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PRESENTATION

Operator

Ladies and gentlemen, thank you for standing by, and welcome to the Fluidigm Fourth Quarter 2020 Financial Results Conference Call. (Operator Instructions) Please be advised that today's conference is being recorded. (Operator Instructions)

I would now like to hand the conference to your speaker today, Agnes Lee. Please go ahead, ma'am.

Agnes Lee - *Fluidigm Corporation - VP of IR*

Thank you to all. Good afternoon, everyone. Welcome to Fluidigm's Fourth Quarter 2020 Earnings Conference Call.

At the close of the market today, Fluidigm released its financial results for the quarter ended December 30, 2020. During this call, we will review our results and provide commentary on our financial and operational performance, market trends, strategic initiatives and our response to the COVID-19 pandemic. Presenting for Fluidigm today will be Chris Linthwaite, our President and CEO; and Vikram Jog, our CFO.

During the call and subsequent Q&A session, we will make forward-looking statements about events and circumstances that have not yet occurred, including plans and projections for our business, future financial results and market trends and opportunities. Examples include statements about expected financial performance, including guidance related to revenue, product line performance, net loss, margins, operating expenses and investment plans as well as statements about COVID-19 testing opportunities, planned product releases, collaborations, partnerships, funding sources, market and revenue growth, expectations, trends in diagnostics and other clinical markets and Fluidigm's strategic plans to access and grow those markets.

These statements are subject to substantial risks and uncertainties that may cause actual events or results to differ materially from current expectations. Information on these risks and uncertainties and other information affecting our business and operating results is contained in our annual report on Form 10-K for the year ended December 31, 2019, as well as our other filings with the SEC. The forward-looking statements in this call are based on information currently available to us, and Fluidigm disclaims any obligation to update these forward-looking statements, except as may be required by law.

During the call, we will present some financial information on a non-GAAP basis. Non-GAAP information is not prepared under a comprehensive set of accounting rules and should only be used to supplement an understanding of the company's operating results as reported under U.S. GAAP. We encourage you to carefully consider our results under GAAP as well as our supplemental non-GAAP information and the reconciliation between these presentations. Reconciliations between GAAP and non-GAAP operating results are presented in the table accompanying our earnings release, which can be found in the Investors section of our website.

I will now turn the call over to Chris, our President and CEO.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

Thank you, Agnes. Good afternoon. As I think about everything that's happened in the past year, it's clear that the ongoing global pandemic has affected every aspect of our business, driving the need for seamless execution as well as opening new doors and accelerating greater opportunities. In fact, the pandemic has flipped the entire health care ecosystem on its head. By leveraging our core competencies, Fluidigm is fast emerging as one of the most unique and disruptive forces in life science technologies. We now span the spectrum from discovery to diagnostics, the latter of which is opening massive new markets for us to pursue. Diagnostics and health care decision-making are ripe for transformation. Our pioneering technologies will help to propel this paradigm shift as our franchises rapidly evolve in the diagnostic and health care decision-making platforms of choice for laboratories around the world that are working to address the most pressing problems in infectious disease, immunology and oncology.

Regarding our fourth quarter, I am so proud of the entire Fluidigm team for delivering financial results that were the highest in the company's history, relentlessly focusing on employee safety and addressing our customers' urgent COVID-related needs. Our team's actions reflect our shared values and an ethos we call stepping up, including a commitment and a passion to rapidly deploy our technology to combat the pandemic of today while accelerating our journey into new diagnostic categories and broader health care decision-making. We expect 2021 to be an incredibly exciting year in terms of new accounts to acquire, new markets to penetrate, new products and capabilities to deliver new insights and new partnerships to improve channel power, customer adoption and overall utilization of our platforms.

Before I turn the call over to Vikram to discuss our fourth quarter and fiscal 2020 results, let me first give you an overview of what we're calling Vision 2025, our updated strategic plan followed by a more in-depth look at our go-to-market strategy in both microfluidics and mass cytometry. The events of 2020 have validated our long-held perspective that the traditional diagnostics market is going through a seismic shift where new entrants, like Fluidigm, who bring new testing strategies, new channels, high flexibility, lab efficiencies and rapid scaling, can capitalize on an enormous addressable market opportunity. Our Board and management team have been working together to refine our long-term plan to align with this perspective. In a short time, we have built new assets that are foundational to diagnostics. We are confident that we have the right assets, the right team, the right vision and the right strategy to access the tremendous opportunity before us.

