

FDA Virtual Townhall

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 all until the question and answer session of today's conference. At that time, you may press Star 1 on your phone to ask a question. I would like to inform all parties that today's conference is being recorded. If you have any objections, you may disconnect at this time. I would now like to turn the conference over to Ms. Irene Aihie. Thank you. You may begin.

Irene Aihie: Thank you. Hello. I am Irene Aihie of CDRH's Office of Communication and Education. Welcome to the FDA's 52nd 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 Dr. Timothy Stenzel, PhD Director, Office of In Vitro Diagnostics and Radiological Health in the Office of Product Evaluation and Quality and Dr. Kristian Roth, both from CDRH, will provide a brief update. Following opening remarks, we will open the conference to your questions related to the development and validation of tests for SARS-CoV-2. Soon to remember that

during this Town Hall, we are not able to respond to questions about specific submissions that are currently under review. Now, I give you to Timothy.

Dr. Timothy Stenzel: Hello. Hopefully my sound here is good. Irene, yours was breaking up just a little bit. Okay. Good. Thanks. So, today is the 52nd Town Hall. We missed a couple of weeks due to various, I don't know, holidays and other events. But obviously, now we're, we're over a year since we started these and we're still getting a lot of callers and there's still work to do. So, I mean, we look forward continuing to work with you on, on all of this.

I had a couple of introductory remarks then we'll finish up with a discussion of new pooling and serial testing and guidance that came out yesterday and then Kris, who thankfully has joined us today will go into some of the details and the recommendations in that guidance. So, to start off, you know, our current priorities for review remain unchanged. We are really looking for the biggest bang for increasing access to testing for all Americans and for all those in the United States. That includes point of care, home, and extremely high throughput of central lab tests. And as I discussed, you know, this new pooling guidance that we'll talk about will continue along those veins, that vein, and continue to expand. We believe greatly in testing as we begin to more widely reopen.

I did want to just pause and talk about, you know, some of the totals for authorizations, roughly to date. I totaled these earlier in the week. We've now authorized 63 home collections for molecular, central lab testing, and 3 actually in-home tests, 2 of which are over the counter. And I'm adding that to 9 point of care tests so we have 12 authorizations for molecular devices and for that could also be of point of care. And then turning it over to the antigen side, we have authorized six submissions for in-home use, four of those authorizations are for over the counter. Adding to the 12 point of care devices,

we then have 18 authorizations for point of care uses. So, we're making progress on that front and of course, I think last week, Toby mentioned the Thermofisher Amplitude Authorization. They can test up to, and this is without pooling, up to 8,000 results a day on one instrument. And so, you should be able to add pooling to that, you actually, you know, can really get even above that greatly increase testing.

So, turning over to the new pooling guidance. So, you know, we made a number of pooling authorizations as also, for screening authorizations. And these are for the pooling it's all been central lab high sensitivity molecular assays and we've learned a lot from all those submissions. And we, we have enough data from the previous submissions and their analysis of those. So that we could move forward with this new guidance that pertains to swabs and high complexity lab tests that have been previously authorized.

I'd like to offer this review of streamlined pathway, in particular, we have not seen in the data we've received any issues when pool, in pools of three, 3x or less. As long as the test itself is a high sensitivity, molecular central lab test. And so, that, that, you know, to us gave us reassurance that we could offer the pathway if somebody under this new pathway wants to just offer a 3x pool, but we don't need to revisit it. We'll continue to monitor performance on market. You know of course, if there's any issues, we will address them.

