

Supplementary Table 1 Detailed information on polymorphisms of the COVID-19-related genes analyzed in this study.

Gene	Gene location	Exon count	Polymorphism	Position	Major allele	Minor allele	Classification
<i>IFITM3</i>	11p15.5	2	rs12252	NC_000011.10:g.320772A>G	A	G	Splice region variant
			rs34481144	NC_000011.10:g.320836C>T	C	T	5' UTR variant
			rs6598045	NC_000011.10:g.321001A>G	A	G	5' UTR variant
<i>ACE2</i>	Xp22.2	19	rs2285666	NC_000023.11:g.15592225C>T	C	T	Splice region variant
			rs35803318	NC_000023.10:g.15582209C>T	C	T	Synonymous variant
			rs2074192	NC_000023.11:g.15564667C>T	C	T	Intron variant
			rs2106809	NC_000023.11:g.15599938A>G	A	G	Intron variant
<i>TMPRSS2</i>	21q22.3	15	rs2070788,	NC_000021.9:g.41470061G>A	A	G	Intron variant
			rs2298659	NC_000021.9:g.41473447G>A	G	A	Synonymous variant
			rs17854725	NC_000021.9:g.41473456A>G	G	A	Synonymous variant
			rs12329760	NC_000021.9:g.41480570C>T	C	T	Missense variant
			rs3787950	NC_000021.9:g.41494369T>C	T	C	Synonymous variant
			rs463727	NC_000021.9:g.41464259T>A	T	A	3' UTR variant
			rs9974589	NC_000021.9:g.41470196A>C	A	C	Intron variant
			rs34624090	NC_000021.9:g.41471517dup	CCC	CCCC	Intron variant
			rs7364083	NC_000021.9:g.41472130G>A	G	A	Intron variant
			rs55964536	NC_000021.9:g.41473711C>T	C	T	Intron variant
			rs734056	NC_000021.9:g.41480393C>A	C	A	Intron variant
			rs4290734	NC_000021.9:g.41481156A>G	A	G	Intron variant
			rs34783969	NC_000021.9:g.41482711A>T	A	T	Intron variant
			rs11702475	NC_000021.9:g.41485641C>T	C	T	Intron variant
			rs35899679	NC_000021.9:g.41491393C>A	C	A	Intron variant
			rs35041537	NC_000021.9:g.41491442C>T	C	T	Intron variant
<i>IL6</i>	7p15.3	6	rs1800795	NC_000007.14:g.22727026C>G	C	G	Intron variant
<i>LZTFL1</i>	3p21.31	15	rs11385942	NC_000003.12:g.45834969dup,	AA	AAA	Non coding transcript exon variant
<i>ABO</i>	9q34.2,	7	rs657152	NC_000009.12:g.133263862A>C	C	A	Intron variant

Supplementary Table 2 Summary of correlation analysis between the case fatality rate of COVID-19 and allele frequencies of the polymorphisms of the *IFITM3*, *ACE2*, *TMPRSS2* and *IL6* genes in several ethnic groups.

Gene	Polymorphisms	Matching groups in1000 genome project	Allele frequencies		Case fatality rate (%)	r ²	P-value
<i>IFITM3</i>	rs12252		A	G		0.1725	0.0419
		African (AFR)	0.740	0.260	2.07		
		European (EUR)	0.959	0.041	7.40		
		American (AMR)	0.823	0.177	4.90		
		East Asian (EAS)	0.472	0.528	5.40		
		South Asian (SAS)	0.853	0.147	1.73		
	rs34481144		C	T		0.017	0.8055
		African (AFR)	0.957	0.043	2.07		
		European (EUR)	0.538	0.462	7.40		
		American (AMR)	0.767	0.233	4.90		
		East Asian (EAS)	0.994	0.006	5.40		
	rs6598045		A	G		0.8901	0.0047
		African (AFR)	0.701	0.299	2.07		
		European (EUR)	0.894	0.106	7.40		
		American (AMR)	0.778	0.222	4.90		
East Asian (EAS)		0.859	0.141	5.40			
<i>ACE2</i>	rs2285666		C	T		0.0139	0.8243
		African (AFR)	0.789	0.211	2.07		
		European (EUR)	0.765	0.235	7.40		
		American (AMR)	0.664	0.336	4.90		
		East Asian (EAS)	0.463	0.537	5.40		
	rs35803318		C	T		0.3933	0.1826
		African (AFR)	0.999	0.001	2.07		
		European (EUR)	0.946	0.054	7.40		
		American (AMR)	0.929	0.071	4.90		
		East Asian (EAS)	1.000	0.000	5.40		
		South Asian (SAS)	1.000	0.000	1.73		

