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see above	Washington State Department of Health	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,

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EPI_ISL_497888, EPI_ISL_497889, EPI_ISL_497890, EPI_ISL_497891	B.J. Govt. Medical College	National Centre For Cell Science
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> Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh

Saumya Sarkar, Dharam Veer Singh, Rahul Vishvkarma, Ujjala Ghoshal, Uday Ghoshal, Ravishankar Ramachandran, Tapas Kumar Kundu, Rajender Singh

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Pavitra Roychoudhury, Amin Addetia, Hong Xie, Lasata Shrestha, Truong Nguyen, Meei-Li Huang, Keith Jerome, Alexander Greninger 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, Yoqesh S Shouche

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

Dhirai Paul, Kunal Iani, Radha Chauhan, Janesh Kumar, Vasudeyan Seshadri, Girdhari Lal, Raiesh Karyakarte, Suyarna Joshi, Murlidhar Tambe, Souray Sen, Santosh Karade, Kayita 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

> Yin Chen, Yanjun Zhang, Haiyan Mao, Junhang Pan, Xiuyu Lou, Yi Sun, Hao Yan, Zhen Li, Wen Sh Jeong-Min Kim, Yoon-Seok Chung, Namjoo Lee, Sang Hee Woo, Hye-Jun Jo, Heui Man Kim, Jun-Sub Kim, Myung Guk Han

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

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		Infectious Diseases, Korea Centers for Diseases Control and Prevention	Diseases, Korea Centers for Diseases Control and Prevention	
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EPI_ISL_498006, E	EPI_ISL_498007, EPI_ISL_498008, EPI	_ISL_498009, EPI_ISL_498010, EPI_ISL_498011, EPI_ISL_498012, EPI_	ISL_498013, EPI_ISL_498014, EPI_ISL_498015, EPI_ISL_498016	
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EPI_ISL_498018, E	EPI_ISL_498019, EPI_ISL_498020, EPI	I_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_4	198029, EPI_ISL_498030, EPI_ISL_498031, EPI_ISL_498032, EPI_ISL_498033, EPI_ISL_498035
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EPI_ISL_498037, E	EPI_ISL_498038, EPI_ISL_498039, EPI	I_ISL_498040, EPI_ISL_498041, EPI_ISL_498042, EPI_ISL_498043, EPI_	ISL_498044, EPI_ISL_498045, EPI_ISL_498046, EPI_ISL_498047, EPI_ISL_4	198048, EPI_ISL_498049, EPI_ISL_498050, EPI_ISL_498051, EPI_ISL_498052, EPI_ISL_498053
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EPI_ISL_498078, E	EPI_ISL_498079, EPI_ISL_498080, EPI	I_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_4	198065, 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_498094, EPI_ISL_498094, EPI_ISL_498094, EPI_ISL_498094, EPI_ISL_498095, EPI_ISL_498097, EPI_ISL_498095, EPI_ISL_498095, EPI_ISL_498094, EPI_ISL_498095, EPI_ISL_498095, EPI_ISL_498096, EPI_IS
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EPI_ISL_498127, E EPI_ISL_498151	EPI_ISL_498128, EPI_ISL_498129, EPI	ISL_498130, EPI_ISL_498131, EPI_ISL_498132, EPI_ISL_498133, EPI_	ISL_498134, EPI_ISL_498135, EPI_ISL_498136, EPI_ISL_498137, EPI_ISL_4	498138, EPI_SL_498139, EPI_ISL_498140, EPI_ISL_498141, EPI_ISL_498142, EPI_ISL_498143, EPI_ISL_498144, EPI_ISL_498145, EPI_ISL_498146, EPI_ISL_498147, EPI_ISL_498148, EPI_ISL_498149, EPI_ISL_498150,
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EPI_ISL_498152, E	EPI_ISL_498153, EPI_ISL_498154, EPI	_ISL_498155, EPI_ISL_498156, EPI_ISL_498157, EPI_ISL_498158, EPI_	SL_498159, EPI_ISL_498160, EPI_ISL_498161, EPI_ISL_498162, EPI_ISL_4	198163, EPI_ISL_498164, EPI_ISL_498165, EPI_ISL_498166, EPI_ISL_498167, EPI_ISL_498168, EPI_ISL_498169, EPI_ISL_498170
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EPI_ISL_498171, E				198182, 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
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EPI_ISL_4	498227, EPI_ISL_498228	National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR	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 198240, EPI_ISL_498241, EPI_ISL_498242, EPI_ISL_498243, EPI_ISL_498244, EPI_ISL_498245, EPI_ISL_498246, EPI_ISL_498247, EPI_ISL_498248, EPI_ISL_498249, EPI_ISL_498250, EPI_ISL_498251, EPI_ISL_498252
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EPI_ISL_4 EPI_ISL_498229, E EPI_ISL_4 EPI_ISL_498255, E EPI_ISL_498258, E EPI_ISL_498268, E	.498227, EPI_ISL_498228 EPI_ISL_498230, EPI_ISL_498231, EPI_see above .498253, EPI_ISL_498254 EPI_ISL_498256, EPI_ISL_498257, EPI_ISL_498259, EPI_ISL_498260, EPI_ISL_498254, EPI_ISL_498263, EPI_ISL_498264,	National Institute of Laboratory Medicine and Referral Center LISL_498232, EPI_ISL_498233, EPI_ISL_498234, EPI_ISL_498235, EPI_ Institut Pasteur de Dakar National Institute of Laboratory Medicine and Referral Center	Genomic Research Lab, BCSIR SL_498236, EPI_ISL_498237, EPI_ISL_498238, EPI_ISL_498239, EPI_ISL_4 Institut Pasteur de Dakar Genomic Research Lab, BCSIR	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 198240, EPI_ISL_498242, EPI_ISL_498243, EPI_ISL_498244, EPI_ISL_498245, EPI_ISL_498252, EPI_I
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Christian Beisel, Sarah Nadeau, Nan Topolsky, Pedro Ferreira, Philipp Jablonski, Susana Posada-Céspedes, Toblas Schär, Ina Missen, Natascha Santacroce, Elodie Burcklen, Christiane Beckmann, Maurice
Redondo, Dilivier Kohel, Christoph Nonpon, Sophie Seidel, Neperile Santamaria de Souza, Niko Reperenvinkel, Tanja Stadler

