

**Virtual Town Hall #76
January 12, 2022**

Moderator: Joseph Tartal

Joseph Tartal: Hello, and thank you for joining us today. I am Joseph Tartal, Deputy Director in the Division of Industry and Consumer Education in CDRH's Office of Communication Education. And I'll be moderating today's program. Welcome to Virtual IVD Town Hall Number 76 for SARS-CoV-2 test developers. This is the first for 2022, in which we'll discuss and answer your questions about diagnostic tests in response to COVID-19. Today's presentations and transcripts will be made available at CDRH Learn under the subsection titled Coronavirus COVID-19 Test Development and Validation Virtual Town Hall Series.

Please note all of the previous town hall recordings and transcripts are currently posted and up to date. The next scheduled IVD Town Hall will take place Wednesday, January 26, 2022.

Our panelists for today's program are Dr. Timothy Stenzel, Director of the Office of In Vitro Diagnostics and Radiological Health, or OIR, in CDRH's Office of Product Evaluation and Quality; Toby Lowe, Associate Director for Regulatory Programs in OIR; and Dr. Kristian Roth, Deputy Director of the Division of Microbiology Devices, also in OIR. We will begin with opening remarks from our panelists. And then we'll answer your previously emailed questions about COVID test development and validation.

Please note we received some questions that are too detailed or too test case-specific that we cannot address on the call. For those questions, we'll try to send a response in writing within a few days. If you have submitted a question and do not hear it addressed, please look for the written response. If you do not receive one within a few days, please feel free to reach back out to the CDRH-EUA-Templates@fda.hhs.gov mailbox for an update.

Last, we'll open the line to your live questions. Right now we'll go an intro. Now I'm handing the program over to Tim. Welcome, Tim.

Timothy Stenzel: Oh. Thank you, Joe. And welcome, everyone. This is an important day because we have a deadline coming up on Friday. So the date for labs to submit an EUA request for an LDT that they are currently offering without FDA authorization is January 14, this Friday. So any test developer that has validated an LDT test by November 15, 2021, when the new policy went into effect, we want to make sure that it's understood that this Friday, January 14, is the deadline.

And you can send it to the templates email address that Joe mentioned. And I'll go into a little bit more detail here. And this will allow your LDT to continue to be used while the FDA reviews the application. There is no need to pause testing. Again, there is no need to pause testing. And if we have any questions about your validation, we'll be reaching out to you. And we'll be engaging you to try to work through those issues. All the while, you can continue testing.

There is no test volume requirement for LDTs that are in this category. So those that have been validated prior to November 15, 2021, there is no volume metric recommendation. Small labs with low-volume tests, they're fine just as well as large labs with high-volume tests.

We did this in an effort to not decrease test availability and to allow all the LDTs that have been developed and launched and validated and launched in the US as of that date, which was a long time to take to develop a test. So we are really focusing for future submissions, not these LDT submissions that have not yet been submitted for EUA authorization but future review priority on those high-volume tests that can most impact testing access and availability. And it just makes good common sense.

Also, all the LDTs that were on the market as well as all the tests that were notified prior to November 15th are all in addition to the EUA tests already authorized and available for use in laboratories. So this, we assume, is a substantial number of tests. And since the LDTs that were validated as of November 15, 2021, do not have to wait for an EUA authorization, this is not going to limit the testing of those validated tests.

And I want to make sure that labs know - LDT developers know - just how easy it is to submit their validation data. It can simply be a copy, a scanned copy, a photocopy of their CLIA validation records. That can be your submission. Make that copy. Send it electronically to us at the template box along with a cover letter that says what we're doing. It's as easy as that. There should be really no problem with doing that for all the CLIA-validated tests out there that want to stay on the market.

So moving to the next topic, any new EUA requests for antigen tests, we're recommending clinical data with omicron. This can be encompassed within the present policies or covered under the present policies for variant detection. We know that omicron is widespread right now. And if your validation was done before omicron, we really need to know how it performs with omicron, because there is the potential for a decrease in clinical sensitivity. There have been numerous preprints and anecdotal reports showing a potential loss of sensitivity here. The FDA has NIH RADx data that's suggestive of that as well.

