

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

Moderator: Irene Aihie

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12:15 pm ET

Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode. At the end of today's presentation we will conduct a question-and-answer session. To ask a question, please press star 1. Today's conference is being recorded. If you have any objections you may disconnect at this time. I would now like to turn the meeting over to Irene Aihie. You may begin.

Irene Aihie: Thank you. Hello. I'm Irene Aihie of CDRH's Office of Communication and Education. Welcome to the FDA's 48th in a series of virtual town hall meetings to help answer technical questions about the development and validation of tests for SARS-CoV-2 during the public health emergency.

Today, Toby Lowe, Associate Director of the Office of In Vitro Diagnostics in Radiological Health and Timothy Stenzel, Director of the Office of In Vitro

Diagnostics in Radiological Health in the Office of Product Evaluation and Quality, both from CDRH will provide a brief update.

Following opening remarks, we will open the line for questions related to the development and validation of tests for SARS-CoV-2. Please remember, during this town hall 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. Thanks everyone for joining us again. As we started, we mentioned last week, we started taking questions ahead of time by email so I will give an update on those as well as a follow up on a question or two from last week.

So first I want to touch on a question that came in during the call last week that we then followed up with over some emails and wanted to clarify for everyone on the call. This is regarding the use of pooling and in what situations that is considered screening versus surveillance.

We have gotten a number of questions about surveillance versus screening and it is a tricky topic.

So we did clarify with this specific situation that was asking about collecting a ten-swab pool where all the swabs are placed into the same transport tube with media. With the assumption that you plan to recollect specimens from each of those individuals if the pool is positive, where the intent is to determine each individual's COVID-19 status for SARS-CoV-2 positive or negative status -- such that that individual could or would take action based on that result.

So in that case the testing protocol that was proposed appears to be screening since it is intended for individual action.

Along those same lines we received over email one other question related to use of an EUA to test for surveillance purposes. And what I would like to ask is that anyone who is interested in or has specific questions about surveillance, please send those in by email.

We receive a lot of questions about testing proposals that are actually screening, not surveillance. And so we want to make sure that we have all the pertinent details before we give you feedback so that we can make sure that we provide the appropriate feedback for your specific situation.

So let me start walking through the rest of the questions here that we received. We received some questions about supporting a screening claim when there is already an EUA for the qualitative detection of SARS-CoV-2 and this is related to the supplemental EUA template that was issued last week.

So our recommendation generally for validating asymptomatic screening are included in the main molecular EUA template if you are interested in an individual screening claim.

If you are interested in the serial screening claim as outlined in the supplemental EUA template, you likely don't need any additional preauthorization data. In that case we recommend that you submit a supplemental EUA request with your requested indication including the serial testing interval and your proposed post authorization validation study.

Regarding serial testing we also received a question about antigen tests and whether the serial testing approach would be acceptable if the antigen assay does not reach the 80% sensitivity in symptomatic individuals.

We do discuss in the antigen template for test developers that strategies for serial testing with less sensitive tests such as the PPO less than 80% may be able to support authorization. But in those cases we would expect the clinical evaluation in an asymptomatic population to be completed prior to authorization of a screening claim.

The shift of the validation to post authorization discussed in the supplemental template is not applicable for tests with sensitivity below 80% in symptomatic subjects.

Timothy Stenzel: And I would just add that the pathway for, you know, those suspected with COVID for an antigen test, you know, it's still available for those that have a single test PPA of less than 80% and if, you want to use serial testing in the symptomatic population as well. So pathway still remains open as described in the health piece we wrote back in September. Thanks Toby.

Toby Lowe: Great. Thanks for adding that Tim. Next we received a question about the process for submitting data to OIR for an EUA, so to clarify, we do have the EUA templates for serology, antigen and molecular test up on our Web site and ask that you submit your EUA request to cdhrh-eua-templates@fda.hhs.gov . Those templates generally reflect our current thinking on the data and information that developers should submit to facilitate the EUA review process.

Once we receive that we review your EUA request and determine whether it is sufficient to support an EUA authorization. And then at that point if we do believe it's sufficient, we would authorize the test then issue the sponsor letter of authorization and add that test to the FDA landing page.

Now we received a question about an OTC antigen test and asking to confirm that the data should show a minimum of 80% agreement with a predicate to be considered for approval for an EUA.

So just to clarify some terminology there, for an EUA review, it is different than a 510k review. So for an EUA, it is not a substantial equivalence determination so there is no predicate.

