

Author	n (strains)	publication title	journal	publication URL
Zhang et al	1	A new coronavirus associated with human respiratory disease in China	unknown	https://dx.doi.org/10.1038/s41586-020-2008-3
Weijun Chen et al	1	Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding	unknown	https://dx.doi.org/10.1016/S0140-6736(20)30251-8
Baowen Du et al	3	unknown	unknown	
Kenneth Siu-Sing LEUNG et al	2	A territory-wide study of early COVID-19 outbreak in Hong Kong community: A clinical, epidemiological and phylogenomic investigation	unknown	https://dx.doi.org/10.1101/2020.03.30.20045740
Gilman Kit-Hang Siu et al	4	unknown	unknown	
Oskar Karlsson Lindsjö et al	1	unknown	unknown	
Matt Storey et al A	1	An emergent clade of SARS-CoV-2 linked to returned travellers from Iran	unknown	https://dx.doi.org/10.1101/2020.03.15.992818
Alexandr Shevtsov et al	2	unknown	unknown	
Rita Feghali et al	1	unknown	unknown	
Zohreh Fattahi et al	3	unknown	unknown	
Prystajeky Natalie et al	6	unknown	unknown	
Matt Storey et al B	14	unknown	unknown	
PathWest Laboratory Medicine WA Microbial Surveillance Unit et al	20	unknown	unknown	
Laura Bankers et al	5	unknown	unknown	
Xiaoyun Ren et al	33	unknown	unknown	
Maria Victoria Elizondo et al	4	unknown	unknown	
Carlos Cortes et al	3	unknown	unknown	
Ashley Jones et al	4	unknown	unknown	
Son Nguyen et al	14	unknown	unknown	
Cooley L. et al	4	unknown	unknown	
Diaz Y et al	1	unknown	unknown	
Eduardo Arathón et al	12	unknown	unknown	
Brenes Hebleen et al	1	unknown	unknown	
Paola Resende et al	15	unknown	unknown	
Francisco Duarte et al	40	unknown	unknown	
Gonzalez Claudia et al	1	unknown	unknown	
Monica Galiano et al	3	Preliminary analysis of SARS-CoV-2 importation & establishment of UK transmission lineages	unknown	https://virological.org/t/preliminary-analysis-of-sars-cov-2-importation-establishment-of-uk-transmission-lineages/507
Tsuyoshi Sekizuka et al A	1	A genome epidemiological study of SARS-CoV-2 introduction into Japan	unknown	https://www.medrxiv.org/content/10.1101/2020.07.01.20143958v1
Jianjun Chen et al	1	unknown	unknown	
Gisela Barrera Badillo et al	1	Genomic analysis of early SARS-CoV-2 strains introduced in Mexico	unknown	https://dx.doi.org/10.1101/2020.05.27.120402
Kouriba et al	1	unknown	unknown	
Ben Huang et al A	2	unknown	unknown	
Ben Huang et al B	1	Whole genome and phylogenetic analysis of two SARS-CoV-2 strains isolated in Italy in January and February 2020: additional clues on multiple introductions and further circulation in Europe	unknown	https://dx.doi.org/10.2807/1560-7917.ES.2020.25.13.2000305
Goba et al	1	unknown	unknown	
Chantal Akoua-Koffi et al	5	unknown	unknown	
Bas Oude Munnink et al	5	unknown	unknown	
Joyce M. Ngoi et al	1	unknown	unknown	
Yacouba Sawadogo et al	2	unknown	unknown	
Souissi et al	1	unknown	unknown	
Adamou Lagare et al	1	unknown	unknown	
Mounerou SALOU et al	2	unknown	unknown	
Collins M. Morang'a et al	4	unknown	unknown	
Abdoul-Salam Ouedraogo et al	2	unknown	unknown	
Augustina Sylverken et al	1	unknown	unknown	
Sahukhan et al	8	unknown	unknown	
Mirzakarim S Ayubov et al	2	unknown	unknown	
Elham Rizgalla et al	1	unknown	unknown	
Githinji G. et al	6	unknown	unknown	
Sokhoum Yann et al	4	unknown	unknown	
Matthew Cotten et al	5	unknown	unknown	
Plácido Mbala-Kingebeni et al	23	unknown	unknown	
Joseph Francis Wamala et al	1	unknown	unknown	
Chisha Sikazwe et al	2	unknown	unknown	
David Perera et al	1	unknown	unknown	
Chen YYC et al	2	unknown	unknown	
Mak TM et al	1	unknown	unknown	
Mak Tze Minn et al	1	unknown	unknown	
Myat Htut Nyunt et al	1	unknown	unknown	
Mohd Noor Mat Isa et al	2	unknown	unknown	
Tze Minn Mak et al	6	unknown	unknown	
Kumbu et al	7	unknown	unknown	
Lex Leong et al	7	unknown	unknown	
Daniel F Gudbjartsson et al A	1	Spread of SARS-CoV-2 in the Icelandic Population	unknown	https://dx.doi.org/10.1056/NEJMoa2006100
Kathrine Stene-Johansen et al	14	unknown	unknown	
Eliisa Franchin et al	2	unknown	unknown	
PHE Covid Sequencing Team et al	6	unknown	unknown	
Adam Meijer et al	126	unknown	unknown	
Jeong-Min Kim et al	2	unknown	unknown	
Ranjit Sah et al	1	Insights into The Codon Usage Bias of 13 Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Isolates from Different Geo-locations	unknown	http://biorxiv.org/lookup/doi/10.1101/2020.04.01.019463
Elizabeth Batty et al	5	unknown	unknown	
Ziqi Chen et al	4	unknown	unknown	
Erik A Karlsson et al	1	Whole genome and phylogenetic analysis of two SARS-CoV-2 strains isolated in Italy in January and February 2020: additional clues on multiple introductions and further circulation in Europe	unknown	https://dx.doi.org/10.2807/1560-7917.ES.2020.25.13.2000305
Young Min CHONG et al	2	unknown	unknown	
Frilasita A Yudhaputri et al	1	unknown	unknown	
Nurdiana Abdul Rahman et al	1	unknown	unknown	
Teemu Smura et al A	7	unknown	unknown	
M.E. Quiñones-Mateu et al	1	unknown	unknown	
Antoine Dara et al	1	unknown	unknown	
Rockett R et al	1	Revealing COVID-19 transmission in Australia by SARS-CoV-2 genome sequencing and agent-based modeling	unknown	https://www.nature.com/articles/s41591-020-1000-7
Boehmer et al	1	unknown	unknown	
Iglesias-Caballero et al A	1	Phylogenetics of SARS-CoV-2 transmission in Spain	unknown	https://dx.doi.org/10.1101/2020.04.20.050039
Teemu Smura et al B	1	A doubt of multiple introduction of SARS-CoV-2 in Italy: A preliminary overview	unknown	https://dx.doi.org/10.1002/jmv.25773
Njoum Richard et al	1	unknown	unknown	
Neta Zuckerman et al	7	unknown	unknown	
Caly L. et al	2	unknown	unknown	
Nagy et al	3	unknown	unknown	
Abi Habib et al	1	unknown	unknown	
Ae Kyung Park et al	8	unknown	unknown	
AlWasti et al	2	unknown	unknown	
Alwasti et al	9	unknown	unknown	
Catherine E. Arnold et al	5	unknown	unknown	
Tomaž Mark Zorec et al	1	unknown	unknown	
Ngoi et al	1	unknown	unknown	
Angel Angelov et al	2	unknown	unknown	
Reham Dawood et al	1	unknown	unknown	
Michael Zody et al	3	unknown	unknown	
Katherine Laiton-Donato et al A	1	Substitutions in Spike and Nucleocapsid proteins of SARS-CoV-2 circulating in Colombia	unknown	https://dx.doi.org/10.1101/2020.06.02.20120782
SEARCH Alliance with Gisela Barrera Badillo et al	1	unknown	unknown	
An-Ting Liou et al	1	unknown	unknown	
John Everett et al	1	unknown	unknown	
Salman Al-Sabah et al	3	unknown	unknown	
Gage Moreno et al	2	unknown	unknown	
Idabely Betancur Ortiz et al	2	unknown	unknown	
Andres F. Cardona-Rios et al	1	unknown	unknown	
Nathalia Ballesteros et al	2	unknown	unknown	
Luz Helena Patiño et al	1	unknown	unknown	
Nikita S. D. Sahadeo et al	23	unknown	unknown	
Massab Umair et al	4	unknown	unknown	
Alosaimi et al	1	unknown	unknown	
Michael Carr et al	4	unknown	unknown	
Markus Antwerpen et al	1	unknown	unknown	
Tahmineh Jalali et al	1	unknown	unknown	
Sara Mfarrej et al	3	unknown	unknown	
Buss et al	5	unknown	unknown	
Htay Htay Tin et al	1	unknown	unknown	
Kamolthip Atsawaramunt et al	1	unknown	unknown	
Pilailuk Okada et al	3	unknown	unknown	
Kuo-Chien Tsao et al	2	unknown	unknown	
Shakeel et al	1	unknown	unknown	
Rabeh El-Sheshery et al	2	unknown	unknown	
Fetouma Doudou et al	1	unknown	unknown	
Fatma Bayraktar et al	13	unknown	unknown	
Antonin Bal et al	7	unknown	unknown	
Danish Covid-19 Genome Consortia et al	2	unknown	unknown	
Endre Gábor Tóth et al	1	unknown	unknown	
Chaoran Chen et al	2	unknown	unknown	