So in order to speed your process to get this data, please reach out to your FDA reviewer for ways that you can address this as soon as possible. Testing with actual live patient samples, even if banked as long as they're probably in saline, is an option to actually including omicron patients in your clinical study. We're not asking you to do a new clinical study. We just want to know, is the test performing on omicron samples? And there are multiple ways to get to that end. So we look forward to working with you and ensuring, through the review process and through the authorization process, that for users, for clinicians, for patients, they know that your test works, at least at some level, with omicron.

Now moving to the next topic, there has been a lot of interest in the preprint data showing that saliva and/or other oral swabs or even oropharyngeal swabs may provide earlier detection of omicron than a nasal swab. And there has been discussion of use of, say, throat swabs, otherwise known as oropharyngeal swabs, for OTC tests and other tests, frankly, for which they have not been validated for. The FDA does advise that COVID-19 tests should be used as authorized, including following their instructions for use regarding obtaining the sample for testing. The home antigen tests available today are only authorized for nasal swabs.

We have received some saliva submissions. So far, they've been unsuccessful due to performance issues. We do not have any data yet suggesting throat swabs are inaccurate or appropriate method for at-home tests.

But we're open to receiving submissions. Of note, that saliva and throat swabs and other swabs within the oral cavity are different types of specimens. And they may not perform equally well. So just because

something works, say, for oropharyngeal doesn't mean it will work for saliva or any other sample type within the oropharynx.

So we have authorized many molecular tests for saliva. But we've also seen some poor performance from molecular tests. And then, as I mentioned, antigen tests so far, we've looked at some that have been unsuccessful with saliva as a sample type for reasons unknown and could be worked out. And obviously, we're interested in that saliva as a sample type even for antigen tests if the issues can be worked out. The FDA has authorized OP swabs for some molecular tests but has not authorized them, as I said, for antigen tests. A check of our records, in fact, indicates that we're not aware of any oropharyngeal submissions or throat swab submissions for antigen tests, which the FDA, as I stated, is open to receiving.

So some safety concerns. So the FDA has also noted concerns regarding self-collection of throat swabs, as they have been-- they are more complicated than nasal swab. Nasal swabs were ideal in many ways for home collection, unsupervised self-collection and, in some cases, even in some kids and, if used incorrectly, can cause harm to the patient.

Some potential safety concerns may include risk of false negative, false positive results for tests that were not developed or validated for use with oropharyngeal specimens. And then, of course, oropharyngeal and/or saliva or other oral samples types may work better or worse for different variant types. There is evidence that OP swabs or saliva may have been worse for, say, delta than for nasal swab.

So a performance may change. And having more options is great. We just like to see some data, including that it's an accurate way to do it and that it's safe.

So mechanical injuries to the tonsils or throat from the swab, there are. Obvious patient preference is for nasal swab over getting a throat swab. Throat swabs frequently induce gagging or vomiting, which can lead to an aspiration of gastric contents or oral contents into the lungs, which could cause a pneumonia, which could complicate obviously a SARS-CoV-2 infection or other underlying lung diseases.

And pieces as well could break off. They're more fragile. The current swabs aren't necessarily designed for throat swabbing. Some of them may be too short for this. And, of course, the CDC does recommend that throat swabs be collected by a trained health care provider.

Moving on to the next topic. And this is the last topic before Toby goes into some notable actions and achievements of recent. There has been a lot of interest in genotyping tests with the increased prevalence of omicron and the fact that only one of the three monoclonal therapies for SARS-CoV-2 is active in omicron. And that is present in lower supply. Supplies are being carefully managed.

Generally, if SARS-CoV-2 or variant results from a sequencing assay are provided to a specific patient or health care provider, then we would consider the assay to be a diagnostic test. And we expect the developer to receive an EUA for the sequencing assay prior to distribution and offering of such a test for clinical use.

