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Research

Genetic Evidence and Host Immune Response in Persons Reinfected with SARS-CoV-2, Brazil

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Table

Characteristics of patients reinfected with severe acute respiratory syndrome coronavirus 2, Brazil, 2020*

Characteristic	Patient A	Patient B	Patient C	Patient D
Primo-infection				
Sex	M	F	M	F
Age, y	54	57	34	34
Concurrent conditions	None	Discoid lupus erythematosus	None	None
Date of symptom onset	March 21	March 26	Asymptomatic	March 31
Symptoms	Headache	Mild diarrhea	No	Mild diarrhea
N1 RT-PCR, log ₁₀ copies/mL	5.12	3.21	3.83	3.01
Date conducted	March 23	March 24	March 24	April 2
RNP RT-PCR (internal control), C _t	26.5	26.66	27.41	28.48
Serology†	IgM, IgA, IgG detected	IgM, IgA, IgG detected	IgM, IgA, IgG detected	IgM, IgA, IgG detected
PRNT ₉₀ /25 uL†	<1:4	<1:4	<1:4	<1:4
Sequencing	Not enough sample	Emerging clade 19A	emerging clade 20B	Not enough sample
ID	N/A	EPI_ISL_636834	EPI_ISL_636836	NA
Second infection				
Date of onset illness	May 25	May 26	May 27	May 30
Symptoms	Fever, dry cough, tiredness, body ache, anosmia, ageusia	Fever, diarrhea, headache, body ache, anosmia, ageusia	Fever, nausea, tiredness, headache, body ache	Dry cough, diarrhea, tiredness, headache, body ache, anosmia, ageusia
RT-PCR, log ₁₀ copies/mL	7.31	7.42	5.18	9.61

copies/mL

Characteristic	Patient A	Patient B	Patient C	Patient D
Date conducted	May 29	May 29	May 29	May 29
RNP RT-PCR internal control	24.6	27.06	28.12	24.5
Serology results [‡]	IgM, IgA, IgG detected	IgM, IgA, IgG detected	IgM, IgA, IgG undetectable	IgM, IgA, IgG undetectable
PRNT ₉₀ /25 uL [‡]	1:16	<1:4	<1:4	<1:4
Sequencing	Emerging clade 20B	Emerging clade 20B	Emerging clade 20B	Emerging clade 20B
Accession ID	EPI_ISL_636737	EPI_ISL_636835	EPI_ISL_636837	EPI_ISL_636838

Follow-up

Serology [§]	IgM, IgA, IgG detected	IgM, IgA, IgG detected	IgM, IgA, IgG detected	IgM, IgA, IgG detected
PRNT ₉₀ /25 uL [§]	1:128	1:32	1:64	1:64
Serology results [¶]	IgM, IgA, IgG detected	IgM, IgA, IgG detected	IgM, IgA, IgG detected	IgM, IgA, IgG detected
PRNT ₉₀ /25 uL	1:64	1:16	1:8	1:8

*N1, nucleocapside gene; NA, not available; PRNT₉₀, 90% plaque-reduction neutralization test; RNP, human RNase P gene; RT-PCR, reverse transcription PCR. [‡]Tests conducted March 27. [‡]Tests conducted June 3. [§]Tests conducted July 9. [¶]Tests conducted August 10.

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