Going into just a bit more detail. So, you know, this is a new streamlined approach that pooled serial screening claims to certain authorized tests for use in serial testing programs. So, our previous review with FDA and authorizations allows us to go forward and the serial testing nature of this provides some additional mitigation for these authorizations to happen without the FDA first reviewing the data. And they are limited, as I said, to pool interior nasal respiratory specimens in a serial testing program. And so,

that many of the molecular diagnostic tests that have already received EUA authorization have this pathway open to them. So, these new authorizations and new pathway would offer authorization for both diagnosis and screening and when tested at least per week as part of a serial testing program. To utilize this approach, EUA holders would follow the guidance. You know if validation is required, go ahead and do that. If not, if it's the 3x pool, then once you've completed the validation or you've decided you're doing 3x, you know. You notify us and we'll update the labeling and post this on the FDA Website.

The public including organizations purchasing these tests are using these services for testing pool specimens for the serial testing program can see the full list of tests that are then covered under this umbrella authorization. You know last month, we introduced a new supplement template for those seeking Emergency Use Authorization for certain tests for screening with serial testing and we've authorized a number of those. This pooling and serial testing amendment really builds upon that earlier action. All serial testing programs should include retesting individuals as needed in case there are any potential false negatives.

And of course, testing alone does not replace the need for other public health measures such as getting vaccinated, social distancing, and washing hands and wearing masks. And with that, I'll turn it over to Kris to provide some more granularity to this, to this new amendment. Kris?

Dr. Kristian Roth: Sure. Thanks Tim. So, there are, you know, multiple validation pathways in this EUA Amendment and it does cover both swab and media pooling. So, if the existing, as Tim mentioned, if the existing EUA test performance with clinical sample that are above 95%. Then that 3x pooling claim is available as long as there's a serial testing program and these claims can be added to your

existing EUA, either for swab, or media pooling. There's also two other I guess pooling levels, one of 5x and one of 10x, and they are both discussed again for swab and media pooling. And to get those from additional pooling claims, you know, there are two approaches which are the same for the 5x and 10x. And the first is an analytical study and in this case, it's, you know, the study is intended to establish that the pooling approach is impacting test performance in a predictable manner. This is evaluated by testing contrived samples and head-to-head kind of study, you know, both individually and pooled.

And if the CT scores follow what was expected to, you know, due to the design of the pooling approach. For instance, if you're looking at 10x media pooling approach, you have a predictable 10x dilution effect on the CT score. You know there's acceptance criteria that's laid out there and, you know, if that acceptance criteria is met then you can go ahead and notify with that particular data set. There's also the option to test pooled and individual clinical samples. This is very similar to the approach that's already laid out in the molecular template. You know we are looking for 20% to be near the LOD and this amendment calls for testing of 20 individual positives and then other clinical samples. And then take those same 20 and test them in the proposed pooling approach and I think the target there is an 85% agreement and, you know, 5% less, less than invalid rate.

So, you know, the regulatory path I think in the validation protocol, the acceptance criteria, all of those pieces are clearly laid out in the amendment letter. And I believe the intent here is to provide a kind of a recipe for, you know, what can be followed. And, you know, this is again to support, you know, clinically adding these claims to your existing EUA. That's it. Back to you, Tim.

Dr. Timothy Stenzel: Thank you, Kris, and obviously we can take questions on this or any other topics, and we'll turn it over to the Operator to open it up for 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, unmute your phone, and record your name clearly. Your name is required to introduce your question. If you need to withdraw your question, press Star 2. Again, to ask a question, please press Star 1. Our first question will come from Susan Sharp. Your line is open.

Susan Sharp: Thank you and thanks, Tim, for this year of these conferences, they're very helpful. I did hear Kris say that the, regarding the pooling and serial strategies, that it can be done with either swab or media pooling. Has there been any approvals given for swab pooling? I kind of tried to look over the list last night. They all looked like that they were all aliquot for liquid pooling. Are there any out there that have gotten an EUA for swab pooling?

Dr. Timothy Stenzel: Kris may know better. I'm not aware of it. You know one of the challenges with swab pooling is that you can't immediately deconvolute what's going on, you know, with the reflex test unless you collect two swabs. So, we have heard developers who are interested in swab pooling and in some ways, that at least analytically and clinically, there is lower risk for false negatives if you do swab pooling. But I may be incorrect, there may be at least one, I'm thinking of one but Kris will know better perhaps if we've authorized one.

