



June 17, 2021

Mark Kidd, Ph.D.  
Wren Laboratories LLC  
688 East Main Street  
Branford, CT 06405

Device: WREN Laboratories COVID-19 PCR Test  
EUA Number: EUA201111  
Laboratory: WREN Laboratories LLC  
Indication: This test is authorized for the following indications for use:  
Qualitative detection of nucleic acid from SARS-CoV-2 in:  
(1) Nasopharyngeal, oropharyngeal (throat), anterior nasal, and mid-turbinate nasal swabs, as well as nasopharyngeal washes/aspirates or nasal aspirates, and bronchoalveolar lavage (BAL) specimens from individuals suspected of COVID-19 by their healthcare provider (HCP).  
(2) Saliva specimens that are collected at home or in a healthcare setting using the WREN Laboratories COVID-19 Saliva Test Collection Kit by any individuals 18 years and older (self-collected), 14 years and older (self-collected under adult supervision), or 5 years and older (collected with adult assistance) including from individuals without symptoms or other reasons to suspect COVID-19, when determined to be appropriate by a healthcare provider.  
Emergency use of this test is limited to the authorized laboratories.

Authorized Laboratories: Testing is limited to laboratories designated by WREN Laboratories LLC that are certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a and meet requirements to perform high-complexity tests.

Dear Dr. Kidd:

On August 3, 2020, based on your<sup>1</sup> request, the Food and Drug Administration (FDA) issued a letter authorizing the emergency use of Wren Laboratories COVID-19 PCR Test for the qualitative detection of nucleic acid from SARS-CoV-2 in nasopharyngeal, oropharyngeal (throat), anterior nasal, and mid-turbinate nasal swabs, as well as nasopharyngeal

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<sup>1</sup> For ease of reference, this letter will use the term “you” and related terms to refer to WREN Laboratories LLC.

washes/aspirates or nasal aspirates, and bronchoalveolar lavage (BAL) specimens from individuals suspected of COVID-19 by their healthcare provider, pursuant to Section 564 of the Federal Food, Drug, and Cosmetic Act (the Act) (21 U.S.C. §360bbb-3). Testing was limited to Wren Laboratories located at 688 East Main Street, Branford, CT, 06405 which is certified under CLIA, 42 U.S.C. §263a and meets requirements to perform high-complexity tests. Subsequently, based on your request FDA reissued the letter on October 20, 2020.<sup>2</sup>

On June 17, 2021, based on your request and having concluded that revising the October 20, 2020, EUA is appropriate to protect public health or safety under section 564(g)(2)(C) of the Act (21 U.S.C. § 360bbb-3(g)(2)(C)), FDA is reissuing the October 20, 2020, letter in its entirety with the revisions incorporated.<sup>3</sup> Pursuant to section 564 of the Act and the Scope of Authorization (Section II) and Conditions of Authorization (Section IV) of this reissued letter, your product<sup>4</sup> is now intended for the indications described above.

On February 4, 2020, pursuant to Section 564(b)(1)(C) of the Act, the Secretary of the Department of Health and Human Services (HHS) determined that there is a public health emergency that has a significant potential to affect national security or the health and security of United States citizens living abroad, and that involves the virus that causes COVID-19. Pursuant to Section 564 of the Act, and on the basis of such determination, the Secretary of HHS then declared that circumstances exist justifying the authorization of emergency use of in vitro diagnostics for detection and/or diagnosis of the virus that causes COVID-19 subject to the terms of any authorization issued under Section 564(a) of the Act.<sup>5</sup>

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<sup>2</sup> On October 20, 2020, the revisions to the August 3, 2020, letter and authorized labeling included: (1) revised intended use to include testing of saliva specimens that are self-collected at home or in a healthcare setting using the WREN Laboratories Saliva Collection Kit when determined to be appropriate by an HCP and to reflect language in recent authorizations, (2) revised Conditions of Authorization to reflect language in more recent authorizations, as well as incorporate conditions regarding at home collection kits and testing of saliva specimens, (3) revised EUA Summary to include data to support testing with self-collected saliva specimens, (4) revised SOP to include accessioning of saliva specimens and to reflect language in recent authorizations, and (5) revised HCP and patient fact sheets to reflect testing of saliva specimens at home or in a healthcare setting.

