	-	-	Yes	-
M-125	yes	-	-	-	-	Yes	Yes	-	-	-	-	-	-	-	-	-	-
M-126	Yes	-	Yes	Yes	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-	-	-	Yes
M-128	Yes	Yes	Yes	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes
M-138	Yes	-	-	Yes	-	-	-	-	-	Yes	-	Yes	Yes	-	-	-	-
M-146	-	Yes	Yes	Yes	-	Yes	Yes	-	-	-	-	Yes	Yes	-	-	-	-
M-148	Yes	-	-	-	-	-	-	-	Yes	-	-	Yes	Yes	-	-	-	-
M-149	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	-	Yes	Yes	Yes	-	-	Yes
M-151	-	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	-	-	Yes
M-153	Yes	-	-	Yes	Yes	Yes	-	-	-	-	-	Yes	Yes	-	-	-	-
M-154	Yes	Yes	Yes	Yes	-	-	Yes	-	-	-	-	Yes	Yes	-	-	-	-
M-155	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-	Yes
M-156	Yes	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	-	Yes	-	Yes
M-157	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	-
M-158	Yes	Yes	-	Yes	Yes	Yes	-	Yes	Yes	-	-	Yes	Yes	-	Yes	Yes	Yes
M-164	Yes	Yes	Yes	Yes	-	-	-	-	-	-	-	Yes	Yes	-	-	-	-
M-165	Yes	Yes	-	-	-	Yes	-	-	-	Yes	-	Yes	Yes	-	-	-	-
M-166	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Yes	-	-	Yes
M-168	Yes	-	Yes	Yes	-	Yes	-	-	-	Yes	-	Yes	Yes	-	-	-	Yes
M-170	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes	-	Yes	Yes	Yes	Yes	-	-	-	-
M-171	Yes	Yes	-	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	-	-	-	-
M-172	Yes	Yes	Yes	Yes	-	-	Yes	Yes	Yes	Yes	-	Yes	Yes	-	-	-	Yes
M-173	Yes	-	Yes	Yes	-	Yes	-	-	-	Yes	-	Yes	Yes	-	-	-	Yes
M-174	Yes	Yes	Yes	Yes	-	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	-	-	-
M-176	Yes	Yes	Yes	-	-	-	Yes	-	-	Yes	-	Yes	Yes	-	-	-	-
M-177	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-	-	Yes	-

Appendix 3 | Vaccination data in vaccinated subjects with different SARS-CoV-2 vaccine brands.

Code	SEX	History of COVID-19 Infection	Vaccine Brand	Number of vaccine injection	Sampling after last injection (Days)
VAC01	Male	Infected	Sputnik	First	48
VAC02	Male	Non-infected	Sputnik	First	48
VAC03	Male	Non-infected	Sputnik	First	48
VAC04	Male	Non-infected	Sputnik	First	50
VAC05	Male	Non-infected	Sputnik	First	48
VAC06	Male	Non-infected	Sputnik	First	48
VAC07	Female	Non-infected	Sputnik	First	48
VAC08	Male	Non-infected	Sputnik	First	48
VAC09	Female	Non-infected	Sputnik	First	48
VAC10	Male	Non-infected	Sputnik	First	48
VAC11	Male	NA	Sinopharm	Both	NA
VAC12	Female	NA	Sinopharm	Both	NA
VAC13	Female	Non-infected	Sinopharm	Both	NA
VAC14	Female	Infected	Sinopharm	Both	18
VAC15	Male	Infected	Sinopharm	Both	44
VAC16	Male	Infected	Sinopharm	Both	110
VAC17	Male	Non-infected	Sinopharm	Both	43
VAC18	Female	Non-infected	Sinopharm	Both	43
VAC19	Female	Non-infected	Sputnik	First	48
VAC20	Male	Non-infected	Sinopharm	Both	43
VAC21	Female	Infected	Sinopharm	First	49
VAC22	Male	Infected	Sinopharm	Both	36
VAC23	Male	Infected	Sinopharm	Both	60
VAC24	Male	Non-infected	Sinopharm	Both	100
VAC25	Male	Non-infected	Astrazeneca	First	54
VAC26	Female	Infected	Sinopharm	First	46
VAC27	Male	Infected	Astrazeneca	First	160
VAC28	Female	Non-infected	Sinopharm	Both	21
VAC29	Male	Infected	Sinopharm	Both	13
VAC30	Female	Non-infected	Sputnik	First	48
VAC31	Male	Non-infected	Sinopharm	Both	36
VAC32	Male	Non-infected	Sinopharm	Both	44
VAC33	Male	Non-infected	Sinopharm	Both	36
VAC34	Male	Non-infected	Sinopharm	Both	19
VAC35	Female	Infected	Sinopharm	Both	13
VAC36	Female	Infected	Sinopharm	First	0
VAC37	Male	Infected	Sinopharm	Both	6
VAC38	Female	Infected	Sinopharm	Both	15
VAC39	Female	Non-infected	Sputnik	First	48
VAC40	Male	Infected	Sinopharm	Both	13
VAC41	Male	Non-infected	Sinopharm	Both	28
VAC42	Male	Infected	Sinopharm	Both	100
VAC43	Female	Infected	Sinopharm	First	50
VAC44	Male	Infected	Sinopharm	Both	50
VAC45	Female	Infected	Sinopharm	Both	18
VAC46	Male	Infected	Sinopharm	Both	13
VAC47	Female	Infected	Sinopharm	Both	19
VAC48	Female	Non-infected	Sputnik	First	48

