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<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Hi, welcome to the 15th Annual Canaccord Genuity Virtual MedTech, Diagnostics and Digital Health & Services Forum. I'm Kyle Mikson, I cover Life Science Tools and Diagnostics at Canaccord.

And we're pleased to have Quanterix here with us today. Quanterix uses a Simoa technology to digitize biomarker analysis with the goal of advancing the science of precision health. Representing the company, we have Kevin Hrusovsky, Quanterix's Chairman and CEO. Great to have you here, Kevin. Thanks for joining us today.

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

My pleasure, Kyle.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Sure. So Kevin, let's – to start the stage, I guess, can you just speak to the rising importance of biomarkers, not only in simply developing drugs, but also in driving precision medicine forward. And then kind of jumping off of this, what are some of the examples of liquid protein biomarkers like blood – in blood and saliva that are kind of gaining steam within biopharma, especially within the field of neurology?

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah, interesting, Kyle, it was probably four or five years ago. We were really driving forward with the concept of biomarkers in blood, which are protein measurements in blood. And at the time, there was not a lot of belief in it. In fact, many felt that there was probably going to be a lot of time required to particularly in neuro evolve biomarkers, protein measurements in blood are non-invasive fluids, either blood or saliva, because it's so far from the brain and there's so many different filters like the blood brain barrier that might prevent that correlative linkage. But since that time through the Powering Precision Health ecosystem, there's over 800 third-party peer-reviewed publications in neurology that allows us to look at various proteins in blood and be able to see and correlate to PET images and MRI images as well as final taps.

And so those correlative studies have unveiled it and Scott Gottlieb actually put a lot of new guidance in place in the FDA that said that you could use biomarkers if they're clinically relevant to actually get drugs approved. And even if it's precognitive impairment or pre-symptoms and so this was a big breakthrough when they issue that

guidance four, five years ago. And now it's become somewhat of the mainstream and many of the R&D organizations that are trying to get drugs approved.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Okay. Just staying with pharma, I guess or biopharma, around the time of your IPO, from what I understand, investors kind of helped you essentially kind of market your impressive services to those companies. And now he fast forward to today, you are a critical part of the wave of these innovative neurology therapeutics that will surely improve lives if approved, I guess though I just wanted to ask like what makes Quanterix so special to biopharma? Like if I'm a biopharma company, either with a neurology pipeline drug or with an asset that is targeting proteins, why should I choose Quanterix over some of the other kind of next-generation protein with content platforms that also have cell traction with pharma?

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah. So Kyle, this slide gives you a sense that and in our own studies in biotech they've emerged and did some analysis that shows that if you use a biomarker in your drug trials, you have – if you have a Phase 1 approval, you've got a 300% increase in probability that you can get a Phase 3 approval by utilizing biomarkers. And there's probably two or three key categories that you're having a profound effect. Almost a magical effect and the well called drug development strategy. Number one is patient stratification for recruitment. The ability to recruit and rule out patients that don't have the exact disease that your drug is intended to go after and many times before biomarkers were used, there would be a lot of in the neurology Alzheimer landscape, Lewy body dementia or frontotemporal dementia that looked like Alzheimer's with PET scans looked like Alzheimer's sometimes even with CSF, but they actually weren't.

And so that would give you a negative readout. And so that would hurt your drug child performance. Another key area that I think is even more profound is the ability to see the disease before symptoms with exquisite sensitivities on these proteins. By doing so, the disease is at an earlier stage and the theory and it works for cancer is that if you can get to these diseases, when they're a much earlier stage, you have a higher potential for the drug to be efficacious because of hitting the disease when it's not quite as established.

And in the case of Alzheimer's, there's a lot of third-party peer review from neurologists that say that they can see elevation of certain key biomarkers like NFL and some of the phosphorylated taus, 15 years in familial Alzheimer patients before dementia hits. So that's creating the ability to get to the disease much earlier in a more stratified way.

Thirdly, the cost performance of doing it noninvasively with blood is a couple magnitudes lower than doing it with PET scan or with cerebral spinal fluid. So you're changing the economics and the ease of throughput as well as getting you more accurate information that allows stratification and then a higher level of drug efficacy

performance. Finally, many times you can use a lower dose of the drug when you're attacking the disease earlier, and that leads to even lower toxicity.

So you have these profound benefits that create the 300% improvement, and that is a game changer. And those that understand it, particularly from their C-suites, they can very rapidly employ these technologies, change the economics and the probability of creating value for their investors and pharma by utilizing these technologies.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Got it. Yeah. The platform is really capable of some remarkable things. And like you were kind of referencing just measuring the extremely low levels of protein, which could help earlier detection disease, and I guess, prevention. At a recent conference, the clinical trials on Alzheimer's disease conference, it's the CTAD conference, I'll refer to it as you presented findings from your work with biopharma in the area of Alzheimer's disease. And you obviously highlighted pTau-180, one with Biogen and then pTau-217 with Lilly.

