



Clinical investigation report

of CLUNGENE[®] COVID-19 Antigen Rapid Test for self-testing

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1. Summary

The clinical performance of CLUNGENE® COVID-19 Antigen Rapid Test for self-testing was evaluated in a prospective study in Greece between June 2021 and July 2021. A total of 578 subjects (122 were symptomatic and 456 were asymptomatic at time of presentation) were enrolled at four collection sites in Attica. The subjects included in the study were provided a instructions for use in Greek and the rapid test kit. No additional training or instructions were provided. Self-sampling with fresh nasal swabs and self-testing occurred in subjects' home or home-like environment. The processes were observed and recorded without intervention. The professional sampling with nasopharyngeal swabs were sent on cold packs to the Locus Medicus laboratory in Athens for SARS-CoV-2 RT-PCR testing. 30 RT-PCR positive samples were subjected to a typing assay to identify which variant it is, so as to verify CLUNGENE® COVID-19 Antigen Rapid Test can identify the most current variant. The sensitivity and specificity of CLUNGENE® COVID-19 Antigen Rapid Test relative to the RT-PCR test were calculated, and it's usability was evaluated by the statistical results based on the questionnaires.

The CLUNGENE® COVID-19 Antigen Rapid Test showed a sensitivity of 95.1% (95%CI: 89.7%-97.7%) and a specificity of 100% (95%CI: 99.2%-100%) compared to gold-standard RT-PCR. This test can accurately identify Alpha, Beta and Delta variants.

4 questionnaires were not counted in the usability statistics because they were incomplete. 98.4% of participants were able to perform the test in a manner that does not cause a safety hazard; 97.2% of the participants were able to read test results correctly; 96.2% of the participants could correctly interpret what to do next in case of a positive/negative/invalid test result; 89.9% of the participants were able to understand the instructions for use. 97.7% (561/574) of participants were satisfied with the product.

The clinical performance and usability of CLUNGENE® COVID-19 Antigen Rapid Test successfully meet the acceptance criteria specified in the clinical investigation plan. Notably, the CLUNGENE® COVID-19 Antigen Rapid Test meet the acceptance criteria of >80% sensitivity and >98% specificity defined by the Medical Device Coordination Group (MDCG) [3]. This study demonstrate that individuals aged 15 years or older can reliably perform the CLUNGENE® COVID-19 Antigen Rapid Test by themselves, and the adult lay users can reliably test another person under 15 years of age.

2. Introduction

2.1 Intended use

The CLUNGENE® COVID-19 Antigen Rapid Test is a lateral flow immunoassay intended for the qualitative detection of SARS-CoV-2 nucleocapsid antigens in nasal swab. This test is intended for self-use by individuals aged 15 years or older and, as applicable for an adult lay user testing another person under 15 years of age. Individuals over 65 years of age should seek assistance in performing test.

The test provides only a preliminary screen test result.

2.2 Testing principle

CLUNGENE® COVID-19 Antigen Rapid Test is based on the technique of lateral flow immunoassay, which applies the principle of the double-antibody sandwich. SARS-CoV-2 nucleocapsid protein

monoclonal antibody conjugated with color microparticles is used as detector and sprayed on conjugation pad. During the test, SARS-CoV-2 antigen in the specimen interacts with SARS-CoV-2 antibody conjugated with color microparticles making antigen-antibody labeled complex. This complex migrates on the membrane via capillary action until the test line, where it will be captured by the pre-coated SARS-CoV-2 nucleocapsid protein monoclonal antibody. A colored test line (T) would be visible in the result window if SARS-CoV-2 antigens are present in the specimen. Absence of the T line suggests a negative result. The control line (C) is used for procedural control and should always appear if the test procedure is performed properly.

3. Rationale and objectives

The aim of this study is to determine the diagnostic sensitivity and diagnostic specificity of CLUNGENE® COVID-19 Antigen Rapid Test compared to gold-standard RT-PCR, and to assess the usability of CLUNGENE® COVID-19 Antigen Rapid Test for layperson.

If CLUNGENE® COVID-19 Antigen Rapid Test is shown to have sufficient sensitivity and specificity, then this device could contribute to overall COVID-19 testing capacity, offering advantages in terms of shorter turnaround times and reduced costs.

4. Study design

This is a prospective clinical study. Participants are sequentially enrolled at collection site(s) until the sample size is achieved.

Self-sampling with nasal swabs and self-testing are conducted by participants using CLUNGENE® COVID-19 Antigen Rapid Test. The processes will be observed and recorded without intervention. The usability will be evaluated by the statistical results based on the questionnaires.

For comparison, to each of the participants, regardless of the results of its self-testing, a RT-PCR test will be performed in a qualified laboratory by professional sampling with nasopharyngeal swabs and by professional testing according to the standard procedure. To verify the performance on the genetic variant case, a portion of RT-PCR positive samples will be sent to a qualified laboratory for typing assay. The sensitivity and specificity of CLUNGENE® COVID-19 Antigen Rapid Test relative to the RT-PCR test will be calculated.

Based on the minimum performance requirements of SARS-CoV-2 antigen rapid tests published by the World Health Organization (WHO) and the Paul-Ehrlich-Institut (PEI) [1, 2], the acceptance criteria of the sensitivity and specificity of CLUNGENE® COVID-19 Antigen Rapid Test was specified as follows:

- Sensitivity >80%
- Specificity >97%

Based on previous experiences, the acceptance criteria of the usability of CLUNGENE® COVID-19 Antigen Rapid Test was specified as follows:

- 1) At least 80% of participants are able to perform the test in a manner that does not cause a safety hazard;
- 2) At least 90% of the participants are able to read test results correctly;

- 3) At least 80% of the participants can correctly interpret what to do next in case of a positive/ negative/ invalid test result;
- 4) At least 80% of the participants are able to understand the instructions for use.

5. Test reagent

Manufacturer	Hangzhou Clongene Biotech Co., Ltd.
Test name	CLUNGENE® COVID-19 Antigen Rapid Test
Pack size	Single test per kit
Contents of kit	Test cassette (individually in a foil pouch with desiccant), sterile swab, extraction reagent tube, waste bag and instructions for use
Batch number	2021050163
Valid until	2023-04
Product storage	4-30 °C

6. Comparator/reference method

The clinical performance of CLUNGENE® COVID-19 Antigen Rapid Test was compared to the results from nasopharyngeal swabs collected into 0.5 mL of transport media solution and tested with a RT-PCR test.

RT-PCR: Sacace™ SARS-CoV-2 Real-TM (REF: V435-100FRT) bearing the CE mark, manufactured by Sacace Biotechnologies Srl in Italy. It is a multiplex Real-time PCR test for the qualitative detection of SARS-CoV-2 RNA using three targets: N gene specific for SARS-CoV-2, E gene specific for SARS-CoV-2 and region of E gene common for all SARS-like coronaviruses (SARS-CoV, SARS-CoV-2).

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7. Test sites and investigators

All participants were recruited consecutively from the following four collection sites in Attica, Greece.

Site 1: 246b Mesogeion Avenue, Athens

60 m² indoor place used as educational/lecture center was used to accommodate participants. Eight separate areas were set for sampling and self-testing purposes, partitioned with curtains to ensure visual and acoustic privacy.

Observer: Georgios Georgioulis, MD

Site 2: 246 Mesogeion Avenue, Athens

There were 4 specially designed areas (ISOBOX located outside of the Locus Medicus Diagnostic Center) were used for sampling and self-testing in way that privacy was ensured.

Observer: Nikolaos Georgakopoulos, MSc – Biologist

Site 3: Patisia/Galatsi area residencies, Attica

Health professional collected samples and observed self-testing visiting participants' apartments in the specific area.

Observer: Vasilis Tsilivakos, MD, PhD

Site 4: Loutsa/Artemida area residencies, Attica

Health professional collected samples and observed self-testing visiting participants' apartments in the specific area.

Observer: Andreas Bitsakos, MSc – Biologist

Sampling for RT-PCR test was supported by adequate highly trained personnel from Locus Medicus Diagnostic Center. RT-PCR test was performed in the Locus Medicus laboratory.

Laboratory: Locus Medicus S.A.

246 Mesogeion Ave.155 61 Holargos, Athens, Greece

The laboratory of Locus Medicus S.A. has been accredited by the Hellenic Accreditation System (ESYD) under the terms of the ELOT EN ISO 15189:2012 (certification no. 621-4) and ELOT EN ISO/IEC 17025:2017 (certification no. 737-3).

