

We gratefully acknowledge the following Authors from the Originating laboratories responsible for obtaining the specimens, as well as the Submitting laboratories where the genome data were generated and shared via GISAID, on which this research is based.

Lighthouse Lab in Alderley Park

Lighthouse Lab in Milton Keynes

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

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EPI ISL 536660, EPI ISL 536665, EPI ISL 536667, EPI ISL 536709	, EPI ISL 536713, EPI ISL 536717, EPI ISL 536727, EPI ISL 536730, EPI ISL 536731, EF		EPI ISL 536744, EPI ISL 536753, EPI ISL 536754, EPI ISL 536756, EPI ISL 536762, EPI ISL 536764, EPI ISL 536775
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EPI ISL 540139, EPI ISL 540140, EPI ISL 540143, EPI ISL 540162	, EPI_ISL_540166, EPI_ISL_540181, EPI_ISL_540185, EPI_ISL_540191, EPI_ISL_540198, EF		
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EPI_ISL_541421, EPI_ISL_541435, EPI_ISL_541492, EPI_ISL_541493, EPI_ISL_541494, EPI_ISL_541510, EPI_ISL_541522, EPI_ISL_541523	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 Kobel, Christoph Noppen, Sophie Seidel, Noemie Santamaria de Souza, Niko Beerenwinkel, Tanja Stadler
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EPI_ISL_549562, EPI_ISL_549566, EPI_ISL_549574, EPI_ISL_549603	, EPI_ISL_549619, EPI_ISL_549629, EPI_ISL_549640, EPI_ISL_549669, EPI_ISL_549675, EF	PI_ISL_549688, EPI_ISL_549690, EPI_ISL_549692,	EPI_ISL_549693, EPI_ISL_549697, EPI_ISL_549700, EPI_ISL_549711, EPI_ISL_549749, EPI_ISL_549755, EPI_ISL_549774, EPI_ISL_549782, EPI_ISL_549794
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EPI_ISL_549951, EPI_ISL_549960, EPI_ISL_549991, EPI_ISL_549993 EPI_ISL_550173, EPI_ISL_550178, EPI_ISL_550231, EPI_ISL_550240	I, EPI_ISL_549998, EPI_ISL_550006, EPI_ISL_550009, EPI_ISL_550021, EPI_ISL_550022, EF I, EPI_ISL_550241	PI_ISL_550043, EPI_ISL_550044, EPI_ISL_550045,	EPI_ISL_550061, EPI_ISL_550070, EPI_ISL_550082, EPI_ISL_550089, EPI_ISL_550094, EPI_ISL_550099, EPI_ISL_550105, EPI_ISL_550119, EPI_ISL_550137, EPI_ISL_550164, EPI_ISL_550167, EPI_ISL_550170,
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EPI_ISL_559814, EPI_ISL_559815, EPI_ISL_559836, EPI_ISL_559842, EPI_ISL_559878, EPI_ISL_559885, EPI_ISL_559887, EPI_ISL_559893	Oxford Viromics, NDM, University of Oxford; Oxford University Hospitals; Basingstoke and North Hampshire Hospital	COVID-19 Genomics UK (COG-UK) Consortium	Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser
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EPI_ISL_560065, EPI_ISL_560066	·	COVID-19 Genomics UK (COG-UK) Consortium	Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wyles, Benjamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans
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EPI_ISL_560218, EPI_ISL_560233, EPI_ISL_560267, EPI_ISL_560275, EPI_ISL_560283	Specialise through centre sequencing lab. Latitogen denotifies this	22.1.2.13 Genomes on (coo-on) consultuin	Lauren Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor
EPI_ISL_560425, EPI_ISL_560427, EPI_ISL_560428, EPI_ISL_560433, EPI_ISL_560433, EPI_ISL_560434, EPI_ISL_560434, EPI_ISL_560493, EPI_ISL_560493, EPI_ISL_560519, EPI_ISL_560520, EPI_ISL_560520, EPI_ISL_560531, EPI_ISL_560544			
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EPI_ISL_560830	Maryland Public Health Laboratory	Maryland Public Health Laboratory	Maryland Department of Health Laboratories Administration
EDITED EGG114 EDITED EGG122 EDITED EGG141 EDITED EGG160	EDI ICI EGG167 EDI ICI EGG170 EDI ICI EGG207 EDI ICI EGG210 EDI ICI EGG226 ED	DI ICI E66324 EDI ICI E6632E EDI ICI E66301	EDI ICI EGGANO EDI ICI EGGANA EDI

