

From: Kim, Sabrina
Sent: Sunday, May 3, 2020 7:37 AM
Cc: Gordon2, Travis (HC/SC); Zimmerman, Shannon; Caira, Celine (IC); Harris, Emily (SPAC/PSPC); Murdock, Kelly (SPAC/PSPC); Chan, Marco (IC); MacKnight, Aisling (HC/SC); Bélair, Thierry (HC/SC); Stickney, Matt; Theis, Rick; Khalil, Samantha; Gagnon, Chantal; Simard2, Veronique (IC); Hage-Moussa, Vanessa (IC); Power, Michael (IC); Jagric, Alexander (IC); Lawrence, Alex; Nathoo, Farees; Nowers, Kathryn (HC/SC)
Subject: Millions of ineffective tests (Spartan)

Hello - the story is out:

Millions of ineffective tests

Journal de Montréal | Philippe Orfali

Journal de Montréal has learned that Health Canada is suspending the use of millions of Spartan tests, purchased at a high price by Quebec, Ontario and other provinces, because they are ineffective.

Health Canada confirmed late Saturday night that the Spartan Cube, which is designed to rapidly detect COVID-19 using a cotton swab, is far less effective than expected.

"In light of the results of the clinical validation studies, Health Canada is restricting the use of the product for research only until sufficient evidence of performance can be provided and evaluated," a spokesperson told the Journal. Therefore, these tests cannot be used for screening COVID-19 in the population.

\$16 million

In April, François Legault's government purchased 200,000 tests and 100 diagnostic devices from Spartan Bioscience at a cost of \$16 million.

Alberta also spent \$9.5 million on 250 machines and 100,000 cotton swabs, Ontario purchased 900,000 tests, and the federal government and Manitoba also made such purchases.

Thanks to the Cube, the Ottawa-based company promised reliable results in just 30 minutes, without having to move samples to the laboratory, whereas current tests often take more than a day to be completed in a lab.

However, the analyses of the Cube are taking twice as long as expected. And the results are accurate in approximately 50% of cases, far from the 90% hoped for, revealed the work of a pan-Canadian committee of experts.

This "poor" test performance caused quite a stir at the National Microbiology Laboratory (NML). The agency has recommended to Ottawa that it suspend the authorization of the tests, which was granted on April 13, and Health Canada could do so as early as Monday.

The cotton swab

Spartan is feeling the pinch. "Health Canada has informed Spartan that it has received a report from the NML indicating concerns about the efficacy of the cotton swab used for the COVID-19 test. There are no concerns about the analytical performance or the device," the company stated in an email.

"Further discussions are scheduled for Monday to comprehend the breadth and scope of the concerns," added a Spartan spokesperson.

The company intends to work hard to "re-register" the tests as soon as possible. For example, it was suggested that the cartridges may be more effective if a larger sample is taken.

4,000 tests per day

This news comes at a very bad time, when governments have been saying for weeks that lifting lockdowns will especially depend on their capacity to further test the population.

Quebec intends to go from 6,000 to 14,000 screenings per day starting next week.

"The more we test, the more we'll find. We want to find positive cases to go up the chain of transmission and isolate people likely to transmit the virus," said Dr. Horacio Arruda, Quebec's director of public health, on Friday.

"[Spartan testing] is in our plans because, if we want to increase testing capabilities, this kind of technology is easier and faster," he stated.

"But we must wait until we have more precise data."

Marie-Louise Harvey, spokesperson for the Ministère de la Santé et des Services sociaux, said that Quebec will be reimbursed if the tests prove to be unusable.

On Saturday, 1,008 new cases and 114 new deaths related to COVID-19 were reported in Quebec, totalling 29,656 confirmed cases and 2,136 deaths.