8. Study samples

The overall study size should not be less than 500 individuals (all positive and negative), in which:

- ï at least 100 RT-PCR positive specimens, collected from symptomatic individuals who were tested within 0~7 days of the onset of symptoms. To validate that CLUNGENE® COVID-19 Antigen Rapid Test could identify the most current variants (Including at least Alpha and Delta), about 30 RT-PCR positive samples will be subjected to a typing assay to identify which variant it is.
- ï at least 100 RT-PCR negative specimens, collected from asymptomatic individuals without a known SARS-CoV-2 exposure.

To the recruitment both males and females of age 7~80 (or older) are expected. Study population should include individuals with following grouping considerations, no less than 20 subjects for each group.

- 7~14 years of age
- 15~65 years of age
- >65 years of age

9. Inclusion/exclusion criteria

Inclusion Criteria:

- ï Age: 7 and above
- ï Symptomatic individuals (within 7 days of onset) who were suspected of COVID-19
- ï Asymptomatic individuals without a known SARS-CoV-2 exposure

- ï Written informed consent of the participant; for children under 18 years of age, informed consent of the parents or legal guardians.

Exclusion Criteria:

- ï Age under 7
- ï Prone to nosebleeds
- ï Laboratory professionals who are proficient in performing rapid lateral flow tests
- ï Healthcare provider
- ï Dyslexia and poor eyesight
- ï Unable to provide informed consent due to mental or cognitive disabilities
- ï Individuals duplicate enrolment

10. Test procedure

10.1 Informed consent

Each participant was verbally informed about the trial, in terms of the processes, duration, potential risks and benefits, but no indications about the use of the device including the instruction for use. If there was no further questions by the subject then each should sign a informed consent.

10.2 Self-sampling and self-testing

After providing written informed consent, the participants received the CLUNGENE® COVID-19 Antigen Rapid Test and a instructions for use in Greek. A mirror for self-sampling and a clock/timer were provided. Participants performed the procedures according to the following testing situations in a separate room/area without time restrictions.

- Parent or legal guardian collected a sample from their child (age 7-14) and parent or legal guardian performed the test.
- Older child (age 15-17) self-collected sample and child performed the test (parent or legal guardian should not be present to intervene).
- Adults (age 18 and older) self-collected the sample and performed the test themselves.

For each subject, there was one observer who watched the process during the operation by the subject, doing investigation after the operation, recording the facts he/she observed, the feedbacks he/she got during the conversation, and a conclusion for each case all on the individual questionnaire. The observer was requested not to provide any help other than referring to the provided instructions for use. Participants were not allowed to use any tools, including cell phones, computers, internet, videos, etc. Participants over 65 years old could seek assistance in performing test, but the details of why he/she need help, how was the test performed should be recorded in the paperbased questionnaire.

10.3 Comparator test

For each participant, nasopharyngeal (NP) swab was collected by professional and placed in a specific tube containing 0.5 mL of transport media solution, and sent on cold packs to the Locus Medicus laboratory for SARS-CoV-2 RT-PCR testing on the same day. All test results were recorded in the case report form including the RT-PCR Ct values.

The RT-PCR sampling was always carried out after self-sampling.

Part of the RT-PCR positive results will be sent to the typing laboratory for typing assay; to conform with the guidance document [3].

11. Results

11.1 Participant characteristics

A total of 578 subjects (122 were symptomatic and 456 were asymptomatic at time of presentation) were enrolled at four collection sites in Attica. Age and gender distribution of the 578 subjects is presented in Table 1 along with the positive rate per age group. Ages of subjects ranged from 9 years to 85 years.

Table 1. Age and gender distribution and positive rate (by CLUNGENE® COVID-19 Antigen Rapid Test) per age group

Age group (years)	Female	Male	Positivity rate % (total positive/total tested)
7-14	64	73	26.3% (36/137)
15-65*	227	179	19.5% (79/406)
>65	19	16	2.9% (1/35)
Total	310	268	20.1% (116/578)

* including 43 minors aged 15-17 years

11.2 Sensitivity and specificity

As showed in the Table 2, the CLUNGENE® COVID-19 Antigen Rapid Test showed a sensitivity of 95.1% (95%CI: 89.7%-97.7%) and a specificity of 100% (95%CI: 99.2%-100%) compared to gold-standard RT-PCR. Further analysis of sensitivity according to different ranges of Ct values was conducted, the sensitivity is much lower at Ct value range > 30, compare to ≤ 30, refer to Table 3 for details. Positive results are broken down by days post-onset of symptoms, refer to Table 4 for details.

30 positive clinical specimens (including 8 Alpha variant, 3 Beta variant and 19 Delta variant) were tested positive with the CLUNGENE® COVID-19 Antigen Rapid Test.

Table 2. Summary of the performance of the CLUNGENE® COVID-19 Antigen Rapid Test compared to RT-PCR

CLUNGENE® COVID-19 Antigen Rapid Test	RT-PCR		
	Positive	Negative	Total
Positive	116	0	116
Negative	6	456	462
Total	122	456	578
Sensitivity	95.1% (116/122) (95%CI: 89.7%-97.7%)		
Specificity	100% (456/456) (95%CI: 99.2%-100%)		

Table 3. Sensitivity according to different Ct value range (N gene specific for SARS-CoV-2)

Group	Number positive/total	Sensitivity	95%CI
Ct ≤ 25	74/74	100%	95.1%-100%
Ct ≤ 30	95/95	100%	96.1%-100%
Ct > 30	21/27	77.8%	59.2%-89.4%

Table 4: Sensitivity according to days post-onset of symptoms

Days post-onset of symptoms	RT-PCR positive	CLUNGENE® Rapid Test positive	Sensitivity	95%CI
0	79	77	97.5%	91.2%~99.3%
0~1	94	91	96.8%	91.0%~99.0%
0~2	100	96	96.0%	90.2%~98.4%
0~3	110	106	96.4%	91.0%~98.6%
0~4	114	110	96.5%	91.3%~98.7%
0~5	118	114	96.7%	91.6%~98.7%
0~6	121	115	95.0%	89.6%~97.7%
0~7	122	116	96.7%	89.7%~97.7%
Total	122	116	96.7%	89.7%~97.7%

11.3 Usability

Among 578 participants, 574 participants' questionnaires were evaluated in the usability study (some critical processes on 4 questionnaires were not recorded). Table 5 summarizes the individual steps of self-sampling and self-testing with the proportion of participants who precisely followed the instructions for use.

Table 5. The relevant steps of self-sampling and self-testing with numbers of participants who precisely followed the instructions

Processes		Participants following precisely instructions	Note
1.	Self-sampling		
1.1	By opening the pouch, the swab-tip was not touched by hands (N=574)	571 (99.5%)	3 participants were aware of this, but found it difficult not to touch the swab-tip
1.2*	The depth of insertion of the swab into left nostril should be about 2.5 cm (N=574)	573 (99.8%)	1 participant did not insert the swab deep enough
1.3*	At least 5 times rotation to rub against the left nasal wall (N=574)	572 (99.7%)	2 participants rotated 4 times
1.4*	Both nostrils should be sampled (N=574)	574 (100%)	

1.5*	The depth of insertion of the swab into right nostril should be about 2.5 cm (N=574)	572 (99.7%)	2 participants did not insert the swab deep enough
1.6*	At least 5 times rotation to rub against the right nasal wall (N=574)	570 (99.3%)	3 participants rotated 4 times, 1 participant rotated 3 times.
2.	Self-testing		
2.1*	The swab was rotated at least 5 times in extraction process (N=574)	570 (99.3%)	1 participant rotated 4 times, 3 participants rotated 3 times.
2.2*	Leaving the swab tip in the extraction reagent for 1 minute (N=574)	573 (99.8%)	1 participant left the swab tip in the extraction reagent less than 1 minute
2.3	The swab-tip was squeezed during the removal from the extraction tube (N=574)	572 (99.7%)	2 participants forgot to squeeze, or only squeezed very lightly
2.4	Covered the tube tightly with the nozzle cap (N=572)	571 (99.8%)	1 participant forgot to cover the tube or covered it un-tightly; 2 unfilled
2.5*	3 drops applied (N=574)	572 (99.7%)	1 participant applied 4 drops; 1 participant applied 2 drops.
2.6*	Applied to the sample well (N=574)	574 (100%)	
2.7	Timing (N=574)	574 (100%)	
2.8*	Read test result at 15-20 minutes after sample application (N=574)	573 (99.8%)	1 participant read result at 10 minutes after sample application

The critical processes for self-sampling and self-testing are marked with an asterisk (*) in Table 5. The following errors were classified as potentially dangerous in terms of leading to a false result by the manufacturer:

- 1) Sampling with nasal swab was not carried out following instructions for use;
- 2) Leaving the swab tip in the extraction reagent less than 15 seconds when the swab is rotated at least 5 times;
- 3) Leaving the swab tip in the extraction reagent less than 1 minute when the swab is rotated less than 5 times;
- 4) Adding less than 2 drops to the sample well;
- 5) Reading the result before 10 minutes or after 30 minutes after sample application.

