

February 21, 2025

Tyler Chozinski Ph.D., Head of Scientific and Medical Affairs Aptitude Medical Systems Inc. 125 Cremona Drive, Suite 100 Goleta, CA 93117

Device: Metrix COVID/Flu Test

EUA Number: EUA240015

Company: Aptitude Medical Systems Inc.

Indication: This test is authorized for the simultaneous qualitative detection

and differentiation of SARS-CoV-2, influenza A, and influenza B nucleic acid. This test is authorized for non-prescription home use with anterior nasal (AN) swab specimens from individuals aged 14 years or older (self-collected) or individuals aged 2 years or older (collected by an adult) with signs and symptoms of respiratory

infection consistent with COVID-19.

Dear Dr. Chozinski:

the indication identified above.

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, as amended on March 15, 2023, 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, or a significant potential for a public health emergency, that affects, or 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.³

¹ For ease of reference, this letter will use the term "you" and related terms to refer to Aptitude Medical Systems Inc. ² For ease of reference, this letter will use the term "your product" to refer to the Metrix COVID/Flu Test used for

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. February 4, 2020. 85 FR 7316 (February 7, 2020). U.S. Department of Health and Human Services, *Amended Determination of a Public Health Emergency or Significant Potential for a Public*

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 in the Instructions for Use (identified below). There are a few FDA-approved/cleared test for the qualitative detection and identification of SARS-CoV-2, influenza A virus, and influenza B virus nucleic acids, along with some other organism types and subtypes not targeted by your product, but they are not adequate and available alternatives to your product. Respiratory viral infections caused by the influenza A and B viruses and SARS-CoV-2 can have similar clinical presentation and diagnostic considerations. Thus, to differentially detect SARS-CoV-2, information from a test that detects and differentiates the virus that causes COVID-19 and the common influenza viruses that cause seasonal epidemics of flu is needed. FDA has granted a De Novo classification request and cleared tests for the qualitative detection of nucleic acid from SARS-CoV-2, but these are not adequate and available alternatives to your product.⁴

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 through the simultaneous detection and differentiation of SARS-CoV-2, influenza A virus and/or influenza B virus RNA, 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. ⁵

Health Emergency Pursuant to Section 564(b) of the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 360bbb-3(b). March 15, 2023. 88 FR 16644 (March 20, 2023) ("Amended Determination").

⁴ To date, the FDA granted a De Novo classification request for the BioFire Respiratory Panel 2.1 (RP2.1) (Product Code: QOF; DEN200031) and cleared various tests (Search FDAs 510(k) Premarket Notification database; https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm; Product codes: QOF, QWR, QQX) for the qualitative detection of nucleic acid from SARS-CoV-2 and other microbial agents in respiratory clinical specimens. Available information indicates that these are not adequate and available alternatives to your product.

⁵ No other criteria of issuance have been prescribed by regulation under Section 564(c)(4) of the Act.

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 reverse transcription and loop-mediated isothermal amplification (RT-LAMP) test intended for the simultaneous qualitative detection and differentiation of SARS-CoV-2, influenza A, and influenza B nucleic acid. This test is authorized for non-prescription home use with anterior nasal (AN) swab specimens from individuals aged 14 years or older (self-collected) or individuals aged 2 years or older (collected by an adult) with signs and symptoms of respiratory infection consistent with COVID-19. Clinical signs and symptoms of respiratory viral infection due to SARS-CoV-2 and influenza can be similar.

Your product is intended for use in the differential detection of SARS-CoV-2, influenza A, and influenza B nucleic acid in clinical specimens and is not intended to detect Influenza C. SARS-CoV-2, influenza A, and influenza B nucleic acid is generally detectable in anterior nasal swab specimens during the acute phase of infection.

Positive results indicate the presence of viral nucleic acid, but clinical correlation with past medical history and other diagnostic information is necessary to determine infection status. Positive results do not rule out bacterial infection or co-infection with other pathogens not detected by the test. The agent detected may not be the definitive cause of disease. Individuals who test positive with your product should self-isolate and seek follow up care with their physician or healthcare provider as additional testing may be necessary.

Negative results do not rule out SARS-CoV-2, influenza A, and/or influenza B infection and should not be used as the sole basis for treatment or other management decisions, including infection control decisions. Negative results should be considered in the context of current prevalence of infection, an individual's recent exposures, history and the presence of clinical signs and symptoms consistent with respiratory infection. Individuals who test negative and continue to experience symptoms of fever, cough and/or shortness of breath may still have a respiratory infection and should seek follow up care with their healthcare provider.