But we do often, you know, ask for a comparator test to be used in your clinical evaluation so I think that's likely what this question is referring to.

And we do recommend for OTC tests in the antigen the - sorry, the non-lab template, we do recommend a minimum of 90% PPA for OTC tests as compared to the comparator test.

And in the new supplemental template issued last week we recommend a minimum of 80% PPA for serial testing claims.

Timothy Stenzel: And those PPAs are in symptomatic individuals. And the comparator test can be, you know, the recently granted molecular test and any subsequent ones coming in for full authorization could use that test. But then if you use the EUA authorized comparators as long as they are high sensitivity molecular tests with an extraction step. Thanks, Toby.

Toby Lowe: Thanks Timothy. And that leads perfectly into one of the next questions which was actually about the BioFire DeNovo that was recently granted. So as I'm sure most people have seen BioFire was issued a De Novo for their extended respiratory panel and includes SARS-CoV-2. And this question is asking whether their test is now the only one that can be used as a predicate for subsequent submissions by other manufacturers.

So since BioFire was entered a De Novo they are currently the only legally marketed predicate for a 510k submission until subsequent tests are also cleared through the 510k pathway.

So for future 510k submissions BioFire is currently the predicate to use there. But for your comparator, for your clinical evaluation you can use BioFire but you also can use an EUA authorized highly sensitive RTTCR assay for the clinical evaluation as well as for EUA requests.

And we do recommend that if you intend to pursue the 510k pathway that you submit a pre-submission to discuss your proposed validation strategies and your comparator methods.

Timothy Stenzel: And I would just add, since we have not granted a serology test or an antigen test that those initial applications would be through the De Novo pathway.

Toby Lowe: Yes. Great. Thanks. And continuing on the BioFire path, we have a question about an EUA under review, an EUA request under review for a similar expanded respiratory panel RSV and SARS-CoV-2. And whether they need to figure out how to perform clinical studies this year even though there is the low influenza prevalence in light of the BioFire De Novo or whether the EUAs would be able to remain in place.

And so I do want to clarify that the BioFire De Novo does not impact any EUAs other than their own for that identical test which we revoked concurrent to granting the De Novo for the same test.

BioFire's other EUAs including the point of care test as well as EUAs for other - where other developers were not impacted.

We obviously can't anticipate when the public health emergency will end but we are committed to helping to ensure that the public has access to a wide variety of test of options for COVID-19. And we do intend to continue to review EUAs to address the public health needs.

And continuing on the influenza and RSV line of questions, we have a question asking whether FDA is open to the use of archived specimens to pursue clearance of an extended respiratory panel to include flu A, B, RSV A&B and SARS-CoV-2.

So generally to evaluate the clinical performance of your multi-analyte test a prospective clinical study should be conducted. Considering the public health needs in the current emergency, a clinical performance study in support of your EUA request may be conducted at one site testing archived, positive and negative clinical samples with known specimen types.

The pre-selection of archived positive samples should represent a range of viral load or CT values including low positive samples near the assay's cut off. And since this is typically for a device that has not been -- excuse me -- FDA cleared for the respiratory pathogens included in the test and it's likely that the test will be used in patients with respiratory symptoms in lieu of an FDA cleared respiratory panel, we do intend to include a condition of authorization that you conduct a post EUA the post authorization prospective clinical study that would include a minimum of three sample collection sites and three testing sites prospectively in patients with general respiratory symptoms.

Timothy Stenzel: And if someone is interested in pursuing a full authorization of an EUA panel we would still allow some archived sample use, however, we would ask for

that prospective clinical study for the conversion to a full authorization and collect as many positives as feasible. You know, we understand that some respiratory viruses especially flu are very low in circulation even during peak respiratory season during the pandemic.

And so the recently authorized BioFire and De Novo in the special controls does speak to this use of archived samples if the prospective study demonstrates low prevalence of certain viruses. Thank you.

Toby Lowe: Thanks, Tim. The next set of questions that we received is regarding the difference between EUA requirements between prescription use lateral flow antigen tests and non-prescription use lateral flow antigen tests.

So generally the recommendation for analytical and clinical validation are included in the EUA template. And we expect that the clinical evaluation be conducted in the appropriate setting such as point of care or at home depending on the proposed indication.

If you are seeking an asymptomatic screening claim you should validate in that population. Though as we have discussed in the supplemental template issued last week you may request a serial screening claim based only on symptomatic validation.