The following mistakes had been made that could lead to an incorrect result:

- 8 participants did not precisely follow the instructions of sampling
 - 2 participants did not insert the swab deep enough into one of their nostrils
 - 5 participants brushed the inside of one of their nostrils 4 or 3 times, less than 5 times
 - 1 participant did not insert the swab deep enough into right nostril and brushed the inside of right nostril 4 times, less than 5 times
- 1 participant rotated the swab less than 5 times and left the swab tip in the extraction reagent less

than 1 minute

In total, 11 errors were made by 9 participants that could potentially lead to an incorrect result. 98.4% (565/574) of the participants were able to perform the test in a manner that does not cause a safety hazard.

5 participants incorrectly read positive results as invalid results; 11 participants incorrectly read negative results as invalid results. 97.2% (558/574) of the participants were able to read test results correctly.

96.2% (552/574) of the participants could correctly interpret what to do next in case of a positive/negative/invalid test result. 22 participants felt difficult to find or explain the results.

The following three questions were used to evaluate whether participants understood the instruction for use, and 89.9% (516/574) of the participants answered all questions correctly.

Questions	Correct	Incorrect	don't know
At what temperature should the test be performed?	522 (90.9%)	45 (7.8%)	7 (1.2%)
When should the test be performed after removing the test cassette from the pouch?	560 (97.6%)	0	14 (2.4%)
How can you tell that the test result is invalid?	557 (97.0%)	11 (1.9%)	6 (1.1%)

The statistical results of the usability study are summarized in the table below:

No.	Acceptance criteria	Result	Evaluation
1	At least 80% of participants can perform the test in a manner that does not cause a safety hazard	98.4%	Passed
2	At least 90% of the participants can read test results correctly	97.2%	Passed
3	At least 80% of the participants can correctly interpret what to do next in case of a positive/negative/invalid test result	96.2%	Passed
4	At least 80% of the participants can understand the instructions for use	89.9%	Passed

97.7% (561/574) of the users were satisfied with the product (very good n=494, good n=67), 13 users did not comment on the satisfaction of the product. However, 5 users found it difficult to open the hole on the box, and 5 users found it difficult to tear off the sealed foil film on the extraction reagent tube.

12. Conclusion and discussion

The clinical performance and usability of CLUNGENE[®] COVID-19 Antigen Rapid Test successfully meet the acceptance criteria specified in section 4. Notably, the CLUNGENE[®] COVID-19 Antigen Rapid Test meet the acceptance criteria of >80% sensitivity and >98% specificity defined by the Medical Device Coordination Group (MDCG) in August 2021 [3]. And the performance of CLUNGENE[®] COVID-19 Antigen Rapid Test is not affected by Alpha, Beta, Gamma, Delta variants.

The 6 false negatives shown in Table 2 involved participants who had no critical deviations in self-use, and whose paired nasopharyngeal swabs with RT-PCR Ct values >30. In contrast to RT-PCR, which

amplifies the virus target sequences, antigen rapid tests detect the presence of viral antigens in the specimen without amplification. As a result, the antigen rapid tests show a lower sensitivity compared to RT-PCR test. The CLUNGENE® COVID-19 Antigen Rapid Test performed well (sensitivity of 95.1%) in early symptomatic cases (within the first 7 days following the onset of symptoms), which is higher than most published studies on other antigen rapid tests for nasal swab (74.2%-97%) [4-10].

All of the deviations in self-use summarized in Table 4 occurred in PCR-negative participants, therefore it could not be observed whether these deviations would lead to false-negative results. 11 errors (sampling n=9, specimen extraction n=2) were made by 9 participants that could potentially lead to an incorrect result, according to the potential dangerous classified by manufacturer. Furthermore, we observed that some participants did not have enough patience to read the instructions for use, resulting in incorrect readings of the results and incorrect answers to questions about the instructions for use. These errors might be reduced by modified instructions for use, such as follows:

- 1) The depth of insertion of the swab into the nostril is recommended to be marked in the illustration;
- 2) The number of swab rotations in the illustrations of sampling and extraction is suggested to be changed to a more visible colour, e.g. red;
- 3) Add symbols of "+", "-", and "?" to the illustrations of positive, negative and invalid test results respectively, which may help lay users understand the test results more visually;
- 4) Bold is recommended for important sentences in the instructions for use.

In conclusion, we demonstrate that individuals aged 15 years or older can reliably perform the CLUNGENE® COVID-19 Antigen Rapid Test by themselves, and the adult lay users can reliably test another person under 15 years of age.

The CLUNGENE® COVID-19 Antigen Rapid Test for self-testing was placed on the market for the first time in Germany under the special approval by the BfArM (No. 5640-S-168/21), and has been widely used by laypersons in schools, companies and homes for self-testing.

In a study performed by Lindner et al. [11], a clinical testing situation was compared with an at self-testing situation. The clinical performance of the SARS-CoV-2 Antigen Self Test Nasal for patient self-testing was evaluated using nasal swab samples collected from 146 lay person in a prospective study at a clinical centre in Germany, sensitivity of self-testing was compared with the gold standard method (RT-PCR). The Ag-RDT evaluated was the STANDARD Q COVID-19 Ag Test (SD Biosensor, Inc. Gyeonggi-do, Korea). The sensitivity was found to be 82.5% (95% CI 68.1-91.3) and specificity was 100% (95% CI 96.5-100). In this study, the agreement of results between a self-test and a test performed by health professionals was assessed as well. Good consistency between self-test results and professional test results. The positive percent agreement was 91.4% (95% CI 77.6-97.0), while the negative percent agreement was 99.1% (95% CI 95.0-100). Most participants (80.9%) considered the Ag-RDT as rather easy to perform.

The COVID-19 rapid antigen tests for self-testing are easy to use and offer rapid results at low cost, especially it has a performance closer to RT-PCR. The tests can contribute to more efficient interruption of transmission through more timely identification of positive cases.