Christian Beisel et al	3	unknown	unknown	unknown
Choukha Anissa et al	4	unknown	unknown	unknown
Ihem Bouliba-Ben Boubaker et al	2	unknown	unknown	unknown
Marion Barbet et al	31	unknown	unknown	unknown
Anke Wienecke-Baldacchino et al	22	unknown	unknown	unknown
Nadia Rodrigues et al	1	unknown	unknown	unknown
Soares da Silva et al	7	unknown	unknown	unknown
Chan Chia Jui et al	8	unknown	unknown	unknown
K Sadeghi et al	1	unknown	unknown	unknown
Habiba Al Safar et al	2	unknown	unknown	unknown
Azzania Fibrani et al	2	unknown	unknown	unknown
Willy Agustine et al	1	unknown	unknown	unknown
Palou et al	3	unknown	unknown	unknown
Sero et al	1	unknown	unknown	unknown
Sukma Oktavianthi et al	1	unknown	unknown	unknown
Supplah J et al	1	unknown	unknown	unknown
Paulino-Ramirez et al	2	unknown	unknown	unknown
Lemieux et al	1	unknown	unknown	unknown
Fabien Rock Niama et al	3	unknown	unknown	unknown
Rossana C Jaspe et al	23	unknown	unknown	unknown
Esdenka Pérez et al	20	unknown	unknown	unknown
Monica Becerra-Wong et al	3	unknown	unknown	unknown
Katherine Lalton-Donato et al B	13	unknown	unknown	unknown
Johana Hernandez Tolosa et al	2	unknown	unknown	unknown
Alfredo Bruno et al	19	unknown	unknown	unknown
Authors from IBT et al	10	unknown	unknown	unknown
Sarah Schmedes et al	2	unknown	unknown	unknown
Ndongo Dia et al	1	unknown	unknown	unknown
Loureiro CL et al	2	unknown	unknown	unknown
Chandima Jeevawardana et al	14	unknown	unknown	unknown
HS Jayasinghearachchi et al	1	unknown	unknown	unknown
Ramzi Fattouh et al	2	unknown	unknown	unknown
Scott Nguyen et al	1	unknown	unknown	unknown
C. Paul Morris et al	2	unknown	unknown	unknown
Otunjiyi P.E. et al A	3	unknown	unknown	unknown
Grant Vestal et al	1	unknown	unknown	unknown
Erin L. Young et al	2	unknown	unknown	unknown
Rivera NR et al	1	unknown	unknown	unknown
Meumann et al	9	unknown	unknown	unknown
Ramon Lorenzo-Redondo et al	3	unknown	unknown	unknown
Matthew Sinn et al	3	unknown	unknown	unknown
CIDM-PH et al.	6	unknown	unknown	unknown
Josephine Darpolor et al	1	unknown	unknown	unknown
Kelsey R. Florek et al	1	unknown	unknown	unknown
Valerie Reeb et al	3	unknown	unknown	unknown
Yan Li et al	4	unknown	unknown	unknown
Lee H. Harrison et al	2	unknown	unknown	unknown
Virginia DCLS et al	1	unknown	unknown	unknown
Nabees Jodar et al	3	unknown	unknown	unknown
Joaquín Ezpeleta et al	2	unknown	unknown	unknown
Cynthia Vázquez et al	3	unknown	unknown	unknown
Victor M Corman et al	12	unknown	unknown	unknown
Milli Sheth et al	18	unknown	unknown	unknown
Gathil Kimita et al	1	unknown	unknown	unknown
Opass Putcharoen et al	1	unknown	unknown	unknown
Nino Berishvili et al	1	unknown	unknown	unknown
Ovantsa Brachiveli et al	1	unknown	unknown	unknown
Meri Pantsulala et al	1	unknown	unknown	unknown
Giorgi Tomashvili et al	13	unknown	unknown	unknown
Dakota Howard et al	124	unknown	unknown	unknown
Henry Lee et al	1	unknown	unknown	unknown
Alexandra Popa et al A	1	Mutational dynamics and transmission properties of SARS-CoV-2 superspreading events in Austria	unknown	https://dx.doi.org/10.1101/2020.07.15.204338v1
Rosenthal et al	2	unknown	unknown	unknown
S. Wesley Long et al	1	unknown	unknown	unknown
Anca-Lelia (Riza) Costache et al	3	unknown	unknown	unknown
Anthony Fries et al	7	unknown	unknown	unknown
SEARCH Alliance San Diego with Aaron Harding et al	2	unknown	unknown	unknown
Oregon State University TRACE Project et al	1	unknown	unknown	unknown
Andrew Lang et al	1	unknown	unknown	unknown
WCMQ: Ayeda A. Ahmed et al	1	unknown	unknown	unknown
Ying Tao et al	1	unknown	unknown	unknown
Aristide Berenger Ako AKO et al	5	unknown	unknown	unknown
Morais J et al	5	unknown	unknown	unknown
Yvan Butera et al	8	unknown	unknown	unknown
Seemann T. et al	3	unknown	unknown	unknown
Sikhulile Moyo et al	11	unknown	unknown	unknown
Cynthia P. Saloma et al	7	unknown	unknown	unknown
Muleya W et al	1	unknown	unknown	unknown
Pérez-Corrales C et al	2	unknown	unknown	unknown
Maphalala GP et al	2	unknown	unknown	unknown
Christian Ranaivoson et al	2	unknown	unknown	unknown
Md. Murshed Hasan Sarkar et al	2	unknown	unknown	unknown
CHRF Bangladesh Genomics Team et al	3	unknown	unknown	unknown
Fatimah S. Alhamlan et al	3	unknown	unknown	unknown
Iyaloo Constantinus et al	2	unknown	unknown	unknown
Salome Hoschi et al	5	unknown	unknown	unknown
Antonio Orduña-Domingo et al	7	unknown	unknown	unknown
Tonney Nyirenda et al	4	unknown	unknown	unknown
Lukas Endler et al	15	unknown	unknown	unknown
Amoako DG et al	6	unknown	unknown	unknown
Naranzul Tsedenbal et al	13	unknown	unknown	unknown
Aubree Gordon et al	2	unknown	unknown	unknown
Fayez Khardine et al	13	unknown	unknown	unknown
Consortorio Mexicano de Vigilancia Genómica (CoVigen-Mex). Author	18	unknown	unknown	unknown
Iglesias-Caballero et al B	1	unknown	unknown	unknown
Juan José Guadalupe et al	1	unknown	unknown	unknown
Nancy Fayad et al	1	unknown	unknown	unknown
Ahmed Kandell et al	1	unknown	unknown	unknown
Ernesto Ramirez-Gonzalez et al	3	unknown	unknown	unknown
Celia Boukadida et al	1	unknown	unknown	unknown
Pablo Tsukayama et al	3	unknown	unknown	unknown
Daniel F Gudbjartsson et al B	2	unknown	unknown	unknown
Sully Márquez et al	2	unknown	unknown	unknown
Alexiev et al	15	unknown	unknown	unknown
Kristína Boršová et al	1	unknown	unknown	unknown
Jan Richter et al	2	unknown	unknown	unknown
Leonidos G. Kostrikis et al.	2	unknown	unknown	unknown
Leonardo I. Almonacid et al	1	unknown	unknown	unknown
L. Johana Madroñero et al	1	unknown	unknown	unknown
Abdul Karim sesay et al	8	unknown	unknown	unknown

