Healthcare Provider Instructions for Use

For Emergency Use Authorization
For In Vitro Diagnostic Use

NAME AND INTENDED USE
The InteliSwab™ COVID-19 Rapid Test Pro is a single-use lateral flow immunoassay with an integrated swab, intended for the qualitative detection of the nucleocapsid protein antigen from SARS-CoV-2 in anterior nasal samples from individuals 18 years or older when the sample is self-collected or in individuals 2 years or older when the sample is collected by an adult or healthcare provider. The test is authorized for individuals who are suspected of COVID-19 by their healthcare provider within 7 days of symptom onset or from individuals without symptoms or other epidemiological reasons to suspect COVID-19 when tested twice over two or three days with at least 24 hours and no more than 48 hours between tests. Testing is limited to laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, that meet the requirements to perform moderate, high or waived complexity tests. This test is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation.

The InteliSwab™ COVID-19 Rapid Test Pro does not differentiate between SARS-CoV-1 and SARS-CoV-2.

Results are for the identification of SARS-CoV-2 nucleocapsid protein antigen. The SARS-CoV-2 nucleocapsid protein is generally detectable in anterior nasal samples during the acute phase of infection. Positive results indicate that viral antigens have been detected, but clinical correlation with patient history and other diagnostic information is necessary to determine infection status. Positive results do not exclude bacterial infection or coinfection with other viruses. The agent detected may not be the definite cause of the disease. Laboratories within the United States and its territories are required to report all results to the appropriate public health authorities in accordance with local, state, and federal requirements using appropriate LOINC and SNOMED codes, as defined by the Laboratory In Vitro Diagnostics (LVD) Test Code Mapping for SARS-CoV-2 Tests provided by CDC.

Negative results should be treated as presumptive and confirmation with a molecular assay, if necessary, for patient management, may be performed. Negative results do not rule out SARS-CoV-2 infection and should not be used as the sole basis for treatment or patient management decisions, including infection control decisions. Negative results should be considered in the context of an individual’s recent exposures, history and the presence of clinical signs and symptoms consistent with COVID-19.

For serial testing programs, additional confirmatory testing with a molecular test for negative results may be necessary, if there is a high likelihood of SARS-CoV-2 infection, such as in an individual with a close contact with COVID-19 or with suspected exposure to COVID-19 or in communities with high prevalence of infection. Additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a low likelihood of SARS-CoV-2 infection, such as in individuals without known exposures to SARS-CoV-2 or residing in communities with low prevalence of infection.

The InteliSwab™ COVID-19 Rapid Test Pro is for use under the Food and Drug Administration’s Emergency Use Authorization (EUA) only.

The InteliSwab™ COVID-19 Rapid Test Pro is intended for use by medical professionals or trained operators who are proficient in performing tests and trained clinical laboratory personnel or individuals trained in POC settings.

SUMMARY AND EXPLANATION OF THE TEST
COVID-19 (coronavirus disease 2019) caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was first identified in December 2019 in Wuhan, Hubei, China. Due to the increased number of reported cases in nearly 170 countries, the World Health Organization (WHO) publicly recognized this as a pandemic on 11MAR20. The President of the United States declared the COVID-19 outbreak a national emergency on 13MAR20. Patient’s symptoms are similar to influenza with transmission via respiratory droplets from coughing and sneezing. COVID-19 can cause respiratory symptoms, fever, cough, shortness of breath, and breathing difficulties. In more severe cases, infection can cause pneumonia, severe acute respiratory syndrome, organ failure in several organs, acute kidney injury, heart problems, blood clots, additional viral and bacterial infections and even death. SARS-CoV-2 is considered contagious whether COVID-19 disease is symptomatic or asymptomatic and patients should self-isolate. The presence of SARS-CoV-2 nucleocapsid protein antigen indicates that the individual is currently infected and capable of transmitting the virus.

The InteliSwab™ COVID-19 Rapid Test Pro uses a sandwich capture lateral flow immunoassay to detect SARS-CoV-2 nucleocapsid protein antigens. SARS-CoV-2 nucleocapsid protein antigens are captured and visualized by colloidal gold labeled with SARS-CoV-2 antibodies generating a visible line in the test zone for a positive sample.
PRINCIPLES OF THE TEST
The InteliSwab™ COVID-19 Rapid Test Pro is a manually performed, visually read immunoassay for the qualitative detection of SARS-CoV-2 nucleocapsid protein antigen using a proprietary integrated collection swab to directly collect samples from the anterior nasal cavity. The InteliSwab™ COVID-19 Rapid Test Pro is comprised of both a single-use test device and a vial containing a pre-measured amount of a buffered developer solution. The test consists of a sealed pouch with two separate compartments for each component. The InteliSwab™ COVID-19 Rapid Test Pro utilizes a proprietary lateral flow immunoassay procedure.

The assay test strip, which can be viewed through the test device result window, is comprised of a series of components: the blocker pad, the conjugate pad, the nitrocellulose membrane, and finally the absorbent pad. The performance of the assay occurs by hydration and transport of reagents and specimen as they interact across the strip via chromatographic lateral flow.

An anterior nasal sample is collected using the flat pad that is integrated into the test device, followed by swirling the test device in the vial of developer solution. The developer solution facilitates the flow of the sample into the device and onto the test strip. As the sample flows through the device, it rehydrates the reagents on the blocker pad, which contains biotinylated anti-SARS-CoV-2 antibodies. The sample then re-hydrates the gold colorimetric reagent, which contains anti-SARS-CoV-2 antibodies. If the sample contains SARS-CoV-2 nucleocapsid protein antigen, it will react with the anti-SARS-CoV-2 antibodies in the blocker pad and conjugate pad and forms a sandwich complex that migrates up the test strip. As the complex continues to migrate up the test strip it encounters the Test (T) Zone and will react with the streptavidin immobilized on the nitrocellulose, a reddish-purple line will appear, qualitatively indicating the presence of SARS-CoV-2 nucleocapsid antigen in the sample. The intensity of the line color is not directly proportional to the amount of antigen present in the sample. If the sample does not contain SARS-CoV-2 nucleocapsid protein antigen, the sandwich complex will not form and the reagents will flow past the Test (T) Zone.

Further up the test strip, the sample will encounter the Control (C) Zone. This is a built-in procedural control which serves to demonstrate that the fluid migrated through the test device. For negative results and most positive results a line will form at the Control (C) Zone. In some cases when viral levels are high, the line at the Control Zone may be very faint or may not be present.

Results are interpreted between 30 and 40 minutes after inserting the device into the Developer Vial. Do not read negative results before 30 minutes as it may result in false negative results. Do not read any result after 40 minutes as it may result in inaccurate results.