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Annex

1. Case Report Form
2. Sample of questionnaire

Case Report Form

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
1	1	2021-06-28	number033	45	Male	2021-06-23	5	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.23	30.95	29.28	Positive	/
2	1	2021-06-28	number036	46	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.07	14.1	12.8	Positive	/
3	1	2021-06-28	number037	22	Male	2021-06-23	5	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	33.56	36.24	33.74	Positive	/
4	1	2021-06-28	number038	16	Male	2021-06-23	5	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	30.42	32.09	31.35	Positive	/
5	1	2021-06-28	number039	23	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	34.14	36.19	36.91	Positive	/
6	1	2021-06-28	number040	13	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	23.03	23.15	24.54	Positive	/
7	1	2021-06-28	number041	30	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.04	15.28	15.74	Positive	/
8	1	2021-06-28	number042	40	Female	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.67	31.6	28.91	Positive	Delta
9	1	2021-06-28	number043	67	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
10	1	2021-06-28	number045	73	Female	2021-06-22	6	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	34.88	35.02	31.83	Positive	/
11	1	2021-06-28	number047	56	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.31	16.91	15.62	Positive	Alpha
12	1	2021-06-28	number048	39	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	23.36	24.93	25.35	Positive	Delta
13	1	2021-06-28	number049	42	Male	2021-06-24	4	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	30.24	31.33	33.49	Positive	/
14	1	2021-06-28	number050	9	Female	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.26	30.96	27.99	Positive	/
15	1	2021-06-28	number051	46	Male	2021-06-26	2	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	25.7	25.73	25.78	Positive	/
16	1	2021-06-28	number052	16	Male	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.26	31.51	32.14	Positive	Delta
17	1	2021-06-28	number053	50	Male	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	26.21	26.94	25.75	Positive	Beta
18	1	2021-06-28	number054	70	Male	2021-06-26	2	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	33.51	36.79	36.83	Positive	/
19	1	2021-06-28	number055	35	Male	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	31.06	33.86	37.08	Positive	/
20	1	2021-06-28	number065	41	Female	2021-06-26	2	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	22.33	22.33	21.95	Positive	/
21	1	2021-06-28	number066	30	Male	2021-06-26	2	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	23.28	23.65	25.23	Positive	/
22	1	2021-06-28	number067	43	Male	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	27.51	29.27	31.49	Positive	/
23	1	2021-06-28	number068	23	Male	2021-06-21	7	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	35.48	38.28	34.99	Positive	/
24	1	2021-06-28	number069	47	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	20.06	21.7	23.67	Positive	/
25	1	2021-06-28	number070	50	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.48	14.99	15.51	Positive	Beta
26	1	2021-06-28	number071	11	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	23.74	25.69	23.35	Positive	Alpha
27	1	2021-06-28	number072	14	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	15.12	15.91	15.05	Positive	Delta
28	1	2021-06-28	number073	19	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	33.6	35.15	35.15	Positive	Alpha
29	1	2021-06-28	number074	9	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	35.02	36	37.73	Positive	/
30	1	2021-06-28	number075	71	Female	2021-06-27	1	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	31.87	34.77	32.3	Positive	/
31	1	2021-06-28	number108	9	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	19.34	20.77	20.06	Positive	/
32	1	2021-06-28	number109	20	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.05	13.06	12.85	Positive	/
33	1	2021-06-28	number110	27	Male	2021-06-24	4	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	26.34	27.66	27.96	Positive	/
34	1	2021-06-28	number111	40	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	21.46	22.68	24.52	Positive	/
35	1	2021-06-28	number112	50	Female	2021-06-24	4	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	28.32	29.31	28.61	Positive	/
36	1	2021-06-28	number113	58	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	21.17	22.95	24.58	Positive	/
37	1	2021-06-28	number114	43	Female	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	30.09	31.84	30.03	Positive	/
38	1	2021-06-28	number115	30	Female	2021-06-23	5	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	32.33	34.46	36.36	Positive	/
39	1	2021-06-28	number116	46	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	32.61	34.7	31.3	Positive	/
40	1	2021-06-28	number117	9	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.56	13.7	12.56	Positive	/
41	1	2021-06-28	number118	11	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	30.57	31.55	30.13	Positive	/
42	1	2021-06-28	number119	13	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.19	19.45	19.22	Positive	/
43	1	2021-06-28	number120	9	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.92	20.6	19.67	Positive	/
44	1	2021-06-28	number121	36	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.9	13.8	12.71	Positive	/
45	1	2021-06-28	number122	17	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.8	12.9	13.29	Positive	/
46	1	2021-06-28	number123	32	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.15	15.55	15.39	Positive	/
47	1	2021-06-28	number124	39	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
48	1	2021-06-28	number125	11	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.14	12.77	13.71	Positive	Delta
49	1	2021-06-28	number126	42	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.1	16.39	17.49	Positive	Beta
50	1	2021-06-28	number127	12	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	24.33	25.86	27.59	Positive	Delta
51	1	2021-06-28	number128	38	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	26.25	26.51	24.26	Positive	Alpha
52	1	2021-06-28	number129	11	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	17.02	17.73	17.11	Positive	Delta
53	1	2021-06-28	number130	38	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.65	19.97	19.11	Positive	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
54	1	2021-06-28	number131	11	Female	2021-06-26	2	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	24.27	24.46	22.11	Positive	/
55	1	2021-06-28	number132	34	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	19.69	20.89	22.71	Positive	/
56	1	2021-06-28	number133	36	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.58	17.38	17.31	Positive	/
57	1	2021-06-28	number134	54	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.29	16.32	14.75	Positive	/
58	1	2021-06-28	number135	25	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.68	19.91	21.56	Positive	/
59	1	2021-06-28	number136	43	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	15.14	16.15	14.6	Positive	/
60	1	2021-06-28	number137	29	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.68	13.15	13.81	Positive	/
61	1	2021-06-28	number138	11	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	25.27	25.88	28.16	Positive	/
62	1	2021-06-28	number139	10	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	17.39	18.61	18.39	Positive	/
63	1	2021-06-28	number140	9	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	19.02	20.83	20.02	Positive	/
64	1	2021-06-28	number141	45	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.96	13.08	12.31	Positive	/
65	1	2021-06-28	number142	47	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.68	18.72	17.63	Positive	/
66	1	2021-06-28	number143	21	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.51	17.65	18.14	Positive	/
67	1	2021-06-28	number144	45	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.88	17.49	16.35	Positive	/
68	1	2021-06-28	number145	9	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	17.36	17.85	16.74	Positive	/
69	1	2021-06-28	number146	9	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	19.65	21.14	22.18	Positive	Alpha
70	1	2021-06-28	number147	35	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	25.12	25.62	25.75	Positive	Delta
71	1	2021-06-28	number148	10	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	24.27	24.42	25.03	Positive	Delta
72	1	2021-06-28	number149	59	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	17.12	18.7	19.22	Positive	Delta
73	1	2021-06-28	number150	13	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.02	19.46	19.95	Positive	Delta
74	1	2021-06-28	number151	16	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.35	12.39	11.49	Positive	/
75	1	2021-06-28	number152	40	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	13.04	13.27	14.28	Positive	/
76	1	2021-06-28	number153	17	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.26	29.85	28.03	Positive	/
77	1	2021-06-28	number209	85	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
78	1	2021-06-28	number210	82	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
79	1	2021-06-28	number211	21	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
80	1	2021-06-28	number212	55	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
81	1	2021-06-28	number213	15	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
82	1	2021-06-28	number214	47	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
83	1	2021-06-28	number215	10	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
84	1	2021-06-28	number216	83	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
85	1	2021-06-28	number217	74	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
86	1	2021-06-28	number218	18	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
87	1	2021-06-28	number219	22	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
88	1	2021-06-28	number220	50	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
89	1	2021-06-28	number221	62	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
90	1	2021-06-28	number222	69	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
91	1	2021-06-28	number223	62	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
92	1	2021-06-28	number224	78	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
93	1	2021-06-28	number225	57	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
94	1	2021-06-28	number226	74	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
95	1	2021-06-28	number227	17	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
96	1	2021-06-28	number228	35	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
97	1	2021-06-28	number229	15	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
98	1	2021-06-28	number230	10	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
99	1	2021-06-28	number231	28	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
100	1	2021-06-28	number232	40	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
101	1	2021-06-28	number233	22	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
102	1	2021-06-28	number234	35	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
103	1	2021-06-28	number235	60	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
104	1	2021-06-28	number236	43	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
105	1	2021-06-28	number237	52	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
106	1	2021-06-28	number238	29	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
107	1	2021-06-28	number239	9	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
108	1	2021-06-28	number240	11	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
109	1	2021-06-28	number241	19	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
110	1	2021-06-28	number242	39	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
111	1	2021-06-28	number243	30	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
112	1	2021-06-28	number244	22	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
113	1	2021-06-28	number245	29	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
114	1	2021-06-28	number246	36	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
115	1	2021-06-28	number247	35	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
116	1	2021-06-28	number248	30	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
117	1	2021-06-28	number249	21	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
118	1	2021-06-28	number250	20	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
119	1	2021-06-28	number251	41	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
120	1	2021-06-28	number252	35	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
121	1	2021-06-28	number253	17	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
122	1	2021-06-28	number254	63	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
123	1	2021-06-28	number255	65	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
124	1	2021-06-28	number256	15	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
125	1	2021-06-28	number257	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
126	1	2021-06-28	number258	10	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
127	1	2021-06-28	number259	29	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
128	1	2021-06-28	number260	33	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
129	1	2021-06-28	number261	11	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
130	1	2021-06-28	number262	38	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
131	1	2021-06-28	number277	61	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
132	1	2021-06-28	number278	13	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
133	1	2021-06-28	number279	60	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
134	1	2021-06-28	number280	61	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
135	1	2021-06-28	number281	80	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
136	1	2021-06-28	number282	76	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
137	1	2021-06-28	number283	78	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
138	1	2021-06-28	number284	10	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
139	1	2021-06-28	number285	9	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
140	1	2021-06-28	number286	20	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
141	1	2021-06-28	number287	55	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
142	1	2021-06-28	number288	29	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
143	1	2021-06-28	number289	10	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
144	1	2021-06-28	number290	13	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
145	1	2021-06-28	number291	15	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
146	1	2021-06-28	number292	35	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
147	1	2021-06-28	number293	33	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
148	1	2021-06-28	number294	44	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
149	1	2021-06-28	number295	33	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
150	1	2021-06-28	number296	38	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
151	1	2021-06-28	number297	39	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
152	1	2021-06-28	number298	17	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
153	1	2021-06-28	number299	42	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
154	1	2021-06-28	number300	46	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
155	1	2021-06-28	number301	11	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
156	1	2021-06-28	number302	12	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
157	1	2021-06-28	number303	67	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
158	1	2021-06-28	number304	74	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
159	1	2021-06-28	number305	63	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
160	1	2021-06-28	number306	54	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
161	1	2021-06-28	number307	82	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
162	1	2021-06-28	number308	75	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
163	1	2021-06-28	number309	11	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
164	1	2021-06-28	number310	11	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
165	1	2021-06-28	number311	11	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
166	1	2021-06-28	number312	80	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
167	1	2021-06-28	number313	63	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
168	1	2021-06-28	number314	57	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
169	1	2021-06-28	number315	78	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
170	1	2021-06-28	number316	60	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
171	1	2021-06-28	number317	10	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
172	1	2021-06-28	number318	40	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
173	1	2021-06-28	number319	38	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
