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Dept. Infectious, Tropical Diseases & Microbiology, IRCCS Sacro

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All Submitters of data may be contacted directly via www.gisaid.org

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			SL_497134, EPI_ISL_497135, EPI_ISL_497136, EPI_ISL_497137, EPI_ISL_497138, EPI_ISL_497139, EPI_ISL_497140, EPI_ISL_497141, EPI_ISL_497142, EPI_ISL_497143, EPI_ISL_497144, EPI_ISL_497145, EPI_ISL_497146,
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			SL_497182, EPI_ISL_497183, EPI_ISL_497184, EPI_ISL_497185, EPI_ISL_497186, EPI_ISL_497187, EPI_ISL_497188, EPI_ISL_497189, EPI_ISL_497190, EPI_ISL_497191, EPI_ISL_497192, EPI_ISL_497193, EPI_ISL_497194,
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			SL_497230, EPI_ISL_497231, EPI_ISL_497232, EPI_ISL_497233, EPI_ISL_497234, EPI_ISL_497235, EPI_ISL_497236, EPI_ISL_497237, EPI_ISL_497238, EPI_ISL_497239, EPI_ISL_497240, EPI_ISL_497241, EPI_ISL_497242,
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			SL 497278, EPI ISL 497279, EPI ISL 497280, EPI ISL 497281, EPI ISL 497282, EPI ISL 497283, EPI ISL 497284, EPI ISL 497285, EPI ISL 497286, EPI ISL 497287, EPI ISL 497288, EPI ISL 497289, EPI ISL 497290,
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			St. 497518, EPI ISL 497519, EPI ISL 497520, EPI ISL 497522, EPI ISL 497523, EPI ISL 497524, EPI ISL 497525, EPI ISL 497527, EPI ISL 497528, EPI ISL 497529, EP
			St. 497542, EPI ISL 497543, EPI ISL 497544, EPI ISL 497545, EPI ISL 497546, EPI ISL 4975747, EPI ISL 497548, EPI ISL 497549, EPI ISL 497553, EPI ISL 497553, EPI ISL 497554,
			St. 497566, EPI ISL 4975767, EPI ISL 497576, EPI ISL 497577, E
			St. 497590, EPI ISL 497591, EPI ISL 497592, EPI ISL 497593, EPI ISL 497594, EPI ISL 497595, EPI ISL 497596, EPI ISL 497597, EPI ISL 497599, EP
			SL 497614, EPI ISL 497615, EPI ISL 497616, EPI ISL 497617, EPI ISL 497618, EPI ISL 497619, EPI ISL 497620, EPI ISL 497621, EPI ISL 497622, EPI ISL 497623, EPI ISL 497624, EPI ISL 497625, EPI ISL 497626,
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EPI_ISL_497723, EPI_ISL_497724, EPI_ISL_497725, E			
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see above	washington state Department of Health	Seattle Flu Study	Truong, Caltlin R. Wolf, Romesh Gautom, Geoff Melly, Brian Hiatt, Philip Dykema, Scott Lindquist, Michael Boeckh, Janet A. Englund, Michael Famulare, Barry R. Lutz, Mark J. Rieder, Lea M. Starita, Matthew
			Thompson, Helen Y. Chu, Jay Shendure, Trevor Bedford
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			Hompson, Helen H. end, July Shendare, Hevol Bedroid
EPI_ISL_497736, EPI_ISL_497738, EPI_ISL_497744, EPI_ISL_497745	Instituto Nacional de Salud, Bogotá, Colombia	Instituto Nacional de Salud, Bogotá, Colombia	Katherine Laiton-Donato, Diego A. Álvarez-Díaz, Carlos Franco-Muñoz, Jonathan Reales, Diego Andrés Prada, Jose A. Usme-Ciro, Nicolas D. Franco-Sierra, Zulma M. Cucunubá, Christian Julian Villabona-Arenas, Liz Villabona-Arenas, Sussy Echeverria, Astrid C. Flórez, Carolina Ferro, Diana Marcela Walteros-Acero, Franklin Prieto, Carlos Andrés Durán, Martha Lucia Ospina Martinez, Marcela Mercado-Reyes
EPI_ISL_497758, EPI_ISL_497760	CSIR-CDRI/SGPGI, Lucknow	CSIr-CDRI/SGPGI, Lucknow	Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh
EPI_ISL_497762, EPI_ISL_497763	CSIR-CDRI/SGPGI, Lucknow	CSIR-CDRI/SGPGI, Lucknow	Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh
EPI_ISL_497764	CSIR-CDRi/SGPGI, Lucknow	CSIR-CDRI/SGPGI, Lucknow	Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh
EPI_ISL_497765	CSIR-CDRI/SGPGI, Lucknow	CSIR-CDRI/SGPGI, Lucknow	Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh
EPI_ISL_497766	CSIR-CDRI/SGPGI, Lucknow	CSIR-CDRi/SGPGI, Lucknow	Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh
EPI_ISL_497767	CSIR-CDRI/SGPGI, Lucknow	CSIR-CDRI/SGPGI, Lucknow	Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh
EPĪSL 497792, EPĪSL 497793, EPĪSL 497794, EPĪS EPĪSL 497816, EPĪSL 497817, EPĪSL 497818, EPĪS EPĪSL 497840, EPĪSL 497841, EPĪSL 497842, EPĪS	SL 497795, EPI ISL 497796, EPI ISL 497797, EPI ISL 497798, EPI SL 497819, EPI ISL 497820, EPI ISL 497821, EPI ISL 497822, EPI	ISL_497799, EPI   ISL_497800, EPI   ISL_497801, EPI   ISL_497802, EPI   ISL_497823, EPI   ISL_497824, EPI   ISL_497825, EPI   ISL_497826, EPI	ISL 497779, EPI   ISL 497780, EPI   ISL 497781, EPI   ISL 497782, EPI   ISL 497783, EPI   ISL 497784, EPI   ISL 497786, EPI   ISL 497787, EPI   ISL 497789, EPI   ISL 497789, EPI   ISL 49780,
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EPI_ISL_497816, EPI_ISL_497817, EPI_ISL_497818, EF EPI_ISL_497840, EPI_ISL_497841, EPI_ISL_497842, EF	PLISL_497819, EPLISL_497820, EPLISL_497821, EPLISL_497822,	EPI_ISL_497823, EPI_ISL_497824, EPI_ISL_497825, EPI_ISL_497826, EPI_ISL_	SL, 497803, EPI, ISL, 497804, EPI, ISL, 497805, EPI, ISL, 497806, EPI, ISL, 497806, EPI, ISL, 497805, EPI, ISL, 497815, EPI, ISL, 497816,
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EPI_ISL_497872	UW Virology Lab	UW Virology Lab	Pavitra Roychoudhury, Amin Addetia, Hong Xie, Lasata Shrestha, Truong Nguyen, Meei-Li Huang, Keith Jerome, Alexander Greninger
EPI_ISL_497873, EPI_ISL_497874, EPI_ISL_497875, EPI_ISL_497876, EPI_ISL_497877, EPI_ISL_497878, EPI_ISL_497879	National Centre For Cell Science	National Centre For Cell Science	Dhiraj Paul, Kunal Jani, Radha Chauhan, Janesh Kumar, Vasudevan Seshadri, Girdhari Lal, Rajesh Karyakarte, Suvarna Joshi, Murlidhar Tambe, Sourav Sen, Santosh Karade, Kavita Bala Anand, Shelinder Pal Singh Shergill, Rajiv Mohan Gupta, Manoj Kumar Bhat, Arvind Sahu, Maharashtra COVID-19 Study Group, DBT's PAN-INDIA 1000 SARS-COV2 RNA genome sequencing consortium, Yogesh S Shouche
EPI_ISL_497880, EPI_ISL_497881, EPI_ISL_497882, EPI_ISL_497883, EPI_ISL_497884, EPI_ISL_497885, EPI_ISL_497886, EPI_ISL_497887	Armed Forces Medical College	National Centre For Cell Science	Dhiraj Paul, Kunal Jani, Radha Chauhan, Janesh Kumar, Vasudevan Seshadri, Girdhari Lal, Rajesh Karyakarte, Suvama Joshi, Murlidhar Tambe, Sourav Sen, Santosh Karade, Kavita Bala Anand, Shelinder Pal Singh Shergill, Rajiv Mohan Gupta, Manoj Kumar Bhat, Arvind Sahu, Maharashtra COVID-19 Study Group, DBT's PAN-INDIA 1000 SARS-COV2 RNA genome sequencing consortium, Yogesh S Shouche
EPI_ISL_497888, EPI_ISL_497889, EPI_ISL_497890, EPI_ISL_497891	B.J. Govt. Medical College	National Centre For Cell Science	Dhiraj Paul, Kunal Jani, Radha Chauhan, Janesh Kumar, Vasudevan Seshadri, Girdhari Lal, Rajesh Karyakarte, Suvarna Joshi, Murlidhar Tambe, Sourav Sen, Santosh Karade, Kavita Bala Anand, Shelinder Pal Singh Shergill, Rajiv Mohan Gupta, Manoj Kumar Bhat, Arvind Sahu, Maharashtra COVID-19 Study Group, DBT's PAN-INDIA 1000 SARS-CoV2 RNA genome sequencing consortium, Yogesh S Shouche
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EPI_ISL_497953, EPI_ISL_497954, EPI_ISL_497955, EPI_ISL_497956, EPI_ISL_497957, EPI_ISL_497958, EPI_ISL_497959, EPI_ISL_497960	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_497961, EPI_ISL_497962, EPI_ISL_497963, EPI_ISL_497964, EPI_ISL_497965, EPI_ISL_497966, EPI_ISL_497967	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
EPI_ISL_497968, EPI_ISL_497969, EPI_ISL_497970, EPI_ISL_497971	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_497972, EPI_ISL_497973	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
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EPI_ISL_497975, EPI_ISL_497976, EPI_ISL_497977, EPI_ISL_497978, EPI_ISL_497979, EPI_ISL_497980, EPI_ISL_497981, EPI_ISL_497982, EPI_ISL_497983, EPI_ISL_497984	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
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EPI_ISL_497987, EPI_ISL_497988, EPI_ISL_497989, EPI_ISL_497990	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_497991, EPI_ISL_497992, EPI_ISL_497993	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
EPI_ISL_497994, EPI_ISL_497995	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_497996	Division of Viral Diseases, Center for Laboratory Control of	Division of Viral Diseases, Center for Laboratory Control of Infectious	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han