MATERIALS PROVIDED
InteliSwab™ COVID-19 Rapid Test Pro Kits are available in the following packaging configurations:

<table>
<thead>
<tr>
<th>Components of Kit</th>
<th>25 Count Kit</th>
<th>100 Count Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Catalog Number</td>
<td>1001-0614</td>
<td>1001-0615</td>
</tr>
<tr>
<td>Divided Pouch, Each containing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Device (1)</td>
<td>25</td>
<td>100</td>
</tr>
<tr>
<td>Absorbent Packet (1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Developer Solution Vial (1)</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>(each vial contains 0.75 mL of a buffered saline solution with an antimicrobial agent)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Test Stands</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Instructions for Use</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Quick Reference Guide</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

MATERIALS NOT PROVIDED BUT REQUIRED AND AVAILABLE AS AN ACCESSORY TO THE KIT
InteliSwab™ COVID-19 Rapid Test Pro Kit Controls (Catalog #: 1001-0613)
InteliSwab™ COVID-19 Positive Control (1 vial, blue cap, 0.25 mL)
InteliSwab™ COVID-19 Negative Control (1 vial, white cap, 0.25 mL)
Loops (package of 5µL loops)
Instructions for use for InteliSwab™ COVID-19 Rapid Test Pro Kit Controls

InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel (Catalog #: 1001-0599)
InteliSwab™ COVID-19 Limit of Detection (1 device)
InteliSwab™ COVID-19 Low Positive (1 device)
InteliSwab™ COVID-19 Negative (1 device)
Instructions for Use for InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel

MATERIALS REQUIRED BUT NOT PROVIDED
Timer or watch capable of timing 30 to 40 minutes
Biohazard waste container
WARNINGS AND PRECAUTIONS

- For prescription use only.
- The product has not been FDA cleared or approved; but has been authorized by FDA under EUA for use by authorized laboratories; use by laboratories certified under the CLIA, 42 U.S.C. §263a, that meet requirements to perform moderate, high or waived complexity tests. This product is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation.
- Federal Law restricts this device to sale by or on the order of a licensed practitioner (U.S. only).
- This product has been authorized only for the detection of proteins from SARS-CoV-2, not for any other viruses or pathogens.
- The emergency use of this product is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of IVDs for detection and/or diagnosis of COVID-19 under Section 564(b)(1) of the Federal Food, Drug and Cosmetic Act, 21 U.S.C. § 360bbb-3(b)(1), unless the declaration is terminated or authorization is revoked sooner.
- Test devices that contain patient samples should be handled as though they could transmit disease. Follow universal precautions1 when handling samples, this kit, and its contents. Wear appropriate personal protection equipment (PPE)2 and gloves when running the test and handling a patient’s test device. Change gloves between tests.
- This test is for the detection of SARS-CoV-2 antigen, not for any other viruses or pathogens.
- Laboratories within the United States and its territories are required to report all results to the appropriate public health agencies.
- Do not use test kit if it is past the expiration date.
- Follow these Instructions for Use to obtain accurate results. Incorrect sampling may result in false results.
- False Negative results can occur if negative results are read before 30 minutes
- Invalid results can occur if the swab is not stirred at least 10 times.
- If any of the solution in the Developer Vial spills, it may cause invalid results. You need to repeat testing with a new test.

Device Handling Precautions

- Do not reuse the Test Device and Developer Solution Vial.
- Inspect the Divided Pouch. If the Divided Pouch has been damaged or open, discard the Divided Pouch and its contents and select a new Divided Pouch for testing.
- Do not touch swab tip when handling the swab sample.
- Do not interchange Test Devices and Developer Solution Vials from kits with different lot numbers.
- If the Test Device is not immediately inserted into the Developer Solution after sample collection, remove the absorbent packet from the Divided Pouch and place the Test Device into the Divided Pouch for transport or until the device can be inserted into the Developer Solution. The Test Device must be inserted into the Developer Solution within 30 minutes of collection.
- Adequate lighting is required to read a test result.
- The solution in the tube contains potentially harmful chemicals (Triton X-100 and ProClin 950). The developer solution should only be used as directed; do not ingest; keep out of the reach of children; avoid contact with skin and eyes. If the solution contacts the skin or eye, flush with copious amounts of water. If irritation persists, seek medical advice: poisonhelp.org or 1-800-222-1222.

STORAGE INSTRUCTIONS
Store unused InteliSwab™ COVID-19 Rapid Test Pro kits unopened at 2°- 30°C (35°-86°F). Do not open the Divided Pouch until you are ready to perform the test. If stored refrigerated, ensure that the Divided Pouch is brought to operating temperature (15°- 40°C, 59°- 104°F) before opening.

QUALITY CONTROL PROCEDURES

Built-in Control Features
The InteliSwab™ COVID-19 Rapid Test Pro for anterior nasal specimens has a built-in procedural control that demonstrates the assay components have migrated adequately through the device. For negative tests, a reddish-purple line in the Control (C) Zone of the Result Window indicates that the fluid migrated appropriately through the Test Device. The line in the Control (C) Zone does not determine if a human sample has been added or if there is an adequate sample. For most positive tests, a reddish-purple line will appear in the Control (C) Zone and the Test (T) Zone; however, in cases where the viral load in the sample is very high, the line in the Control (C) Zone may not be present or may be very faint. (Refer to Test Result and Interpretation of Test Result section in these Instructions for Use).

External Quality Control
InteliSwab™ COVID-19 Rapid Test Pro Kit Controls are for use with the InteliSwab™ COVID-19 Rapid Test Pro. The InteliSwab™ COVID-19 Rapid Test Kit Controls are specifically formulated and manufactured to ensure performance of the test and are used to verify an operator’s ability to properly perform the test and interpret the results. The COVID-19 Positive Control will produce a positive test result and has been manufactured to produce a faint line in the Test (T) Zone. The COVID-19 Negative Control will produce a negative test result (Refer to Test Result and Interpretation of Test Result section in these Instructions for Use). Use of Kit Control reagents manufactured by any other source may not produce the required results, and therefore, will not meet the requirements for an adequate quality assurance program for the InteliSwab™ COVID-19 Rapid Test Pro. If external controls do not produce expected results, testing of individuals should not be performed. Contact OraSure Technologies’ Customer Care if the InteliSwab™ COVID-19 Rapid Test Kit Control reagents do not produce the expected results.
Run the External Controls under the following circumstances:

- Each new operator prior to performing testing on patient specimens,
- When opening a new test kit lot,
- Whenever a new shipment of test kits is received,
- If the temperature of the test kit storage area falls outside of 2º-30ºC (36º-86ºF), and
- At periodic intervals as dictated by the user facility country, state or local regulations and policies.

Test Procedures for External Controls

Refer to the InteliSwab™ COVID-19 Rapid Test Pro Kit Control Instructions for Use for full instruction on the use of these reagents. It is the responsibility of each laboratory using the InteliSwab™ COVID-19 Rapid Test Pro to establish an adequate quality assurance program to ensure the performance of the device under its specific locations and conditions of use.

Qualification for New Operators

The InteliSwab™ COVID-19 Visual Reference Panel is available separately for use with the InteliSwab™ COVID-19 Rapid Test Pro. The InteliSwab™ COVID-19 Visual Reference Panel consists of three devices that have been manufactured to represent limit of detection, low positive and negative test result. New operators must be able to correctly interpret all test results in the InteliSwab™ COVID-19 Visual Reference Panel prior to using the InteliSwab™ COVID-19 Rapid Test Pro to test patient samples. Failure to read low intensities can result in the inability to detect specimens near the limit of detection of the InteliSwab™ COVID-19 Rapid Test Pro and may result in false negative results.