----- Original Message -----

From: Kim, Sabrina <Sabrina.Kim@pmo-cpm.gc.ca>

Sent: Saturday, May 2, 2020 7:38 PM

To: Gordon2, Travis (HC/SC) <travis.gordon2@canada.ca>

Cc: Zimmerman, Shannon <Shannon.Zimmerman@dpmo-cvpm.gc.ca>; Caira, Celine (IC) <celine.caira@canada.ca>; Harris, Emily (SPAC/PSPC) <emily.harris@canada.ca>; Murdock, Kelly (SPAC/PSPC) <kelly.murdock@canada.ca>; Chan, Marco (IC) <marco.chan@canada.ca>; MacKnight, Aisling (HC/SC) <aisling.macknight@canada.ca>; Bélair, Thierry (HC/SC) <thierry.belair@canada.ca>; Stickney, Matt <Matt.Stickney@pmo-cpm.gc.ca>; Theis, Rick <Rick.Theis@pmo-cpm.gc.ca>; Khalil, Samantha <Samantha.Khalil@pmo-cpm.gc.ca>; Gagnon, Chantal <Chantal.Gagnon@pmo-cpm.gc.ca>; Simard2, Veronique (IC) <veronique.simard2@canada.ca>; Hage-Moussa, Vanessa (IC) <vanessa.hage-moussa@canada.ca>; Power, Michael (IC) <michael.power@canada.ca>; Jagric, Alexander (IC) <alexander.jagric@canada.ca>; Lawrence, Alex <Alex.Lawrence@dpmo-cvpm.gc.ca>; Nathoo, Farees <Farees.Nathoo@dpmo-cvpnn.gc.ca>; Nowers, Kathryn (HC/SC) <kathryn.nowers@canada.ca>

Subject: Re: Spartan

Thanks Travis!!

Sabrina Kim
Issues Advisor
Office of the Prime Minister
613-795-7803

> On May 2, 2020, at 6:12 PM, Gordon2, Travis (HC/SC) <travis.gordon2@canada.ca> wrote:

> Hi all,

> Few updates.

> The below info in the initial information should be treated as preliminary, though the timeline is correct to go by. Latest info is in this email.

> In terms of the specific issues with the kit: it is not the test itself, but rather the specific swab used as it is a proprietary swab. All other approved kits use the run-of-the-mill nasopharyngeal swabs we're procuring by the boatload. So I want to be clear that there are no similar issues expected in the other test kits which have all been battle-tested at this point. The other Point of Care test we've approved, Cepheid, has been well-validated and was used partly as a control for the validation of the Spartan kit. No concerns there.

> PHAC NML has only distributed test kits (including as part of bulk buy) to ON, AB, and for use at NML for validation testing. NS and QC were about to start validation testing under NML direction as well. So in terms of clinical use as part

of GoC distribution, it has not occurred. NML confirms these entities are aware as its partly their data that informed NML's analysis.

> Spartan indicated that they have provided 5,500 tests to AHS, Universite Laval, CHU in Montreal, and the Province of Ontario. Spartan is reaching out to confirm whether any of the tests were used for clinical diagnosis, but early impressions seem to be that they were for research/validatory use. We will share more as we have it.

> Spartan has received the regulatory letter from Health Canada informing them that additional conditions have been imposed on their approval. Namely, that:

> o No distribution of the Spartan COVID-19 System is authorized until such time as Health Canada assesses the documentation to be submitted by Spartan and removes this condition.

> o The Spartan COVID-19 System is authorized for Research Use Only until such time as Health Canada assesses the documentation to be submitted by Spartan and removes this condition.

> o Within one month, Spartan Bioscience shall submit an investigational testing (clinical trial) application to Health Canada to obtain clinical evidence to support the intended use of the Spartan COVID-19 System. The clinical trial shall assess all aspects of the Spartan COVID-19 System, including the sampling method and proprietary swab.

> Sabrina you are correct that the April 11th authorization allowed full sale, however it's quite normal for confirmatory testing to be done by a buyer and the expectation is that that is likely what has been happening but as I noted above, Spartan is confirming as once the kits are out of their hands, end-users can conceivably use them how they wish.

> In terms of the go-forward, we are in good shape. Remember that under the Interim Order, we do accept a lighter data package for the acceptance of these tests but NML coordinates with HC for confirmatory testing. In this instance, the swab was tested in a laboratory setting and showed only minor variations in the sensitivity of the results. But when tested on people, that's where the swab fell through. We will be ensuring on a go-forward basis that any proprietary consumables are validated. That is the weakness detected here through this event. The overall assessment process remains solid, so there's not a need to be concerned about other devices which have shown good results in the field.

terms of next steps, I will let Thierry speak to Comms approach but a response will go to J de M tonight. Tomorrow, our enforcement branch will send a letter to Spartan explaining to them how to do a voluntary recall; this has already been signaled to Spartan and they are working on it.