And, of course, it was an LDT that was validated prior to November 15, 2021. If you want to stay in the market with that testing, just let us know by January 14th, this Friday. Then the LDT can continue to be offered while the FDA reviews the EUA request.

As discussed in our February 2021 guidance on mutations, FDA believes that whole genome sequencing tests may be best suited for genotyping claims due to their ability to detect both known and emerging mutations and variants or otherwise unknown mutations, unknown variants that may come along.

If you wish to pursue a genotyping claim, a detailed discussion of your validation proposal is best addressed within the context of a pre-EUA. We recommend that you submit a pre-EUA with a detailed intended use statement and validation plans for establishing performance for all mutations you find and detect.

Please note that we've recommended including a diagnostic test in your genotyping test so that risk of false result with the genotyping test can be mitigated. Your genotyping test could be a reflex off of an EUA-authorized test. Or the diagnostic test can be incorporated into detection plus-minus of SARS-CoV-2 can be incorporated into your genotyping test.

Without a diagnostic test performed in parallel with your genotyping test, the risk to patient, due to false results, is significant. That makes sense. Typically, this type of significant risk is mitigated by providing data from a clinical validation study using samples from patients infected with virus harboring the mutation of interest with the diagnostic test performed in parallel.

The risk to patients is reduced. And therefore, we will likely recommend establishing a performance of the genotyping test with either archives, clinical samples or inactivated virus within the clinical matrix. And, of course, a sequencing-based assay is probably the best comparator here if it's a good sequencing assay for establishing the, quote, "truth" of the genotyping result.

Please strongly consider, with any sort of genotyping protocol, whether it be whole genome sequencing and/or a non-sequencing-based genotyping or a limited genotyping sequencing assay, whatever, submitting a change protocol with a request with your submission so that you can more easily and quickly update your assay without FDA review prior to launching that update as long as the pre-authorized conditions for that change protocol are met.

We, of course, are likely to want to see that data, review it in case there's any issues. But again, if you follow the pre-authorized change protocol, with the output conditions are met, you just go ahead and make that change, launch it, letting us know and showing us the validation data. You don't have to wait on the FDA to review. OK. Toby, I will turn it over to you now. Thank you.

Toby Lowe: Thanks, Tim. Thanks, everyone, for joining us again this week. I'm just going to quickly run through a few notable actions since the last town hall. In the middle of December, we issued a letter to clinical laboratory staff and health care providers about false reactivity or false positives with the Rapid Plasma Reagin (RPR, and non-treponemal) test results with the Bio-Rad Laboratories, Bio-Plex 2200 Syphilis Total and RPR kit in some people who have received a COVID-19 vaccine. So there's more information in the letter posted on our website but we just wanted to make people aware of this potential.

A little bit later in December, we also added some information to the SARS-CoV-2 or Coronavirus Viral Mutation web page. We added information about omicron and antigen tests there. We also issued EUAs for the first two antigen OTC tests that had data provided through the NIH ITAP, or Independent Test

Assessment Program. Those were the SD Biosensor OTC COVID-19 tests distributed by Roche, and the Siemens CLINITEST Rapid COVID-19 test.

And then just yesterday, we issued a safety communication regarding the LuSys Laboratories COVID-19 antigen test and antibody tests. These tests have not been authorized, cleared, or approved by the FDA. And we have concerns that the performance has not been adequately established, and that there's a high risk of false results when using these tests.

So I believe we can--

Joseph Tartal: Are we ready to move--

Toby Lowe: --to the questions.

Joseph Tartal: Sure. So we'll move on to the emailed questions. Thank you to everyone who has emailed questions ahead of time. So again, we received some of these questions that are a little too detailed or test case specific that we cannot address on the call. But we will be sending a response in writing within a few days. Again, if you submit a question and do not hear back from us, please feel free to reach back out to the CDRH-EUA-Templates@fda.hhs.gov mailbox.

