## FDA Virtual Town Hall Series – Immediately in Effect Guidance on Coronavirus (COVID-19) Diagnostic Tests

Moderator: IRENE AIHIE June 24, 2020 12:15 p.m. ET

Coordinator:

Welcome and thank you for standing by. At this time all participants are in a listen-only mode until the question and answer session of the call. If you would like to ask a question during that time, please press star followed by the number 1. Today's conference is being recorded. Any objections, you may disconnect at this time. Now I'd like to turn over the meeting to Irene Aihie. Thank you. You may begin.

Irene Aihie:

Thank you. Hello. I am Irene Aihie of CDRH's Office of Communications and Education. Welcome to the FDA's 14th in a series of virtual town hall meetings to help answer technical questions about the development and validations of tests for SARS-CoV-2 during the Public Health Emergency.

Today Timothy Stenzel, Director of the Office of In Vitro Diagnostics and Radiological Health in the Office of Product Evaluation and Quality, and Toby Lowe, Associate Director of the Office of In Vitro Diagnostics and Radiological Health, both from CDRH, will provide a brief update.

Following opening remarks, we will open the lines for your questions related

to today's discussion. Please remember that we are not able to respond to questions about specific submissions that might be under review. Now I give you Toby.

Toby Lowe:

Thanks, Irene. Hi everyone. Thanks for joining us today. I'm going to start out by just giving a couple of updates on information that we've put on our Web site. We talked last week a little bit about the new information that we put up about polling and asymptomatic testing. We did get a couple of updated FAQs on that out shortly after last week's town hall. And then this morning we just updated a couple of our FAQs on validation and on the bridging policy and the modification policy in our guidance.

So those updates were intended to better explain that our recommendation for validation for all tests including tests offered under the policies and the guidance as well as the tests that have submitted for an EUA prior to offering the test that our recommendations for validation for all of those are included in the policy guidance as well as in the EUA templates that are referenced from the guidance.

We also clarified in the questions, FAQ, about the modifications policy and about bridging studies that the policy on modifications for use of a new specimen type does not reference bridging studies. So we would recommend that developers who are modifying an EUA authorized test for use of a new specimen type such as saliva, refer to the policy guidance and the molecular diagnostics template for information about our recommendations on validation for the new specimen type.

We also clarified in that FAQ that for modifications to an EUA authorized test we have indicated that we don't expect a new EUA or an EUA amendment in certain situations, for modifications. But we clarified that that does mean that the test is not under the original EUA, so it is being offered as a nonauthorized test under the policies in the guidance if you follow that pathway.

So those were a couple of the clarifications that we put out today. And then we - since we put out the FAQs last week including the FAQ on surveillance testing, we've gotten quite a few questions about the distinction between screening and surveillance and diagnostics testing in terms of testing asymptomatic individuals and testing different populations. So we're working on getting similar information out about that and I wanted to give a quick rundown of how we look at those different terms.

So for surveillance, we generally think of that as looking for information at a population of community level. Obviously you'll be testing at an individual level but the purpose of surveillance testing is to gain information at that population level rather than to make individual decisions at an individual person level. Screening on the other hand, is looking for occurrence at the individual level in situations where there might not be a specific reason for that individual to suspect that they would have COVID-19. So where you might be looking at all employees returning to a workplace or all students or faculty coming back to a school.

Things like that we would consider to be screening because we are looking to make a decision at the individual level there. And then obviously diagnostic testing also looking for occurrence at the individual level, but that's done when there's a particular reason for that individual to be suspected that they may be infected. And so as we have discussed previously, the tests that we've authorized so far that are indicated for individuals suspected of COVID-19, by a healthcare provider, are generally indicated that that diagnostic testing level where there is a reason to believe that individual may be infected. And any asymptomatic testing is done at the discretion of the ordering healthcare

provider.

So I'd like to provide a little bit of clarification on that. Hopefully that's helpful. And now I'll turn it over to Tim, for his update.

Timothy Stenzel: Thanks, Toby. Yes. So we're going to try to provide even more sort of helpful hints and tips today on making this whole process efficient for everybody and for aiding everyone in arriving at a decision of EUA authorizations as soon as possible. So last week I asked folks to contact me if they had not been assigned a contact within two weeks of their EUA submission. That's EUA not a pre-EUA. And it's my understanding that as of today, all of those subject EUA submissions have a contact and still there is the opportunity to reach out to me for EUAs that have not been assigned a contact within two weeks of the date of submission.