> Thanks,
> Travis

> ---- Original Message -----

> From: Zimmerman, Shannon <Shannon.Zimmerman@dpmo-cvpm.gc.ca>

> Sent: 2020-05-02 5:57 PM

> To: Caira, Celine (IC) <celine.caira@canada.ca>

> Cc: Harris, Ennily (SPAC/PSPC) <emily.harris@canada.ca>; Kim, Sabrina <Sabrina.Kim@pmo-cpm.gc.ca>; Gordon2, Travis (HC/SC) <travis.gordon2@canada.ca>; Murdock, Kelly (SPAC/PSPC) <kelly.murdock@canada.ca>; Chan, Marco (IC) <marco.chan@canada.ca>; MacKnight, Aisling (HC/SC) <aisling.macknight@canada.ca>; Bélair, Thierry (HC/SC) <thierry.belair@canada.ca>; Stickney, Matt <Matt.Stickney@pmo-cpm.gc.ca>; Theis, Rick <Rick.Theis@pmo-cpm.gc.ca>; Khalil, Samantha <Samantha.Khalil@pmo-cpm.gc.ca>; Gagnon, Chantal <Chantal.Gagnon@pmo-cpm.gc.ca>; Simard2, Veronique (IC) <veronique.simard2@canada.ca>; Hage-Moussa, Vanessa (IC) <vanessa.hage-moussa@canada.ca>; Power, Michael (IC) <michael.power@canada.ca>; Jagric, Alexander (IC) <alexander.jagric@canada.ca>; Lawrence, Alex <Alex.Lawrence@dpmo-cvpm.gc.ca>; Nathoo, Farees <Farees.Nathoo@dpmo-cvpm.gc.ca>

> Subject: Re: Spartan

Also adding. A reminder that Ford cares about this a lot so something should be relayed to Ontario.

> Sent from my iPhone

>
> On May 2, 2020, at 5:56 PM, Caira, Celine (IC) <celine.caira@canada.ca> wrote:
>
> Adding comms/issues from our end.
>
> Sent from my iPhone
>
> On May 2, 2020, at 5:48 PM, Harris, Emily (SPAC/PSPC) <emily.harris@canada.ca> wrote:
>
> From our end, JDM knows this is a health lead.
>
> Sent from my iPhone
>
> On May 2, 2020, at 5:44 PM, Kim, Sabrina <Sabrina.Kim@pmo-cpm.gc.ca<<mailto:Sabrina.Kim@pmo-cpm.gc.ca>>>
wrote:
>
> Thank you! Adding. What is being sent to JDM?
>
> Is Spartan or someone else going to be able to say this to the journalist? "The company indicated that they have distributed approximately 3,500 tests and that they have been used for research purposes at this time."
>
> Also, some Qs:
>
>
> - The 3, 500 tests only went to ON, MB, AB, NS and QC?
>
> - Have all of the provinces who received the kits been informed of this by the GoC?
>
> - While Spartan says that the 3, 500 tests were used exclusively for research purposes — technically the April MC authorization would have allowed for them to have been used for actual testing, which is why the authorization is going to be amended tmrw. Is that right?
>
> - Will the prior availability of clinical validation data be applied by HC as a criterion when considering approval for all test kits going forward?
>
> - Are there other test kits that had been authorized by HC prior to receiving clinical validation data, beyond Spartan? And if yes, is any of the simultaneous clinical validation data still underway?
>
> From: Harris, Emily (SPAC/PSPC) <emily.harris@canada.ca<<mailto:emily.harris@canada.ca>>>
> Sent: Saturday, May 2, 2020 4:59 PM
> To: Gordon2, Travis (HC/SC) <travis.gordon2@canada.ca<<mailto:travis.gordon2@canada.ca>>>>
> Cc: Murdock, Kelly (SPAC/PSPC) <kelly.murdock@canada.ca<<mailto:kelly.murdock@canada.ca>>>>; Caira, Celine (IC) <celine.caira@canada.ca<<mailto:celine.caira@canada.ca>>>>; Chan, Marco (IC) <marco.chan@canada.ca<<mailto:marco.chan@canada.ca>>>>; Kim, Sabrina <Sabrina.Kim@pmo-cpm.gc.ca<<mailto:Sabrina.Kim@pmo-cpm.gc.ca>>>>; MacKnight, Aisling (HC/SC) <aisling.macknight@canada.ca<<mailto:aisling.macknight@canada.ca>>>>; Bélair, Thierry (HC/SC) <thierry.belair@canada.ca<<mailto:thierry.belair@canada.ca>>>>
> Subject: Re: Spartan
>
> Flagging that Journal de Montreal was asking about this earlier this week.
> Sent from my iPhone