R. Beukelman et al	1	unknown	unknown	unknown	3	unknown	unknown	unknown
Claudia Wong-Arambula et al	37	unknown	unknown	unknown				
Chris Benton et al	1	unknown	unknown	unknown				
Keith Gagnon et al	1	unknown	unknown	unknown				
Linda Mendoza et al	1	unknown	unknown	unknown				
Jolene Bowers et al	1	unknown	unknown	unknown				
Anna Majer et al	14	unknown	unknown	unknown				
Kame A. Galán-Huerta et al	3	unknown	unknown	unknown				
Alexander Kneubehl et al	3	unknown	unknown	unknown				
Romie Gavilan Chavez et al	3	unknown	unknown	unknown				
Matt Plumb et al	1	unknown	unknown	unknown				
Dr. Miza Abdul Muhsin et al	3	unknown	unknown	unknown				
Keith Durkin et al	1	A phylogenetic workflow to rapidly g						
Bas B Oude Munnink et al	28	unknown	unknown	unknown				
S. Calvignac-Spencer et al	1	unknown	unknown	unknown				
Alia Grad et al	2	unknown	unknown	unknown				
Ikrum BNOLYAHIA et al	1	unknown	unknown	unknown				
Groyo Solene et al	4	unknown	unknown	unknown				
Norossa Razanjajov et al	2	unknown	unknown	unknown				
Jeong-Ah Kim et al	7	unknown	unknown	unknown				
Samuel O. Oyola et al	12	unknown	unknown	unknown				
Mitsuo Mapangy Clajina Chastel et al	2	unknown	unknown	unknown				
Sonia Eterna Lukana-Douki et al	4	unknown	unknown	unknown				
Prof. Francine Ntoumi et al	1	unknown	unknown	unknown				
Cheng-Lih Peng et al	3	unknown	unknown	unknown				
Miguel Quinones-Mateu et al	1	unknown	unknown	unknown				
Giorgio Giurato (Corresponding Author) et al	1	unknown	unknown	unknown				
Gianharr J et al	1	unknown	unknown	unknown				
Doa et al	1	unknown	unknown	unknown				
Belén Prado-Vivar et al	2	unknown	unknown	unknown				
Matuk et al	2	unknown	unknown	unknown				
Antonio Grimaldi et al	2	unknown	unknown	unknown				
Carlos Padilla Rojas et al	28	unknown	unknown	unknown				
Al Salfar et al	2	unknown	unknown	unknown				
Westi Fares et al	1	unknown	unknown	unknown				
Caroline Öhrman et al	1	unknown	unknown	unknown				
Lidia Dotsenko et al	1	unknown	unknown	unknown				
Borges et al	19	unknown	unknown	unknown				
Gabriela Moura et al	1	unknown	unknown	unknown				
Cristina Muñoz Cuevas et al	1	unknown	unknown	unknown				
Abeer N. Alshakiri et al	1	unknown	unknown	unknown				
Lidia Dotsenko et al.	3	unknown	unknown	unknown				
Khine Zaw Oo et al	7	unknown	unknown	unknown				
Mai-Juan Ma et al	1	unknown	unknown	unknown				
Fumiko Yamamoto et al	2	unknown	unknown	unknown				
Allan K.O. Campbell et al	1	unknown	unknown	unknown				
Meiling Zhang et al	3	unknown	unknown	unknown				
Tony Wawina-Bokalanga et al	3	unknown	unknown	unknown				
Surakameh Mahasirimonkol et al	5	unknown	unknown	unknown				
EL Harnouchi Adil et al	1	unknown	unknown	unknown				
Elva House et al	1	unknown	unknown	unknown				
BRC: Fatma M. Benslimane et al	4	unknown	unknown	unknown				
Solène Groyo et al	6	unknown	unknown	unknown				
Bode Shobayo et al	2	unknown	unknown	unknown				
Zahun Zahin et al	8	unknown	unknown	unknown				
Christophe Rodriguez et al	4	unknown	unknown	unknown				
Tatiana Sedláčková et al	6	unknown	unknown	unknown				
Foster et al	7	unknown	unknown	unknown				
Francisco Gerardo M. Polotán et al	4	unknown	unknown	unknown				
Deborah A. Nickerson et al	3	unknown	unknown	unknown				
SEARCH Alliance with Abraham Campos Romero et al	3	unknown	unknown	unknown				
Consejo Mexicano de Vigilancia Genómica (COVIGEN-Mex). Autho		unknown	unknown	unknown				
Claudia Gonzalez et al	2	unknown	unknown	unknown				
Inoka C. Perera et al	1	unknown	unknown	unknown				
Chiwala Mú et al	1	unknown	unknown	unknown				
Viktoria Cabanova et al	2	unknown	unknown	unknown				
Siddle et al	12	unknown	unknown	unknown				
Pham Ngoc Thach et al	10	unknown	unknown	unknown				
Manh Huy Dao et al	1	unknown	unknown	unknown				
Nguyen Van Vinh Chau et al	1	unknown	unknown	unknown				
Triph Hoang Long et al	2	unknown	unknown	unknown				
Tizani Soekarno et al	2	unknown	unknown	unknown				
Caitlin Selway et al	13	unknown	unknown	unknown				
Pham Xuan Huy et al	2	unknown	unknown	unknown				
Alan K.L. Tsang et al	6	unknown	unknown	unknown				
Shah Jahan et al	1	unknown	unknown	unknown				
Luzia Lajtas et al	9	unknown	unknown	unknown				
Alex Saljik et al	7	unknown	unknown	unknown				
Ariesson Viana Da Silva et al	2	unknown	unknown	unknown				
Baumstärker E. et al	27	unknown	unknown	unknown				
Sandra Gonzalez et al	30	unknown	unknown	unknown				
Tim Roloff et al	3	unknown	unknown	unknown				
Nir Rainy et al	4	unknown	unknown	unknown				
Reinhard Gabriel et al	1	unknown	unknown	unknown				
Paula scholes et al	2	unknown	unknown	unknown				
Samuel MS Cheng et al	1	unknown	unknown	unknown				
Katherine Ching et al	4	unknown	unknown	unknown				
Grace Ngan et al	8	unknown	unknown	unknown				
Kamel K et al	2	unknown	unknown	unknown				
Zhevat Jakupi et al	14	unknown	unknown	unknown				
Lorusso A et al	2	unknown	unknown	unknown				
Sole Blomqvist et al	11	unknown	unknown	unknown				
Maciej Kosinski et al	3	unknown	unknown	unknown				
Marc Noguera-Julian et al	1	unknown	unknown	unknown				
Gilda Troncoso et al	1	unknown	unknown	unknown				
Sarah Cockerton et al	155	unknown	unknown	unknown				
Sandra Janezic et al	6	unknown	unknown	unknown				
Karen Orszácz et al	24	unknown	unknown	unknown				
Daniela Vujković et al	13	unknown	unknown	unknown				
Keith Durkin et al	4	unknown	unknown	unknown				
Irena Tabain et al	16	unknown	unknown	unknown				
Galetic S et al	7	unknown	unknown	unknown				
?	14	unknown	unknown	unknown				
Celestin Godwe et al	4	unknown	unknown	unknown				
Abroil A. et al	10	unknown	unknown	unknown				
Dimas Tadeu Covas et al	16	unknown	unknown	unknown				
Knezevic et al	11	unknown	unknown	unknown				
Mona Holberg-Petersen et al	3	unknown	unknown	unknown				
Danish Covid-19 Genome Consortium et al	16	unknown	unknown	unknown				
Gabriela Rutkowska et al	1	unknown	unknown	unknown				
Ruth Viquez et al	30	unknown	unknown	unknown				
Catalina Fardo-Roa et al	2	unknown	unknown	unknown				
Alexandra Galetović et al	1	unknown	unknown	unknown				
Irina Salimović-Babić et al	1	unknown	unknown	unknown				
Jan Albert et al	6	unknown	unknown	unknown				
Emmanouil Athanasiadis et al	7	unknown	unknown	unknown				
Zoe Yandell et al	11	unknown	unknown	unknown				
M. Takalo et al	6	unknown	unknown	unknown				
Adelaide Milani et al	1	unknown	unknown	unknown				
Geert Martens et al	3	unknown	unknown	unknown				
Nadia Wohlwend et al	11	unknown	unknown	unknown				
Sandrine Moreira et al	8	unknown	unknown	unknown				
Caiba Ibtisam Pereszlenyi et al	8	unknown	unknown	unknown				
Dr. Hani Mousa Al-Akabi et al	4	unknown	unknown	unknown				
Lukas Zemaitis et al	8	unknown	unknown	unknown				
Chacko S. et al	8	unknown	unknown	unknown				
Seemann et al	12	unknown	unknown	unknown				
National Public Health Laboratory Team et al	3	unknown	unknown	unknown				
Dr Esomba Rene Ghislain et al	1	unknown	unknown	unknown				
Okuyi et al	2	unknown	unknown	unknown				
Ricardo De Mendonça et al	1	unknown	unknown	unknown				
Katya Levytsky et al	2	unknown	unknown	unknown				
G Zhai et al	11	unknown	unknown	unknown				
Abay Sisay et al	1	unknown	unknown	unknown				
Marlene Stadtmüller et al	5	unknown	unknown	unknown				
Teodora Busharova et al	14	unknown	unknown	unknown				
Kelvin K.W. To et al	5	unknown	unknown	unknown				
Leakhena Pum et al	10	unknown	unknown	unknown				
Thant Sita et al	2	unknown	unknown	unknown				
Mojnu Miah et al	5	unknown	unknown	unknown				
Radosław Charkiewicz et al	2	unknown	unknown	unknown				
Sevan Omar Majed et al	1	unknown	unknown	unknown				
Paywast Jamal Jalal et al	2	unknown	unknown	unknown				
Alisher Abdullaev et al	2	unknown	unknown	unknown				
WFFaly Magassouba et al		unknown	unknown	unknown				
Nalia Ismael et al	10	unknown	unknown	unknown				
Bratati Kahali et al	1	unknown	unknown	unknown				
Epidemic Intelligence Team et al	1	unknown	unknown	unknown				
Rene K. Keke et al	2	unknown	unknown	unknown				
Hassan Afrad et al	2	unknown	unknown	unknown				
Rajeev Shrestha et al	1	unknown	unknown	unknown				
Rachel Boyle et al	12	unknown	unknown	unknown				
Harper VanSteenhouse et al	5	unknown	unknown	unknown				
Cedro-Tanda A et al	25	unknown	unknown	unknown				
Corina Casangu et al	3	unknown	unknown	unknown				
Uriel A. Hurtado Paez et al	1	unknown	unknown	unknown				
Nicole Liechti et al	3	unknown	unknown	unknown				
Saied Jaradat et al	1	unknown	unknown	unknown				
Yasir Elferrih et al	6	unknown	unknown	unknown				
Stefan Boers et al	1	unknown	unknown	unknown				
Sylvia Krzetovska et al	1	unknown	unknown	unknown				
D. Fathmath Nazla Rafeeq et al	10	unknown	unknown	unknown				
Chantal Vogels et al	2	unknown	unknown	unknown				
Rendon M et al	8	unknown	unknown	unknown				
Maria Teresa Mojica-Ortiz et al	1	unknown	unknown	unknown				
Vadim Nirca et al	4	unknown	unknown	unknown				
Anastasia Chatzidimitriou et al.	1	unknown	unknown	unknown				
Trestan Pilonel et al	1	unknown	unknown	unknown				
Kyriaki Tryfinopoulou et al	5	unknown	unknown	unknown				
Air Comodor Dr. J. Chimedza et al	3	unknown	unknown	unknown				
Pamela O'Brien et al	6	unknown	unknown	unknown				
Yun Wu et al	1	unknown	unknown	unknown				
Hernandez Sabel et al	1	unknown	unknown	unknown				
James Denvir et al	2	unknown	unknown	unknown				
Jim Mildenberger et al	6	unknown	unknown	unknown				
Kimberly Reeves et al	1	unknown	unknown	unknown				
Suwanie Lewis et al	1	unknown	unknown	unknown				
Isaac Miguel et al	2	unknown	unknown	unknown				
Bezdicok Matej et al	6	unknown	unknown	unknown				
BRC: Heba A. Al-Khatib et al	5	unknown	unknown	unknown				
Maximilian Riess et al	5	unknown	unknown	unknown				
Dr. Mahmoud Ghazo et al	1	unknown	unknown	unknown				
Issa Abu-Dayyeh et al	8	unknown	unknown	unknown				
National Public Health Laboratory Team/Dhaulagiri Hospital PCR CO	1	unknown	unknown	unknown				
Rodrigo Guaricchi et al	4	unknown	unknown	unknown				