174	1	2021-06-28	number320	38	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
175	1	2021-06-28	number321	23	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
176	1	2021-06-28	number322	26	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
177	1	2021-06-28	number323	19	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
178	1	2021-06-28	number324	37	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
179	1	2021-06-28	number325	33	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
180	1	2021-06-28	number326	22	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
181	1	2021-06-28	number327	17	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
182	1	2021-06-28	number328	47	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
183	1	2021-06-28	number329	29	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
184	1	2021-06-28	number330	52	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
185	1	2021-06-28	number331	15	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
186	1	2021-06-28	number332	11	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
187	1	2021-06-28	number333	13	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
188	1	2021-06-28	number334	9	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
189	1	2021-06-28	number335	34	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
190	1	2021-06-28	number336	56	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
191	1	2021-06-28	number337	52	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
192	1	2021-06-28	number338	59	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
193	1	2021-06-28	number339	10	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
194	1	2021-06-28	number340	40	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
195	1	2021-06-28	number341	48	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
196	1	2021-06-28	number342	17	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
197	1	2021-06-28	number343	23	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
198	1	2021-06-28	number344	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
199	1	2021-06-28	number345	9	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
200	1	2021-06-28	number346	67	Male	2021-06-22	6	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	38.43	42.12	39.59	Positive	/
201	1	2021-06-28	number347	18	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
202	1	2021-06-28	number348	44	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
203	1	2021-06-28	number349	50	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
204	1	2021-06-28	number350	32	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
205	1	2021-06-28	number351	37	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
206	1	2021-06-28	number518	24	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
207	1	2021-06-29	number352	29	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
208	1	2021-06-29	number353	27	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
209	1	2021-06-29	number354	10	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
210	1	2021-06-29	number355	13	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
211	1	2021-06-29	number356	84	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
212	1	2021-06-29	number357	20	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
213	1	2021-06-29	number358	25	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
214	1	2021-07-02	number492	44	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
215	1	2021-07-02	number493	27	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
216	1	2021-07-02	number494	27	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
217	1	2021-07-02	number495	26	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
218	1	2021-07-02	number496	27	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
219	1	2021-07-02	number497	41	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
220	1	2021-07-02	number498	30	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
221	1	2021-07-02	number499	10	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
222	1	2021-07-02	number500	23	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
223	1	2021-07-02	number501	43	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
224	1	2021-07-02	number502	17	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
225	1	2021-07-02	number503	48	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
226	1	2021-07-02	number504	14	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
227	1	2021-07-02	number505	10	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
228	1	2021-07-02	number506	24	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
229	1	2021-07-02	number507	9	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
230	1	2021-07-02	number508	43	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
231	1	2021-07-02	number509	19	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
232	1	2021-07-02	number510	40	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
233	1	2021-07-02	number511	44	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
234	1	2021-07-02	number512	30	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
235	1	2021-07-02	number513	27	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
236	1	2021-07-02	number514	24	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
237	1	2021-07-02	number515	15	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
238	1	2021-07-02	number516	48	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
239	1	2021-07-04	number517	9	Male	/	/	Nasal swab	Negative	2021-07-04	2021-07-04	Nasopharyngeal	0	0	0	Negative	/
240	1	2021-07-05	number519	28	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
241	1	2021-07-05	number520	28	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
242	1	2021-07-05	number521	27	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
243	1	2021-07-05	number522	13	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
244	1	2021-07-05	number523	37	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
245	1	2021-07-05	number524	33	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
246	1	2021-07-05	number525	45	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
247	1	2021-07-05	number526	59	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
248	1	2021-07-05	number527	26	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
249	1	2021-07-05	number528	21	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
250	1	2021-07-05	number529	18	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
251	1	2021-07-05	number530	32	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
252	1	2021-07-05	number531	31	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
253	1	2021-07-05	number532	14	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
254	1	2021-07-06	number263	10	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
255	1	2021-07-06	number264	22	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
256	1	2021-07-06	number265	40	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
257	1	2021-07-06	number266	10	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
258	1	2021-07-06	number533	50	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
259	1	2021-07-06	number534	24	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
260	1	2021-07-06	number535	25	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
261	1	2021-07-06	number536	31	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
262	1	2021-07-06	number537	34	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
263	1	2021-07-06	number538	44	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
264	1	2021-07-06	number539	24	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
265	1	2021-07-07	number267	11	Male	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
266	1	2021-07-07	number268	43	Female	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
267	1	2021-07-07	number269	36	Male	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
268	1	2021-07-07	number270	34	Male	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
269	1	2021-07-07	number271	15	Female	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
270	1	2021-07-07	number272	28	Male	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
271	1	2021-07-07	number273	37	Male	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
272	1	2021-07-07	number274	11	Female	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
273	1	2021-07-07	number275	53	Male	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
274	1	2021-07-09	number490	9	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
275	1	2021-07-16	number491	41	Female	/	/	Nasal swab	Negative	2021-07-16	2021-07-16	Nasopharyngeal	0	0	0	Negative	/
276	2	2021-06-24	number391	30	Male	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
277	2	2021-06-24	number392	13	Male	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
278	2	2021-06-24	number393	36	Female	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
279	2	2021-06-24	number394	46	Male	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
280	2	2021-06-24	number395	36	Female	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
281	2	2021-06-24	number396	22	Female	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
282	2	2021-06-24	number397	36	Female	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
283	2	2021-06-24	number398	37	Female	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
284	2	2021-06-24	number399	42	Male	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
285	2	2021-06-24	number400	54	Female	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
286	2	2021-06-24	number401	42	Male	/	/	Nasal swab	Negative	2021-06-24	2021-06-24	Nasopharyngeal	0	0	0	Negative	/
287	2	2021-06-25	number402	39	Female	/	/	Nasal swab	Negative	2021-06-25	2021-06-25	Nasopharyngeal	0	0	0	Negative	/
288	2	2021-06-25	number403	23	Female	/	/	Nasal swab	Negative	2021-06-25	2021-06-25	Nasopharyngeal	0	0	0	Negative	/
289	2	2021-06-25	number404	56	Male	/	/	Nasal swab	Negative	2021-06-25	2021-06-25	Nasopharyngeal	0	0	0	Negative	/
290	2	2021-06-25	number405	30	Female	/	/	Nasal swab	Negative	2021-06-25	2021-06-25	Nasopharyngeal	0	0	0	Negative	/
291	2	2021-06-25	number406	47	Female	/	/	Nasal swab	Negative	2021-06-25	2021-06-25	Nasopharyngeal	0	0	0	Negative	/
292	2	2021-06-25	number577	74	Female	2021-06-25	0	Nasal swab	Negative	2021-06-25	2021-06-25	Nasopharyngeal	30.39	30.66	32.99	Positive	/
293	2	2021-06-28	number001	43	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
294	2	2021-06-28	number002	9	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
295	2	2021-06-28	number003	9	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
296	2	2021-06-28	number004	11	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
297	2	2021-06-28	number005	41	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
298	2	2021-06-28	number006	43	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
299	2	2021-06-28	number007	81	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
300	2	2021-06-28	number008	36	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
301	2	2021-06-28	number009	15	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
302	2	2021-06-28	number010	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
303	2	2021-06-28	number011	71	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
304	2	2021-06-28	number012	57	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
305	2	2021-06-28	number013	42	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
306	2	2021-06-28	number014	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
307	2	2021-06-28	number015	17	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
308	2	2021-06-28	number016	58	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
309	2	2021-06-28	number017	53	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
310	2	2021-06-28	number018	41	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
311	2	2021-06-28	number019	14	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
312	2	2021-06-28	number020	41	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
313	2	2021-06-28	number021	18	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
314	2	2021-06-28	number022	42	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
315	2	2021-06-28	number023	24	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
316	2	2021-06-28	number024	36	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
317	2	2021-06-28	number025	19	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
318	2	2021-06-28	number026	10	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
319	2	2021-06-28	number027	15	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
320	2	2021-06-28	number028	13	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
321	2	2021-06-28	number029	74	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
322	2	2021-06-28	number030	29	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
323	2	2021-06-28	number031	27	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
324	2	2021-06-28	number032	33	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
325	2	2021-06-28	number044	57	Male	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.73	29.97	31.62	Positive	/
326	2	2021-06-28	number046	70	Male	2021-06-22	6	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	38.48	42.14	44.92	Positive	/
327	2	2021-06-28	number056	9	Male	2021-06-24	4	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.46	31.93	30.88	Positive	/
328	2	2021-06-28	number057	36	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	19.19	20.55	19.71	Positive	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
329	2	2021-06-28	number058	41	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.34	20.01	18.21	Positive	/
330	2	2021-06-28	number059	14	Female	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	30.16	32.27	31.72	Positive	/
331	2	2021-06-28	number060	23	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	36.27	37.43	36.68	Positive	/
332	2	2021-06-28	number061	44	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	17.46	18.79	17.72	Positive	/
333	2	2021-06-28	number062	22	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.03	14.34	13.84	Positive	/
334	2	2021-06-28	number063	42	Male	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	32.16	33.25	34.98	Positive	/
335	2	2021-06-28	number064	28	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	13.05	14.09	14.89	Positive	/
336	2	2021-06-28	number076	10	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	20.46	21.99	23.77	Positive	Delta
337	2	2021-06-28	number077	34	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	26.26	28.44	26.99	Positive	Alpha
338	2	2021-06-28	number078	33	Male	2021-06-26	2	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	28.81	28.95	26.66	Positive	Delta
339	2	2021-06-28	number154	58	Male	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	33.4	34.8	37.79	Positive	/
340	2	2021-06-28	number155	15	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
341	2	2021-06-28	number156	25	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
342	2	2021-06-28	number157	40	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
343	2	2021-06-28	number158	21	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
344	2	2021-06-28	number159	48	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
345	2	2021-06-28	number160	16	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
346	2	2021-06-28	number161	37	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
347	2	2021-06-28	number162	39	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
348	2	2021-06-28	number163	15	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
349	2	2021-06-28	number164	39	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
350	2	2021-06-28	number165	16	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
351	2	2021-06-28	number166	44	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
352	2	2021-06-28	number167	17	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
353	2	2021-06-28	number168	27	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
354	2	2021-06-28	number169	32	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
355	2	2021-06-28	number170	44	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
356	2	2021-06-28	number171	32	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
357	2	2021-06-28	number172	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
358	2	2021-06-28	number173	31	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
359	2	2021-06-28	number174	22	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
360	2	2021-06-28	number175	16	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
361	2	2021-06-28	number176	35	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
362	2	2021-06-28	number177	13	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
363	2	2021-06-28	number178	42	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
364	2	2021-06-28	number179	55	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