>

> On May 2, 2020, at 4:55 PM, Gordon2, Travis (HC/SC)
<travis.gordon2@canada.ca<<mailto:travis.gordon2@canada.ca>>> wrote:
> Hi all,

Looks like we've got issues on the Spartan test kit. Wanted to flag for you given pressers tomorrow. Our Department is king on lines. I believe ISED and PSPC departments would have flagged for you as well.

> Needless to say, Spartan should be scrubbed from any proactive remarks.

> Will keep you informed incl passing on any media lines once complete.

> Cheers,
> Travis

> From: Wen, Vanessa (HC/SC) <vanessa.wen@canada.ca<<mailto:vanessa.wen@canada.ca>>>
> Sent: 2020-05-02 4:27 PM
> To: Gordon2, Travis (HC/SC) <travis.gordon2@canada.ca<<mailto:travis.gordon2@canada.ca>>>
> Cc: Faustin, Isabelle (PHAC/ASPC) <isabelle.faustin@canada.ca<<mailto:isabelle.faustin@canada.ca>>>>; Nowers, Kathryn (HC/SC) <kathryn.nowers@canada.ca<<mailto:kathryn.nowers@canada.ca>>>>; Bélair, Thierry (HC/SC) <thierry.belair@canada.ca<<mailto:thierry.belair@canada.ca>>>>
> Subject: RE: Spartan

> Hi Travis,

> Please see below and attached.

> Thanks,
Vanessa

> Submission and first conditional authorization for research purposes only (March 26th)

> • On March 26, 2020, Health Canada issued a conditional authorization to a Spartan, under the Interim order, for "research use only".

> Authorization with new conditions enabling the sale (April 11th)

> • On April 11, Health Canada completed its scientific review and amended the conditions on the authorization, enabling the sale of the Spartan Cube.

> • The authorization followed a scientific assessment by Health Canada to ensure that the device is supported by evidence that it meets requirements for safety and effectiveness.

> The Spartan submission included lab test results that confirmed that the instrument could detect the COVID virus with a high level of sensitivity, however these tests were not conducted in a clinical setting.

> • The Interim Order enables Health Canada to authorize devices under an expedited scientific review process, on the basis of minimum requirements.

> • Health Canada's scientific review relied on analytical data only. Consistent with other trusted regulators, in the context of the pandemic, evidence of performance in a clinical setting is not requested. This regulatory flexibility for this type of test was applied knowing that further clinical validation is carried out by public health laboratories in order to determine test performance in clinical settings.

- > • There were conditions on the authorization for the provision of limited studies and sales reporting.
- > Routine clinical studies following authorization for sale

- > • As part of Good Laboratory Practices, following authorization of the device by Health Canada, the NML and other provincial health laboratories across Canada undertook clinical validation studies upon receipt of the device. These studies seek to confirm that the product will work as intended for the purpose of diagnosis, and are standard studies undertaken for any authorized diagnostic technology.

- > • While this scientific study in clinical setting by the NML and public health labs is separate from Health Canada's authorization process, the NML is working in collaboration with Health Canada's Medical Devices Directorate to share knowledge gained through these studies.
- > Preliminary studies

- > • On April 26, 2020, the NML shared the results of their preliminary studies. They reported that the Cube performance in their lab tests was consistent with the evidence submitted by Spartan Bioscience to Health Canada.