Additionally for tests intended to be performed by lay users you should submit usability data. And for OTC tests for the lay user who will also receive and interpret the results themselves, we would expect user comprehension data.

The question further asks if data from asymptomatic individuals for an OTC claim could be done post-authorization? So generally for non-prescription tests we do expect that they will include a claim for asymptomatic screening

since there would not be a healthcare provider involved to determine if the individual has symptoms or is otherwise suspected of COVID-19.

And generally we do expect to see that symptomatic - sorry, the asymptomatic validation pre-authorization. But in the case of serial screening per the supplemental template we will consider authorizing that claim with a post-authorization condition to establish performance with asymptomatic individuals when your PPA is at least 80% in symptomatic individuals.

We received a question about high volume and low volume settings or tests for a lateral flow test. And we have discussed this previously where we do prioritize review of EUA requests where authorization would significantly increase testing capacity such as tests that reduce reliance on test supplies and try to report widely distributed tests to address public health needs.

We can't unfortunately provide specific numbers of what we consider to be high or low volume or throughput. But if you need help determining whether your test would be considered high testing capacity we recommend that you reach out through the EUA mailbox with information about the features of your test.

Timothy Stenzel: I would add that lateral flow devices are one at a time devices and if they are being performed in a high or moderately complex lab they are not high throughput tests. And so their prime value in the pandemic is in the point of care or potentially the home setting. So that's where we focus our priority reviews for lateral flow devices.

Toby Lowe: Thanks, Tim. We received a question about over the counter test kits and whether or not they are required to report the results to public health

authorities. And we do encourage developers of home tests to include mechanisms for reporting results to public health authorities.

We don't intend to hold up authorizations of home tests that do not have this. But we have in some cases included the development of such a mechanism as a condition of authorization for a home test that we have authorized before that test has been available.

Timothy Stenzel: Yes. And that's some period of time after authorization. And absolutely we see the reporting of data from all types of tests as useful for managing this pandemic. And any method that can, I don't know, streamline the reporting of that would be helpful. And HHS administration have been working on pathways to do this and they continue to make advances. And we would refer you to them and their announcements on the availability of reporting features. Thank you.

Toby Lowe: Great. And then the last question that we will go through from the pre-sent questions is regarding assay controls for home tests and whether external or internal controls are needed for at home tests. And so we do generally believe that external controls are important for quality control and training, but we don't think that they are typically needed for at home tests.

However, we do recommend that at home tests have an internal control to ensure that the test results are valid. And with that I think we can turn it over to live questions.

Coordinator: Thank you. We will now begin the question-and-answer session. If you would like to ask a question please press star 1. Please unmute your phone and record your first and last name clearly when prompted - your name is required to introduce your question. To withdraw your question you may press star 2.

Once again at this time if you would like to ask a question please press star 1. One moment please for our first question. Our first question is from (Parvan), your line is open.

(Parvan): Hi, thank you for doing this. I'm, (Parvan), I'm with GreenRoad Diagnostics. We have been added to the commercial manufacturers' notification list in late December and been under high throughput EUA review ever since. However, this Monday we received mail from the FDA team saying they are no longer under active EUA review as we are not high throughput.

We have a couple of questions but we are just adding more color to what we are doing. Excuse me. Our test is a direct saliva RT-LAMP assay with MRA detection which allows for massive (unintelligible) for ultra-high throughput. It does not require extraction which greatly reduces total time from sample to answer. We chose 96 well plates as a base crossing unit.

The manual steps required are equivalent to manual handling with high throughput RT-PCR systems, so we classify that's high throughput. There seems to be a guidance where 384 well plates are required instead of 96.

There also seems to be a guidance for automation to be included directly in the EUA.

Now coming to my questions, the first one, will 96 well plates read simultaneously meet or exceed automated 384 well plates, what is the consideration for qualifying as high throughput?

The second question - sorry. Go on.

Timothy Stenzel: No. No. Go ahead. Ask your second question.

(Parvan): The second question is, where the throughput of the manual process meets or exceeds the throughput of the automated system, should automation be included in the EUA or should a separate EUA be submitted?

Timothy Stenzel: So this is a very specific question for your specific technology and we have invited all developers to send an email to the templates email address or through a pre-EUA process to address whether or not their tests or a specific test will meet our current threshold for priority review.