And then there also of data from a prototype, next-generation asset targeting pTau-231. So could you just maybe qualitatively speak to the results that you shared at this conference and maybe discuss why you're the partner of choice, in Alzheimer's and neurology, like in general and then we can get the diagnostics after that, I suppose.

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah. What's incredible about our overall ecosystem, which is a nonprofit called Powering Precision Health. There's many neurologists around the world that are deploying the HD-X in the Simoa technology. And they're always looking for biomarkers even when they have very low concentrations, which many times happens for neuromarkers because of the blood brain barrier. And the fact that there's six quarts of blood versus three pints of cerebral spinal fluid so when it crosses the blood brain barrier, it's very dilute and very low concentration. So the sensitivity of our technologies are key to being able to create these correlative linkages to the pathology.

And so they're now looking at different phosphorylated tau for different stages of the disease, particularly looking earlier and earlier and earlier, because again, the efficacy can be increased, the dosage can be decreased, increasing the probability of a success. And so pTau-231 seems to have good dynamic range and many of the third-party peer reviewed pubs from neurology that pTau-217 and two and 181 probably are a little bit more just before cognitive impairment, they have great dynamic range.

And so 231 might allow you to go even further upstream into even earlier stage disease, right now though, because let's face it, dementia, the PET scans are many times still the gold standard. And so what you're moving into at 231 is seeing the pathology before deposits have even gone into the brain. So what you end up having is cerebral spinal fluid positive, 231 would be positive in blood, but the actual images would be negative because it hasn't started to deposit yet in the brain. So when you start to go earlier and

earlier with these biomarkers, it's going to take more time, I think, to create these correlations because you're creating new gold standards of seeing things that today there's nothing to compare them to. And that I think will probably cause it some time before some of those next-generation phosphorylated taus are utilized in mainstream trials. But I think the 217 and the 181 are showing great utility and versatility as is GFAP and NFL.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Okay, really interesting. First time I really saw a lot kind of presented about 231 is interesting to see, I guess that was all really, obviously fascinating, really impressive stuff there, but let's just move on to diagnostics. That's clearly kind of a topical issue with kind of Quanterix. The TAM and diagnostics and health screens looks like it go to \$100 billion or so for you, which is obviously a pretty large range. You received the breakthrough device designation for the pTau-181 assay somewhat recently. And just with that being said, what is the near-term strategy in neurology diagnostics? And I guess importantly, how are you increasing your investments to further this kind of effort and then also like how you rightsizing diagnostics business to be successful?

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah. So first of all, we keep saying by our stock, not based on diagnostics, because we do think that the more we do in diagnostics and the more these biomarkers reveal their efficacy and capability to see disease earlier, non-invasively with great economics, the more attractive the business becomes and more it's utilized in drug trials, which derisks our 30% to 40% CAGR from 2019 to 2024 for the growth of our RUO business. And again, we think that there's no regulatory reimbursement risk with the RUO.

And that's why we think there's a great backstop that you have with the RUO part of our business. But when you look at the TAM opportunity, it can be as much as 20 times larger when you cross over and actually become a diagnostic, particularly for diseases like Alzheimer's where it's a fairly formidable disease today, and it's going to continue to grow over the next 50 years.

And so what we see is how do you take from a breakthrough designation that into the next stage of investments. And so we're beginning to lay out what we think are some conservative approaches and estimates for investors as we start to traverse into diagnostics. And I would probably start off by saying that what we are finding is that the work we did with the FDA for COVID where we got two EUAs, one for serology, and one for the antigen created a relationship where they saw, we could see COVID before symptoms. And they asked us because there is a lot of concerns early triggers from COVID for Alzheimer's that could, actually worsen the story on Alzheimer's loss of taste, smell, brain fog. Those are CNS markers that could be triggering evidence in maybe early Alzheimer's. And they asked us, hey, do you have anything that can work for Alzheimer's?

So we gave them the pTau-181, 55 days later. They actually gave us breakthrough designations that happened very quickly, but it typically could take a couple years. And now going from a breakthrough designation into an actual approval, 50K for single slide IVD could take two years. And so that's the type of estimates that we're trying to put in place here. But we think before even getting an FDA approved approach, we could stand up our own LDT lab based on these publications and start helping now patients see whether they have elevated levels of phosphorylated tau maybe to rule out if you will, and you're just worried, you'd like to know early, because now these drugs appear to only work.