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EPI_ISL_497998, EPI_ISL_497999, EPI_ISL_498000, EPI_ISL_498001, EPI_ISL_498002, EPI_ISL_498003	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
EPI_ISL_498004	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_498005	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
EPI_ISL_498006, EPI_ISL_498007, EPI_ISL_498008, E	EPI_ISL_498009, EPI_ISL_498010, EPI_ISL_498011, EPI_ISL_498012,	EPI_ISL_498013, EPI_ISL_498014, EPI_ISL_498015, EPI_ISL_498016	
see above	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_498017	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
EPI_ISL_498018, EPI_ISL_498019, EPI_ISL_498020, E	EPI_ISL_498021, EPI_ISL_498022, EPI_ISL_498023, EPI_ISL_498024,	EPI_ISL_498025, EPI_ISL_498026, EPI_ISL_498027, EPI_ISL_498028, EPI_	ISL_498029, EPI_ISL_498030, EPI_ISL_498031, EPI_ISL_498032, EPI_ISL_498033, EPI_ISL_498034, EPI_ISL_498035
see above	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_498036	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han
EPI_ISL_498037, EPI_ISL_498038, EPI_ISL_498039, E			ISL_498048, EPI_ISL_498049, EPI_ISL_498050, EPI_ISL_498051, EPI_ISL_498052, EPI_ISL_498053
see above	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Division of Viral Diseases, Center for Laboratory Control of Infectious Diseases, Korea Centers for Diseases Control and Prevention	Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Dong Hyun Song, Daesang Lee, Seong Tae Jeong, Myung Guk Han
EPI_ISL_498078, EPI_ISL_498079, EPI_ISL_498080, E	EPI_ISL_498081, EPI_ISL_498082, EPI_ISL_498083, EPI_ISL_498084,	EPI_ISL_498085, EPI_ISL_498086, EPI_ISL_498087, EPI_ISL_498088, EPI_	ISL_498065, EPI_ISL_498066, EPI_ISL_498067, EPI_ISL_498068, EPI_ISL_498069, EPI_ISL_498070, EPI_ISL_498071, EPI_ISL_498072, EPI_ISL_498073, EPI_ISL_498074, EPI_ISL_498075, EPI_ISL_498076, EPI_ISL_498076, EPI_ISL_498091, EP
see above EPI_ISL_498127, EPI_ISL_498128, EPI_ISL_498129, E EPI_ISL_498151	NHLS-IALCH EPI_ISL_498130, EPI_ISL_498131, EPI_ISL_498132, EPI_ISL_498133,	KRISP, KZN Research Innovation and Sequencing Platform EPI_ISL_498134, EPI_ISL_498135, EPI_ISL_498136, EPI_ISL_498137, EPI_	Giandhari J, Pillay S, Lessells R, Chimukangara B, Mdlalose K, York D, Khan S, Tegally H, Wilkinson E, de Oliveira T ISL_498138, EPI_ISL_498139, EPI_ISL_498140, EPI_ISL_498141, EPI_ISL_498143, EPI_ISL_498144, EPI_ISL_498145, EPI_ISL_498146, EPI_ISL_498147, EPI_ISL_498148, EPI_ISL_498149, EPI_ISL_498150,
see above	Department of Clinical Microbiology	GIGA Medical Genomics	Keith Durkin, Maria Artesi, Sébastien Bontems, Raphaël Boreux, Cécile Meex, Axelle Chaslain, Céline Fombellida-Lopez, Pierrette Melin, Marie-Pierre Hayette, Vincent Bours.
			ISL_498163, EPI_ISL_498164, EPI_ISL_498165, EPI_ISL_498166, EPI_ISL_498167, EPI_ISL_498169, EPI_ISL_498170
see above	Instituto Nacional de Salud, Bogotá, Colombia	Instituto Nacional de Salud, Bogotá, Colombia	Katherine Laiton-Donato, Diego A. Álvarez-Díaz, Carlos Franco-Muñoz, Jonathan Reales, Diego Andrés Prada, Jose A. Usme-Círo, Nicolas D. Franco-Sierra, Zulma M. Cucunubá, Christian Julian Villabona-Arenas, Liz Villabona-Arenas, Sussy Echeverina, Astrid C. Fidorez, Carolina Ferro, Diana Marcela Walteros-Acero, Franklin Prieto, Carlos Andrés Durán, Martha Lucia Ospina Martinez, Marcela Mercado-Reyes
EPI_ISL_498171, EPI_ISL_498172, EPI_ISL_498173, E see above	EPI_ISL_498174, EPI_ISL_498175, EPI_ISL_498176, EPI_ISL_498177, OUCRU	EPI_ISL_498178, EPI_ISL_498179, EPI_ISL_498180, EPI_ISL_498181, EPI_ OUCRU	ISL_498182, EPI_ISL_498183, EPI_ISL_498184, EPI_ISL_498185, EPI_ISL_498186, EPI_ISL_498187, EPI_ISL_498188, EPI_ISL_498189, EPI_ISL_498190, EPI_ISL_498191, EPI_ISL_498192  Nguyen Van Vinh Chau, Nguyen Thi Thu Hong, Nguyen Thi Han Ny, Le Nguyen Truc Nhu, Nghiem My Ngoc, Vo Thanh Lam, Nguyen Thanh Dung, Lam Minh Yen, Ngo Ngoc Quang Minh, Le Manh Hung, Nguyen Tri  Dung, Dinh Nguyen Huy Man, Lam Anh Nguyet, Tran Chanh Xuan, Tran Tinh Hien, Nguyen Thanh Phong, Tran Nguyen Hoang Tu, Tran Tan Thanh, Nguyen Thanh Truong, Nguyen Tan Binh, Tang Chi Thuong, Guy  Thinaites, and Le Van Tan, for OUCNU COVID-19 research group*
EPI_ISL_498193	Molecular Pathology Division, Department of Pathology, Hong Kong Sanatorium & Hospital	Molecular Pathology Division, Department of Pathology, Hong Kong Sanatorium & Hospital	Chun Hang AU, Wai Sing CHAN, Ho Yin LAM, Dona N. HO, Simon Y.M. LAM, Jonpaul S.T. ZEE, Tsun Leung CHAN, Edmond S.K. MA
EPI_ISL_498226 EPI_ISL_498227, EPI_ISL_498228	LIC  National Institute of Laboratory Medicine and Referral Center	LIC Genomic Research Lab, BCSIR	LIC Shahina Akter, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Saddam
			Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
			ISL 498240, EPI ISL 498241, EPI ISL 498242, EPI ISL 498243, EPI ISL 498244, EPI ISL 498246, EPI ISL 498246, EPI ISL 498247, EPI ISL 498248, EPI ISL 498249, EPI ISL 498250, EPI ISL 498250, EPI ISL 498252
see above EPI_ISL_498253, EPI_ISL_498254	Institut Pasteur de Dakar National Institute of Laboratory Medicine and Referral Center	Institut Pasteur de Dakar Genomic Research Lab, BCSIR	Ndongo Dia, Moussa Moise Diagne, Mamadou Diop, Marie Henriette Dior Ndione, Mamadou Malado Jallow, Safietou Sankhe Mbengue, Ousmane Faye, Amadou Alpha Sall.  Tanjina Akhter Banu, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Saddam
			Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
EPI_ISL_498255, EPI_ISL_498256, EPI_ISL_498257, EPI_ISL_498258, EPI_ISL_498259, EPI_ISL_498260, EPI_ISL_498261	Hospital for Tropical Diseases	COVID-19 Network Investigations (CONI) Alliance	Elizabeth Batty, Nantarat Chantawat, Wasun Chantratita, Thanat Chookajorn, Stefan Fernandez, Angkana Huang, Weena Janwitthayanan, Akaniti Jittmittraphap, Anthony R. Jones, Khajohn Joonsalak, Chonticha Klungtong, Theerarat Kochakarn, Namfon Kotanan, Krittikorn Kumpornsin, Pornsawan Leuangwutiwong, Wudichai Manasatienki, Jihakhbhom Panthan, Ekawat Pasomsub, Kingkan Rakmanee, Insee Sensorn, Jinjira Thaipadungpanit, Arporn Wangwiwatsin, Treewat Watthanachockchai
EPI_ISL_498262, EPI_ISL_498263, EPI_ISL_498264, EPI_ISL_498265, EPI_ISL_498266	Ramathibodi Hospital	COVID-19 Network Investigations (CONI) Alliance	Elizabeth Batty, Wasun Chantratita, Thanat Chookajorn, Stefan Fernandez, Angkana Huang, Anthony R. Jones, Khajohn Joonsalak, Chonticha Klungtong, Theerarat Kochakarn, Namfon Kotanan, Krittikorn Kumpomsin, Wudtichai Manasatienkij, Bhakbhoom Panthan, Ekawat Pasomsub, Kingkan Rakmanee, Insee Sensorn, Janjira Thaipadungpanit, Arporn Wangwiwatsin, Treewat Watthanachockchai
EPI_ISL_498267, EPI_ISL_498268	National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR	Barna Goswami, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Iffat Jahan, Md. Saddam Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
EPI_ISL_498269, EPI_ISL_498270, EPI_ISL_498271	Department of Microbiology, The University of Hong Kong	Department of Microbiology, The University of Hong Kong	Kelvin K.W. To, Kwok-Yung Yuen
EPI_ISL_498272, EPI_ISL_498273	National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR	Iffat Jahan, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Md. Saddam Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
EPI_ISL_498274, EPI_ISL_498417	National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR	Tasnim Nafisa, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Aktier Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Sadam Hossain, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Shekh Md. Selim Ah Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
EPI_ISL_498418, EPI_ISL_498419	National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR	Md. Maruf Ahmed Molla, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Saddam Hossain, Tasnim Nafisa, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
EPI_ISL_498466, EPI_ISL_498467	National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR	Mahmuda Yeasmin, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Saddam Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
EPI ISL 498492, EPI ISL 498493, EPI ISL 498494, E EPI ISL 498516, EPI ISL 498517, EPI ISL 498518, E	EPI_ISL_498495, EPI_ISL_498496, EPI_ISL_498497, EPI_ISL_498498,	EPI ISL 498499, EPI ISL 498500, EPI ISL 498501, EPI ISL 498502, EPI EPI ISL 498523, EPI ISL 498524, EPI ISL 498525, EPI ISL 498526, EPI	ISL_498479, EPI_ISL_498480, EPI_ISL_498481, EPI_ISL_498482, EPI_ISL_498483, EPI_ISL_498484, EPI_ISL_498485, EPI_ISL_498486, EPI_ISL_498487, EPI_ISL_498488, EPI_ISL_498499, EPI_ISL_498490, EPI_ISL_498503, EPI_ISL_498504, EPI_ISL_498505, EPI_ISL_498507, EPI_ISL_498508, EPI_ISL_498509, EPI_ISL_498510, EPI_ISL_498511, EPI_ISL_498513, EP
see above	ACT Pathology	Schwessinger Lab	Ashley Jones, Benjamin Schwessinger, Robert Lanfear, Robyn N Hall, Megan McDonald, Ming-Dao Chia, Kevin Murray, Craig Kennedy, Karina Kennedy
EPI_ISL_498549, EPI_ISL_498550	National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR	Asish Kumar Ghosh, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Saddam Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan
EPI_ISL_498551, EPI_ISL_498552, EPI_ISL_498554, EPI_ISL_498556	Lebanese American University	Lebanese American University	Abi Habib,W., Abdallah,J., El Shesheny,R., Mokhbat,J., Webby,R.J., Goldstein,J. and Kayali,G.
EPI_ISL_498558, EPI_ISL_498559, EPI_ISL_498560, EPI_ISL_498561	Laboratory of Molecular Virology International Center for Genetic Engineering and Biotechnology (ICGEB)	ARGO Open Lab Platform for Genome Sequencing	Licastro D, Rajasekharan S, Dal Monego S, Segat L, D'Agaro P, Marcello A
EPI_ISL_498562	Laboratory of Molecular Virology International Center for Genetic Engineering and Biotechnology (ICGEB)	ARGO Open Lab Platform for Genome Sequencing	Licastro D, Rajasekharan S, Dal Monego S, Segat L, D'Agaro P, Marcello A
EPI_ISL_498563	Laboratory of Molecular Virology International Center for Genetic Engineering and Biotechnology (ICGEB)	ARGO Open Lab Platform for Genome Sequencing	Licastro D, Rajasekharan S, Dal Monego S, Segat L, D'Agaro P, Marcello A
EPI ISL 498564, EPI ISL 498565, EPI ISL 498565, EPI ISL 498566, EPI ISL 498566, EPI ISL 498566, EPI ISL 498576, EPI ISL 498577, EPI ISL 498577, EPI ISL 498577, EPI ISL 498587, EPI ISL 498587, EPI ISL 498578, EPI ISL 498578, EPI ISL 498578, EPI ISL 498578, EPI ISL 498589, EPI ISL 498589, EPI ISL 498599, EPI ISL 498609, EPI ISL 498609, EPI ISL 498609, EPI ISL 498699, EPI ISL 498699			