Dr. Kristian Roth: I am going to check on that. I believe we do have one and I can get that name for you just in a moment here.

Susan Sharp: Thank you.

Dr. Timothy Stenzel: And we can, we can pause, and give that name later. So, Susan do you have any other questions at this time?

Susan Sharp: Nope, that was it. Thanks so much.

Coordinator: Thank you. Our next question will come from Emmy Wright. Your line is open.

Emmy Wright: Hello. Thank you for taking my question. My question today is in regards to professional use testing and if you wanted to specify essentially no age restriction? Like from you know, that can be used with patients from between 2 to 80. In terms of testing the various, the various ages, is there some sort of referenced, I'm sorry, percentage that we need to look for in our testing? Or can we just do, show that we have authenticated the testing within the various ages, age groups?

Dr. Timothy Stenzel: Yes. Well, professional use, you mean, point of care in office.

Emmy Wright: Yes. Correct. Yes.

Dr. Timothy Stenzel: So, the samples are obtained by some healthcare professional. We have a lower level of, we see a lower level of risk for different age groups when that's the case. Where we really focus on this is in, in the home collection, or home testing situation where kids underage, you know, won't be able to collect a sample themselves. And we, we want to see that the adults in the home can collect a sample in the underage child down to age 2 and show adequate performance and safety of the collection and of the testing. We, you don't need to find, you know, a two-year-old in your study. We sort of break up the underage kids into two big, bigger buckets and I'm forgetting exactly which ones they are.

But obviously, somewhere in the range of 2 to 8 and 8 to 13, I believe, are the two buckets and Kris may be able to correct me. And I don't believe we asked for a definite age distribution in the point of care setting but I could be wrong. We could have updated that because we have, feel reasonably assured, that those routinely collected samples in the point of care environment can do this accurately. The other thing I did want to mention, and I think I mentioned it at the top of the call when I gave my introductory remarks, and this is a little bit tangential to your question but it offers me the opportunity to bring this up.

And that is, we really are encouraging those who ultimately want to go to a home use test, whether prescription or over the counter, to really kind of focus their development efforts around that setting if they can. Because if they first do it staged and get a point of care authorization, they're then really are required to do another clinical study in the home. When you, if you were to go directly to a home-use situation and performance, you know, meets expectations when consumers are doing the collection and testing and/or interpretation of the test results themselves. The test automatically gets a wave, a deemed waived status, and automatically can, you know, be used in the point of care of moderate complexity, high complexity environments.

Because we've really tested it at the most extreme version of untrained users and so, there could be a lot of synergy and streamlining. And decrease in costs of development if you feel comfortable that a test can go immediately to clinical studies in the home environment. I'll pause there and see if I've been correct, check with Kris. I always check with Kris, most of the time it's offline to this call. But Kris, any, any, any corrections on what I've said?

Dr. Kristian Roth: No. I don't have any corrections. Sounds good.

Susan Sharp: So, what you're saying is for, if we are going to split this on, with our in-home use right now. We don't necessarily have to do like a certain percentage just as long they're representative in those specific age groups to the 8 to 13. What about the older than 65-age group?

Dr. Timothy Stenzel: Same thing there and, you know, it's nice if you can get, you know, all comers representation of ages in your clinical study sites. As long as you can get, you know, permissions from IRBs and consent as needed. You know that's always, always ideal. So, it just, it should all work the same in that environment and it should speed, you know, your study to get to, you know, the number of positives that we recommend as quickly as possible.

Susan Sharp: So, and then if it's for home use, does the same rule kind of apply? I know you folks love the focus areas basically for the younger children if the sample is acquired by the adult. Do we have to like have a certain number of positives or can we just show that we have a record of it?

