

October 9, 2020

Jacob Richards, Ph.D.
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Abbott Laboratories Inc.
100 Abbott Park Road
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Device: AdviseDx SARS-CoV-2 IgM

Company: Abbott Laboratories Inc.

Indication: Qualitative detection of immunoglobulin M (IgM) antibodies to

SARS-CoV-2 in human serum (including collected using a serum separator tube), and plasma (dipotassium EDTA, tripotassium EDTA, lithium heparin, lithium heparin in a separator tube, and

sodium heparin). Intended for use as an aid in identifying

individuals with an adaptive immune response to SARS-CoV-2, indicating recent or prior infection. Samples should only be tested from individuals that are 15 days to 30 days post symptom onset. SARS-CoV-2 antibody negative samples collected 15 days or more post symptom onset should be reflexed to a test that detects and reports SARS-CoV-2 IgG. Emergency use of this test is limited to

authorized laboratories.

Authorized Laboratories: Laboratories certified under the Clinical Laboratory Improvement

Amendments of 1988 (CLIA), 42 U.S.C. 263a, that meet requirements to perform moderate or high complexity tests.

Dear Dr. Richards:

This letter is in response to your<sup>1</sup> request that the Food and Drug Administration (FDA) issue an Emergency Use Authorization (EUA) for emergency use of your product,<sup>2</sup> pursuant to Section 564 of the Federal Food, Drug, and Cosmetic Act (the Act) (21 U.S.C. §360bbb-3).

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

<sup>&</sup>lt;sup>1</sup> For ease of reference, this letter will use the term "you" and related terms to refer to Abbott Laboratories Inc.

<sup>&</sup>lt;sup>2</sup> For ease of reference, this letter will use the term "your product" to refer to the "AdviseDx SARS-CoV-2 IgM" assay for the indication identified above.

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>3</sup>

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 "AdviseDx SARS-CoV-2 IgM Instructions for Use" for the ARCHITECT i System and Alinity i System (described 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 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 your product when used for such use, 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>4</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 a qualitative test intended for the detection of IgM antibodies to SARS-CoV-2 in human serum (including collected using a serum separator tube), and plasma (dipotassium EDTA, tripotassium EDTA, lithium heparin, lithium heparin in a separator tube, and sodium heparin). The product is intended for use as an aid in identifying individuals with an adaptive immune response to SARS-CoV-2, indicating recent or prior infection. At this time, it is

<sup>&</sup>lt;sup>3</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 Cosmetic Act, 21 U.S.C.* § 360bbb-3. 85 FR 7316 (February 7, 2020).

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

unknown for how long antibodies persist following infection and if the presence of antibodies confers protective immunity. Samples should only be tested from individuals that are 15 days to 30 days post symptom onset. SARS-CoV-2 antibody negative samples collected 15 days or more post symptom onset should be reflexed to a test that detects and reports SARS-CoV-2 IgG.

The AdviseDx SARS-CoV-2 IgM assay is performed using the AdviseDx SARS-CoV-2 IgM Reagent Kit in combination with the AdviseDx SARS -CoV-2 IgM Calibrator Kit on the ARCHITECT i System (ARCHITECT i 1000SR or i 2000SR systems) or with the Alinity i System. The test is an automated, two-step immunoassay that uses chemiluminescent microparticle immunoassay (CMIA) technology. In the first step antibodies to SARS-CoV-2 present in the specimen bind with SARS-CoV-2 antigen coated paramagnetic microparticles. Unbound sample is removed by washing. In the second step, anti-human IgM acridiniumlabeled conjugate is added that binds specifically to any anti-SARS-CoV-2 IgM antibody captured on the paramagnetic microparticles in the first stage. Following a wash cycle, chemiluminescence is generated by adding Pre-Trigger and Trigger Solutions to the paramagnetic microparticles conjugates. The resulting chemiluminescent reaction is measured as a relative light unit (RLU) by the ARCHITECT i 1000SR or i 2000SR systems or the Alinity i System. The amount of IgM antibodies to SARS-CoV-2 in the specimen is related to the RLU detected and this relationship is reflected in the calculated Index (S/C). The presence or absence of IgM antibodies to SARS-CoV-2 in the specimen is determined by comparing the chemiluminescent RLU in the reaction to the calibrator RLU

Your product must be used in combination with the AdviseDx SARS-CoV-2 IgM Calibrator Kit, available separately, to be run as outlined in the "AdviseDx SARS-CoV-2 IgM Calibrator Kit" Package Insert instructions for the ARCHITECT i System and the "AdviseDx SARS-CoV-2 IgM Calibrator Kit" Package Insert instructions for the Alinity i System:

 AdviseDx SARS-CoV-2 IgM Calibrator Kit—Contains inactivated, cell-free, human blood-derived material, reactive for anti-SARS-CoV-2 IgM. Used for the calibration of the test and the calculation of the results when the product is run on the ARCHITECT i 1000SR or i 2000SR systems, Alinity i System or other authorized instruments.

