Coordinator: Welcome and thank you for standing by. At this time all participants are in a listen-only mode until the question-and-answer portion of today's call. During that time if you would like to ask a question over the phone line 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 am Irene Aihie of CDRH's Office of Communications and Education. Welcome to the FDA's 29th 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 Timothy Stenzel, Director of the Office of In Vitro Diagnostics and Radiological Health in the Office of Product Evaluation and Quality 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 Timothy.

Dr. Timothy Stenzel: Thank you, Irene. And hello again, everyone. Today it will be me. (Toby) is on a well-deserved leave this week. So I have a few starting discussion points. The first thing that - relative to pre-EUA submissions, if a question that is asked in a pre-EUA is something that can be answered clearly and directly from a template that we've already posted, we will defer to that and not generally provide any more direct feedback.

This will really help us triage these questions because we spend a great deal of time on (unintelligible) the templates and keeping them as up to date as we can. I've directed the office staff to cut and paste the relevant section into the email, if you send it by email, as well as to attach the full template. So I'm hoping that, that works for everybody because that would be a very efficient way of handling this.

Next I wanted to revisit positive predictive value. It is - we get frequent questions about the application of positive predictive value, in particular I think for - currently, for rapid antigen tests. So everybody has seen various publications about potential false positives as there have been rollout and use in lower percent positive populations in nursing homes and other settings.

And I just want to reiterate the value of looking at positive predictive value in assessing what to do with a positive result, specifically for a direct antigen test. But it can apply to any diagnostic test including molecular tests. Because in general, if the percent positivity is low in these populations, even with the relatively specific test, the number of false positives can be significant.
And therefore, we have recommended that, and the CDC does as well, that you confirm those results before taking any potential action, especially (in) regards patients. Obviously there's less - potentially less impact on healthcare workers if they have the false positive that can be confirmed to be false positive within a day or so. And then they don't need to be further quarantined if there's no other indication to do so.

But with the patients there can be obviously a little bit more disruption. So it is very beneficial to have a plan in place to - when you utilize these tests, to have a plan in place to rapidly reflex those positive individuals to a second test. And work out a way that we can get a fairly rapid turnaround time on those critical.

It's very clear in some of those preliminary data that I've seen, that the deployment of rapid antigen tests have been able to identify positives in low percent positive - true positive ways and low percent positive populations. And that this may have an incredibly valuable - be an incredibly valuable tool in the fight because you may be able to identify those positive individuals with the rapid antigen test which is not super sensitive.

So you're not necessarily seeing, you know, late, you know, I'm not going to say late RNA shedding for example, but typically you're going to see patients who are potentially and most likely, have the ability to infect others. And so if you can identify those in 15, 20 minutes with a quick turnaround test on location, if you can identify those individuals you can enhance your ability to protect your staff and others (unintelligible) the staff.

And I just want to go through a different set of numbers than I did last week or the week before, with regard to this PPV. So in this case I'm setting the percent positivity rate at just over 2%. It's actually 2.3%. The sensitivity of
the test I've dialed in 85% and the specificity I've dialed in at 98%. The positive predictive value for a positive result is then 50% in this population. I kind of selected these numbers to come up with a 50%.

That means one out of two results is a true positive and one out of two results is on average, a false positive. So again, it just highlights that you can have a very specific test, 98%, in a prevalent population of a little bit over 2% and still see significant numbers of false positives. And in my view, there is nothing wrong with this test. It is just, you know, the importance of recognizing positive predictive value in low incident populations.

And so the other thing I wanted to mention regarding direct (imaging) tests is there, because there has been a good bit of press about it, is whenever we get medical device reports or we get other signals of potential problems with any test and in particular, any EUA or COVID test. We do look into those NDRs and if warranted, we do an investigation.

We of course, will reach out to the sponsors and understand what they know; review the complaints that they've received; and if we can confirm anything we will make that transparent to the community, the larger community, the testing community, clinical community through various means as soon as we can. And, you know, and I have nothing new to announce along those lines today, about direct antigen tests.

So moving onto the final topic in my preliminary remarks, I did want to update an important new practice for this community. We've already issued a frequently asked question on our Web site and I do have prepared remarks for this. It is an important announcement.
So today the FDA issued a new frequently asked question for test developers to share an update on our prioritization of EUA requests. We recognize that we are currently in a different phase of the pandemic with respect to tests than we were previously. One second.

