April 28, 2020

To Manufacturers and Other Stakeholders:

Authorized Devices:	In vitro diagnostic SARS-CoV-2 Antibody Tests (Lateral Flow or Enzyme-linked immunosorbent assay (ELISA) tests) that have been evaluated in an independent validation study performed at the National Institutes of Health's (NIH) National Cancer Institute (NCI), or by another government agency designated by FDA, and are confirmed by FDA to meet the criteria set forth in the Scope of Authorization (Section II) of this letter.
Indication:	Authorized devices are intended for use as an aid in identifying individuals with an adaptive immune response to SARS-CoV-2, indicating recent or prior infection, by detecting antibodies (IgG, or IgG and IgM, or IgM), as specified in each authorized device's instructions for use, to SARS-CoV-2 in human plasma and/or serum. Emergency use of the authorized devices is limited to the authorized laboratories.[1]
Authorized Laboratories:	Laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. 263a, to perform moderate or high complexity tests.

This Emergency Use Authorization (EUA) is being issued in response to the need for in vitro diagnostic devices to detect antibodies to SARS-CoV-2 during the Coronavirus Disease 2019 (COVID-19) pandemic.

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[2]. 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

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[1] Devices that detect and differentiate IgA from other immunoglobulins are not eligible for authorization under this EUA.

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

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.

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 the authorized devices, described in the Scope of Authorization (Section II), subject to the terms of this authorization. Devices authorized by this EUA are limited to use in authorized laboratories. Authorized devices are added to Appendix A of this letter of authorization upon submission of a request from the manufacturer of the in vitro diagnostic device as described in the Scope of Authorization (Section II) and FDA's confirmation that the device meets the applicable criteria, and are authorized pursuant to section 564 of the Act and the Conditions of Authorization (Section IV) of this letter. Authorized devices will be added to Appendix A, which will be maintained on FDA's webpage.

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I. Criteria for Issuance of Authorization

I have concluded that the emergency use of the authorized devices 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 the virus;

2. Based on the totality of scientific evidence available to FDA, it is reasonable to believe that the authorized devices may be effective in diagnosing recent or prior infection with SARS-CoV-2 by identifying individuals with an adaptive immune response to the virus that causes COVID-19, and that the known and potential benefits of the authorized devices when used for diagnosing recent or prior infection with SARS-CoV-2 by identifying individuals with an adaptive immune response to the virus that causes COVID-19, outweigh the known and potential risks of the authorized devices; and,

3. There is no adequate, approved, and available alternative to the emergency use of the authorized devices.

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 devices that meet the authorization criteria set forth below when used in laboratories certified under CLIA, 42 U.S.C. 263a, to perform moderate or high complexity tests as an aid in identifying individuals with an adaptive immune response to SARS-CoV-2, indicating recent or prior infection, by detecting antibodies (IgG, or IgG and IgM, or total), as specified in each authorized device's instructions for use, to SARS-CoV-2 in human plasma and/or serum during the COVID-19 pandemic.

Authorization Criteria

To be authorized under this EUA, a device must be confirmed by FDA to meet the applicable criteria for performance and labeling set forth below based on information submitted by the manufacturer. FDA will add a device to the list of authorized devices in Appendix A of this letter of authorization upon submission of the information below from the manufacturer, and after confirmation that the applicable performance and labeling criteria have been met. Additional process information is included below.

A. Independent Clinical Agreement Validation

Manufacturers must submit clinical agreement data from an independent validation study performed by the NCI, or by another government agency designated by FDA, using a well-characterized panel of at least 30 confirmed SARS-CoV-2 antibody positive (for each immunoglobulin the test is intended to detect) serum/plasma samples and 80 antibody negative and/or pre-COVID-19 serum/plasma samples. Ten of the 80 negative samples must be confirmed to be HIV positive. The data must demonstrate a minimum overall 90.0% positive percent agreement and overall 95.0% negative percent agreement, and for tests that report specifically IgM and IgG results, a minimum positive percent agreement for IgM of 70% and a minimum positive percent agreement for IgG of 90%. The data must demonstrate that no cross-reactivity with HIV was detected.