Dr. Timothy Stenzel: Yes. I would refer to the template, our recommendations. Yes. We have a certain percentage of the positives that if you're going to claim down to a certain age, down to two eventually. That we have adequate representation in among the positives in those age groups and all the intervening negatives in those age groups as well.

Susan Sharp: Okay. So, okay, number of positives and negatives. Okay. All right. Thank you so much.

Coordinator: Thank you. Our next question will come from Franco Calderone. Your line is open.

Franco Calderone: Thank you for taking my call again. So, we are working on or have been for almost a year now, on an antigen test for self-use at home. And we've done several small, I guess you can call them, clinical feasibility studies just to see how the tests have been performing and we've noticed that there's a nice concordance there. So, regarding the research perspective, we've noticed that the CT values are consistently pushing upwards of about 28, maybe even 29 CT. From, and then on the lower end, let's see, 15 or so. What, what can we do to get to the 10, 20% that FDA requires that is considered a low positive which are above CT 30, I believe? I believe that's what the guidance says, that 10 to 20% need to be in that range?

We, we can get to 28, 28.7, but it has been difficult to, to find the samples that we can play with that would put us at above CT 30. Not that the test cannot do it because we have been able to locate those specimens. But do you, do you have any recommendations or maybe suggestions on how we can, we can do that? Again, we were very confident about the lower levels, you know, we've been able to find samples that go pretty low and then up again to about 28.7 or so. Any, any suggestions you may have?

Dr. Timothy Stenzel: Yes. So, one obvious thing to check is some of the molecular assays don't count the first 10 or 15 cycles. So, make sure the EUA authorized high sensitive molecular test that you're using doesn't do that. For example, I know that the M2000 Abbott assay and the Lira assay do cutoff CT, so you have to add 10, I think it's 10, in both cases to the number to get the actual cycle threshold. But, you know, assuming that's not the case, first of all, it was kind of good news that you're getting in your studies, you're getting things that are shifted towards the higher positives. We have heard, in some studies, that they've seen a shift towards a lower positive, higher CTs, in their studies and they get sort of an over, you know, sampling of really lower viral load samples with high CTs.

And, you know, I've always advised to those folks to make sure that they're collecting within, you know, five to seven days of symptom onset if they're going for the symptomatic test subject. And this is, I know what we do for molecular tests and that we have allowed a dilution of higher positives, you know, closer to, you know, the range around LOD that we want to see for and cutoff for molecular tests. It's a little more challenging with an antigen test. We, to date, you know, there's an all-comer study and you're testing as many people as you can enroll of your study subjects, study sites, and you're enrollment in multiple sites. And you're enrolling within your inclusion/exclusion criteria and the number of days post-symptoms.

We've typically seen, when you go for those 30 positives for point of care, we've typically seen, or for the home use. We typically have seen a good range of CTs in the studies. It hasn't, it hasn't been an issue unless there was some, you know, unfortunately we've seen it with some developers a biased approach in selection of subjects. But again, if you take all comers within, you know, these zero to 5 day, zero to 7 in symptoms. We've typically, when there's been an unbiased selection of these subjects, we've typically seen good range. So, if you're really concerned about this I would approach through a pre-sub if you don't have, if you haven't already interacted with our staff on this particular topic and ask our experts what they think about this because it is a loophole and complicated especially if you are doing direct swab in antigen tests to be able to deal with that. Okay?

And what, I would say that you can also look at, you know, supplementing more patients who are further from symptoms. That's the obvious situation although we've seen very high CTs early in, in the early days sometimes 40 in the first couple of days of symptoms. So, that's just the initial thought I had

but I think it's fortunately not something that is really common, but our team can help you out. Okay?