> We are now also focusing our attention on pre-EUA and where there are templates that we've provided under guidance with recommendations that would apply to a given pre-EUA, we would ask whenever possible, to use those templates to guide the process. If there is something in your development or in your plan that is not in the template as far as there are not recommendations because you have something that's not been covered, we want to in particular, focus our attention on providing developer's that feedback that is not present in guidance or templates.

I want to re-review or review as a priority EUA submission and for our review staff, which are quite busy. These are EUAs that have data even if all the studies aren't complete we want to review priority submissions on a rolling basis. So any applications deemed high priority and have data such as point of care, such as high throughput automated instruments such as, you know, those are - in both those - the situations at the point of care that does require EUA

authorization, the high through put should be obviously and that would be a priority.

And then also for any home collection where there's data or there's home testing where there is data for us to review. And obviously with home collection and home testing those activities require an EUA before authorization. You know, in working with our reviewers, we would ask that when all reviewers ask for additional information, additional analyses of data that maybe you've already provided, or any new data that may be required to complete a review, we would ask that you please provide that as soon as possible.

And this states that many times we are - will be unable to advance the application until we get that requested information. And so we would ask that, you know, that that be addressed as soon as we can, when you get those requests. Next is a general update. We are obviously now posting all NCI results. Once a decision has been made, a regulatory decision has been made, and once we complete the QC and QA of those reports. So hopefully, soon after the decision we can post those. And as of today, there are results for 21 of the tests that have been submitted to the NCI and they are now public.

So that is present - that link is present on our EUA page. All right, so another helpful hint here is if you could provide information regarding test validation using the templates that have been made available online if possible, we would greatly appreciate that. And the better organized and the greater the clarity of the information that's provided to really assist our reviewers to efficiently review that.

If there is something, for example, that they don't understand about the application that, you know, they will reach out and ask you questions. And

that obviously takes time to do that. So, thanks in advance for helping us in that way. Also, if the templates have been updated since you provided information, I would ask that you track that. And you may want to proactively reach out to our reviewers or the contacts, to ask if those updates might apply to you and determine what might be asked for there.

And so proactivity on both of our parts will help speed these reviews. Specifically regarding the serology template and the information that we will that we asked for in that template, please remember to provide data that is specific to each sample that's evaluated in your validation studies. These are also called line data. And for clinical agreement study this should include the date the specimen was collected for evaluation with the serology test, the date the specimen was collected for the PCR comparative results, the sample type evaluated plasma, serum, whole blood, finger prick, whatever, and the day from symptom onset to the date the specimen was collected, for evaluation with the serology test, the result of the PCR test and obviously the serology result.

If the serology test reports IGM as well as IGG, these results should be provided in separate columns in this line data format. Obviously timing of the various tests and symptom onset is obviously important to understand the true performance of the test. You know, we do look at what are the results after symptom onset; what are the results in days after PCR results? So that helps us to understand the true performance of the test and when a test might turn positive.

It also informs future users of that test so that they understand those kinds of performance characteristics. And then also, when you do study protocols for each validation study, please provide those predefined study protocols electronically, to our review staff, so they can fully understand the validation

testing that you performed with your tests and the measures you used to determine if your test met its pre-specified, predefined performance targets. And with that, we can turn it over to the operator for questions and we look forward to the rest of the call. Thank you.

Coordinator:

Thank you. We will now begin the question and answer session. If you'd like to ask a question please press star 1, unmute your phone, and record your name clearly. Once again, to ask a question, please press star followed by the number 1. Our first question comes from (Mark Hagman). Your line is open.

Timothy Stenzel: Hello, (Mark). Make sure you're not on mute.

(Mark Hagman): Can you hear me now?

Timothy Stenzel: Yes.