B. Validation Performed by the Manufacturer

Manufacturers of the device must submit the following:

1) As applicable for devices that specifically report IgG and IgM, information demonstrating that the device specifically detects IgG and does not cross-react with IgM and the reverse. Information to demonstrate that the antibody class specificity of the anti-IgG and anti-IgM reagents have been well-characterized, or data demonstrating 100% agreement between the expected and the observed results for a minimum of five IgM and IgG positive samples using dithiothreitol (DTT) treatment, must be provided.

2) Any additional performance validation data generated for the test (e.g., cross-reactivity data, additional clinical agreement data performed in addition to the independent validation study), which must be supportive of the claims included in the instructions for use, and not contradictory to the independent clinical agreement validation described above.

C. Labeling Criteria

In order to be added to Appendix A as an authorized device, manufacturers must demonstrate to FDA that they have device-specific instructions for use (the "authorized labeling") that comply with the labeling requirements specified in Condition of Authorization A (see Section IV) below. Device labeling must be provided with each authorized device and must specifically include the following:

- The intended use of the test that specifies the antibodies detected (i.e., IgG, or IgG and IgM, or total) and includes the following statements:

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  - For use under Emergency Use Authorization only.
  - The test should not be used to diagnose acute SARS-CoV-2 infection.
  - Negative results do not preclude acute SARS-CoV-2 infection. If acute infection is suspected, direct testing for SARS-CoV-2 is necessary.
  - False positive results may occur due to cross-reactivity from pre-existing antibodies or other possible causes. Due to the risk of false positive results, confirmation of positive results should be considered using a second, different *[as appropriate, IgG or IgG/IgM]* assay.

- Detailed instructions for performing the test and interpreting the test results.

- Appropriate limitation statements, including but not limited to:
  - When deviations in the test procedure may yield erroneous results;
  - Conditions under which the test should not be used; and
  - That the test will not be used as the sole basis for treatment or other patient management decisions. Health care personnel should consider other information, including clinical history and local disease prevalence, in assessing the need for a second but different serology test to confirm an adaptive immune response.

- Study descriptions and results from performance testing including a detailed description of the independent clinical agreement study performed by a designated government agency, including appropriate study limitations, and all validation data generated by the manufacturer (e.g., cross-reactivity data, class specificity data, additional clinical agreement data). Results for all clinical agreement evaluations must include the point estimates and 95% confidence intervals for positive percent agreement (PPA) and negative percent agreement (NPA).

- Manufacturer contact information.

- Date indicating when the instructions for use was generated.

Process for Addition to Appendix A

A manufacturer may request inclusion under this EUA of any lateral flow or ELISA SARS-CoV-2 antibody test that meets the criteria by submitting the requisite information to CDRH-EUA-Template@fda.hhs.gov, including the general information below in its request. If such information is submitted, and FDA confirms that the device meets the above criteria, the device will be authorized under this EUA and added to Appendix A.

1) Contact information, name and place of business, email address, and contact information for a U.S. agent (if any), in addition to general information about the device such as the proprietary or brand name, model number, and marketing authorizations in the country of origin (or region) (if any).

2) A copy of the device's labeling that meets the requirements set forth above.

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3) Whether the device currently has marketing authorization in another regulatory jurisdiction, such as the European CE Mark, Australian Register of Therapeutic Goods (ARTG) Certificate of Inclusion, Health Canada Licence, China National Medical Products Administration (NMPA) approval, or Japan Pharmaceuticals and Medical Device (PMDA) approval (including certification number, if available).
4) Whether the device is manufactured in compliance with 21 CFR Part 820 or ISO 13485: *Medical Devices – Quality Management Systems – Requirements for Regulatory Purposes*, or an equivalent quality system, and the manufacturer or importer has documentation of such.
5) Information sufficient to demonstrate that the device meets the criteria above.

The Authorized Devices

Devices are authorized under this EUA and will be listed in Appendix A if they are confirmed by FDA to meet the criteria set forth in this section (Section II) based on the manufacturer's submission. Authorized devices are authorized to be manufactured and distributed to authorized laboratories consistent with this section (Section II).