<sup>3</sup> The revisions to the October 20, 2020, letter include: (1) update the name of the WREN laboratories saliva collection kit from “Wren Laboratories COVID-19 Saliva Collection Kit” to “WREN Laboratories COVID-19 Saliva Test Collection Kit”, (2) revisions to the intended use and authorized labeling to include testing of saliva specimens collected by any individuals 18 years and older (self-collected), 14 years and older (self-collected under adult supervision), or 5 years and older (collected with adult assistance) including from individuals without symptoms or other reasons to suspect COVID-19, when determined to be appropriate by a healthcare provider. (3) revision to the intended use and authorized labeling to allow WREN Laboratories LLC the ability to designate other laboratories to run the test, (4) addition of a new extraction methodology and RT-PCR plate set-up including a plate-based extraction approach and a pre-spotted custom made primer RT-PCR plate, and data to support the additional methods (5) updates to the *in silico* inclusivity data in the EUA Summary and inclusion of additional warning language and limitations regarding circulating SARS-CoV-2 variant strains, (6) updates to the Conditions of Authorization to reflect language in more recent authorizations, as well as incorporate conditions for authorized distributors and authorized laboratories (7) revised EUA Summary to include data to support the additional intended use claims, (8) revised SOP to include accessioning of saliva specimens and to reflect language in recent authorizations, and (9) revised the fact sheets HCP and patient to reflect the updates to the intended use and language used in more recent authorizations.

<sup>4</sup> For ease of reference, this letter will use the term “your product” to refer to the WREN Laboratories COVID-19 PCR Test used for the indication identified above.

<sup>5</sup> U.S. Department of Health and Human Services, *Determination of a Public Health Emergency and Declaration that Circumstances Exist Justifying Authorizations Pursuant to Section 564(b) of the Federal Food, Drug, and*

FDA considered the totality of scientific information available in authorizing the emergency use of your product for the indication above. A summary of the performance information FDA relied upon is contained in the EUA Summary (identified below).

Having concluded that the criteria for issuance of this authorization under Section 564(c) of the Act are met, I am authorizing the emergency use of your product, described in the Scope of Authorization of this letter (Section II), subject to the terms of this authorization.

## **I. Criteria for Issuance of Authorization**

I have concluded that the emergency use of your product meets the criteria for issuance of an authorization under Section 564(c) of the Act, because I have concluded that:

1. The SARS-CoV-2 can cause a serious or life-threatening disease or condition, including severe respiratory illness, to humans infected by this virus;
2. Based on the totality of scientific evidence available to FDA, it is reasonable to believe that your product may be effective in diagnosing COVID-19, and that the known and potential benefits of your product when used for diagnosing COVID-19, outweigh the known and potential risks of your product; and
3. There is no adequate, approved, and available alternative to the emergency use of your product.<sup>6</sup>

## **II. Scope of Authorization**

I have concluded, pursuant to Section 564(d)(1) of the Act, that the scope of this authorization is limited to the indication above.

### **Authorized Product Details**

Your product is intended for the qualitative detection of nucleic acid from SARS-CoV-2 in (1) nasopharyngeal, oropharyngeal (throat), anterior nasal, and mid-turbinate nasal swabs, as well as nasopharyngeal washes/aspirates or nasal aspirates, and bronchoalveolar lavage (BAL) specimens from individuals suspected of COVID-19 by their healthcare provider (HCP) and (2) saliva specimens that are collected at home or in a healthcare setting using the WREN Laboratories COVID-19 Saliva Test Collection Kit by any individuals 18 years and older (self-collected), 14 years and older (self-collected under adult supervision), or 5 years and older (collected with adult assistance) including from individuals without symptoms or other reasons to suspect COVID-19, when determined to be appropriate by a healthcare provider.

Testing is limited to laboratories designated by WREN Laboratories LLC that are certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a and meet requirements to perform high-complexity tests.

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*Cosmetic Act, 21 U.S.C. § 360bbb-3. 85 FR 7316 (February 7, 2020).*

<sup>6</sup> No other criteria of issuance have been prescribed by regulation under Section 564(c)(4) of the Act.