Diseases EPI\_ISL\_498619, EPI\_ISL\_498620, EPI\_ISL\_498621, EPI\_ISL\_498622, EPI\_ISL\_498623, EPI\_ISL\_498624, Viollier AG Department of Biosystems Science and Engineering, ETH Zürich Christian Beisel, Sarah Nadeau, Ivan Topolsky, Pedro Ferreira, Philipp Jablonski, Susana Posada-Céspedes, Tobias Schär, Ina Nissen, Natascha Santacroce, Elodie Burcklen, Christiane Beckmann, Maurice Redondo, Olivier Kohel, Christoph Noppen, Sophie Seidel, Noemie Santamaria de Souza, Niko Beerenwinkel, Tania Stadle

EPI ISL 498625, EPI ISL 498626, EPI ISL 498627 FPI ISI 498628, FPI ISI 498629 Department of Clinical Microbiology GIGA Medical Genomics Keith Durkin Maria Artesi Sahastian Rontoms, Panhael Boroux, Cécile Maey, Avalle Chaslain, Céline Fombellida-Lonez, Dierrette Malin, Maria-Dierre Hayette, Vincent Rours

EPI ISL 498630, EPI ISL 498631, EPI ISL 498631, EPI ISL 498632, EPI ISL 498632, EPI ISL 498633, EPI ISL 498633, EPI ISL 498635, EPI ISL 4986365, EPI ISL 4986365, EPI ISL 498653, EPI ISL 498653, EPI ISL 498653, EPI ISL 498649, EPI ISL 498659, EPI ISL 498659, EPI ISL 498659, EPI ISL 498659, EPI ISL 498649, EPI ISL 498659, EPI ISL 498649, EPI ISL 498659, EPI ISL 4986 EPI ISL 498655, EPI ISL 498656, EPI ISL 498656, EPI ISL 498657, EPI ISL 498657, EPI ISL 498667, EPI ISL 498678, EPI ISL 498667, EPI ISL 498667, EPI ISL 498667, EPI ISL 498667, EPI ISL 498677, EPI ISL 498678, EPI ISL 498667, EPI ISL 498667, EPI ISL 498667, EPI ISL 498667, EPI ISL 498677, EPI ISL 498677 EPI ISL 498679, EPI ISL 498680, EPI ISL 498681, EPI ISL 498682, EPI ISL 498683, EPI ISL 498685, EPI ISL 498685, EPI ISL 498686, EPI ISL 498687, EPI ISL 498688, EPI ISL 498689, EPI ISL 498680, EPI ISL 498680

see above Utah Public Health Laboratory Utah Public Health Laboratory Heidi Butz, Frin Young, Kelly Oakeson

EPI ISL 498691, EPI ISL 498692, EPI ISL 498693, National Institute for Viral Disease Control and Prevention, China National Institute for Viral Disease Control and Prevention, China CDC Xiang Zhao,LingLing Mao,Yao Meng,Zhixiao Chen,Yuchao Wu,Yong ZhangBo ZhijianJiangun Zhang,Yang Song,Dayan Wang,WenQing YaoWenbo Xu EPI ISL 498694

EPI ISL 498695, EPI ISL 498696, EPI ISL 498697, EPI ISL 498697, EPI ISL 498697, EPI ISL 498709, EPI ISL 498709, EPI ISL 498703, EPI ISL 498703, EPI ISL 498703, EPI ISL 498704, EPI ISL 498705, EPI ISL 498705, EPI ISL 498705, EPI ISL 498726, EPI ISL 498727, EPI ISL 498729, EPI ISL 498729, EPI ISL 498729, EPI ISL 498727, EPI ISL 498739, EPI ISL 498739 EPI\_ISL\_498743, EPI\_ISL\_498744, EPI\_ISL\_498745, EPI\_ISL\_498746, EPI\_ISL\_498747

see above	Quest Diagnostics	Quest Diagnostics	Rosenthal, S.H., Gerasimova, A., Kagan, R.M. and Owen, R.
EPI_ISL_498748, EPI_ISL_498749, EPI_ISL_498750	Pathology West - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498751	South Eastern Area Laboratory Services (SEALS)	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498761, EPI_ISL_498762	Pathology West - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498763, EPI_ISL_498764	Sydney South West Pathology Service (SSWPS) - Liverpool Hospital - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498765	Sydney South West Pathology Service (SSWPS) - Concord Repatriation General Hospital - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498766, EPI_ISL_498767	Pathology West - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498768	South Eastern Area Laboratory Services (SEALS)	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498769, EPI_ISL_498770, EPI_ISL_498771, EPI_ISL_498772	Laverty Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498773	Douglass Hanly Moir Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498774, EPI_ISL_498775	Histopath	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498776, EPI_ISL_498777	Pathology West - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498778	Sydney South West Pathology Service (SSWPS) - Liverpool Hospital - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498779, EPI_ISL_498780	Pathology West - NSW Health Pathology	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
EPI_ISL_498781, EPI_ISL_498782	Sydney South West Pathology Service (SSWPS) - Liverpool Hospital	NSW Health Pathology - Institute of Clinical Pathology and Medical	CIDM-PH et al.