And if you have been unable to get your question answered, please send another email to the template's email address and ask that Toby and Tim be copied and we will respond as quickly as possible to you about your specific situation.

(Parvan): Thank you. We actually just did that. Just since we got the mail on Monday and we were not able to get in time to submit the question early on for this town hall. The one thing we want to clarify is because of the difference between 384 and 96 well plates, if you use 96 well plates but if our throughput is meeting or exceeding how would it be considered? That's something we were not clear on?

Timothy Stenzel: Yes. So you have a very assay specific question here and its best handled offline and not on this call so that we can understand the details of your test and see if it doesn't meet our threshold and give guidance for modifications you might be able to make. So your questions are very focused on your specific test and that's best handled offline as the leader of the call has suggested at the beginning of the call.

So please go to the next - please make sure that Toby and I are included in your email correspondence on this, and we will make sure that you get a response. All right. Thank you. Let's please move on to the next caller.

Coordinator: Yes. Our next question is from (Karbamody Vankar), your line is open.

(Karbamody Vankar): Good afternoon. Thanks for taking my call. I have a question related to the serology template that was put last week March 17. I'm looking at the clinical agreement study section of the template and either suggesting the section A, the comparator as RTPCR test.

Taking this RTPCR test as a comparator was there early on but now that we have so many EUA authorized serology tests available, is it possible to use a EUA authorized serology test as a comparator rather than RTPCR test? Is there any rationale in requiring only RTPCR tests as a comparator? Thank you.

Timothy Stenzel: Yes. Thanks for that question. We continue to believe that RTPCR high sensitivity molecular test with an extraction step remains the best comparator for all comparisons whether they be serology, antigen or molecular. And the serology test can have lower sensitivity and, you know, in the authorized. So for now we are continuing with our recommendation that molecular be the pathway.

But as always these are recommendations and if you want to pursue something that's not recommended and get a preview on our thoughts about that validation. You can send the pre-EUA to the template's email address. Thank you.

(Karbamody Vankar): Thank you.

Coordinator: Thank you. Our next question is from (Elaine Allan), your line is open.

(Elaine Allan): Yes. Hi, thank you for your time that you give us every week. It's very much appreciated. My question concerns a comment made last week regarding clinicians ordering off-label testing to look at the response to vaccine.

Last week FDA stated that after investigations that have been it turned out that the vaccine generated an antibody to the spike protein but the serology test was directed towards the end point. So therefore the serology test was not a good candidate to look at the vaccine response.

My question is, would a serology assay that looks at the spike protein potentially be a candidate for vaccine response?

Timothy Stenzel: So I think this may be vaccine specific and if a test wants to make a claim that they can detect a specific response then a clinical study, you know, should demonstrate that. So, you know, we don't object clinicians ordering tests off-label. They do that fairly frequently. They prescribe drugs off-label.

When they do that they are taking more responsibility obviously for the use of that test or possibly drug. And we just wanted to make sure that they were aware that not every serology test that we have authorized can detect an immune response to every one of the vaccines we haven't analyzed that. But clearly if there is a mis-match then you would theoretically know that an end protein management test would not be positive if the patient has only received a spike protein vaccine.

And again we are open to submissions that at least want to clarify this and as this goes forward and clinicians use serology tests in this manner even though

they are not authorized for this, we want to make sure that its clear, you know, that, you know, certain tests could potentially be used.

So I'm not sure how we are going to do that but we are open to response to what test developers want to do in that regard and so it's probably best to come in with a pre-EUA with something you would like to do and suggest along with some sort of study design.

(Elaine Allan): Okay. So it wasn't a sweeping comment that all serology tests were not candidates. It was just that particular issue or situation.

Timothy Stenzel: Yes, it's a theoretical mis-match. But again you can have a spike protein vaccine - not again but I would say that you could have a, you know, a spike protein vaccine that may not overlap entirely or completely or even at all perhaps with a spike protein. An antigen test depending on what's the antigen in the vaccine and what's the antigen in the serology test. So just because it...

((Crosstalk))

(Elaine Allan): I understand.

Timothy Stenzel: ...make a blank statement that a spike protein serology test, you know, works for a given spike protein vaccine. We would like certainly to make that claim and we would like to look at data that supports that.

And we are busy, busy with a number of things that are in the works to further expand testing and we always have more than enough to do and Toby has on her list the communication around serology tests and vaccines. So for more details about that you can come in and ask questions or you can wait on her potential communication in the future once it gets cleared.