EPI_ISL_498629 Department of Clinical Microbiology GIGA Medical Genomics Keith Durkin, Maria Artesi, Sébastien Bontems, Raphaēl Boreux, Cécile Meex, Axelle Chaslain, Céline Fombellida-Lopez, Pierrette Melin, Marie-Pierre Hayette, Vincent Bours.

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Xiang Zhao,LingLing Mao,Yao Meng,Zhixiao Chen,Yuchao Wu,Yong ZhangBo ZhijianJiangun Zhang,Yang Song,Dayan Wang,WenQing YaoWenbo Xu

Heidi Butz, Frin Young, Kelly Oakeson

Rosenthal S.H. Gerasimova A. Kagan R.M. and Owen R.

lahan, 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 Saiib, Md, Salim Khan

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

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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	NSW Health Pathology - Institute of Clinical Pathology and Medical Research; Westmead Hospital; University of Sydney	CIDM-PH et al.
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 Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akhter Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat

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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

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see above National Institute of Laboratory Medicine and Referral Center Genomic Research Lab, BCSIR Abu Sayeed Mohammad Mahmud, Mohammad Samir Uzzaman, Eshrar Osman, Md. Ahasan Habib, Shahina Akter, Tanjina Akther Banu, Md. Murshed Hasan Sarkar, Barna Goswami, Iffat Jahan, Md. Saddam Hossain, Tasnim Nafisa, Md. Maruf Ahmed Molla, Mahmuda Yeasmin, Asish Kumanar Glosh, A. K. M. Shamsuzzaman, S

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EP_ISL_499083 September 10 Javier Martin, Dimitra Klapsa, Thomas Wilton

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EPI ISL_499269 DeepSeq Nottingham Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Wright, Matthew Loose