	rs2074192	C	T		0.6503	0.0526
		African (AFR)	0.654	0.346	2.07	
		European (EUR)	0.574	0.426	7.40	
		American (AMR)	0.601	0.399	4.90	
		East Asian (EAS)	0.572	0.428	5.40	
		South Asian (SAS)	0.774	0.226	1.73	
	rs2106809	A	G		0.0511	0.6666
		African (AFR)	0.911	0.089	2.07	
		European (EUR)	0.753	0.247	7.40	
		American (AMR)	0.676	0.324	4.90	
		East Asian (EAS)	0.478	0.522	5.40	
		South Asian (SAS)	0.517	0.483	1.73	
<i>TMPRSS2</i>	rs2070788	G	A		0.1475	0.4522
		African (AFR)	0.274	0.726	2.07	
		European (EUR)	0.464	0.534	7.40	
		American (AMR)	0.494	0.506	4.90	
		East Asian (EAS)	0.356	0.644	5.40	
		South Asian (SAS)	0.466	0.534	1.73	
	rs2298659	G	A		0.7236	0.0318
		African (AFR)	0.825	0.175	2.07	
		European (EUR)	0.770	0.230	7.40	
		American (AMR)	0.782	0.218	4.90	
		East Asian (EAS)	0.751	0.249	5.40	
		South Asian (SAS)	0.811	0.189	1.73	
	rs17854725	A	G		0.0021	0.9316
		African (AFR)	0.661	0.339	2.07	
		European (EUR)	0.458	0.542	7.40	
		American (AMR)	0.589	0.411	4.90	
		East Asian (EAS)	0.879	0.121	5.40	
		South Asian (SAS)	0.556	0.444	1.73	
	rs12329760	C	T		0.0013	0.9451
		African (AFR)	0.713	0.287	2.07	

	European (EUR)	0.764	0.236	7.40		
	American (AMR)	0.846	0.154	4.90		
	East Asian (EAS)	0.638	0.362	5.40		
	South Asian (SAS)	0.774	0.226	1.73		
rs3787950		T	C		0.6165	0.0643
	African (AFR)	0.782	0.218	2.07		
	European (EUR)	0.921	0.079	7.40		
	American (AMR)	0.939	0.061	4.90		
	East Asian (EAS)	0.845	0.155	5.40		
	South Asian (SAS)	0.743	0.257	1.73		
rs463727		T	A		0.0009	0.9547
	African (AFR)	0.921	0.079	2.07		
	European (EUR)	0.543	0.457	7.40		
	American (AMR)	0.728	0.272	4.90		
	East Asian (EAS)	0.994	0.006	5.40		
	South Asian (SAS)	0.645	0.355	1.73		
rs9974589		A	C		0.1217	0.3489
	African (AFR)	0.273	0.727	2.07		
	European (EUR)	0.464	0.536	7.40		
	American (AMR)	0.493	0.507	4.90		
	East Asian (EAS)	0.356	0.644	5.40		
	South Asian (SAS)	0.465	0.535	1.73		
rs34624090		CCC	CCCC		0.0063	0.8809
	African (AFR)	0.904	0.096	2.07		
	European (EUR)	0.558	0.442	7.40		
	American (AMR)	0.759	0.241	4.90		
	East Asian (EAS)	0.994	0.006	5.40		
	South Asian (SAS)	0.613	0.387	1.73		
rs7364083		G	A		0.2269	0.3396
	African (AFR)	0.151	0.849	2.07		
	European (EUR)	0.462	0.538	7.40		
	American (AMR)	0.480	0.520	4.90		
	East Asian (EAS)	0.355	0.645	5.40		