INSTRUCTIONS FOR USE

Follow Safety Precautions section in these Instructions for Use. Gather all the materials you will need. Allow the InteliSwab™ COVID-19 Rapid Test Pro to come to operating temperature (15°- 40°C, 59°- 104°F) before use. Refer to the External Quality Control section in these Instructions for Use to determine when the InteliSwab™ COVID-19 Rapid Test Kit Pro Controls should be run.

SPECIMEN COLLECTION AND TEST PROCEDURE

Set the Test Stand at your workspace. Make sure the Test Stand is on a sturdy surface. Use only the Test Stand provided.

1. Open the two chamber pouch by tearing at the notches on the top of each side of the Pouch (see picture 1).
2. Remove the Developer Solution Vial (“Vial”) from the Pouch (see picture 2).
3. Hold the Vial firmly in your hand. Carefully remove the cap from the Vial by gently rocking the cap back and forth while pulling it off (see picture 3).
4. Slide the Vial into the top of one of the slots in the Test Stand. DO NOT force the Vial into the Stand from the front of the slot as splashing may occur. Make sure the Vial is pushed all the way to the bottom of the slot in the Test Stand (see picture 4).
5. Instruct the individual to blow their nose into a tissue. DO NOT have them clean out their nose with the tissue (see picture 5).
6. Remove the Device from its Pouch (see picture 6).
7. DO NOT touch the Flat Pad (see picture 7).
8. Check to make sure that an Absorbent Packet is included with the Device (see picture 8). If no Absorbent Packet is present, discard the Device and obtain a new Pouch for testing.
9. DO NOT cover the two holes on the back of the Device with labels or other materials. Doing so may cause invalid results (see picture 9).
10. ADULTS: Direct the individual to insert the Flat Pad of the Device inside the nostril. Circle around the nostril 15 times while maintaining contact with the inside wall of the nostril. SWAB BOTH NOSTRILS (see picture 10). If you are conducting a test on a child 15-17 years old or an adult who requires assistance, proceed by swabbing the individual.
CHILDREN (14 AND UNDER): When collecting from a child under the age of 15, slowly circle the swab in each nostril a minimum of 4 times while gently pressing against the inside of the nostril. This should take about 15 seconds.

If you DO NOT swab BOTH nostrils 15 times (adult) OR 4 times (CHILD), you may get a false result.

11. Keep the Test Stand on the flat surface, insert the Device into the Vial and swirl the Device 10 times while making sure the Flat Pad is in the solution. Make sure the flat pad is toward the back of the tube so it contacts the liquid. (see picture 11). Swirling the device less than 10 times may cause invalid results.

12. Leave Device in the Vial making sure that the Flat Pad touches the bottom of the Vial. The Result Window on the Device should be facing you (see picture 12). Make sure the tube and device are at an angle.

13. Start timing the test (see picture 13) by setting the timer for 30 minutes. DO NOT remove the Device from the Vial while the test is running.

14. Pink fluid will appear and travel up the Result Window. The pink fluid will gradually disappear as the test develops (see picture 14).

TEST RESULT AND INTERPRETATION OF TEST RESULT
Interpret results between 30 and 40 minutes. Do not read negative results before 30 minutes as it may result in false negative results. Do not read any result after 40 minutes as it may yield inaccurate results.

NEGATIVE
A test is Negative if:
A reddish-purple line appears in the C Zone and NO line appears in the T Zone (see picture 15). The line in the C Zone must be present to interpret a negative test result.

A Negative test result is interpreted as nucleocapsid protein antigen was not detected in the specimen. The individual is presumed negative for COVID-19.

Negative results do not rule out SARS-CoV-2 infection. Individuals without symptoms that test negative should be tested again with at least 24 hours and no more than 48 hours between tests. All negative results are considered presumptive, and confirmation with a molecular assay, if necessary for patient management, may be performed. Negative results should be considered in the context of an individual’s recent exposures, history, and the presence of clinical signs and symptoms consistent with COVID-19.

POSITIVE
A test is Positive if:
A reddish-purple line appears in the T Zone and there is a line in the C Zone. Lines may vary in intensity. The test is positive regardless of how faint these lines appear (see pictures 16 and 17).

In some cases the reddish-purple line in the C Zone may not be present or may be very faint if there are high levels of virus in the sample (see picture 18).

A Positive test result is interpreted as nucleocapsid protein antigen was detected in the specimen. The individual is positive for COVID-19. Additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a low likelihood of COVID-19, such as in individuals without known exposures to COVID-19 or residing in communities with low prevalence of infection.
**INVALID**

A test is **Invalid** if any of the following occurs:

- **NO** lines appear on the device (see picture 19), or
- a reddish-purple background in the Result Window makes it difficult to read the result after 30 minutes (see picture 20), or
- any partial line on one side of the C or T Zones (see pictures 21 and 22)

An **Invalid** test result means that there was a problem running the test. An **Invalid** result **cannot be interpreted**. An invalid test result needs to be repeated with a fresh sample and a new test device. Please contact OraSure Technologies’ Customer Care (1-800-ORASURE) if you are unable to obtain a valid test result upon repeat testing.

**GENERAL TEST CLEAN-UP**

1. Dispose of the used test materials in a biohazard waste container. All equipment and biohazardous waste should be discarded in accordance with country, state, and local laws and policies.
2. Change your gloves between each test to prevent contamination.
3. Use a freshly prepared 10% solution of bleach to clean up any spills.

**LIMITATIONS OF THE TEST**

1. A negative test result may occur if the level of antigen in a sample is below the limit of detection of the test.
2. Weak Positive samples may take longer to develop and can take the entire 30 minutes for a test line to be present. Therefore, all negative test results must be read at least 30 minutes after inserting the device into the developer vial. Negative test results must not be reported prior to reading the device at 30 minutes.
3. Reading any result after 40 minutes may yield inaccurate test results.
4. The control line only indicates that reagents have properly migrated up the test device. In positive patient samples with high levels of virus, the line at the Control (C) Zone may not be present or may be very faint. The control line does not indicate that an adequate human sample was added to the test device.
5. Positive test results do not rule out co-infections with other pathogens.
6. Potential cross reactivity of the InteliSwab™ COVID-19 Rapid Test with COVID-19 vaccines or therapeutics has not been evaluated.
7. False negative results may occur if a specimen is improperly collected or handled.
8. False negative results are more likely after seven days or more of symptoms.
9. Negative results are presumptive, do not rule out COVID-19 infection and it may be necessary to obtain additional testing with a molecular assay, if needed for patient management.
10. Performance of nasal swabs collected from patients without symptoms or other epidemiological reasons to suspect COVID-19 infection or for serial screening, when tested twice over two to three days with at least 24 but not more than 48 hours between tests has not been determined, a study to support use will be completed.
11. If the differentiation of specific SARS viruses and strains is needed, additional testing, in consultation with state or local public health departments, is required.
12. The test detects both viable (live) and nonviable SARS-CoV-2. Test performance depends on the amount of virus (antigens) in the sample and may or may not correlate with viral culture results performed on the same sample.
13. The performance of this test was established based on the evaluation of a limited number of clinical specimens. Clinical performance has not been established in all circulating variants but is anticipated to be reflective of the prevalent variants in circulation at the time and location of the clinical evaluation. Performance at the time of testing may vary depending on the variants circulating, including newly emerging strains of SARS-CoV-2 and their prevalence, which change over time.

