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MEMORANDUM **NOTE DE SERVICE**

TO Rosslynn Miller-Lee
Executive Director,
Medical Device Evaluation Bureau
MDD

FROM
DE Maria Carballo, Manager
IVD Device Evaluation Division
MDD

SUBJECT Recommendation for Authorization under Interim Order COVID-19**OBJET**
Manufacturer: **Cepheid.**

Device: Xpert Xpress SARS-CoV-2 test – **Application 312836**

Background

On March 23rd, 2020, Health Canada received a copy of the Emergency Use Authorization submitted by Cepheid to the USA FDA for authorization of the Xpert Xpress SARS-CoV-2 test intended for the detection of SARS-CoV-2 in nasopharyngeal swab and/or nasal wash/ aspirate specimens. The device is intended for laboratory and Point of Care use and can deliver results in 45 minutes.

The application was reviewed under the Interim Order 32 Respecting the Importation and Sale of Medical Devices for Use in Relation to COVID-19 pursuant to 33 subsection 30.1(1) of the Food and Drugs Act. This Interim Order will allow the Department to issue expedited authorization for sale or import of medical devices to deal with the current significant risk of COVID-19 to the health and safety of Canadians.

The information submitted was evaluated based on the Medical Devices Regulations and the "*Policy for Diagnostics Testing in Laboratories Certified to Perform High Complexity Testing under CLIA prior to Emergency Use Authorization for Coronavirus Disease-2019 during the Public Health Emergency"* Guidance issued by the US FDA on February 29, 2020.

The received Xpert Xpress SARS-CoV-2 received an FDA USA Emergency Use Authorization (EUA) on March 20, 2020.

Intended Use

LABORATORY USE

The Xpert Xpress SARS-CoV-2 test is a rapid, real-time RT-PCR test intended for the qualitative detection of nucleic acid from the SARS-CoV-2 in either nasopharyngeal swab and/or nasal wash/ aspirate specimens collected from individuals suspected of COVID-19 by

their healthcare provider. Testing of nasopharyngeal swab and nasal wash/aspirate specimens using the Xpert Xpress SARS-CoV-2 test run on the GeneXpert Dx and GeneXpert Infinity systems is limited to laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. § 263a, to perform high and moderate complexity tests.

Testing of nasopharyngeal swab specimens using the Xpert Xpress SARS-CoV-2 test run on the GeneXpert Xpress System (Tablet and Hub Configurations) is authorized to be distributed and used in patient care settings outside of the clinical laboratory environment.

Results are for the detection of SARS-CoV-2 RNA. The SARS-CoV-2 RNA is generally detectable in nasopharyngeal swab specimens and/or nasal wash/ aspirate specimens during the acute phase of infection. Positive results are indicative of active infection with SARS-CoV-2; clinical correlation with patient history and other diagnostic information is necessary to determine patient infection status. Positive results do not rule out bacterial infection or co-infection with other viruses. The agent detected may not be the definite cause of disease. Laboratories within the United States and its territories are required to report all positive results to the appropriate public health authorities. Negative results do not preclude SARS-CoV-2 infection and should not be used as the sole basis for treatment or other patient management decisions. Negative results must be combined with clinical observations, patient history, and epidemiological information.

Testing with the Xpert Xpress SARS-CoV-2 test is intended for use by trained operators who are proficient in performing tests using either GeneXpert Dx, GeneXpert Infinity and/or GeneXpert Xpress systems. The Xpert Xpress SARS-CoV-2 test is only for use under the Food and Drug Administration's Emergency Use Authorization.
[Package Insert 302-3562, Rev A May 2020]

POINT OF CARE

The Xpert Xpress SARS-CoV-2 test is a rapid, real-time RT-PCR test intended for the qualitative detection of nucleic acid from the SARS-CoV-2 in either nasopharyngeal swab and/or nasal wash/aspirate specimens collected from individuals suspected of COVID-19 by their healthcare provider.

Testing of nasopharyngeal swab and nasal wash/aspirate specimens using the Xpert Xpress SARSCoV-2 test run on the GeneXpert Dx and GeneXpert Infinity systems is limited to laboratories certified under the Clinical Laboratory Improvement Amendments of 1988 (CLIA), 42 U.S.C. § 263a, to perform high and moderate complexity tests.

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[Package Insert 302-3750, Rev A March 2020]

Discussion: The information provided meets the minimum requirements for issue of Authorization under Interim Order 32.

Studies for Limit of Detection, Reactivity/Inclusivity, Cross-reactivity/Microbial interference, reagent stability, risk assessment, and Clinical evaluation using contrived specimens, were provided and determined to be acceptable. Endogenous interference was not validated. However, this is not identified as a minimum requirement since PCR is a well-established PCR method thus evaluation of endogenous interference is not critical.

Labelling meets the minimum requirements of the Regulations with minor exemptions that will be addressed by the manufacturer with the creation of either a Rest of the World or Canada specific IFU. The issue to be addressed is the revision of the IFU to eliminate the very specific US FDA required language referring to use under EUA and limitation of use to CLIA certified laboratories in addition to specific CFR regulations. This will be requested under a condition imposed on the Authorization. Also as a condition is the completion of the reagent shelf life stability studies. The claim made is based on the similarities of the test formulation of the reagents between Xpert Xpress SARS-CoV-2 and the FDA-cleared and Health Canada licensed Xpert Xpress Flu/RSV.

In the context of the COVID-19 pandemic, the preliminary validation studies provided by the manufacturer provide reasonable assurance that the Xpert Xpress SARS-CoV-2 will perform as claimed for its intended use under the current COVID-19 national health emergency.

RECOMMENDATION:

Authorization of the Xpert Xpress SARS-CoV-2 under Interim Order 32 with the following conditions:

1. Submit by April 14, 2020, the Instructions for Uses (IFU) with revised Intended Use statements that omit the US FDA specific EUA and US specific laboratory authorization requirements/CLIA language.
2. Provide, when available, the completed shelf life stability studies.

I concur / Je suis d'accord

	2020-03-24		
Maria Carballo Manager, In Vitro Diagnostic Section / chef, Matériels diagnostiques in vitro Device Evaluation Division / Division de l'Évaluation des Matériels	Date	**Rosslyn Miller-Lee** Executive Director/ Directrice Executive Medical Devices Evaluation Bureau/ Bureau de l'évaluation des instruments médicaux	Date