(Mark Hagman): I'm sorry. Good morning, Toby. Good morning, Tim. This is (Mark Hagman). I'm following up on my question from two weeks ago, where I asked about fully at home testing, wondering when a new template may be coming out. We still have over 1.6 million people who are testing their blood every day, who are diabetic and we think that the finger stick technology and validation can be done to show that these tests are safe and effective for their intended use. So I just would like to get an update on what your feelings are for when the next template may come out. Thank you.

Timothy Stenzel: Yes. There are a couple of template updates that we're still working on. And we'll - so, for the molecular templates we don't have a section on the molecular template, the manufactured kit template for say point of care. So we're looking at updating that. And then the at home testing, the first one will be for molecular and that is nearing completion and final edits, so hopefully

we'll get that out very soon. We also are going to have updates to serology for home collection and home testing for serology. So those are all high priority.

The first one to come out will probably be the molecular home testing one.

The - we can't exactly say when that date will be. In the interim, we want to be able to provide and gain our information through the pre-EUA process for those that are developing the molecular point of care, molecular home testing, serology home testing, and serology collection incidents.

(Mark Hagman): Thank you.

Coordinator: Our next question comes from (Cory Yekkel). Your line is open.

(Cory Yekkel): Hi. Can you hear me?

Timothy Stenzel: Yes.

Toby Lowe: Yes.

(Cory Yekkel): Okay. It's our understanding that CDC is working on a multiplex assay to detect COVID flu A and flu B from a single specimen. Can FDA offer some insight on how this fits under authorization? What is FDA's view of a test of this type, a test that detects all three versus other tests?

Timothy Stenzel: Yes. So we consider this panel or multi-analyst testing. We have evolved through this pandemic first, focusing on getting assays out that can detect SARS-COV-2 primarily, or antibodies to COVID. The next phase that will begin in the fall, is when we begin to see whether or not there are other respiratory viruses that will be causing symptoms other than SARS-COV-2.

And because we anticipate that there will be a really - a huge amount of SARS-COV-2 testing which may make it difficult for labs to test for other respiratory viruses, we are now very open to reviewing submissions that expand beyond SARS-COV-2 to include other respiratory viruses. We have already authorized some who added SARS-COV-2 to an existing panel. Those panels were previously cleared or granted by the agency prior to this pandemic.

We now are welcoming all comers for panel and we have for analyzed other than SARS-COV-2 we are taking an efficiently streamlined approach to getting the validation done. It is not at the normal pre-market bar that we set and, you know, had set prior to the pandemic. We do add, for those tests that have not, other than SARS-COV-2 that have not been cleared previously, to the pandemic in lieu of a declaration, we are asking for post-market commitments to rapidly move that Fas soon as possible after authorization through the regular review process.

So hopefully that addresses your question.

(Cory Yekkel): It does. Thank you.

Coordinator: Our next question comes from (Susan Sharpe). Your line is open.

(Susan Sharpe): Thank you. And thanks again, Tim and Toby, for all of your work. I'm just wondering if anybody has any kind of an update they can give us on the 3-D printed swabs and where we are with that.

Timothy Stenzel: That's a great question. Toby, do you have - I can say something, but you might be a little bit better prepared for this than I am.

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Toby Lowe:

Sure. So we did have a town hall specifically on 3-D printed swabs, several weeks ago now, at this point. And we did put up some FAQs about 3-D printed swabs on our Web site, on our FAQ site. So basically we don't have a recommendation specifically, about 3-D printed swabs.

They are considered to be, you know, generally swabs are considered to be class 1 devices, so we do have some information on the FAQ page about the regulatory requirements there, basically for Registration and Listing, quality systems, medical device reporting, corrections and removals, and other applicable regulatory requirements, but not pre-market review.

We also posted a link to some resources that are available through the NIH 3-D print exchange, that we think can be very helpful for developers that are considering printing swabs. And we also point to the general labeling requirements, because we think that, you know, as with any medical device appropriate labeling is important for users to know what it is that they're getting. So that's the information that we've got so far on 3-D swabs.

Timothy Stenzel: Thanks, Toby. And just to be clear, we are not asking for, nor are requiring, and we won't be doing EUA authorizations for 3-D printed swabs. Thank you.

(Susan Sharpe): Thank you.

Coordinator: Our next question comes from (Andrew). Your line is open.

(Andrew): Hello. Can you hear me?

Timothy Stenzel: Yes.