- NSW Health Pathology Research: Westmead Hospital: University of Sydney EPI ISL 498783, EPI ISL 498784, EPI ISL 498785. National Institute of Laboratory Medicine and Referral Center Genomic Research Lab. BCSIR Md. Saddam Hossain, Abu Saveed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Taniina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat EPI ISL 498786, EPI ISL 498787, EPI ISL 498788. Jahan, Tasnim Nafisa, Md, Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md, Selim Al Din, Utoal Chandra Ray, Salek Ahmed Sajib, Md, Salim Khan EPI ISL 498789, EPI ISL 498790, EPI ISL 498791

EPI ISL 498793, EPI ISL 498794, EPI ISL 498795, EPI ISL 498796, EPI ISL 498797, EPI ISL 498800, EPI ISL 498801, EPI ISL 498802, EPI ISL 498803, EPI ISL 498804, EPI ISL 498805, EPI ISL 498805, EPI ISL 498806, EPI ISL 498805, EPI ISL 498806, EPI ISL 498807, EPI ISL 498806, EPI ISL 498806, EPI ISL 498806, EPI ISL 498807, EPI ISL 498806, EPI ISL 498806

EPI ISL 498792

see above

see above

EPI ISL 499472

see above National Institute of Laboratory Medicine and Referral Center Genomic Research Lab. BCSIR Md. Murshed Hasan Sarkar, Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Barna Goswami, Iffat Jahan, Md. Saddam Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan

EPI ISL 498808, EPI ISL 498809, EPI ISL 498811, EPI ISL 498814, EPI ISL 498815, EPI ISL 498816, EPI ISL 498817, EPI ISL 498818, EPI ISL 498830, EPI ISL 498892, EPI ISL 498893, EPI ISL 4988932, EPI ISL 498817, EPI ISL 498818, EPI ISL 498818, EPI ISL 498819, EPI ISL 49881

Genomic Research Lab, BCSIR Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Saddam National Institute of Laboratory Medicine and Referral Center see above Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumar Ghosh, A. K. M. Shamsuzzaman, Sheikh Md. Selim Al Din, Utpal Chandra Ray, Salek Ahmed Sajib, Md. Salim Khan EPI ISL 499042 National Institute for Biological Standards and Control (NIBSC) National Institute for Biological Standards and Control (NIBSC) Javier Martin, Dimitra Klapsa, Thomas Wilton

Instituto de Virologia "Dr. I. M. Vanella". Facultad de Ciencias EPI ISL 499083 Laboratorio de Virología, Hospital de Niños Ricardo Gutiérrez, CABA. Sandra Gallego, Brenda Konigheim, Sebastian Blanco, Lorena Spinsanti, Javier Aquilar, Adrian Diaz, Gonzalo Castro, Gabriela Barbas, Mercedes Nabaes, Stephanie Goya, Monica Natale, Silvina Lusso, Mariana Medicas, Universidad Nacional de Cordoba, Laboratorio Central de Argentina. Viegas. la Provincia de Cordoba, Argentina. Ministerio de Salud de la

EPI\_ISL\_499266, EPI\_ISL\_499267, EPI\_ISL\_499268, Queens Medical Centre, Clinical Microbiology Department / COVID-19 Genomics UK (COG-UK) Consortium Gemma Clark, Wendy Smith, Manjinder Khakh, Vicki M Fleming, Michelle M Lister, Hannah Howson-Wells, Jonathan Ball, Patrick McClure, Joseph Chappell, Theocharis Tsoleridis, Nadine Holmes, Matthew Carlisle, EPI\_ISL\_499269 DeepSeg Nottingham Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose

EPI ISL 499270, EPI ISL 499271, EPI ISL 499271, EPI ISL 499273, EPI ISL 499283, EPI ISL 499284, EPI ISL 499283, EPI ISL 499287, EPI ISL 499288, EPI ISL 499288 EPI ISL 499294, EPI ISL 499295, EPI ISL 499295, EPI ISL 499295, EPI ISL 499206, EPI ISL 499300, EPI ISL 499300 EPŢSL\_499318, EPŢSL\_499319, EPŢSL\_499320, EPŢSL\_499321, EPŢSL\_499322, EPŢSL\_499323, EPŢSL\_499324, EPŢSL\_499325, EPŢSL\_499326, EPŢSL\_499327, EPŢSL\_499328, EPŢSL\_499329

Translational Research Laboratory, Portsmouth Hospitals NHS Trust

COVID-19 Genomics UK (COG-UK) Consortium

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EPI ISL 499330, EPI ISL 499331, EPI ISL 499331, EPI ISL 499332, EPI ISL 499333, EPI ISL 499333, EPI ISL 499334, EPI ISL 499334, EPI ISL 499346, EPI ISL 499347, EPI ISL 499348, EPI ISL 499349, EPI ISL 499349 Virology Department, Sheffield Teaching Hospitals NHS COVID-19 Genomics UK (COG-UK) Consortium Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angval, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew see above

Foundation Trust/Department of Infection, Immunity a Wyles, Benjamin Lindsey, Mehmet Yayuz, Mohammad Raza, Carjad Evans Cardiovascular Disease. The Medical School, University of Sheffield EPI ISL 499352, EPI ISL 499353, EPI ISL 499354 West of Scotland Specialist Virology Centre, NHSGGC / MRC-COVID-19 Genomics UK (COG-UK) Consortium Ana da Silva Filipe, Natasha Johnson, Kathy Smollett, Daniel Mair, Stephen Carmichael, Lily Tong, Jenna Nichols, Elihu Aranday-Cortes, Kirstyn Brunker, Yasmin Parr, Alice Broos, Kyriaki Nomikou; Sarah McDonald, University of Glasgow Centre for Virus Research Marc Niebel, Patawee Asamaphan; Richard Orton, Joseph Hughes, Sreenu Vattipally, David L Robertson; Alasdair MacLean, Rory Gunson; Kathy Li, Natasha Jesudason, Rajiv Shah, James Shepherd, Antonia Ho,

EPI\_ISL\_499355, EPI\_ISL\_499356, EPI\_ISL\_499356, EPI\_ISL\_499357, EPI\_ISL\_499357, EPI\_ISL\_499358, EPI\_ISL\_499373, EPI\_ISL\_499373, EPI\_ISL\_499373, EPI\_ISL\_499373, EPI\_ISL\_499373, EPI\_ISL\_499373, EPI\_ISL\_499373, EPI\_ISL\_499374, EPI\_ISL\_499374, EPI\_ISL\_499377, EPI\_ISL\_499377 EPI ISL 499379, EPI ISL 499370, EPI ISL 499380, EPI ISL 499381, EPI ISL 499382, EPI ISL 499383, EPI ISL 499384, EPI ISL 499385, EPI ISL 499386, EPI ISL 499387, EPI ISL 499389, EPI ISL 499390, EPI ISL 499393, EPI ISL 499393, EPI ISL 499393, EPI ISL 499395, EPI ISL 499386, EPI ISL 499386, EPI ISL 499388, EPI ISL 499389, EPI ISL 499393, EPI ISL 499389, EPI ISL 499389

see above Originating lab: Wales Specialist Virology Centre Sequencing lab: COVID-19 Genomics UK (COG-UK) Consortium Catherine Moore, Johnathan Evans, Laura Gifford, Malorie Perry, Simon Cottrell, Angela Marchbank, Alec Birchley, Alexander Adams, Amy Gaskin, Bree Gatica-Wilcox, Jason Coombes, Joel Southgate, Lauren Pathogen Genomics Unit Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor

EPI\_ISL\_499398, EPI\_ISL\_499399, EPI\_ISL\_499399, EPI\_ISL\_499400, EPI\_ISL\_4994015, EPI\_ISL\_4994015, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499408, EPI\_ISL\_499407, EPI\_ISL\_499417, EPI\_ISL\_499417, EPI\_ISL\_499415, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499417, EPI\_ISL\_499417, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499417, EPI\_ISL\_499417, EPI\_ISL\_499417, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499407, EPI\_ISL\_499417, EPI\_ISL\_4994 EP ISL 499422, EP ISL 499423, EP ISL 499423, EP ISL 499424, EP ISL 499424, EP ISL 499425, EP ISL 499425, EP ISL 499426, EP ISL 499426, EP ISL 499426, EP ISL 499427, EP ISL 499427, EP ISL 499427, EP ISL 499430, EP ISL 499434, EP ISL 499457, EP ISL Wales Specialist Virology Centre Sequencing lab: Pathoge COVID-19 Genomics UK (COG-UK) Consortium Catherine Moore, Johnathan Evans, Laura Gifford, Malorie Perry, Simon Cottrell, Angela Marchbank, Alec Birchley, Alexander Adams, Amy Gaskin, Bree Gatica-Wilcox, Jason Coombes, Joel Southgate, Laurer

Genomics Unit Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor

EPI ISL 499460, EPI\_ISL 499461, EPI\_ISL 499462, EPI ISL 499463, EPI\_ISL 499464, EPI\_ISL 499465, EPI\_ISL 499466, EPI\_ISL 499467, EPI\_ISL 499468, EPI\_ISL 499469, EPI\_ISL 499469

Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, lenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateiu, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, Iames P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead COVID-19 Genomics UK (COG-UK) Consortium

Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela

Angela Beckett. Yann Bourgeois, Garry Scarlett, Sharon Glavsher, Scott Elliott, Kelly Bicknell, Robert Impey, Allyson Lloyd, Sarah Wyllie, Ethan Butcher, Angon Chauhan, Samuel Robson

Emma Thomson

Liverpool Clinical Laboratories

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EPI_ISL_499473	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Randle, Trevor Lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499474	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499475, EPI_ISL_499476, EPI_ISL_499477	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Chariotte Nelson, Elaine O Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Prandle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499478	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499479	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Lystin O'Grady
EPI_ISL_499480, EPI_ISL_499481	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499482	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499483, EPI_ISL_499484	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499485	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499486, EPI_ISL_499487, EPI_ISL_499488, EPI_ISL_499489	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499490	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Waln, Mark Webber, Andrew J. Page, Lystin O'Grady
EPI_ISL_499491, EPI_ISL_499492	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499493, EPI_ISL_499494	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499495	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Waln, Mark Webber, Andrew J. Page, Lystin O'Grady
EPI_ISL_499496, EPI_ISL_499497, EPI_ISL_499498, EPI_ISL_499499, EPI_ISL_499500, EPI_ISL_499501	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499502, EPI_ISL_499503, EPI_ISL_499504, EPI_ISL_499505, EPI_ISL_499506, EPI_ISL_499507, EPI_ISL_499508	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499509	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499510	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitalis NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499511, EPI_ISL_499512, EPI_ISL_499513, EPI_ISL_499514	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499515	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitalis NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
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EPI_ISL_499540, EPI_ISL_499541, EPI_ISL_499542, E see above	Everpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Prandle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499546, EPI_ISL_499547, EPI_ISL_499548, E	PI_ISL_499549, EPI_ISL_499550, EPI_ISL_499551, EPI_ISL_499552, EPI_ISL	_499553, EPI_ISL_499554, EPI_ISL_499555, EPI_ISL_499556	
see above	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499557	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N P Randle, Tervor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499558, EPI_ISL_499559, EPI_ISL_499560, EPI_ISL_499561	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499562	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Grady

