

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

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

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EPI_ISL_717832, EPI_ISL_717833, EPI_ISL_717834, EPI_ISL_717835, EPI_ISL_717836, EPI_ISL_717841	LACEN Dr. Francisco Rimolo Neto	Bioinformatics Laboratory / LNCC	Carolina M Voloch, Ronaldo da Silva F Jr, Luiz G P de Almeida, Cynthia C Cardoso, Otavio Bustrolini, Alexandra L Gerber, Ana Paula de C Guimarães, Diana Mariani, Andréa Cony Cavalcanti, Claudia dos Santos Rodrigues, Terezinha M P P Castilheira, Amílcar Tanuri, Ana Tereza R de Vasconcelos
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EPI_ISL_718191, EPI_ISL_718192 EPI_ISL_718193, EPI_ISL_718194, EPI_ISL_718195, EPI_ISL_718196	Borneo Medical Centre Ministry of Health Hospitals	Institute of Health and Community Medicine Institute of Health and Community Medicine	David Perera, Ooi Mong How, Chua Hock Hin, Tonnni Sia Loong Loong, Wong Jyn Shan, Wong Kiing Aik, Chan Chia Jui David Perera, Ooi Mong How, Chua Hock Hin, Tonnni Sia Loong Loong, Wong Jyn Shan, Wong Kiing Aik, Chan Chia Jui
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EPI_ISL_718216 EPI_ISL_718217 EPI_ISL_718218	Borneo Medical Centre Ministry of Health Hospitals Borneo Medical Centre	Institute of Health and Community Medicine Institute of Health and Community Medicine Institute of Health and Community Medicine	David Perera, Ooi Mong How, Chua Hock Hin, Tonnni Sia Loong Loong, Wong Jyn Shan, Wong Kiing Aik, Chan Chia Jui David Perera, Ooi Mong How, Chua Hock Hin, Tonnni Sia Loong Loong, Wong Jyn Shan, Wong Kiing Aik, Chan Chia Jui David Perera, Ooi Mong How, Chua Hock Hin, Tonnni Sia Loong Loong, Wong Jyn Shan, Wong Kiing Aik, Chan Chia Jui
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EPI_ISL_718226, EPI_ISL_718227, EPI_ISL_718228, EPI_ISL_718229, EPI_ISL_718230, EPI_ISL_718231, EPI_ISL_718232, EPI_ISL_718233, EPI_ISL_718234, EPI_ISL_718235, EPI_ISL_718236, EPI_ISL_718237, EPI_ISL_718238, EPI_ISL_718239, EPI_ISL_718240, EPI_ISL_718241, EPI_ISL_718242, EPI_ISL_718243, EPI_ISL_718244, EPI_ISL_718245, EPI_ISL_718246, EPI_ISL_718247, EPI_ISL_718248, EPI_ISL_718249	Borneo Medical Centre	Institute of Health and Community Medicine	David Perera, Ooi Mong How, Chua Hock Hin, Tonnni Sia Loong Loong, Wong Jyn Shan, Wong Kiing Aik, Chan Chia Jui
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Dutch COVID-19 response team

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EPI_ISL_723470, EPI_ISL_723471, EPI_ISL_723472, EPI_ISL_723473, EPI_ISL_723474, EPI_ISL_723475, EPI_ISL_723476, EPI_ISL_723477, EPI_ISL_723478, EPI_ISL_723479, EPI_ISL_723480, EPI_ISL_723481, EPI_ISL_723482, EPI_ISL_723483, EPI_ISL_723484, EPI_ISL_723485, EPI_ISL_723486, EPI_ISL_723487, EPI_ISL_723488, EPI_ISL_723489, EPI_ISL_723490, EPI_ISL_723491

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Virginia DCCLS

Virginia DCCLS

Virginia DCCLS

EPI_ISL_723492, EPI_ISL_723493, EPI_ISL_723494, EPI_ISL_723495, EPI_ISL_723496, EPI_ISL_723497, EPI_ISL_723498, EPI_ISL_723499, EPI_ISL_723500, EPI_ISL_723501, EPI_ISL_723502, EPI_ISL_723503, EPI_ISL_723504, EPI_ISL_723505, EPI_ISL_723506, EPI_ISL_723507, EPI_ISL_723508, EPI_ISL_723509, EPI_ISL_723510, EPI_ISL_723511, EPI_ISL_723512, EPI_ISL_723513, EPI_ISL_723514, EPI_ISL_723515, EPI_ISL_723516, EPI_ISL_723517, EPI_ISL_723518, EPI_ISL_723519, EPI_ISL_723520