(Andrew):

Hello? Yes. Hi, Tim. I have a quick question about testing not of COVID infection or antibody, but rather testing around associated genetic risk factors. So there have been a number of publications in the past few months around things like HLA blood types and blood types on red blood cells, A, B and O, that can potentially be indicators of a risk for more severe Coronavirus infection. Would reporting of those kinds of things, rather than status of infection or antibody, be considered for enforcement discretion?

Timothy Stenzel: If there are a claim around use for COVID patients, then those claims would require an EUA authorization. When we get inquiries about such tests, we take a look at what's on the market already and what can be used. And determine, you know, if there are a shortages need. But in general, I would say if somebody wants to make a claim around suitability and COVID then they would need an EUA authorization for that. And so if that's something that's of interest to you then you can reach out to your EUA template email address and we can address any questions you might have at that time.

(Andrew):

Thank you. I'll certainly do that for more detail. But just quickly, to clarify if there is no specific claim but rather say linking to information for a patient or a consumer that there has been some research around that, would that still need an EUA?

Timothy Stenzel: So that's also considered part of labeling. And if you were promoting it - for the use in COVID patients in general yes, that is something that we would review. If the test is just out there, they are already authorized pre-COVID, but clinicians figure out that it can be used without, you know, without the developer promoting it for this purpose in any way, then that's all - you know, they're still measuring hematocrits out there, for example. They don't need a COVID-specific plan for that.

(Andrew): Right. Okay.

Timothy Stenzel: Toby, do you have anything else to say about that?

Toby Lowe: No. I think you covered it.

Timothy Stenzel: Thank you.

(Andrew): Thank you.

Coordinator: Our next question comes from (Brian). Your line is open.

(Brian): Hi, Tim. My question is about the external controls. It's my understanding that

with regard to say serology test kits, the lateral flow devices, that you all are

now asking for proof or evidence of external controls in addition to the internal control. Can you expand on that? And is there - are you looking for

each manufacturer to provide those standards? Are there any US-approved or

authorized external controls that you are also validating?

Timothy Stenzel: So, I am not aware of any standalone serology controls that we authorized for

the pandemic. It is helpful for the users to have something that's provided by

the developers to be able to do quality control procedures on the schedule as

they deem appropriate or as is required by laws, regs, and statutes and other

requirements of accrediting agency for example.

So we are asking that because it is just something that we would like to see.

We will work with developers if there are challenges in obtaining those and

some of these things could potentially be put into a post-market commitment

as we try to get tests authorized as soon as possible. Hopefully, that addresses

your question. But it is an unmet need and we're trying to address that as best

we can.

(Brian): Thank you.

Coordinator: Our next question comes from (Tammy). Your line is open.

(Tammy): Good morning. Can you hear me? Good morning.

Timothy Stenzel: Yes. Yes. Welcome.

(Tammy): So my question has to do with, you know, recently there's been let's just go

ahead and say it, the ID Now and interpretation results and repeat testing

where it is that for the isothermal method versus PCR, if there is discordant

results the PCR result is the one to be interpreted. My question is if you're

looking at two different methods of the same limit of detection or sensitivity,

like two different PCR methods and you have discordant results, how do you

go about interpreting or is there any other action to be taken before

interpreting results?

And I'm talking about a circumstance where it is - you have had collection

within 72 hours from one PCR method to another.

Timothy Stenzel: Okay. So there are more than one test out there that we've authorized that have

the limitation that negative are presumed negative. And the language is

usually conditional that, you know, basically, as clinical signs and symptoms

warrant, you may want to reselect to another molecular test. And that applies

to the Abbott ID Now. If that - and then, those tests should obviously be EUA

authorized. And that would be on the test that I would recommend that you

would rely on as far as interpreting those two individual test results.

Obviously taking it into the context of the whole patient experience is

important as well. No test is perfect. Even the reflex test may have an issue.

Yes we are now asking in applications that performance assessments be done relative to another EUA authorized test instead of just contrived samples against the test's own say LOG as required when there were not plentiful samples and when there weren't available other tests in which to make a comparison. So two different tests can very absolutely have different LODs and therefore, potentially for a very low positive, hopefully not commonly, it can have discordant results.