VAC49	Male	Infected	Sinopharm	Both	36
VAC50	Male	NA	Sinopharm	Both	NA
VAC51	Female	Infected	Sinopharm	Both	159
VAC52	Male	Non-infected	Sinopharm	First	17
VAC53	Female	Non-infected	Sputnik	First	48
VAC54	Female	Infected	Boarat	Both	144
VAC55	Female	Infected	Sinopharm	Both	28
VAC56	Male	Infected	Sinopharm	Both	12
VAC57	Male	Infected	Boarat	Both	64
VAC58	Female	Non-infected	Sinopharm	Both	59
VAC59	Female	Infected	Astrazeneca	Both	NA
VAC60	Female	Infected	Sputnik	First	48
VAC61	Female	Non-infected	Sputnik	First	48
VAC62	Female	Non-infected	Sputnik	First	48
VAC63	Female	Non-infected	Sputnik	First	48
VAC64	Female	Infected	Sputnik	First	48
VAC65	Female	Infected	Sputnik	First	NA
VAC66	Female	Infected	Sputnik	First	NA
VAC67	Female	Non-infected	Sputnik	First	48
VAC68	Female	Infected	Sputnik	First	48
VAC69	Female	Non-infected	Sputnik	First	48
VAC70	Male	Non-infected	Sputnik	First	48
VAC71	Female	Non-infected	Sputnik	First	48
VAC72	Male	Non-infected	Sputnik	First	48
VAC73	Female	Non-infected	Sputnik	First	48
VAC74	Female	Non-infected	Sputnik	First	48
VAC75	Female	Non-infected	Sputnik	First	48
VAC76	Female	Non-infected	Sputnik	First	48
VAC77	Female	Infected	Sputnik	First	48
VAC78	Female	Non-infected	Sputnik	First	48
VAC79	Female	Non-infected	Sputnik	First	48
VAC80	Male	Non-infected	Sputnik	Both	31
VAC81	Male	Infected	Sputnik	Both	NA
VAC82	Male	Non-infected	Sputnik	Both	31
VAC83	Female	Non-infected	Sputnik	Both	31
VAC84	Female	Non-infected	Sputnik	First	48
VAC85	Female	Non-infected	Sputnik	First	48
VAC86	Female	Infected	Sputnik	Both	35
VAC87	Female	Infected	Sputnik	First	50
VAC88	Male	Non-infected	Sputnik	First	48
VAC89	Female	Non-infected	Sputnik	Both	35
VAC90	Male	Non-infected	Sputnik	First	50
VAC91	Female	Non-infected	Sputnik	First	48
VAC92	Male	Infected	Astrazeneca	First	56
VAC93	Male	Infected	Sputnik	First	21
VAC94	Male	Infected	Sputnik	First	21
VAC95	Female	Non-infected	Sputnik	First	21
VAC96	Female	Non-infected	Covaxin	Both	55
VAC97	Male	Non-infected	Covaxin	Both	24
VAC98	Female	Infected	Covaxin	Both	55
VAC99	Male	Non-infected	Covaxin	Both	55
VAC100	Female	Non-infected	Covaxin	Both	55