365	2	2021-06-28	number180	52	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
366	2	2021-06-28	number181	29	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
367	2	2021-06-28	number182	23	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
368	2	2021-06-28	number183	49	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
369	2	2021-06-28	number184	24	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
370	2	2021-06-28	number185	74	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
371	2	2021-06-28	number186	69	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
372	2	2021-06-28	number187	50	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
373	2	2021-06-28	number188	40	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
374	2	2021-06-28	number189	56	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
375	2	2021-06-28	number190	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
376	2	2021-06-28	number191	32	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
377	2	2021-06-28	number192	44	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
378	2	2021-06-28	number193	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
379	2	2021-06-28	number194	30	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
380	2	2021-06-28	number195	14	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
381	2	2021-06-28	number196	28	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
382	2	2021-06-28	number197	30	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
383	2	2021-06-28	number198	31	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
384	2	2021-06-28	number199	47	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
385	2	2021-06-28	number200	33	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
386	2	2021-06-28	number201	45	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
387	2	2021-06-28	number202	57	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
388	2	2021-06-28	number203	84	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
389	2	2021-06-28	number204	60	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
390	2	2021-06-28	number205	38	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
391	2	2021-06-28	number206	64	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
392	2	2021-06-28	number207	64	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
393	2	2021-06-28	number208	80	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
394	2	2021-06-28	number407	12	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
395	2	2021-06-28	number408	41	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
396	2	2021-06-28	number409	9	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
397	2	2021-06-28	number410	59	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
398	2	2021-06-28	number411	17	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
399	2	2021-06-28	number412	23	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
400	2	2021-06-28	number413	9	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
401	2	2021-06-28	number414	31	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
402	2	2021-06-28	number415	54	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
403	2	2021-06-28	number416	31	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
404	2	2021-06-28	number417	46	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
405	2	2021-06-28	number418	28	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
406	2	2021-06-28	number419	21	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
407	2	2021-06-28	number420	53	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
408	2	2021-06-28	number421	46	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
409	2	2021-06-28	number422	20	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
410	2	2021-06-28	number423	38	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
411	2	2021-06-28	number424	57	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
412	2	2021-06-28	number425	27	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
413	2	2021-06-28	number426	59	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
414	2	2021-06-28	number427	20	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
415	2	2021-06-28	number428	48	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
416	2	2021-06-28	number429	51	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
417	2	2021-06-28	number430	30	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
418	2	2021-06-28	number431	17	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
419	2	2021-06-28	number432	36	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
420	2	2021-06-28	number433	21	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
421	2	2021-06-28	number434	14	Male	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
422	2	2021-06-28	number578	17	Female	2021-06-28	0	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	34.22	37.06	33.69	Positive	/
423	2	2021-06-29	number359	43	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
424	2	2021-06-29	number360	23	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
425	2	2021-06-29	number361	38	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
426	2	2021-06-29	number362	26	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
427	2	2021-06-29	number363	23	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
428	2	2021-06-29	number364	49	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
429	2	2021-06-29	number365	20	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
430	2	2021-06-29	number435	14	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
431	2	2021-06-29	number436	11	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
432	2	2021-06-29	number437	14	Male	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
433	2	2021-06-29	number438	24	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
434	2	2021-06-29	number439	25	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
435	2	2021-06-29	number440	24	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
436	2	2021-06-29	number441	42	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
437	2	2021-06-29	number442	33	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/
438	2	2021-06-29	number443	45	Female	/	/	Nasal swab	Negative	2021-06-29	2021-06-29	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
439	2	2021-06-30	number444	11	Male	/	/	Nasal swab	Negative	2021-06-30	2021-06-30	Nasopharyngeal	0	0	0	Negative	/
440	2	2021-06-30	number445	21	Female	/	/	Nasal swab	Negative	2021-06-30	2021-06-30	Nasopharyngeal	0	0	0	Negative	/
441	2	2021-06-30	number446	18	Female	/	/	Nasal swab	Negative	2021-06-30	2021-06-30	Nasopharyngeal	0	0	0	Negative	/
442	2	2021-06-30	number447	17	Male	/	/	Nasal swab	Negative	2021-06-30	2021-06-30	Nasopharyngeal	0	0	0	Negative	/
443	2	2021-06-30	number448	9	Female	/	/	Nasal swab	Negative	2021-06-30	2021-06-30	Nasopharyngeal	0	0	0	Negative	/
444	2	2021-07-01	number366	71	Female	/	/	Nasal swab	Negative	2021-07-01	2021-07-01	Nasopharyngeal	0	0	0	Negative	/
445	2	2021-07-01	number367	81	Female	/	/	Nasal swab	Negative	2021-07-01	2021-07-01	Nasopharyngeal	0	0	0	Negative	/
446	2	2021-07-01	number368	64	Female	/	/	Nasal swab	Negative	2021-07-01	2021-07-01	Nasopharyngeal	0	0	0	Negative	/
447	2	2021-07-02	number369	11	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
448	2	2021-07-02	number370	82	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
449	2	2021-07-02	number371	14	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
450	2	2021-07-02	number449	40	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
451	2	2021-07-02	number450	50	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
452	2	2021-07-02	number451	9	Female	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
453	2	2021-07-02	number452	11	Male	/	/	Nasal swab	Negative	2021-07-02	2021-07-02	Nasopharyngeal	0	0	0	Negative	/
454	2	2021-07-03	number372	10	Male	/	/	Nasal swab	Negative	2021-07-03	2021-07-03	Nasopharyngeal	0	0	0	Negative	/
455	2	2021-07-04	number373	14	Female	/	/	Nasal swab	Negative	2021-07-04	2021-07-04	Nasopharyngeal	0	0	0	Negative	/
456	2	2021-07-05	number374	60	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
457	2	2021-07-05	number375	9	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
458	2	2021-07-05	number376	13	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
459	2	2021-07-05	number377	10	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
460	2	2021-07-05	number378	11	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
461	2	2021-07-05	number453	14	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
462	2	2021-07-05	number454	16	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
463	2	2021-07-05	number455	29	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
464	2	2021-07-05	number456	36	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
465	2	2021-07-05	number457	13	Male	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
466	2	2021-07-05	number458	14	Female	/	/	Nasal swab	Negative	2021-07-05	2021-07-05	Nasopharyngeal	0	0	0	Negative	/
467	2	2021-07-06	number379	13	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
468	2	2021-07-06	number380	12	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
469	2	2021-07-06	number459	34	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
470	2	2021-07-06	number460	18	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
471	2	2021-07-06	number461	13	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
472	2	2021-07-06	number462	17	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
473	2	2021-07-06	number463	31	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
474	2	2021-07-06	number464	9	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
475	2	2021-07-06	number465	16	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
476	2	2021-07-06	number466	10	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
477	2	2021-07-06	number467	46	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
478	2	2021-07-06	number468	31	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
479	2	2021-07-06	number469	15	Male	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
480	2	2021-07-06	number470	16	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
481	2	2021-07-06	number471	51	Female	/	/	Nasal swab	Negative	2021-07-06	2021-07-06	Nasopharyngeal	0	0	0	Negative	/
482	2	2021-07-08	number381	11	Male	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
483	2	2021-07-08	number382	25	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
484	2	2021-07-09	number383	10	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
485	2	2021-07-09	number384	9	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
486	2	2021-07-09	number385	62	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
487	2	2021-07-09	number386	73	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
488	2	2021-07-09	number387	10	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
489	2	2021-07-09	number388	9	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
490	2	2021-07-09	number389	11	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
491	2	2021-07-09	number390	12	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
492	2	2021-07-09	number472	13	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
493	2	2021-07-09	number473	13	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
494	2	2021-07-09	number474	59	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
495	2	2021-07-09	number475	43	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
496	2	2021-07-09	number476	15	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
497	2	2021-07-09	number477	62	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
498	2	2021-07-09	number478	17	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
499	2	2021-07-09	number479	12	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
500	2	2021-07-09	number480	37	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
501	2	2021-07-09	number481	45	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
502	2	2021-07-09	number482	49	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
503	2	2021-07-09	number483	33	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
504	2	2021-07-09	number484	22	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
505	2	2021-07-09	number485	17	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
506	2	2021-07-09	number486	55	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
507	2	2021-07-09	number487	32	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
508	2	2021-07-09	number488	32	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
509	2	2021-07-09	number489	38	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
510	3	2021-06-28	number034	27	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.83	15.13	15.36	Positive	/
511	3	2021-06-28	number079	49	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	25.02	26	26.44	Positive	/
512	3	2021-06-28	number080	10	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	31.44	33.86	33.22	Positive	/
513	3	2021-06-28	number081	12	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	33.34	35.84	38.46	Positive	/
514	3	2021-06-28	number082	16	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	19.51	20.23	20.39	Positive	/
515	3	2021-06-28	number083	11	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.34	16.5	16.65	Positive	/
516	3	2021-06-28	number084	33	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	21.53	21.77	22.77	Positive	/
517	3	2021-06-28	number085	14	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.95	13.14	12.97	Positive	/
518	3	2021-06-28	number086	26	Female	/	/	Nasal swab	Negative	2021-06-28	2021-06-28	Nasopharyngeal	0	0	0	Negative	/
519	3	2021-06-28	number087	17	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	20.26	20.58	21.05	Positive	/
520	3	2021-06-28	number088	30	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.49	18.88	17.88	Positive	/
521	3	2021-06-28	number089	30	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	13.25	13.66	13.82	Positive	/
522	3	2021-06-28	number090	52	Female	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	32.4	34.18	33.67	Positive	Alpha
523	3	2021-06-28	number091	29	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	13.75	14.74	15.93	Positive	Delta
524	3	2021-06-28	number092	40	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.42	15.6	15.48	Positive	Delta
525	3	2021-06-28	number093	14	Male	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	27.13	27.56	29.88	Positive	Alpha
526	3	2021-06-28	number094	42	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	12.17	13.2	14.07	Positive	/
527	3	2021-06-28	number095	40	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	14.28	15.28	15.31	Positive	/
528	3	2021-06-28	number096	40	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	20.81	21.31	21.84	Positive	/
529	3	2021-06-28	number097	10	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	24.89	26.33	24.62	Positive	/
530	3	2021-06-28	number098	13	Female	2021-06-25	3	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	31.64	32.15	31.6	Positive	/
531	3	2021-06-28	number099	10	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.8	18.43	20.03	Positive	Delta
532	3	2021-06-28	number100	9	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.34	18.65	18.33	Positive	Delta
533	3	2021-06-28	number101	20	Male	2021-06-27	1	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	29.51	31.61	28.92	Positive	Delta
534	3	2021-06-28	number102	14	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	25.44	26.89	26.43	Positive	Delta
535	4	2021-06-28	number035	39	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	18.61	20.17	20.82	Positive	/
536	4	2021-06-28	number103	16	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	16.11	16.25	14.77	Positive	/
537	4	2021-06-28	number104	23	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	20.88	22.43	20.5	Positive	/
538	4	2021-06-28	number105	10	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	13.14	13.26	14.07	Positive	/
539	4	2021-06-28	number106	23	Female	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	17.6	18.06	17.03	Positive	/
540	4	2021-06-28	number107	13	Male	2021-06-28	0	Nasal swab	Positive	2021-06-28	2021-06-28	Nasopharyngeal	24.17	25.67	24.57	Positive	/
541	4	2021-07-07	number276	25	Male	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
542	4	2021-07-07	number540	19	Female	/	/	Nasal swab	Negative	2021-07-07	2021-07-07	Nasopharyngeal	0	0	0	Negative	/
543	4	2021-07-08	number541	42	Male	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
544	4	2021-07-08	number542	23	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
545	4	2021-07-08	number543	19	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
546	4	2021-07-08	number544	30	Male	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
547	4	2021-07-08	number545	14	Male	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
548	4	2021-07-08	number546	25	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/