Many COVID-19 tests are now authorized to be run in labs. Presently, over 250 EUAs for tests are authorized and over 400 tests are already being offered following notification under FDA’s testing guidance. We prioritize review of EUA requests for tests taking into account a wide variety of factors, such as the public health need for the product and the availability of the product.

And we have prioritized with you EUA requests for tests where authorization would increase testing accessibility such as point of care tests, home collection kits, and at home tests. And - or would significantly increase testing capacity, such as tests that reduce reliance on test supplies or high throughput and widely distributed tests. So all those should be relatively common sense as we go forward.

In light of this and the recent HHS announcement that FDA will not require pre-market review of LDTs, to make the best use of our resources for the greatest public health benefit the FDA is declining to review EUA requests for LDTs at this time. FDA continues to prioritize review of EUA requests for point of care tests, home collection test kits, at home tests, tests that reduce reliance on test supplies, as well as high throughput, widely distributed tests.

This approach will provide greater potential to improve the national testing capacity and permit FDA to take appropriate steps to assure that authorized tests may be effective. And so with that, I think we can open it up for the Q&A. Thank you.
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. And our first question is from Shannon Clark. Your line is open.

Shannon Clark: Hello. Shannon Clark from UserWise. So for point of care testing of molecular antigen and antibody products, as far as the six different operators, it's noted that the testing should be performed with the Quick Reference instructions only and no training. This is consistent with the CDRH Human Factors guidance issued in 2016.

And typically in Human Factors testing we never ask untrained users to please follow the instructions at the beginning of the session because we want to see what they're actually going to do in real life. However, for this testing, for the testing classified in the templates, is it allowable to please ask them to follow the instructions prior to using the product?

Dr. Timothy Stenzel: That is a new one. Very specific question. I don't know a particular reason not to say, you know, that, you know, so there are, or something rather like there are instructions to follow in the test. A little bit more benign than what you said. But you know what, on this particular question I think it's best that we get a specific answer to you. Because I want to - I'm (alliant) with our typical practice so that I'm not out of step with what the office has said in this detail.
So if you send this to the templates email address that's a great question, and I'm myself, interested what the response would be. So please ask to include me in the discussion when you send that email.

Shannon Clark: Okay. I'll do so. And just as a benchmark, the CDRH Human Factors team does not allow us to say please follow the instructions or to even remind them that they're present in the carton because we want to kind of see what they're actually going to do in real life. However, if we're only having six participants and each one is going to test like I don't know, 20 subjects, we might have one that chooses not to follow the instructions and then the study becomes a disaster zone. So that's just a consideration.

Dr. Timothy Stenzel: Yes. No, I think it's a great question. And like I said, I was not aware of that potentially nuanced approach to how we recommend validation of point of care tests. So…

Shannon Clark: Thank you.

Dr. Timothy Stenzel: It is - it is a risk. Thanks.

Coordinator: Our next question is from (Elisa Maldonado-Hovich). Your line is open.

(Elisa Maldonado-Hovich): All right. Thank you. I have a question regarding the EUA notification pathway. For me, the serology antibody pathway, notification pathway is quite clear. However, I’m not as clear in regards to the - for antibody - excuse me, for antigen tests. So we have a prescription, RX point of care for healthcare professionals so in clinic, using (empty) swabs so nothing unusual, for antigen tests.
So if we're about ready to submit our EUA and believe we validated our, you know, clinical data and our submission is complete, based on today's new, you know, priorities, announced priorities, can we proceed with the EUA notification pathway for an antigen test, and obviously wait for your approval before we start the integration, and then submit our antigen application template within the 15 days?

Dr. Timothy Stenzel: Yes. Thanks for this question. So you are allowed to use the notification pathway. Once you notify us and you get confirmation from us, you can actually begin distribution of your test.

(Elisa Maldonado-Hovich): Okay.

Dr. Timothy Stenzel: However, it can only be performed in a high complexity lab until you get EUA authorization. And at that point, if it's appropriate to be used in both, in all types of environments including high, moderate, and clear way settings, then you'll get that, you know, the ability to do that in moderate complexity and clear wave site, upon authorization.

(Elisa Maldonado-Hovich): All right. Thanks for that clarification. And just maybe for near future, consider it, you know, consider other routes other than high complexity labs since point of care is for healthcare professionals in clinics, which oftentimes are not high complexity environments, considering the new priority.