ANDLEEB HANIF et al	3	unknown	unknown	unknown
Giorgi Gogoladze et al	1	unknown	unknown	unknown
Ulinici M et al	1	unknown	unknown	unknown
Alla Mironenko et al	2	unknown	unknown	unknown
Marie-Astrid Vernet et al	1	unknown	unknown	unknown
Mvula B et al	1	unknown	unknown	unknown
Halatoko et al	1	unknown	unknown	unknown
Cruys et al. on behalf of the Jessa_cmdLab et al	1	unknown	unknown	unknown
Ellie Johnson et al	2	unknown	unknown	unknown
Sara Marti et al	2	unknown	unknown	unknown
Wolkowicz Tomasz et al	1	unknown	unknown	unknown
Aghayev AR et al	1	unknown	unknown	unknown
Rijad Konjodzic et al	1	unknown	unknown	unknown
Jiratchaya Puenpa et al	1	unknown	unknown	unknown
Long Chen et al	1	unknown	unknown	unknown
D.Keckarević et al	1	unknown	unknown	unknown
Olujiyi P.E. et al B	1	First African SARS-CoV-2 genome sequence from Nigerian COVID-19 case	unknown	https://virological.org/t/first-african-sars-cov-2-genome-sequence-from-nigerian-covid-19-case/421
Caruso Arnaldo et al	1	unknown	unknown	unknown
Kowalski et al	2	unknown	unknown	unknown
Richard T. Ellison III et al	1	unknown	unknown	unknown
Oscar M. Rollano-Peñalosa et al	1	unknown	unknown	unknown
Souleymane Mboup et al	1	unknown	unknown	unknown
Sikhuile Wonderful T. Choga et al	1	unknown	unknown	unknown
Salome Javashvili et al	1	unknown	unknown	unknown
Vidanovic et al	2	unknown	unknown	unknown
Anna-Malin Linde et al	1	unknown	unknown	unknown
Nguyen Thi Tam et al	2	unknown	unknown	unknown
Alghoribi et al	1	unknown	unknown	unknown
Nouar Outob et al	2	unknown	unknown	unknown
Nasereddin et al	1	unknown	unknown	unknown
Janis Pjalkovskis et al	1	unknown	unknown	unknown
Ivan Ivanov et al	2	unknown	unknown	unknown
Barbara Bartolini et al	1	unknown	unknown	unknown
Aleksandar J. Dimovski et al	2	unknown	unknown	unknown
Arindam Maitra et al	2	unknown	unknown	unknown
Mulenga Mwenda-Chimfwembe et al	5	unknown	unknown	unknown
Claudia Alteri et al	1	unknown	unknown	unknown
Francis A. Tablizo et al	2	unknown	unknown	unknown
Conall McCaughey et al	1	unknown	unknown	unknown
Maciej Grzybek et al	2	unknown	unknown	unknown
Viktória Hodorová et al	2	unknown	unknown	unknown
Robyn N Hall et al	1	unknown	unknown	unknown
Ramuth M et al	7	unknown	unknown	unknown
Lukasz Rabalski et al	1	unknown	unknown	unknown
Jasmina Vranes et al	1	unknown	unknown	unknown
Sesay et al	2	unknown	unknown	unknown
Uma Sharma et al	1	unknown	unknown	unknown
Natalia Rego et al	3	unknown	unknown	unknown
CUTINO-MOQUEL et al	1	unknown	unknown	unknown
Marta Giovanetti et al	1	unknown	unknown	unknown
Fernando Hayashi Sant'Anna et al	1	unknown	unknown	unknown
Magaly Martinez et al	2	unknown	unknown	unknown
Laise de Moraes et al	1	unknown	unknown	unknown
Fabio Miyajima et al	1	unknown	unknown	unknown
Valdinete Nascimento et al	1	unknown	unknown	unknown
Fernando Antonio Vinhal dos Santos et al	1	unknown	unknown	unknown
Lutz G P de Almeida et al	1	unknown	unknown	unknown
L. Planciola et al	1	unknown	unknown	unknown
INSACOG-IGIB et al	1	unknown	unknown	unknown
Goletić T. et al	1	unknown	unknown	unknown
Broňa Brejová et al	1	unknown	unknown	unknown
Gisela Barrera-Badillo et al	1	unknown	unknown	unknown
Raece Naem et al	1	unknown	unknown	unknown
Alfredo Bruno Calcedo et al	1	unknown	unknown	unknown
Brendan L. O'Connell et al	1	unknown	unknown	unknown
Chamings et al	1	unknown	unknown	unknown
Arash Iranzadeh et al	3	unknown	unknown	unknown
Fabian Aguilar et al	1	unknown	unknown	unknown
Leandro Patiño et al	1	unknown	unknown	unknown
Mikhaylov et al	1	unknown	unknown	unknown
M Mazzeo et al	1	unknown	unknown	unknown
Tapfumanel Mashe et al	8	unknown	unknown	unknown
Jilini et al	1	unknown	unknown	unknown
Sikhuile Dorcas Maruapula et al	1	unknown	unknown	unknown
Anges Yadouleton et al	3	unknown	unknown	unknown
Julio Elias Alvarado-Yaah et al	1	unknown	unknown	unknown
Anvita G. Malhotra et al	1	unknown	unknown	unknown
Susan Engelbrecht et al	2	unknown	unknown	unknown
Thomas Demuyser et al	1	unknown	unknown	unknown
Ricardo De Mendonça et al	1	unknown	unknown	unknown
Kathleen Subramoney et al	1	unknown	unknown	unknown
PA Bester et al	2	unknown	unknown	unknown
Marzena Baranowska et al	1	unknown	unknown	unknown
Yichen Ding et al	1	unknown	unknown	unknown
Yathrib Al Zakwani et al	4	unknown	unknown	unknown
Shempela. D et al	4	unknown	unknown	unknown
Filip Sima et al	4	unknown	unknown	unknown
Yekti Hediningsih et al	3	unknown	unknown	unknown
Martine Bos et al	3	unknown	unknown	unknown
Sima tokajian et al	3	unknown	unknown	unknown
Jeremy Roe et al	1	unknown	unknown	unknown
Steven C. Holland et al	2	unknown	unknown	unknown
Mohammad Jubair et al	1	unknown	unknown	unknown
Elaine M. Kenny et al	2	unknown	unknown	unknown
Andrea Patrizia Salzmann et al	2	unknown	unknown	unknown
Ramirez A. et al	2	unknown	unknown	unknown
Sana Perjani et al	4	unknown	unknown	unknown
UKHSA et al	2	unknown	unknown	unknown
Sonal Sharma et al	1	unknown	unknown	unknown
Sergio Maria Ivano Malandrín et al	3	unknown	unknown	unknown
Asmita Gupta et al	1	unknown	unknown	unknown
Donald Fraser et al	2	unknown	unknown	unknown
Olga Burdunac et al	3	unknown	unknown	unknown
Orty Eshel et al	1	unknown	unknown	unknown
Björn Hallström et al	2	unknown	unknown	unknown
Martineti Lucchini Gladys et al	2	unknown	unknown	unknown
Jasmine Coppens et al	1	unknown	unknown	unknown
Di Gaudio F. et al	2	unknown	unknown	unknown
Severine Berden et al. on behalf of the Jessa_cmdLab et al	1	unknown	unknown	unknown
Gravity Diagnostics et al	1	unknown	unknown	unknown
Amy Strydom et al	1	unknown	unknown	unknown
Christopher R. Jossart et al	1	unknown	unknown	unknown
Viegas Sofia et al	1	unknown	unknown	unknown
Agha Rza Aghayev et al	3	unknown	unknown	unknown
Dieudonne Mutangana et al	1	unknown	unknown	unknown
Isaac Miguel Sánchez et al	10	unknown	unknown	unknown
Nokukhanya Mdlalose et al	1	unknown	unknown	unknown
William K. Ampofo et al	2	unknown	unknown	unknown
Caaba István et al	1	unknown	unknown	unknown
Deyvid Amgarten et al	1	unknown	unknown	unknown
Ann-Claire et al	5	unknown	unknown	unknown
Konstantinus I et al	3	unknown	unknown	unknown
Julie W. Hirschhorn et al	1	unknown	unknown	unknown
Mendoza L. et al	10	unknown	unknown	unknown
Alejandra Dávila-Barclay et al	4	unknown	unknown	unknown
Charlotte Michel et al	1	unknown	unknown	unknown
Amir Hesam Nemati et al	1	unknown	unknown	unknown
Biaseux Maxime et al	1	unknown	unknown	unknown
Keah Higgins et al	1	unknown	unknown	unknown

Eberhardt et al	2	unknown			unknown	unknown
Beata Rozwadowska et al	1	unknown			unknown	unknown
Keisha Francis et al	1	unknown			unknown	unknown
Cecilia Pajuelo et al	2	unknown			unknown	unknown
Martin Maidadi Foudi et al	4	unknown			unknown	unknown
David Alexander et al	3	unknown			unknown	unknown
Dorota Wagrocka - Rocznik et al	3	unknown			unknown	unknown
The Lighthouse Lab in Milton Keynes et al	1	unknown			unknown	unknown
Anne Lavergne et al	1	unknown			unknown	unknown
Fernando Lázaro et al	1	unknown			unknown	unknown
Irene Bianconi et al	1	unknown			unknown	unknown
Alvarez M et al	2	unknown			unknown	unknown
Son Nguyen on behalf of Q-PHIRE Genomics et al	1	unknown			unknown	unknown
Sabel Hernandez-Zavala et al	1	unknown			unknown	unknown
Yu Hua et al	1	unknown			unknown	unknown
Paul A. Christensen et al	2	unknown			unknown	unknown
Vanja Gavrilica Wilkasa et al	1	unknown			unknown	unknown
Zahra Ahmadi et al	2	unknown			unknown	unknown
Chilima BZ et al	1	unknown			unknown	unknown
Nazish Badar et al	1	unknown			unknown	unknown
Špulerová et al	1	unknown			unknown	unknown
Brahmaraju Mopidevi et al	1	unknown			unknown	unknown
Rastislav Slavkovský et al	1	unknown			unknown	unknown
Marketa Gancarcikova et al	1	unknown			unknown	unknown
Clayton O. Oryango et al	2	unknown			unknown	unknown
Huang Zheng et al	1	unknown			unknown	unknown
Cristina Andrés et al	1	unknown			unknown	unknown
Drew MacKellar et al	2	unknown			unknown	unknown
Glauber Wagner et al	1	unknown	unknown	unknown	hCoV-19/Brazil/SC-UFSC-52-66/2021	
Corrado Pipan et al	1	unknown	unknown	unknown	hCoV-19/Italy/FVG-UD-73085/2022	
Omar Khalilur Rahman et al	1	unknown	unknown	unknown	hCoV-19/Malaysia/AS11/2021	
Rasa Ugerskiene et al	1	unknown	unknown	unknown	hCoV-19/Lithuania/LSMULKGGMMK3C14/2022	
Thang Minh Cao et al	1	unknown	unknown	unknown	hCoV-19/Vietnam/PHCM_294/2022	
Zuzana Onderková et al	1	unknown	unknown	unknown	hCoV-19/Slovakia/Func20224_RUVZ_KE-22-108/2022	
Consortio Mexicano de Vigilancia Genómica (CoVGen-Mex): Julio Elias Alvarado-Yaah et al	1	unknown	unknown	unknown	hCoV-19/Mexico/SIN_LANGEBIO_IMSS_5125/2022	
Marcelo Henrique dos Santos Paiva et al	1	unknown	unknown	unknown	hCoV-19/Brazil/PE-FIOCRUZ-IAM8681/2022	
Cyndi Clark et al	3	unknown	unknown	unknown	hCoV-19/USA/TN-ASC-21060346/2022,hCoV-19/USA/PA-ASC-210589762/2022,hCoV-19/USA/TN-ASC-210692266/2022	
Kirsten St. George et al	1	unknown	unknown	unknown	hCoV-19/USA/NY-Wadsworth-2205926-01/2022	
Seth A. Faith PhD et al	1	unknown	unknown	unknown	hCoV-19/USA/OH-22AM-07C00432/2022	
Hang Pham Thi Thu et al	1	unknown	unknown	unknown	hCoV-19/Vietnam/PHCM_307/2022	
Wei Hua Huang et al	1	unknown	unknown	unknown	hCoV-19/USA/NC-ECU-CORVASEQ-111880486/2022	
Rastislav Slavkovský et al	1	unknown	unknown	unknown	hCoV-19/CzechRepublic/UMTM403656/2022	
Gregory L. Ware et al	1	unknown	unknown	unknown	hCoV-19/USA/LA-EVTL12547/2022	
Zahra Fereydouni et al	1	unknown	unknown	unknown	hCoV-19/Iran/AN1191/2021	
Lorie M. Atkins et al	1	unknown	unknown	unknown	hCoV-19/USA/LA-EVTL12998/2022	
Fredy A. Tabares-Villa et al	1	unknown	unknown	unknown	hCoV-19/Colombia/QUI-UTP-VG-755/2021	
Juvenio Chan et al	1	unknown	unknown	unknown	hCoV-19/Belize/8734452-ICGES/2021	
Blohm et al	1	unknown	unknown	unknown	hCoV-19/USA/MT-FYR-1720/2022	
Mahsa Tavakoli et al	2	unknown	unknown	unknown	hCoV-19/Iran/AP17162/2022,hCoV-19/Iran/51103/2022	
Giorgio Dirani et al	1	unknown	unknown	unknown	hCoV-19/Italy/EMR_AUSL Romagna_C022-22-36/2022	
Mitsuhiro Kamegama et al	1	unknown	unknown	unknown	hCoV-19/Japan/PG-200618/2022	
Hirokazu Adachi et al	1	unknown	unknown	unknown	hCoV-19/Japan/PG-185047/2022	
Souleymane MBOUP et al	1	unknown	unknown	unknown	hCoV-19/Senegal/SN-IR4-006143/2021	
Hubert Niesters et al	1	unknown	unknown	unknown	hCoV-19/Netherlands/GR-UJCG-MMB_4703/2022	
Lodj Nyinkou Komamen et al	1	unknown	unknown	unknown	hCoV-19/Belgium/CHUJolimur14036494/2022	
Rachael Downham et al	1	unknown	unknown	unknown	hCoV-19/USA/MI-TAMC_1134/2022	
Lindsey Bodnar et al	1	unknown	unknown	unknown	hCoV-19/USA/NJ-PHEL-V22010947/2022	
Ivana Čeko et al	1	unknown	unknown	unknown	hCoV-19/BosniaandHerzegovina/v1347/2022	