Your product is performed using anterior nasal swab specimens from individuals aged two years or older. When using your product, the individual performing the test must follow the instructions provided in the "Metrix COVID/Flu Test Instructions" when collecting the specimen, running the test procedure, and interpreting and reporting the results.

The Metrix COVID/Flu Test includes the materials, or other authorized materials (as may be requested under Condition L. and M. below), required to collect the anterior nasal swab specimen and perform the test procedure, as described in the "Metrix COVID/Flu Test Instructions" and the "Metrix COVID/Flu Test Instructions for Use for Healthcare Providers."

Your product also requires use of the reusable Metrix Reader⁶ device, which you provide separately from the test and along with the "Metrix Reader Quick Start Guide."

Your product includes an internal control that is processed along with the specimen in the Metrix Reader. The internal control must generate the expected signal/result in the Metrix Reader for a test to be considered valid, as outlined in the "Metrix COVID/Flu Test Instructions" and the "Metrix COVID/Flu Test Instructions for Use for Healthcare Providers."

The labeling entitled, "Metrix COVID/Flu Test Instructions," the "Metrix COVID/Flu Test Instructions for Use for Healthcare Providers," the "Metrix COVID/Flu Test" box label(s)⁷, "Metrix Reader Quick Start Guide" (available at https://www.fda.gov/medical-devices/in-vitro-diagnostics-euas), and the following fact sheet pertaining to the emergency use, are required to be made available as set forth in the Conditions of Authorization (Section III), and are collectively referred to as "authorized labeling:"

• Fact Sheet for Healthcare Professionals⁸: Aptitude Medical Systems Inc. - Metrix COVID/Flu Test

The above described product, when accompanied by the authorized labeling provided as set forth in the Conditions of Authorization (Section III), is authorized to be distributed and used 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 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.

⁶ "Metrix Reader" includes Gen 2 and additional generations of the Metrix Reader as may be requested, and for which you receive appropriate authorization, in accordance with Condition L. below. Metrix Reader options are described in the "Metrix COVID/Flu Test Instructions for Use for Healthcare Providers."

⁷ "Metrix COVID/Flu Test" box labels include a box for 1- and 25-test(s)/kit and "Metrix COVID/Flu Test" box labels for additional test kits numbers/options as may be requested, and for which you receive appropriate authorization, in accordance with Condition M. below. Metrix COVID/Flu Test numbers/options are described in the "Metrix COVID/Flu Test Instructions for Use for Healthcare Providers."

⁸ Note that the information typically found in a Fact Sheet for Individuals is contained in the authorized "Metrix COVID/Flu Test Instructions" that will be available to end users as set forth in the Conditions of Authorization (Section III).

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 III). 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. Conditions of Authorization

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

Aptitude Medical Systems Inc. (You) and Authorized Distributor(s)9

- A. Your product must comply with the following labeling requirements: the intended use statement in 21 CFR 809.10(a)(2), (b)(2); adequate directions for use in 21 U.S.C. 352(f) and 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 available the "Metrix COVID/Flu Test Instructions" for your product in the shipped kit using the applicable "Metrix COVID/Flu Test" box label (see Footnote 7) and electronically on your website(s).
- C. You and authorized distributor(s) must maintain records of customer complaint files and report to FDA any significant complaints about usability or deviations from the established performance characteristics of which you and authorized distributor(s) become aware.
- D. You and authorized distributor(s) must inform relevant public health authorities of this EUA, including the terms and conditions herein, and any updates made to your product and/or the authorized labeling.
- E. Through a process of inventory control, you and authorized distributor(s) must maintain records of the locations (e.g., pharmacies, doctor's offices, etc.) to which your product is distributed and the number of your product distributed to each location.
- F. You and authorized distributor(s) must collect information on the performance of your product. You must report any significant deviations from the established performance characteristics of your product of which you become aware to the Division of Microbiology (DMD)/Office of Health Technology 7 (OHT7)/Office of Product Evaluation and Quality (OPEQ)/Center for Devices and Radiological Health (CDRH) (via email: CDRH-EUA-Reporting@fda.hhs.gov). Serious adverse events, especially

⁹ "Authorized Distributor(s)" are identified by you, Aptitude Medical Systems Inc., in your EUA submission as an entity allowed to distribute your product.