We have believed for some time and recently reaffirmed that COVID will have a profound and continued impact on health care in ways not imagined at the beginning of the outbreak. The pandemic has made increasingly clear the necessity of new tools for combating infectious disease and a paradigm shift and disruption in the delivery of diagnostic test results. At Fluidigm, we are bringing to market an array of new technologies that are increasingly essential in these efforts. We have proven our ability to deliver high throughput, flexible, low-cost testing solutions by leveraging our differentiated microfluidics technology. On a parallel path, in mass cytometry, we are moving closer to health care from our research routes. We are uniquely positioned to provide health care insights through a proven technology that elucidates a deeper understanding of the immune response, disease pathology and increasingly turns these insights into treatment strategies.

We are focused on accelerating market adoption of both microfluidics and mass cytometry, diagnostics and health care-oriented labs. We are incorporating the lessons we learnt from COVID and applying them to a broader spectrum of diseases. We have many options for growth, and we will be selective in the areas we pursue with our resources. We expect the long-term growth rates of both of our franchises to exceed 20% with a \$12 billion to \$15 billion immediately addressable market in molecular diagnostics, complementing our existing approximately \$3 billion market opportunity.

We have an exciting array of new products in our pipeline, and we'll start to unveil them to the marketplace in 2021. This is a direct result of our conscious shift to higher growth, higher return on investment offerings. We are targeting next-generation health care decision tools, including diagnostics and applied markets research. Throughout our portfolio, we believe there is an opportunity to increase our footprint across thousands of new labs, including General CLIA testing labs, flow cores and clinical and anatomical pathology.

We are now at the dawn of a revolution, powered by digital health that will transform the health care ecosystem. We are committed to helping clinicians and emerging digital health providers deliver more informed health care decisions and better serve their patients by expanding access to broad testing and connecting clinicians more directly with their patients. Our investments are focused on transformative partnerships, technologies

and capabilities to achieve optimal patient outcomes as we navigate the current pandemic and apply the lessons we have learned to other applications in health care decision-making.

Now I'd like to take a closer look at our microfluidics and mass cytometry business lines. Let me start with microfluidics and our game plan in solidifying our leadership position as the next-generation diagnostics company. We will do this in 4 primary ways. First, we will advance our technological innovation to simplify our workflow, serve the decentralized market and acquire new accounts. Second, we will expand into new channels, such as digital health care and telemedicine providers. Third, we will build upon the beachhead that we have established in labs to penetrate new markets. These labs already utilize our innovative diagnostic systems and are looking for a next-generation testing menu for the post-COVID era. And therefore, fourth, we will introduce new capabilities and diagnostic content as we expand our menu to new therapeutic areas, which will drive a higher proportion of recurring revenue.

Although the COVID pandemic caused significant disruption to our business, it also presented opportunities for us to prove the advantages of our unique technology to new accounts. Over the course of 2020, we were able to help revolutionize testing for the benefits of patients and first responders around the country and around the world. We believe COVID testing represents a 5- to 10-year market opportunity that high levels of testing are required in concert with vaccination and the testing should be maintained for national surveillance as well as in industries such as travel. In other words, more vaccinations does not mean fewer tests.

During the year, we saw strong demand for the market's first commercially available saliva-based COVID testing kits, leading to broad-based improvements across the business. Microfluidics revenue grew 89% from COVID testing alone, and we sold 2.2 million COVID tests over the past 6 months. These results are truly a testament to our ability to rapidly scale, bring new tests to market and acquire new customers. I strongly believe that the impact of COVID on health care will be profound and the ripples will continue to be felt for a long time to come. The pandemic has disrupted the diagnostics industry, creating new opportunities for digital health providers and demonstrating the need for high throughput, cost-effective and flexible testing technology that can be rapidly adapted as new information arises, such as new viral sequences, new pathogens and population stratification with differentiated treatment plans informed by companion tests and data sets.