You also recommend use of AdviseDx SARS-CoV-2 IgM Control Kit, available separately, to be run as outlined in the "AdviseDx SARS-CoV-2 IgM Control Kit" Package Insert instructions for the ARCHITECT i System and the "AdviseDx SARS-CoV-2 IgM Control Kit" Package Insert instructions for the Alinity i System, or other authorized controls (may be requested under Condition L below):

AdviseDx SARS-CoV-2 IgM Control Kit - The negative control contains human
plasma and the positive control contains inactivated, cell-free, human blood-derived
material, reactive for anti-SARS-CoV-2 IgM. Used for the estimation of test
precision and the detection of systematic analytical deviations of the product run on
the ARCHITECT i 1000SR or i 2000SR systems, Alinity i System or other authorized
instruments.

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 Instructions for Use

Page 4 – Jacob Richards, Ph.D., Abbott Laboratories Inc.

(described below).

Your above described product is authorized to be accompanied with labeling entitled "AdviseDx SARS-CoV-2 IgM" Instructions for Use ARCHITECT i System (ARCHITECT i 1000SR or i 2000SR systems) or with the Alinity i System (available at <a href="https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/vitro-diagnostics-euas">https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/vitro-diagnostics-euas</a>), and the following product-specific information pertaining to the emergency use, which is required to be made available to healthcare providers and recipients:

- Fact Sheet for Healthcare Providers: Abbott Laboratories Inc. AdviseDx SARS-CoV-2 IgM
- Fact Sheet for Recipients: Abbott Laboratories Inc. AdviseDx SARS-CoV-2 IgM

"Authorized labeling" is the "AdviseDx SARS-CoV-2 IgM" Instructions for Use ARCHITECT i System (ARCHITECT i 1000SR or i 2000SR systems), and with the Alinity i System, and the two Fact Sheets.

The above described product, when accompanied by the "AdviseDx SARS-CoV-2 IgM" instructions for use ARCHITECT i System (ARCHITECT i 1000SR or i 2000SR systems) or with the Alinity i System, and the two Fact Sheets is authorized to be distributed to and used by authorized laboratories under this EUA, despite the fact that it does not meet certain requirements otherwise required by applicable federal law.

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 recent or prior infection with SARS-CoV-2 by identifying individuals with an adaptive immune response to the virus that causes 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, storage, and distribution of your product, but excluding Subpart H (Acceptance
Activities, 21 CFR 820.80 and 21 CFR 820.86), Subpart I (Nonconforming Product, 21 CFR
820.90), and Subpart O (Statistical Techniques, 21 CFR 820.250).

### IV. Conditions of Authorization

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

# Abbott Laboratories Inc. (You) and Authorized Distributor(s)<sup>5</sup>

- A. 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).
- B. You and authorized distributor(s) will make your product available with the authorized labeling to authorized laboratories.
- C. You and authorized distributor(s) will make available on your website(s) the Fact Sheet for Healthcare Providers and the Fact Sheet for Recipients.
- D. You 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 your product, and authorized labeling.
- E. Through a process of inventory control, you and authorized distributor(s) will maintain records of the authorized laboratories to which they distribute the test and number of tests they distribute.
- F. You and authorized distributor(s) will collect information on the performance of your product. You will report to FDA any suspected occurrence of false positive and false negative results and significant deviations from the established performance characteristics of the product of which you become aware.
- G. You and authorized distributor(s) are authorized to make available additional

<sup>&</sup>lt;sup>5</sup> "Authorized Distributor(s)" are identified by you, Abbott Laboratories Inc., in your EUA submission as an entity allowed to distribute your product.

- information relating to the emergency use of your product that is consistent with, and does not exceed, the terms of this letter of authorization.
- H. You and authorized distributor(s) will make available the control and calibrator materials (AdviseDx SARS-CoV-2 IgM Control Kit and AdviseDx SARS-CoV-2 IgM Calibrator Kit), or other authorized control and calibrator materials (refer to Condition L. below), at the same time as your product.