Dr. Timothy Stenzel: I totally - yes, I totally, I totally get that. This is not just involving the FDA though. It also involves CMS and I think there's FAQs on this on our site as well for CMS in that. Unless we've authorized something it cannot be used in a lab other than a high complexity lab, according to my understanding of CMS clear rules. So I would also refer you to them.
(Elisa Maldonado-Hovich): All right. Thanks for the clarification. I appreciate it.

Coordinator: Our next question is from Savannah Esteve. Your line is open.

Savannah Esteve: Hi. Thank you. This is Savannah from UserWise. The other week you noted that as long as the participants of a human factor study were English speaking that using participants from other countries could be acceptable.

And I just wanted to highlight that this advice is contrary to the CDRH guidance for Human Factors 2016 which specifies that participants should be US residents even though the Human Factors group at the FDA has been known to accept Human Factors testing from Canada since there is a cultural similarity to the US.

I guess I was just looking for some clarification on that comment from last week.

Dr. Timothy Stenzel: Yes. And also I think I may have misspoke last week and I think we do recommend Spanish language as well. So my understanding, in our practice, is that we allow and perhaps this is when you - when a clinical study is done at the same time, that we allow that to be done outside the US for these kinds of tests.

So I could be wrong. But I think that's typically been our practice. And we want to be at least in this emergency situation, as flexible as possible on - because we do have a number of developers outside the US that have devices that may be important and deployable within the US.

Savannah Esteve: Okay. Thank you, Timothy.
Coordinator: Our next question is from (Wendy Strongin). Your line is open.

(Wendy Strongin): Thank you. In a prior call you said that experts have concerns about whether saliva would be sufficiently sensitive for antigen testing. Was that based on any data that they had actually collected or that FDA has seen? Or was that just a general concern?

Dr. Timothy Stenzel: So we have seen data to this effect. And it does, you know, obviously alert us to a potential issue. There was also a recent press report about two different developers who reported they have decided and rapid antigen tests could not - have decided not to pursue saliva as a sample type. So the FDA remains open to it. But we want to see the data to support its use.

(Wendy Strongin): Yes. I know the press report you're familiar - that you're referring to. But it doesn't say anything about what was tried or what the method was. Does the FDA have any data that you can make available to manufacturers who are interested in this?

Dr. Timothy Stenzel: We cannot share any confidential - any company confidential information with the public. Those companies are welcome to share that. So, you know, the companies were named in that press report so you're free to approach them and ask them for anything that they might have that might help you.

But typically, you know, a rapid antigen test, the sample type, you know, whether it's, you know, nasal swab or nasopharyngeal swab, it would go directly into some sort of (lysis) buffer, you know, and then onto the device. And you can imagine the similar workflow for saliva. I mean that would just be where I would start.
But, you know, picking the right antigen target might be important in saliva and also, how you might process that saliva sample in that first buffer might be important in order to free up and preserve those protein antigens you're targeting.

(Wendy Strongin): Great. Thank you. I have one additional question about antibody testing. The CDC says on its Web site that if someone has antibodies they likely have some degree of immunity to SARS-CoV-2. Would you allow a home test to have a claim of some degree of immunity conferred by antibodies without the manufacturer actually going out and doing studies, which would obviously be very, you know, difficult and time consuming to actually prove immunity?

Dr. Timothy Stenzel: Yes, that's a different - a difficult situation to prove. First of all, if you just do one serology test in a low percent positive population the likelihood of a false positive result is not insignificant and should be reckoned with. And we've talked long ago on this meeting, on this call, about the potential to do not just one but a second serology, different serology test to try to, you know, firm up that exposure history.

And then the question about - even about - well, you know, about immunity is obviously an important one but very difficult to prove. And in order to make claims about that in which somebody might rely on that information and - in going about their life, and potentially putting them at risk of being let's say reinfected, let's just assume they've had a prior infection but we've already had reports of reinfection.

And until we firm up that understanding that's something that we're not going to be able to authorize at this time unless the data's supported.

(Wendy Strongin): Thank you.
Coordinator: Our next question is from (Vajya Daka). Your line is open.

(Vajya Daka): Thank you for taking my call today. My question is around the FAQ that you have put out this morning that FDA is not going to be reviewing any LDT submission. But I wanted to - a clarification on the past submission that we had. And we had gone with FDA for a round or two, in terms of addressing their reviews and concerns on our assay. Can you please clarify that? Thank you.