EPI ISL_499270, EPI ISL_499270, EPI ISL_499277, EPI ISL_499275, EPI ISL_499277, EPI ISL_499281, EPI ISL_499281, EPI ISL_499288, EPI ISL_499288, EPI ISL_499288, EPI ISL_499288, EPI ISL_499288, EPI ISL_499288, EPI ISL_499289, EPI ISL_499297, EPI ISL_499288, EPI ISL_499287, EPI ISL_499288, EPI IS

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see above Centre for Enzyme Innovation, University of Portsmouth / 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 Translational Research Laboratory, Portsmouth Hospitals NHS Trust

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see above Virology Department, Sheffield Teaching Hospitals NHS Foundation 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 Parker, Nikki Smith, Adri Angyal, Rebecca Brown, Luke Green, Rachel Tucker, Paul Parsons, Danielle Groves, Katie Johnson, Laura Carrilero, Alex Keeley, Dave Partridge, Matthew Wiles, Beniamin Lindsey, Mehmet Yavuz, Mohammad Raza, Cariad Evans

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Antonia Ho, Emma Thomson

EPI ISL 499355, EPI ISL 499356, EPI ISL 499357, EPI ISL 499357, EPI ISL 499357, EPI ISL 499366, EPI ISL 499366, EPI ISL 499366, EPI ISL 499366, EPI ISL 499377, EPI

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

EPI_SL_499398, EPI_SL_499399, EPI_SL_499400, EPI_ISL_499400, EPI_ISL_499401, EPI_ISL_499407, EPI_ISL_499407, EPI_ISL_499406, EPI_ISL_499406, EPI_ISL_499406, EPI_ISL_499406, EPI_ISL_499407, EPI_ISL_499407, EPI_ISL_499407, EPI_ISL_499413, EPI_ISL_499413, EPI_ISL_499413, EPI_ISL_499414, E

see above Wales Specialist Virology Centre Sequencing lab: Pathogen 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

 $EPL_{1}SL_{2}499460, EPL_{1}SL_{2}499461, EPL_{1}SL_{2}499462, EPL_{1}SL_{2}499463, EPL_{1}SL_{2}499464, EPL_{1}SL_{2}499465, EPL_{1}SL_{2}499466, EPL_{1}SL_{2}499467, EPL_{1}SL_{2}499469, EPL_{1}SL_{2}499471, EPL_{1}SL_{2}499467, EPL_{1}$

Sam Haldenby, Anita Lucaci, Steve Paterson, Julian Hiscox, Alistair Darby, M Almsaud, A Alrezalih, 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 Gerada, PKF Gilmore, Richard Gregory, Kimeng Han, Catherine Hartley, Margaret Hughes, Miren Hurriz-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassic Olateju, Rebekah Penrice-Randal, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Neli Sawanston. Ecaderina Vamos. Ioand Watts. Mark Whitehead