No.	Site	Test Date (Rapid Test)	Participant ID	Age	Gender	Symptom Onset Date	Days after Symptom Onset	Swab Specimen Type for Rapid Test	CLUNGENE Rapid Test Result	RT-PCR Sample Collection Date	RT-PCR Test Date	Swab Specimen Type for RT-PCR	RT-PCR Ct Values			RT-PCR Result	Typing result
													SARS-CoV-2 N gene	SARS-CoV-2 E gene	SARS-like Cov		
549	4	2021-07-08	number547	11	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
550	4	2021-07-08	number548	11	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
551	4	2021-07-08	number549	18	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
552	4	2021-07-08	number550	14	Male	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
553	4	2021-07-08	number551	9	Female	/	/	Nasal swab	Negative	2021-07-08	2021-07-08	Nasopharyngeal	0	0	0	Negative	/
554	4	2021-07-09	number552	43	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
555	4	2021-07-09	number553	14	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
556	4	2021-07-09	number554	40	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
557	4	2021-07-09	number555	20	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
558	4	2021-07-09	number556	13	Female	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
559	4	2021-07-09	number557	10	Male	/	/	Nasal swab	Negative	2021-07-09	2021-07-09	Nasopharyngeal	0	0	0	Negative	/
560	4	2021-07-12	number558	58	Male	/	/	Nasal swab	Negative	2021-07-12	2021-07-12	Nasopharyngeal	0	0	0	Negative	/
561	4	2021-07-12	number559	20	Male	/	/	Nasal swab	Negative	2021-07-12	2021-07-12	Nasopharyngeal	0	0	0	Negative	/
562	4	2021-07-12	number560	40	Female	/	/	Nasal swab	Negative	2021-07-12	2021-07-12	Nasopharyngeal	0	0	0	Negative	/
563	4	2021-07-13	number561	31	Female	/	/	Nasal swab	Negative	2021-07-13	2021-07-13	Nasopharyngeal	0	0	0	Negative	/
564	4	2021-07-13	number562	33	Female	/	/	Nasal swab	Negative	2021-07-13	2021-07-13	Nasopharyngeal	0	0	0	Negative	/
565	4	2021-07-13	number563	62	Female	/	/	Nasal swab	Negative	2021-07-13	2021-07-13	Nasopharyngeal	0	0	0	Negative	/
566	4	2021-07-13	number564	45	Female	/	/	Nasal swab	Negative	2021-07-13	2021-07-13	Nasopharyngeal	0	0	0	Negative	/
567	4	2021-07-13	number565	19	Male	/	/	Nasal swab	Negative	2021-07-13	2021-07-13	Nasopharyngeal	0	0	0	Negative	/
568	4	2021-07-14	number566	12	Female	/	/	Nasal swab	Negative	2021-07-14	2021-07-14	Nasopharyngeal	0	0	0	Negative	/
569	4	2021-07-14	number567	15	Male	/	/	Nasal swab	Negative	2021-07-14	2021-07-14	Nasopharyngeal	0	0	0	Negative	/
570	4	2021-07-16	number568	21	Female	/	/	Nasal swab	Negative	2021-07-16	2021-07-16	Nasopharyngeal	0	0	0	Negative	/
571	4	2021-07-16	number569	23	Female	/	/	Nasal swab	Negative	2021-07-16	2021-07-16	Nasopharyngeal	0	0	0	Negative	/
572	4	2021-07-16	number570	43	Female	/	/	Nasal swab	Negative	2021-07-16	2021-07-16	Nasopharyngeal	0	0	0	Negative	/
573	4	2021-07-16	number571	33	Male	/	/	Nasal swab	Negative	2021-07-16	2021-07-16	Nasopharyngeal	0	0	0	Negative	/
574	4	2021-07-18	number572	9	Male	/	/	Nasal swab	Negative	2021-07-18	2021-07-18	Nasopharyngeal	0	0	0	Negative	/
575	4	2021-07-25	number573	10	Female	/	/	Nasal swab	Negative	2021-07-25	2021-07-25	Nasopharyngeal	0	0	0	Negative	/
576	4	2021-07-25	number574	9	Male	/	/	Nasal swab	Negative	2021-07-25	2021-07-25	Nasopharyngeal	0	0	0	Negative	/
577	4	2021-07-25	number575	22	Female	/	/	Nasal swab	Negative	2021-07-25	2021-07-25	Nasopharyngeal	0	0	0	Negative	/
578	4	2021-07-25	number576	44	Male	/	/	Nasal swab	Negative	2021-07-25	2021-07-25	Nasopharyngeal	0	0	0	Negative	/