Dr. Timothy Stenzel: Can you ask that question in a slightly different way? I want to make sure I understand the question.

(Vajya Daka): Okay. Yes. I just wanted - I'm sorry. I just wanted to know if the EUA for LDT that we have submitted in the past, will be reviewed or those will also be declined to be reviewed.

Dr. Timothy Stenzel: So you've already been reviewed and you've already been authorized?

(Vajya Daka): So we're not - so let me rephrase it again. So I am from a high complexity lab and we have submitted our LDTs several months ago and also a couple of months ago, two of the assays that we have. I just wanted to know if you are going to be reviewing those old submissions in giving us EUA status or are you going to be declining to review any of the LDTs for EUA approval.

Dr. Timothy Stenzel: Yes. So there were a few as we approached this, in this new policy, that we finished up because they were so close to the finish line and we had worked closely with those. And it - and in fairness, it seemed the right thing to do. But for those that were further out from potentially being authorized, we are going to decline to review those LDT applications.
(Vajya Daka): So let me ask you one more question. So we have - FDA had reviewed our submission once and then given us feedback and we have submitted those feedback to FDA. So will those be reviewed or those will be also declined?

Dr. Timothy Stenzel: Yes. Those will be declined. If you haven't received an EUA authorization already then yes, we will be from here forward, be declining to review any LDTs.

(Vajya Daka): Okay. Thank you so much.

Coordinator: Our next question is from (Jackie Chang). Your line is open.

(Jackie Chang): Hi. Good morning. I have a question about the 510(k) process. So for a test that has already been submitted notification and is pending on an EUA, is there a pathway for a manufacturer to submit a PMA or a 510(k) request? And then if a manufacturer wants to get pre-market (current)s for neutralizing antibody test either through EUA or a 510(k), which FDA panel will handle this device? Thank you.

Dr. Timothy Stenzel: When you mean FDA panel what do you mean by that?

(Jackie Chang): Like is it clinical chemistry, immunology, like which division? Because previously you mentioned there are three parts, three groups that handle all the EUAs. So there's molecular biology, there's antigen and there's a serology one. So I'm just wondering which one will handle the neutralizing tests. And then if it is through a 510(k) will it be the same group of people or a different group of FDA division?
Dr. Timothy Stenzel: Yes. So we have three teams. We have a serology team, we have a direct antigen team, and we have a molecular team. And they divvy up the applications by technology so that those that are most experienced in those technologies are involved in the review of those technologies.

And so, you know, if - and we strongly - we'd be very open to receiving test submissions for full authorization. For the first COVID test they will be a de novo (template). Once we've authorized the first de novo for a given category, all subsequent tests in that category will be obviously a 510(k). That will need to adhere to the special control recommendation.

That's a document that has very specific recommendations for validation of the test once we've granted a de novo and created a new regulation for a new - that new class of test. And so our staff are doing double duty. They're - the experts in our office who are reviewing EUAs are also going to be reviewing de novos and 510(k)s for COVID tests.

And in addition, our office is still handling all the usual and roughly the same amount that we saw last year, of non-COVID tests that come - submissions that come to our office. So we're staying very, very busy.

(Jackie Chang): That's very impressive. My specific question was about the neutralizing antibody test. Right now there's no template for a neutralizing antibody test. And if we want to go through an EUA pathway and if we are not a point of care or any of the priorities that you listed in today's announcement, will we still have a chance or should we go through a de novo pathway?

Dr. Timothy Stenzel: Yes. Yes. Yes. So for kit developers that want to have a neutralizing antibody assay or semi-quant or quant, we've already authorized I think at least one semi-quant assay. Our EUA team will continue to review those kit
submissions. The team is working on - for serology, working on home collection, working on home testing and working on a - those are two different templates and then a third template having to do with semi-quant, quant, and neutralizing.

And so I believe the team is ready to start making some recommendations for neutralizing assays. So if you send an email to our templates email address and ask for a specific - for any recommendations having to do with development and validation of neutralizing antibody assays, I believe the team can start giving you some specifics while we finalize those - that template.

(Jackie Chang): Oh, this is so great. Thank you. So helpful. Thank you again.

Dr. Timothy Stenzel: You're welcome.

Coordinator: Our next question is from (Chris Benson). Your line is open.