While these unprecedented times represent an inflection point for the broader industry, our business has also reached a key inflection point that will redefine our future, and we now have the capability to build a durable diagnostics business powered by microfluidics, subsidized by COVID testing demand and nondilutive funding. Our path to grow is clear. We must keep focusing on our strengths. We are an innovation leader for neat saliva diagnostics and collection. Our cost-effective solutions are best-in-class and are ready to be deployed on a mass scale. We can provide a highly dynamic range of lab throughput, and our technology is extremely flexible. This proprietary technology is what enables rapid iteration of panels, assays and tests, consumables that drive recurring revenue to adapt to new viral strains and new diagnostic content and form better treatment decisions and support vaccine implementations.

In fact, we have an extensive runway to continued growth as we further advance the transformation of our microfluidics franchise into a durable diagnostics platform. This strategy shift will launch longer-term revenue acceleration in the business, broaden our customer base and increase recurring revenue. In this diagnostics revolution, we will not work alone. For example, in 2020, in addition to building a network of testing partners to increase access to saliva-based COVID testing to communities, we also secured new partnerships for building new capabilities, accessing new markets, penetrating new labs and developing new products. This work will continue in 2021. Over the coming months, we intend to establish new relationships with sample aggregators to expand COVID-related opportunities and drive commercial execution as well as with digital health providers and new market entrants in areas such as retail as a channel for our differentiated COVID testing platform.

We are also planning to enter into new collaborations to create content and improve workflows on our next-generation platform, which we believe will have an impact that transcends COVID. The applications of our microfluidics technology are not limited to infectious disease. We are already seeing emerging utilization of our technology in oncology, genotyping and clinical research arenas. Going forward, we will continue pivoting from a highly academic focus to broader clinical and diagnostic applications, and we'll continue strengthening our competitive positioning in diagnostics, where we've seen a large addressable opportunity ripe for disintermediation.

We proved ourselves as disruptors by creating the first commercially kitted saliva-based COVID test, which has been adopted by several universities, including the recently announced addition of George Mason University. Our multiyear product pipeline is robust, including several major new

product releases in 2021, and we remain on track for our next-generation Biomark platform release in the summer. We have a clear go-to-market strategy focused on sample aggregators, customer labs and connecting providers, and we will be partnering with digital platforms to eliminate the need for costly sales channels, leveling the playing field with larger peers. We will also continue innovating with a new instrument and sample-to-answer IFC. And we are working toward embedding digital capabilities into our products and offerings to meet the future needs of the diagnostics industry.

The digital health care revolution is here to stay, and we intend to play a leadership role in this transformation. Our recently appointed Chief Digital Officer will lead our efforts embedding digital into our product and solutions road map. Overall, I'm incredibly proud of the way our team's agility and responsiveness has paved the way for accelerating growth and increased opportunity in 2021 and beyond. This is what gives us confidence in our ability to achieve an expected organic growth rate of low- to mid-20s through 2025 in our microfluidics business.

Now let me turn to our other core franchise, mass cytometry, and why this technology is the most powerful platform for key clinical and health care decision-making. Our game plan for mass cytometry growth comprises 4 key elements: first, we intend to propel our established beachhead in academia into clinical labs with a health care decision-making tools; second, we will continue to innovate our technology and improve the platform; third, we will be embedding digital capabilities into our product suite for better informed health care decisions; and fourth, we will leverage the competitive advantage we have over our competitors in regulated markets to move into health care decision-making.

First, we've established an enviable beachhead in academic flow with over 325 active systems, which have attracted scores of new users. Furthermore, we are becoming the gold standard for immune system studies with review committees requesting mass cytometry data sets in study designs. As a result, we are seeing increased recurring revenue and publications. In the last year alone, we saw 100% increase in our publication rate which has now exceeded 1,380 cumulative publications and reviews involving mass cytometry. Mass cytometry is moving ever closer to serving an essential role in health care decision-making, and we believe we're the market leader in generating cytometry-based academic insights used to address applied market health care questions.

We don't intend to undertake this revolution alone. We've been building collaborations and partnerships to forge new ground for applications for mass cytometry. A prime example is the collaboration with PLT Tech we announced today. We are excited about this collaboration to introduce our mass cytometry platform registered for diagnostics in China. As part of this collaboration, we will be working with PLT Tech to submit Fluidigm's Helios suspension instrument for the Chinese diagnostics approval. Under the agreement, PLT Tech will initially focus on panel development of blood panel -- for blood channel diagnostics, particularly those affecting children and ultimately develop prognostic applications to evaluate effectiveness of immunotherapy treatments. PLT intends to purchase 3 systems as part of this agreement.