And that is a challenge to interpret those results. Each lab that brings up a test of their own and gets EUA authorization, or brings in a test from a manufacturer, we want to sort of kick the tires on that test to understand just what they feel is its performance characteristics. When it's EUA-authorized already we're not asking for a full validation. They just want to get their understanding of that. Most labs that do this will come to a fairly rapid assessment of if they have more than one test in their lab, which test might be a little bit more sensitive and which test might - and hopefully both tests are equally specific so they're not either coming up with any false positives. And therefore if they have that understanding of which test might be a little bit more sensitive, they would assess that that is the test that they might rely on more readily than another one. If developers are, you know, spending a sample from their lab and are assessing some concordance issues, the FDA will look at line listing data as I mentioned, for serology, but also for molecular tests.

And having a good understanding of what test was performed, if there are CT results for both, which - what are the CT results for each of the different tests for all the results that are positive for each test. And so we can readily see things, if an occasional sample might be missed in one comparison if all of

those are at the low end of the sensitivity range. And as long as overall performance is adequate then, you know, there are pathways to seek and get authorization. I don't know if I quite addressed your question.

((Crosstalk))

(Tammy):

Yes, and no. So I'm also, you know, with how things are happening real time and as, you know, testing becomes into a higher demand and different methods will have different levels of operator intervention in order to perform the test for us. So as is that laboratory in for performing, you know, 1000 tests very for PCR methods versus one versus another where those different methods like I said might have a different level of user interaction and possible sources contamination produce false positives, you know, it kind of sort of complicates the matter when it is, you try to interpret which result is the more reliable one not in terms of sensitivity but in terms of like I said, just thoroughly environmental circumstances that can affect the quality of the test. So does that help clarify what it is I'm trying to look at?

Timothy Stenzel: Yes. And I just don't know that I can, you know, without knowing the specific tests which is not appropriate for this specific audience and knowing some more details about like, you know, someone might be able with knowledge of both tests, give you a little bit more guidance. The one thing to remember is, you know, for those who really don't know the details of diagnostics testing. There are a lot of variables that can play into the overall performance of the test. And the FDA does its best job to further understand the whole sort of performance, you know, from sample collections all through to at least result reporting from the tests or the instrument that's doing the testing.

> And that is that it can be the full review the, you know, understood - the results are understood as say positive and negative. And there are many

variables along the way. You know, if it's a very manual assay then it obviously can be highly user dependent and which is why we normally ask for precision suitability with multiple uses, multi-day to try to get at whether - but that's not what we ask for under an EUA. And, you know, because we're addressing an emergency situation, we are focused on the immediate public health and so we don't have those same sort of understanding of the data.

So, you know, in an emergency situation we all try our best to get optimal results and but, you know, there are variables in sample collections - different people swabbing noses can make a difference. You know, there are these multitude of variables. And then the reaction themselves are highly complex reactions and not a simple, usually not a simple sort of reaction.

So all sorts of variables can come in this test - timing, temperature, and things like that. So we assess the overall performance of tests in this emergency. And I would urge not over reliance on any one particular result, whether it's positive or negative. And that's generally the case in normal clinical practice. Yes, we would love to always rely on a test result as being the absolute truth. That's unfortunately, you know, an objective that is really sometimes if not most of the time, hard to achieve and you could absolutely count on one single result, whether it's within this emergency, during this emergency or after this emergency.

(Tammy):

Okay. So concerning this, you know, I hate to monopolize the time, but one more thing. So you're doing something like it where there's discordant results on the pre-symptomatic or asymptomatic patient where it is that typically any sort of laboratory result has to be balanced with the patient's history and presentation, again this is kind of the real life circumstances - that is that providers and personnel have to face as, you know, testing goes on and again the increase in demand of the testing especially when it is that new businesses,

or businesses are reopening, travel is reopening, and those - that level of testing is ramped up across the nation. And any thoughts on that? And I'll wrap things up there.

Timothy Stenzel: Yes. And, you know, (unintelligible) and we need to get to further questions and again, pre-symptomatic, asymptomatic testing, we don't have enough understanding of the viral course, the viral levels and all the different sample types. And even with symptomatic patients and the highest performing tests out there, even during the middle of the, you know, the most viral load we already know that even with multiple samples, perhaps even the same test in the same patients, can yield different results just because of some of the variables as I suggested.