(Chris Benson): Hi Tim. Thanks for taking questions every week. I represent a foreign manufacturer of a SARS-CoV-2 molecular test that is undergoing interactive review. We submitted a pooling claim and had been asked to test the FDA panel with the test. Since the FDA said they will not ship the panel outside the US we need to find a US laboratory to perform this testing for us.

As you can imagine, this can be quite difficult because every lab we've talked to are extremely busy. Can you tell me why the FDA will not send this (normal) reference panel to a foreign manufacturer? Thanks.

Dr. Timothy Stenzel: Yes. No, a couple of things. And one of them you may want to send me an email through the templates email box. I know that we've had - I'm not aware of the specific prohibition. I know that we tried to ship internationally. But
there has been some shipment problems and - going through customs and things like that.

And I have more than a little bit of experience in trying to ship biological materials from one country to another and dealing with the customs issue. And it's very challenging. So it may be due to that that they haven't been able to overcome that issue. Now it might be that we could work with a company that's in a foreign country and figure this all out and map out a shipping strategy to get it to the company in enough time so that the dry ice is still on the samples.

But the other thing is that I want to examine your specific case to find out if the reference panel results are required to make an upfront decision. It is a condition of all authorizations of all tests that when we request that you do a panel test and that you do that and report the results to us.

So if you send me an email with - via our templates email box ask for Doc Stenzel, on this particular issue about - well these two issues, I want to look into it a little bit more and give you a very specific response.

(Chris Benson): All right, Tim. Thanks. Yes, it - the requirements of the testing related to writing the (pool) monitoring plan and that was the justification for that. But I’m happy to contact…

Dr. Timothy Stenzel: Yes.

(Chris Benson): …you directly. Yes.

Dr. Timothy Stenzel: Yes. So we've started to use the reference panel data in a very kind of limited way. And for those developers that have, you know, a relatively high
sensitivity assay, we've been trying to streamline things like the monitoring plan, to make it a little bit easier for those tests that have demonstrated with the panel that they have a relatively high sensitivity test.

We're not really taking any negative actions at all based on some of the results. But where we can - we have reassurance from the results that you have a relatively high sensitivity test we are looking for opportunities to benefit those developers at this time.

(Chris Benson): Okay. Thanks again.

Dr. Timothy Stenzel: But we have the ability to put in place a monitoring plan without that (being). It's just not as streamlined as we would like to offer. Okay? So it's really an effort to help you out.

(Chris Benson): Okay.

Dr. Timothy Stenzel: If we can.

(Chris Benson): Understood. All right. Thank you.

Coordinator: Our next question is from (Dana Hummel). Your line is open.

(Dana Hummel): Hi. Thank you for taking my question. What is your recommendation as to how researchers can purchase say serology rapid tests if the researcher does not have a CLIA certificate or a CLIA waiver? So basically I'm wondering if the test kit is labeled as RUO, can a researcher without a CLIA certificate or a waiver purchase the kit from a manufacturer? And this would be for either an EUA authorized test or a non-EUA test.
Dr. Timothy Stenzel: So I forget the exact number of serology tests that we've authorized for the point of care setting. I'm not sure if that matters for what you're doing. I think it may only be one at the moment. They're very interested in adding to that and adding home testing and home collection to serology. What are they going to do with this test and results? I can potentially guide you in a good direction or a helpful direction here at least…

(Dana Hummel): I…

Dr. Timothy Stenzel: …as to what the…

(Dana Hummel): I guess maybe surveillance.

Dr. Timothy Stenzel: …recommendations are.

(Dana Hummel): Perhaps for surveillance or just general COVID research.

Dr. Timothy Stenzel: So pure surveillance, you know, you want to know what the percent positivity is in a population. That's what you're going to do. You're going to - they'll probably do this under IRB. That's not so much - first of all, pure surveillance testing according to how we define it on the FDA Web site, we have elected to not have purview over that kind of testing in this pandemic.

So, you know, researchers are doing that and following our recommendations along with the recommendations of CMS and CDC. I would urge you to check out our sister agencies' recommendations on what you can and can't do in surveillance testing. But if that's what it's for it doesn't matter what the FDA classification of that test is.

(Dana Hummel): Okay. And then…
Dr. Timothy Stenzel: We don't require an EUA test for that purpose. And although we might - I think are - we may recommend if there is one that it might be beneficial to use that because it's obviously gone through some review and you can narrow based on - largely on the NCI testing program. You can actually know what the performance of that test is based on that program and our review of the data in that program.