Taking a step back, our mass cytometry business comprises 2 segments: suspension and imaging. With regards to suspension, we plan to significantly increase our existing footprint of over 325 active instruments moving from discovery to research applications as we advance into commercial labs and contract research organizations which number over 1,200. Our customers turn to us to address their pain points, including number of markers analyzed simultaneously, resolution and single cell-based analysis. As a result, we are seeing an increasing number of publications and studies using mass cytometry technology to shed new light on diseases. We've been placing as many as 35 to 50 analyzers per year and driving utilization with new content and workflows that are named in significant studies and publications. Our Maxpar Direct Immune Profiling Assay delivers a complete sample-to-answer solution for high dimensional immune profiling and has become a standard method for assessing immune system response. For example, just this week, we announced that the NIH has sponsored a study at Stanford Medical School focused on pediatric patients with MIS-C using our Maxpar Direct Immune Profiling Assay. These studies and publications are a leading indicator that our technology will play a pivotal role in the health care revolution to come.

In addition to suspension, we view imaging as a highly attractive market that will extend well into the future. That is why, in the past 2 years, we focused our efforts on helping our customers better understand the immunome, a scientific subject of study and investigation with a huge impact on health care that requires insights into single cells, bulk cells and tissue. Currently, high complexity imaging is dominated by immunofluorescence and immunohistochemistry to examine the cellular localization of proteins and visualize antigens and cells. There is, however, a great need by our researchers to be able to see even more plexity, not only in research settings, but increasingly in clinical workups of tumor characterization. It is clear that the plexity opportunity ahead of us is immense. We currently have an installed base of more than 100 imaging systems in 17 countries,

but we estimate that our serviceable market is at least an order of magnitude greater with more than 1,500 possible labs who could benefit from deploying our instrumentation and our consumables.

In fact, Fluidigm is uniquely positioned to serve both the discovery and applied markets with our proven technology and scientifically published studies. And this year, we will be leveraging our partnerships to drive greater adoption in biopharma and CROs and looking to expand even further into imaging cores and pathology labs beyond 2021. We are expanding our focus from image acquisition to encompass both pre- and post-imaging analytical solutions through new partnerships, such as Indica Labs and Visiopharm. We're using our therapeutic insights and Japan Services Lab to customize and access emerging new capabilities in exciting areas of advanced health care-oriented biology. On one service project, in particular, we want to highlight is our recent work with Georgetown Lombardi Comprehensive Cancer Center, which led to a publication to identify novel targets for pancreatic cancer therapy, as well as an idea to form a new private company around these insights.

And finally, as another proof of our leadership in enabling cutting-edge research, we are pleased to see that our services labs have more than 40 projects completed or in progress, including several focused on COVID-related research. In addition to expanding our system placement beachhead, we will use data to enhance the value of our technology by embedding digital capabilities into our products and technologies, providing an enhanced customer experience. Our Chief Digital Officer will coordinate and drive our digital vision to impact data management and interpretation, digital integration of instruments and delivery of information. This will have applications across all of our products, our operations and our customer interactions. In regulated markets, Fluidigm holds a significant advantage over its recently emerging competitors. We have built a rigorous infrastructure encompassing stringent processes, operations, manufacturing and quality controls that enable us to meet regulatory guidelines. It can take years for companies to build this infrastructure from scratch.

Lastly, I would like to mention some important news regarding our leadership. As we announced in December, our Board welcomed Dr. Ana Stankovic as its newest Director. Ana brings us over 30 years of regulatory and diagnostics experience. In addition, I recently appointed our Chief Science Officer, Andrew Quong, to lead and accelerate our diagnostics initiatives. I expect that both Ana and Andrew will continue to share their expertise to enable the company to capture a sizable portion of the diagnostics market opportunities.

Going back to our Vision 2025 plan, we are well positioned in our mass cytometry suspension and imaging franchises for sustainable 20% plus growth as we expand into applied research markets. Across the company, we are bringing to market a pipeline of innovative new products and capabilities, including content, workflow and instruments that will be strengthened by our vital partnerships, especially those in digital health care channels. We will announce progress on this pipeline as the year progresses. In summary, our 4 areas of focus are technology innovation, expanding beachheads, partnerships and menu expansion.