EPI_ISL_499563	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindelis, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499564, EPI_ISL_499565, EPI_ISL_499566, EPI_ISL_499567		COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499568	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499569, EPI_ISL_499570, EPI_ISL_499571	•	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrica-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Varmos, Joanne Watts, Mark Whitehead
EPI_ISL_499572	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499573, EPI_ISL_499574, EPI_ISL_499575, E	EPI_ISL_499576, EPI_ISL_499577, EPI_ISL_499578, EPI_ISL_499579, EPI_ISL_4	499580, EPI_ISL_499581, EPI_ISL_499582, EPI_ISL_499583,	, EPI ISL 499584, EPI_ISL_499585, EPI_ISL_499586
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrica-Randal, Lucillahow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawil, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499587	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499588	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Grady
EPI_ISL_499589, EPI_ISL_499590	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentiey, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrica-Randal, Lucillahow, N.P Randle, Trevor lan Robinson, Parul Sharma, Ghada T Shawil, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499591, EPI_ISL_499592	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gliroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Grady
EPI_ISL_499593, EPI_ISL_499594	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrica-Randal, Lucillabow, N. P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499595, EPI_ISL_499596, EPI_ISL_499597, EPI_ISL_499598	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499599	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gliroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'GraQ'.
EPI_ISL_499600	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Varnos, Joanne Watts, Mark Whitehead
EPI_ISL_499601	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasis Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Edg., Dustin O'Grage, Justin O'Grage, Jus
EPI_ISL_499602	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499603	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Grady.
EPI_ISL_499604, EPI_ISL_499605	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucilhabow, N.P. Randle, Trevor lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499606	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499607, EPI_ISL_499608	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N. PR andle, Trevor lan Robinson, Parul Sharma, Ghada T Shawil, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499609, EPI_ISL_499610	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
F.PI ISL 499611, EPI_ISL_499612, EPI_ISL_499613, E	EPI_ISL_499614, EPI_ISL_499615, EPI_ISL_499616, EPI_ISL_499617, EPI_ISL_4	499618. EPI ISL 499619, EPI_ISL_499620, EPI_ISL_499621,	. FPI ISI 499622
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Glimore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, LLuu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N. PR andle, Trevor lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499623	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Grady
EPI_ISL_499624, EPI_ISL_499625	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Chariotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N. P. Randle, Trevor lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499626	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499627, EPI_ISL_499628, EPI_ISL_499629,		COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela

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Luke W Meredith, M. Estée Török, Myra Hosmillo, William L. Hamilton, Martin D. Curran, Theresa Feltwell, Grant Hall, Anna Yakovleva, Fahad A Khokhar, Charlotte J. Houldcroft, Laura G Caller, Aminu S. Jahun,

EPI_ISL_499630			Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Nell Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499631	Quadram Institute Bioscience	COVID-19 Genomics UK (COG-UK) Consortium	Dave J. Baker, Gemma L. Kay, Alp Aydin, Thanh Le-Viet, Steven Rudder, Ana P. Tedim, Anastasia Kolyva, Maria Diaz, Leonardo de Oliveira Martins, Nabil-Fareed Alikhan, Lizzie Meadows, Rachael Stanley, Ngozi Elumogo, Muhammed Yasir, Nicholas M. Thomson, Alexander J Trotter, Rachel Gilroy, Samuel Bloomfeld, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Grady
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			ISL 499667, EPI ISL 499668, EPI ISL 499669, EPI ISL 499670, EPI ISL 499671, EPI ISL 499672, EPI ISL 499673, EPI ISL 499674, EPI ISL 499675, EPI ISL 499676, EPI ISL 499677, EPI ISL 499678, EPI ISL 499679,
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ISL_499704, EPI_ISL_499705, EPI_ISL_499706, E	EPI_ISL_499707, EPI_ISL_499708, EPI_ISL_499709, EPI_ISL_499710, E	EPI_ISL_499711, EPI_ISL_499712, EPI_ISL_499713, EPI_ISL_499714, EPI_I	ISL 499715, EPI ISL 499716, EPI ISL 499717, EPI ISL 499718, EPI ISL 499719, EPI ISL 499720, EPI ISL 499721, EPI ISL 499722, EPI ISL 499723, EPI ISL 499724, EPI ISL 499725, EPI ISL 499726, EPI ISL 499727,
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EPI_ISL_499776			
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
	PI_ISL_499780, EPI_ISL_499781, EPI_ISL_499782, EPI_ISL_499783, EPI_ISI PI_ISL_499804, EPI_ISL_499805, EPI_ISL_499806, EPI_ISL_499807	L_499784, EPI_ISL_499785, EPI_ISL_499786, EPI_ISL_499787,	EPI_ISL_499788, EPI_ISL_499789, EPI_ISL_499790, EPI_ISL_499791, EPI_ISL_499792, EPI_ISL_499793, EPI_ISL_499794, EPI_ISL_499795, EPI_ISL_499796, EPI_ISL_499797, EPI_ISL_499798, EPI_ISL_499799, EPI_ISL_499800,
see above	Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust	COVID-19 Genomics UK (COG-UK) Consortium	Darren L Smith, Andrew Nelson, Matthew Bashton, Greg R Young, Joshua Loh, John Allan, Mohammad A Tariq, Giles S Holt, Gary Black, Wen C Yew, Lynn Dover, Paul Baker, Steve Liggett, Sarah Essex, Jane Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499808, EPI_ISL_499809	Queens Medical Centre, Clinical Microbiology Department / DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Gemma Clark, Wendy Smith, Manjinder Khakh, Vicki M Fleming, Michelle M Lister, Hannah Howson-Wells, Jonathan Ball, Patrick McClure, Joseph Chappell, Theocharis Tsoleridis, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499810	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499811, EPI_ISL_499812, EPI_ISL_499813, EP	PLISL_499814, EPLISL_499815, EPLISL_499816, EPLISL_499817, EPLISI	L_499818, EPI_ISL_499819, EPI_ISL_499820, EPI_ISL_499821,	EPI ISL 499822, EPI ISL 499823, EPI ISL 499824, EPI ISL 499825, EPI ISL 499825, EPI ISL 499827
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499828, EPI_ISL_499829	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499830	University of Birmingham	COVID-19 Genomics UK (COG-UK) Consortium	Institute of Microbiology, University of Birmingham: Claire McMurray, Joanne Stockton, Samuel Nicholls, Radoslaw Poplawski, Will Rowe, Josh Quick, Nicholas Loman. University of Birmingham Testing Laboratory: Celina M Whalley, Andrew Bosworth, Charlotte Poxon, Kasun Wanigasooriya, Oliver Pickles, Mike Kidd, Alex Richiter, Andrew D Beggs PHE Heartlands Lab: Husam Osman, Andrew Bosworth. Queen Elizabeth Hospital: Anna Casey
EPI_ISL_499831, EPI_ISL_499832, EPI_ISL_499833, EPI_ISL_499834, EPI_ISL_499835, EPI_ISL_499836, EPI_ISL_499837, EPI_ISL_499838	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499839	University of Birmingham	COVID-19 Genomics UK (COG-UK) Consortium	Institute of Microbiology, University of Birmingham: Claire McMurray, Joanne Stockton, Samuel Nicholls, Radoslaw Poplawski, Will Rowe, Josh Quick, Nicholas Loman. University of Birmingham Testing Laboratory: Celina M Whalley, Andrew Bosworth, Charlotte Poxon, Kasun Wanigasooriya, Oliver Pickles, Mike Kidd, Alex Richter, Andrew D Beggs PHE Heartlands Lab: Husam Osman, Andrew Bosworth. Queen Elizabeth Hospital: Anna Casey
EPI_ISL_499840, EPI_ISL_499841, EPI_ISL_499842, EP	PLISL_499843, EPLISL_499844, EPLISL_499845, EPLISL_499846, EPLISL	L_499847, EPI_ISL_499848, EPI_ISL_499849, EPI_ISL_499850	
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499851, EPI_ISL_499852	University of Birmingham	COVID-19 Genomics UK (COG-UK) Consortium	Institute of Microbiology, University of Birmingham: Claire McMurray, Joanne Stockton, Samuel Nicholls, Radoslaw Poplawski, Will Rowe, Josh Quick, Nicholas Loman. University of Birmingham Testing Laboratory: Celina M Whalley, Andrew Bosworth, Charlotte Poxon, Kasun Wanigasooriya, Oliver Pickles, Mike Kidd, Alex Richter, Andrew D Beggs PHE Heartlands Lab: Husam Osman, Andrew Bosworth. Queen Elizabeth Hospital: Anna Casey
EPI_ISL_499853	Department of Pathology, University of Cambridge	COVID-19 Genomics UK (COG-UK) Consortium	Luke W Meredith, M. Estée Török, Myra Hosmillo, William L. Hamilton, Martin D. Curran, Theresa Feltwell, Grant Hall, Anna Yakovleva, Fahad A Khokhar, Charlotte J. Houldcroft, Laura G Caller, Aminu S. Jahun, Sarah L. Caddy, Yasmin Chaudhry, Malte Pinckert, Ian Goodfellow
EPI_ISL_499854	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499855	Department of Pathology, University of Cambridge	COVID-19 Genomics UK (COG-UK) Consortium	Luke W Meredith, M. Estée Török, Myra Hosmillo, William L. Hamilton, Martin D. Curran, Theresa Feltwell, Grant Hall, Anna Yakovleva, Fahad A Khokhar, Charlotte J. Houldcroft, Laura G Caller, Aminu S. Jahun, Sarah L. Caddy, Yasmin Chaudhry, Malte Pinckert, Ian Goodfellow
EPI_ISL_499856, EPI_ISL_499857	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499858	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499859, EPI_ISL_499860	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499861	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499862, EPI_ISL_499863, EPI_ISL_499864, EPI_ISL_499865, EPI_ISL_499866, EPI_ISL_499867, EPI_ISL_499868	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499869	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499870, EPI_ISL_499871, EPI_ISL_499872, EP	PI_ISL_499873, EPI_ISL_499874, EPI_ISL_499875, EPI_ISL_499876, EPI_ISI	L_499877, EPI_ISL_499878, EPI_ISL_499879, EPI_ISL_499880,	EPI_ISL_499881, EPI_ISL_499882, EPI_ISL_499883, EPI_ISL_499884, EPI_ISL_499885, EPI_ISL_499886, EPI_ISL_499886, EPI_ISL_499888, EPI_ISL_499899, EPI_ISL_499890, EPI_ISL_499891, EPI_ISL_499892, EPI_ISL_499893
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel Garcia-Dorival, Matthew Gemmell, Alessandro Gerdad, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Ituriza-Comara, James Johnson, Lluu, Jenfer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Pandle, Trevor lan Robinson, Parul Sharma, Ghada T Shawii, James P Stewart, Neil Swainston,