EPI_ISL_566114, EPI_ISL_566122, EPI_ISL_566122, EPI_ISL_566141, EPI_ISL_566141, EPI_ISL_566303, EPI_ISL_566303

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EPI_ISL_566459, EPI_ISL_566461, EPI_ISL_566463, EPI_ISL_566470 EPI_ISL_566750, EPI_ISL_566751, EPI_ISL_566769, EPI_ISL_566770), EPI ISL 566472, EPI ISL 566478, EPI ISL 566499, EPI ISL 566527, EPI ISL 566533, EPI), EPI ISL 566773, EPI ISL 566775, EPI ISL 566792, EPI ISL 566794, EPI ISL 566822, EPI	_ISL_566536, EPI_ISL_566582, EPI_ISL_566623, E	EPLISL_566624, EPLISL_566654, EPLISL_566687, EPLISL_566690, EPLISL_566693, EPLISL_566697, EPLISL_566698, EPLISL_566700, EPLISL_566727, EPLISL_566738, EPLISL_566743, EPLISL_566744, EPLISL_566914, EPLISL
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EPI_ISL_567095, EPI_ISL_567143, EPI_ISL_567148, EPI_ISL_567175 EPI_ISL_567497, EPI_ISL_567507, EPI_ISL_567517, EPI_ISL_567520			EPLISL_567428, EPLISL_567430, EPLISL_567431, EPLISL_567437, EPLISL_567443, EPLISL_567448, EPLISL_567461, EPLISL_567468, EPLISL_567472, EPLISL_567478, EPLISL_567488, EPLISL_567494,
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EPI_ISL_567866, EPI_ISL_567890, EPI_ISL_567916, EPI_ISL_567925 see above	s, EPI_ISL_567926, EPI_ISL_567975, EPI_ISL_568011, EPI_ISL_568013, EPI_ISL_568020, EPI Lighthouse Lab in Alderley Park	_ISL_568025, EPI_ISL_568045, EPI_ISL_568066, E	EPLISL_568087, EPLISL_568125, EPLISL_568140, EPLISL_568141, EPLISL_568142, EPLISL_568152, EPLISL_568200, EPLISL_568211 Jacquelyn Wynn, Mairead Hyland, The Lighthouse Lab in Alderley Park and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia
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EPI_ISL_572851, EPI_ISL_572852 EPI_ISL_572853, EPI_ISL_572854, EPI_ISL_572855,		COVID-19 Genomics UK (COG-UK) Consortium COVID-19 Genomics UK (COG-UK) Consortium	Aminu S. Jahun, Yasmin Chaudhry, Grant Hall, Iliana Georgana, Myra Hosmillo, Martin D. Curran, Malte Pinckert, Surendra Parmar, Ian Goodfellow 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,
EPI_ISL_572856 EPI_ISL_572860, EPI_ISL_572861			Lauren Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan
EPI_ISL_572862, EPI_ISL_572863, EPI_ISL_572864, EPI_ISL_572865, EPI_ISL_572866, EPI_ISL_572867,	and North Hampshire Hospital Department of Pathology, University of Cambridge	COVID-19 Genomics UK (COG-UK) Consortium	Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser Aminu S. Jahun, Yasmin Chaudhry, Grant Hall, Iliana Georgana, Myra Hosmillo, Martin D. Curran, Malte Pinckert, Surendra Parmar, Ian Goodfellow
EPI_ISL_572868 EPI_ISL_572869, EPI_ISL_572870	Oxford Viromics, NDM, University of Oxford; Oxford University Hospitals; Basingstoke and North Hampshire Hospital	COVID-19 Genomics UK (COG-UK) Consortium	Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrín Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser
EPI_ISL_572871	Virology Department, Royal Infirmary of Edinburgh, NHS Lothian / School of Biological Sciences, University of Edinburgh / Institute of Genetics and Molecular Medicine,	COVID-19 Genomics UK (COG-UK) Consortium	McHugh M, Dewar R, Rooke S, Gallagher M, Balcaza C, O'Toole Á, Scher E, Hill V, McCrone JT, Colquhoun R, Yu X, Jackson B, Rambaut A, Williams TC, Templeton K
EPI_ISL_572872	University of Edinburgh 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
EPI_ISL_572873		COVID-19 Genomics UK (COG-UK) Consortium	Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan
EPI_ISL_572874	and North Hampshire Hospital Virology Department, Royal Infirmary of Edinburgh, NHS Lothian / School of Biological Sciences, University of Edinburgh / Institute of Genetics and Molecular Medicine,	COVID-19 Genomics UK (COG-UK) Consortium	Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser McHugh M, Dewar R, Rooke S, Gallagher M, Balcaza C, O'Toole Á, Scher E, Hill V, McCrone JT, Colquhoun R, Yu X, Jackson B, Rambaut A, Williams TC, Templeton K
FPI ISI 572875 FPI ISI 572876 FPI ISI 572877 FPI ISI 572878	University of Edinburgh 3, EPI_ISL_572879, EPI_ISL_572880, EPI_ISL_572881, EPI_ISL_572882, EPI_ISL_572883, EPI	ISI 572884 EPI ISI 572885 EPI ISI 572886 E	FPI ISI 572887 FPI ISI 572888 FPI ISI 572889 FPI ISI 572890
see above			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 Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor
EPI_ISL_572959	of Infection, Immunity and Cardiovascular Disease, The Medical School, University of	COVID-19 Genomics UK (COG-UK) Consortium	Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katej Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katej Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wyles, Benjamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans
EPI_ISL_572960, EPI_ISL_573043, EPI_ISL_573072, EPI_ISL_573079, EPI_ISL_573080, EPI_ISL_573158,	Sheffield Oxford Viromics, NDM, University of Oxford; Oxford University Hospitals; Basingstoke and North Hampshire Hospital	COVID-19 Genomics UK (COG-UK) Consortium	Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser
EPĪ_ISL_573171, EPĪ_ISL_573204, EPĪ_ISL_573220 EPI_ISL_573261	Centre for Enzyme Innovation, University of Portsmouth / Translational Research	COVID-19 Genomics UK (COG-UK) Consortium	Angela Beckett, Yann Bourgeois, Garry Scarlett, Sharon Glaysher, Scott Elliott, Kelly Bicknell, Robert Impey, Allyson Lloyd, Sarah Wyllie, Ethan Butcher, Anoop Chauhan, Samuel Robson
 EPI_ISL_573277	Laboratory, Portsmouth Hospitals NHS Trust Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria	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
	Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust		Greenaway, Debra Padgett, Clive Graham, Garren Scott, Edward Barton, Emma Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_573417	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_573419	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 Carilsie, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose
EPI_ISL_573547	Virology Department, Sheffield Teaching Hospitals NHS Foundation Trust/Department of Infection, Immunity and Cardiovascular Disease, The Medical School, University of Sheffield	COVID-19 Genomics UK (COG-UK) Consortium	Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wyles, Benjamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans
EPI_ISL_573589, EPI_ISL_573611, EPI_ISL_573616, EPI_ISL_573636		COVID-19 Genomics UK (COG-UK) Consortium	Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser
EPI_ISL_573652, EPI_ISL_573667, EPI_ISL_573671	University College London, Great Ormond Street Hospital for Children NHS Foundation Trust, Imperial College Healthcare NHS Trust	COVID-19 Genomics UK (COG-UK) Consortium	Sergi Castellano, Rachel Williams, Mark Kristiansen, Paola Resende Silva, Sunando Roy, Tony Brooks, Helena Tutill, Paola Niola, Patricia Dyal, Charlotte Williams, Leysa Forrest, Yasmin Panchbhaya, Jacqueline Findlay, Samuel Weeks, Julianne Brown, Kathryn Harris, Paul Randell, James Price, Alison Holmes, Judith Breuer
EPI_ISL_573699, EPI_ISL_573704, EPI_ISL_573725, EPI_ISL_573728, EPI_ISL_573754	Virology Department, Sheffield Teaching Hospitals NHS Foundation Trust/Department of Infection, Immunity and Cardiovascular Disease, The Medical School, University of Sheffield	COVID-19 Genomics UK (COG-UK) Consortium	Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wyles, Benjamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans
EPI_ISL_573804	University College London, Great Ormond Street Hospital for Children NHS Foundation Trust, Imperial College Healthcare NHS Trust	COVID-19 Genomics UK (COG-UK) Consortium	Sergi Castellano, Rachel Williams, Mark Kristiansen, Paola Resende Silva, Sunando Roy, Tony Brooks, Helena Tutill, Paola Niola, Patricia Dyal, Charlotte Williams, Leysa Forrest, Yasmin Panchbhaya, Jacqueline Findlay, Samuel Weeks, Julianne Brown, Kathryn Harris, Paul Randell, James Price, Alison Holmes, Judith Breuer
EPI_ISL_573833		COVID-19 Genomics UK (COG-UK) Consortium	Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser
EPI_ISL_573930, EPI_ISL_574138		COVID-19 Genomics UK (COG-UK) Consortium	
EPI_ISL_574653, EPI_ISL_574654, EPI_ISL_574655, EPI_ISL_574657, EPI_ISL_574658, EPI_ISL_574661	Seattle Flu Study	Seattle Flu Study	Deborah A. Nickerson, Chris D. Frazar, Jover Lee, Benjamin Pelle, Matthew Richardson, Amanda Adler, Elisabeth Brandstetter, Peter D. Han, Kairsten Fay, Misja Ilcisin, Kirsten Lacombe, Thomas R. Sibley, Melissa Truong, Caitlin R. Wolf, Karen Cowgill, Stephanie Schrag, Jeff Duchin, Michael Boeckh, Janet A. Englund, Michael Famulare, Barry R. Lutz, Mark J. Rieder, Lea M. Starita, Matthew Thompson, Helen Y. Chu, Trevor Bord, Jay Shendure, Jay Shendure, Sharing A. Starita, Matthew Thompson, Helen Y. Chu, Trevor Bord, Jay Shendure, Jay Shendure, Sharing A. Shar
EPI ISI 574663 EPI ISI 574664 EPI ISI 574665	Seattle Flu Study	Seattle Flu Study	Deborah & Nickerson Chris D. Frazar Inver Lee Reniamin Pelle Matthew Birbardson Amanda diler Filicabeth Rrandstetter Peter D. Han Kairsten Fay Misia Ilrisin Kirsten Larombe Thomas R.

Seattle Flu Study

Deborah A. Nickerson, Chris D. Frazar, Jover Lee, Benjamin Pelle, Matthew Richardson, Amanda Adler, Elisabeth Brandstetter, Peter D. Han, Kairsten Fay, Misja Ilcisin, Kirsten Lacombe, Thomas R.

EPI_ISL_574663, EPI_ISL_574664, EPI_ISL_574665,

Seattle Flu Study

FPI ISI 575303. FPI ISI 575305. FPI ISI 575310.