	South Asian (SAS)	0.462	0.538	1.73		
rs55964536	C	T			0.0044	0.9004
	African (AFR)	0.899	0.101	2.07		
	European (EUR)	0.517	0.483	7.40		
	American (AMR)	0.712	0.288	4.90		
	East Asian (EAS)	0.994	0.006	5.40		
	South Asian (SAS)	0.602	0.398	1.73		
rs734056	C	A			0.0257	0.7615
	African (AFR)	0.787	0.213	2.07		
	European (EUR)	0.511	0.489	7.40		
	American (AMR)	0.683	0.317	4.90		
	East Asian (EAS)	0.992	0.008	5.40		
	South Asian (SAS)	0.566	0.434	1.73		
rs4290734	A	G			0.0002	0.9769
	African (AFR)	0.931	0.069	2.07		
	European (EUR)	0.513	0.487	7.40		
	American (AMR)	0.689	0.311	4.90		
	East Asian (EAS)	0.993	0.007	5.40		
	South Asian (SAS)	0.569	0.431	1.73		
rs34783969	A	T			0.0066	0.8786
	African (AFR)	0.885	0.115	2.07		
	European (EUR)	0.512	0.488	7.40		
	American (AMR)	0.683	0.317	4.90		
	East Asian (EAS)	0.993	0.007	5.40		
	South Asian (SAS)	0.572	0.428	1.73		
rs11702475	C	T			0.007	0.8752
	African (AFR)	0.877	0.123	2.07		
	European (EUR)	0.509	0.491	7.40		
	American (AMR)	0.690	0.310	4.90		
	East Asian (EAS)	0.992	0.008	5.40		
	South Asian (SAS)	0.573	0.427	1.73		
rs35899679	C	A			0.0048	0.8959

		African (AFR)	0.893	0.107	2.07		
		European (EUR)	0.537	0.463	7.40		
		American (AMR)	0.712	0.288	4.90		
		East Asian (EAS)	0.993	0.007	5.40		
		South Asian (SAS)	0.616	0.384	1.73		
	rs35041537		C	T		0.0061	0.8831
		African (AFR)	0.886	0.114	2.07		
		European (EUR)	0.537	0.463	7.40		
		American (AMR)	0.709	0.291	4.90		
		East Asian (EAS)	0.993	0.007	5.40		
		South Asian (SAS)	0.615	0.385	1.73		
<i>IL6</i>	rs1800795		C	G		0.0136	0.8260
		African (AFR)	0.018	0.982	2.07		
		European (EUR)	0.416	0.584	7.40		
		American (AMR)	0.184	0.816	4.90		
		East Asian (EAS)	0.001	0.999	5.40		
		South Asian (SAS)	0.139	0.861	1.73		
<i>LZTFL1</i>	rs11385942		AA	AAA		0.1691	0.4180
		African (AFR)	0.947	0.053	2.07		
		European (EUR)	0.919	0.081	7.40		
		American (AMR)	0.954	0.046	4.90		
		East Asian (EAS)	0.995	0.005	5.40		
		South Asian (SAS)	0.704	0.296	1.73		
<i>ABO</i>	rs657152		A	C		0.1016	0.5380
		African (AFR)	0.461	0.539	2.07		
		European (EUR)	0.400	0.600	7.40		
		American (AMR)	0.251	0.749	4.90		
		East Asian (EAS)	0.372	0.628	5.40		
		South Asian (SAS)	0.404	0.596	1.73		