Livernool Clinical Laboratories

COVID-19 Genomics LIK (COG-LIK) Consortium

see ahove

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 Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Nel 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		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, Nell Swainston, Ecaterina Varons, 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 Dego, Justin 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 lan 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 Wain, Mark Webber, Andrew J. Page, Justin 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 Biloomfield, Clairie Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Grady
EPI_ISL_499496, EPI_ISL_499497, EPI_ISL_499498, EPI_ISL_499499, EPI_ISL_499500, EPI_ISL_499501		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, Nel 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 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_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 Ranibow, N.P. Randle, Trevor lan Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Nei 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 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_499516, EPI_ISL_499517, EPI_ISL_499518, I	EPI_ISL_499519, EPI_ISL_499520, EPI_ISL_499521, EPI_ISL_499522, EPI_ISL_49	9523, EPI_ISL_499524, EPI_ISL_499525, EPI_ISL_499526, EPI_	SL_499527, EP SL_499528, EP SL_499529, EP SL_499530, EP SL_499531, EP SL_499532, EP SL_499533, EP SL_499534, EP SL_499535, EP SL_499536, EP SL_499537, EP SL_499538, EP SL_499539,
EPI_ISL_499540, EPI_ISL_499541, EPI_ISL_499542, I see above	ರಗ_ವರ್ಮ499945, ರಗ_ವರ್ಮ499944, ರಗ_ವರ್ಮ499945 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-Randai, Lucille Rainbow, N.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Nell Swainston, Ecaterina Vanco,
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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 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_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 Swindells, Brendan Payne, Jennifer Collins, Yusri Taha, Gary Eltringham
EPI_ISL_499564, EPI_ISL_499565, EPI_ISL_499566, EPI_ISL_499567	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_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	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, Xineneg 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_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,	EPI_ISL_499576, EPI_ISL_499577, EPI_ISL_499578, EPI_ISL_499579, EPI_ISL_49	99580, 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 Penrice-Anadal, 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_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 Gliroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Crady
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 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-Anadal, 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_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, Nabili-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_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 Alreaili, Muhannad Alruwaili, Stuart D Armstrong, Jones Benjamin, Eleanor G Bentley, Anu Chawla, Jordan J Clark, Angela Cowell, Richard Eccles, Isabel García-Dorival, Matthew Germell, Alessandro Gerada, PKF Groven, Richard Gregory, Ximeng Han, Catherine Hartley, Margaret Hughes, Miren Inturriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassic 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_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 Gilroy, Samuel Biloomfield, Clairs Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Crady
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 Vamos, 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, 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 Bioomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Alison E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Crady
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 Gliroy, Samuel Bloomfield, Claire Stuart, Andrew Bell, Reenesh Prakash, Samir Dervisevic, Allson E. Mather, John Wain, Mark Webber, Andrew J. Page, Justin O'Crady
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, 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_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.P. Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawli, 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
EPI_ISL_499611, EPI_ISL_499612, EPI_ISL_499613,	EPI_ISL_499614, EPI_ISL_499615, EPI_ISL_499616, EPI_ISL_499617, EPI_ISL_49	99618, EPI_ISL_499619, EPI_ISL_499620, EPI_ISL_499621, EPI	ISL 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 Gilmore, Richard Gregory, Xineneg 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_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, Xineneg 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 Swalinston, 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,	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,

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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 499631 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 Quadram Institute Bioscience 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 499632, EPI ISL 499633, EPI ISL 499633, EPI ISL 499634, EPI ISL 499634, EPI ISL 499634, EPI ISL 499655, EPI ISL 499656, EPI ISL 499656, EPI ISL 499659, EPI ISL 499659 EPI ISL 499656, EPI ISL 499657, EPI ISL 499657, EPI ISL 499657, EPI ISL 499657, EPI ISL 499665, EPI ISL 499666, EPI ISL 499666, EPI ISL 499667, EPI ISL 499678, EPI ISL 499667, EPI ISL 49967, EPI ISL 49967, EPI ISL 49967, EPI ISL 49967, EPI ISL 499667, EPI ISL 499667, EP FPI ISI 499680, FPI ISI 499681, FPI ISI 499682, FPI ISI 499682, FPI ISI 499683, FPI ISI 499693, FPI ISI 499698, FPI ISI 499699, FPI ISI 499698, FPI ISI 499698 EF J. L. 499700. EF J.

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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 Shawii, James P Stewart, Neil Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
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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, EF	PI_ISL_499814, EPI_ISL_499815, EPI_ISL_499816, EPI_ISL_499817, EPI_ISL_4	99818, EPI_ISL_499819, EPI_ISL_499820, EPI_ISL_499821, EPI_	JSL_499822, EPI_ISL_499823, EPI_ISL_499824, EPI_ISL_499825, EPI_ISL_499826, 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, Nell 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 Richter, 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, Nell 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, EF	PI_ISL_499843, EPI_ISL_499844, EPI_ISL_499845, EPI_ISL_499846, EPI_ISL_4	99847, 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, Nell 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, Nell 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 Ituriza-Gomara, James Johnson, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-dad, L Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawii, 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 Ituriza-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_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-Mandal, Lucille Rainbow, N.P Randle, Trevor Ian Robinson, Parul Sharma, Ghada T Shawii, 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
			ISL_499881, EPI_ISL_499882, EPI_ISL_499883, EPI_ISL_499884, EPI_ISL_499885, EPI_ISL_499886, EPI_ISL_499887, EPI_ISL_499889, 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 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-Man, Lucille Rainbow, N.P Randle, Trevor Ian 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 Nottingham	COVID-19 Genomics UK (COG-UK) Consortium	Christopher Holmes, Paul Bird, Thomas Helmer, Karlie Fallon, Julian Tang, Jonathan Ball, Partick McClure, Joeseph Chappell, Nadine Holmes, Matthew Carlisle, Christopher Moore, Fei Sang, Johnny Debebe, Victoria Winkin, Matthew Loose