Ecaterina Vamos, Joanne Watts, Mark Whitehead EPI\_ISL\_499894, EPI\_ISL\_499895 University Hospitals Of Leicester NHS Trust and DeepSeq COVID-19 Genomics UK (COG-UK) Consortium Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria

Nottingham Wright, Matthew Loose EPI\_ISL\_499896 Liverpool Clinical Laboratories COVID-19 Genomics UK (COG-UK) Consortium Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston,

Ecaterina Vamos, Joanne Watts, Mark Whitehead Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose EPI\_ISL\_499897 University Hospitals Of Leicester NHS Trust and DeepSeq COVID-19 Genomics UK (COG-UK) Consortium Nottingham

EPI\_ISL\_499898, EPI\_ISL\_499899, EPI\_ISL\_499900, EPI\_ISL\_499901, EPI\_ISL\_499902, EPI\_ISL\_499903, Liverpool Clinical Laboratories COVID-19 Genomics UK (COG-UK) Consortium Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerado, RYR Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Milen Lituriza-Gomana, James Johnson, LLuu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawil, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead EPI ISL 499904

COVID-19 Genomics UK (COG-UK) Consortium

EPI_ISL_499906, EPI_ISL_499907	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N. P. Randle, Trevor lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499908	Department of Pathology, University of Cambridge	COVID-19 Genomics UK (COG-UK) Consortium	Luke W Meredith, M. Estée Török, Myra Hosmillo, William L. Hamilton, Martin D. Curran, Theresa Feltwell, Grant Hall, Anna Yakovleva, Fahad A Khokhar, Charlotte J. Houldcroft, Laura G Caller, Aminu S. Jahun, Sarah L. Caddy, Yasmin Chaudhry, Malte Pinckert, Ian Goodfellow
EPI_ISL_499909	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainban, N. PRandle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499910	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499911	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N. P. Randle, Trevor lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499912, EPI_ISL_499913	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499914, EPI_ISL_499915, EPI_ISL_499915, EPI_ISL_499916, EPI_ISL_499917, EPI_ISL_49917,			
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Varmos, Joanne Watts, Mark Whitehead
EPI_ISL_499933	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_SL_499934, EPI_SL_499935, EPI_SL_499936, EPI_SL_499937, EPI_SL_499937, EPI_SL_499937, EPI_SL_499939, EPI_SL_499940, EPI_SL_499940, EPI_SL_499947, EPI_SL_499945, EPI_SL_499946			
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal , Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499947	University of Birmingham	COVID-19 Genomics UK (COG-UK) Consortium	Institute of Microbiology, University of Birmingham: Claire McMurray, Joanne Stockton, Samuel Nicholls, Radoslaw Poplawski, Will Rowe, Josh Quick, Nicholas Loman. University of Birmingham Testing Laboratory:  Celina M Whalley, Andrew Bosworth, Charlotte Poxon, Kasun Wanigasooriya, Oliver Pickles, Mike Kidd, Alex Richter, Andrew D Beggs PHE Heartlands Lab: Husam Osman, Andrew Bosworth. Queen Elizabeth Hospital: Anna Casey
EPI_ISL_499948, EPI_ISL_499949	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucillahow, N.P. Randle, Tevor lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499950	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_499951, EPI_ISL_499952, EPI_ISL_499953, E	PI_ISL_499954, EPI_ISL_499955, EPI_ISL_499956, EPI_ISL_499957, EPI_IS	L_499958, EPI_ISL_499959, EPI_ISL_499960, EPI_ISL_499961, E	EPI_ISL_499962, EPI_ISL_499963, EPI_ISL_499964, EPI_ISL_499965
see above	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Glimore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499966	Department of Pathology, University of Cambridge	COVID-19 Genomics UK (COG-UK) Consortium	Luke W Meredith, M. Estée Tőrők, Myra Hosmillo, William L. Hamilton, Martin D. Curran, Theresa Feltwell, Grant Hall, Anna Yakovleva, Fahad A Khokhar, Charlotte J. Houldcroft, Laura G Caller, Aminu S. Jahun, Sarah L. Caddy, Yasmin Chaudhry, Malte Pinckert, Ian Goodfellow
EPI_ISL_499967	Liverpool Clinical Laboratories	COVID-19 Genomics UK (COG-UK) Consortium	Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezaihi, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Gemmell, Alessandro Gerada, PKF Gilmore, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Iturriza-Gomara, James Johnson, Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
EPI_ISL_499968, EPI_ISL_499969, EPI_ISL_499970, EPI_ISL_499971, EPI_ISL_499972, EPI_ISL_499973	Department of Pathology, University of Cambridge	COVID-19 Genomics UK (COG-UK) Consortium	Luke W Meredith, M. Estée Török, Myra Hosmillo, William L. Hamilton, Martin D. Curran, Theresa Feltwell, Grant Hall, Anna Yakovleva, Fahad A Khokhar, Charlotte J. Houldcroft, Laura G Caller, Aminu S. Jahun, Sarah L. Caddy, Yasmin Chaudhry, Malte Pinckert, Ian Goodfellow
EPI_ISL_499974, EPI_ISL_499975, EPI_ISL_499976, EPI_ISL_499977, EPI_ISL_499978, EPI_ISL_499979, EPI_ISL_499980, EPI_ISL_499981, EPI_ISL_499982, EPI_ISL_499983	University Hospitals Of Leicester NHS Trust and DeepSeq Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Patrick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI ISL_49998, EPI ISL_49998, EPI ISL_49998, EPI ISL_49998, EPI ISL_49998, EPI ISL_49999, EPI ISL_49999, EPI ISL_500003, EPI ISL_5000003, EPI ISL_500003, EPI ISL_50000			
EPI_ISL_500157, EPI_ISL_500158, EPI_ISL_500159	Complejo Hospitalario Universitario de Albacete	SeqCOVID-SPAIN consortium/IBV(CSIC)	Encarnacion Simarro Córdoba, Julia Lozano Serra, Lorena Robles Fonseca, Monica Parra Grandes, Caridad Sainz de Baranda Camino and SeqCOVID-SPAIN consortium
EPI_ISL_500160, EPI_ISL_500161	Hospital Universitario Virgen de las Nieves de Granada-SAS	SeqCOVID-SPAIN consortium/IBV(CSIC)	Mercedes Pérez Ruiz, Sara Sanbonmatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SeqCOVID-SPAIN consortium
EPI_ISL_500162	Hospital Clínico Universitario de Santiago de Compostela	SeqCOVID-SPAIN consortium/IBV(CSIC)	José Javier Costa Alcalde, Antonio Aguilera Guirao, Mª Luisa Pérez del Molino Bernal, Amparo Coira Nieto, Gema Barbeito Castiñeiras, Rocio Trastoy Pena and SeqCOVID-SPAIN consortium
EPI_ISL_500163, EPI_ISL_500164, EPI_ISL_500165	Hospital Universitario Virgen de las Nieves de Granada-SAS	SeqCOVID-SPAIN consortium/IBV(CSIC)	Mercedes Pérez Ruiz, Sara Sanbonmatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SegCOVID-SPAIN consortium
EPI_ISL_500166	Complejo Hospitalario Universitario de Albacete	SeqCOVID-SPAIN consortium/IBV(CSIC)	Encarnacion Simarro Córdoba, Julia Lozano Serra, Lorena Robles Fonseca, Monica Parra Grandes, Caridad Sainz de Baranda Camino and SeqCOVID-SPAIN consortium
EPI_ISL_500167	Hospital Clínico Universitario de Santiago de Compostela	SeqCOVID-SPAIN consortium/IBV(CSIC)	José Javier Costa Alcalde, Antonio Aguilera Guirao, Mª Luisa Pérez del Molino Bernal, Amparo Coira Nieto, Gema Barbeito Castiñeiras, Rocio Trastoy Pena and SeqCOVID-SPAIN consortium
EPI_SL_500168, EPI_SL_500170, EPI_SL_500171, EPI_SL_500171, EPI_SL_500173, EPI_SL			
see above EPI_ISL_500207	Hospital Universitario Virgen de las Nieves de Granada-SAS Complejo Hospitalario Universitario de Albacete	SeqCOVID-SPAIN consortium/IBV(CSIC) SeqCOVID-SPAIN consortium/IBV(CSIC)	Mercedes Pérez Ruiz, Sara Sanbonmatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SeqCOVID-SPAIN consortium Encarnacion Simarro Córdoba, Julia Lozano Serra, Lorena Robles Fonseca, Monica Parra Grandes, Caridad Sainz de Baranda Camino and SeqCOVID-SPAIN consortium
EPI_ISL_500207 EPI_ISL_500208	Hospital Universitario Virgen de las Nieves de Granada-SAS	SeqCOVID-SPAIN consortium/IBV(CSIC)	encariación simatro Cotodos, juita cizario seria, curetra koutes triniseca, mónica para e ariateis, cariada samiz de barianta caminio and sequevolv-system consortium Mercedes Pérez Ruíz, Sara Sanbonnatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Mari and Sequevolv-SPAIN consortium
EPI_ISL_500209	Hospital Clínico Universitario de Santiago de Compostela	SeqCOVID-SPAIN consortium/IBV(CSIC)	metricus retaz vinzi, sana sanuonintasu saniez, inene retursa volta, jose m. navanionen anu septovinzarian consoluturi José javier Costa Alcalde, Antonio Aguilera Guirao, M. Luisa Perez del Molino Bernal, Amparo Coira Nieto, Gema Barbelto Castiñeiras, Rocio Trastoy Pena and SeqCOVID-SPAIN consortium
EPI_ISL_500210, EPI_ISL_500211, EPI_ISL_500212, EPI_ISL_500213, EPI_ISL_500214, EPI_ISL_500215, EPI_ISL_500216, EPI_ISL_500217	Hospital Universitario Virgen de las Nieves de Granada-SAS	SeqCOVID-SPAIN consortium/IBV(CSIC)	Mercedes Pérez Ruiz, Sara Sanbonmatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SeqCOVID-SPAIN consortium
EPI_ISL_500218	Complejo Hospitalario Universitario de Albacete	SeqCOVID-SPAIN consortium/IBV(CSIC)	Encarnacion Simarro Córdoba, Julia Lozano Serra, Lorena Robles Fonseca , Monica Parra Grandes, Caridad Sainz de Baranda Camino and SeqCOVID-SPAIN consortium
EPI_ISL_500219	Hospital Clínico Universitario de Santiago de Compostela	SeqCOVID-SPAIN consortium/IBV(CSIC)	José Javier Costa Alcalde, Antonio Aguilera Guirao, M. Luisa Pérez del Molino Bernal, Amparo Coira Nieto, Gema Barbeito Castiñeiras, Rocio Trastoy Pena and SeqCOVID-SPAIN consortium
EPI_ISL_500220	Hospital Universitario Virgen de las Nieves de Granada-SAS	SeqCOVID-SPAIN consortium/IBV(CSIC)	Mercedes Pérez Ruiz, Sara Sanbonmatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SeqCOVID-SPAIN consortium
EPI_ISL_500221	Hospital Clínico Universitario de Santiago de Compostela	SeqCOVID-SPAIN consortium/IBV(CSIC)	José Javier Costa Alcalde, Antonio Aguilera Guirao, Mª Luisa Pérez del Molino Bernal, Amparo Coira Nieto, Gema Barbeito Castiñeiras, Rocio Trastoy Pena and SeqCOVID-SPAIN consortium
EPI_ISL_500222, EPI_ISL_500223, EPI_ISL_500224,	Hospital Universitario Virgen de las Nieves de Granada-SAS	SeqCOVID-SPAIN consortium/IBV(CSIC)	Mercedes Pérez Ruiz, Sara Sanbonmatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SeqCOVID-SPAIN consortium
EPI_ISL_500225, EPI_ISL_500226, EPI_ISL_500227  EPI_ISL_500228, EPI_ISL_500229, EPI_ISL_500230, EPI_ISL_500230	PLIST 500231 FPLIST 500232 FPLIST 500233 FPLIST 500234 FPLIS	500235	FPI ISI 500239 FPI ISI 500240 FPI ISI 500241 FPI ISI 500242 FPI ISI 500243 FPI ISI 500244 FPI ISI 500245 FPI ISI 500246 FPI ISI 500247 FPI ISI 500249 FPI ISI 500250 FPI ISI 500251

