



April 30, 2020

Jill Taylor, Ph.D.
Wadsworth Center
New York State Department of Health
Empire State Plaza, PO Box 509
Albany, NY 12201-0509

Device: New York SARS-CoV Microsphere Immunoassay for Antibody Detection

Company: Wadsworth Center, New York State Department of Health (“Wadsworth Center”)

Indication: Qualitative detection of total antibody (IgG, IgM, and IgA) to SARS-CoV-2 in human serum. Intended for use as an aid in identifying individuals who may have high levels of SARS-CoV-2-reactive antibodies in their blood that reflect an adaptive immune response to SARS-CoV-2 indicating recent or prior infection. Emergency use of this test is limited to Wadsworth Center, New York State Department of Health, which is certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. §263a, to perform high complexity tests.

Dear Dr. Taylor:

This letter is in response to your¹ request that the Food and Drug Administration (FDA) issue an Emergency Use Authorization (EUA) for emergency use of your product,² 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 HHS then declared that circumstances exist justifying the authorization of emergency use of in

¹ For ease of reference, this letter will use the term “you” and related terms to refer to Wadsworth Center.

² For ease of reference, this letter will use the term “your product” to refer to the New York SARS-CoV Microsphere Immunoassay for Antibody Detection, for the indication identified above.

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.³

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 who may have high levels of SARS-CoV-2 reactive antibodies in their blood that reflect 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.⁴

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 for the detection of total antibodies (IgM, IgA, IgG) against SARS-CoV-2 in human serum specimens. The product is intended for use as an aid in identifying individuals who may have high levels of SARS-CoV-2-reactive antibodies in their blood. Serum antibodies reflect an adaptive immune response to SARS-CoV-2 indicating recent or prior infection. At this time, it is unknown for how long antibodies persist following infection and if the presence of antibodies confers protective immunity.

Your product is a fluorescent immunoassay that uses full-length recombinant nucleocapsid protein from SARS-CoV-1 (90% homologous to SARS-CoV-2 nucleoprotein) covalently linked to polystyrene microspheres to bind SARS-CoV-2 antibodies present in human serum. Non-bound SARS-CoV-2 antibodies are washed away and then bound antibodies are reacted with a

³ 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).

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

biotinylated secondary anti-human immunoglobulin reagent (specific for human IgM, IgA, and IgG). After washing, microspheres are reacted with streptavidin labeled with Red Phycoerythrin. After washing, beads are resuspended and surface bound antibody is detected with the Luminex FlexMap dual laser cytometer, or other authorized instruments. The fluorescence measured is proportional to the amount of anti-SARS nucleocapsid protein antibodies in the serum.

Your product also includes positive and negative serum controls, or other authorized controls, to be run as outlined in the Standard Operating Procedure:

- Positive Control: Positive serum control - for a valid assay the median fluorescence intensity (MFI) of the individual Positive Control must be greater than the established cutoff value of the coupled bead lot.
- Negative Control: Negative serum control - for a valid assay the MFI value of the Negative Control must be lower than the established cutoff value for the coupled bead lot.

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 Standard Operating Procedure.

The above described product, when labeled consistently with the authorized procedures submitted as part of the EUA request, and as described in the “New York SARS-CoV Microsphere Immunoassay EUA summary” (available at <https://www.fda.gov/medical-devices/emergency-situations-medical-devices/emergency-use-authorizations>), which may be revised in consultation with, and with concurrence of, the Division of Microbiology Devices (DMD)/Office of Health Technology 7 Office of In Vitro Diagnostics and Radiological Health (OHT7-OIR)/Office of Product Evaluation and Quality (OPEQ)/Center for Devices and Radiological Health (CDRH), 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.

Your product is authorized to be accompanied by 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: New York SARS-CoV Microsphere Immunoassay for Antibody Detection
- Fact Sheet for Recipients: New York SARS-CoV Microsphere Immunoassay for Antibody Detection

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 authorized product, when used to diagnose recent or prior infection with SARS-CoV-2 by identifying individuals who may have high levels of SARS-CoV-2 reactive antibodies that reflects an adaptive immune response to the virus and used consistently 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 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.

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) described above and the Secretary of HHS's corresponding declaration under Section 564(b)(1), 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.

IV. Conditions of Authorization

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

Wadsworth Center, New York State Department of Health

- 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)); any 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 will inform relevant public health authorities of this EUA, including the terms and conditions herein, and any updates made to your product, authorized labeling and authorized Fact Sheets.
- C. You will ensure that you have a process in place for reporting test results to healthcare providers and relevant public health authorities, as appropriate.

- D. You 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.
- E. You will make available on your website(s) the Fact Sheet for Healthcare Providers and the Fact Sheet for Patients.
- F. You 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.
- G. You will use your authorized test as outlined in the authorized test procedures submitted as part of the EUA request and “New York SARS-CoV Microsphere Immunoassay EUA summary”. Deviations from the authorized test procedures, will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.
- H. You will collect information on the performance of your product. You will report to FDA to DMD/OHT7-OIR/OPEQ/CDRH (via email: CDRH-EUA-Reporting@fda.hhs.gov) 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.
- I. You may request changes to the Scope of Authorization (Section II in this letter) of your product. Such requests will be made in consultation with DMD/OHT7-OIR/OPEQ/CDRH, and require concurrence of, Office of Counterterrorism and Emerging Threats (OCET)/Office of the Chief Scientist (OCS)/Office of the Commissioner (OC) and DMD/OHT7-OIR/OPEQ/CDRH.
- J. You may request changes to the authorized labeling. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.
- K. You may request changes to the authorized Fact Sheets. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.
- L. You may request the addition of other instruments for use with your product. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.
- M. You may request the addition of other ancillary methods for use with your product. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.
- N. You may request the addition of other specimen types for use with your product. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.

- O. You may request the addition and/or substitution of control materials for use with your product. Such requests will be made in consultation with, and require concurrence of, DMD/OHT7-OIR/OPEQ/CDRH.
- P. You may request substitution for or changes to the authorized materials used 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.
- Q. You will evaluate the performance and assess traceability⁵ of your product 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, 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. You will track adverse events, including any occurrence of false results and report to FDA under 21 CFR Part 803.
- S. All laboratory personnel using your product must be appropriately trained in 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.
- T. You will maintain records of test usage and ensure that that any records associated with this EUA are maintained and otherwise notified by FDA. Such records will be made available to FDA for inspection upon request.

Conditions Related to Printed Materials, Advertising and Promotion

- U. All descriptive printed matter, including advertising and promotional materials relating to the use of your product 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.
- V. No descriptive printed matter, including advertising or promotional material 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.
- W. 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;

⁵ Traceability refers to tracing analytical sensitivity/reactivity back to an FDA-recommended reference material.

- This test has been authorized by FDA under an EUA for use by authorized laboratories;
- This test has been authorized only for the detection of total antibodies (IgM, IgG, and IgA) 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.

Sincerely,

RADM Denise M. Hinton
Chief Scientist
Food and Drug Administration

Enclosures