EPI_ISL_576487, EPI_ISL_576488, EPI_ISL_576557

EPI_ISL_577238, EPI_ISL_577244, EPI_ISL_577252,

EPI ISL 577630

EPI ISL 580398, EPI ISL 580407, EPI ISL 580434,

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Thompson, Helen Y. Chu, Trevor Bedford, Jay Shendure

EPI_ISL_574679, EPI_ISL_574682, EPI_ISL_574684 Seattle Flu Study Seattle Flu Study Deborah A. Nickerson, Chris D. Frazar, Jover Lee, Benjamin Pelle, Matthew Richardson, Amanda Adler, Flisabeth Brandstetter, Peter D. Han, Kairsten Fay, Misja Ilcisin, Kirsten Lacombe, Thomas R Sibley, Melissa Truong, Caitlin R. Wolf, Michael Boeckh, Janet A. Englund, Michael Famulare, Barry R. Lutz, Mark J. Rieder, Lea M. Starita, Matthew Thompson, Jay Shendure, Trevor Bedford, Helen Y. Chu EPI ISL 575030, EPI ISL 575032 Seattle Flu Study Seattle Flu Study

Deborah A. Nickerson, Chris D. Frazar, Jover Lee, Benjamin Pelle, Matthew Richardson, Amanda Adler, Flisabeth Brandstetter, Peter D. Han, Kairsten Fav, Misja Ilcisin, Kirsten Lacombe, Thomas R.

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Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team)

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Wellcome Sanger Institute for the COVID-19 | Jacquelvn Wynn, Mairead Hyland, The Lighthouse Lab in Alderley Park and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic Kwiatkowski, Cordelia

Johnson, F.L., Griego-Fisher, A.M., Malone, D.

Molecular Biology, New Mexico Department of Health Scientific Laboratory EPI ISL 575323, EPI ISL 575326 EPI_ISL_575338, EPI_ISL_575339, EPI_ISL_575342, EPI_ISL_575346, EPI_ISL_575364, EPI_ISL_575361, EPI_ISL_575363, EPI_ISL_575365, EPI_ISL_575379, EPI_ISL_575382, EPI_ISL_575384, EPI_ISL_575384, EPI_ISL_575387, EPI_ISL_575395

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EPI ISL 575410, EPI ISL 575417, EPI ISL 575417, EPI ISL 575419, EPI ISL 575419, EPI ISL 575419, EPI ISL 575541, EPI ISL 575691, EPI ISL 575594, EPI ISL 575691, EPI ISL 575691, EPI ISL 575691, EPI ISL 575691, EPI ISL 575419, EPI ISL 575419, EPI ISL 575691, EPI ISL 575691

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EPI_ISL_576353 Texas Department of State Health Services (TXDSHS) Texas Department of State Health Services Rashmi Tuladhar, Bonnie Oh, Mayela Pedrueza, Jenny Zhang, Maliha Rahman, Anita Pokharel, Myong Koag, Chun Wang, Rachel Lee, Grace Kubin (TXDSHS)

EPI ISL 576573, EPI ISL 576605, EPI ISL 576617, EPI ISL 576639, EPI ISL 576655, EPI ISL 576657, EPI ISL 576687, EPI ISL 576711, EPI ISL 576712, EPI ISL 576810, EPI ISL 576822, EPI ISL 576871 Oxford Viromics, NDM, University of Oxford; Oxford University of Oxford; Oxford University Hospitals; Basingstoke COVID-19 Genomics UK (COG-UK) Consortium Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan see ahove Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser

EPI ISL 576897 Department of Pathology, University of Cambridge COVID-19 Genomics UK (COG-UK) Consortium Aminu S. Jahun, Yasmin Chaudhry, Grant Hall, Iliana Georgana, Myra Hosmillo, Martin D. Curran, Malte Pinckert, Surendra Parmar, Jan Goodfello, EPI_ISL_576958 Oxford Viromics, NDM, University of Oxford; Oxford University Hospitals; Basingstoke COVID-19 Genomics UK (COG-UK) Consortium Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan and North Hampshire Hospital Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser

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EPI ISI 577073. EPI ISI 577080. EPI ISI 577082. Oxford Viromics, NDM, University of Oxford; Oxford University Hospitals; Basingstoke COVID-19 Genomics UK (COG-UK) Consortium Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan EPI_ISL_577085, EPI_ISL_577086, EPI_ISL_577088, and North Hampshire Hospital Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser EPI_ISL_577090

EPI ISL 577286, EPI ISL 577289 EPI_ISL_577401, EPI_ISL_577410 Oxford Viromics, NDM, University of Oxford; Oxford University Hospitals; Basingstoke COVID-19 Genomics UK (COG-UK) Consortium Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan and North Hampshire Hospital Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser

EPI_ISL_577417, EPI_ISL_577449, EPI_ISL_577464, Wales Specialist Virology Centre Sequencing lab: Pathogen Genomics Unit 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, EPI_ISL_577486, EPI_ISL_577495, EPI_ISL_577507, Lauren Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor

EPI_ISL_577513, EPI_ISL_577539, EPI_ISL_577543 EPI_ISL_577578, EPI_ISL_577581, EPI_ISL_577586, Michigan Department of Health and Human Services, Bureau of Laboratories Michigan Department of Health and Human Blankenship HM, Riner D, Soehnlen MK EPI_ISL_577587, EPI_ISL_577595 Services. Bureau of Laboratories

EPI_ISL_577682, EPI_ISL_577700, EPI_ISL_577712 NIV Influenza NIV Influenza EPI ISL 577866, EPI ISL 577944, EPI ISL 577944, EPI ISL 577964, EPI ISL 577964, EPI ISL 578023, EPI ISL 578024, EPI ISL 578024, EPI ISL 578028, EPI ISL 578037, EPI ISL 578037, EPI ISL 578028, EPI ISL 578029, EPI ISL 578028, EPI ISL 578028,

EPĪSL_578042, EPĪSL_578043, EPĪSL_578046, EPĪSL_578047, EPĪSL_578048, EPĪSL_578048, EPĪSL_578057, EPĪSL_578062, EPĪSL_578062, EPĪSL_578064, EPĪSL_578065, EPĪSL_578067, EPĪSL_578070, EPĪSL_578077, EPĪSL_578077 Dutch COVID-19 response team Erasmus Medical Center Bas Oude Munnink, Reina Sikkema, David Nieuwenhuijse, Irina Chestakova, Anne van der Linden, Marjan Boter, Emmanuelle Munger, Corine GeurtsvanKessel, Annemiek van der Eijk, Richard Molenkamp, Marion Koopmans, on behalf of the Dutch national COVID-19 response team.

EPI_ISL_578178, EPI_ISL_578179, EPI_ISL_578183 CSIR-Indian Institute of Chemical Biology, MEDICA Supercpecialty Hospital Kolkata CSIR-Indian Institute of Chemical Biology, Sujay Krishna Maity, Priyanka Mallick, Debaleena Bhowmik, Abhishake Lahiri, Dr. Aviral Roy, Dr. Soumen Saha, Dr. Arpita Ghosh Mitra, Dr. Rajesh Pandey, Dr. Sandip Paul, Dr. Partha Chakrabarti, Dr. MEDICA Supercpecialty Hospital Kolkata Saikat Chakrabarti

EPI_ISL_578247, EPI_ISL_578248, EPI_ISL_578251, EPI_ISL_578252, EPI_ISL_5782525, EPI_ISL_578253, EPI_ISL_578260, EPI_ISL_578260, EPI_ISL_578268, EPI_ISL_578268, EPI_ISL_578269, EPI_ISL_578270, EPI_ISL_578270, EPI_ISL_578271, EPI_ISL_578270, EPI_ISL_578284, EPI_ISL_578284, EPI_ISL_578259, EPI_ISL_578290, EPI_ISL_578290, EPI_ISL_578290, EPI_ISL_578290, EPI_ISL_578269, EPI_ISL_578269, EPI_ISL_578269, EPI_ISL_578271, EPI_ISL_578271, EPI_ISL_578271, EPI_ISL_578269, EPI_ISL_578290, EPI_ISL_57829