(Elaine Allan): Okay. Great. Thanks so much.

Coordinator: Our next question is from (Tim Snider). Your line is open.

(Tim Snider): Hi, thank you. My question is around the clarification on the BioFire De Novo and just want to make sure I understood properly. Is that De Novo now the predicate for all COVID NAT test or is it only for multi-plex respiratory panel type NAT tests that include COVID?

Timothy Stenzel: So I will let Toby fill in any gaps here but it's a predicate for all SARS tests. It can be used for full authorization comparisons and it also can be used for EUA authorization comparison. We are going to continue to be open for other comparators to be used for EUA authorizations as well as for full authorization because there may be not full availability for everybody to get a limited number of fully authorized tests until we get to that point.

Once we get to that point where there is plenty of availability of fully authorized tests, you know, we will see what we do at that point.

(Tim Snider): Okay. Thank you very much.

Toby Lowe: And I would just add that the - yes, until there are more 510(k)s authorized for SARS-CoV-2 whether as a single analyte or a multi-analyte test the BioFire is the only predicate for a 510(k). But as Timothy said, we do, you know, we will consider other high sensitivity RTPCR tests as the comparator for your clinical evaluation.

But for the 510(k), you know, paper submissions the BioFire would be the predicate of record.

(Tim Snider): Okay. Thank you.

Timothy Stenzel: You know, that's a detail for those schooled in regulatory submissions about how you go about doing that but you can, you know, when you submit your 510k you list the legally authorized predicate that can be applied to the 510(k). Next one.

Coordinator: Our next question is from (Kristen Bankard), your line is open.

(Kristen Bankard): Hello. Thank you for taking my call. I have a question regarding the serial testing, the asymptomatic post authorization clinical study. Does the FDA have standard criteria for PPA and NPA specifically for molecular tests for that clinical study?

Timothy Stenzel: So, you know, for molecular tests in symptomatic populations, you know, are above the 95% PPA in comparison to another EUAS authorized test. We would expect that, you know, a once weekly serial testing program with a molecular test would yield a very high PPA even in the asymptomatic population.

Based on the recent data that has been a pre-print out, of a study that was sponsored by NIH and also other data that we have available. So we don't have a pre-set threshold for the asymptomatic screening performance because we just haven't seen enough data and we haven't seen other than the research study that was performed, we haven't seen to my knowledge a serial testing submission so we could see what the data looked like.

So once we get experience on what tests generally are able to achieve and there may be differences between molecular and antigen tests for example

because antigen tests are typically less sensitive than molecular tests it was difficult to set an expectation.

But obviously ideally would like to see all serial testing programs in both symptomatic and asymptomatic be above an 80% PAA if possible but we are not setting a firm recommendation at this time.

(Kristen Bankard): Okay. Thank you.

Coordinator: Our next question is from (Emily), your line is open.

(Emily): Hi, my question is regarding the enrollment of individuals age 65 and older into a clinical evaluation trial for a molecular non-lab test. Our current protocols are aimed to exclude all individuals who have received the COVID vaccination but in the guidelines the target suggests that 35% enrollment of people who are 65 and older.

Given that the large majority of these individuals have already received a vaccination, we plan to remove this exclusion from our trial. The question is, would the preference be to remove the vaccination exclusion for all subjects or just individuals over the age of 65?

Timothy Stenzel: So for what type of test is this? A serology test?

(Emily): This is for a molecular test.

Timothy Stenzel: Molecular test. Toby, I'm not sure that I'm prepared to answer that question. Maybe we write it down and respond unless you feel that you can handle that question today.

Toby Lowe: No. I think I would suggest that you send in your proposal with additional details about your proposed trial and then we can respond specifically to your proposal.

Timothy Stenzel: And, you know, I think we will take this back and discuss and hopefully provide a sort of a clear answer next week on the call.

(Emily): Okay. Thank you.

Coordinator: Our next question is from (Perchim Greg), your line is open.

(Perchim Greg): Hello. Can you hear me?

Timothy Stenzel: Yes, we can.

(Perchim Greg): Yes. So I'm from the X, Y, Zee Laboratory, we are in the process of validating the flu and the COVID convolute of multiplex tests. The question is when we started we were thinking it would be very easy to get a clinical sample with influenza A and B infection. But the fact is its very difficult. And my question is, is it okay for us to use the - inactivated virus of influenza A and B to make a contrived sample for the validation?