 $EPI_{1}SL_{2}500228, EPI_{1}SL_{3}500229, EPI_{1}SL_{3}500229, EPI_{1}SL_{3}500223, EPI_{1}SL_{3}500223, EPI_{1}SL_{3}500233, EPI_{1$ 

EPI ISL 500276. EPI ISL 500277. EPI ISL 500278. EPI ISL 500279. EPI ISL 500280. EPI ISL 500281. EPI ISL 500282. EPI ISL 500283. EPI ISL 500284. EPI ISL 500285. EPI ISL 500286 Hospital Universitario Araba, Vitoria-Gasteiz SeaCOVID-SPAIN consortium/IBV(CSIC Silvia Hernáez Crespo, Carmen Gómez González, Amaia Aguirre Quiñonero, Marina Fernández Torres, Mª Rosario Almela Ferrer, Mª Concepción Lecaroz Agara, Andrés Canut Blasco and SeqCOVID-SPAIN consortium EPI ISL 500287, EPI\_ISL\_500288, EPI\_ISL\_500290, Servicio de Microbiología, Hospital Miguel Servet, Zaragoza SegCOVID-SPAIN consortium/IRV/CSIC) Antonio Rezusta Lónez, Alexander Tristancho Raró, Ana Milagro, Yolanda Gracia Grataloup, Nieves Martínez Cameo and SegCOVID-SPAIN consortium EPI ISL 500291 FP ISL 500292, FP ISL 500293, FP ISL 500293, FP ISL 500294, FP ISL 500294, FP ISL 500295, FP ISL 500296, FP ISL 500317, FP ISL EPI ISL 500316, EPI ISL 500317, EPI ISL 500317, EPI ISL 500318, EPI ISL 500319, EPI ISL 500320, EPI ISL 500322, EPI ISL 500323, EPI ISL 500323, EPI ISL 500324, EPI ISL 500325, EPI ISL 500325, EPI ISL 500327, EPI ISL 500327, EPI ISL 500339, EPI ISL 500331, EPI ISL 500327, EPI ISL 500331, EPI ISL 500331 Servicio de Microbiología. Hospital Universitario Donostia. OSI Gustavo Cilla, Milagrosa Montes, Luis Piñeiro, Jose Maria Marimón and SegCOVID-SPAIN consortium Donostialdea, Área de Enfermedades Infecciosas, Grupo de Infección Respiratoria y Resistencia Antimicrobiana, Instituto de Investigación Sanitaria Biodonostia EPI ISL 500336, EPI ISL 500337, EPI ISL 500337, EPI ISL 500338, EPI ISL 500338, EPI ISL 500349, EPI ISL 500349, EPI ISL 500344, EPI ISL 500345, EPI ISL 500345, EPI ISL 500357, EPI ISL 500357, EPI ISL 500357, EPI ISL 500357, EPI ISL 500347, EPI ISL 500347, EPI ISL 500349, EPI ISL 500349, EPI ISL 500357, EPI ISL 500349, EPI ISL 500357, EPI ISL 500349, EPI ISL 500349, EPI ISL 500349, EPI ISL 500357, EPI ISL 500357, EPI ISL 500363, EPI ISL 500364, EPI ISL 500365, EPI ISL 500366, EPI ISL 500367, EPI ISL 500368 see above Servicio de Microbiología, Hospital Miguel Servet, Zaragoza SeaCOVID-SPAIN consortium/IBV(CSIC) Antonio Rezusta López, Alexander Tristancho Baró, Ana Milagro, Yolanda Gracia Grataloup, Nieves Martínez Cameo and SeqCOVID-SPAIN consortium EPI ISL 500369, EPI ISL 500370, EPI ISL 500370, EPI ISL 500371, EPI ISL 500371, EPI ISL 500372, EPI ISL 500392, EPI ISL 500392, EPI ISL 500392, EPI ISL 500393, EPI ISL 500393, EPI ISL 500394, EPI ISL 500388, EPI ISL 500388, EPI ISL 500388, EPI ISL 500399, EPI ISL 500391, EPI ISL 500392, EPI ISL 500393, EPI ISL 500394, EPI ISL 500394, EPI ISL 500395, EPI ISL 500396, EPI ISL 500397, EPI ISL 500397, EPI ISL 500398, EPI ISL 500399, EPI ISL 500413, EPI ISL 500413 EPI ISL 500420, EPI ISL 500421, EPI ISL 500421, EPI ISL 500422, EPI ISL 500422, EPI ISL 500438, EPI ISL 500439, EPI ISL 500439 EPI]SL\_500444, EPI]SL\_500445, EPI]SL\_500446, EPI]SL\_500447, EPI]SL\_500448, EPI]SL\_500448, EPI]SL\_500450, EPI]SL\_500450, EPI]SL\_500451, EPI]SL\_500452, EPI]SL\_500452, EPI]SL\_500454, EPI]SL\_500456, EPI]SL\_500456, EPI]SL\_500457, EPI]SL\_500457, EPI]SL\_500458, EPI]SL SeqCOVID-SPAIN consortium/IBV(CSIC) see above Centro de Investigación Biomédica de La Rioja - Hospital San María de Toro, losé Manuel Azcona Gutiérrez, María Pilar Bea Escudero, Miriam Blasco Alberdi and SegCOVID-SPAIN consortium Pedro Logroño EPI ISL 500459 Ouest Diagnostics Ouest Diagnostics Rosenthal, S.H., Gerasimova, A., Kagan, R.M., Owen, R. AND Lacbawan, F. EPI ISL 500460, EPI ISL 500461, EPI ISL 500461, EPI ISL 500462, EPI ISL 500462, EPI ISL 500463, EPI ISL 500477, EPI ISL 500477 EPI ISL 500484, EPI ISL 500485, EPI ISL 500486 I ACEN/PE Marcelo Henrique dos Santos Paiya, Duschinka Ribeiro Duarte Guedes, Cássia Docena, Matheus Filqueira Bezerra, Filipe Zimmer Dezordi, Laís Ceschini Machado, Larissa Krokovsky, Elisama Helyecio, Alexandre see above WallauLab, Aggeu Magalhaes Institute Freitas da Silva, Antonio Mauro Rezende5, Sinval Pinto Brandão Filho7, Constância Flávia Junqueira Ayres, Gabriel Luz Wallau EPI ISI 500500, EPI ISI 500501, EPI ISI 500502 University of Washington Virology Lab University of Washington Virology Lab Payitra Roychoudhury, Hong Xie, Lasata Shrestha, Amin Addetia, Truong Nguyen, Victoria M Rachleff, Meei-Li Huang, Keith R Jerome, Alexander Greninger EPI ISL 500503, EPI ISL 500504, EPI ISL 500504, EPI ISL 500505, EPI ISL 500505, EPI ISL 500506, EPI ISL 500512, EPI ISL 500512, EPI ISL 500512, EPI ISL 500513, EPI ISL 500513, EPI ISL 500514, EPI ISL 500514 EPI ISL 500527, EPI ISL 500528, EPI ISL 500529, EPI ISL 500530, EPI ISL 500531, EPI ISL 500532, EPI ISL 500533, EPI ISL 500534, EPI ISL 500535, EPI ISL 500536, EPI ISL 500537, EPI ISL 500538 Mayo Clinic Laboratories University of Washington Virology Lab Pavitra Roychoudhury, Hong Xie, Lasata Shrestha, Amin Addetia, Truong Nguyen, Victoria M Rachleff, Meei-Li Huang, Keith R Jerome, Alexander Greninger EPI ISL 500539. EPI ISL 500540. EPI ISL 500540. EPI ISL 500541. EPI ISL 500541. EPI ISL 500542, EPI ISL 500559, EPI ISL 500559, EPI ISL 500547, EPI ISL 500549, EPI ISL 500549, EPI ISL 500549, EPI ISL 500549, EPI ISL 500559, EPI ISL 500549, EPI ISL 500559, EPI ISL 500549, EPI ISL 500549 EPI ISL 500563, EPI ISL 500564, EPI ISL 500565, EPI ISL 500566, EPI ISL 500567, EPI ISL 500568, EPI ISL 500570, EPI ISL 500571, EPI ISL 500571 Department of Microbiology Nurdyana Abdul Rahman, Kun Lee Lim, Chenhao