When you take them early, you could have a test potentially that says you have no elevated ptau. Then you could then say, hey, I feel good each year in an annual test. We call it the rule out. And so that could evolve. And then the rule in is you have enough specificity, which today we're showing, above 80% heading for 90%, just with single markers like pTau, if you add to a GFAP and NFL, you can increase the area under the curve. And so we think that the laboratory developed test, LDT is a good place to start. And we think that that initial approach can be done in our Accelerator, and we're going to be – and we're working on that. And we might use partnerships too. We've got great partners in LabCorp and Quest and Frontage and Mayo Clinic and others. But we also could use a little bit of M&A maybe to support that LDT workout.

But by the end of 2023, we think we'll have revenue and the investment. We're showing here is without partnerships. And you could see the TAMs are on the right hand side. What percent of those TAMs can you move into is, is a big question. And the single site is the second row here. That's where you actually do get the FDA approval. And that's where dual process could kick in with CMS and trying to get some level of reimbursement with the regulatory approval. And again, conservatively, we think by the end of 2024 with \$40 million to \$60 million of trial work and other work that we could get there with this approach. Assuming everything works and obviously it's promising right now, and that's why we're showing this slide.

And then finally, distributed IVD, we do have a relationship with Abbot today, it's non-exclusive, and we have one for NFL with Siemens. We could use partnerships, or we could even someday move in ourselves with our own device with a broader menu, not just for Alzheimer's, but for MS and some of the other neuro diseases.

So anyway, this is a slide that this describes the potential and gives you that kind of roadmap that we're working towards. And we brought Masoud Tolou who came from PerkinElmer. He was running \$3 billion of revenue over there and understands diagnostics very well. He's very transformative. We put Dawn Mattoon to head up our Diagnostics Unit for the moment inside the Quantarix to build out and create more infrastructure. And we brought in a guy Mike Miller to run our CLIA lab Accelerator. So we're building out the team and we'll see where we can get to over the next couple years.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Great. And this illustrative slide, does this assume the breakthrough device designation? Is that baked in here?

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah. Breakthrough device really helps you for the second category because we got the breakthrough designation for single-site IVD as an aid. And so we are building slides now that will be shown in the future where we have four categories inside of Alzheimer's, you've got screening, you've got triaging when you it's an aid and you're using, let's say MRI or PET to support your diagnosis or you're may be using spinal tap to support it. Then you have a pure diagnosis that's just based on your test. And then you have patient monitoring, which could either be treatment monitoring or could be disease progression monitoring. Those four categories, we're looking at the TAMs, inside of these TAMs where the breakthrough designation today is only for triaging. And then we would be building off of that position and that's that middle row versus the LDT, which you could get to sooner.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Okay, got it. And then just staying with neurology diagnostics, but just different disease. I know on the last call, I think on the call prior you mentioned that you're kind of targeting, you do a breakthrough device designation for multiple sclerosis as well for MS using NfL. I guess like, how meaningful is that diagnostic opportunity in MS and why should investors be excited about MS relative to Alzheimer's. And I know there's a ton of MS therapeutics, obviously, maybe that's related to it ultimately as well.

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah, very good question, Kyle. And I think the fact that there's 16 approved drugs and that a lot of the body of evidence from many of these neurologists suggests that they can use NfL and blood using our technology. We bought Uman as well, where we have the antibody pairs with a very specific for clinical discrimination, as well as this Simoa that gives you the sensitivity. The combination has created just a flurry of third-party peer view publications over the last five years for NfL and MS. And that body of evidence is very complete, much more than Alzheimer's, which we're still kind of in the first inning.

Let's say we're more in the second inning for MS with the level of those publications. So we do believe that many of these publications suggest you can see whether a drug is working much earlier via measuring it in blood. And it's a much more longitudinal, easy to do way to track whether there's disease progression or the treatment's working and get you onto the right drug sooner.

And so there's – because there is 16 approved drugs in MS, as opposed to Alzheimer's where we only have one Aduhelm right now. We feel like the field could benefit from utilizing our NfL for that purpose. And we actually think someday everyone should probably know their NfL levels because we know NfL elevates with concussions, with

almost every neurodegenerative disease. So it's more of a broad-based cholesterol like marker that if you've got something going on in your head, that's neurodegeneratively deteriorating your brain function, NfL elevates in blood, and we've got all those correlative studies with PET scans, images, MRIs, as well as cerebral spinal fluid. So it's a low cost way.