**CONDITIONS OF AUTHORIZATION FOR LABORATORY**

The InteliSwab™ COVID-19 Rapid Test Pro Letter of Authorization, along with the authorized Fact Sheet for Healthcare Providers, the authorized Fact Sheet for Patients, and authorized labeling are available on the FDA website: https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/in-vitro-diagnostics-euas. However, to assist clinical laboratories using the InteliSwab™ COVID-19 Rapid Test Pro (“your product” in the conditions below), the relevant Conditions of Authorization are listed below:

A. Authorized laboratories using your product must include, with test result reports, all Fact Sheets. Under exigent circumstances, other appropriate methods for disseminating these Fact Sheets may be used, which may include mass media.

B. Authorized laboratories using your product must use your product as outlined in the authorized labeling. Deviations from the authorized procedures, including the authorized instruments, authorized clinical specimen types, authorized control materials, authorized other ancillary reagents and authorized materials required to use your product are not permitted.
C. Authorized laboratories that receive your product must notify the relevant public health authorities of their intent to run your product prior to initiating tests.

D. Authorized laboratories using your product must have a process in place for reporting test results to healthcare providers and relevant public health authorities, as appropriate.

E. Authorized laboratories must collect information on the performance of your product and report to DMD/OHT7-OIR/OPEQ/CDRH (via email: CDRH-EUA-Reporting@fda.hhs.gov) and OraSure Technologies, Inc. (via email: customercare@orasure.com) any suspected occurrence of false positive or false negative results and significant deviations from the established performance characteristics of your product of which they become aware.

F. All operators using your product must be appropriately trained in performing and interpreting the results of your product. Use appropriate personal protective equipment when handling this kit, and use your product in accordance with the labeling.

G. OraSure Technologies, Inc. and authorized laboratories using your product must ensure that any records associated with this EUA are maintained until otherwise notified by the FDA. Such records will be made available to the FDA for inspection upon request.

*The letter of authorization refers to, “Laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, that meet requirements to perform high, moderate or waived complexity tests. This test is authorized for use at the Point of Care (POC) i.e. in patient care settings operating under CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation” as “authorized laboratories.”

**PERFORMANCE CHARACTERISTICS**

**CLINICAL PERFORMANCE**

A clinical study to evaluate the performance of the InteliSwab™ COVID-19 Rapid Test Pro was conducted during February and April of 2021 in five (5) geographically diverse sites across the US. A total of 146 individuals with signs and symptoms of COVID-19 within the first seven (7) days of symptom onset completed the study and obtained a valid result. Subjects eighteen (18) years and older independently collected an anterior nasal sample, conducted the test, interpreted and reported their self-test result. The parents of subjects fifteen (15) to seventeen (17) years of age collected the anterior nasal sample, conducted the test, interpreted and recorded the test result for the child. An additional clinical study was conducted during September 2021 in children (ages 2-14). A total of 19 children were enrolled in the study where the parent or caregiver collected the anterior nasal sample and performed the test. The InteliSwab™ COVID-19 Rapid Test Pro test results were compared to highly sensitive molecular FDA EUA SARS-CoV-2 assays to determine test performance. The results from the pediatric study conducted in September 2021 have been combined with the previous study results collected in early 2021. The InteliSwab™ COVID-19 Rapid Test Pro when conducted by a lay user correctly identified 85% of positive samples. Additionally, the InteliSwab™ COVID-19 Rapid Test Pro correctly identified 98% of negative samples. The COVID-19 infection rate was 37% (61/165) in this study. The performance is shown in the following table.

<table>
<thead>
<tr>
<th>InteliSwab™ COVID-19 Rapid Test Pro</th>
<th>Comparator Method</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td>Positive</td>
<td>52</td>
</tr>
<tr>
<td>Negative</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>61</td>
</tr>
</tbody>
</table>

Positive Percent Agreement (PPA): 52/61 = 85% (95% CI: 74%, 92%)

Negative Percent Agreement (NPA): 102/104 = 98% (95% CI: 93%, 100%)

**Samples Positives by InteliSwab™ COVID-19 Rapid Test Pro by Age Group**

<table>
<thead>
<tr>
<th>Positivity Rate</th>
<th>Age Group</th>
<th>Number of Specimens</th>
<th>Number of Positives</th>
<th>Positivity Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-13</td>
<td>19</td>
<td>9</td>
<td>47.4%</td>
<td></td>
</tr>
<tr>
<td>14-23</td>
<td>26</td>
<td>11</td>
<td>42.3%</td>
<td></td>
</tr>
<tr>
<td>24-64</td>
<td>111</td>
<td>33</td>
<td>29.7%</td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>9</td>
<td>1</td>
<td>11.1%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>165</td>
<td>54</td>
<td>32.7%</td>
<td></td>
</tr>
</tbody>
</table>
### Samples Positives by InteliSwab™ COVID-19 Rapid Test Pro by Days Since Symptom Onset

<table>
<thead>
<tr>
<th>Days Since Symptom Onset</th>
<th>PPA with 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1</td>
<td>92.9% (13/14) (95% CI:68.5%-98.7%)</td>
</tr>
<tr>
<td>0-2</td>
<td>92% (23/25) (95% CI:75%-97.8%)</td>
</tr>
<tr>
<td>0-3</td>
<td>81% (34/42) (95% CI:66.7%-90%)</td>
</tr>
<tr>
<td>0-4</td>
<td>83% (44/53) (95% CI:70.8%-90.8%)</td>
</tr>
<tr>
<td>0-5</td>
<td>84.5% (49/58) (95% CI:73.1%-91.6%)</td>
</tr>
<tr>
<td>0-6</td>
<td>85% (51/60) (95% CI:73.9%-91.9%)</td>
</tr>
<tr>
<td>0-7</td>
<td>85.2% (52/61) (95% CI:74.3%-92%)</td>
</tr>
</tbody>
</table>

### Analytical Performance

**Limit of Detection (LoD)**

A preliminary LoD was determined by evaluating different concentrations of a SARS-CoV-2 live virus stock (USA_WA1/2020) diluted in nasal matrix. Contrived samples were randomized, and operators were blinded to the sample identities for testing on the InteliSwab™ COVID-19 Rapid Test Pro. The LoD was confirmed as the lowest concentration of SARS-CoV-2 that was detected ≥95% of the time (i.e., concentration where 19 out of 20 test results were positive). The InteliSwab™ COVID-19 Rapid Test Pro LoD was confirmed to be $2.5 \times 10^5$ TCID$_{50}$/mL ($8.0 \times 10^5$ GC/mL).

**Cross-Reactivity (Analytical Specificity) and Microbial Interference**

Cross-Reactivity and Microbial Interference studies were conducted to determine if other respiratory pathogens that could be present in a nasal sample could cause a false-positive test result, or interfere with a true positive result. A panel of sixteen (16) viruses, ten (10) bacteria, three (3) fungi, and pooled human nasal wash was evaluated in this study. No cross-reactivity or interference was seen with the following microorganisms when tested at the concentrations listed in the table below with the exception of SARS-CoV, which resulted in positive test results due to the high homology between SARS-CoV and SARS-CoV-2 nucleocapsid proteins.