So with that, we're going to get started with our first question. So Toby, would a premarket submission for over-the-counter COVID-19 tests be submitted as a 510(k), or would this be a De Novo?

Toby Lowe: So we've not yet granted a full authorization for an over-the-counter COVID-19 test. So the first one we would likely expect to be submitted as a De Novo, and then once we offer as the first De Novo, subsequent similar tests would be 510(k)s.

Joseph Tartal: OK, because that would be the predicate for the next device, perfect. So next question, can FDA clarify whether modifications made by a laboratory to an emergency use authorized COVID-19 diagnostic test prior to November 15, 2021 to add new specimen types can continue to be used without FDA authorization?

Toby Lowe: Yes, as long as the specimen type is one that has been previously authorized for another test for the same technology. This is discussed in Section 4D2 of the updated guidance.

And it notes that for modifications made as discussed in previous versions of the guidance, prior to November 15, 2021, such as a high complexity CLIA-certified laboratory that modified an EUA authorized COVID-19 diagnostic test for use with a new specimen type, where the new specimen type has been previously authorized for another test of the same technology, and where the lab has validated the test for the new specimen type, FDA does not intend to object to the continued use-- that's continued now after the November 15 guidance-- of such a modified test without notification to FDA or a new or amended EUA.

Joseph Tartal: All right. Thank you. Can FDA clarify the types of modifications that can be made by a laboratory to an authorized COVID-19 molecular diagnostic test after November 15, 2021?

Toby Lowe: Yes, so this is sort of the opposite of that previous question. And there are differences in the discussion in the November 15 guidance for modifications made before and after the issuance of that updated guidance.

So under the modifications policy in the guidance, when a laboratory modifies an EUA authorized test where the laboratory has validated the modification and confirmed that the performance of the modified test is equivalent to the performance of the authorized test, and use of the test is limited to the high complexity CLIA-certified laboratory in which the modification was made, FDA does not expect such a laboratory to submit an EUA request for modifications that do not change the indication for use set forth in the EUA and also do not change the analyte-specific reagents.

These changes can include the addition of a new or different extraction kits or instruments, since the addition of new or different extraction kits or instruments generally would not change the indication for use. Modified tests offered under this policy are offered without FDA authorization, and they should not include any statements that state or imply that the test is FDA authorized. This is discussed in the guidance, so FDA provided recommendations for transparency for such tests in Section 4.C.3 of the guidance.

And then changes to the indication for use such as adding a new specimen type or a new patient population, such as asymptomatic individuals, would not fall under the modifications policy and FDA would expect a new or amended EUA be issued prior to such a test being offered. Further changes to the PCR primers or probes, for example, would not fall under this policy since that would involve changing the analyte-specific reagents. And FDA similarly, would expect a new or amended EUA be issued prior to such a test being offered.

Joseph Tartal: OK, thank you for the answers of both of those questions. We'll move on to our next question. Our next email question, are usability in clinical studies required to support the addition of the mobile app for an over-the-counter antigen test?

Toby Lowe: Yes, if you're considering a mobile app option for your device, we recommend that you include the mobile app as part of your usability study so that you're assessing the actual use environment. The entire workflow should be run by the same participants using the intended sample, and include the mobile app electronic instructions and result interpretation by the user in a way that's most consistent with how the device will be used.

Joseph Tartal: All right. And our next question, the current test policy guidance includes priority review for over-the-counter and point-of-care diagnostic tests. Is FDA considering priority review for over-the-counter and point-of-care serology tests?

Toby Lowe: So as stated in the revised guidance issued November 15, we do intend to prioritize review of lab-based and point-of-care serology tests that are high throughput, intended for the quantitative measurement of antibody titers, or the quantitative detection of neutralizing antibodies from developers who have indicated the ability to scale up manufacturing capacity shortly after authorization.

Joseph Tartal: OK. For next question, can FDA clarify the clinical study patient enrollment recommendations to support an over-the-counter test?