Franco Calderone? Okay. Thank you for that and to your point about the different instruments giving different ranges. So, for CT values, we have experienced that ourselves because when we got the retrospective specimens. These were confirmed positives because we wanted to do the sure thing and it was a particular brand and it was high performance RT PCR associated with that, with that assay. And then, you know, we wanted to double check so we took the double specimens, and we took the second specimen to another lab with a high percentage RT PCR, and we got different CTs even though the specimens were taken in the same day from the same patient. So, it's, you know, it's looking really nice for us and we're being able to get up to those CTs, you know, high CT values. But again, we've experienced difficulty getting past 29 at this point but thanks for your comment.

Dr. Timothy Stenzel: Yes. Okay. You know I'll just add that, you know, CTs are not going to be the same on the same samples across different instruments and assays and these are not calibrated quantitative tests. You know if the rate developed or even one team developed a truly quantitative test linked to the International standard for SARS-Cov-2. Then you could be going to standardize CTs but then again, there's this high variability of sample collection that is impossible to understand. So.

Frank Calderone: That's right. Thank you.

Coordinator: Thank you. Our next question comes from Elizabeth Bernilly. Your line is open.

Elizabeth Bernilly: Hey, first I'd like to thank you for this forum. We found it very informative. Our question is regarding the timing of submissions to the FDA for EUAs. It's our understanding that for molecular tests, the EUA submission must be received within 15 days post the start of testing, provided that your validation is complete. Does the same time requirement apply for non-prescription home collections kits, EUA submissions?

Dr. Timothy Stenzel: So, a home collection, home testing, and point of care testing is not covered under the notification policy. So, those are all applications that, that we want to review, and authorize before, typically before they are offered. The high and moderate complexity submissions that and Kris is here with me but sometimes I miss Toby too when she's not on the call. But, you know, be sure and check the notification policy but definitely home testing is not, or home collection or home testing is not something that can be notified. That's something that...

Elizabeth Bernilly: Okay. Thank you.

Dr. Timothy Stenzel: Go ahead and submit your EUA and home testing, home collection is a top priority for us and so, we'll got on those as soon as possible.

Elizabeth Bernilly: Okay. Thank you very much.

Coordinator: Thank you. Our next question will come from Michael Patts. Your line is open.

Michael Patts: Yes. Hi. Just curious to know if the recent expansion or amendment for the pooling with molecular tests will be expanded to antigen tests?

Dr. Timothy Stenzel: Well, we will, we've, this umbrella policy is based on cumulative data and review of existing authorizations. We haven't authorized an antigen pool yet and it doesn't apply to antigen tests right now. Antigen tests are, you know, it'd be nice to see an application where sensitivity is great enough with an antigen test that you can pool. But so far, we haven't authorized one and certainly, again we haven't been able to authorize it, review it, and understand the performance characteristics around that kind of pooling and testing. And we are not going to move forward at this time with an umbrella policy that covers that until we've accumulated enough understanding of the science to make a good, a good regulatory decision.

Michael Patts: Okay. Thank you.

Coordinator: Our next question will come from Glen Fay. Your line is open.

Glen Fay: Yes. Hi. Thanks for taking my call. We appreciate this here by the FDA. We're planning to put in a pre-EUA submission with protocols for an at home neutralizing antibody test. It's a lateral flow device preferred finger prick method and the question that I have is, essentially to use a comparative, the plaque reduction neutralization test, it requires serum. How, how do we approach that dilemma? Do we have the, when we're doing the agreement study, basically we have the patients perform the finger prick method, get the results, and then we pull serum, pull blood from them and then do the comparative testing? I just need a little clarification on that.

Dr. Timothy Stenzel: Yes. That would be, that would be the right order. So, I don't believe we have template for it. I know we have home collection for serology. I don't think our home, I don't think have a template out for home serology and testing.

Glen Fay: (Unintelligible).

Dr. Timothy Stenzel: Yes.

Glenn Fay: So, we're trying to (unintelligible).