The SARS-CoV-2 nucleic acid is generally detectable in respiratory specimens and saliva during the acute phase of infection. Positive results are indicative of the presence of SARS-CoV-2 nucleic acid; clinical correlation with patient history and other diagnostic information is necessary to determine patient infection status. Positive results do not rule out bacterial infection or co-infection with other viruses. Negative results do not preclude SARS-CoV-2 infection and should not be used as the sole basis for patient management decisions. Negative results must be combined with clinical observations, patient history, and epidemiological information. Negative results for SARS-CoV-2 RNA from saliva should be confirmed by testing of an alternative specimen type if clinically indicated.

To use your product, SARS-CoV-2 nucleic acid is first extracted, isolated and purified from the specimens. The purified nucleic acid is quantified, normalized and then reverse transcribed into cDNA. Normalized cDNA is PCR amplified and detected using an authorized real-time (RT) PCR instrument described in the authorized labeling (described below). The product uses all commercially sourced materials or other authorized materials and authorized ancillary reagents commonly used in clinical laboratories as described in the authorized labeling (described below).

Your product requires the following control materials, or other authorized control materials (as may be requested under Condition I below) that are required to run as outlined in the authorized labeling . All controls listed below must generate expected results in order for a test to be considered valid, as outlined in the authorized labeling:

- Internal Control - RNase P is co-extracted and amplified from all patient samples as an internal control. Detection of the RNase P gene in patient test samples verifies successful extraction of the sample, proper assay setup, sample integrity, and collection of human biological material.
- Positive Template Control - The 2019-nCoV\_N\_Positive Control from Integrated DNA Technologies (IDT, Cat # 10006625) is needed to verify PCR reagent integrity as well as proper assay set-up of the RT-PCR reactions for the N1 and N3 genes. It is made of purified plasmid DNA that contains one copy each of the N1 and N3 targets. The positive control is used on every assay plate starting at PCR master mix addition (not reverse transcription master mix set-up).
- No Template (Negative) Control (NTC) - Molecular grade, nuclease-free DEPC-treated water used to monitor contamination of extraction and RT-PCR assay reagents.
- Positive Plate Control - Extracted cDNA from a human cell line is used to evaluate the RNase P primers and probe, reagent integrity and amplification.

Your product also requires the use of additional authorized materials and authorized ancillary reagents that are not included with your product and are described in the authorized labeling.

The above described product is authorized to be accompanied with the labeling submitted as part of the EUA request (described below) and the EUA Summary (available at <https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/in-vitro-diagnostics-euas>), and the following product-specific information pertaining to the emergency use, which is required to be made available to

healthcare providers and patients:

- Fact Sheet for Healthcare Providers: WREN Laboratories LLC – WREN Laboratories COVID-19 PCR Test
- Fact Sheet for Patients: WREN Laboratories LLC – WREN Laboratories COVID-19 PCR Test

The above described product, when accompanied by the “Procedure: Wren Laboratories COVID-19 PCR Test” laboratory procedures, EUA Summary (identified above) and the two Fact Sheets is authorized to be distributed and used by the authorized laboratories, despite the fact that it does not meet certain requirements otherwise required by applicable federal law.

The WREN Laboratories COVID-19 Saliva Test Collection Kit with the “WREN Laboratories COVID-19 Saliva Test Collection Kit” instructions for use is authorized to be distributed and used as part of the above described product as set forth in this EUA.

“Authorized labeling” refers to the “EUA Summary,” Fact Sheet for Healthcare Providers, Fact Sheet for Patients, the “Procedures: Wren Laboratories COVID-19 PCR Test” laboratory procedures, and the “WREN Laboratories COVID-19 Saliva Test Collection Kit” instructions for use.

I have concluded, pursuant to Section 564(d)(2) of the Act, that it is reasonable to believe that the known and potential benefits of your product, when used consistent with the Scope of Authorization of this letter (Section II), outweigh the known and potential risks of your product.

I have concluded, pursuant to Section 564(d)(3) of the Act, based on the totality of scientific evidence available to FDA, that it is reasonable to believe that your product may be effective in diagnosing COVID-19, when used consistent with the Scope of Authorization of this letter (Section II), pursuant to Section 564(c)(2)(A) of the Act.

FDA has reviewed the scientific information available to FDA, including the information supporting the conclusions described in Section I above, and concludes that your product (as described in the Scope of Authorization of this letter (Section II)) meets the criteria set forth in Section 564(c) of the Act concerning safety and potential effectiveness.