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Virginia Division of Consolidated Laboratory Services (DCLS)

Virginia DCLS

EPI_ISL_723521, EPI_ISL_723522, EPI_ISL_723523, EPI_ISL_723524, EPI_ISL_723525, EPI_ISL_723526, EPI_ISL_723527, EPI_ISL_723528, EPI_ISL_723529, EPI_ISL_723530, EPI_ISL_723531, EPI_ISL_723532, EPI_ISL_723533, EPI_ISL_723534, EPI_ISL_723535, EPI_ISL_723536, EPI_ISL_723537, EPI_ISL_723538, EPI_ISL_723539, EPI_ISL_723540, EPI_ISL_723541, EPI_ISL_723542, EPI_ISL_723543, EPI_ISL_723544, EPI_ISL_723545, EPI_ISL_723546, EPI_ISL_723547, EPI_ISL_723548, EPI_ISL_723549, EPI_ISL_723550, EPI_ISL_723551, EPI_ISL_723552, EPI_ISL_723553, EPI_ISL_723554, EPI_ISL_723555, EPI_ISL_723556, EPI_ISL_723557

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EPI_ISL_723631, EPI_ISL_723632, EPI_ISL_723633, EPI_ISL_723634, EPI_ISL_723635, EPI_ISL_723636, EPI_ISL_723637, EPI_ISL_723638, EPI_ISL_723639, EPI_ISL_723640, EPI_ISL_723641, EPI_ISL_723642, EPI_ISL_723643, EPI_ISL_723644, EPI_ISL_723645, EPI_ISL_723646, EPI_ISL_723647, EPI_ISL_723648, EPI_ISL_723649, EPI_ISL_723650, EPI_ISL_723651, EPI_ISL_723652, EPI_ISL_723653, EPI_ISL_723654, EPI_ISL_723655, EPI_ISL_723656, EPI_ISL_723657, EPI_ISL_723658, EPI_ISL_723659, EPI_ISL_723660, EPI_ISL_723661, EPI_ISL_723662, EPI_ISL_723663, EPI_ISL_723664, EPI_ISL_723665, EPI_ISL_723666, EPI_ISL_723667, EPI_ISL_723668, EPI_ISL_723669, EPI_ISL_723670

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EPI_ISL_723852, EPI_ISL_723853, EPI_ISL_723854, EPI_ISL_723855, EPI_ISL_723856, EPI_ISL_723857, EPI_ISL_723858, EPI_ISL_723859, EPI_ISL_723860, EPI_ISL_723861, EPI_ISL_723862, EPI_ISL_723863, EPI_ISL_723864, EPI_ISL_723865, EPI_ISL_723866, EPI_ISL_723867, EPI_ISL_723868, EPI_ISL_723869, EPI_ISL_723870, EPI_ISL_723871, EPI_ISL_723872, EPI_ISL_723873, EPI_ISL_723874, EPI_ISL_723875, EPI_ISL_723876, EPI_ISL_723877, EPI_ISL_723878, EPI_ISL_723879, EPI_ISL_723880, EPI_ISL_723881, EPI_ISL_723882, EPI_ISL_723883, EPI_ISL_723884, EPI_ISL_723885, EPI_ISL_723886, EPI_ISL_723887, EPI_ISL_723888, EPI_ISL_723889, EPI_ISL_723890, EPI_ISL_723891, EPI_ISL_723892, EPI_ISL_723893, EPI_ISL_723894, EPI_ISL_723895, EPI_ISL_723896, EPI_ISL_723897, EPI_ISL_723898, EPI_ISL_723899, EPI_ISL_723900, EPI_ISL_723901, EPI_ISL_723911, EPI_ISL_723912, EPI_ISL_723913, EPI_ISL_723914, EPI_ISL_723915, EPI_ISL_723916, EPI_ISL_723917, EPI_ISL_723918, EPI_ISL_723919, EPI_ISL_723920, EPI_ISL_723921, EPI_ISL_723922, EPI_ISL_723923, EPI_ISL_723924, EPI_ISL_723925, EPI_ISL_723926, EPI_ISL_723927, EPI_ISL_723928, EPI_ISL_723929, EPI_ISL_723930, EPI_ISL_723931, EPI_ISL_723932, EPI_ISL_723933, EPI_ISL_723934