Toby Lowe: Yeah, so we recommend that you present the symptomatic and asymptomatic data for over-the-counter tests both separately and combined. We generally would expect at least 20 symptomatic individuals, and 10 asymptomatic individuals at the time of authorization. And this is discussed in the antigen and molecular home-use template.

There's also information in both the molecular and antigen diagnostic test templates about the definition of asymptomatic individuals, which generally would be someone who's free of symptoms for at least two weeks prior to enrollment and testing. Or if they've previously tested positive, at least two weeks from the time of the last positive test prior to enrollment and testing.

And we also would generally expect asymptomatic individuals who are suspected of COVID-19 such as with a known exposure be excluded from consideration as an asymptomatic individual for this context. And then as part of the clinical study protocol and data, we would like to see documentation of how you screened and confirmed that all enrolled individuals were asymptomatic and consistent with your proposed intended use.

So in the EUA request, we'd like to see all of the elements of the clinical study provided including known exposures, symptoms, and days since symptom onset for each symptomatic individual included in the clinical validation study. And then we recommend that you stratify the performance data for symptomatic only, asymptomatic only, and then an overall combined analysis.

Joseph Tartal: Great, thank you for that clarification. Our next question, what is FDA's position on serial antigen testing once per week?

Toby Lowe: So at this time we have not seen performance data to support a weekly testing interval for antigen tests. In order to increase the serial testing interval to weekly for an antigen test, we would want to see data supporting that time interval. And we suggest that developers interested in pursuing this submit a proposed study design for discussion.

Generally, we recommend that COVID-19 tests authorized for serial screening should be used as authorized including following the authorized instructions for use regarding repeat testing within an indicated time frame for asymptomatic individuals. And it's important to note that most antigen test kits that are authorized for screening asymptomatic individuals are authorized for serial screening typically over three days with at least 24 hours, and no more than 48 hours between tests.

Joseph Tartal: All right, thank you. And this is our last emailed question. And before we go to our live questions, we are going to turn it back over to Tim for a minute. But this is our last emailed question. We received some questions about the Transition Plan guidance that was recently issued for transitioning after the emergency ends. Generally, do you have any clarification on how the transition will be implemented?

Toby Lowe: So those guidances were recently issued, but it is premature to say what the final plan will be. The guidance was issued as a draft guidance and we are encouraging everyone to submit comments to the docket including with respect to the specific questions that were submitted for this Town Hall, as well as how to assure that COVID-19 tests are accurate and reliable. When the comment period closes on March 23, 2022, this year, we will review all the comments received and take them into consideration as we finalize our plans.

Joseph Tartal: And so please get those comments into the docket. And with that, I'm going to turn it over to Tim for a minute.

Timothy Stenzel: Yeah, thank you, Joe, thank you, Toby. I see that we've had substantial numbers join us since the start. So I just wanted to repeat the first announcement which is very timely and there's a deadline of Friday, January 14 for those LDTs that want to stay on the market that had been validated prior to November 15, 2021, the date of the new updated guidance. There is no volume minimum for these LDTs. We are not interested in pulling LDTs off the market that were validated prior to November 15th.

It doesn't matter the volume. And the submission is very easy, just send us a copy of your CLIA validation. It could be photocopy, scanned copy. Send it to the template email address with a cover letter. That will suffice for you to get your data into us as long as it's in by this Friday, January 14, 2022. And for you to stay on the market, you don't need a pause while we review. You continue to meet the pandemic needs with your LDT while we review it. If we have questions, we'll reach back out and ask you, and work with you if there's any issue. We wanted all the tests that had been developed to be able to stay on the market while we review, so all the LDT tests. So with that, I think we can go back to the live questions. Thanks.

Joseph Tartal: Sounds good thank you, Tim. So now let's take your live questions. To ask a live question, please select the Raise Hand icon at the bottom of your screen. When you're called on, please identify yourself and ask your question promptly. Also, please note that for time purposes, one question only. And no questions about specific submissions. So with that, our first question. I'm going to unmute you, Wenli. So please unmute yourself, and ask your question.