The emergency use of your product under this EUA must be consistent with, and may not exceed, the terms of this letter, including the Scope of Authorization (Section II) and the Conditions of Authorization (Section IV). Subject to the terms of this EUA and under the circumstances set forth in the Secretary of HHS's determination under Section 564(b)(1)(C) of the Act described above and the Secretary of HHS's corresponding declaration under Section 564(b)(1) of the Act, your product is authorized for the indication above.

### **III. Waiver of Certain Requirements**

I am waiving the following requirements for your product during the duration of this EUA:

- Current good manufacturing practice requirements, including the quality system requirements under 21 CFR Part 820 with respect to the design, manufacture, packaging, labeling, and storage of your product.

#### **IV. Conditions of Authorization**

Pursuant to Section 564(e) of the Act, I am establishing the following conditions on this authorization:

#### **Wren Laboratories LLC (You) and Authorized Distributor(s)<sup>7</sup>**

- A. You and authorized distributors must make available all instructions related to the self-collection of saliva specimens using the WREN Laboratories COVID-19 Saliva Test Collection Kit both in the shipped kit and on your website.
- B. You and authorized distributor(s) must make available on your website(s), if applicable, the Fact Sheet for Healthcare Providers and the Fact Sheet for Patients.
- C. Through a process of inventory control, you and authorized distributor(s) must maintain records of the numbers and locations to which the WREN Laboratories COVID-19 Saliva Test Collection Kit is distributed.
- D. You and authorized distributor(s) must maintain customer complaint files on record. You will report to FDA any significant complaints about usability or deviations from the established performance characteristics of the product of which you become aware.
- E. You and authorized distributor(s) are authorized to make available additional information relating to the emergency use of your product that is consistent with, and does not exceed, the terms of this letter of authorization.

#### **Wren Laboratories LLC (You)**

- F. Your product must comply with the following labeling requirements under FDA regulations: the intended use statement (21 CFR 809.10(a)(2), (b)(2)); adequate directions for use (21 U.S.C. 352(f)), (21 CFR 809.10(b)(5), (7), and (8)); appropriate limitations on the use of the device including information required under 21 CFR 809.10(a)(4); and any available information regarding performance of the device, including requirements under 21 CFR 809.10(b)(12).
- G. You must notify FDA of any authorized distributor(s) of the WREN Laboratories COVID-19 Saliva Test Collection Kit including the name, address, and phone number of any authorized distributor(s).

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<sup>7</sup> “Authorized Distributor(s)” are identified by you, Wren Laboratories LLC, in your EUA submission as an entity allowed to distribute the WREN Laboratories COVID-19 Saliva Test Collection Kit.

- H. You must provide authorized distributor(s), relevant public health authorities, and authorized laboratories with a copy of this EUA and communicate to authorized distributor(s), relevant public health authorities, and authorized laboratories any subsequent authorized revisions that might be made to this EUA and the authorized accompanying materials.
- I. You may request changes to this EUA for your product, including to the Scope of Authorization (Section II in this letter) or to the authorized labeling, including requests to make available additional authorized labeling specific to an authorized distributor. Such additional labeling may use another name for the product but otherwise must be consistent with the authorized labeling, and not exceed the terms of authorization of this letter. Any request for changes to this EUA should be submitted to the Division of Microbiology (DMD)/Office of Health Technology 7 (OHT7)-Office of In Vitro Diagnostics and Radiological Health (OIR)/Office of Product Evaluation and Quality (OPEQ)/Center for Devices and Radiological Health (CDRH) and require appropriate authorization from FDA prior to implementation.
- J. You must evaluate the analytical limit of detection and assess traceability of your product with any FDA-recommended reference material(s), if requested by FDA.<sup>8</sup> After submission to and concurrence with the data by FDA, FDA will update the EUA Summary to reflect the additional testing.
- K. You must submit to FDA a summary report within 30 calendar days of authorization summarizing the results of any testing performed using saliva specimens collected with the WREN Laboratories Saliva Collection Kit by individuals without symptoms or other reasons to suspect COVID-19 infection when determined to be appropriate by a healthcare provider used with your product during that timeframe, including how many specimens were received, how many specimens had to be rejected during accession and the main reasons for rejection, age of a patients and the positivity rate for specimens collected with the authorized self-collection kit.
- L. You must ensure authorized laboratories using your product have a process in place for reporting test results to healthcare providers and relevant public health authorities, as appropriate.
- M. You must have a process in place in accordance with 21 CFR Part 803 to track adverse events, including any occurrence of false results with your product, including with the WREN Laboratories COVID-19 Saliva Test Collection Kit and report any such events to FDA pursuant to 21 CFR Part 803. Serious adverse events, especially unexpected biosafety concerns, should immediately be reported to DMD/OHT7-OIR/OPEQ/CDRH (via email: [CDRH-EUA-Reporting@fda.hhs.gov](mailto:CDRH-EUA-Reporting@fda.hhs.gov)).
- N. You must collect information on the performance of your product. You must report to