Dr. Timothy Stenzel: Yes. Yes. So, any sort of home testing validation, we're trying to, we're trying to, you know, make sure that there's no bias introduced into the study. So, you can do the home studies in a simulated environment so that after, you know, the test has been used by that consumer. Then healthcare professionals come in and take any additional samples that we need for the studies. So, I know we've issued a neutralizing antibody template. I'd just look at that and kind of merge that with our home testing template.

Glenn Fay: Okay. All right. It's just, because basically you've got a three-pronged attack. You've got basically your usability study and then to drive the clinical agreement and then pulling samples to do the plaque reduction neutralization test. That seems a little cumbersome for, you know, for trying to organize all that.

Dr. Timothy Stenzel: So, you don't have to combine your user usability studies into your clinical study if that's more challenging to you. It is more efficient if you can do all of that at once. So, you would do, you would have, you know, hand the patient the kit in a simulated environment. They would, you know, initiate and do testing and then they would answer your usability and user study questions. Then they would do the test and they would read the test and interpret the test for usability studies. And then the healthcare professional would come in and collect a comparative sample. But you can, you can separate out the pure clinical study from the user and usability studies if that's easier for you to do.

But I do like the idea of you sending in a pre-EUA for this kind of testing development. Thanks.

Coordinator: Thank you. Our next question will come from Jody Schultz. Your line is open.

Jody Schultz: Yes. Thank you very much. Hello. I'm Jody Schultz from Thermofisher Scientific. As it relates to the new pooling guidance, I have a couple of questions. In reviewing the guidance, it appears that as part of the notifications to FDA to add in the specific claim for pooling that a set of required validation data is required for that particular notification. And I wanted to just clarify that that particular validation data is the analytical validation data and not the additional clinical performance study that may be needed from a post-authorization commitment standpoint? So, that's the first question.

Dr. Timothy Stenzel: Yes. The notification doesn't require you to submit the clinical study data. I'm going to turn this question over to Kris because he's much more familiar with the details of the policy.

Dr. Kris Roth: Sure. I didn't 100% follow the question. I'm not sure what the post-authorization piece is but, you know, within that amendment letter, you know, there are the validation studies and acceptance criteria. And, you know, if you meet those, you know, it's not notification but you can, it is similar to a notification which, you know, you will follow the directions in that particular guidance. And with the new instructions for use and the appropriate protocol you have in there and then we will add you to that Exhibit 1 and post your new IFU onto the Website. And, you know, after that then that pooling protocol is part of your EUA.

Jody Schultz: Sure. Yes. So, I think the question is, you know, there were some pieces of the notification or of the guidance that spoke to a post-authorization commitment

to bring in the clinical data. So, you know, the analytical data that I'm referring to is located in the Appendices, you know, it's part of that particular notification. So, I just wanted to clarify that, you know, that all you have to do is perform the testing, you know, as an Appendix A through F. And then later on, you know, submit the clinical testing, you know, as a supplement.

Dr. Kris Roth: So, I'm not quite sure that there is a later on. You know this is a kind of, you know, if you're just going for that serial testing claim with pooling. Everything that is needed for that claim is in that guidance and, you know, should be done prior to, you know, granting a claim. If you're talking about perhaps, you know, doing pooling without the serial claim, then I think obviously there's other pathways for that. But everything should be in that particular amendment letter and there really is no kind post-EUA or post-authorization kind of commitment on your end.

Dr. Timothy Stenzel: And I may have misspoke, Kris. You want to see the data in the notification and to the FDA but once, you know, you've submitted that notification and we've accepted it. Then they're posted on the Website and we will not hold up on them starting while we review the data.

Jody Schultz: So, all right.

Dr. Timothy Stenzel: I'm confusing this notification policy with our previous notification policy. So, we want to have all the data submitted in the submission, but you don't have to wait on launching for us to review that data.

Jody Schultz: Okay. I understand. And then the other question I had, you know, to your point about the serial testing. So, does this particular guidance, must you perform the serial testing, you know, as a claim or can you obtain a pooling claim without serialized testing? Like for example, in airline or other types of

testing where you may not, the application may not be serial testing. So, I'm just wondering if this pooling guidance could apply without the serial approach?