> But also we're add layering on top with the actual biology. Where is the virus most being shed right now? Are we sampling that and we sometimes don't know the best place on a given patient with a sample. Can we move onto the next person. Thank you.

(Tammy):

Thanks.

Coordinator:

Our next question comes from (Padumi). Your line is open.

(Padumi):

Good afternoon. Can you hear me?

Timothy Stenzel: Yes, we can.

(Padumi):

Yes. Good afternoon. I really thank all of you for your hard work and the excellent work that is done and these virtual town hall meetings have been really, really helpful for developers like us. My question is specifically about serology testing. As of today, I think around 196 tests are there in the

notification list, of which 11 are authorized and I see 48 tests are recalled. So it means, you know, there are so much number of tests and you mentioned in your earlier I think over 60 times or more number of applications you have received.

So the bottleneck here is the limitation of the reviewers at FDA and also the limitation of NCI to do an independent validation. My question is, is your department asking for additional resources? Is there any timeline when all this backlog will be cleared? What is the future like looks like as far as the developers are concerned?

Timothy Stenzel: Yes. So as I've explained on prior calls and tried to explain today, we do have a whole lot of applications. We have more than doubled our review staff on IVD you know, serology and diagnostic tests, molecular management tests. And we've added additional support personnel. These reviews do require expertise in infectious disease and diagnostics in general, in order to do a professional review. And it just isn't overnight that you can hire and train up or hire the expertise that you need.

> We have received additional funding to hire additional staff, which we have been adding. And we have when needed. We have been able to bring in additional resources from elsewhere in the FDA. We have had reviewers come over from CBER for example, and I want to thank CBER and those reviewers who have joined us.

> The other thing that we've done and I've mentioned this before, through the notification pathway and the guidance, developers, if they qualify, is to notify us in their applications. And once received and accepted and posted, the developers can market their tests in the US. And we then do the priority review. one of those priority reviews is if there are any critical public health

concerns. And that would be also a priority review. And so all I can say is that we're working our hardest.

We provided the easiest possible pathway for many developers to get onto the market. There are certain aspects that we need review on and we focus our attention on those high priorities as I mentioned earlier in the call. Thank you for your question. We're very dedicated. We're working very hard and as I already indicated earlier in this call, we want everybody to have a - every EUA application to have a contact to help you get regular updates on our direct team, but at least weekly get an update from us prospectively, and not waiting on the developers to reach out to us.

So everybody - I want them to get from us, a regular update no less than weekly. Thank you.

(Padumi): Thank you.

Coordinator: Our next question comes from (Mark). Your line is open.

(Mark): Hi. Thank you. Who should we contact if we have not been assigned a reviewer within two weeks of submission? We received an acknowledgment letter on May 16th but we haven't received any communication regarding assignment of a reviewer.

Timothy Stenzel: Okay. Is it a EUA, or a pre-EUA?

(Mark): It's an EUA.

Timothy Stenzel: EUA? Well you should have already been assigned so that was someone missed that. I apologize. If you send us an email today then, to the templates

email address and ask that it be forwarded to me, Timothy Stenzel, I will specifically look into it and get down to it and we'll get you assigned somebody shortly. And I apologize.

(Mark): I'm sorry about that. What was your name again?

Timothy Stenzel: Timothy Stenzel, S-T-E-N-Z-E-L

(Mark): Thank you.

Coordinator: Our next question comes from (Russell). Your line is open.

(Russell): Hi. Thank you. I want to echo everyone's appreciation for your help and transparency. This really makes this a much clearer to understand. You

mentioned earlier, testing for IGM and IGG and how we structure the data, there is several papers out of China had indicated a combination of PCR and total antibody as the best accuracy for making the diagnosis. Would we have

to have a separate submission for total antibody or could we fold that in with

IGM and IGG?

And if we were to create a multiplex platform and we already had EUAs for PCR and for serology, would we have to make a second submission for the combined test?