- > • The preliminary studies did not investigate the effectiveness of the Spartan Bioscience swabbing system.

- > • Since the results were overall positive, the next step was to conduct testing using swabs collected directly from patients.
- > Further studies

- > • Further studies under clinical conditions were conducted where the Spartan swabs were used for specimen collection.

- > • On May 1, the NML provided Health Canada with a final report (see attached). This report identified that the Spartan Cube successfully detected positive samples only 47% of the time among samples tested in three different provinces (Alberta, Ontario and Manitoba).

- > • This inferior performance is in contrast with the initial laboratory-based assessment of the Spartan test done by the NML, which indicated that the analytical sensitivity performed as advertised.

- > • It is believed that this performance difference between lab and clinical settings is not related to the device itself, but rather to the swabs, which may not successfully collect appropriate mucosal material for the test. >
- Issuance of new conditions allowing for research purposes only (May 2nd)

- > • In light of the clinical results, Health Canada will issue on May 2nd an amended Letter of Conditions that will restrict the use of the product to research use until adequate evidence of clinical performance can be provided. The new conditions are as follow :

- > o No distribution of the Spartan COVID-19 System is authorized until such time as Health Canada assesses the documentation to be submitted by Spartan and removes this condition.

- > o The Spartan COVID-19 System is authorized for Research Use Only until such time as Health Canada assesses the documentation to be submitted by Spartan and removes this condition.

- > o Within one month, Spartan Bioscience shall submit an investigational testing (clinical trial) application to Health Canada to obtain clinical evidence to support the intended use of the Spartan COVID-19 System. The clinical trial shall assess all aspects of the Spartan COVID-19 System, including the sampling method and proprietary swab.

> The first two conditions will not be modified until sufficient clinical information is provided to support the intended use of the Spartan COVID-19 System, and is deemed by Health Canada to be acceptable.

> Recent engagement activities and next steps

> • Health Canada held a call with Spartan on May 1st, at 8:00 pm. The purpose of the call was to discuss the information the Department received from the National Microbiology Laboratory on the Spartan test's performance in clinical setting; and the regulatory actions taken in light of this information.

> • The company indicated that they have distributed approximately 3,500 tests and that they have been used for research purposes at this time. They will confirm this in writing.

> • In an informal call the company on May 2nd, Spartan indicated being receptive to a voluntary recall of their devices.

> • Health Canada will issue a letter on May 2nd detailing the new conditions and the next steps in relation to the voluntary recall.

> • ISED and PSPC are kept informed of the situation.

> • PHAC is engaging provinces.

> • A subsequent call with the company is planned on Monday with the NML to further discuss the details of the study.

> Media

> • Media lines are currently being completed.

> • There is a response to a media inquiry from the Journal de Montréal that should go out today. We can expect media coverage as of today and tomorrow.

> From: Gordon2, Travis (HC/SC) <travis.gordon2@canada.ca<<mailto:travis.gordon2@canada.ca>>>

> Sent: 2020-05-02 9:52 AM

> To: Wen, Vanessa (HC/SC) <vanessa.wen@canada.ca<<mailto:vanessa.wen@canada.ca>>>

> Cc: Faustin, Isabelle (PHAC/ASPC) <isabelle.faustin@canada.ca<<mailto:isabelle.faustin@canada.ca>>>

> Subject: Spartan

> Hey VW:

> Understand HPFB will be restricting Spartan to a research authorization. I'm sure MLs are on the way, but can we get:

> 1. A summary of the deficiencies with the product that make it unsuitable for clinical use;

> 2. Why it was approved in the first place for clinical use?

> 3. Timeline for when this will go public.

> 4. Isabelle — Can we get a copy of the NML report on the device? I understand this informed HPFB's move. I will need to flag for procurement partners in Government.

> Thanks,
> Travis
>
> --
> Travis Gordon
> Senior Policy Advisor / Conseiller principal en politiques Office of the Minister of Health / Cabinet de la ministre de la
Santé Government of Canada / Gouvernement du Canada
> T: 613-410-2938
> PIN:EF06BDF5
>
> <CPHLN FINAL REPORT_Spartan SARSCoV2 Test_SWG Validation_2020May 1.docx>