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EPI_ISL_579765, EPI_ISL_579766, EPI_ISL_579771, EPI_ISL_579789, EPI_ISL_579791, EPI_ISL_579800, EPI_ISL_579819, EPI_ISL_579828, EPI_ISL_579842, EPI_ISL_579845, EPI_ISL_579877, EPI_ISL_579880, EPI_ISL_579903 Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic see above Genomics UK Consortium Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team

EPI_ISL_579943, EPI_ISL_579944, EPI_ISL_580020, EPI_ISL_580076, EPI_ISL_580079, EPI_ISL_580116, EPI_ISL_580121, EPI_ISL_580126, EPI_ISL_580156, EPI_ISL_580166, EPI_ISL_580191, EPI_ISL_580198, EPI_ISL_580240, EPI_ISL_580240, EPI_ISL_580251, EPI_ISL_580251

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Genomics UK Consortium on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team EPI_ISL_580288, EPI_ISL_580292, EPI_ISL_580314 Lighthouse Lab in Alderley Park Wellcome Sanger Institute for the COVID-19 Jacquelyn Wynn, Mairead Hyland, The Lighthouse Lab in Alderley Park and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia

Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team Genomics UK Consortium EPI ISL 580354 Wellcome Sanger Institute for the COVID-19 Rob Howes, The Lighthouse Lab in Cambridge and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe Lighthouse Lab in Cambridge

on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team Wellcome Sanger Institute for the COVID-19 Jacquelyn Wynn, Mairead Hyland, The Lighthouse Lab in Alderley Park and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia EPI_ISL_580383, EPI_ISL_580384 Lighthouse Lab in Alderley Park Genomics UK Consortium Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team

EPI_ISL_580391 Lighthouse Lab in Cambridge Wellcome Sanger Institute for the COVID-19 Rob Howes, The Lighthouse Lab in Cambridge and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team Genomics UK Consortium

Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team EPI_ISL_580436, EPI_ISL_580442, EPI_ISL_580447, Genomics UK Consortium EPI_ISL_580476, EPI_ISL_580552 EPI_ISL_580579 Lighthouse Lab in Cambridge Wellcome Sanger Institute for the COVID-19 Rob Howes, The Lighthouse Lab in Cambridge and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team Genomics UK Consortium

EPI_ISL_580600 Lighthouse Lab in Alderley Park Wellcome Sanger Institute for the COVID-19 Jacquelyn Wynn, Mairead Hyland, The Lighthouse Lab in Alderley Park and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Genomics UK Consortium Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team

EPI_ISL_580625 Lighthouse Lab in Cambridge Wellcome Sanger Institute for the COVID-19 Rob Howes, The Lighthouse Lab in Cambridge and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team

EPI_SL_580631, EPI_SL_580638, EPI_SL_580638, EPI_SL_5806641, EPI_SL_5806641, EPI_SL_580662, EPI_SL_580667, EPI_SL_580683, EPI_SL_580688, EPI_SL_580688, EPI_SL_580713, EPI_SL_580735, EPI_SL_580735, EPI_SL_580736, EPI_SL_580782, EPI_SL_580786, EPI_SL_580785, EPI_SL_580812, EPI_SL_580735, EPI_SL_580812, EPI_SL_580782, EPI_SL_580812, EPI_SL_580812, EPI_SL_580812, EPI_SL_580782, EPI_SL_580812, EPI_SL_580812, EPI_SL_580782, EPI_

Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf see above Lighthouse Lab in Milton Keynes Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team EPI ISL 580858 Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic

Genomics UK Consortium $Kwiatkowski, Cordelia\ Langford, John\ Sillitoe\ on\ behalf\ of\ the\ Wellcome\ Sanger\ Institute\ COVID-19\ Surveillance\ Team$ EPI_ISL_580864, EPI_ISL_580898 Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team

EPI_ISL_580907 Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team Genomics UK Consortium

EPI_ISL_580915, EPI_ISL_580961, EPI_ISL_580995 Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team