hCoV-19/Guinea/LFHVG-G0422/2021,hCoV-19/Guinea/LFHVG-G0472/2021,hCoV-19/Guinea/LFHVG-G0497/2021

hCoV-19/Mozambique/CERI-KRISP-K027528/2021,hCoV-19/Mozambique/CERI-KRISP-K032761/2021,hCoV-19/Mozambique/INS-K007950/2020,hCoV-19/Mozambique/CERI-KRISP-K035200/2022,hCoV-19/Mozambique/CERI-KRISP-K035200/2022

hCoV-19/India/TN-CBR-SEQ-10711/2021

hCoV-19/Nepal/EPN-B1279/2021

hCoV-19/Benin/NMIMR-442LCPCHDO/2021,hCoV-19/Benin/NMIMR-LFHV529453/2021

hCoV-19/Bangladesh/IEDCR-IdaSHI-OIS-594/2021,hCoV-19/Bangladesh/IEDCR-OIS-253/2021

hCoV-19/Nepal/DH_015/2021

hCoV-19/NewZealand/21MV0488/2021,hCoV-19/NewZealand/21MV0628/2021,hCoV-19/NewZealand/21MV0663/2021,hCoV-19/NewZealand/21CH0087/2021,hCoV-19/NewZealand/21MV0609/2021,hCoV-19/NewZealand/21MV0609/2021

hCoV-19/Scotland/QUEH-2B906C6/2021,hCoV-19/Scotland/QUEH-2C5DCC2/2021,hCoV-19/Scotland/QUEH-380426F/2022,hCoV-19/Scotland/QUEH-38E0357/2022,hCoV-19/Scotland/QUEH-2E828B5/2021

hCoV-19/Mexico/MEX-INMEGEN-38-58/2021,hCoV-19/Mexico/TAB-INMEGEN-38-69/2021,hCoV-19/Mexico/HBD-INMEGEN-38-19/2021,hCoV-19/Mexico/OAX-INMEGEN-38-114/2021,hCoV-19/Mexico/TAM-INMEGEN-38-114/2021

hCoV-19/Romania/B-37955/2021,hCoV-19/Romania/IS-39515/2021,hCoV-19/Romania/B-4/2022

hCoV-19/Colombia/ANT-CIB-13-21/2021

hCoV-19/Switzerland/BE-IFIK-3682-1348/2021,hCoV-19/Switzerland/BE-IFIK-5053-9121/2021,hCoV-19/Switzerland/BE-IFIK-220131_os_35/2022

hCoV-19/Jordan/PHBC33/2021

hCoV-19/Syria/Northwest-0003/2021,hCoV-19/Syria/Northwest-0034/2021,hCoV-19/Syria/Northwest-00171/2022,hCoV-19/Syria/Northwest-0135/2022,hCoV-19/Syria/Northwest-0132/2022,hCoV-19/Syria/Northwest-0157/2022

hCoV-19/Netherlands/ZH-LJUMC-1082/2021

hCoV-19/Poland/3641WIS2021_wessel/2021

hCoV-19/Maldives/MAV34764/2021,hCoV-19/Maldives/MAV90509/2021,hCoV-19/Maldives/MAV86720/2021,hCoV-19/Maldives/MAV91954/2021,hCoV-19/Maldives/MAV94998/2021,hCoV-19/Maldives/MAV91558/2021,hCoV-19/Maldives/MAV91558/2021

hCoV-19/U.S. Virgin Islands/Vi-Yale-14503/2021,hCoV-19/USA/CT-Yale-16135/2022

hCoV-19/Andorra/AND-249_213361423101_COV-GC/2021,hCoV-19/Andorra/AND-249_213361421901_COV-GC/2021,hCoV-19/Andorra/AND-247_212871383301_COV-GC/2021,hCoV-19/Andorra/AND-251_213841393401_COV-GC/2021

hCoV-19/Colombia/MAG-CGBM-S30112021-47/2021

hCoV-19/Moldova/D0059/2021,hCoV-19/Moldova/E0055/2021,hCoV-19/Moldova/D0057/2022,hCoV-19/Moldova/E0056/2022

hCoV-19/Greece/V5645/2021

hCoV-19/Switzerland/VD-CHUV-GEN9059/2021

hCoV-19/Greece/10620/2022,hCoV-19/Greece/15611/2021,hCoV-19/Greece/12473/2022,hCoV-19/Greece/5693/2022,hCoV-19/Greece/6205/2022

hCoV-19/Zimbabwe/CERI-KRISP-K021332/2021,hCoV-19/Zimbabwe/CERI-KRISP-K021540/2021,hCoV-19/Zimbabwe/CERI-KRISP-K034091/2021

hCoV-19/USA/HI-H216199/2021,hCoV-19/Guam/H216786/2021,hCoV-19/USA/GU-H228404/2022,hCoV-19/USA/HI-H227081/2021,hCoV-19/USA/AS-H227814/2022,hCoV-19/USA/AS-H228623/2022

hCoV-19/USA/OR-ORSU-213571009/2021

hCoV-19/Mexico/AGU-HSSEA-Lesp-32580-S6/2021

hCoV-19/USA/WV-WVU-WV121333/2021,hCoV-19/USA/WV-WVU-WV128476/2021

hCoV-19/USA/WY-WYPHIL-21082158/2021,hCoV-19/USA/WY-WYPHIL-21118157/2021,hCoV-19/USA/WY-WYPHIL-21126012/2021,hCoV-19/USA/WY-WYPHIL-22020179/2022,hCoV-19/USA/WY-WYPHIL-22033241/2022,hCoV-19/USA/WY-WYPHIL-22033241/2022

hCoV-19/USA/NC-CORVASEO-1086-574/2021

hCoV-19/Jamaica/202112075/2021

hCoV-19/Dominican Republic/1501306/2021,hCoV-19/Dominican Republic/1603023-ICGES/2021

hCoV-19/Czech Republic/CSQ2992/2021,hCoV-19/Czech Republic/CSQ4911/2022,hCoV-19/Czech Republic/CSQ4809/2022,hCoV-19/Czech Republic/CSQ6513/2022,hCoV-19/Czech Republic/CSQ6512/2022,hCoV-19/Czech Republic/CSQ6512/2022

hCoV-19/Qatar/QA-QU-18-33-C10/2021,hCoV-19/Qatar/QA-QU-18-30-B4/2021,hCoV-19/Qatar/QA-QU-18-30-C3/2021,hCoV-19/Qatar/QA-QU-18-34-A6/2021,hCoV-19/Qatar/QA.OU.18.36.H12/2022

hCoV-19/Sweden/10251245/2021,hCoV-19/Sweden/2A57149830099/2021,hCoV-19/Sweden/47805218X5/2021,hCoV-19/Sweden/938484377/2021,hCoV-19/Sweden/10264179/2021

hCoV-19/Jordan/MoH-1026/2021

hCoV-19/Jordan/Biolab0562/2021,hCoV-19/Jordan/Biolab0557/2021,hCoV-19/Jordan/Biolab0443/2021,hCoV-19/Jordan/AM-ALSR-5790/2021,hCoV-19/Jordan/Biolab024/2021,hCoV-19/Jordan/AM-ALSR-5325/2020,hCoV-19/Jordan/AM-ALSR-5325/2020

hCoV-19/Nepal/NPHLS-231/2021

hCoV-19/Brazil/RJ-NVBS9540GENOV700956390661/2021,hCoV-19/Brazil/DF-NVBS9973GENOV828385988443/2021,hCoV-19/Brazil/MG-NVBS9689GENOV700956927689/2021,hCoV-19/Brazil/MS-NVBS12382GENOV700