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EPI_ISL_724124, EPI_ISL_724125, EPI_ISL_724126, EPI_ISL_724127, EPI_ISL_724128, EPI_ISL_724129, EPI_ISL_724130, EPI_ISL_724131, EPI_ISL_724132, EPI_ISL_724133, EPI_ISL_724135, EPI_ISL_724136, EPI_ISL_724137, EPI_ISL_724138, EPI_ISL_724139, EPI_ISL_724140, EPI_ISL_724141, EPI_ISL_724142, EPI_ISL_724143, EPI_ISL_724144, EPI_ISL_724145, EPI_ISL_724146, EPI_ISL_724147, EPI_ISL_724148, EPI_ISL_724149, EPI_ISL_724150, EPI_ISL_724151, EPI_ISL_724152, EPI_ISL_724153, EPI_ISL_724154, EPI_ISL_724155, EPI_ISL_724156, EPI_ISL_724157, EPI_ISL_724158, EPI_ISL_724159, EPI_ISL_724160, EPI_ISL_724161, EPI_ISL_724162, EPI_ISL_724163, EPI_ISL_724164, EPI_ISL_724165, EPI_ISL_724166, EPI_ISL_724167, EPI_ISL_724168, EPI_ISL_724169, EPI_ISL_724170, EPI_ISL_724171, EPI_ISL_724172, EPI_ISL_724173, EPI_ISL_724174, EPI_ISL_724175, EPI_ISL_724176, EPI_ISL_724177, EPI_ISL_724178, EPI_ISL_724179, EPI_ISL_724180, EPI_ISL_724181, EPI_ISL_724182, EPI_ISL_724183, EPI_ISL_724184, EPI_ISL_724185, EPI_ISL_724186, EPI_ISL_724187, EPI_ISL_724188, EPI_ISL_724189, EPI_ISL_724190, EPI_ISL_724191, EPI_ISL_724192, EPI_ISL_724193, EPI_ISL_724194, EPI_ISL_724195, EPI_ISL_724197, EPI_ISL_724198, EPI_ISL_724199, EPI_ISL_724200, EPI_ISL_724201, EPI_ISL_724202, EPI_ISL_724203, EPI_ISL_724204, EPI_ISL_724205, EPI_ISL_724206, EPI_ISL_724207, EPI_ISL_724208, EPI_ISL_724209

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EPI_ISL_724210, EPI_ISL_724211, EPI_ISL_724212, EPI_ISL_724213, EPI_ISL_724214, EPI_ISL_724215, EPI_ISL_724216, EPI_ISL_724217, EPI_ISL_724218, EPI_ISL_724219, EPI_ISL_724220, EPI_ISL_724221

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EPI_ISL_724268, EPI_ISL_724276, EPI_ISL_724278, EPI_ISL_724279, EPI_ISL_724283, EPI_ISL_724287, EPI_ISL_724290, EPI_ISL_724291, EPI_ISL_724294, EPI_ISL_724295, EPI_ISL_724300, EPI_ISL_724307, EPI_ISL_724318, EPI_ISL_724319