EPLISL_581007	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic
EPI_ISL_581008, EPI_ISL_581025, EPI_ISL_581026,	Lighthouse Lab in Milton Keynes	Genomics UK Consortium	Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf
EPI_ISL_581040		Genomics UK Consortium	of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_581080, EPI_ISL_581085, EPI_ISL_581087	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_581138, EPI_ISL_581139, EPI_ISL_581145, EPI_ISL_581162 EPI_ISL_581283, EPI_ISL_581292, EPI_ISL_581295, EPI_ISL_581297		_ISL_581190, EPI_ISL_581200, EPI_ISL_581202,	EPI_ISL_581205, EPI_ISL_581208, EPI_ISL_581220, EPI_ISL_581233, EPI_ISL_581235, EPI_ISL_581238, EPI_ISL_581239, EPI_ISL_581252, EPI_ISL_581257, EPI_ISL_581266, EPI_ISL_581275, EPI_ISL_581277,
see above	Lighthouse Lab in Milton Keynes	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_581334	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_581342, EPI_ISL_581343, EPI_ISL_581365	Lighthouse Lab in Milton Keynes		The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_581381	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Koberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_581642, EPI_ISL_581643, EPI_ISL_581644, EPI_ISL_581645	i, EPI_ISL_581647, EPI_ISL_581648, EPI_ISL_581649, EPI_ISL_581652, EPI_ISL_581659, EPI		
see above	Department of Clinical Microbiology	GIGA Medical Genomics	Keith Durkin, Maria Artesi, Sébastien Bontems, Raphaël Boreux, Bouchra Boujemla, Cécile Meex, Pierrette Melin, Marie-Pierre Hayette, Vincent Bours
EPI_ISL_582049, EPI_ISL_582050, EPI_ISL_582051, EPI_ISL_582052	Servicio de Microbiología. Hospital Universitario Donostia. OSI Donostialdea. Area de Enfermedades Infecciosas, Grupo de Infección Respiratoria y Resistencia Antimicrobiana. Instituto de Investigación Sanitaria Biodonostia	SeqCOVID-SPAIN consortium/IBV(CSIC)	Gustavo Cilla, Milagrosa Montes, Luis Piñeiro, Jose Maria Marimón and SeqCOVID-SPAIN consortium
EPI_ISL_582128, EPI_ISL_582129, EPI_ISL_582130, EPI_ISL_582131	Antwerp University Hospital	Institute of Tropical Medicine	Philippe Selhorst, Colin Anthony
EPI_ISL_582508	CNR Virus des Infections Respiratoires - France SUD	CNR Virus des Infections Respiratoires - France SUD	Antonin Bal, Gregory Destras, Gwendolyne Burfin, Hadrien Règue, Alexandre Gaymard, Maude Bouscambert-Duchamp, Florence Morfin-Sherpa, Martine Valette, Bruno Lina, Laurence Josset
			EPI_ISL_582912, EPI_ISL_582913, EPI_ISL_582930, EPI_ISL_582931, EPI_ISL_582932, EPI_ISL_582933, EPI_ISL_582934, EPI_ISL_582938, EPI_ISL_582951
see above	County of Santa Clara Public Health Department	Chan-Zuckerberg Biohub	CZB Cliahub Consortium EPI_ISL_583026, EPI_ISL_583029, EPI_ISL_583033, EPI_ISL_583036, EPI_ISL_583036, EPI_ISL_583040, EPI_ISL_583041, EPI_ISL_583042, EPI_ISL_583044
see above	, פוין זאר פארן, פוין ארן, פוין בארטנט, פוין בארטנט, פוין בארטנט, פוין בארטנט, פוין בארטנט, פוין בארטנט, פוין Orange County Public Health Lab	ist563023, EPI_ist563024, EPI_ist563025, Chan-Zuckerberg Biohub	Erijaljaavuka, Erijaljaavuka, Erijaljaavuka, Erijaljaavuka, Erijaljaavuka, Erijaljaavuka, Erijaljaavuka, Erijal C28 Cilahub Consortium
EPI_ISL_583161, EPI_ISL_583162, EPI_ISL_583163,	Humboldt County Public Health Laboratory	Chan-Zuckerberg Biohub	CZB Cliahub Consortium
EPI_ISL_583164, EPI_ISL_583165, EPI_ISL_583166, EPI_ISL_583167, EPI_ISL_583168, EPI_ISL_583169, EPI_ISL_583170			
EPI_ISL_583171, EPI_ISL_583172	Tulare County Public Health Lab	Chan-Zuckerberg Biohub	CZB Cliahub Consortium
EPI_ISL_583191	San Francisco Public Health Laboratory	Chan-Zuckerberg Biohub	CZB Cliahub Consortium
EPI_ISL_583198	Marin County Public Health Department	Chan-Zuckerberg Biohub	CZB Cliahub Consortium
EPI_ISL_583293, EPI_ISL_583301, EPI_ISL_583307, EPI_ISL_583310 EPI_ISL_583404, EPI_ISL_583406, EPI_ISL_583407, EPI_ISL_583409	, EPI_SL_583318, EPI_SL_583323, EPI_SL_583327, EPI_SL_583328, EPI_ISL_583329, EPI , EPI_SL_583412, EPI_SL_583415, EPI_SL_583419	_ISL_583333, EPI_ISL_583335, EPI_ISL_583336,	EPLISL_583337, EPLISL_583342, EPLISL_583343, EPLISL_583346, EPLISL_583360, EPLISL_583364, EPLISL_583372, EPLISL_583378, EPLISL_583387, EPLISL_583391, EPLISL_583396, EPLISL_583397,
see above	University of Michigan Clinical Microbiology Laboratory	Lauring Lab, University of Michigan, Department of Microbiology and Immunology	Valesano
EPI_ISL_583488	Institute of Virology, Biomedical Research Center of the Slovak Academy of Sciences, Bratislava	Faculty of Natural Sciences, Comenius University, Bratislava	Broňa Brejová, Viktória Hodorová, Kristína Boršová, Viktória Čabanová, Dominika Fričová, Sabina Fumačová Havlíková, Juraj Kopáček, Martina Ličková, Ľubomíra Lukáčiková, Martina Neboháčová, Monika Sláviková, Edita Staroňová, Elena Tichá, Tomáš Vinař, Jozef Nosek, Boris Klempa
EPI_ISL_583511, EPI_ISL_583517, EPI_ISL_583519, EPI_ISL_583521, EPI_ISL_583522, EPI_ISL_583530, EPI_ISL_583531	Michigan Department of Health and Human Services, Bureau of Laboratories	Michigan Department of Health and Human Services, Bureau of Laboratories	Blankenship HM, Riner D, Soehnlen MK
EPI_ISL_584166	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_584217, EPI_ISL_584234, EPI_ISL_584280, EPI_ISL_584327, EPI_ISL_584340, EPI_ISL_584364, EPI_ISL_584379	Virology Department, Sheffield Teaching Hospitals NHS Foundation Trust/Department of Infection, Immunity and Cardiovascular Disease, The Medical School, University of Sheffield	COVID-19 Genomics UK (COG-UK) Consortium	Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wyles, Benjamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans
EPI_ISL_584392, EPI_ISL_584409, EPI_ISL_584411, EPI_ISL_584437	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_584815, EPI_ISL_584828, EPI_ISL_584833	University College London, Great Ormond Street Hospital for Children NHS Foundation Trust, Imperial College Healthcare NHS Trust	COVID-19 Genomics UK (COG-UK) Consortium	Sergi Castellano, Rachel Williams, Mark Kristiansen, Paola Resende Silva, Sunando Roy, Tony Brooks, Helena Tutill, Paola Niola, Patricia Dyal, Charlotte Williams, Leysa Forrest, Yasmin Panchbhaya, Jacqueline Findlay, Samuel Weeks, Julianne Brown, Kathryn Harris, Paul Randell, James Price, Alison Holmes, Judith Breuer
EPI_ISL_584859, EPI_ISL_584879	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	
EPI_ISL_585053	Virology Department, Sheffield Teaching Hospitals NHS Foundation Trust/Department of Infection, Immunity and Cardiovascular Disease, The Medical School, University of Sheffield	COVID-19 Genomics UK (COG-UK) Consortium	Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wyles, Benjamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans
EPI_ISL_585201	Regional Virus Laboratory, Belfast Health and Social Care Trust	COVID-19 Genomics UK (COG-UK) Consortium	Conall McCaughey, James McKenna, Tanya Curran, Susan Feeney, Alison Watt, Clara Cox, Mairead Connor, Zoltan Molnar, David Simpson, Derek Fairley
EPI_ISL_585285		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, Kyriaki Nomikou; Sarah McDonald, Marc Niebel, Patawee Asamaphan; Richard Orton, Joseph Hughes, Sreenu Vattipally, David L Robertson; Alasdair MacLean, Rory Gunson; Kathy Li, Igor Starinskij, Natasha Jesudason, Rajiv Shah, James Shepherd, Antonia Ho, Emma Thomson
			EPI ISL 585328, EPI ISL 585329, EPI ISL 585330, EPI ISL 585332, EPI ISL 585333, EPI ISL 585335, EPI ISL 585343, EPI ISL 585349, EPI ISL 585349, EPI ISL 585351, EPI ISL 585356, EPI ISL 585359,
EPI_ISL_585361, EPI_ISL_585364, EPI_ISL_585365, EPI_ISL_585367 see above	, EPI_ISL_585368, EPI_ISL_585371, EPI_ISL_585372, EPI_ISL_585374, EPI_ISL_585375, EPI Lighthouse Lab in Glasgow / MRC-University of Glasgow Centre for Virus Research		Asamaphan; Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak; Alasdair MacLean, Rory Gunson; Richard Orton, Joseph Hughes, Sreenu Vattipally, David L Robertson;
EPI_ISL_585502, EPI_ISL_585503	University College London, Great Ormond Street Hospital for Children NHS Foundation	COVID-19 Genomics UK (COG-UK) Consortium	Sharif Shaaban, Matthew Holden; Kathy Li, Natasha Jesudason, Rajiv Shah, James Shepherd, Antonia Ho, Emma Thomson Sergi Castellano, Rachel Williams, Mark Kristiansen, Paola Resende Silva, Sunando Roy, Tony Brooks, Helena Tutill, Paola Niola, Patricia Dyal, Charlotte Williams, Leysa Forrest, Yasmin Panchbhaya,
EPI_ISL_585511, EPI_ISL_585524, EPI_ISL_585531	Trust, Imperial College Healthcare NHS Trust Northumbria University / South Tees Hospitals NHS Foundation Trust / North Cumbria	COVID-19 Genomics UK (COG-UK) Consortium	Jacqueline Findlay, Samuel Weeks, Julianne Brown, Kathryn Harris, Paul Randell, James Price, Alison Holmes, Judith Breuer 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
	Integrated Care NHS Foundation Trust / North Tees and Hartlepool NHS Foundation Trust / Newcastle Hospitals NHS Foundation Trust		Greenaway,Debra Padgett,Clive Graham,Garren Scott,Edward Barton,Emma Swindells,Brendan Payne,Jennifer Collins,Yusri Taha,Gary Eltringham
EPI_ISL_585624	Virology Department, Sheffield Teaching Hospitals NHS Foundation Trust/Department of Infection, Immunity and Cardiovascular Disease, The Medical School, University of Sheffield	COVID-19 Genomics UK (COG-UK) Consortium	Thushan de Silva, Matthew Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wyles, Benjamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans
EPI_ISL_585628	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_585639, EPI_ISL_585654, EPI_ISL_585663, EPI_ISL_585669	, EPI_ISL_585698, EPI_ISL_585750, EPI_ISL_585782, EPI_ISL_585892, EPI_ISL_585893, EPI	_ISL_585929, EPI_ISL_586011	
see above	Wales Specialist Virology Centre Sequencing lab: Pathogen Genomics Unit	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 Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor
EPI_ISL_588437, EPI_ISL_588445, EPI_ISL_588460, EPI_ISL_588469			Englist, 588568, EPIJSL, 588577, EPIJSL, 588731, EPIJSL, 588873, EPIJSL, 588868, EPIJSL, 588879, EPIJSL, 588979, EPIJSL, 58897
EPI_ISL_588969 see above	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic
EPI ISL 589018, EPI ISL 589019. EPI ISL 589024. EPI ISI 589026	i, EPI_ISL_589029, EPI_ISL_589034, EPI_ISL_589040, EPI_ISL_589043, EPI_ISL_589063, EPI	Genomics UK Consortium ISL 589070, EPI ISL 589075	Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
see ahove	Lighthouse Lab in Milton Keynes		The Lighthouse Lab in Milton Keynes and Aley Alderton Roberto Amato Sonia Gonzalves Ewan Harrison David K. Jarkson Lan Johnston Dominir Kwiatkowski. Cordelia Langford John Sillitoe on behalf

Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf

Lighthouse Lab in Milton Keynes

see above

Genomics UK Consortium	of the Wellcome Sanger Institute COVID-19 Surveillance Team
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Michael Carr, Gabriel Gonzalez, Jonathan Dean, Daniel Hare, Cillian F De Gascun

		Genomics OK Consortium	of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589092	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Instlute COVID-19 Surveillance Team
EPI_ISL_589103, EPI_ISL_589114	Lighthouse Lab in Milton Keynes		The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589119	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589121, EPI_ISL_589123	Lighthouse Lab in Milton Keynes		The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589151	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589167, EPI_ISL_589173, EPI_ISL_589176	Lighthouse Lab in Milton Keynes		The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589190	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589199, EPI_ISL_589205, EPI_ISL_589212	Lighthouse Lab in Milton Keynes	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589223	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589226, EPI_ISL_589256, EPI_ISL_589266	Lighthouse Lab in Milton Keynes	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589276, EPI_ISL_589370, EPI_ISL_589385	Lighthouse Lab in Alderley Park	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Jacquelyn Wynn, Mairead Hyland, The Lighthouse Lab in Alderley Park and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team
EPI_ISL_589576, EPI_ISL_589585, EPI_ISL_589588, EPI_ISL_58959- EPI_ISL_589770	4, EPI_ISL_589597, EPI_ISL_589599, EPI_ISL_589603, EPI_ISL_589605, EPI_ISL_589640, EP	PI_ISL_589658, EPI_ISL_589661, EPI_ISL_589664,	EPI_ISL_589691, EPI_ISL_589698, EPI_ISL_589709, EPI_ISL_589721, EPI_ISL_589723, EPI_ISL_589728, EPI_ISL_589731, EPI_ISL_589747, EPI_ISL_589749, EPI_ISL_589753, EPI_ISL_589759, EPI_ISL_589764,
see above	Lighthouse Lab in Milton Keynes	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, 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_589783	Lighthouse Lab in Alderley Park	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Jacquelyn Wynn, Mairead Hyland, The Lighthouse Lab in Alderley Park and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, 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_589789	Lighthouse Lab in Milton Keynes	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, 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_589978, EPI_ISL_589989, EPI_ISL_589999, EPI_ISL_590002, EPI_ISL_590050, EPI_ISL_590054, EPI_ISL_590076, EPI_ISL_590080, EPI_ISL_590162, EPI_ISL_590111, EPI_ISL_590211, EPI_ISL_590231, EPI_ISL_590578, EPI_ISL_590677, EPI_ISL_590578, EPI_ISL_590678, EPI_ISL_590678
see above	Lighthouse Lab in Glasgow	Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium	Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, 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_590707, EPI_ISL_590736	University of Michigan Clinical Microbiology Laboratory	Lauring Lab, University of Michigan, Department of Microbiology and Immunology	Valesano
EPI_ISL_590880	Medical Microbiology Unit, Department for Laboratory Medicine, Drammen Hospital, Vestre Viken Health Trust,	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_590881	Furst Medical Laboratory	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_590895	Ostfold Hospital Trust - Kalnes, Centre for Laboratory Medicine, Section for gene technology and infection serology	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_590898	Furst Medical Laboratory	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_590899	Foerde Hospital, Department of Microbiology	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_590912	Furst Medical Laboratory	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_590923, EPI_ISL_590928, EPI_ISL_590935	Oslo University Hospital, Department of Medical Microbiology	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_590977	Dept. of Medical Microbiology, Stavanger University Hospital, Helse Stavanger HF	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_591008	Foerde Hospital, Department of Microbiology	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_591013	Unilabs Laboratory Medicine	Norwegian Institute of Public Health, Department of Virology	Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Hilde Vollan, Karoline Bragstad, Olav Hungnes
EPI_ISL_591029, EPI_ISL_591035	MD PHL	MD PHL	Maryland Department of Health Laboratories Administration
EPI_ISL_593636, EPI_ISL_593638	unknown	Public Health Virology Laboratory, Forensic and Scientific Services (PHV-FSS)	Son Nguyen et al.
EPI_ISL_593742	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_593980, EPI_ISL_593981	Delaware Public Health Lab	Delaware Public Health Lab	Gregory Hovan
EPI_ISL_594152	Klinsisk mikrobiologi Linkoping	The Public Health Agency of Sweden	Anna-Malin Linde, Maria Lind Kariberg, Mattias Haukland, Reza Advani, Olov Svartstrom, Oskar Karlsson Lindsjo, Sandra Broddesson, Petra Edquist, Mia Brytting, Anna Risberg, Karin Tegmark-Wisell
EPI_ISL_594485, EPI_ISL_594497, EPI_ISL_594499, EPI_ISL_594521, EPI_ISL_594553	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 Wanigasoriya, Oliver Pickles, Mike Kidd, Alex Richter, Andrew D Beggs PHE Heartlands Lab: Husam Osman, Andrew Bosworth. Queen Elizabeth Hospital: Anna Casey
EPI_ISL_594620, EPI_ISL_594625, EPI_ISL_594640, EPI_ISL_594906, EPI_ISL_594907, EPI_ISL_594910, EPI_ISL_594911, EPI_ISL_594912, EPI_ISL_594917, EPI_ISL_594921	Oxford Viromics, NDM, University of Oxford; Oxford University Hospitals; Basingstoke and North Hampshire Hospital	COVID-19 Genomics UK (COG-UK) Consortium	Tanya Golubchik, David Bonsall, George Macintyre, Amy Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser
EPI ISL 594931, EPI ISL 594932, EPI ISL 594933, EPI ISL 594940, EPI ISL 594941, EPI ISL 594942, EPI ISL 594956, EPI ISL 594962, EPI ISL 594979	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_595043, EPI_ISL_595045	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_595689, EPI_ISL_595693, EPI_ISL_595696, EPI_ISL_595703	1, EPI_ISL_595702, EPI_ISL_595720, EPI_ISL_595724, EPI_ISL_595759, EPI_ISL_595769, EP	Pl_ISL_595781, EPI_ISL_595783, EPI_ISL_595784,	EPI_ISL_595785, EPI_ISL_595786, EPI_ISL_595793
see above		COVID-19 Genomics UK (COG-UK) Consortium	Tanya Golubchik, David Bonsall, George Macintyre, Arny Trebes, Mariateresa de Cesare, Catrin Moore, Alex Mobbs, Anita Justice, Robert Shaw, Monique Andersson, Timothy Peto, Emma Wise, Nathan
EPI_ISL_596270	and North Hampshire Hospital HELIX LCC	WHO National Influenza Centre Russian Federation	Moore, Jessica Lynch, Nick Cortes, Matilde Mori, Stephen Kidd, David Buck, John Todd, Christophe Fraser Andrey Komissarov, Artem Fadeev, Anna Ivanova, Kseniya Komissarova, Dmitry Bazhenov, Daria Danilenko
EPI_ISL_596391, EPI_ISL_596407, EPI_ISL_596415	Seattle Flu Study	Seattle Flu Study	Deborah A. Nickerson, Chris D. Frazar, Jover Lee, Benjamin Pelle, Matthew Richardson, Amanda Adler, Elisabeth Brandstetter, Peter D. Han, Kairsten Fay, Misja Ilcisin, Kirsten Lacombe, Thomas R. Sibley, Melissa Truong, Caitlin R. Wolf, Karen Cowgill, Stephanie Schrag, Jeff Duchin, Michael Boeckh, Janet A. Englund, Michael Famulare, Barry R. Lutz, Mark J. Rieder, Lea M. Starita, Matthew
EPI_ISL_596474, EPI_ISL_596475, EPI_ISL_596477	National Public Health Laboratory, National Centre for Infectious Diseases	National Public Health Laboratory, National Centre for Infectious Diseases	Thompson, Helen Y. Chu, Trevor Bedford, Jay Shendure Tze Minn Mak, Sophie Octavia, Zhenyang Zhou, Lin Cui, Raymond Tzer Pin Lin
EDI ISI 506880 EDI ISI 506806 EDI ISI 506005	National Virus Reference Laboratory	National Virus Reference Laboratory	Michael Carr, Gabriel Conzalez, Ionathan Dean, Daniel Hare, Cillian F. De Cascun