Dr. Timothy Stenzel: The older pathway is still open, I believe. Kris, do you have more specifics?

Dr. Kris Roth: Of course. Yes. Yes. You can always follow the template. That's perfectly valid. This current approach is not a guidance, right? This is an EUA amendment. So, you know, it is again, it is a recipe that you can follow and if you, you know, kind of meet the outlined criteria. Then you get the claims that are kind of described in the amendment. You know there's not an opportunity to kind of interpret things a little bit differently or kind of make adjustments to, you know, what is acceptable and what isn't acceptable as we typically do in a guidance situation or in a template situation. But this is kind of, like I said, a kind of add A to B and get C type of authorization amendment. And it's that's way to make this, you know, as streamlined as possible to, you know, to get these claims, you know, out there quickly.

Judy Schultz: Yes. I think my question is if you already have a EUA authorized test and you wanted to add pooling to it. Could you use this approach without the serialized testing?

Dr. Kris Roth: Again. No. The amendment is kind of what it is. This is, you know, serial testing is a major mitigation that we're proposing to ensure that, you know, if you miss those folks on week one. You know you can go and get them on week two when that viral load starts to kind rise. You know there's a lot of, you know, becoming more and more literature available suggesting that, you know, serial testing approaches are appropriate to, you know, reduce

transmission or reduce the risk of transmission. That's exactly the kind of what we're trying to address with this particular amendment.

Dr. Timothy Stenzel: So, what differs from this amendment and Kris is using appropriate words and, you know words matter. Is that when we, when you notify us under this new amendment, we will authorize you versus previous sort of notifications halfway. You could launch before we authorize you. And so, it's a little bit different. We're providing the authorization upfront if you fall into these specific, you know, stipulations in this amendment that's been issued. Without deviating from it, it's sort of an umbrella sort of situation where it's cookie cutter. You've got to fall into this, these methods, to fall under this new program. And then we issue an authorization for it which is different than the prior sort of notification paths.

Jody Schultz: Thank you. Thank you for the clarification. That was very helpful.

Coordinator: Our next question will come from Ella Holston. Your line is open.

Ella Holston: Hi. My question is for an antigen saliva test regarding the cross reactivity studies. In the antigen templates, there's a recommended list for organisms for respiratory specimens and plants specimens but not for saliva specimens. So, I'm wondering if there's such a list?

Dr. Timothy Stenzel: So, thanks for brining that up because the other thing that I was going to mention at the top of the call was our continuing examination of saliva-based tests. So, that for antigen-based tests, we're, you know, we're still cautious about that sample type for antigen tests and I'll mention then in a moment after I address your question. That, you know, I'll answer your question and go onto the say, molecular test, after this. So, yes, we do have a list so I would reach out through, you know, I would actually encourage all test developers

that are going for saliva now. That they do a pre-EUA so that we can review their study plans and analytical plans to make sure that they're appropriate for that sample size. But we do have a list so if you, if you just want the list to begin with, you can go to our templates email address and ask for that. But if, if you want to just submit a whole pre-EUA for your development and your studies, that is also advised.

Ella Holston: Okay. Thank you.

Dr. Timothy Stenzel: That address your question? And then you know, I'll back up and talk a little bit more about saliva. So, we are, when comparative studies are done between swab and saliva and we ask for primarily NP swab, comparative saliva. We are seeing occasionally significant differences before or between those two samples and it always tends to show a decreased performance in saliva. So, we're encouraging all developers that if they're in the process of validating saliva or want to validate saliva through a device. Come in with a pre-EUA and give us an opportunity to work with you on your study design and molecular studies. All right. Next caller?

Coordinator: Thank you. Our next question will come from Emma Powell. Your line is open.