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EPI_ISL_724349, EPI_ISL_724351, EPI_ISL_724353, EPI_ISL_724355, EPI_ISL_724356, EPI_ISL_724357, EPI_ISL_724358, EPI_ISL_724359, EPI_ISL_724360, EPI_ISL_724361, EPI_ISL_724362, EPI_ISL_724363, EPI_ISL_724365, EPI_ISL_724366, EPI_ISL_724367, EPI_ISL_724368, EPI_ISL_724369, EPI_ISL_724370, EPI_ISL_724372, EPI_ISL_724374, EPI_ISL_724375, EPI_ISL_724377, EPI_ISL_724378, EPI_ISL_724379, EPI_ISL_724380, EPI_ISL_724382, EPI_ISL_724383, EPI_ISL_724384, EPI_ISL_724386, EPI_ISL_724387, EPI_ISL_724388, EPI_ISL_724389, EPI_ISL_724390, EPI_ISL_724391, EPI_ISL_724394, EPI_ISL_724396, EPI_ISL_724399, EPI_ISL_724401, EPI_ISL_724404, EPI_ISL_724405, EPI_ISL_724406, EPI_ISL_724408, EPI_ISL_724409, EPI_ISL_724410, EPI_ISL_724411, EPI_ISL_724412, EPI_ISL_724413, EPI_ISL_724415, EPI_ISL_724417, EPI_ISL_724418, EPI_ISL_724419, EPI_ISL_724420, EPI_ISL_724421, EPI_ISL_724422, EPI_ISL_724423, EPI_ISL_724425, EPI_ISL_724427, EPI_ISL_724428, EPI_ISL_724429, EPI_ISL_724430, EPI_ISL_724431, EPI_ISL_724432, EPI_ISL_724433, EPI_ISL_724434, EPI_ISL_724435, EPI_ISL_724436, EPI_ISL_724437, EPI_ISL_724438, EPI_ISL_724439, EPI_ISL_724440, EPI_ISL_724441, EPI_ISL_724442, EPI_ISL_724443, EPI_ISL_724444, EPI_ISL_724445, EPI_ISL_724446, EPI_ISL_724447, EPI_ISL_724448, EPI_ISL_724449, EPI_ISL_724450, EPI_ISL_724451, EPI_ISL_724452, EPI_ISL_724453, EPI_ISL_724454, EPI_ISL_724455, EPI_ISL_724456, EPI_ISL_724457, EPI_ISL_724458, EPI_ISL_724459, EPI_ISL_724460, EPI_ISL_724461, EPI_ISL_724462, EPI_ISL_724463, EPI_ISL_724464, EPI_ISL_724465, EPI_ISL_724466, EPI_ISL_724467, EPI_ISL_724468, EPI_ISL_724469, EPI_ISL_724470, EPI_ISL_724471, EPI_ISL_724472, EPI_ISL_724473, EPI_ISL_724474, EPI_ISL_724475, EPI_ISL_724476, EPI_ISL_724477, EPI_ISL_724478, EPI_ISL_724479, EPI_ISL_724480, EPI_ISL_724481, EPI_ISL_724482, EPI_ISL_724483, EPI_ISL_724484, EPI_ISL_724485, EPI_ISL_724486, EPI_ISL_724487, EPI_ISL_724488, EPI_ISL_724489, EPI_ISL_724490, EPI_ISL_724491, EPI_ISL_724492, EPI_ISL_724493, EPI_ISL_724494, EPI_ISL_724495, EPI_ISL_724496, EPI_ISL_724500, EPI_ISL_724501, EPI_ISL_724502, EPI_ISL_724503, EPI_ISL_724504, EPI_ISL_724505, EPI_ISL_724506, EPI_ISL_724507, EPI_ISL_724508, EPI_ISL_724509, EPI_ISL_724510, EPI_ISL_724511, EPI_ISL_724512, EPI_ISL_724513, EPI_ISL_724514, EPI_ISL_724515, EPI_ISL_724516, EPI_ISL_724517, EPI_ISL_724518, EPI_ISL_724519, EPI_ISL_724520, EPI_ISL_724521, EPI_ISL_724522, EPI_ISL_724523, EPI_ISL_724524, EPI_ISL_724525, EPI_ISL_724526, EPI_ISL_724527, EPI_ISL_724528, EPI_ISL_724529, EPI_ISL_724530, EPI_ISL_724531, EPI_ISL_724532, EPI_ISL_724533, EPI_ISL_724534, EPI_ISL_724535, EPI_ISL_724536, EPI_ISL_724537

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EPI_ISL_725773, EPI_ISL_725774, EPI_ISL_725775, EPI_ISL_725776, EPI_ISL_725777, EPI_ISL_725778, EPI_ISL_725779, EPI_ISL_725780,

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