Someday, we think everyone should know their baseline for NfL in case they ever have a concussion or they move into any other kind of disease. And so MS could be a way to start a cascade of an LDT that allows you to start to move into monitoring MS patients for disease progression initially, and then maybe for drug selection and then making sure you're on the right drug. So we think there's a field there of opportunity to really help medicine and help patients with MS.

And so we're watching this category and through we did submit it – it could be a couple years before we ever get a breakthrough designation for MS. And that's the type of timeline that we are putting out there. But it's pretty exciting evidence from the peer reviewed pubs.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Yeah. No, that was – that's really helpful and really promising. And so we have a few minutes left, unfortunately. So I want to talk about some bigger picture concepts. Just moving along the kind of strategic roadmap for Quanterix. It's our opinion that payers maybe even PBMs and other competitive managers could be the ultimate end market for Quanterix. Just a few days ago SomaLogic, which is like viewed as a comparable company to Quanterix talked about the promise of proteomics in population health. A good example would be, Medicare Advantage Plans with capitated rate structures that would benefit from the early detection of cost of conditions, which Quanterix obviously could provide the biomarker analysis for. So with that context and background, could you just update us on those IRB studies that you had with some payers about a year or so ago, and then as well as like, how are you thinking about that health screen opportunity?

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah. We did have a large payer one, the largest in the world do a lot of COVID work with us and they get to get exposed with the Accelerator Laboratory and also with our instrumentation what it is we can do by seeing disease before symptoms. And I think that that learning on COVID is now being explored as a way to create better outcomes because let's face it. Payers are looking for evidence of the drug working and also evidence and ways to move people into a drug where they think it's going to have benefit.

They don't want to be paying for the drug if it's not going to create benefits. So I do think that the biomarker not only can further stratify and improve those who get put on drugs by making sure that they have a profile with their biomarkers where the drug is going to

work, but then secondarily monitoring very efficiently and cost effectively whether the drug is having a desired impact. So, coverage with evidence is a key area.

We do believe that some of our biomarkers even as we mentioned, NfL for MS and some of what we're doing phosphorylated tau in NfL and GFAP for Alzheimer's could be great examples of where you move a patient in long before symptoms, when there's a much better efficacy opportunity for better outcomes. And then you monitor whether the drug is having the desired performance. We think that the payers will be creating a lot of opportunity for improving healthcare over the years by utilizing these pre-symptomatic or asymptomatic biomarkers that are non-invasive and easy to deploy and cost effective for greater outcomes in the future. So I do agree that this is a great area of opportunity.

I would look at SomaLogic being a little bit more upstream with a lot more broad-based multiplexing. We're bringing utility to the extraordinary level of sensitivity and getting less invasive samples once the proteins are identified that have relevance. So that's when we think the TAMs are largest, and that's why we continue to deploy translational proteomics around trials, that then lead into the actual clinic that then ultimately create an opportunity for diagnostics to move patients in and then monitor the performance of those drugs.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Okay. That was really interesting. Last question, I guess, a longer-term question, and I think many times investors – with investors, you talk about how this is kind of a longer term opportunity with Quanterix. So I guess, in five to 10 years, Kevin, do you see the company being known as a life science research tools company with some tests or a diagnosis company with some instruments?

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Yeah. So if the kind of dreams that we have right now for the company could come true, I would say that we're deploying them initially in both diagnostics and pharmaceuticals. As you can see in this slide, looking at these biomarkers that allow you to make a drug effective and allow a patient long before symptoms to be treated. So we think that that is the first phase. Second phase is biomarkers for the prevention of disease. And we think biomarker one someday could even allow you to have your own environment individually to monitor your disease triggers and try to prevent diseases by the way you live your life.

And so my view is, is that there is an opportunity to take this biomarker opportunity where we've tried to keep the technology in our company for both the RUO and diagnostics. We think that there's a lot of value that can be created for each of these businesses by symbolically being inside of the same company, because they both benefit each business. And then longer-term evolving this into even more of a consumer opportunity. So we do see a dream of opportunity that this could be a very large company initially helping get drugs that take care of diseases, but then longer-term to the larger

populations to try to prevent the diseases with great biomarker surveillance in non-invasive wearable device ways.

<<Kyle Mikson, Analyst, Canaccord Genuity Group Inc.>>

Okay. That was a much more elegant answer than I – the way I frame the questions. I appreciate that. So I think we'll have to wrap it up there, Kevin. But really appreciate you coming out and we'll speak to you soon. Enjoy the rest of the conference.

<<Kevin Hrusovsky, Chairman and Chief Executive Officer>>

Thank you very much, Kyle. You're very kind and we always enjoy the Canaccord group. You guys are a great bank. Thank you.