

## Supplementary Data

GISAID identifier	Sequencing platform	Collection date	Sequencing facility
EPI_ISL_452363	Oxford Nanopore GridION	31 Jan 2020	Laboratory of Infectious Diseases Center of Beijing Ditan Hospital
EPI_ISL_452361	Oxford Nanopore GridION	11 Feb 2020	Laboratory of Infectious Diseases Center of Beijing Ditan Hospital
EPI_ISL_1069206	Oxford Nanopore MinION	26 Jan 2020	Microbiology Laboratory,Lu'an Center for Disease Control and Prevention, Anhui
EPI_ISL_413017	Illumina MiSeq	8 Feb 2020	Department of Microbiology, Institute for Viral Diseases, College of Medicine, Korea University
EPI_ISL_451325	Oxford Nanopore MinION	31 Jan 2020	West China Hospital of Sichuan University
EPI_ISL_451394	Oxford Nanopore MinION	3 Feb 2020	West China Hospital of Sichuan University
EPI_ISL_451390	Oxford Nanopore MinION	23 Jan 2020	West China Hospital of Sichuan University
EPI_ISL_451322	Oxford Nanopore MinION	1 Feb 2020	West China Hospital of Sichuan University
EPI_ISL_451389	Oxford Nanopore MinION	30 Jan 2020	West China Hospital of Sichuan University
EPI_ISL_451377	Oxford Nanopore MinION	8 Feb 2020	West China Hospital of Sichuan University
EPI_ISL_451330	Oxford Nanopore MinION	29 Jan 2020	West China Hospital of Sichuan University
EPI_ISL_451319	Oxford Nanopore MinION	27 Jan 2020	West China Hospital of Sichuan University
EPI_ISL_451320	Oxford Nanopore MinION	27 Jan 2020	West China Hospital of Sichuan University
EPI_ISL_451353	Oxford Nanopore MinION	27 Jan 2020	West China Hospital of Sichuan University
EPI_ISL_451076	Oxford Nanopore MinION	8 Feb 2020	West China Hospital of Sichuan University

EPI_ISL_454919	Oxford Nanopore MinION	3 Feb 2020	Wuhan Chain Medical Labs (CMLabs)
EPI_ISL_462306	Illumina MiSeq	14 Feb 2020	National Public Health Laboratory, National Centre for Infectious Diseases, Singapore
EPI_ISL_493179	Oxford Nanopore PromethION	26 Jan 2020	National Virus Resource Center, Chinese Academy of Sciences, Wuhan
EPI_ISL_493180	Oxford Nanopore PromethION	26 Jan 2020	National Virus Resource Center, Chinese Academy of Sciences, Wuhan
EPI_ISL_493182	Oxford Nanopore PromethION	26 Jan 2020	National Virus Resource Center, Chinese Academy of Sciences, Wuhan

**Table S1** Sequencing platforms and facilities used to sequence the 20 intermediate genomes  
Sequencing information was derived from the GISAID entry for each genome.

EPI_ISL_451313,	EPI_ISL_451314,	EPI_ISL_451315,	EPI_ISL_451316,	EPI_ISL_451321,
EPI_ISL_451326,	EPI_ISL_451327,	EPI_ISL_451328,	EPI_ISL_451329,	EPI_ISL_451331,
EPI_ISL_451334,	EPI_ISL_451338,	EPI_ISL_451344,	EPI_ISL_451345,	EPI_ISL_451346,
EPI_ISL_451354,	EPI_ISL_451356,	EPI_ISL_451357,	EPI_ISL_451359,	EPI_ISL_451360,
EPI_ISL_451365,	EPI_ISL_451369,	EPI_ISL_451370,	EPI_ISL_451371,	EPI_ISL_451374,
EPI_ISL_451376,	EPI_ISL_451378,	EPI_ISL_451379,	EPI_ISL_451380,	EPI_ISL_451381,
EPI_ISL_451382,	EPI_ISL_451384,	EPI_ISL_451385,	EPI_ISL_451386,	EPI_ISL_451387,
EPI_ISL_451388,	EPI_ISL_451391,	EPI_ISL_451392,	EPI_ISL_451395,	EPI_ISL_451398,
EPI_ISL_454930,	EPI_ISL_454931,	EPI_ISL_454932,	EPI_ISL_454933,	EPI_ISL_454934,
EPI_ISL_454935,	EPI_ISL_454936,	EPI_ISL_454937,	EPI_ISL_454980,	EPI_ISL_454981,
EPI_ISL_455374,	EPI_ISL_455375,	EPI_ISL_455386,	EPI_ISL_455391	

**Supp Data S1** Genomes from the study by Lin et al (2020) that were included in the analysis of Pekar et al