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<sup>8</sup> Traceability refers to tracing analytical sensitivity/reactivity back to an FDA-recommended reference material. FDA may request, for example, that you perform this study in the event that we receive reports of adverse events concerning your product.

DMD/OHT7-OIR/OPEQ/CDRH (via email: [CDRH-EUA-Reporting@fda.hhs.gov](mailto:CDRH-EUA-Reporting@fda.hhs.gov)) any suspected occurrence of false positive or false negative results and significant deviations from the established performance characteristics of your product of which you become aware.

### **Authorized Laboratories**

- O. Authorized laboratories using your product will include with test result reports, all authorized Fact Sheets. Under exigent circumstances, other appropriate methods for disseminating these Fact Sheets may be used, which may include mass media.
- P. Authorized laboratories using your product must use your product as outlined in the authorized labeling. Deviations from the authorized laboratory procedures, including the authorized instruments, authorized extraction methods, authorized clinical specimen types, authorized control materials, authorized other ancillary reagents and/or authorized materials required to use your product are not permitted.
- Q. Authorized laboratories when testing saliva specimens collected using the WREN Laboratories COVID-19 Saliva Test Collection Kit DTC authorized for use with your product must follow any specimen accessioning protocol provided with the collection kit when accepting specimens for testing.
- R. Authorized laboratories must notify the relevant public health authorities of their intent to run your product.
- S. Authorized laboratories using your product must have a process in place for reporting test results to relevant public health authorities, as appropriate. Authorized laboratories using your product must also have a process in place for reporting test results via the agreed upon process as authorized by the WREN Laboratories COVID-19 Saliva Test Collection Kit DTC.
- T. Authorized laboratories using your product 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](mailto:CDRH-EUA-Reporting@fda.hhs.gov)) and you (via email: [covid@wrenlaboratories.com](mailto:covid@wrenlaboratories.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.
- U. All laboratory personnel using your product must be appropriately trained in molecular techniques and use appropriate laboratory and personal protective equipment when handling this product, and use your product in accordance with the authorized laboratory procedure.

### **WREN Laboratories LLC (You), Authorized Distributor(s), and Authorized Laboratories**

- V. You, authorized distributor(s), and authorized laboratories using your product must



ensure that any records associated with this EUA are maintained until otherwise notified by FDA. Such records will be made available to FDA for inspection upon request.

### **Conditions Related to Printed Materials, Advertising and Promotion**

- W. All descriptive printed matter, advertising and promotional materials, relating to the use of your product shall be consistent with the authorized labeling, as well as the terms set forth in this EUA and meet the requirements set forth in section 502(a), (q)(1), and (r) of the Act and FDA implementing regulations.
- X. No descriptive printed matter, advertising and promotional materials, relating to the use of your product may represent or suggest that this test is safe or effective for the detection of SARS-CoV-2.
- Y. All descriptive printed matter, advertising and promotional materials, relating to the use of your product shall clearly and conspicuously state that:
- This product has not been FDA cleared or approved, but has been authorized for emergency use by FDA under an EUA for use by authorized laboratories;
  - This product has been authorized only for the detection of nucleic acid from SARS-CoV-2, not for any other viruses or pathogens; and,
  - 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-3(b)(1), unless the declaration is terminated or authorization is revoked sooner.

The emergency use of your product as described in this letter of authorization must comply with the conditions and all other terms of this authorization.

### **V. Duration of Authorization**

This EUA will be effective until the declaration that circumstances exist justifying the authorization of the emergency use of in vitro diagnostics for detection and/or diagnosis of COVID-19 is terminated under Section 564(b)(2) of the Act or the EUA is revoked under Section 564(g) of the Act.

Sincerely,

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RADM Denise M. Hinton  
Chief Scientist  
Food and Drug Administration

Enclosure