hCoV-19/Colombia/ICE-SCOV-724/2021,hCoV-19/Colombia/VAC-ICE-SCOV-692/2021,hCoV-19/Colombia/VAC-ICE-SCOV-922/2022
hCoV-19/Canada/SK-RRPL-268593/2021,hCoV-19/Canada/SK-RRPL-271614/2021
hCoV-19/Lesotho/UHB-MI-SEB-00882/2021
hCoV-19/Armenia/MB12-21/2021,hCoV-19/Armenia/MB11-12/2021,hCoV-19/Armenia/MB15-16/2021,hCoV-19/Armenia/MB12-16/2021,hCoV-19/Armenia/MB3-12/2021,hCoV-19/Armenia/MB17-2/2022
hCoV-19/Spain/IB-HUSE-03052/2021
hCoV-19/Poland/PL_P6392/2021,hCoV-19/Poland/PL_P131/2022
hCoV-19/Indonesia/JK-GS-NIHRD-WGS11481/2021,hCoV-19/Indonesia/JK-NIHRD-WGS12907/2021,hCoV-19/Indonesia/JK-NIHRD-MI_22_21489/2022
hCoV-19/Eswatini/N13363/2021,hCoV-19/Eswatini/N21907/2021,hCoV-19/Eswatini/N22769/2021,hCoV-19/Eswatini/N22774/2021,hCoV-19/Namibia/N32167/2021,hCoV-19/Eswatini/N28464/2021,hCoV-19/Eswatini/N28508
hCoV-19/Malawi/MLW-00086/2021,hCoV-19/Malawi/MLW-00254/2021,hCoV-19/Malawi/MLW-00303/2021,hCoV-19/Malawi/MLW-00305/2021,hCoV-19/Malawi/MLW-00294/2021
hCoV-19/USA/CA-CDPH-500036138/2021
hCoV-19/France/MC-CERBAHC-1240226/2021,hCoV-19/Guadeloupe/CERBAHC-02386885/2022,hCoV-19/Guadeloupe/CERBAHC-01903496/2022,hCoV-19/France/IDF-CERBAHC-02225281/2022,hCoV-19/Guadeloupe/C
hCoV-19/India/MH-KasturbaMCGM-ICMR-INSACOG-WG2190/2021
hCoV-19/SouthSudan/UG1246/2021,hCoV-19/SouthSudan/UG1245/2021,hCoV-19/SouthSudan/UG1247/2021,hCoV-19/SouthSudan/UG1248/2021,hCoV-19/SouthSudan/UG1096/2021,hCoV-19/SouthSudan/UG1254/2021
hCoV-19/USA/NE-CUMC-21277078/2021,hCoV-19/USA/NE-CUMC-22045081/2022
hCoV-19/USA/LA-BIE-CAT00397/2021
hCoV-19/USA/MT-MTPHL-3942634/2021,hCoV-19/USA/MT-MTPHL-3945367/2021,hCoV-19/USA/MT-MTPHL-3995072/2022
hCoV-19/Bangladesh/hcddb-120448/2021,hCoV-19/Bangladesh/hcddb-G124799/2021
hCoV-19/Italy/CAM-INTPas_C79/2021
hCoV-19/Nigeria/NCDC-NR1144/2021,hCoV-19/Nigeria/NCDC-NR815/2021,hCoV-19/Nigeria/NCDC-NR1535/2021,hCoV-19/Nigeria/NCDC-NR-GL-000801/2022,hCoV-19/Nigeria/NCDC-NR-GL-000703/2022
hCoV-19/Argentina/PAIS-G0375/2021,hCoV-19/Argentina/PAIS-G0073/2020
hCoV-19/Colombia/VAC-LCSS-21081701870-86/2021
hCoV-19/Chile/MA-CADIUMAG-01713/2021
hCoV-19/USA/AR-UMGC-24572/2021,hCoV-19/USA/AR-UMGC-33102/2022
hCoV-19/USA/NE-NM_L347224903/2021,hCoV-19/USA/NE-NPHL22-6524/2022,hCoV-19/USA/NE-NPHL22-13204/2022
hCoV-19/USA/DE-DHSS-B1157079/2021,hCoV-19/USA/DE-DHSS-B1177624/2022
hCoV-19/USA/ND-NDDH-8533/2021,hCoV-19/USA/ND-NDDH-8871/2021,hCoV-19/USA/ND-NDDH-12525/2022,hCoV-19/USA/ND-NDDH-10129/2022,hCoV-19/USA/ND-NDDH-11600/2022
hCoV-19/Mauritius/CERI-KRISP-K033313/2021,hCoV-19/Mauritius/386624/2021,hCoV-19/Mauritius/386774/2021,hCoV-19/Mauritius/CERI-KRISP-K033109/2021,hCoV-19/Mauritius/CERI-KRISP-K033299/2021,hCoV-19/Ma
hCoV-19/Ukraine/Kyiv-192863/2021,hCoV-19/Ukraine/Kyiv-192886/2021
hCoV-19/Malaysia/C19UMB629/2021
hCoV-19/Spain/CM-ISCIII-216443/2021
hCoV-19/NewCaledonia/0370175/2022,hCoV-19/NewCaledonia/0340169/2022
hCoV-19/USA/RH-RISHL-154497/2021
hCoV-19/Russia/RVA-CRIE-L18902302u_4233/2021,hCoV-19/Russia/SMO-CRIE-L21970053u/2021,hCoV-19/Russia/MOS-CRIE-L10601107u_8515/2021,hCoV-19/Russia/MOS-CRIE-L106K2251u_5588/2021,hCoV-19/Cr
hCoV-19/Moldova/Nr-103696/2021,hCoV-19/Moldova/Nr-103952/2021,hCoV-19/Moldova/Nr-108002/2021,hCoV-19/Moldova/801/2022
hCoV-19/Latvia/5842/2021
hCoV-19/Norway/Ahus-1372/2021,hCoV-19/Norway/Ahus-707/2021,hCoV-19/Norway/Ahus-3395/2022,hCoV-19/Norway/Ahus-3399/2022,hCoV-19/Norway/Ahus-3385/2022
hCoV-19/Kyrgyzstan/Kyrg51410-030821/2021,hCoV-19/Kyrgyzstan/Kyrg21122-140721/2021
hCoV-19/Belarus/HM-CRIE-7724066216/2021
hCoV-19/Moldova/A0013_2021_08_26/2021
hCoV-19/Hellongjiang/IVDC-10-03/2021
hCoV-19/Russia/NIZ-RII-MH503985/2021,hCoV-19/Russia/TA-RII-MH370775/2021,hCoV-19/Crimea/Sevastopol-RII-MH487875/2021,hCoV-19/Russia/SPE-RII-60075/2021,hCoV-19/Russia/BA-RII-MH505855/2022,hCoV-1
hCoV-19/Colombia/NAR-IAVH-VG-10582/2021,hCoV-19/Colombia/DC-IAVH-VG-10542/2021,hCoV-19/Colombia/DC-IAVH-VG-11549/2021,hCoV-19/Colombia/MAG-IAVH-VG-16383/2022
hCoV-19/Ecuador/USFQ-2299/2021,hCoV-19/Ecuador/USFQ-2344/2021
hCoV-19/Colombia/VAC-CSN-29678705/2021
hCoV-19/Jiangxi/IVDC-10-10/2021
hCoV-19/Kazakhstan/1783/2021,hCoV-19/Kazakhstan/7827-2/2021,hCoV-19/Kazakhstan/2859/2021
hCoV-19/Slovakia/uzsr-E07-BA_22_00001484/2022
hCoV-19/Kazakhstan/1823/2021
hCoV-19/NorthMacedonia/43325/2021
hCoV-19/Jiangsu/NJ/2021
hCoV-19/Liaoning/IVDC-DL-118/2021,hCoV-19/China/IVDC-DL-41/2021
hCoV-19/Liaoning/IVDC-11-04/2021,hCoV-19/Liaoning/IVDC-11-02/2021
hCoV-19/Morocco/62/2021,hCoV-19/Morocco/98/2021,hCoV-19/Morocco/202/2021,hCoV-19/Morocco/602/2022
hCoV-19/Italy/CAM-TIGEM-IZSM-COLL-23396/2021
hCoV-19/Canada/UN-UB-KSL-04118/2021,hCoV-19/Canada/un-UB-KSL-04393/2021
hCoV-19/Argentina/PMS-00589/2021
hCoV-19/USA/OR-OSPHL00393/2021
hCoV-19/USA/DC-DFS-PHL-02254/2021
hCoV-19/Brazil/MS-FIOCRUZ-ILMD2203008/2021,hCoV-19/Brazil/MS-FIOCRUZ-ILMD2202587/2021
hCoV-19/Chile/AR-UFRO-0427/2021
hCoV-19/Chile/VS-UV-217/2021,hCoV-19/Chile/RM-265625/2020,hCoV-19/Chile/TA-81873/2021,hCoV-19/Chile/BI-194028/2020,hCoV-19/Chile/RM-230338/2020,hCoV-19/Chile/TA-27184/2021,hCoV-19/Chile/RM-116932/2
hCoV-19/Honduras/483330-ICGES/2021,hCoV-19/Honduras/LNV490460-ICGES/2022,hCoV-19/Honduras/38782-ICGES/2021
hCoV-19/USA/MS-UMMC-M1371C2-514699/2021,hCoV-19/USA/MS-UMMC-M200A11-527818/2022
hCoV-19/USA/DE-DHSS-B1125421/2021
hCoV-19/Uganda/UG741/2021
hCoV-19/Indonesia/JK-NIHRD-WGS13909/2021
hCoV-19/Uganda/MRC-LVRI-LVRI415400/2021,hCoV-19/Uganda/MRC-LVRI-LVRI40271/2021,hCoV-19/Uganda/MRC-LVRI-LVRI409475/2021,hCoV-19/Uganda/MRC-LVRI-DH65/2021
hCoV-19/Switzerland/BE-IFIK-211220_os_91/2021
hCoV-19/Switzerland/SG-ETHZ-673473/2021,hCoV-19/Switzerland/ZH-ETHZ-674111/2022
hCoV-19/Belgium/CHU/Namur13573887/2021
hCoV-19/Iran/Ahvaz-NIC-59/2021
hCoV-19/Djibouti/NAMRUS_G638/2021,hCoV-19/Djibouti/NAMRUS_A167/2022,hCoV-19/Djibouti/NAMRUS_A150/2021,hCoV-19/Djibouti/NAMRUS_CI_16/2021,hCoV-19/Djibouti/NAMRUS_A155/2022,hCoV-19/Djibouti/NAM
hCoV-19/Japan/PJ-148445/2021,hCoV-19/Japan/PJ-172052/2021,hCoV-19/Japan/PJ-45112/2021,hCoV-19/Japan/PJ-23786/2020,hCoV-19/Japan/PJ-6745/2020,hCoV-19/Japan/PJ-10273/2020,hCoV-19/Japan/KC-529
hCoV-19/Thailand/CU-A21737-NT/2021
hCoV-19/Japan/PJ-174018/2021
hCoV-19/Japan/PJ-147654/2021
hCoV-19/Japan/RIMD04016/2021
hCoV-19/Japan/PJ-186834/2022
hCoV-19/Japan/PJ-167602/2021
hCoV-19/Japan/PJ-174453/2021
hCoV-19/Latvia/3670402/2021,hCoV-19/Latvia/3558331/2021,hCoV-19/Latvia/3635456/2021,hCoV-19/Latvia/3419407/2021,hCoV-19/Latvia/3591641/2021,hCoV-19/Latvia/3876901/2022,hCoV-19/Latvia/3879329/2022
hCoV-19/Latvia/2111042797/2021,hCoV-19/Latvia/2201037720/2022
hCoV-19/Belgium/MBLGP93992777/2021,hCoV-19/Belgium/MBLGP-CTMAPF41847756/2022
hCoV-19/CentralAfricanRepublic/JXCDC-85/2021,hCoV-19/Tanzania/JXCDC-09/2021,hCoV-19/Tanzania/JXCDC-10/2021
hCoV-19/Belgium/UZA-UA-CV2124449944/2021
hCoV-19/SierraLeone/CPHRL_SEQ_21_298/2021,hCoV-19/SierraLeone/CPHRL_SEQ_21_297/2021
hCoV-19/Lithuania/BT-LSC-VU_31_26/2021,hCoV-19/Lithuania/T-32/2020
hCoV-19/Lithuania/MR-LUHS-26-70/2021
hCoV-19/Lithuania/S22A62/2022
hCoV-19/Poland/WSESEGorzow-21S2059/2021
hCoV-19/France/NOR20246129/2022
hCoV-19/CzechRepublic/NRL_17250/2021
hCoV-19/Slovakia/uzsr-C10-BA_22_0000474/2021,hCoV-19/Slovakia/BA_22_00007343/2022,hCoV-19/Slovakia/BA_22_00011745/2022,hCoV-19/Slovakia/BA_22_00010029/2022,hCoV-19/Slovakia/BA_22_00004910/2022
hCoV-19/Scotland/EDB29904/2021
hCoV-19/USA/WI-WSLH-222388/2021
hCoV-19/Australia/NSW-ICPMR-1232/2021,hCoV-19/Australia/NSW-ICPMR-16251/2021,hCoV-19/Australia/NSW-ICPMR-9665/2021,hCoV-19/Australia/NSW-ICPMR-14136/2021,hCoV-19/Australia/NSW-ICPMR-15082/202
hCoV-19/Australia/ACT1924/2021,hCoV-19/Australia/ACT1904/2021,hCoV-19/Australia/ACT1752/2021,hCoV-19/Australia/ACT1745/2021,hCoV-19/Australia/ACT1735/2021,hCoV-19/Australia/ACT3261/2022,hCoV-19/Austr
hCoV-19/Australia/TAS000296/2021
hCoV-19/Australia/NT-RDH-97/2021,hCoV-19/Australia/NT-RDH-59/2021,hCoV-19/Australia/NT-RDH-78/2021,hCoV-19/Australia/NT-RDH-56/2021,hCoV-19/Australia/NT-RDH-150/2022,hCoV-19/Australia/NT-RDH-155/2022
hCoV-19/Australia/NT-RDH-35/2021,hCoV-19/Australia/NT-RDH-36/2021
hCoV-19/Mexico/CMX-IMSS_01/2020
hCoV-19/Austria/CeMM0401/2020
hCoV-19/Brazil/SP-468/2020,hCoV-19/Brazil/SP-764/2020
hCoV-19/Portugal/R038/2020
hCoV-19/England/BRIS-12B7EB/2020
hCoV-19/UnitedArabEmirates/skmc-203119900/2020
hCoV-19/Egypt/CHE57357_Wave_3_A053/2021
hCoV-19/Senegal/1812450/2020,hCoV-19/Senegal/3003750/2021
hCoV-19/Argentina/UW21052663641/2021,hCoV-19/Armenia/UW-ARIM6/2020
hCoV-19/Estonia/Cov3262/2020
hCoV-19/Peru/LIM-UPCH-1750/2021,hCoV-19/Peru/LIM-UPCH-1602/2020
hCoV-19/Kazakhstan/KUS-NRL-5935/2021,hCoV-19/Kazakhstan/MAN-NRL-6115/2021
hCoV-19/England/ALDP-1403078/2021,hCoV-19/England/ALDP-136D93D/2021,hCoV-19/England/ALDP-34FAB5/2022,hCoV-19/England/ALDP-343FB55/2022
hCoV-19/Gabon/18483/2021
hCoV-19/Pakistan/UHS-PAK-S76/2021
hCoV-19/Sweden/SE0211583/2021
hCoV-19/Kuwait/MadN/2021
hCoV-19/Mongolia/UB-294476/2021
hCoV-19/Afghanistan/2870x0002_23698/2021
hCoV-19/Iraq/Erbil5/2021