### Potential Cross Reactant Source/Strain/ID No. Concentration Tested

Virus

<table>
<thead>
<tr>
<th>Potential Cross Reactant</th>
<th>Source/Strain/ID No.</th>
<th>Concentration Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adenovirus 1</td>
<td>ATCC VR-1</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Human metapneumovirus (hMPV)</td>
<td>Zeptometrix 0810157CF</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Rhinovirus</td>
<td>ATCC VR-1601</td>
<td>$4.45 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Enterovirus 68</td>
<td>ATCC VR-1826</td>
<td>$8.0 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Human Coronavirus 0C43</td>
<td>Zeptometrix 0810024CF</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Human Coronavirus 229E</td>
<td>ATCC VR-740</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Human Coronavirus NL63</td>
<td>BEI Resources</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
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<tr>
<td>SARS-coronavirus</td>
<td>MRI Urbani</td>
<td>$7.9 \times 10^5$ TCID$_{50}$/mL</td>
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<tr>
<td>MERS-coronavirus</td>
<td>MRI EMC/2012</td>
<td>$2.5 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Parainfluenza virus 1</td>
<td>ATCC VR-94</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Parainfluenza virus 2</td>
<td>ATCC VR-92</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
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<td>Parainfluenza virus 3</td>
<td>ATCC VR-93</td>
<td>$1.43 \times 10^5$ TCID$_{50}$/mL</td>
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<td>Parainfluenza virus 4b</td>
<td>Zeptometrix 0810060BCF</td>
<td>$8.5 \times 10^4$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Parainfluenza virus 4b</td>
<td>ATCC VR-1377</td>
<td>$8.0 \times 10^4$ TCID$_{50}$/mL</td>
</tr>
<tr>
<td>Potential Cross Reactant</td>
<td>Source/Strain[ID No.]</td>
<td>Concentration Tested</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------------------</td>
<td>---------------------</td>
</tr>
<tr>
<td>Virus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influenza A</td>
<td>ATCC VR-1894</td>
<td>1.43 x 10^5 CPE50/mL</td>
</tr>
<tr>
<td>Influenza B</td>
<td>ATCC VR-1921</td>
<td>1.43 x 10^5 TCID50/mL</td>
</tr>
<tr>
<td>Respiratory syncytial</td>
<td>ATCC VR-26</td>
<td>4.0 x 10^6 PFU/mL</td>
</tr>
<tr>
<td>Virus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bordetella pertussis</td>
<td>ATCC 9797</td>
<td>1.0 x 10^6 cfu/mL</td>
</tr>
<tr>
<td>Chlamydia pneumoniae</td>
<td>ATCC VR-2282</td>
<td>1.0 x 10^6 cfu/mL</td>
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<tr>
<td>Haemophilus influenzae</td>
<td>ATCC 49247</td>
<td>1.0 x 10^7 IFU/mL</td>
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<td>Legionella pneumophila</td>
<td>Zeptometrix 801645</td>
<td>1.0 x 10^6 cfu/mL</td>
</tr>
<tr>
<td>Bacteria</td>
<td></td>
<td></td>
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<tr>
<td>Streptococcus pneumoniae</td>
<td>ATCC 49319</td>
<td>4.48 x 10^5 cfu/mL</td>
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<tr>
<td>Streptococcus pyogenes</td>
<td>ATCC 19615</td>
<td>1.0 x 10^5 cfu/mL</td>
</tr>
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<td>Mycoplasma pneumoniae</td>
<td>ATCC 15531-TIR</td>
<td>1.0 x 10^5 cfu/mL</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>ATCC 12600</td>
<td>1.0 x 10^6 cfu/mL</td>
</tr>
<tr>
<td>Staphylococcus epidermidis</td>
<td>ATCC 14990</td>
<td>1.0 x 10^6 cfu/mL</td>
</tr>
<tr>
<td>Mycobacterium tuberculosis</td>
<td>Zeptometrix 801660</td>
<td>1.0 x 10^5 cfu/mL</td>
</tr>
<tr>
<td>Fungi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Candida albicans</td>
<td>ATCC 14003</td>
<td>5.0 x 10^6 cfu/mL</td>
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<tr>
<td>Pneumocystis carinii</td>
<td>ATCC PRA-159</td>
<td>1.0 x 10^6 nuclei/mL</td>
</tr>
<tr>
<td>P. jiroveci-S. cerevisiae recombinant</td>
<td>Zeptometrix 801698</td>
<td>1.0 x 10^6 cfu/mL</td>
</tr>
<tr>
<td>Pooled Human Nasal Wash</td>
<td>Lee Biosolutions 991-26</td>
<td>N/A</td>
</tr>
</tbody>
</table>

* Used for Exclusivity Testing
* Used for Microbial Interference

Cross reactivity in samples containing HKU1 coronavirus could not be conclusively ruled out through in silico comparison of the HKU1 and the SARS-CoV-2 nucleocapsid protein amino acid sequence. Additionally, the SARS-CoV-2 Nucleocapsid protein sequence was BLAST aligned on the NIH NCBI database to the entire set of proteins encoded by P. jiroveci. No significant identity was found as a result of this search and thus no interference is expected with the IntelliSwab™ COVID-19 Rapid Test Pro, however, cross-reactivity cannot be ruled out.

**High Dose Hook Effect**
Potential hook effect in the IntelliSwab™ COVID-19 Rapid Test Pro was assessed by loading 50 µL of neat virus stock directly onto the center of the flat pad of test device in triplicate, resulting in a test concentration of 1.0 x 10^5 TCID50/mL. No hook effect was seen with the USA-WA1/2020 SARS-CoV-2 isolate.
Endogenous Interfering Substances
A study was conducted to determine if any substances, naturally present in respiratory specimens or that may be artificially introduced into the nasal cavity listed in the table interfere in the performance of the InteliSwab™ COVID-19 Rapid Test Pro. In addition to the materials that are found in the nasal cavity, substances that are commonly found on the hands were also tested. Test performance was evaluated in the absence and presences of SARS-CoV-2 (3x LoD). None of the substances listed in the tables below interfered with the performance of the InteliSwab™ COVID-19 Rapid Test Pro.