In closing, I'm confident that as the company evolves in 2021, regardless of quarter-to-quarter fluctuations and COVID-related uncertainty, our mission to improve life by driving meaningful insights in health and disease will stay the same. Fluidigm will continue to revolutionize biology by enabling new insights into diseases and power better outcomes for patients. We are seeing more and more proof of this, more publications, more applied settings, more clinical trials, the number of these proof points will accelerate, resulting in greater insights and more informed health care decisions. Fluidigm has already begun its journey as a leader in next-generation diagnostics.

And with that, I'd like to now transition to -- Vikram, sorry, Vikram, for a detailed discussion of our fourth quarter and fiscal year operating results.

Vikram Jog - Fluidigm Corporation - CFO

Thanks, Chris, and good afternoon, everyone. Before turning to the financial results, I want to inform everyone that we have posted supplemental financial information in addition to our investor presentation on our investor website. I will begin by providing revenue highlights and follow up with additional color on each of our franchises and regions. I will then discuss our operating results and end with 2021 guidance.

We are very pleased with our strong performance in the fourth quarter and full year 2020. Our team remained resilient and resourceful, opening up new opportunities in diagnostics and expanding utilization of our mass cytometry technology in infectious diseases, using the same tools that are being used by our customers to gain insights in cancer and immunology.

Total revenue was \$44.6 million in Q4 2020, an increase of 38% compared to Q4 2019. As Chris noted, Q4 2020 revenue broke last year's record and -- sorry, broke last quarter's record and is now the highest quarterly revenue ever achieved by Fluidigm. During the fourth quarter, product and service revenue of \$40.5 million grew 26% compared to Q4 2019. Microfluidics diagnostics revenue, comprising both consumables and instruments, contributed over \$9 million, driving growth in our overall product and service revenue. Changes in foreign exchange rates had an approximately 2 percentage point positive impact on both total and product and service revenue growth. Microfluidics product and service revenue of \$21 million increased 98% year-over-year primarily driven by diagnostics revenues, both consumables and instruments. We sold 1.25 million COVID-19 tests in the quarter, up from the 795,000 tests that we reported in the third quarter. ASP was below last quarter but still within our range of \$5 to \$20 per test. And similar to last quarter, a majority of tests sold were to universities. At year-end, approximately 30 instrument systems were generating patient results. We now have a base of instruments generating results at commercial labs to drive our near-term diagnostics initiatives with partners.

Mass cytometry product and service revenue of \$19.5 million in the fourth quarter was 9% lower than the prior year quarter mainly due to lower instrument revenue, offset by higher consumables revenue. We saw another quarter of sequential revenue growth for both instruments and consumables as customers placed instrument orders that had been delayed from earlier in the year. We also benefited from year-end seasonality in the fourth quarter. Future customer ordering activity remains dependent on any impact from COVID restrictions and the pace at which we build our sales funnel.

Looking at our fourth quarter revenue compared to the prior year period from a regional perspective. The Americas revenue grew 87% to \$22.1 million, including \$4.1 million of development grant and license revenue. Product and service revenue increased 57% to \$18 million, driven by higher microfluidics diagnostics revenue. The majority of our microfluidics diagnostic sales this quarter was in the U.S. EMEA revenue increased by 24% to \$14.3 million. This increase was driven by microfluidics and mass cytometry consumables, offset by lower mass cytometry instrument revenues. Microfluidics revenue was driven by diagnostics instruments and consumable sales as well as research demand. Asia Pacific revenue decreased 10% to \$8.2 million, driven by lower microfluidics and mass cytometry instrument sales, offset by mass cytometry consumables and service revenue. To round out my commentary on the regions, in the fourth quarter, changes in foreign exchange rates had a 6 percentage point positive impact on EMEA revenue growth. As I noted earlier, we reported development grant and license revenue of \$4.1 million in Q4. This included \$2.7 million of development revenue associated with an OEM supply and development agreement with a customer and \$1.4 million of revenue related to a research and development grant.