Nottingham Victoria 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

EPI_ISL_499897 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, Nottingham Victoria Wright, Matthew Loose EPI_ISL_499898, EPI_ISL_499899, EPI_ISL_499900, 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_499905 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,

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

Mercedes Pérez Ruiz, Sara Sanbonmatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SeqCOVID-SPAIN consortium

			Sarah L. Caddy, Yasmin Chaudhry, Malte Pinckert, Ian Goodfellow
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 Ian Robinson, Parul Sharma, Ghada T Shawli, James P Stewart, Nel 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 Y 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 Oldeiju, Rebekañ 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_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, Nell 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
FPI ISI 499914. FPI ISI 499915. FPI ISI 499916. FPI	ISI 499917, FPI ISI 499918, FPI ISI 499919, FPI ISI 499920, FPI ISI	499921, FPI ISI 499922, FPI ISI 499923, FPI ISI 499924, FPI	ISL 499925, EPI ISL 499926, EPI ISL 499927, EPI ISL 499928, EPI ISL 499929, EPI ISL 499930, EPI ISL 499931, EPI ISL 499932
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-Randaí, 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_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 ISL 499934, EPI ISL 499935, EPI ISL 499936, EPI	ISL 499937, EPI ISL 499938, EPI ISL 499939, EPI ISL 499940, EPI ISL	499941, EPI ISL 499942, EPI ISL 499943, EPI ISL 499944, EPI	
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-Randel, 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_499947	University of Birmingham	COVID-19 Genomics UK (COG-UK) Consortium	Institute of Microbiology, University of Birmingham: Claire McMurray, Joanne Stockton, Samuel Nicholls, Radosław Poplawski, Will Rowe, Josh Quick, Nicholas Loman. University of Birmingham Testing Laboratory: Celina M Whalley, Andrew Bosworth, Charlotte Poxon, Kasun Wanigasooriya, Oliwer 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-Anadal, 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_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, EPI		499958, EPI ISL 499959, EPI ISL 499960, EPI ISL 499961, 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 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 Swainson, Caterina Varons, 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 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_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, L Luu, Jenifer Manson, Charlotte Nelson, Elaine O'Toole, Cassie Olateju, Rebekah Penrice-Randel, 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_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_500008, EPI_ISL_500009, EPI_ISL_5000010, EPI EPI_ISL_500032, EPI_ISL_500033, EPI_ISL_500036, EPI EPI_ISL_500056, EPI_ISL_500057, EPI_ISL_500058, EPI EPI_ISL_5000080, EPI_ISL_5000081, EPI_ISL_500082, EPI EPI_ISL_500104, EPI_ISL_500105, EPI_ISL_500106, EPI	JSL 500011, EPI JSL 500012, EPI JSL 500013, EPI JSL 500013, EPI JSL 500036, EPI JSL 500037, EPI JSL 500036, EPI JSL 500037, EPI JSL 500038, EPI JSL JSL 500059, EPI JSL 500060, EPI JSL 500061, EPI JSL 500062, EPI JSL 500086, EPI JSL 500086, EPI JSL 500086, EPI JSL 500086, EPI JSL 500107, EPI JSL 500108, EPI JSL 500107, EPI JSL 5001073, EPI JSL 5001034, EPI JSL 500107, EPI JSL 5001074,	500015, EPI_ISL_500016, EPI_ISL_500017, EPI_ISL_500018, EPI_ 500039, EPI_ISL_500040, EPI_ISL_500041, EPI_ISL_500042, EPI_ 500063, EPI_ISL_500064, EPI_ISL_500065, EPI_ISL_500066, EPI_ 500087, EPI_ISL_500088, EPI_ISL_500089, EPI_ISL_500090, EPI_ 500111, EPI_ISL_500112, EPI_ISL_500113, EPI_ISL_500114, EP	SL 499995, EPI SL 499996, EPI SL 499999, EPI SL 499999, EPI SL 499999, EPI SL 499999, EPI SL 500000, EPI SL 50000, EPI SL 500000, EPI SL 50000, EPI SL 5000
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, Nel Swainston, Ecaterina Vamos, Joanne Watts, Mark Whitehead
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 SeqCOVID-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, Carídad 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
	_ISL_500171, EPI_ISL_500172, EPI_ISL_500173, EPI_ISL_500174, EPI_ISL_ _ISL_500195, EPI_ISL_500196, EPI_ISL_500197, EPI_ISL_500198, EPI_ISL_ Hospital Universitario Virgen de las Nieves de Granada-SAS		_ISL_500179, EPI_ISL_500180, EPI_ISL_500181, EPI_ISL_500182, EPI_ISL_500183, EPI_ISL_500184, EPI_ISL_500185, EPI_ISL_500186, EPI_ISL_500187, EPI_ISL_500188, EPI_ISL_500189, EPI_ISL_500190, EPI_ISL_500191,
EPI_ISL_500207	Complejo Hospitalario Universitario de Albacete	SegCOVID-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_500208	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_500209	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_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, Mª 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 Sanbomnatsu Gámez, Irene Pedrosa Corral, José M. Navarro-Marí and SeqCOVID-SPAIN consortium José Javier Costa Alzalde. Antonio Aquillera Guiza Mul Jusé Pérez del Mollino Bernal. Amparo Coira Nidro. Genera Barbairo Castificiaes. Rozi in Trastro. Pena and SeqCOVID-SPAIN consortium
FPL ISL 500221			