VAC101	Female	Infected	Covaxin	Both	24
VAC102	Female	Infected	Covaxin	Both	55
VAC103	Female	Infected	Sputnik	Both	55
VAC104	Female	Infected	Sinopharm	Both	41
VAC105	Female	Infected	Sputnik	Both	55
VAC106	Female	Infected	Sputnik	Both	55
VAC107	Female	NA	Astrazeneca	First	NA
VAC108	Female	Non-infected	Covaxin	Both	59
VAC109	Female	Infected	Sinopharm	Both	17
VAC110	Female	Non-infected	Sinopharm	Both	51
VAC111	Female	Non-infected	Sinopharm	Both	55
VAC112	Male	Non-infected	Sinopharm	Both	55
VAC113	Female	Infected	Sputnik	Both	18
VAC114	Male	Infected	Sputnik	Both	18
VAC115	Female	Infected	Sputnik	first	39
VAC116	Female	Infected	Sputnik	Both	18
VAC117	Female	Infected	Sputnik	Both	18
VAC118	Male	Infected	Sputnik	Both	18
VAC119	Female	Non-infected	Sputnik	Both	18
VAC120	Male	Non-infected	Sinopharm	Both	13
VAC121	Female	Non-infected	Sinopharm	Both	36
VAC122	Male	Non-infected	Sinopharm	Both	21
VAC123	Male	Infected	Sinopharm	Both	14
VAC124	Female	Infected	Sinopharm	Both	30
VAC125	Male	Infected	Sinopharm	Both	NA
VAC126	Male	Infected	Sinopharm	Both	21
VAC127	Male	Non-infected	Sinopharm	Both	NA
VAC128	Male	Non-infected	Sinopharm	Both	25
VAC129	Male	Non-infected	Sinopharm	Both	NA
VAC130	Male	Non-infected	Sinopharm	Both	NA
VAC131	Female	Non-infected	Sinopharm	Both	NA
VAC132	Male	Infected	Sinopharm	Both	30
VAC133	Female	Infected	Sinopharm	Both	40
VAC134	Male	Non-infected	Sinopharm	Both	30
VAC135	Female	Non-infected	Sinopharm	Both	21
VAC136	Female	NA	Sinopharm	Both	NA
VAC137	Female	Infected	Sinopharm	Both	30
VAC138	Male	NA	Sinopharm	Both	NA
VAC139	Male	Infected	Sinopharm	Both	NA
VAC140	Male	Infected	Sinopharm	Both	30
VAC141	Male	Infected	Sinopharm	Both	NA

NA: Not available

Appendix 4 | Demographics and laboratory findings in COVID-19 infected patients.

Characteristics	Results
Age (year), Mean ± SD	51.53 ± 15.45
Sex (%)	M: 71 (53) F: 63 (47)
PT (Sec)	12.81 ± 1.11
PTT (Sec)	38.91 ± 9.16
INR	3.57 ± 14.71
Hb (mg/dl)	12.99 ± 1.74
WBC (× 10³/mm³)	6.52 ± 3.87
PMN (% mean)	68.9
Lymph (%), mean	23.67
Mon (%), mean	6.48
ESR (mm³/hr), Mean ± SD	61.38 ± 35.72
CRP, (mm³), Mean ± SD	30 (35.34)
DDimer (µg/ml), Mean ± SD	1122.34 ± 1570.45
CT scan Findings	124 (92.5)
Myalgia (%)	98 (73.1)
Heart failure (%)	4 (3.0)
Heart ischemia (%)	15 (11.0)
Blood pressure (%)	36 (26.9)
Lung chronic (%)	15 (11.2)
Asthma (%)	8 (6.0)
Diabetes (%)	25(18.7)
Obesity (%)	18 (13.4)
Fatty liver (%)	12 (9.0)
Kidney disease (%)	8 (6.0)
Thalassemia (%)	2 (1.5)
Cancer (%)	8 (6.0)