Emma Powell: Good morning. Thanks for taking my call. I have a question about home use serology antibody test. Two questions. First of one is, since we don't have publicized the template yet, would FDA consider prescription or over the counter? And if over the counter, sorry?

Dr. Timothy Stenzel: Oh, you were breaking up a little bit, so I wasn't understanding all the words. So, you're talking about a home use serology test and then if you could repeat your questions, that would be helpful.

Emma Powell: Sure. So, questions regarding home use serology antibody test. First question's regarding whether a prescription will be needed by FDA? And if there's no prescription needed, would a reporting capability be required? Like the antigen home test?

Dr. Kris Roth: Okay. Those questions are clear, and I understand them. So, first thing I would recommend is that you do submit a pre-EUA for home serology tests and screening. We haven't authorized one before and we don't have a template out there. In general, for home use tests, you know, we don't require a prescription if the OTC, over the counter validations, are done. And, you know, one of the major differences between Rx and OTC is that usability study where a user, not only performs the test, and reads the test but accurately interprets the results of the test and we have assurance that, that home users can use the test appropriately.

As far as reporting goes, there's no legal, current legal requirement for home use tests, in home tests, to report. And therefore, the FDA is not making that a requirement at the time of first authorization. We are asking developers upfront what their plans are for reporting because that's good thing to encourage. And then we would follow-up, you know, an authorization with a requirement of authorization to come up with a subsequent reporting mechanism. Hopefully that answers your questions.

Emma Powell: Yes. I have a second part of the question, but I want to make a correction for what you just said. FDA has approved home collection but not home use yet, right?

Dr. Timothy Stenzel: Correct.

Dr. Kris Roth: Correct.

Emma Powell: Okay.

Dr. Timothy Stenzel: Correct.

Emma Powell: Thank you. So, the second part of the same question regarding home use antibody test is that when we, if we want to come back to study. Should we include vaccinated people either included as a total number of clinical study subjects? Or we can create an additional group from additional data in recruiting some vaccinated people?

Dr. Kris Roth: So, vaccines and serology tests are a little bit more complicated than vaccines and antigen or molecular tests. So, for antigen and molecular tests, we, we just want to know if any of your subjects in the study were vaccinated and we want to analyze the data, the subset of data, for vaccinated individuals. It could be that their viral levels are lower if they have breakthrough infection, and we just want to understand that.

For serology, it can really interfere with our assessment of the test performance. So, I would come in with a pre-EUA again with that question to our team about what you'd like to do, and we'll give you specific feedback of that. And it obviously is going to be a challenge going forward with individuals as the percent of our population gets at least one vaccination. Now, it's over 50% of our US population.

Emma Powell: So, if that's the reason with configuring, we need to include that group? So, if the data is drawn supporting good performance impacting antibody response, you know, post the specific vaccine. Would FDA review the data and consider allowing it?

Dr. Kris Roth: Again, I recommend, I don't think I can give you a specific detailed response here and I would encourage you to submit a pre-EUA along with your study design and what you want to do in that study.

Emma Powell: Okay. Yes. Thank you.

Coordinator: Thank you. And we do have time for one last question. Our last question will come from Susan Sharp. Your line is open.

Susan Sharp: Hi. Thanks again guys. I just wanted to give Kris an opportunity to give us the name of that swab pooling, so we don't forget.

Dr. Kris Roth: Yes. Thank you. So, we don't have, it's not public. We don't have authorized swab pooling right now. We are in negotiations with a number of folks in the pre-EUA stage, so I did get that confused. But thank you for bringing that back up. I appreciate it.

Susan Sharp: Thank you, Kris.

Coordinator: Thank you. I will now turn the conference back over to Ms. Irene Aihie.

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 Webpage at www.fda.gov/training/cdrhlearn by Friday, April 30th. If you have 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 today's 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. Once again that does conclude today's conference. Thank you for your participation. You may disconnect at this time.

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