Questionnaire

for lay user study with CLUNGENE COVID-19 Antigen Rapid Test;

- used for the observer who is responsible for all the onsite processes including documentation/recording, **BUT** without intervention processes those as lay user should go through with, e.g. no hints on how to collect specimen properly; nor remind the volunteer "it's time to read your results, Sir";
- the questions are drawn from instructions for use (IFU), most from chapter [Step-By-Step Instructions], it's possible to refer to the instructions with the indexes.
- For volunteers over 65 years old, if they seek assistance in performing test, delivery helping by the observer to complete the testing, and **record** the processes in the last part of this questionnaire, including but not limited why he/she need helps, how the testing was proceed, what were the problems/difficulties for him/her with the study (by reading the IFU? by sample collection?....)? Be noticed that, as one of the basic principles, there should be **NO** help for volunteers with age 15~65.
- After the volunteers were introduced with the procedures of the study, and If there are no more questions, give the CLUNGENE COVID-19 Antigen Rapid Test to them.

Personal information of the participant:

Gender: M W

Age: _____ years (note: If the volunteer is minor under 15, the test is then performed by an adult, please confirm here)

Participant ID: _____

Has the participant ever used an IVD (in vitro diagnostic products) or self-testing IVD kit?

No; Yes, the IVD product was _____

Was it correctly conducted by general preparation processes as following:

- Was it easy for him/her to open the sealed foil film on the extraction reagent tube? [1.]
 - Very easy; ok; not easy
- Was it easy for him/her to press a hole on the box and insert the tube into the box? [2.]
 - Very easy; ok; not easy; did not recognize it

Was it correctly conducted by collection the specimen with the swab? [3, 4, 5]

- by opening the pouch, the swab-tip was not touched by hands (this is mentioned in the IFU)? [3. a.]
 - Well done and no-touching of the swab-tip;
 - He/she was aware of this, but it is difficult not to touch the swab-tip;
 - He/she has no idea about the requirement and touched the tip unconsciously
- The depth of insertion of the swab into left nostril should be about 2.5 cm (1 inch); [4. a.]
 - well done with the insertion; did not insert the swab deep enough
- at least 5 times rotation to rube against the left nasal wall. [4. b.]
 - well done with 5 times rotation;
 - not following the procedure, he/she rotated _____times
- Both nostrils should be sampled.
 - well done with both nostrils; only one side of nostrils was sampled
- The depth of insertion of the swab into right nostril should be about 2.5 cm (1 inch); [5. a.]
 - well done with the insertion; did not insert the swab deep enough
- at least 5 times rotation to rube against the right nasal wall. [5. b.]
 - Well done with 5 times rotation;

not following the procedure, he/she rotated _____times

Was it correctly conducted by the extraction processes with the extraction reagent: [7. 8.]

- The swab was rotated at least 5 times? [7. a.]
 - Well done with rotation;
 - Not following the procedure, he/she rotated _____ times
- Leaving the swab tip in the extraction reagent for 1 minute? [7. b.]
 - Well done with 1 minute incubation;
 - Not following the procedure, he/she kept the incubation time only about _____seconds.
- The swab-tip was squeezed during the removal from the extraction tube? [8. a.]
 - Well done with squeezing;
 - He/she forgot to squeeze, or only squeeze very lightly
- Was it correct by covering the tube tightly with the provided cap? [8. b.]
 - Well done with covering the tube;
 - He/she forgot to cover the tube; or cover it un-tightly

from: ____:____ to: ____:____ approx.: _____ mins
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Was it correctly conducted by operation of the test including reading results: [10. 11. 12.]

- Was it correct by application the specimen with 3 drops? [10. b.]
 - Well done with application 3 drops;
 - Not following the procedure, he/she dropped _____ drops
- Was it correctly applied to the sample well? [10. b.]
 - Well done with application;
 - He/she feel difficult to apply the reagent to the sample well, due to _____
- Timing [11.]
 - Well done with timing;
 - He/she deliberately decide not to set a timer
- Was the result read within the right time window (15~20 minutes after sample application)? [12.]
 - Well done with the time-window;
 - He/she read the result before the time window:
_____ minutes before
 - He/she read the result after the time window:
_____ minutes after
- Was it the result read by the user correct?
 - Positive/ negative/ invalid by the user; result read by the observer: _____

from: ____:____ to: ____:____ approx.: _____ mins
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Does he/she know, what to do next if his/her result is positive/negative/invalid (he/she could reference the instruction for use, then he/she should explain them to the observer correctly):

- Were the interpretations correct?
 - Yes, exactly the right answer;
 - No, he/she feel difficult to find or explain the results
- Was it easy with the explanation/interpretation of the results?
 - Very easy; ok; not easy

Does the participant understand the IFU correctly? (Ask participants to answer the following questions)

- at what temperature should the test be performed?
 - at 4~30 °C; at 15~30 °C; any temperature; don't know
- When should the test be performed after removing the test cassette from the pouch?
 - should be performed within 15 minutes; should be performed within one hour;
 - should be performed immediately; don't know
- How can you tell that the test result is invalid?
 - no colored line appears at C and T position (nothing appears at all);
 - nothing appears at C, but there is a colored line at T position;
 - one colored line appears at C position;
 - don't know

The overall image of the product by the user (the study participants/lay users):

- Very good; good; normal; not sure; not good

Whether he/she has used nasal medication (drops) within 24 hrs before the test?

- Yes, the medicine: _____
- No; not sure

To the study observer: In case if the volunteer (65+) cannot process the test by himself/herself, provide minimal assistance to them; also, please write down the details the reason that he/she need helps, the processes that he/she proceeded by himself/herself, and processes that with your help. Also, the opinions and views are welcome to write down here, to help the manufacturer to improve the product in term of friendliness to senior citizen. Use the following space, or a separate paper (bind to this document):

Signature the observer	Date	City
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