National Virus Reference Laboratory

EPI_ISL_596889, EPI_ISL_596896, EPI_ISL_596905, EPI_ISL_596907, EPI_ISL_596919 National Virus Reference Laboratory

EPI ISL 599258, EPI ISL 599489, EPI ISL 599489, EPI ISL 599505, EPI ISL 599505, EPI ISL 599506, EPI ISL 599544, EPI ISL 5995735, EPI ISL 599575, EPI ISL 599759, EPI ISL 599766, EPI ISL 599769, EPI ISL 599769, EPI ISL 599677, EPI ISL 599789, EPI ISL 599789, EPI ISL 599789, EPI ISL 599684, EPI ISL 599789, EPI ISL 599789, EPI ISL 599789, EPI ISL 599789, EPI ISL 599589, EPI ISL 599589, EPI ISL 599684, EPI ISL 599684, EPI ISL 599789, EPI ISL 599789, EPI ISL 599789, EPI ISL 599589, EPI ISL 599789, EPI ISL 599589, EPI ISL 599589, EPI ISL 599789, EPI ISL 59978 Wellcome Sanger Institute for the COVID-19 Lighthouse Lab in Glasgow Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Cluoston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic Genomics UK Consortium 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 599818, EPI ISL 599838, EPI ISL 599840, EPI ISL 599840, EPI ISL 599840, EPI ISL 599849, EPI ISL 599873, EPI ISL 599873 Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalt Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI ISL 600148, EPI ISL 600205, EPI ISL 600205, EPI ISL 600210, EPI ISL 600217, EPI ISL 600571, EPI ISL 600587, EPI ISL 600588, EPI ISL 600589, EPI ISL 600589 EPI ISL 600611, EPI ISL 600615, EPI ISL 600621, EPI ISL 600625, EPI ISL 600629, EPI ISL 600633, EPI ISL 600635, EPI ISL 600655, EPI ISL 600657, EPI ISL 600657, EPI ISL 6006748, EPI ISL 600677, EPI ISL 6006748, EPI ISL 600748, EPI ISL 600833, EPI ISL 600833, EPI ISL 600834, EPI ISL 600834, EPI ISL 600834, EPI ISL 600834, EPI ISL 600835, EPI ISL 600834, EPI ISL 600835, EPI ISL 600834, EPI ISL 6008 EPI_ISL_600869, EPI_ISL_600871, EPI_ISL_600876, EPI_ISL_600881, EPI_ISL_600884, EPI_ISL_600889 see above Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Genomics LIK Consortium 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_600892, EPI_ISL_600912, EPI_ISL_600913, Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf EPI_ISL_600915 Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI ISL 600936, EPI ISL 600941, EPI ISL 600941, EPI ISL 600944, EPI ISL 600944, EPI ISL 600957, EPI ISL 600959, EPI ISL 600958, EPI ISL 600958, EPI ISL 600958, EPI ISL 600969, EPI ISL 600969, EPI ISL 600969, EPI ISL 600969, EPI ISL 600970, EPI ISL 60104, EPI ISL 600970, EPI ISL 60104, EPI ISL 601057, EPI EP | SL 601162, EP | SL 601185, EP | SL 601188, EP | SL 601188, EP | SL 601193, EP | SL 601219, EP | SL 601201, EP | SL 601201, EP | SL 601203, EP | SL 601207, EP | SL 601207, EP | SL 601213, EP | SL 601213, EP | SL 601219, EP | SL 601212, EP | SL 601222, EP | SL 601223, EP | SL 601223, EP | SL 601224, EP | SL 601213, EP | SL 601214, EP | SL 601214 Wellcome Sanger Institute for the COVID-19 Harner VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic see above Lighthouse Lab in Glasgow Genomics UK Consortium 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_601239 Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behal Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI_ISL_601246, EPI_ISL_601250, EPI_ISL_601251 Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Harner VanSteenhouse, Yumi Kasai, David Gray, Carol Cluoston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic Genomics UK Consortiun 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_601258, EPI_ISL_601268 Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI_ISL_601274 Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Cluoston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K, Jackson, Jan 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) Genomics UK Consortium EPI ISL 601283. EPI ISL 601298 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K, Jackson, Jan Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI_ISL_601334, EPI_ISL_601356 Lighthouse Lab in Glasgov Wellcome Sanger Institute for the COVID-19 Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Genomics UK Consortium Kwiatkowski, Cordelja Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI ISL 601359, EPI ISL 601363, EPI ISL 601367, EPI ISL 601370, EPI ISL 601373, EPI ISL 601376, EPI ISL 601378, EPI ISL 601378, EPI ISL 601488, EPI ISL 601406, EPI ISL 601412, EPI ISL 601427, EPI ISL 601439, EPI ISL 601440, EPI ISL 601451 Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf see above of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) Genomics UK Consortium EPI ISL 601459 Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Harner VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic Genomics UK Consortium Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-tea EPI_ISL_601465, EPI_ISL_601468 Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behalf Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic EPI ISL 601469, EPI ISL 601488 Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Kwiatkowski, Cordelia Langford, John Sillitoe on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team Genomics UK Consortium EPI_ISL_601514, EPI_ISL_601524, EPI_ISL_601532, EPI_ISL_601545, EPI_ISL_601551, EPI_ISL_601557, EPI_ISL_601564, EPI_ISL_601582, EPI_ISL_601603, EPI_ISL_601638, EPI_ISL_601656, EPI_ISL_601660, EPI_ISL_601678 see above Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19 The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, 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_601700 Lighthouse Lab in Cambridge Wellcome Sanger Institute for the COVID-19 Rob Howes, The Lighthouse Lab in Cambridge and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe Genomics UK Consortium on behalf of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team EPI ISL 601707, EPI ISL 601724, EPI ISL 601739, Lighthouse Lab in Milton Keynes Wellcome Sanger Institute for the COVID-19. The Lighthouse Lab in Milton Keynes and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Jan Johnston, Dominic Kwiatkowski, Cordelia Langford, John Sillitoe on behal EPI_ISL_601754, EPI_ISL_601777, EPI_ISL_601786 Genomics UK Consortium of the Wellcome