<table>
<thead>
<tr>
<th>Substance Used</th>
<th>Source/Brand</th>
<th>Amount used</th>
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<tbody>
<tr>
<td>Disinfectant Wipes (Alkyl (C14 (50%), C12 (40%), C16 (10%) Dimethyl Benzyl Ammonium Chloride, 0.26%)</td>
<td>Lysol</td>
<td>1 wipe</td>
</tr>
<tr>
<td>Bleach Wipes (0.525% bleach)</td>
<td>Hype-wipe</td>
<td>1 wipe</td>
</tr>
<tr>
<td>Hand Sanitizer Gel (70% ethyl alcohol)</td>
<td>CVS</td>
<td>1.038 g</td>
</tr>
<tr>
<td>Hand Lotion with Aloe</td>
<td>Corn Huskers</td>
<td>0.991 g</td>
</tr>
<tr>
<td>Hand Lotion with Coconut Oil, Cocoa Butter, and African Shea Butter</td>
<td>Gold Bond Ultimate Healing</td>
<td>1.067 g</td>
</tr>
<tr>
<td>Hand Soap</td>
<td>Softsoap Fresh Breeze</td>
<td>1.055 g</td>
</tr>
</tbody>
</table>

Usability Study
The usability of the InteliSwab™ COVID-19 Rapid Test Pro and the ability of the packaging and labeling to direct untrained users to perform self-testing in individuals 15 years or older was evaluated by observation in the clinical study and an additional usability study. A total of 288 subjects were enrolled in the study and were instructed to self-collect or collect a sample from a child, complete the required procedural steps, and interpret the test results unassisted in a simulated home-setting. The overall success of every task completed by all subjects enrolled was determined by unassisted professional observation. Subjects performed 95% (4423/4638) of steps/tasks correctly. After the completion of the test, the subject (or Parent/Legal Guardian) completed a test usability and satisfaction questionnaire, in which 99% of subjects indicated that their overall impression of the test was satisfactory or favorable. 98% of subjects found this test to be easy-to-use across 8 different ease of use survey questions. Additionally, 99% of subjects indicated specifically that it was easy to read and understand the test results. During the usability study, 1.2% of subjects received an invalid result or did not receive a result when conducting the test.
A usability study was conducted in children 2 to 14 years of age in which the parent/legal guardian swabbed the child and completed the test. Thirty (30) children were enrolled in the study. The parent/guardian successfully completed tasks 96% (606/630) of the time. As part of the performance study, the parent or legal guardian also completed a satisfaction questionnaire and indicated within the survey that their overall impression of the test was favorable or satisfactory. Additionally, in that performance study 95% (18/19) of parents/guardians indicated that swabbing the nose, reading and interpreting results were easy.

BIBLIOGRAPHY
1. CDC. Universal Precautions For Prevention Of Transmission Of Human Immunodeficiency Virus, Hepatitis B Virus, And Other Bloodborne Pathogens In Health-Care Settings. MMWR 1988; 37(24):377-388.

<table>
<thead>
<tr>
<th>SYMBOL</th>
<th>EXPLANATION</th>
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</thead>
<tbody>
<tr>
<td><img src="lot.png" alt="LOT" /></td>
<td>Batch Code</td>
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<td>Catalog Number</td>
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</tr>
<tr>
<td><img src="rx.png" alt="Prescription Use" /></td>
<td>Prescription Use</td>
</tr>
</tbody>
</table>
INTERPRETING RESULTS:
Read test results in a well-lit area.

Note: The line next to the “C” does not show that an adequate sample has been collected.

POSITIVE RESULT: LINES IN C AND T ZONES

Positive test result is interpreted as a red-purple line appearing in the C and T zones, regardless of how faint these lines appear.

- The test is POSITIVE if:
  - A reddish-purple line appears in the T zone and there is a line in the C zone. Lines may vary in intensity. The test is positive regardless of how faint these lines appear.
  - In some cases, the reddish-purple line in the C zone may not be present or may be very faint if there are high levels of virus in the sample. A positive test result is interpreted as a non-purple line that is visible detected in the specimen. The individual is positive for COVID-19.

The individual is presumed positive for COVID-19.

Invalid test result: repeat with a new device.

NEGATIVE RESULT: LINE IN C ZONE

Reading before 30 minutes may cause a false negative result.

The test is NEGATIVE if:
- A reddish-purple line appears in the C zone and no line appears next to the T zone.

The line in the C zone must be present to interpret a negative result. A negative result is interpreted as no red-purple line was detected in the specimen. The individual is presumed negative for COVID-19.

Negative results do NOT rule out SARS-CoV-2 infection. Individuals without symptoms that test negative should be tested again with at least 24 hours and no more than 48 hours between tests.

GENERAL TEST CLEAN-UP

1. Dispose of the used test materials in a biohazard waste container. All equipment and biohazardous wastes should be discarded in accordance with country, state, and local laws and policies.
2. Change your gloves between each test to prevent contamination.
3. Use a properly prepared 10% solution of bleach to clean up any spills.

Do Not Reuse
DO:  
- Use the InteliSwab™ COVID-19 Rapid Test Pro for testing for COVID-19 infection.

- Follow the Instructions for Use (reverse side) to obtain accurate results. Inadequate sampling may result in false results.

- Inspect the two-part pouch. If the two-part pouch has been damaged, discard the two-part pouch and its contents. The results from the InteliSwab™ COVID-19 Rapid Test Pro are invalid if the two-part pouch is damaged.

- Use adequate lighting to read a test result.

- Use the test device and vial containing fluid only once and dispose of both properly.

- Wash hands promptly prior to testing and after use.

- Store the InteliSwab™ COVID-19 Rapid Test Pro in a dry area at temperatures between 35°-86°F (2°-30°C). Bring the two-part pouch to room temperature (within 10°-15°F, 5°-10°C) before opening.

- Keep out of reach of children.

- Store adequately. 

- IMPORTANT INFORMATION ABOUT THE INTESTIBILASwab™ COVID-19 RAPID TEST PRO 

- For prescription use only. 

- The InteliSwab™ COVID-19 Rapid Test Pro is a single-use, lateral flow immunoassay with an integrated test strip intended for the qualitative detection of the nucleocapsid protein antigen from SARS-CoV-2 in anterior nares or nasal swab specimen from individuals 18 years of age or older who are self-collected or in individuals 2 years of age or older when the sample is collected by an adult healthcare provider. The test is authorized for individuals who are suspected of COVID-19 infection in the 2-7 days of symptom onset or from individuals without symptoms or other indications of COVID-19 infection who are likely to be tested because they are a contact of a person with COVID-19 or if the result of a previous test is negative. The test is not recommended for persons who do not have symptoms and are not at risk for COVID-19 infection. This test is NOT intended for use by medical professionals or trained operators. The result of this test may not reflect the actual status of the individual tested.

- For serial testing programs, additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a high likelihood of SARS-CoV-2 infection. For serial testing programs, additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a high likelihood of SARS-CoV-2 infection. Additional confirmatory testing with a molecular test for positive results may also be necessary, if there is a high likelihood of SARS-CoV-2 infection.

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**EXPLANATION OF SYMBOLS**

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<tr>
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</tr>
<tr>
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</tbody>
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**NAME AND INTENDED USE**

The InteliSwab™ COVID-19 Rapid Test Pro Kit Controls are intended as an external quality control reagents to monitor the performance of the InteliSwab™ COVID-19 Rapid Test Pro with direct anterior nasal samples. For use only with the InteliSwab™ COVID-19 Rapid Test Pro.

**Run the Kit Controls under the following circumstances:**

- Each new operator prior to performing testing on patient specimens,
- When opening a new test kit lot,
- Whenever a new shipment of test kits is received,
- If the temperature of the test kit storage area falls outside of 2°-30°C (35°-86°F), and
- At periodic intervals as dictated by the user facility, country, state or local regulations and policies.

It is the responsibility of each laboratory using the InteliSwab™ COVID-19 Rapid Test Pro to establish an adequate quality assurance program to ensure the performance of the device under its specific locations and conditions of use.