Timothy Stenzel: So I just want to clarify, so you are looking to validate an EUA authorized validate a panel test for EUA authorization and you want to know if you can use contrived non-SARS respiratory viruses?

(Perchim Greg): So contrive the influenza A and B so we are validating the multiplex test for the COVID and influenza A and B channel.

Timothy Stenzel: Yes, because there is already FDA cleared influenza tests on the market, we are wanting to make sure that performance of EUA panel tests that are new that we haven't seen before for flu A and B that they perform at an acceptable level and we are asking for archived samples.

This is sort of the first time I have heard that archived samples are not available for flu A and B. You can always send an email with a pre-EUA to our template's box. But until we know what flu A and B banks are depleted for clinical samples, we would still like to see archived samples prior to EUA authorization.

And then as we discussed we would ask to see a prospective study post-authorization to be able to be considered for EUA authorization. So you explain your challenges in trying to obtain these archived samples.

But again this is an area where we have already cleared flu A and B and they are available in the market and so we are being cautious.

(Perchim Greg): Okay. Thank you.

Coordinator: Our next question is from (Annie Wright), your line is open.

(Annie Wright): Yes, hello. I had a question regarding stability testing for - in the guidance, you know, it describes stability testing to include transport and shipping. So I am just wondering if an EUA's expectations of the FDA to also include some sort of worst case shake and bake scenario for the shipping and handling portion? Or can we just basically have a shipping study that basically shows the transportation of our device without the actual simulated shaking and baking?

Timothy Stenzel: Toby, I'm not sure how much the templates go into detail on this. But we are satisfied with an in-lab stability testing, looking at for EUA authorization looking at temperature stability.

And so now since we can expect that this pandemic will go year-round or the testing at least for SARS will go year-round going forward -- we expect to see potential extremes or heat or high temperatures and the extremes of frozen temperatures on shipping stability.

Toby, do you have anything else to add on stability testing?

Toby Lowe: No. I am also not completely sure how much detail is in the templates. I would have to pull it up on that but if you do have further questions beyond this you should definitely send it in and we can take a look.

Timothy Stenzel: Yes. So for full authorization we would potentially look at some things like drops and things like that but have since pulled that back for EUAs since the bar can be lower for EUA authorization. So I believe but double check that it's just the temperature extremes on shipping.

And for the potentially extreme time for any return, we also ask for stability testing on any home collection device to make sure once it enters into commerce that it has an expiration date and that we know what that is.

(Annie Wright): Okay. Yes. To assure stability. Okay.

Timothy Stenzel: And so stability for that is good for the initial authorization we may - and then of course real time stability after that.

(Annie Wright): So just really quickly, the extreme temperatures are you expecting the data as part of the EUA submission or can that just be like a protocol provided and then it could be like an ongoing study?

Timothy Stenzel: So for a home collection situation we are asking to review that shipping stability study prior to authorization. If you were already using something for which we have authorized and managed for a right of reference such as the Gates collection study. You could potentially if you use the sort of exact same things you can potentially fall under that right of reference that gates has offered and you can ask about that in the submission.

But if you have a specifically proprietary unique device then those stability studies would need to be repeated.

(Annie Wright): Okay. But do they need to be the data we submitted in any way or can be part of like the real-time data where you can say, okay, we are going to be doing this. This is what we are proposing to do.

Timothy Stenzel: No. Actual real-time data - so I was talking about two different things. Real-time is for the collection capability testing, not shipping. And for that we would want to see accelerated stability testing of your collection kit. And then we also want to see the shipping stability to make the authorization for - as part of the authorization required recommendations for a home collection kit.

(Annie Wright): Okay. What about for professional use, provider care?

Timothy Stenzel: So for professional use these are collection kits. Toby, you can help me out here. But if a kit makes a claim about use of the collection kit in for SARS or SARS plus a panel we would treat that as a device and we would ask for and

obviously to be shipped and so we would look at the same sort of things there.
Toby, did I get that right?

Toby Lowe: Right. If it's some, you know, proprietary collection device we would expect to see information on the specific collection device including some of the stability data if you are, you know, simply using previously, you know, widely marketed, you know, a standard nasal swab and things like that then we are not likely to have additional questions.

(Annie Wright): Okay. Thank you so much. Thank you.

Coordinator: Our next question is from (Shannon Clark), your line is open.

(Shannon Clark): Hello, this is (Shannon Clark) with UserWiseConsulting. We specialize in human factors testing. Are you able to hear me?