SeqCOVID-SPAIN consortium/IBV(CSIC)

SeqCOVID-SPAIN consortium/IBV(CSIC)

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EPI_ISL_500222, EPI_ISL_500223, EPI_ISL_500224, EPI_ISL_500225, EPI_ISL_500226, EPI_ISL_500227

Hospital Clínico Universitario de Santiago de Compostela

Hospital Universitario Virgen de las Nieves de Granada-SAS

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 see above Hospital Universitario Araba, Vitoria-Gasteia 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 Baró, Ana Milagro, Volanda Gracia Grataloup, Nieves Martínez Cameo and SegCOVID-SPAIN consortium FP ISL 500292, FP ISL 500293, FP ISL 500293, FP ISL 500294, FP ISL 500294, FP ISL 500295, FP ISL 500296, FP ISL 500297, 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 500322, 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 500403, EPI ISL 500409, EPI ISL 500403, EPI ISL 500403 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 Centro de Investigación Biomédica de La Rioja - Hospital San Pedro SeqCOVID-SPAIN consortium/IBV(CSIC) see above María de Toro, losé Manuel Azcona Gutiérrez, María Pilar Bea Escudero, Miriam Blasco Alberdi and SegCOVID-SPAIN consortium Loaroño 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 Paiva, Duschinka Ribeiro Duarte Guedes, Cássia Docena, Matheus Filqueira Bezerra, Filipe Zimmer Dezordi, Laís Ceschini Machado, Larissa Krokovsky, Elisama Helvecio, see above WallauLab, Aggeu Magalhaes Institute Alexandre Freitas da Silva, Antonio Mauro Rezende5, Sinval Pinto Brandão Filho7, Constância Flávia Junqueira Ayres, Gabriel Luz Wallau FPI ISI 500500. FPI ISI 500501. FPI 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 500554, EPI ISL 500554, EPI ISL 500554, EPI ISL 500555, EPI ISL 500555, EPI ISL 500556, EPI ISL 500556, EPI ISL 500556, EPI ISL 500556, EPI ISL 500548, EPI ISL 500554, EPI ISL 500554, EPI ISL 500554, EPI ISL 500557, EPI ISL 500557, EPI ISL 500548, EPI ISL 500554, EPI ISL 500548, EPI ISL 500548, EPI ISL 500554, EPI ISL 500548, EPI ISL 500548, EPI ISL 500548, EPI ISL 500548, EPI ISL 500554, EPI ISL 5005554, EPI ISL 500554, EPI ISL 500548, EPI ISL 500548, EPI ISL 500554, EPI ISL 500548, EPI ISL 50054 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 Laboratory Michael Carr, Gabriel Gonzalez, Jonathan 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 500624, EPI ISL 500623, EPI ISL 500624, EPI ISL 500635, EPI ISL 500640, EPI ISL 500653, EPI ISL 500664, EPI ISL 500665, EPI ISL 500666, EPI ISL 500665, EPI ISL 500665, EPI ISL 500666, EPI ISL 500667, EPI ISL 500666, EPI ISL 500667, EPI ISL 500667 Area of Virology, Serology and Virology Division (SAVID), New South Area of Virology, Serology and Virology Division (SAVID), New South see above Rawlinson, W. 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 Health England England 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