**SUMMARY AND EXPLANATION OF THE KIT CONTROLS**

The InteliSwab™ COVID-19 Rapid Test Pro Kit Controls are formulated using a nucleocapsid recombinant antigen in a PBS+1% BSA solution. The Kit Controls are specifically formulated and manufactured to ensure proper performance of the test. The COVID-19 Positive Control will produce a reddish-purple line at the Test (T) Zone. The COVID-19 Negative Control will generate a negative test result (no line at the T Zone). Both controls will produce a reddish-purple line in the Control (C) Zone. Refer to Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use. Use of kit control reagents manufactured by any other source will not meet the requirements for an adequate quality assurance program for the InteliSwab™ COVID-19 Rapid Test Pro.
MATERIALS PROVIDED

InteliSwab™ COVID-19 Rapid Test Pro Kit Controls
Each Kit Control box contains an IFU and two vials (one COVID-19 Positive Control and one COVID-19 Negative Control) as described below:

COVID-19 Positive Control
One blue-capped vial containing 0.25 mL of SARS-CoV-2 nucleocapsid recombinant antigen diluted in Phosphate-Buffered Saline with 1% Bovine Serum Albumin. Preservative: 2-methyl-4-isothiazolin-3-one.

COVID-19 Negative Control
One white-capped vial containing 0.25 mL of Phosphate-Buffered Saline with 1% Bovine Serum Albumin. Preservative: 2-methyl-4-isothiazolin-3-one.

Specimen Collection Loops

MATERIALS REQUIRED AND PROVIDED in the InteliSwab™ COVID-19 Rapid Test Pro Kit
Divided Pouches, each containing a Test Device, an Absorbent Packet, and a Developer Solution Vial

Test Stands
Instructions for Use

MATERIALS REQUIRED BUT NOT PROVIDED
Timer or watch capable of timing 30 minutes
Latex, vinyl, or nitrile disposable gloves
Biohazard waste container

WARNINGS
For in vitro Diagnostic Use

• These Instructions for Use must be read completely before using the product.
• Follow the instructions carefully when performing the InteliSwab™ COVID-19 Rapid Test Pro. Failure to do so may cause an inaccurate test result.
• This product has not been FDA cleared or approved, but has been authorized by FDA under an EUA for use by authorized laboratories; for use by laboratories certified under CLIA that meet requirements to perform moderate, high or waived complexity tests. This product is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation. – This product has been authorized only for the detection of proteins from SARS-CoV-2, not for any other viruses or pathogens.
• The emergency use of this product is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of in vitro diagnostics for detection and/or diagnosis of COVID-19 under Section 564(b)(1) of the Federal Food Drug and Cosmetic Act, 21 U.S.C. § 360bbb-1(b)(1), unless the declaration is terminated or the authorization is revoked sooner.
• Before proceeding with testing, all study personnel MUST read and be familiar with Universal Precautions and Infection Control Guidance for Healthcare Professionals about Coronavirus (COVID-19). 1.

PRECAUTIONS
Safety Precautions
• Handle Kit Controls and materials in contact with Kit Controls as if capable of transmitting infectious agents.
• Dispose of all Kit Controls and materials used in the test procedure in a biohazard waste container. All equipment and biohazardous waste should be discarded in accordance with country, state, and local laws and policies.
• Wear disposable gloves while handling and testing the Kit Controls. Dispose of used gloves in a biohazard waste container.
• Use of kit control reagents manufactured by any other source will not meet the requirements for an adequate quality assurance program for the InteliSwab™ COVID-19 Rapid Test Pro.

EXPECTED RESULTS
COVID-19 Negative Control
The COVID-19 Negative Control will produce a Negative test result. A single line should be present in the Result Window in the Control (C) Zone and NO line should be present in the Test (T) Zone. This indicates a Negative test result.

COVID-19 Positive Control
The COVID-19 Positive Control will produce a Positive test result and has been manufactured to produce a very faint line at the Test (T) Zone. Two lines should be present in the Result Window. A line in the Control (C) Zone and a line in the Test (T) Zone should be present. This indicates a Positive test result. The lines will not necessarily be the same intensity.

NOTE: If the test result is Positive, test the sample again using another Test Device without the Control Reagent. If the result is still Positive, contact OraSure Technologies’ Customer Care if the Kit Control reagents do not produce the expected result.

LIMITATIONS
The InteliSwab™ COVID-19 Rapid Test Pro Kit Controls are quality control reagents for use only with the InteliSwab™ COVID-19 Rapid Test Pro.

STORAGE INSTRUCTIONS
Store the InteliSwab™ COVID-19 Rapid Test Pro Kit Controls at 2°-8°C (36°-46°F). Do not use the Kit Controls beyond the expiration date printed on the outer box. Open the Kit Control vials only when you are performing tests. Recap and store the vials in their original box at 2°-8°C (36°-46°F) after use. Once opened, Kit Controls should be discarded after one week.

DIRECTIONS FOR USE
General Test Preparation
Perform procedures according to the General Test Preparation section of the InteliSwab™ COVID-19 Rapid Test Pro IFU.

TEST PROCEDURE
1. Open a Kit Control vial containing the control reagent.
2. Insert the rounded end of an unused Specimen Collection Loop into the vial of control reagent. Visualy inspect the loop to make sure that it is completely filled with the control reagent. Use separate unused Specimen Collection Loops for each control reagent.
3. Immediately immerse the control-reagent-filled Specimen Collection Loop into the Developer Vial. Use the Specimen Collection Loop to stir the specimen in the developer solution. Remove the Specimen Collection Loop from the Developer Vial and discard the used loop in a waste container.
4. Remove the Test Device from the Divided Pouch without touching the flat pad. Insert the Test Device, flat pad first, into the Developer Vial containing the specimen. Be sure that the Result Window is facing towards you and the flat pad touches the bottom of the Developer Vial.
5. Leave the Test Device in the Developer Solution Vial and start a timer. Do not remove the Test Device from the vial until you have read the results. Read the results in a fully lighted area after 30 minutes, but no more than 40 minutes. Read the results as described in the Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Kit IFU.
6. Dispose of the used test materials in a waste container.
BIBLIOGRAPHY
2. CDC. Universal Precautions For Prevention Of Transmission Of Human Immunodeficiency Virus, Hepatitis B Virus, And Other Bloodborne Pathogens In Health-Care Settings. MMWR 1988; 37(24):377-388.

EXPLANATION OF SYMBOLS

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOT</td>
<td>Batch Code</td>
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<tr>
<td>IVD</td>
<td>In Vitro Diagnostic Medical Device</td>
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<tr>
<td>REF</td>
<td>Catalog Number</td>
</tr>
<tr>
<td>Caution, Consult Accompanying Documents</td>
<td>Manufacturer</td>
</tr>
<tr>
<td>PN</td>
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</tbody>
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For Technical or Customer Service within the United States, phone (800) ORASURE (800-672-7873). For customers outside the United States, phone +(001) 610 882 1820 or go to www.OraSure.com.

For in vitro Diagnostic Use

All new operators must be able to correctly interpret all devices provided within the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel prior to using the InteliSwab™ COVID-19 Rapid Test Pro.