(Dana Hummel): Yes. I agree. But if the researcher doesn't have a CLIA certificate or a CLIA waiver then they're not allowed to buy the EUA test. Right?

Dr. Timothy Stenzel: I am not aware of that prohibition. Now I don't know if some test developers are putting a restriction on that. If they are, I'd like to hear about it and I'd like to potentially address it through an FAQ question and answer on the FDA side. And then, you know, if there is - and you are getting prohibition for true research surveillance use of a EUA authorized test I would like to hear about it in detail. And I would urge you to send me an email to my attention, to the - through our templates email box.

(Dana Hummel): Okay. I’m a manufacturer and so I thought that we were not allowed to sell our test unless it was a CLIA certified or CLIA waived lab. But you're saying if we have some sort of documentation from the researcher saying it will be purely used for RUO use only then that would be acceptable?

Dr. Timothy Stenzel: You know, that would be an adequate potential mitigation for that. But I know we've clearly recommended to use - FDA has clearly recommended you use EUA authorized tests even for surveillance. So that would be our current recommendation.

(Dana Hummel): Okay. Thank you so much.
Coordinator: Our next question is from (Christopher Hanson). Your line is open.

(Christopher Hanson): Yes. Based on your earlier response to a question, it sounds like pending EUAs for - or pending EUA request submissions for LDTs will be declined at this time. Will developers who have a pending submission for an LDT receive any sort of notification that their submission will be declined at this time? And does…

Dr. Timothy Stenzel: Yes.

(Christopher Hanson): …such - just one other question. Would such declining mean that the developer would no longer be able to eventually get PREP Act coverage for their tests?

Dr. Timothy Stenzel: Okay. Yes, we are going through our submissions and determining which tests are LDTs and they will get a letter as soon as we can get that out to them, explaining that and giving them that information. Regarding PREP Act coverage, I’m just - I’m going through a prepared - a potential question here.

It says is this an FDA effort to prevent LDTs from COVID-19 from getting PREP Act protection? No. This is an effort to prioritize FDA resources for the greatest public health benefit considering the extent in which we can use our authority under the FD&C Act, the Food, Drug & Cosmetics Act. The PREP Act is a separate statute.

(Christopher Hanson): Thank you.

Coordinator: Our next question is from (Tom MacDougal). Your line is open.
(Tom MacDougal): Hi there. Thanks for taking my question. I was hoping to expand on an earlier one and then ask one of my own. So you said earlier that the first clearance submission for each of the categories, you know, serology, molecular, antigen, will be a de novo followed by 510(k)s from there.

And I was curious if, you know, let's say the first serology submission is for moderate and high complexity CLIA labs only, can that be followed up with 510(k)s that are looking at non-laboratory use or point of care use?

Dr. Timothy Stenzel: As a 510(k)? You know, getting into the details of that I would rather - my personal druthers is that I would rather have - I'm a (lumper) and not a splitter - and to have as broad a categories of de novo grants as possible. It does mean we need to write these special controls in a way that would allow all of that.

And whether we're at a juncture to do that with the submission of a moderate or a high complexity test, without data on its point of care use is something that I would like to examine when we get those submissions and provide that feedback.

Hopefully, we can provide the broadest and sort of bucket in here of these submissions so that we frankly, limit not only our work but that of test developers as well, regarding de novos.

(Tom MacDougal): Okay. Thank you. And then just my other question is I'm working with a developer who has an antigen test that can be visually read and they want to develop alongside it an electronic light based kind of reader system. And, you know, I've seen, you know, tests like Abbott already have these on the market previously. But for a company that does not, should they seek a separate approval for this reading system or can it be included in the EUA?
Dr. Timothy Stenzel: So we're working on template updates regarding this for direct antigen tests. So you can certainly email our template team email box and ask for the recommendations for the development of a reader for a direct antigen test. And the team should be able to cut and paste from our current thinking on recommendations for this and give you as specific an answer as we can on that.

Can - and it may matter whether or not the same developer who developed the antigen test is also the one that's developing or responsible for the development of the reader. If that's all within one legal entity you can simply update your original EUA application with the reader.

