

March 29, 2021

Marlene Hanna
Director, Regulatory Affairs
Ortho-Clinical Diagnostics, Inc.
100 Indigo Creek Drive
Rochester, NY 14626

Device: VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack used in combination with the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator

EUA Number: EUA200233

Company: Ortho-Clinical Diagnostics, Inc.

Indication: Qualitative detection of total antibodies (including IgG, IgA and IgM) to SARS-CoV-2 in human serum and plasma (dipotassium EDTA). Intended for use as an aid in identifying individuals with an adaptive immune response to SARS-CoV-2, indicating recent or prior infection. 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 Ms. Hanna:

On April 14, 2020, based on your¹ request, the Food and Drug Administration (FDA) issued an Emergency Use Authorization (EUA) for emergency use of the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack used in combination with the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator pursuant to Section 564 of the Federal Food, Drug, and Cosmetic Act (the Act) (21 U.S.C. §360bbb-3) for the qualitative detection of total antibodies (including IgG and IgM) to SARS-CoV-2 in human serum and plasma (K2 EDTA) specimens from individuals suspected of COVID-19 by a healthcare provider. Testing was limited to laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. 263a, to perform moderate and high

¹ For ease of reference, this letter will use the term “you” and related terms to refer to Ortho-Clinical Diagnostics, Inc.

complexity tests. Based on your request, FDA granted updates to the authorized labeling on May 9, 2020,² October 30, 2020,³ and again on January 29, 2021.⁴

On January 8, 2020, you requested to amend your Emergency Use Authorization (EUA). Based on that request, and having concluded that revising the April 14, 2020 EUA is appropriate to protect the 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 April 14, 2020, letter in its entirety with the revisions incorporated.⁵ 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 product⁶ is now authorized for use consistent with the indication 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

² On May 9, 2020, your request was granted to (1) revise the intended use in accordance with the May 4, 2020 Policy for Coronavirus Disease-2019 Tests During the Public Health Emergency, (2) revise the Sensitivity section to incorporate the new data from 50 additional SARS-CoV-2 positive samples, and delete the Clinical Agreement table, (4) revise the Substances that do not Interfere table with results from the supplemental interference study required as part of the Condition “S” (fulfilled) in the April 14, 2020 Letter of Authorization, and (4) make various technical and editorial clarifying revisions.

³ On October 30, 2020, your request was granted to (1) update the Instructions for Use (IFU) to include a limitation: “A positive result may not indicate previous SARS-CoV-2 infection. Consider other information including clinical history and local disease prevalence, in assessing the need for a second but different serology test to confirm an immune response,” (2) update the Fact Sheet for Healthcare Providers (HCP) to include: “Due to the risk of false positive results, confirmation of positive results should be considered – using a second, different antibody assay that detects the same type of antibodies,” and (3) include updates to the IFU and fact sheets to reflect more recent authorizations.

⁴ On January 29, 2021, your request was granted to update the IFU to: (1) add in the interpretation of results section the terms “negative” and “positive” next to “Non-reactive” and “Reactive” respectively, and (2) change the storage and transportation temperature of the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator and VITROS Immunodiagnostic Products VITROS Anti SARS-CoV-2 Total Controls from refrigerated to frozen.

⁵ The revisions to the April 14, 2020, letter and authorized labeling include (1) update the indications in the letter to include reference to IgA consistent with previous updates, and additional updates to reflect language used in more recent authorizations, (2) modification of the test reagent buffer formulation to eliminate the serum negative bias, (3) update the IFU to add two additional limitations (related to performance in individuals who have received a COVID-19 vaccine, and performance with circulating variants) and to add additional edits for clarification, (4) Inclusion of a Product Information Card (PIC) in the calibrator packaging and inclusion of a one-pager with the first kit shipment, (5) update the HCP and recipient fact sheets to include information regarding testing of individuals who have received a COVID-19 vaccine and add information regarding available alternative tests, and update the HCP fact sheet to include information related to performance with circulating variants, and (6) update the Conditions of Authorization to remove Condition S (condition fulfilled), add Conditions D, L, P, Q and R and consolidation of several conditions in new Condition M below and other clarifying modifications to reflect language used in more recent authorizations.

⁶ For ease of reference, this letter will use the term “your product” to refer to the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack used in combination with the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator.

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.⁷

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 included the “VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack/VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator” Instructions for Use (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 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.⁸

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 total antibodies (including IgG, IgA and IgM) against SARS-CoV-2 in human serum and plasma (dipotassium EDTA). Your 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. Testing is limited to laboratories certified under CLIA that meet requirements to perform moderate or high complexity tests. At this time,

⁷ 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).

⁸ No other criteria of issuance have been prescribed by regulation under Section 564(c)(4) of the Act.

it is unknown for how long antibodies persist following infection and if the presence of antibodies confers protective immunity.

The test is performed using the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack used in combination with the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator on the VITROS ECi/ECiQ/3600 Immunodiagnostic System and the VITROS 5600/XT 7600 Integrated Systems (includes “Operating Instructions”). An immunometric technique is used; this involves a two stage reaction. In the first stage antibodies to SARS-CoV-2 present in the sample bind with SARS-CoV-2 antigen coated on the well. Unbound sample is removed by washing. In the second stage horseradish peroxidase (HRP)-labeled recombinant SARS-CoV-2 antigen is added in the conjugate reagent. The conjugate binds specifically to any anti-SARS-CoV-2 antibody captured on the well in the first stage. Unbound conjugate is removed by the subsequent wash step. The bound HRP conjugate is measured by a luminescent reaction. A reagent containing luminogenic substrates (a luminol derivative and a peracid salt) and an electron transfer agent is added to the wells. The HRP in the bound conjugate catalyzes the oxidation of the luminol derivative, producing light. The electron transfer agent (a substituted acetanilide) increases the level of light produced and prolongs its emission. The light signals are read by the system. The amount of HRP conjugate bound is indicative of the amount of SARS-CoV-2 antibody present.

The VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack includes the following material or other authorized materials: Reagent Pack with coated wells, assay reagent, conjugate reagent. The VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator includes two vials of VITROS SARS-CoV-2 Total Calibrator.

Your product also requires the use of VITROS Immunodiagnostic Products VITROS Anti-SARS-CoV-2 Total Controls or other authorized controls (as may be requested under Condition M below) which are not included with the kit but are available from you with the “VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Controls” product insert to be run as outlined in the “VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack/VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator” Instructions for Use:

- VITROS Immunodiagnostic Products VITROS Anti-SARS-CoV-2 Total Controls - 2 VITROS Anti-SARS-CoV-2 Total Controls (anti-SARS-CoV-2 negative and anti-SARS- CoV-2 Total positive)

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.

The labeling entitled “VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack/VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator” Instructions for Use (available at <https://www.fda.gov/medical-devices/coronavirus-disease-2019-covid-19-emergency-use-authorizations-medical-devices/vitro-diagnostics-euas>), the “Obtaining Printed Instructions for Use Free of Charge” one-pager (included with the first shipment of the kit), the Product Information Card (PIC card) (included with the calibrators), and the following product-specific information pertaining to the emergency use, is required to be made available as set forth in the Conditions of Authorization (Section IV), and are collectively referred to as “authorized

labeling”:

- Fact Sheet for Healthcare Providers: Ortho-Clinical Diagnostics, Inc. - VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack
- Fact Sheet for Recipients: Ortho-Clinical Diagnostics, Inc. - VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack

The above described product, when accompanied by the authorized labeling as set forth in the Conditions of Authorization (Section IV), 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:

Ortho-Clinical Diagnostics, Inc. (You) and Authorized Distributor(s)⁹

- 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) must make your product available with the authorized labeling to authorized laboratories.
- C. You and authorized distributor(s) must make available on your website(s) the authorized labeling.
- D. You and authorized distributor(s) must include a physical copy of the authorized PIC card with each shipped VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator to authorized laboratories, and will make the VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Reagent Pack/VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Calibrator” Instructions for Use electronically available with the opportunity to request a copy in paper form, and after such request, you must promptly provide the requested information without additional cost. You and authorized distributor(s) must also include a physical copy of the “Obtaining Printed Instructions for Use Free of Charge” one-pager with the first shipment of your product to each customer.
- E. You and authorized distributor(s) must 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.
- F. Through a process of inventory control, you and authorized distributor(s) must maintain records of the authorized laboratories to which they distribute your product and number they distribute.
- G. You and authorized distributor(s) must collect information on the performance of your product. You must 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.
- H. 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

⁹ “Authorized Distributor(s)” are identified by you, Ortho-Clinical Diagnostics, Inc., in your EUA submission as an entity allowed to distribute your product.

does not exceed, the terms of this letter of authorization.

- I. You and authorized distributor(s) must make available the control material (VITROS Immunodiagnostic Products VITROS Anti-SARS-CoV-2 Total Controls) with the “VITROS Immunodiagnostic Products Anti-SARS-CoV-2 Total Controls” product insert or other authorized control materials (as may be requested under Condition M below), at the same time as your product.

Ortho-Clinical Diagnostics, Inc. (You)

- J. You must notify FDA of any authorized distributor(s) of your product, including the name, address, and phone number of any authorized distributor(s).
- K. You must provide authorized distributor(s) with a copy of this EUA and communicate to authorized distributor(s) any subsequent amendments that might be made to this EUA and its authorized accompanying materials (e.g., Fact Sheets).
- L. You must 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, 21 CFR 820.90), and Subpart O (Statistical Techniques, 21 CFR 820.250).
- M. 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.
- N. You must evaluate the performance and assess traceability¹⁰ 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 must 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.
- O. You must 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.

¹⁰ Traceability refers to tracing analytical sensitivity/reactivity back to an FDA-recommended reference material.

- P. 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.
- Q. 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.
- R. If requested by FDA, you must periodically submit new lots for testing at the National Cancer Institute, or by another government agency designated by FDA, to confirm continued performance characteristics across lots. In addition, FDA may request records regarding lot release data for tests to be distributed or already distributed. If such lot release data are requested by FDA, you must provide it within 48 hours of the request.
- S. You must 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.

Authorized Laboratories

- T. Authorized laboratories using your product must 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.
- U. Authorized laboratories 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.
- V. Authorized laboratories that receive your product must notify the relevant public health authorities of their intent to run your product prior to initiating testing.
- W. 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.
- X. 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 you (OrthoCareTechnicalSolutions@orthoclinicaldiagnostics.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.
- Y. 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.

Ortho-Clinical Diagnostics, Inc. (You), Authorized Distributor(s) and Authorized Laboratories

- Z. 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

- AA. 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.
- BB. No descriptive printed matter, 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.
- CC. All descriptive printed matter, 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 but has been authorized for emergency use by FDA under an EUA for use by authorized laboratories;
 - This test has been authorized only for detecting total antibodies against SARS-CoV-2, not for any other viruses or pathogens; and
 - The emergency use of 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 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,

RADM Denise M. Hinton
Chief Scientist
Food and Drug Administration

Enclosure