Failure to read at low intensities can result in the inability to detect specimens near the limit of detection of the InteliSwab™ COVID-19 Rapid Test Pro and may result in false negative results.

These Instructions for Use and the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use must be read completely before using the product. Follow the instructions carefully; failure to do so may cause an inaccurate test result.

NAME AND INTENDED USE

The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is intended to assist new operators in becoming proficient at reading specimens with antigen levels near the limit of detection of the device. The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is comprised of InteliSwab™ COVID-19 Rapid Test Pro devices that have been designed to represent reading intensities of limit of detection, low positive, and negative test results. The limit of detection test device is indicative of specimens with antigen levels at the limit of detection of the device.

It is the responsibility of each laboratory using the InteliSwab™ COVID-19 Rapid Test Pro to establish an adequate quality assurance program to ensure proficiency of new operators in their ability to interpret test results. The clinical performance of this device was established based on an operator’s ability to read visual intensities at the Test (T) Zone at all levels including very weak lines representing low antigen levels.

SUMMARY AND EXPLANATION OF THE COVID-19 VISUAL REFERENCE PANEL

The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel consists of three devices that have been manufactured to represent limit of detection, low positive, and negative test results. The devices are specifically formulated and manufactured to assist new operators in becoming proficient at reading specimens with antigen levels near the limit of detection of the device. The COVID-19 Limit of Detection Device has a very faint reddish-purple line at the Test (T) Zone. The COVID-19 Low Positive Device has a reddish-purple line at the Test (T) Zone. The COVID-19 Negative Device does not have a line at the Test (T) Zone. All devices have a reddish-purple line at the Control (C) Zone. Refer to Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use on how to interpret the devices.

This panel is to be used to assist new operators with becoming proficient at reading and interpreting InteliSwab™ COVID-19 Rapid Test Pro results at or near the limit of detection of the device. The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is NOT to be used as a quality control device to set intensity values used as a cutoff for reading and interpreting InteliSwab™ COVID-19 Rapid Test Pro devices. Any line at the Test (T) Zone is considered a positive result regardless of how faint the line appears.
MATERIALS REQUIRED AND PROVIDED in the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel

- Foil Pouch containing three predetermined InteliSwab™ COVID-19 Rapid Test Pro devices representing limit of detection, low positive and negative test results as described below.

1. COVID-19 Limit of Detection Device
   One InteliSwab™ COVID-19 Rapid Test Pro device that has been manufactured at a predetermined reactivity level to produce a positive test result consistent with the limit of detection of the device.

2. COVID-19 Low Positive Device
   One InteliSwab™ COVID-19 Rapid Test Pro device that has been manufactured at a predetermined reactivity level to produce a positive test result.

3. COVID-19 Negative Device
   One InteliSwab™ COVID-19 Rapid Test Pro device that has been manufactured to produce a negative test result.

Instructions for Use

MATERIALS REQUIRED BUT NOT PROVIDED

- Latex, vinyl, or nitrile disposable gloves

WARNINGS

For in vitro Diagnostic Use

- These Instructions for Use must be read completely before using the product.
- Follow the Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use for instructions on how to interpret the devices.
- The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel when stored protected from light (either pouched or unpouched) is stable through the expiration date printed on the pouch. If not protected from light or stored above indicated temperature, the unpouched device should be discarded after 15 days.
- The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is NOT to be used as a quality control device to set intensity values used as a cutoff for reading and interpreting InteliSwab™ COVID-19 Rapid Test Pro devices. Any line at the Test (T) Zone is considered to be a positive result regardless of how faint the line appears.
- All testing MUST be conducted under appropriate biosafety conditions in accordance with CDC guidelines. All study personnel conducting testing MUST read and be familiar with Universal Precautions.
- This product has not been FDA cleared or approved, but has been authorized by FDA under an EUA for use by laboratories certified under CLIA that meet requirements to perform moderate, high or waived complexity tests. This product is authorized for use at the Point of Care (POC), i.e., in patient care settings operating under a CLIA Certificate of Waiver, Certificate of Compliance, or Certificate of Accreditation. This product has been authorized only for the detection of proteins from SARS-CoV-2, not for any other viruses or pathogens.
- The emergency use of this product is only authorized for the duration of the declaration that circumstances exist justifying the authorization of emergency use of in vitro diagnostics for detection and/or diagnosis of COVID-19 under Section 564(b)(1) of the Federal Food Drug and Cosmetic Act, 21 U.S.C. § 360bbb3(b)(1), unless the declaration is terminated or the authorization is revoked sooner.

PRECAUTIONS

Safety Precautions

- The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel does not contain potentially infectious materials. Hazardous disposal is only required if used in areas containing infectious materials.
- Use of Visual Reference Panels manufactured by any other source will not meet the requirements for an adequate quality assurance program for the InteliSwab™ COVID-19 Rapid Test Pro.

STORAGE INSTRUCTIONS

Store the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel at 15°-30°C (59°-86°F). Do not use the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel beyond the expiration date printed on the foil pouch. Open the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel pouch only when qualifying new operators in interpreting test results. Re-seal and store the devices in their original foil pouch at 15°-30°C (59°-86°F) after use. If not protected from light or stored above the indicated temperatures, the unpouched device should be discarded after 15 days.

DIRECTIONS FOR USE

Test Procedure

Note: The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel should be read and interpreted in the same location that testing and interpreting the InteliSwab™ COVID-19 Rapid Test Pro occurs.

1. Open the foil pouch containing the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel.
2. Pull out the three devices contained within the foil pouch.
3. Note the date the pouch was opened on the device labels or the pouch label.
4. Follow the Test Result and Interpretation of Test Result section of the InteliSwab™ COVID-19 Rapid Test Pro Instructions for Use for instructions on how to interpret the devices.

EXPECTED RESULTS

COVID-19 Limit of Detection Device

The COVID-19 Limit of Detection Device has been manufactured to have a very faint reddish-purple line at the Test (T) Zone. A reddish-purple line should be present in the Result Window in both the Control (C) Zone and the Test (T) Zone. This indicates a weakly positive test result consistent with the limit of detection of the device. The Control (C) Zone and the Test (T) Zone lines will not be the same intensity.

COVID-19 Low Positive Device

The COVID-19 Low Positive Device has been manufactured to have a reddish-purple line at the Test (T) Zone. A reddish-purple line should be present in the Result Window in both the Control (C) Zone and the Test (T) Zone. This indicates a positive test result. The Control (C) Zone and the Test (T) Zone lines will not be the same intensity.

COVID-19 Negative Device

The COVID-19 Negative Device has been manufactured to have a line at the Control (C) Zone. A single line should be present in the Result Window in the Control (C) Zone and NO line should be present in the Test (T) Zone. This indicates a negative test result.

NOTE: If a new operator is unable to interpret all devices provided as part of the InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel, they are not considered to be proficient at reading and interpreting the InteliSwab™ COVID-19 Rapid Test Pro. Failure to read at low intensities can result in the inability to detect specimens near the limit of detection of the InteliSwab™ COVID-19 Rapid Test Pro and may result in false negative results.

LIMITATIONS

The InteliSwab™ COVID-19 Rapid Test Pro Visual Reference Panel is for use only with the InteliSwab™ COVID-19 Rapid Test Pro.