Wenli Ja: Hello, yes, my name is Wenli Ja, and thank you for taking my question. And I have a question on the saliva test. And I'm from XYZ Laboratory and we are actually evaluating a saliva antigen kit, which has very good analytical performance. I'm sure the clinical study will follow up to see how that performs.

And I do have a question on the PCR comparator test, I know this must have been addressed before. I think that with the new evidence, as Tim just mentioned, that also from our own experience, for various reasons we test pairs of saliva and the NP swabs sometimes for different people.

And then what we find is at the different stages, sometimes saliva has a much higher viral content than the nasal swab. Sometimes the reverse, depends on the state of the patient or the infection status and the type.

So with this being considered, if we still use NPS comparator test that will actually skew the data and I'm not sure how reliable that would be. And would the FDA consider the saliva as a comparative test? Or it all depends on what's the purpose right? If we use the saliva for antigen tests, then saliva as a comparator is just all for the assay for the self, compared to assay themselves. But if you compare different anatomic sites, there would be a different story. So I wonder what's the FDA thought at this moment, and if we can use both NP and saliva to do RT-PCR and compare with the antigen test result? This is my question, thank you.

Timothy Stenzel: Thanks, Wenli. Yes, I understand your question, and I understand your concern. For respiratory viruses, I think most people still recognize the NP swab as the gold standard. It has been problematic to use in this pandemic when people need to be tested so often, but for validating a new

test, it does remain the gold standard. And we have seen issues with saliva for molecular tests. So that will still be the comparator sample type.

You did bring up what can you do if you have discordance, particularly if the antigen test is positive and the NP swab should be negative. Those discordances can happen both directions. And there are ways to do discordant analysis up front on every sample, which can-- by using the right comparative battery of tests in order to adjudicate any discordances, if the proper concordant analysis testing is done on every sample in an unbiased fashion. That can be used to inform your PPA or NPA.

Otherwise, if it's more focused on just the discordant samples done properly as well, we have the ability to annotate the 2 by 2 tables that list your performance characteristics, i.e., if the antigen test has what looks like false positives, compared to the NP swab, but you have a saliva test that is confirmed to be SARS-CoV-2, that can be a component of discordant analysis that can be placed into your instructions for use.

So that is the way that we've been handling these kind of potential discordances for a long time, not just under this pandemic. It is a tried and true method of examining this in an unbiased way. So with this concern, I would discuss it with your primary reviewer, or if you are going to submit a Pre-EUA, ask it in the Pre-EUA submission, along with your study design and your discordant resolution design. OK? All right, thank you.

Wenli Ja: Mm-hmm.

Joseph Tartal: We'll go to our next question. Karl, I'm unmuting you. Please unmute yourself and ask your question.

Karl Enters: Yes my question is for Toby. As you were discussing OTCs using an app, one of the questions we would have as we are developing the usability study is, must we have an actual device to do that? Or can we use a hybrid model where we present the screenshots and use a keypad, for instance, to ascertain whether it's understood and acted on appropriate.

Toby Lowe: So we generally want to see the usability study performed as close as possible to how the test will be performed. So it really depends on what you're intending to use as a final product and how a user will interface with it. We would want to see the usability study address it that way.

Karl Enters: OK, thank you very much.

Toby Lowe: Mm-hmm.

Joseph Tartal: OK, thank you. Our next question, Mark, I'm unmuting you now. Please unmute yourself and ask your question.

Mark Swanson: Thank you. I had previously sent this in via email as well. So I just wanted to see if we can get an answer here. Can you clarify the language? I work with several clients. I'm a regulatory consultant working with several clients and the language has been consistent in their letters. It talks about notification to the Agency about authorized distributors and CLIA-certified labs. And I just want to know, just clarify, do they have to wait for a response from the agency before those distributors and labs can begin their activity? And then will FDA add them on the FDA's listings?

Timothy Stenzel: Mark, let me just clarify your question. You're asking for adding new distributors for a test, do you need to wait on FDA response?

Mark Swanson: Correct.