Timothy Stenzel: So I think I understand your question, but I'll give you a chance to address it and respond if I'm not quite right on target. So, first of all, I refer folks to the CDC guidance document on serology testing and in that I believe it says that we don't have any specific recommendation about which isotype and which type of serology test that the developer uses. It may say in there that IGM, I forget the details, may not have as much value as IGG, the total or pan.

The performance characteristic is that we expect to see in our template, and we're in the process of updating our template for serology to address anybody who is interested in IGM only, just as an aside. And if somebody wants to come in with, you know, a pan or a total then we would assess that depending on how results are reported out. So if someone has a test and it separately currently reports out IGM and IGG results, we would ask for data to support each independent parameter and look at the performance characteristics of it.

We would also assess the overall performance characteristics with the combined sensitivity, the combined - and the combined specificity. If results of IGM and IGG individually, are shielded from the user and something - and it's from a different, you know, a different assessment is made about a positive and negative then we wouldn't be looking at individual data. We'd be looking at the overall results. Hopefully that addresses your question.

(Russell):

Yes. And I guess there was a corollary question which if you don't have time to address it is fine, but it has to do with if there is approval for - if you have an EUA for both PCR and serology separately, if you combine the testing does that require separate EUA?

Timothy Stenzel: So if you want to make a claim, if you're PCR positive and then you're serology positive what does it mean?

(Russell):

Well I'm thinking more in terms of if...

Timothy Stenzel: Combined tests?

(Russell):

Yes. Combined tests. So the indication coming out of China in several papers is that combining PCR and total antibodies has been the best way to make the diagnosis for patients who have clinical suspicion.

Timothy Stenzel: Yes. If you want to make the statement in the instructions for use for your particular, you know, there's one device in the combining the testing and the results, then we'll look at that. If you have two different applications in an EUA authorization and you want to combine them to make and additional assessment on patient status and your claims for COVID-19, then yes, the claims about the combination of the test would be reviewed.

> It - potentially if there are EUA authorizations for both already for one pathway, it could simply be an amendment to both, with the data and updated labeling of both. Unless you would have package the things together and send us the list together, which may not be the most efficient. So I think any subsequent questions are probably best addressed specifically, to the EUA template email address, or one of the other reviewers or contact that you have been given for your EUAs. Okay?

(Russell):

Yes. Thanks very much. That's really helpful.

Coordinator:

Our next question comes from (Ray). Your line is open.

(Ray):

Hello. Thank you very much for taking the question. And thank you for continuing to sponsor these town halls. This is a question about RUO components that may get qualified as a part of a CLIA EUA new submission for a molecular test and these components go across the entire workflow for RT PCR, enzymes, extraction systems, thermocyclers, the like. If that EUA is issued to the CLIA laboratory, what would be the expectations for labeling of those components that have found a new use?

Timothy Stenzel: Yes. That's a good question and we've gotten increasing inquiries on that and

we are working on further clarification. Toby, I think we already have some FAQ on there. Do you want to address that any further at this time?

Toby Lowe:

Yes. So I - we are working on getting it considered. We're looking at getting more information out on this. And so, you know, there is a difference between an RUO component and an RUO test kit. So, you know, we do have a guidance document out about appropriate labeling and distribution for RUO products. I would encourage you to take a look at that.

If a laboratory is purchasing RUO components and developing their own test from scratch and they get authorized for that, then that test is authorized; the components are not.

(Ray): Right.

Toby Lowe: So the - if there is a commercial manufacturer that is developing a complete

would not be something that we would think is appropriate.

test kit and is selling that as RUO to laboratories to do their own, you know,

so that the laboratory would have to bring that in to their own EUA, that

(Ray): Right.

Toby Lowe: I'm a little bit unclear of what exact situation you're asking about, but

hopefully that's helpful.

(Ray): Yes. It is about the former situation where it's just components, not part of any

design systems for SARS-COV-2 detection. So specifically, there's an

instrument, high throughput thermocycler that I know is under consideration

of an EUA by a CLIA laboratory. And the - it's just that situation that that

instrument is labeled RUO at the moment. And it was, considering what

would be the consideration if the EUA issues out.

Timothy Stenzel: None. We will - if they're using an RUO instrument, what matters is the validation that shows accuracy of the testing. Even in non-pandemic situations I'll just say that LDT developers that seek FDA authorization, can in some situations, use RUO instruments. Sometimes it's the only thing that's available to a developer. I've had, prior to my FDA experience, I had that very same experience and we were able to go on and get a PMA approval, using RUO instruments because it was the only thing that was available.

