Appendix 1. GISAID Accession Numbers, Clades & Lineages of Isolates

Patients	Accession ID	GISID Glade	Lineage	
1	EPI_ISL_13971728	GK	B.1.617.2	
2	EPI_ISL_13971729	GK	B.1.617.2.126	
3	EPI_ISL_13971730	GK	B.1.617.2.121	
4	EPI_ISL_13971731	GK	B.1.617.2	
5	EPI_ISL_13971732	GK	B.1.617.2.126	
6	EPI_ISL_13971733	GK	B.1.617.2.78	
7	EPI_ISL_13971734	GK	B.1.617.2.126	
8	EPI_ISL_13971735	O	B.1.617.2.126	
9	EPI_ISL_13971736	GK	B.1.617.2	
10	EPI_ISL_13971737	GK	B.1.617.2.78	
11	EPI_ISL_13971738	GK	B.1.617.2	
12	EPI_ISL_13971739	GRA	B.1.529	
13	EPI_ISL_13971740	GRA	B.1.529	
14	EPI_ISL_13971741	GRA	B.1.529	
15	EPI_ISL_13971742	GRA	B.1.529	
16	EPI_ISL_13971743	GRA	B.1.529	
17	EPI_ISL_13971744	GK	B.1.617.2.78	
18	EPI_ISL_13971745	G	B.1.1.7	
19	EPI_ISL_13971746	G	B.1.17	

Appendix 2. Different Types of Mutations Found in S Gene

Mutations	AA	Gene	Type of Mutation	Detected Patients
C56G	T19R	S	Non- synonymous SNV	1,2,3,4,5,6,7,8,9,10,11,16,
G425A	G142D	S	Non- synonymous SNV	1,2,3,4,5,6,7,8,9,10,11,17,
467_472del	156_158del	S	no frameshift deletion	1,2,3,4,5,6,7,8,9,10,11,17,
T1355G	L452R	S	Non- synonymous SNV	1,2,3,4,5,6,7,8,9,10,11,17,
C1433A	T478K	S	Non- synonymous SNV	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16, 17,
A1841G	D614G	S	Non- synonymous SNV	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16, 17,18,19
C2042G	P681R	S	Non- synonymous SNV	1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16, 17,18,19
G2848A	D950N	S	Non- synonymous SNV	1,2,3,4,5,6,7,8,9,10,11,17,
G3786A	E1262E	S	synonymous SNV	1,
C284T	T95I	S	Non- synonymous SNV	2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,
A2328G	K776K	S	synonymous SNV	2,
A2548C	I850L	S	Non- synonymous SNV	2,5,7,8,
G2786C	S929T	S	Non- synonymous SNV	2,

	1	1	
H1058R	S	Non- synonymous SNV	2,
A27S	S	Non- synonymous SNV	3,
P665P	S	synonymous SNV	3,15,16,
D586D	S	synonymous SNV	5,
K786N	S	synonymous SNV	5,
N606N	S	synonymous SNV	6,
A783A	S	synonymous SNV	7,
A893T	S	synonymous SNV	7,
V1129I	S	synonymous SNV	7,
Y144fs	S	frameshift deletion	8,
A163A	S	synonymous SNV	8,
V1104L	S	Non- synonymous SNV	9,11,
D53D	S	synonymous SNV	10,16,
S514S	S	synonymous SNV	10,
G219fs	S	frameshift deletion	11,
G744D	S	Non- synonymous SNV	11,
A67V	S	Non- synonymous SNV	12,13,14,15,17,
	P665P  D586D  K786N  N606N  A783A  A893T  V1129I  Y144fs  A163A  V1104L  D53D  S514S  G219fs  G744D	A27S S  P665P S  D586D S  K786N S  N606N S  A783A S  A893T S  V1129I S  V1129I S  V1144fs S  A163A S  V1104L S  S514S S  G219fs S  G744D S	Synonymous   SNV

203_208del	68_70del	S	no frameshift deletion	12,13,14,15,17,18,19
425_433del	142_145del	S	no frameshift deletion	12,13,14,15,16,
632_634del	211_212del	S	no frameshift deletion	12,13,14,15,16,
642_643insGAGCCAG AA	R214delinsRE PE	S	no frameshift insertion	12,13,14,15,16,
G1016A	G339D	S	Non- synonymous SNV	12,13,14,15,16,
G1037A	R346K	S	Non- synonymous SNV	12,13,14,15,16,
T1111C	S371P	S	Non- synonymous SNV	12,13,14,15,16,
C1112T	S371F	S	Non- synonymous SNV	12,13,14,15,16,
T1117C	S373P	S	Non- synonymous SNV	12,13,14,15,16,
C1124T	S375F	S	Non- synonymous SNV	12,13,14,15,16,
G1251T	K417N	S	Non- synonymous SNV	12,13,14,15,16,
T1320G	N440K	S	Non- synonymous SNV	12,13,14,15,16,
G1336A	G446S	S	Non- synonymous SNV	12,13,14,15, 16,
G1430A	S477N	S	Non- synonymous SNV	12,13,14,15,16,
A1451C	E484A	S	Non- synonymous SNV	12,13,14,15,16,

11 IEO C	0.402B			10 10 14 15 16
A1478G	Q493R	S	Non- synonymous SNV	12,13,14,15,16,
G1486A	G496S	S	Non- synonymous SNV	12,13,14,15,16,
A1493G	Q498R	S	Non- synonymous SNV	12,13,14,15,16,
A1501T	N501Y	S	Non- synonymous SNV	12,13,14,15,16,18,19
T1513C	Y505H	S	Non- synonymous SNV	12,13,14,15,16,
C1640A	T547K	S	Non- synonymous SNV	12,13,14,15,16,
C2292A	N764K	S	Non- synonymous SNV	12,13,14,15,16,
C1963T	H655Y	S	Non- synonymous SNV	12,13,14,15,16,
T2037G	N679K	S	Non- synonymous SNV	12,13,14,15,16,
G2386T	D796Y	S	Non- synonymous SNV	12,13,14,15,16,
C2568A	N856K	S	Non- synonymous SNV	12,13,14,15,16,
A2862T	Q954H	S	Non- synonymous SNV	12,13,14,15,16,
T2907A	N969K	S	Non- synonymous SNV	12,13,14,15,16,
C2941T	L981F	S	Non- synonymous SNV	12,13,14,15,16,

C3438T	D1146D	S	synonymous SNV	12,13,14,15,16,
G655A	G219S	S	Non- synonymous SNV	17,
G656A	G219D	S	Non- synonymous SNV	17,
G664T	A222S	S	Non- synonymous SNV	17,
C1860T	V620V	S	synonymous SNV	17
C293T	S98F	S	Non- synonymous SNV	18,
429_431del	143_144del	S	no frameshift deletion	18,19
A1203T	V401V	S	synonymous	18,
C1709A	A570D	S	Non- synonymous	18,19,
C2147T	T716I	S	Non- synonymous	18,19
T2944G	S982A	S	Non- synonymous	18,19
G3259A	A1087T	S	Non- synonymous	18,
G3352C	D1118H	S	Non- synonymous	18,19
C80T	A27V	S	Non- synonymous	19
C761T	S254F	S	Non- synonymous	19
G2050T	A68	S	Non- synonymous	19
G2853T	V951V	S	synonymous SNV	19

Abbreviations: SNV, single nucleotide variation; AA, amino acids.