Timothy Stenzel: Yes, yes you do. We have a database of distributors some of which have known issues that we don't necessarily immediately approve. So it's important to run that distributor list by us and get our approval before doing that.

Mark Swanson: In the CLIA-certified labs as well?

Timothy Stenzel: I'm not sure what you mean by CLIA-certified labs?

Mark Swanson: Well there's--

Timothy Stenzel: What do you mean?

Mark Swanson: There's language in their EUA letter that outlines to notify the Agency of additional CLIA-certified labs. And they would have to wait for that response authorization to allow them to do that activity, correct?

Timothy Stenzel: So if you're adding labs to an LDT sort of authorization, frequently we do want to review the validation for that. We have seen issues and have been unable to add labs. But it all depends on the original authorization and the original authorization language. For instance, some have been not needed. So others have been needed. So I think that's a specific enough a question depending on the language in the authorization to go back to your lead reviewer on that application for the greatest specificity of an answer.

Mark Swanson: OK.

Joseph Tartal: Thank you, Mark. We're going to open up the line to our next person. Venkateswaran, I'm unmuting you now. Please ask your question.

Venkateswaran Kodumudi: Good afternoon. Thanks for taking my call. So my question is based on the revised update. The FDA is not planning to review any lab-based high volume, high throughput, high capacity, qualitative serology test. Is that right?

Timothy Stenzel: At this point, the priority is for high volume point-of-care or central lab tests that can quantitate the level of antibody or detect neutralizing antibody. As the science has developed here on serology, we feel that if there's going to be an expansion of use of serology, it's going to depend on whether you can have an assay that detects neutralizing antibody. Or can fully quantitate, so that if there is an immune correlate that we can put it into international units.

Because many of the studies that are ongoing are not using an EUA authorized tests or in this manner that are fully quantitative. So we need to have a way to link those study results to assays without requiring the assays to go ahead and do the big clinical validation for correlates to immunity. So this is

how we're trying to be least burdensome in applying any known correlates of immunity to serology tests.

Venkateswaran Kodumudi: Thank you.

Joseph Tartal: Our next question, Michael, I'm going to unmute. Please unmute yourself and ask your question.

Are you there? Michael, please unmute yourself and ask your question. And they've dropped off. Or no?

And go on to our next person. Meijie, please unmute yourself and ask your question.

Meijie Tang: Hi, my question is for Toby or Tim as well. Clarify the patient enrollment about antigen over-the-counter test, the clinical performance study. I recall it was OK to just have 30 symptomatic at the time of submission, and today Toby said 20 symptomatic and the 10 asymptomatic. So is there any change? Or any combinations of those that will work as long, as we tabulate the performance of each and overall?

Timothy Stenzel: I don't know if that is what she said.

[BARK]

Pardon for the dog. Kris, do you have an immediate response? I thought it was still 30 symptomatics and that you could go the serial testing route for asymptomatic screening without any asymptomatic patients. But premarket, if you wanted a single use screening test, we do want to see adequate performance on 10 asymptomatic samples prior to authorization. And then for subsequently, an additional 10 or whatever is needed to bring it up to the total of 20. Kris, can you clarify further?

Kristian Roth: Yeah, I would agree with that. In some cases, we have-- because there's other information available on particular tests --we have deviated from that. But I think what Tim is mentioning is the standard path and I think what we continue to recommend.

Meijie Tang: I see, so still require 30 symptomatic minimum, with or without the asymptomatic claim?

Kristian Roth: You know, I think I would say yes. But I would say this is a very important study detail for you. And it might be best to follow up with an email so we're just we're absolutely sure what kind of claim that you're going for. If it's single use symptomatic plus a serial asymptomatic claim, if that is the case, then just let us know, and then we can get back you with the email with exactly what numbers we're expecting from that.

Meijie Tang: Thank you.

Joseph Tartal: Our next question is from Deb. Deb, I'm unmuting you. Please unmute yourself and ask your question.