Authorized devices must be accompanied by labeling that includes the information specified in this section (Section II) and required by the Conditions of Authorization (Section IV). In addition, the authorized devices must be accompanied by the following information pertaining to their emergency use, which are authorized to be made available to healthcare providers and patients:

- Fact Sheet for Healthcare Providers: Emergency Use of SARS-CoV-2 Antibody Tests During the COVID-19 Pandemic
- Fact Sheet for Recipients: Emergency Use of SARS-CoV-2 Antibody Tests During the COVID-19 Pandemic

FDA may remove a test that was added to Appendix A if FDA has reason to believe that the product no longer meets the Scope of Authorization (Section II) or any of the Conditions of Authorization (Section IV). FDA will provide the manufacturer 24 hours advance notice of such removal and will be available to work with the manufacturer to resolve the issue(s) that led to removal of the device(s) from Appendix A. Devices that are removed from Appendix A will appear on a list maintained on FDA's website and may not be used unless or until they are added back on to Appendix A, or are otherwise approved, cleared or authorized by FDA.

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 the authorized devices, when used consistently with the Scope of Authorization of this letter (Section II), outweigh the known and potential risks of such products.

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 the authorized devices may be effective for the indication above, when used consistently with the Scope of Authorization of this letter (Section II), pursuant to section 564(c)(2)(A) of the Act.

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

The emergency use of authorized devices 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 [illegible] the circumstances set forth in the Secretary of HHS's determination under section 564(b)(1)(C) described above and the Secretary of HHS's corresponding declaration under section 564(b)(1), in vitro diagnostic devices that are confirmed by FDA to meet the criteria for performance and labeling set forth in this section (Section II) that are included in Appendix A are authorized to be used and distributed as set forth in this EUA.

III. Waiver of Certain FDA Requirements

I am waiving the following requirements for authorized devices 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, storage, and distribution of the authorized devices listed in Appendix A that are used in accordance with this EUA.

IV. Conditions of Authorization

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

Manufacturers and Authorized Distributors of Authorized Devices

A. The authorized device 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)); any appropriate limitations on the use of the device including information required under 21 CFR 809.10(b)(11), and any available information regarding performance of the device, including requirements under 21 CFR 809.10(b)(12). Unique device identification requirements in 21 CFR Part 830 and 21 CFR 801.20 are not applicable.

B. Manufacturers and authorized distributor(s) will make the device available with the authorized labeling to authorized laboratories.

C. Manufacturers and authorized distributor(s) will provide to authorized laboratories the authorized Fact Sheet for Healthcare Providers and the authorized Fact Sheet for Recipients.

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D. Manufacturers and authorized distributor(s) will make available on their website(s) the authorized Fact Sheet for Healthcare Providers and the authorized Fact Sheet for Recipients.

E. Manufacturers and authorized distributor(s) will inform authorized laboratories and relevant public health authorities of this EUA, including the terms and conditions herein, and any updates made to the authorized device, authorized labeling and authorized Fact Sheets.

F. Through a process of inventory control, manufacturers and authorized distributor(s) will maintain records of the authorized laboratories to which they distribute their test and the number of authorized devices they distribute.

G. Manufacturers and authorized distributor(s) will collect information on the performance of the authorized device. Manufacturers will report to FDA any suspected occurrence of false positive and false negative results and significant deviations from the established performance characteristics of the authorized device of which they become aware.

H. Manufacturers and authorized distributor(s) will make available authorized control material included as part of the authorized device or other authorized control materials for purchase at the same time as the authorized device or within two months of the date of addition to Appendix A under this EUA (unless otherwise specified by DMD/OHT7-OIR/OPEQ/CDRH).

I. Manufacturers and authorized distributor(s) will make available authorized calibrator material included as part of the authorized device or other authorized calibrator materials for purchase at the same time as the authorized device.

J. Manufacturers and authorized distributor(s) are authorized to make available additional information relating to the emergency use of the product that is consistent with, and does not exceed, the terms of this letter of authorization.

K. Manufacturers and authorized distributors will 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.

Manufacturers of Authorized Devices

L. Manufacturers will notify FDA of any authorized distributor(s) of the device, including the name, address, and phone number of any authorized distributor(s), and any product name changes specific to the authorized distributor(s) private label, and will provide authorized distributor(s) with a copy of this EUA and the authorized labeling.