If it involves a separate company then it gets a little bit more challenging, but we'd really look to streamline how we do that. And, you know, if that company is willing to work closely with you then we can work out all of these kinks in the least burdensome way possible.

(Tom MacDougal): Great. Thank you so much.

Coordinator: Our next question is from (Griffin Soriano). Your line is open.

(Griffin Soriano): Hi, Dr. Stenzel. Thanks for taking my question. I apologize. A bit of a long one here. But if a test developer must receive EUA for a combo antigen test like the one we saw recently from Quidel, do they already need to have an FDA cleared rapid influenza diagnostic test?

And if so, and the developer does not have one, do they need to conduct a 510(k) study to receive EUA for a combo test or does a combo antigen
developer simply need to illustrate their test performance for Flu A/B and SARS versus an already approved PCR test for these diseases?

Dr. Timothy Stenzel: So I don't think the current antigen template, has recommendations for a combo or a multi-analyte test. Obviously we just authorized the Quidel test. Our molecular template has some good information about the recommended development path and validation for combo tests that have non-SARS respiratory viruses that we haven't reviewed before in that.

And that could be a good guide but I believe the team is ready to be able to give you specific feedback on our recommendations based on our current thinking around this for direct antigen tests. So simply email that. But you can look at the molecular to start getting an idea of what we're going to be suggesting for such tests.

We are - take two different pathways depending on whether the tests have been previously cleared for say Flu A/B. And, you know, we've already reviewed it and we've already, you know, designated perhaps the (unintelligible) test and you're adding SARS to it.

There's less development of work invalidation for such a test than if you're coming in new to us in either a combo that's new to us and that you now have SARS, Flu A/B, (ADRC) or whatever, and we haven't seen that test before; we haven't authorized the non-SARS (analytes) yet, there is a greater expectation of validation that we recommend. And that's because we haven't seen that test before. And therefore, there might be point of care studies as well as the validation (of those).

Now in pre-market for an EUA for such a device, we're going to be flexible. We would like to see as much prospective data as possible. However, we're
not, you know, we're not in the middle of flu season yet and we may have in fact, because of mask wearing and social distancing plus the usual amount of vaccination, we may see a very light flu season going forward in the United States. That would be our hope. Hopefully that pans out.

In which case, there may not be enough prospective samples in a reasonable amount - positives in a reasonable amount of time for you to follow our usual recommendation. So we are going to be very open and flexible to the use of say (bank) samples. (Bank), Flu RC, whatever on your panel. Clearly there's plenty, unfortunately, of SARS around today.

But for those other (analytes) we will - we absolutely will allow the use of the samples, (bank) samples, to pre-market, validate your test for EUA review and authorization. We would however, in all likelihood have post-market commitments and then authorizations that ask you to do a follow up prospective study that allows us to really understand the performance of those non-SARS (analytes).

Because that, you know, even in the pandemic that does typically require a 510(k). And so we are being flexible to assimilate the development of panels such as this. And we're trying to do our best to help you (make it).

(Griffin Soriano): Great. Thank you. And just one quick one. To date, I know you've been mentioning this on previous calls, but to date, have you been approached by any developers with an EUA for at home COVID testing for active infection?

Dr. Timothy Stenzel: COVID? And so as molecular or antigen testing at home?

(Griffin Soriano): Yes, that's correct.
Dr. Timothy Stenzel: So what I can say - I can't really talk about who's done what. I think I can. There's a lot of interest in that, obviously. But what I'll say is that we have to my knowledge, and I get sort of an update every day or every other day about this, on particular high priority category tests. We haven't received an EUA submission that has, you know, (unintelligible) for our review for an at home antigen or an at home molecular test.

(Griffin Soriano): Great. Thank you very much.

Coordinator: It looks like that's all the time we have for questions. I'll go ahead and turn the call back over to (Kimba Ford)?

(Kimba Ford): Thank you. This is (Kimba Ford) who's now covering on behalf of Irene Aihie. We appreciate your participation and thoughtful questions on today's presentation. The transcript and the presentation will be available on the CDRH Learn Web page at www.FDA.gov/Training/CDRHLearn, by Thursday, October 15. If you have additional questions about today's presentation, please email CDRH-EUA-Templates@FDA.HHS.gov.

As always, we appreciate your feedback. Following the conclusion of the 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/CDRHWwebinars), immediately following the conclusion of this live discussion.

Again, thank you for participating. Please join us next Wednesday. 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