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

EPLIST 500710 EPLIST 500711 EPLIST 500712 EPI_ISL_500713, EPI_ISL_500714, EPI_ISL_500715 medicine By Sehime Gülsün Temel, Adem Alemdar, Kadir Yesilhağ EPI ISL 500717 Area of Virology, Serology and Virology Division (SAVID), New South Area of Virology, Serology and Virology Division (SAViD), New South Rawlinson, W Wales Health Pathology Randwick Wales Health Pathology Randwic 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 - Kristiansand, Department of Medical Norwegian Institute of Public Health, Department of Virology Kathrine Stene-Johansen, Kamilla Heddeland Instefjord, Hilde Elshaug, Rasmus Riis Kopperud, Karoline Bragstad, Olav Hungnes Microbiology EPI ISL 500776, EPI ISL 500777, EPI ISL 500778 Foerde Hospital, Department of Microbiology Norwegian Institute of Public Health, Department of Virology Kathrine Stene-Johansen, Kamilla Heddeland Instefiord, Hilde Elshaug, Rasmus Riis Kopperud, Karoline Bragstad, Olay Hungnes EPI ISL 500779, EPI ISL 500780, EPI ISL 500781. Akershus University Hospital, Department for Microbiology and 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_500782, EPI_ISL_500783 Infectious Disease Control EPLISI 500784 EPLISI 500785 EPLISI 500786 Furst Medical Laboratory Norwegian Institute of Public Health, Department of Virology Kathrine Stene-Johansen, Kamilla Heddeland Instefiord, Hilde Elshaug, Rasmus Riis Kopperud, Karoline Bragstad, Olay Hungnes EPI_ISL_500787, EPI_ISL_500788, EPI_ISL_500789, EPI_ISL_500790 EPI ISL 500791, EPI ISL 500792 Hospital of Southern Norway - Kristiansand, Department of Medical Norwegian Institute of Public Health, Department of Virology Kathrine Stene-Johansen, Kamilla Heddeland Instefiord, Hilde Elshaug, Rasmus Riis Kopperud, Karoline Bragstad, Olay Hungnes

EPI ISL 500797, EPI ISL 500798, EPI ISL 500799 Hospital of Southern Norway - Kristiansand, Department of Medical Norwegian Institute of Public Health, Department of Virology Kathrine Stene-Johansen, Kamilla Heddeland Instefiord, Hilde Elshaug, Rasmus Riis Kopperud, Karoline Bragstad, Olay Hungnes Microbiology EPI_ISL_500800 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, Karoline Bragstad, Olav Hungnes EPI_ISL_500801, EPI_ISL_500802, EPI_ISL_500802, EPI_ISL_500803, EPI_ISL_500804, EPI_ISL_500804, EPI_ISL_500805, EPI_ISL_500821, EPI_ISL_500823, EPI_ISL_500823, EPI_ISL_500813, EPI_ISL_500814, EPI_ISL_500814 EPI_ISL_500825, EPI_ISL_500826, EPI_ISL_500827, EPI_ISL_500828, EPI_ISL_500829, EPI_ISL_500830

Kathrine Stene-Johansen, Kamilla Heddeland Instefiord, Hilde Elshaug, Rasmus Rijs Kopperud, Karoline Bragstad, Olav Hungnes