M. Manufacturers may request changes to their authorized device's authorized labeling (but not addition of specimen types). Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.

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N. Manufacturers will ensure that the authorized laboratories using the authorized device have a process in place for reporting test results to healthcare providers and relevant public health authorities, as appropriate.

O. Manufacturers may request substitution or changes to the authorized instruments, other ancillary methods, addition and/or substitution of control materials for use with the authorized device. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.

P. Manufacturers will evaluate the performance and assess traceability[3] of the authorized device with any FDA-recommended reference material(s) or established panel(s) of characterized clinical specimens. After submission to FDA and DMD/OHT7-OIR/OPEQ/CDRH's review of and concurrence with the data, the authorized labeling will be updated to reflect the additional testing. Such labeling updates will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.

Q. Manufacturers may request substitutions or changes to the authorized materials for use in the detection process of human antibodies against SARS-CoV-2. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.

R. Manufacturers will track adverse events, including any occurrence of false results, and report to FDA under 21 CFR Part 803.

S. As may be requested by FDA, manufacturers will periodically submit new lots for testing at NCI, or by another government agency designated by FDA, to confirm continued performance characteristics across lots.

Authorized Laboratories

T. Authorized laboratories using the authorized device will include with the test result reports, all authorized Fact Sheets. Under exigent circumstances, other appropriate methods for dissemination these Fact Sheets may be used, which may include mass media.

U. Authorized laboratories using the authorized device will use the authorized device as outlined in the Instructions for Use. Deviations from the authorized procedures, including any authorized instruments, authorized clinical specimen types, authorized control materials, authorized other ancillary reagents and authorized materials required to use the authorized device are not permitted.

V. Authorized laboratories that receive the authorized device will notify the relevant public health authorities of their intent to run the authorized device prior to initiating testing.

[3] Traceability refers to tracing analytical sensitivity/reactivity back to an FDA-recommended reference material.

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W. Authorized laboratories using the authorized device will have a process in place for reporting test results to healthcare providers and relevant public health authorities, as appropriate.

X. Authorized laboratories using the authorized device will 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.

Y. Authorized laboratories using the authorized device will collect information on the performance of the authorized product and report to DMD/OHT7-OIR/OPEQ/CDRH (via email: CDRH-EUA-Reporting@fda.hhs.gov) and the manufacturer any suspected occurrence of false positive or false negative results and significant deviations from the established performance characteristics of the product of which they become aware.

Z. All laboratory personnel using the authorized device must be appropriately trained in immunochromatographic techniques and use appropriate laboratory and personal protective equipment when handling this kit, and use the authorized device in accordance with the authorized labeling. All laboratory personnel using this assay must also be trained in and be familiar with the interpretation of results of the authorized device.

Conditions Related to Printed Materials, Advertising and Promotion

AA. All descriptive printed matter, including advertising and promotional materials related to the use of the authorized device shall be consistent with the Fact Sheets and authorized labeling, as well as the terms set forth in this EUA and the applicable requirements set forth in the Act and FDA regulations.

BB. All descriptive printed matter, including advertising and promotional materials relating to the use of the authorized device shall clearly and conspicuously state that:

- This device has not been FDA cleared or approved;
- This device has been authorized by FDA under an EUA for use by authorized laboratories;
- This device has been authorized only for the detection of SARS-CoV-2 antibodies (the antibodies detected should be specified, e.g., total, IgG, IgG and IgM), not for any other viruses or pathogens; and,
- This device 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 Act, 21 U.S.C. § 360bbb-3(b)(1), unless the authorization is terminated or revoked sooner.

CC. No descriptive printed matter, including advertising or promotional materials relating to the use of the authorized device may represent or suggest that this device is safe or effective for the detection of SARS-CoV-2.

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DD. The emergency use of each authorized device must comply with the conditions and all other terms of this authorization, as described in this letter of authorization.

V. Duration of Authorization

This EUA will be effective until the declaration that circumstances exist justifying the authorization 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 Denis M.
Chief Scienti
Food and Dr Administr

Enclosures

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