Sanger Institute COVID-19 Surveillance Team (http://www.sanger.ac.uk/covid-team) EPI ISL 601787, EPI ISL 601827, EPI ISL 601827, EPI ISL 601827, EPI ISL 601840, EPI ISL 601840, EPI ISL 602085, EPI ISL 602097, EPI ISL 602097, EPI ISL 602100, EPI ISL 602100, EPI ISL 6020100, EPI ISL 602100, EPI ISL 602114 Harper VanSteenhouse, Yumi Kasai, David Gray, Carol Clugston, Anna Dominiczak and Alex Alderton, Roberto Amato, Sonia Goncalves, Ewan Harrison, David K. Jackson, Ian Johnston, Dominic see ahove Lighthouse Lab in Glasgow Wellcome Sanger Institute for the COVID-19 Genomics UK Consortium 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 602260 MD PHI MD PHI Maryland Department of Health Laboratories Administration WHO National Influenza Centre Russian EPI_ISL_602344, EPI_ISL_602345, EPI_ISL_602423 HELIX LLC Andrey Komissarov, Artem Fadeey, Kseniya Komissarova, Anna Ivanova, Dmitry Razhenov, Daria Danilenko Federation EPI_{1} SL_602639, EPI_{1} SL_602655, EPI_{1} SL_602655, EPI_{1} SL_602665, EPI_{1} SL_602665, EPI_{1} SL_602689, EPI_{1} SL_602688, EPI_{1} SL_602699, EPI_{1} SL_602699, EPI_{1} SL_602699, EPI_{1} SL_602773, EPI_{1} SL_602699, EPI_{1} SL_602773, EPI_{1} SL_602699, EPI_{1} SL_602773, $EPI_$ NHLS-IALCH KRISP, KZN Research Innovation and Giandhari J, Pillay S, Lessells R, Mdlalose K, York D, Khan S, Tegally H, Wilkinson E, de Oliveira T Sequencing Platform EPI ISL 602958, EPI ISL 602961, EPI ISL 602963, EPI ISL 602963, EPI ISL 602964, EPI ISL 602965, EPI ISL 602966, EPI ISL 602967, EPI ISL 602968, EPI ISL 602970, EPI ISL 602970, EPI ISL 602973, EPI ISL 602974, EPI ISL 602975, EPI ISL 602975, EPI ISL 602980, EPI ISL 602980, EPI ISL 602980, EPI ISL 602980, EPI ISL 602974, EPI ISL 602975, EPI ISL 602975, EPI ISL 602980, EPI ISL 602980, EPI ISL 602980, EPI ISL 602975, EPI ISL 602975, EPI ISL 602975, EPI ISL 602980, EPI ISL 602980, EPI ISL 602980, EPI ISL 602975, EPI ISL 602975, EPI ISL 602980, EPI ISL 602980, EPI ISL 602980, EPI ISL 602975, EPI ISL 602980, EPI ISL 602975, EPI ISL 602980, EPI ISL 602980 Minnesota Department of Health, Public Health Laboratory Minnesota Department of Health, Public Matt Plumb, Jacob Garfin, Alexandra Lorentz, and Xiong Wang Health Laboratory EPI ISL 603269, EPI ISL 603280, EPI ISL 603280, EPI ISL 603328, EPI ISL 603328, EPI ISL 6033328, EPI ISL 6033328, EPI ISL 603359, EPI ISL 603359, EPI ISL 603364, EPI ISL 603364, EPI ISL 603370, EPI ISL 603370, EPI ISL 603370, EPI ISL 603384, EPI ISL 603385, EPI ISL 6033410, EPI ISL 603411, EPI ISL 603412, EPI ISL 603412, EPI ISL 603412, EPI ISL 603364, EPI ISL 603370, EPI ISL 603370, EPI ISL 603370, EPI ISL 603370, EPI ISL 603385, EPI ISL 603385, EPI ISL 603385, EPI ISL 603385, EPI ISL 603364, EPI ISL 603370, EPI ISL 603385, EPI ISL 603 Department of Biosystems Science and Christian Beisel, Sarah Nadeau, Ivan Topolsky, Pedro Ferreira, Philipp Jablonski, Susana Posada-Céspedes, Tobias Schär, Ina Nissen, Natascha Santacroce, Elodie Burcklen, Christiane Beckmann, Maurice Engineering, ETH Zürich Redondo, Olivier Kobel, Christoph Noppen, Sophie Seidel, Noemie Santamaria de Souza, Niko Beerenwinkel, Tanja Stadler EPI_ISL_605060, EPI_ISL_605064, EPI_ISL_605067, EPI_ISL_605072, EPI_ISL_605078, EPI_ISL_605081, EPI_ISL_605090, EPI_ISL_605130, EPI_ISL_605132, EPI_ISL_605143, EPI_ISL_605143 Sachin Chalapati, Conor Crosbie, Nimesh Pinnamaneni National Virus Reference Laboratory Irish Coronavirus Sequencing Consortium -Helixworks EPI_ISL_605421, EPI_ISL_605428, EPI_ISL_605428, EPI_ISL_605436, EPI_ISL_605436, EPI_ISL_605543, EPI_ISL_605643, EPI_ISL_605543, EPI_ISL_605543 University of Wisconsin-Madison AIDS Vaccine Research Laboratories University of Wisconsin-Madison AIDS Vaccine Gage Moreno, Katarina Braun, et al. AIDS Vaccine Research Laboratories Research Laboratories EPI_ISL_609973, EPI_ISL_609984, EPI_ISL_609985, Virginia DCLS Virginia DCLS Virginia DCLS EPI_ISL_609986 EPI_ISL_612124, EPI_ISL_612125, EPI_ISL_612286, West of Scotland Specialist Virology Centre, NHSGGC / MRC-University of Glasgow 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, Kyriaki Nomikou; Sarah McDonald, Marc Niebel, Patawee EPI ISL 612292 Centre for Virus Research Asamaphan; Richard Orton, Joseph Hughes, Sreenu Vattipally, David L Robertson; Alasdair MacLean, Rory Gunson; Kathy Li, Igor Starinskij, Natasha Jesudason, Rajiv Shah, James Shepherd, Antonia Ho, Emma Thomson EPI_ISL_612320, EPI_ISL_612321 Virology Department, Royal Infirmary of Edinburgh, NHS Lothian / School of Biological COVID-19 Genomics UK (COG-UK) Consortium McHugh M, Dewar R, Rooke S, Gallagher M, Balcaza C, O'Toole Á, Scher E, Hill V, McCrone JT, Colquhoun R, Yu X, Jackson B, Rambaut A, Williams TC, Templeton K Sciences, University of Edinburgh / Institute of Genetics and Molecular Medicine, University of Edinburgh EPI ISL 612487 Wales Specialist Virology Centre Sequencing lab: Pathogen Genomics Unit 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 Gilbert, Lee Graham, Nicole Pacchiarini, Sara Kumziene-Summerhayes, Sarah Taylor, Sophie Jones, Sara Rey, Matthew Bull, Joanne Watkins, Sally Corden, Tom Connor EPI_ISL_613481, EPI_ISL_613483, EPI_ISL_613486, Plumb, M., Garfin, J., Lorentz, A., Wang, X. Public Health Laboratory - Infectious Disease Lab, Minnesota Department of Health Minnesota Department of Health, Public EPI_ISL_613488, EPI_ISL_613489 Infectious Disease Laboratory Submission Group Health Laboratory EPI ISL 613843 Florida Bureau of Public Health Laboratories Florida Bureau of Public Health Laboratories Sarah Schmedes, Jason Blanton EPI ISL 614051, EPI ISL 614052, EPI ISL 614054, EPI ISL 614057, EPI ISL 614057, EPI ISL 614077, EPI ISL 614088, EPI ISL 614088, EPI ISL 614123, EPI ISL 614124, EPI ISL 614126, EPI ISL 614136, EPI ISL 614137, EPI ISL 614138, EPI ISL 614139, EPI ISL 614130 Virginia DCLS Virginia DCLS see above Virginia DCLS EPI_ISL_614171 Michigan Department of Health and Human Services, Bureau of Laboratories Michigan Department of Health and Human Blankenship HM, Riner D, Soehnlen MK Services, Bureau of Laboratories

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