- unexpected biosafety concerns, should immediately be reported to DMD/OHT7/OPEQ/CDRH (via email: CDRH-EUAReporting@fda.hhs.gov).
- G. 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.
- H. You and authorized distributor(s) using your product must ensure that any records associated with this EUA are maintained until otherwise notified by FDA. Such records must be made available to FDA for inspection upon request.

Aptitude Medical Systems Inc. (You)

- I. You must notify FDA of any authorized distributor(s) of your product, including the name, address, and phone number of any authorized distributor(s).
- J. You must provide authorized distributor(s) with a copy of this EUA and communicate to authorized distributor(s) any subsequent revisions that might be made to this EUA and its authorized accompanying materials, including the authorized labeling.
- K. You must make the authorized "Metrix COVID-19 Test Instructions," the "Metrix COVID/Flu Test Instructions for Use for Healthcare Providers," the "Metrix Reader Quick Start Guide," and the Fact Sheet for Healthcare Professionals electronically available on your website. Additionally, you must provide the opportunity to request a copy of the "Metrix COVID-19 Test Instructions," the "Metrix COVID/Flu Test Instructions for Use for Healthcare Providers," the "Metrix Reader Quick Start Guide," and Fact Sheet for Healthcare Professionals in paper form, and, after such request, promptly provide the requested labeling at no additional cost.
- 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 shall not exceed the terms of authorization of this letter. Any request for changes to this EUA should be submitted to DMD/OHT7/OPEQ/CDRH and any such change requires appropriate authorization from FDA prior to implementation.
- M. You may request new box labels to allow additional test kits numbers/options for your product. Such additional labeling requests to this EUA should be submitted to, and require concurrence of, DMD/OHT7/OPEQ/CDRH prior to implementation.
- N. Within three months of the date of this letter, you must establish and maintain a quality system that is appropriate for your product's design and manufacture, and that meets the requirements of either the 2016 edition of ISO 13485 or 21 CFR Part 820. You must

- submit to DMD/OHT7/OPEQ/CDRH a notification of compliance within this three-month timeframe.
- O. If requested by FDA, you must submit associated documents or records related to your quality system for FDA review within 48 hours of the request.
- 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. You must have a process in place to track adverse events and report to FDA pursuant to 21 CFR Part 803.
- S. You must evaluate the analytical limit of detection and assess traceability ¹⁰ of your product with any FDA-recommended reference material(s) if requested by FDA. After submission to and review and concurrence with the data by FDA, you must update labeling to reflect the additional testing if requested by FDA. Such labeling updates must be made in consultation with, and require concurrence of, DMD/OHT7/OPEQ/CDRH.
- T. You must complete the agreed upon real-time stability study for your product and notify DMD/OHT7/OPEQ/CDRH of the testing results as they become available until completion of the study. After submission of the study data, and review and concurrence with the data by FDA, you must update your product labeling to reflect the additional testing if requested by FDA. Such labeling updates must be made in consultation with, and require concurrence of, DMD/OHT7/OPEO/CDRH.
- U. You must evaluate the impact of SARS-CoV-2 viral mutations **and** all other target analytes on your product's performance. Such evaluations must occur on an ongoing basis and must include any additional data analysis that is requested by FDA in response to any performance concerns you or FDA identify during routine evaluation. Additionally, if requested by FDA, you must submit records of these evaluations for FDA review within 48 hours of the request. If your evaluation identifies viral mutations that affect the stated expected performance of your device, you must notify FDA immediately (via email: CDRH-EUA-Reporting@fda.hhs.gov).
- V. If requested by FDA, you must update your labeling within 7 calendar days to include any additional labeling risk mitigations identified by FDA regarding the impact of viral mutations on test performance. Such updates must be made in consultation with, and require concurrence of, DMD/OHT7/OPEQ/CDRH.

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

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, as applicable, and FDA implementing regulations.
- X. 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, influenza A and influenza B.
- 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 by FDA under an EUA;
 - This product has been authorized only for the detection and differentiation of nucleic acid from SARS-CoV-2, influenza A, and influenza B, 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.

IV. 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,

Ellen J. Flannery, J.D.
Deputy Center Director for Policy
Director, Office of Policy
Center for Devices and Radiological Health
Food and Drug Administration

Enclosure