> So the FDA in all situations takes into consideration these things. And there are ways to mitigate risks, you know, to RUO labeled components and instruments. And we are taking a very obviously light approach in this pandemic in order to address the emergency while at the same time trying to make sure that all tests out there are accurate. So, thank you.

(Ray): Yes. Thank you very much.

Coordinator: Our next question comes from (Colleen). Your line is open.

(Colleen):

Hi. I'm (Colleen) from Biochemical Diagnostics. We're a commercial third party control manufacturer and we're working on trying to develop the COVID control for the serology lateral 2 antibody testing primarily, because that's the market that we're in. And I was just wondering if we need to apply for an individual EUA or if the lateral flow manufacturers would need to modify all of their existing EUAs to let them use an external commercial control and any support you have to - or any ideas to help a manufacturer support, you know, quality control that would work in the industry currently the existing antibody manufacturer of the lateral flow.

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Timothy Stenzel: Yes. So if somebody wants to incorporate your controls into their assay and refer to them specifically, then we would want to see the data in relationship to their - if they want to include it say in their instructions for use as something that they would recommend, we just want to make sure that it's working with their test. So - but as far as offering controls independent of the specific assay, we definitely are encouraging that. Toby, I would just turn it over to you for any considerations that might be important.

Toby Lowe:

No. I think that you covered it there.

Timothy Stenzel: Okay.

(Colleen):

So would each lateral flow manufacturer have to revise their EUA or would our EUA lift their devices and support - do we send the supporting data or do they need to resubmit?

Timothy Stenzel: Well we would - go ahead, Toby.

Toby Lowe:

So as Tim was saying, it depends on how they're including it in their assay. So if they are referencing by name that would be a step that's included in their instructions for use, so that would require their EUA to be updated. I would have to look back at the serology EUAs to see how controls are incorporated because I'm not positive. But I think that would be an update to their IFU. So it's a pretty easy update, but we would want to see the data.

(Colleen):

Okay.

Timothy Stenzel: And an individual control manufacturer would want to have information about, you know, those - the performance - those other manufacturers' tests. You know, that may require - well I just don't know how to go about that right now. I would suggest that you approach this at the EUA template email address.

(Colleen):

Okay.

Timothy Stenzel: It's not a common request. We generally are not reviewing individual controls unless they're incorporated as part of an assay.

Toby Lowe:

Right. I believe the controls themselves would be possibly exempt, so we would want to see that they are registered and listed appropriately. And then the assays could incorporate them into their IFUs. So...

Timothy Stenzel: And I do think that's specific performance claims that are not used in any one particular assay or a set of assays you mentioned by name, might require more than what's covered in class 1 exempt. So if that's something that you're really interested in then please come to us with what you want in a question, to the EUA templates email address.

((Crosstalk))

Toby Lowe:

They are Class 1 exempt if they are not tied to an assay.

(Colleen):

Okay. Terrific. Thank you. I appreciate your help. And I also like these workshops every week. I think they provide a lot of value to manufacturers. So thank you for the effort you're putting into it.

Timothy Stenzel: You're welcome. You're welcome. Thank you, everyone.

Irene Aihie:

Operator, are we done with our questions?

Coordinator: Yes, ma'am. That was the final question.

Irene Aihie: Thank you. This is Irene Aihie. We appreciate your participation and

thoughtful questions. Today's presentation and transcript will be made

available on the CDRH Learn Web page at

www.FDA.gov/Training/CDRHLearn, by Tuesday, June 30th. If you have additional questions about today's presentation, please email CDRH-EUA-

Support@FDA.HHS.gov. As always, we appreciate your feedback. Following

the conclusion of today's presentation, please complete a short, 13-question

survey about your FDA CDRH Virtual Town Hall experience. The survey can

be found at www.FDA.gov/CDRHWebinar, immediately following the

conclusion of today's live webinar.

Again, thank you for participating. And this concludes today's discussion.

Coordinator: Thank you. And this does conclude today's conference. All parties may

disconnect.

[End of segment]