Li, Kian Sing Chan, Lynette Oon, Kern Rei Chng, Niranjan Nagarajan, Karrie Ko EPI\_SL\_500573, EPI\_SL\_500573, EPI\_SL\_500574, EPI\_SL\_500574, EPI\_SL\_500576, EPI\_SL\_500576, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500599, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500599, EPI\_SL\_500599, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500589, EPI\_SL\_500599, EPI\_SL\_500589, EPI\_SL see above National Virus Reference Laboratory National Virus Reference Laborators Michael Carr, Gabriel Gonzalez, Ionathan Dean, Suzie Coughlan, Cillian F De Gascun EPI ISL 500596, EPI ISL 500597, EPI ISL 500597, EPI ISL 500598, EPI ISL 500599, EPI ISL 500613, EPI ISL 500614, EPI ISL 500614 EPI ISL 500620, EPI ISL 500620, EPI ISL 500621, EPI ISL 500623, EPI ISL 500624, EPI ISL 500625, EPI ISL 5006264, EPI ISL 500637, EPI ISL 500640, EPI ISL 500657, EPI ISL 500640, EPI ISL 500657, EPI ISL 500640, EPI ISL 500640, EPI ISL 5006580, EPI ISL 500659, EPI ISL 500640, EPI ISL 500659, EPI ISL 5006 EPI ISL. 500668, EPI ISL. 500669, EPI ISL. 500688, EPI ISL. 500689, EPI IS EPISL\_500692, EPISL\_500693, EPISL\_500694, EPISL\_500695, EPISL\_500696, EPISL\_500696, EPISL\_500697, EPISL\_500698, EPISL\_500700, EPISL\_500700, EPISL\_500702, EPISL\_500703, EPISL\_500704, EPISL\_500704, EPISL\_500706, EPISL\_500706 Area of Virology, Serology and Virology Division (SAVID), New Area of Virology, Serology and Virology Division (SAVID), New South see above Rawlinson, W South Wales Health Pathology Randwick Wales Health Pathology Randwick EPI\_ISL\_500707, EPI\_ISL\_500708, EPI\_ISL\_500709, Respiratory Virus Unit, Microbiology Services Colindale, Public Respiratory Virus Unit, Microbiology Services Colindale, Public Health PHE Covid Sequencing Team FPI ISI 500710 FPI ISI 500711 FPI ISI 500712 Health England England EPI\_ISL\_500713, EPI\_ISL\_500714, EPI\_ISL\_500715 EPI\_ISL\_500716 BSL3 Lab Pendik Veterinary Control Institute Department of Medicinal Genetics, Bursa Uludağ University, Faculty of Mustafa HASOKSUZ, Fahriye SARAC, Osman ERGANIS, Serdar UZAR, Hakan ENUL, Cumhur ADIAY, Ahmet SAIT, Orbay SAYI, Kadir YESILBAG, Oguz KARABEY medicine By Sehime Gülsün Temel, Adem Alemdar, Kadir Yesilbağ EPI ISL 500717 Area of Virology, Serology and Virology Division (SAViD), New Area of Virology, Serology and Virology Division (SAVID), New South Rawlinson, W South Wales Health Pathology Randwick Wales Health Pathology Randwick EPI ISL 500719 Respiratory Virus Unit, Microbiology Services Colindale, Public Respiratory Virus Unit, Microbiology Services Colindale, Public Health PHF Covid Sequencing Team Health England England EPI ISL 500768, EPI ISL 500769, EPI ISL 500770, Furst Medical Laboratory Norwegian Institute of Public Health, Department of Virology Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Karoline Bragstad, Olav Hungnes EPI\_ISL\_500771, EPI\_ISL\_500772, EPI\_ISL\_500773, FPI ISI 500774 EPI\_ISL\_500775 Hospital of Southern Norway - 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EPI\_ISL\_500855, EPI\_ISL\_500856, EPI\_ISL\_500857, EPI\_ISL\_500858, EPI\_ISL\_500859, EPI\_ISL\_500860, EPI\_ISL\_500861, EPI\_ISL\_500862, EPI\_ISL\_500863 Virginia DCLS Virginia DCLS see above Virginia DCLS

EPI\_ISL\_500864 Andressa Rangel de Oliveira Lima, Luiz Gonzaga Paula de Almeida, Alexandra Lehmkuhl Gerber, Marlon Daniel Lima Tonin, Mônica Gomes Monteiro da R. Santos, Claudio Alberto Mule Monteiro, Átila Duque Rossi, Instituto de Pesquisas Biomédicas, Hospital Naval Marcílio Dias Bioinformatics Laboratory / LNCC Isabel de Medeiros Magalhaes de As, Luana Ferreira Martins de Toledo, Amilcar Tanuri, Albina Luciana da Silva Freitas, Fernanda Conceição Silva do Amorim, Shana Priscila Coutinho Barroso, Cynthia Chester Cardoso, Carolina Moreira Voloch, Ana Tereza Vasconcelos

EPI\_ISL\_500865, EPI\_ISL\_500866, EPI\_ISL\_500867, EPI\_ISL\_500868, EPI\_ISL\_500869, EPI\_ISL\_500870, EPI\_ISL\_500871, EPI\_ISL\_500872, EPI\_ISL\_500873, EPI\_ISL\_500874, EPI\_ISL\_500875 see above LACEN/PE WallauLab, Aggeu Magalhaes Institute

EPI ISL 500877, EPI ISL 500878, EPI ISL 500878, EPI ISL 500879, EPI ISL 500889, EPI ISL 500889, EPI ISL 500889, EPI ISL 500889, EPI ISL 500899, EPI ISL 500899 EPI ISL 500901, EPI ISL 500901, EPI ISL 500902, EPI ISL 500903, EPI ISL 500903, EPI ISL 500904, EPI ISL 500904, EPI ISL 500907, EPI ISL 500907, EPI ISL 500907, EPI ISL 500917, EPI ISL 500917

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EPI ISL 501556 PHE South West Regional Laboratory, National Infection Service Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium Stephanie Hutchings, Hannah Pymont, Dr Peter Muir, Barry Vipond, Rich Hopes; and Alex Alderton, Roberto Amato, Sonia Goncalyes, Ewan Harrison, David K, Tackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI\_ISL\_501557 Department of Medical Microbiology, Western Sussex Hospitals Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium Manasa Mutingwende, Sarah Lowdon, Olga Podplomyk, Michelle Erkiert, Jonathan Lewis, Paul Randell and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. 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WILSON IOSE DA SILVA IUNIOR. HEIDI LACERDA ALVES DA CRUZ. MARCOS DA SILVEIRA REGUEIRA NETO, BRUNO SAMPAIO, SERGIO DE SA LEITAO PAIVA IUNIOR. ZILDENE DE SOUSA SILVEIRA, MAIRA GALDINO DA EPI ISL 502875 LACEN/PE LABBE, Federal University of Pernambuco ROCHA PITTA, MICHELLY CRISTINY PEREIRA, REGINALDO GONCALVES DE LIMA NETO, MARCOS ANTONIO DE MORAIS JUNIOR, ANTONIO CARLÓS DE FREITAS, VALDIR DE QUEIROZ BALBINO.