Timothy Stenzel: Yes.

(Shannon Clark): Good. So with regard to the home use or non-laboratory use template for antigen and molecular testing, on our side we have been getting feedback on our submissions in relation to the age range. And I just wanted to confirm that there is a typo in this template where under the clinical evaluation section number eight it says, the parent or legal guardian collects a sample from a child e.g. aged 3 to 13.

And then just a couple paragraphs later it says the study population should include individuals across all ages 2 years to 65 plus years. Can you confirm that age range that you are looking for an OTC designation is in fact 2 to 65 years and that the labeling shall specify that or is 3 to 65 years adequate?

Timothy Stenzel: Thanks for pointing that potential typo here. Yes, the intended use population and, you know, we would like to see data for age range is 2 to 65 I believe, not three. And for self-collection in that population we typically say age 14 and above can self-collect and below that a parent, guardian, adult would collect.

(Shannon Clark): And I did misspeak, its 65 plus. Is there an upper age limit?

Timothy Stenzel: So, you know, so what we want to see is that sort of age groups are included. So I would like to see folk's aged 2 to 14, you know, collected by a parent, guardian ort an adult. And then...

(Shannon Clark): Two to 13.

Timothy Stenzel: Yes. And then above 14 to above 65, you know, we would like to see, you know, obviously there is different potential issues in some groups so I would to see a good range so, you know, include those who are 65 plus and typically, you know, those we enrolled in age 14 to 65 is in typically depending on how many enrollees you have in your study you are going to see a good range on that. But make sure you have got representatives of those below 14 and those above 65 and then probably have plenty between the two.

(Shannon Clark): Thank you.

Coordinator: Our next question is from (Jackie Chen), your line is open.

(Jackie Chen): I have a question about the performance evaluation in particular the emerging viral mutation monitoring plan. And my question is this expected for manufacturers who already have an EUA? And if so, can you share with us some examples on how they address that and how these manufacturers

monitor and deal with any new and emerging viral mutations for a serology or a neutralizing antibody test?

Timothy Stenzel: Okay. So it is something we have asked all test developers whether they have been EUA authorized or not to do, to have a monitoring plan in place. For those who are under review now or submitting in the future, we would want to see that plan. We are not asking manufacturers who have already been authorized to come back in with a plan submission but to have a plan in place and to act upon it.

But for those that are a new submissions we will be asking about that for all assay types and, you know, knowledge of your specific test is needed to address any potential issues. Molecular tests are relatively straight forward in that, you know, the sequence of the primers and probes, you can do calculations around melting temperatures and know what your cycling parameters are or your isothermal parameters are. And determine with some modeling, simple modeling, whether or not your assay potentially could be affected.

Serology tests are more challenging. We are all current in serology testing in review, we are now asking for the antigen sequence that you are using and we are logging that into our database. Obviously it's an amino acid sequence and so we would be scanning the nucleic acid sequence database for SARS for any amino acid changes within the antigen portion of the serology tests and we would ask developers to do the same for antibody tests - for serology tests.

For antigen tests there is a different pathway. Developers would need to understand the characteristics of the antibodies that they use in their antigen test and know the map of, you know, the antibody binding to the virus which is specific for every type of antibody that's monoclonal.

Polyclonal will have, you know, different things to look for. But and there it may depend on, a polyclonal antibody, it may depend on what the antigen was used and the sequence of that antigen to raise the antibodies for that antigen test.

So every test developer has some different things that they can do and we are just asking that they come in with a plan. It all starts with the specific knowledge of your own test and examination of sequences in the US circulating sequence database. I hope that's helpful.

Coordinator: Great. And at this time I would turn things back over to Irene.

Irene Aihie: Thank you. This is Irene Aihie. We appreciate your participation and thoughtful questions during today's town hall. Today's presentation and transcript will be made available on the CDRH Learn Web page at www.fda.gov/training/cdrhlearn by Friday April, 2. If you have any additional questions about today's presentation, please email cdrh-eua-templates@fda.hhs.gov.

As we continue to hold these virtual town halls we would appreciate your feedback, following the conclusion of this virtual town hall please complete a short 13 question survey about your FDA CDRH virtual town hall experience. The survey can be found now on www.fda.gov/cdrhwebinar.

Again thank you for participating and this concludes today's virtual town hall.

Coordinator: Thank you for participating in today's conference. All lines may disconnect at this time.

END