## **Abbott Laboratories Inc. (You)**

- I. You will notify FDA of any authorized distributor(s) of your product, including the name, address, and phone number of any authorized distributor(s).
- J. You will provide authorized distributor(s) with a copy of this EUA and communicate to authorized distributor(s) any subsequent amendments made to this EUA and its authorized accompanying materials (e.g., Fact Sheets).
- K. You will comply with the following requirements pursuant to FDA regulations: Subpart H (Acceptance Activities, 21 CFR 820.80 and 21 CFR 820.86), Subpart I (Nonconforming Product, CFR 820.90), and Subpart O (Statistical Techniques, 21 CFR 820.250).
- L. 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.
- M. You will evaluate the performance and assess traceability<sup>6</sup> of your product with any FDA-recommended reference material(s) or established panel(s) of characterized clinical specimens. After submission to and concurrence with the data by FDA, you will update your labeling to reflect the additional testing. Such labeling updates will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.
- N. You will have a process in place to track adverse events, including any occurrence of false results and report to FDA pursuant to 21 CFR Part 803.
- O. You must have lot release procedures and the lot release procedures, including the study design and statistical power, must ensure that the tests released for distribution have the clinical and analytical performance claimed in the authorized labeling.

<sup>&</sup>lt;sup>6</sup> Traceability refers to tracing analytical sensitivity/reactivity back to an FDA-recommended reference material.

- P. If requested by FDA, you must submit lot release procedures to FDA, including sampling protocols, testing protocols, and acceptance criteria, that you use to release lots of your product for distribution in the U.S. If such lot release procedures are requested by FDA, you must provide it within 48 hours of the request.
- Q. You will complete the agreed upon real-time stability study for your product. After submission to and concurrence with the data by FDA, you will update your labeling to reflect the additional testing. Such labeling updates will be made in consultation with, and require concurrence of, DMD/OHT7- OIR/OPEQ/CDRH.
- R. If requested by FDA, you will participate in a National Institutes of Health's National Cancer Institute's Frederick National Laboratory for Cancer Research independent evaluation of your product. After submission to and concurrence with the data by FDA, you will update your product labeling to reflect the additional testing. Such labeling updates will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.

### **Authorized Laboratories**

- S. 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.
- T. Authorized laboratories will use your product as outlined in the authorized labeling. Deviations from the authorized procedures, including the authorized clinical specimen types, authorized control materials, authorized other ancillary reagents and authorized materials required to use your product are not permitted.
- U. Authorized laboratories that receive your product will notify the relevant public health authorities of their intent to run your product prior to initiating testing.
- V. Authorized laboratories using your product will have a process in place for reporting test results to healthcare providers and relevant public health authorities, as appropriate.
- W. Authorized laboratories will collect information on the performance of your product and report to DMD/OHT7-OIR/OPEQ/CDRH (via email: <a href="mailto:CDRH-EUA-Reporting@fda.hhs.gov">CDRH-EUA-Reporting@fda.hhs.gov</a>) and to you (<a href="https://www.corelaboratory.abbott/us/en/offerings/segments/infectious-disease/sars-cov-2">Cov-2</a>) 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.
- X. All laboratory personnel using your product must be appropriately trained in automated immunoassay techniques and use appropriate laboratory and personal protective equipment when handling this kit, and use your product in accordance with the authorized labeling. All laboratory personnel using the assay must also be trained in and

be familiar with the interpretation of results of the product.

## Abbott Laboratories Inc. (You), Authorized Distributors and Authorized Laboratories

Y. You, authorized distributors, and authorized laboratories using your product 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.

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

- Z. All descriptive printed matter, including 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 the applicable requirements set forth in the Act and FDA regulations.
- AA. No descriptive printed matter, including advertising or 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.
- BB. All descriptive printed matter, including advertising and promotional materials, relating to the use of your product, shall clearly and conspicuously state that:
  - This test has not been FDA cleared or approved;
  - This test has been authorized by FDA under an EUA for use by authorized laboratories;
  - This test has been authorized only for the presence of IgM antibodies against SARS-CoV-2, not for any other viruses or pathogens; and
  - This test 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.

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.

Page 9 – Jacob Richards, Ph.D., Abbott Laboratories Inc.

Sincerely,

RADM Denise M. Hinton
Chief Scientist
Food and Drug Administration

Enclosure