hCoV-19/Pakistan/PPHRL-AH023/2021,hCoV-19/Pakistan/PPHRL-AH028/2021,hCoV-19/Pakistan/PPHRL-AH60/2021

hCoV-19/Georgia/Tb-SNGS384/2021

hCoV-19/Moldova/ICGEB_810217_S12/2021

hCoV-19/Ukraine/HCL021165818701/2021,hCoV-19/Ukraine/HCL021165832901/2021

hCoV-19/CentralAfrica/Replic/24172/2021

hCoV-19/Malawi/KRISP-K010155/2020

hCoV-19/Togo/NMIR-TG-TGS-040-21/2021

hCoV-19/Belgium/Jessa_55-2107-000735/2021

hCoV-19/USANM-DDH-2021080013/2021,hCoV-19/USANM-NMDOH-2021079841/2021

hCoV-19/Spain/CT-HUB02201/2021,hCoV-19/Spain/CT-HUB04000/2022

hCoV-19/Poland/NIPH-NIH_ECDC-2515/2021

hCoV-19/Azerbaijan/Aghayev-11/2021

hCoV-19/BosniaandHerzegovina/AGCOB4239/2021

hCoV-19/Thailand/Bangkok_CU3324/2021

hCoV-19/Guangdong/IVDC-05-03/2021

hCoV-19/Serbia/Nis-J599862-1405/2021

hCoV-19/Nigeria/Lagos01/2020

hCoV-19/Italy/LOM-UNIBS-MB61-1Day158/2020

hCoV-19/Poland/PL_MCB_77/2020,hCoV-19/Poland/PL_MCB_110/2020

hCoV-19/USAMA-UMASSMED-P003807/2020

hCoV-19/Bolivia/Beni-GM3-1/2021

hCoV-19/Senegal/SN-TH-TIV-2172/2021

hCoV-19/Botswana/RBB30_BHP_CV0501858/2020

hCoV-19/Georgia/Tb-86952/2020

hCoV-19/Serbia/Lipljan-005360911/2020,hCoV-19/Kosovo/KM-08372107/2020

hCoV-19/Sweden/20-23815/2020

hCoV-19/Vietnam/VNHN_4875/2020,hCoV-19/Vietnam/VNHN_1492/2020

hCoV-19/SaudiArabia/KAIMRC-S150/2020

hCoV-19/Palestine/75/2020,hCoV-19/Palestine/50/2020

hCoV-19/Palestine/AAS62/2021

hCoV-19/Latvia/1172/2020

hCoV-19/Bulgaria/21/2020,hCoV-19/Bulgaria/10/2020

hCoV-19/Italy/LAZ-INMI-52/2020

hCoV-19/NorthMacedonia/34018/2021,hCoV-19/NorthMacedonia/12037/2020

hCoV-19/India/MH-GA32/2020,hCoV-19/India/WB-INSACOG-193130098166/2022

hCoV-19/Zambia/ZMB-36434/2020,hCoV-19/Zambia/ZMB-39963/2020,hCoV-19/Zambia/ZMB-128376/2021,hCoV-19/Zambia/ZMB-128421/2021,hCoV-19/Zambia/ZMB-128404/2021

hCoV-19/Italy/LOM-UniMi-L73/2020

hCoV-19/Philippines/PH-PGC-03101/2020,hCoV-19/Philippines/PH-PGC-13313/2021

hCoV-19/NorthernIreland/NIRE-1068BD/2020

hCoV-19/Poland/1154951/2020,hCoV-19/Poland/1157220/2020

hCoV-19/Slovakia/UKBA-201/2020,hCoV-19/Slovakia/UKBA-322/2020

hCoV-19/Australia/ACT0094/2020

hCoV-19/Mauritius/P-033852/2020,hCoV-19/Mauritius/N4685/2021,hCoV-19/Mauritius/5880/2022,hCoV-19/Mauritius/NS2022/2022,hCoV-19/Mauritius/5411/2022,hCoV-19/Mauritius/101886/2022,hCoV-19/Mauritius/4436/2020

hCoV-19/minik/Poland/Pomorskie_49/2020

hCoV-19/Croatia/GA-21-87107/2020

hCoV-19/Gambia/0536/2020,hCoV-19/Gambia/0528/2020

hCoV-19/India/DL-NCDC-709267/2020

hCoV-19/Uruguay/CHY-MM61/2020,hCoV-19/Uruguay/CUY12-002838-UVRN/2021,hCoV-19/Uruguay/RT01-LYMO/2020

hCoV-19/England/LOND-128D08E/2020

hCoV-19/Paraguay/PY3/2020

hCoV-19/Brazil/RS-34239CVL/2020

hCoV-19/Paraguay/ics_9855/2021,hCoV-19/Paraguay/ics_11784/2021

hCoV-19/Brazil/BA-FIOCRUZ-PM63134/2021

hCoV-19/Brazil/CE-FIOCRUZ-22085/2021

hCoV-19/Brazil/AM-FIOCRUZ-21890672NRJ/2021

hCoV-19/Brazil/GO-HLAGVN-1683122/2021

hCoV-19/Brazil/RJ-LNN0201/2021

hCoV-19/Argentina/PAS-F0166/2021

hCoV-19/India/KL-GENESCOV00800/2020

hCoV-19/BosniaandHerzegovina/VFS-LNSA-LMGF003/2020

hCoV-19/Slovakia/UKBA-212/2020

hCoV-19/Mexico/COA-HdRE-36/2020

hCoV-19/SaudiArabia/KAUST-IEDDAH999/2020

hCoV-19/Ecuador/36192/2020

hCoV-19/USA/VT-OHSU-3170/2020

hCoV-19/Australia/GC-251/2020

hCoV-19/SouthAfrica/NHLS-UCT-GS-0656/2020,hCoV-19/SouthAfrica/NHLS-UCT-GP-M983/2021,hCoV-19/SouthAfrica/NHLS-UCT-GS-AX47/2022