Redondo, Olivier Kobel, Christoph Noppen, Sophie Seidel, Noemie Santamaria de Souza, Niko Beerenwinkel, Tanja Stadler

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EPI_SL_500831, EPI_JSL_500832, EPI_JSL_500832, EPI_JSL_500834, EPI_JSL_500834, EPI_JSL_500844, EPI_JSL_500844, EPI_JSL_500844, EPI_JSL_500849, EPI_JSL_500849, EPI_JSL_500849, EPI_JSL_500853, EPI_JSL_500853, EPI_JSL_500853, EPI_JSL_500853, EPI_JSL_500854, EPI_JSL_500844, 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 Instituto de Pesquisas Biomédicas, Hospital Naval Marcílio Dias Bioinformatics Laboratory / LNCC

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Rossi, 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

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EPI ISL 500946 GMERS Medical College & Hospital, Gotri, Vadodara Guiarat Biotechnology Research Centre Zuber Saived, Komal Patel, Labdhi Pandya, Afzal Ansari, Nikha Trivedi, Meenakshi Shah, Neena Doshi, Varsha Godbole, Apuryasinh Puvar, lanvi Rayal, Zarna Patel, Monika Gandhi, Pinal Trivedi, Maharshi Pandya, Nidhi Patel, Nitin Savaliya, Raghawendra Kumar, Dinesh Kumar, R D Dixit, A M Kadri, Harsh Bakshi, Chaitanya Joshi, Madhvi Joshi

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EPI ISL 500948 Zuber Saived, Komal Patel, Labdhi Pandva, Afzal Ansari, Nikha Trivedi, Naresh Chauhan, Summaiva Mullan, Amit gamit, Apurvasinh Puvar, Janvi Raval, Zarna Patel, Monika Gandhi, Pinal Trivedi, Maharshi Department of MicroBiology, Government Medical College, Surat Guiarat Biotechnology Research Centre Pandya, Nidhi Patel, Nitin Savaliya, Raghawendra Kumar, Dinesh Kumar, R D Dixit, A M Kadri, Harsh Bakshi, Chaitanya Joshi, Madhvi Josh EPI_ISL_500949 Department of MicroBiology, Government Medical College, Surat Guiarat Biotechnology Research Centre Komal Patel, Labdhi Pandya, Afzal Ansari, Nikha Triyedi, Naresh Chauhan, Summaiya Mullan, Amit gamit, Apuryasinh Puyar, Janyi Rayal, Zarna Patel, Monika Gandhi, Pinal Triyedi, Maharshi Pandya, Nidhi Patel, ari, Nikia Titvari, Naresi Cilaulian, Julinianja Mulain, Amit gamu, Aputvasimi ruvar, Jamin Ravat, Zania Pater, Mulika Gamun, Pina Nitin Savaliya, Raghawendra Kumar, Dinesh Kumar, Zuber Saiyed, R. D. Dixit, A. M. Kadri, Harsh Bakshi, Chaitanya Joshi, Madhvi Joshi EPI ISL 500950 Department of MicroBiology, Government Medical College, Surat Gujarat Biotechnology Research Centre Labdhi Pandya, Afzal Ansari, Nikha Trivedi, Naresh Chauhan, Summaiya Mullan, Amit gamit, Apurvasinh Puvar, Janvi Raval, Zarna Patel, Monika Gandhi, Pinal Trivedi, Maharshi Pandya, Nidhi Patel, Nitin Savaliva, Raghawendra Kumar, Dinesh Kumar, Zuber Saived, Komal Patel, R. D. Dixit, A. M. Kadri, Harsh Bakshi, Chaitanya Joshi, Madhyi Joshi FPI ISI 500951, FPI ISI 500952, FPI ISI 500953 Respiratory Virus Unit, Microbiology Services Colindale, Public

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Regional Virus Laboratory, Belfast Health and Social Care Trust
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Conail McCaughey, James McKenna, Tanya Curran, Susan Feeney, Alison Watt, Ciara Cox, Mairead Connor, Zoltan Moinar, David Simpson, Derek Fairley; 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/covidteam)

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