Debs Payne: Hello, everybody. Thank you so much for having these sessions. Thanks so much, Tim and Toby. If we use the CDC panel while it was under EUA prior to November 15th, and then we've ordered

primers from a different vendor where it's no longer labeled EUA, do we need to submit any paperwork for verification on the performance to the CDC single primer set by Friday?

Timothy Stenzel: So you were using the SARS only CDC EUA authorized test and you were probably purchasing those reagents from IDT or Biosearch. Is that correct?

Debs Payne: Correct.

Timothy Stenzel: And that was covered under an EUA authorization. That's an interesting question, which we hadn't necessarily contemplated in preparation for today's call.

Debs Payne: Yeah, so we now--

Timothy Stenzel: I think those details--

Debs Payne: Sorry.

Timothy Stenzel: Go ahead.

Debs Payne: So now we're just ordering the primers from IDT but they're not under EUA. Right?

Timothy Stenzel: Yeah they're RUO and they're not quality. The previous primers that were EUA authorized were quality controlled by the CDC. They would do a QC check on every batch. And can you immediately send an email to the templates box today? And we'll sort this out offline for you, Debs. OK?

Debs Payne: OK, thank you so much.

Timothy Stenzel: And ask for them to copy Kris, Tim, and Toby. When they receive it they'll then share it to us. And we'll—

Debs Payne: OK, yeah.

Timothy Stenzel: --get you back a response. Because I understand your trouble and I want to try to meet your need here to stay on the market.

Debs Payne: OK, thank you so much. Thank you. Sorry.

Timothy Stenzel: Mm-hmm.

Joseph Tartal: Thank you. I'll go to our next question from Menzelk. Menzelk, I'm unmuting you now. Please unmute yourself and ask your question.

Menzelk: So, hi, can you hear me?

Joseph Tartal: Yes, we can.

Menzelk: OK with the new omicron variant data that Siemens was able to put into their package insert, how do you recommend other manufacturers that are now conducting their studies and getting their

results back from the NIH, can they just update their package inserts? Or do they have to send that into the FDA?

Timothy Stenzel: So if the NIH has done their omicron testing on an antigen test, either an EUA authorized test or one that's going through one of the RADx or ITAP process, if it's pre-authorization we're working with RADx to put that into the labeling that we did for Siemens. But we will go through the antigen tests and update those labels.

So if a particular developer, you, wants to come in and speed up that label update showing that you are detecting omicron, I think that's an important element due to the question about omicron performance. And we want to work with you on that. So if you have NIH data you can just make that request in a supplement, and we will work with you to get the IFU updated.

Menzelk: Thank you.

Joseph Tartal: OK. We'll go on to our next question, which looks like it may be our last question of the Town Hall. So Sunil, I'm going to unmute. Please unmute yourself and ask your question.

Sunil Hazaray: Hello, thank you for this Town Hall meeting. And I might have misunderstood your answers regarding serology testing, but I just wanted to clarify if you would be accepting and reviewing over-the-counter serology point-of-care test submissions.

Timothy Stenzel: So Toby said what we were prioritizing and we are not prioritizing over-the-counter serology tests.

Sunil Hazaray: Thank you.

Joseph Tartal: OK, that looks like our last question of the day. It looks like we may have had one-- Nope, that was it. So that is the last question of the day. So thank you, everyone. We greatly appreciate your participation.

Today's program and transcript will be made available at CDRH Learn. Please visit CDRH Learn at www.fda.gov/training/cdrhlearn. You will find the recording and transcript in the subsection titled Coronavirus COVID-19 Test Development and Validation Virtual Town Hall Series. For additional questions about today's Town Hall and COVID-19 IVD topics in general, please email CDRH-EUA-Templates@fda.hhs.gov.

As we continue to hold these virtual Town Halls, we appreciate your feedback about the program series. Please complete a brief survey which you may find at www.fda.gov/cdrhwebinar. Also please remember to join us for the next IVD Town Hall scheduled for Wednesday January 26, 2022. Hopefully see you in a couple of weeks. This concludes today's program. Thank you.

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