hCoV-19/Ecuador/USFQ-208/2020

hCoV-19/Ecuador/178632/2021

hCoV-19/Kazakhstan/KZY-CSP-9153_S70/2020

hCoV-19/Argentina/PAS-F0016/2020

hCoV-19/Zimbabwe/ZW-34550/2020,hCoV-19/Zimbabwe/ZW-25731/2020,hCoV-19/Zimbabwe/QIBZIM-71139/2021,hCoV-19/Zimbabwe/QIBZIM-70399/2021,hCoV-19/Zimbabwe/QIBZIM-70412/2021,hCoV-19/Zimbabwe/C

hCoV-19/SolomonIslands/SOL007/2020

hCoV-19/Botswana/RBB41_BHP_AAA22769/2020

hCoV-19/Benin/427936/2021,hCoV-19/Benin/473010/2021,hCoV-19/Benin/446182/2021

hCoV-19/Mexico/PUE_IBT_IMSS_1049/2021

hCoV-19/India/MP-AIIMS_B-ICMR-INSACOG-WGS-245/2022

hCoV-19/SouthAfrica/SU-NHLS_4175/2022,hCoV-19/SouthAfrica/Tygerberg_3516/2021

hCoV-19/Belgium/UZB_5482022030717/2022

hCoV-19/Belgium/ULB-IBC_CV8416250567/2022

hCoV-19/SouthAfrica/NCV802/2022

hCoV-19/SouthAfrica/UPS-VIRO-NGS-ONT010322NB86/2022,hCoV-19/SouthAfrica/UPS-VIRO-NGS-ONT030222NB43/2022

hCoV-19/Poland/22SNR1762_wsserze/2022

hCoV-19/Singapore/1963/2022

hCoV-19/Oman/5221027/2022,hCoV-19/Oman/5221024/2022,hCoV-19/Oman/522973/2021,hCoV-19/Oman/5221000/2021

hCoV-19/Zambia/CHAZ-CHS1667/2022,hCoV-19/Zambia/CHAZ-CHS1665/2022,hCoV-19/Zambia/CHAZ-CHS0747/2021,hCoV-19/Zambia/CHAZ-CHS0762/2021

hCoV-19/Austria/LB-R00055-S092/2022,hCoV-19/Austria/LB-R00062-S252/2022,hCoV-19/Austria/LB-R00057-S051/2022,hCoV-19/Austria/LB-R00063-S020/2022

hCoV-19/Indonesia/JT_Labkes-7556/2022,hCoV-19/Indonesia/JT_Labkes-7569/2022,hCoV-19/Indonesia/JT_Labkes-245/2022

hCoV-19/Netherlands/NH-inBiome-211058/2022,hCoV-19/Netherlands/NH-inBiome-211064/2022,hCoV-19/Netherlands/NH-inBiome-211061/2022

hCoV-19/Lebanon/LAU-CVD-986/2022,hCoV-19/Lebanon/LAU-CVD-03/2021,hCoV-19/Lebanon/LAU-CVD-02/2021

hCoV-19/USA/AK-PH117930/2022

hCoV-19/USA/AZ-ASU49931/2022,hCoV-19/USA/AZ-ASU42504/2022

hCoV-19/Bangladesh/codrb-G139924/2022

hCoV-19/Ireland/D-Enter-COV02222063_A3/2022,hCoV-19/Ireland/D-Enter-COV120222046_F10/2022

hCoV-19/Switzerland/ZH-ETHZ-36408738/2022,hCoV-19/Switzerland/BL-ETHZ-36238231/2022

hCoV-19/Spain/CT-LabRefCat-789613/2022,hCoV-19/Spain/CT-LabRefCat-6928839/2022

hCoV-19/Tunisia/8039/2022,hCoV-19/Tunisia/8029/2022,hCoV-19/Tunisia/8100/2022,hCoV-19/Tunisia/8034/2022

hCoV-19/England/DHSC-CYKYQR/2022,hCoV-19/England/DHSC-CYYSKSQ/2022

hCoV-19/India/GJ-INSACOG-GBRC5052/2022

hCoV-19/Italy/LOM_ASSTMonza_600044861_20220301071800/2022,hCoV-19/Italy/LOM_ASSTMonza_600044875_20220301071800/2022,hCoV-19/Italy/LOM_ASSTMonza_600044513_20220301072500/2022

hCoV-19/India/TG-CDFD-F_158666/2022

hCoV-19/England/LSPA-38E2829/2022,hCoV-19/England/LSPA-38CA890/2022

hCoV-19/Moldova/Nr.5392/2022,hCoV-19/Moldova/Nr.17396/2022,hCoV-19/Moldova/Nr.1021/2022

hCoV-19/Israel/HCH-741124107/2022

hCoV-19/Sweden/SUS0009577/2022,hCoV-19/Sweden/SUS0008280/2022

hCoV-19/Switzerland/TI-EOC-26718149/2022,hCoV-19/Switzerland/TI-EOC-26718155/2022

hCoV-19/Belgium/UZA-UA-65578788/2022

hCoV-19/Italy/SIC-CQRC-3422019842-2022/2022,hCoV-19/Italy/SIC-CQRC-3090933/2021

hCoV-19/Belgium/Jessa_55-2152-000166/2021

hCoV-19/USA/KY-GD-122121-227/2021

hCoV-19/SouthAfrica/CERI-KRISP-K032343/2021

hCoV-19/USA/WI-WSLH-2203215/2022

hCoV-19/Mozambique/N25009/2021

hCoV-19/Azerbaijan/MHTM-A2/2022,hCoV-19/Azerbaijan/MHTM6/2022,hCoV-19/Azerbaijan/MHTM2/2022

hCoV-19/Rwanda/NRL/EK0701895/2021

hCoV-19/DominicanRepublic/1862950-LNSPDD/2022,hCoV-19/DominicanRepublic/1826588-LNSPDD/2022,hCoV-19/DominicanRepublic/1859468-LNSPDD/2022,hCoV-19/DominicanRepublic/1845392-LNSPDD/2022,hCoV-19/DominicanRepublic/1845392-LNSPDD/2022

hCoV-19/SouthAfrica/CERI-KRISP-K033754/2021

hCoV-19/Ghana/TRA-2306/2021,hCoV-19/Ghana/TRA-2294/2021

hCoV-19/Hungary/mbf_32269/2021

hCoV-19/Brazil/SP-HIAE-ID1393/2022

hCoV-19/NewCaledonia/0270588/2022,hCoV-19/NewCaledonia/0360233/2022,hCoV-19/NewCaledonia/0390788/2022,hCoV-19/NewCaledonia/030376/2022,hCoV-19/NewCaledonia/3650310/2021

hCoV-19/Namibia/N25906/2021,hCoV-19/Namibia/N25937/2021,hCoV-19/Namibia/N25825/2021

hCoV-19/USA/SC-MUSC-05140/2021

hCoV-19/Guatemala/1665-LNSGua/2022,hCoV-19/Guatemala/1636-LNSGua/2022,hCoV-19/Guatemala/1057-LNSGua/2022,hCoV-19/Guatemala/458-LNSGua/2022,hCoV-19/Guatemala/1540-LNSGua/2022,hCoV-19/Guatemala/1665-LNSGua/2022

hCoV-19/Peru/LIM-UPCH-2745/2022,hCoV-19/Peru/LIM-UPCH-2813/2022,hCoV-19/Peru/LIM-UPCH-2679/2022,hCoV-19/Peru/LIM-UPCH-2878/2022

hCoV-19/Belgium/LJUB-LJUB_4879955-R/2022

hCoV-19/Iran/AN294/2022

hCoV-19/France/ARA-CFD220006968102/2022

hCoV-19/USA/AL-ADPH-ADPH_1848/2022

hCoV-19/Argentina/PAIS-E0757/2022,hCoV-19/Argentina/PAIS-E0764/2022
hCoV-19/Poland/Kce-1793/2022
hCoV-19/Jamaica/JAM-UWIMicro-0042/2021
hCoV-19/Peru/AMA-UNTRM-0302/2022,hCoV-19/Peru/AMA-UNTRM-0357/2022
hCoV-19/Cameroon/EXTN-17044/2021,hCoV-19/Cameroon/DO334112/2021,hCoV-19/Cameroon/DO334072V14/2021,hCoV-19/Cameroon/DO334088/2021
hCoV-19/Canada/MB-CPL-350887/2022,hCoV-19/Canada/MB-CPL-346459/2022,hCoV-19/Canada/MB-CPL-282378/2021
hCoV-19/Poland/4777g2/2022,hCoV-19/Poland/4552g2/2022,hCoV-19/Poland/41699/2022
hCoV-19/England/MILK-307AB61/2021
hCoV-19/FrenchGuiana/IPG202200285/2022
hCoV-19/Spain/MD-HULP-060512035/2022
hCoV-19/Italy/TAA-SABES_1900631114/2022
hCoV-19/Spain/GA-CHUVI-21802567/2022,hCoV-19/Spain/GA-CHUVI-51785767/2022
hCoV-19/Australia/GLD3763/2021
hCoV-19/Mexico/AGU_JSSEA-Lesp-13723-S17/2022
hCoV-19/Zhejiang/3859/2021
hCoV-19/USA/TX-HMH-MCoV-78259/2022,hCoV-19/USA/TX-HMH-MCoV-91228/2022
hCoV-19/Indonesia/JK-GS-GSILab-894744/2022
hCoV-19/Iran/AM2813/2021,hCoV-19/Iran/API1783/2022
hCoV-19/Malawi/NHRL-COVseq0159/2021
hCoV-19/Pakistan/NanoBAS-01/2021
hCoV-19/CzechRepublic/FNO-211868/2021
hCoV-19/USANY/WMC2021-1022/2021
hCoV-19/CzechRepublic/UMTM380245/2021
hCoV-19/CzechRepublic/FNHK-Ps-003389/2022
hCoV-19/Kenya/CDC-DLSP-Kisumu-COV203466/2022,hCoV-19/Kenya/CDC-DLSP-Kisumu-COV201915/2022
hCoV-19/China/YJ20215120/2021
hCoV-19/Spain/CTHUVH-E45819/2022
hCoV-19/USA/WA-PHL-010369/2022,hCoV-19/USA/WA-PHL-013353/2022