Moving now to our operating performance. Let me start by saying that 2020 was an extraordinary year for Fluidigm. Despite all the challenges that were brought on by the pandemic, GAAP operating loss for the full year 2020 of \$51 million showed a modest improvement from the \$51.8 million of operating loss for the same period last year. Non-GAAP operating loss showed a more significant improvement of nearly \$4 million. For the full year 2020, non-GAAP operating loss was \$20.4 million compared to \$24.1 million for the full year 2019. We drove this improvement by increasing product and service revenue on a full year basis and accessing alternative revenue sources to fund investments for long-term growth, including NRE and grant and license revenue of \$15.6 million. We will continue to look for similar sources of revenue in 2021.

The remainder of my comments on operations will focus on non-GAAP measures. Please note that the reconciliation tables between our GAAP and non-GAAP measures are provided at the end of our earnings press release that was issued earlier today. Non-GAAP product and service margin was 62.7% in the fourth quarter of 2020 compared to 64.9% in the year ago period and 68.3% in the third quarter of 2020. Non-GAAP product and service margin on a year-over-year basis was lower primarily due to reserves for excess and obsolete inventory and lower pricing for mass cytometry instruments, partially offset by a favorable product mix. Sequentially, product and service margin was lower due to higher service costs, inventory reserves and lower prices for mass cytometry instruments, partially offset by higher utilization of mass cytometry instrument manufacturing capacity. Non-GAAP operating expenses were \$38.3 million in the fourth quarter of 2020 compared to \$22.9 million in the year ago period.

When the pandemic hit in early 2020, we took immediate action to preserve our liquidity, including reductions in salaries and variable compensation. With sequential improvements in revenue in the second half of 2020 and increased confidence in our outlook, we restored employee salaries and short-term incentive compensation. The year-over-year increase in operating expenses is primarily driven by increased compensation costs, including variable compensation, higher facilities costs and higher litigation expenses.

Moving on now to cash flow and the balance sheet. Cash and cash equivalents, short-term investments and restricted cash at the end of the fourth quarter of 2020 totaled \$69.5 million compared to \$73.4 million at the end of the third quarter and \$60.7 million at the end of 2019. Operating cash

burn was \$8.1 million during the quarter and \$19.8 million for the full year, a \$15.4 million improvement compared to 2019. Accounts receivable days sales outstanding increased to 54 days compared to 40 days at the end of the third quarter. Investing cash flow was a positive \$3.6 million for the quarter, and \$7.6 million for the full year, excluding sales and maturities of investments. Investing cash flows included \$14.3 million and \$25.4 million of proceeds from our RADx grant during the quarter and full year, respectively. Capital expenditures were \$10.7 million in the quarter and \$12.7 million for the full year compared to \$2.5 million in 2019. The year-over-year increase in capital expenditures was primarily related to the expansion of the IFC manufacturing facility, which is being funded by the RADx brand. At year-end, the borrowing base under our asset-based revolving credit facility was \$15 million, none of which was utilized.

And finally, on to guidance. In 2021, we will be focused on executing on our Vision 2025 strategic plan through innovation, beachhead expansion, partnerships and increased menu. The COVID-19 pandemic is still ongoing. And although we expect it to dissipate as vaccinations proliferate around the globe, the timing and pace of the recovery remain uncertain. Reallocations of research budgets to COVID-related projects that started in 2020 are still in place as we enter 2021. Our expectations for this year are, therefore, tempered by these uncertainties.

With this backdrop, for the full year 2021, total product and service revenue is projected to be approximately \$140 million to \$150 million or approximately 14% to 22% higher year-over-year. Other revenue is projected to be approximately \$4 million to \$5 million. Non-GAAP net loss is projected to be between \$17 million and \$21 million. We expect non-GAAP product and service margin in 2021 to be close to or slightly above full year 2020 levels. At the franchise level, mass cytometry revenue is expected to grow year-over-year at or below the low end of our total product and service revenue growth range. Growth is expected to be primarily driven by consumables and service revenue. Overall, microfluidics revenue is expected to grow at or above the higher end of that range, and year-over-year growth in microfluidics revenue is expected to be primarily driven by diagnostics testing revenue.

Q1 product and service revenue is projected to be approximately \$29 million to \$31 million, reflecting 20% to 29% growth year-over-year. Mass cytometry revenue is projected to be approximately 13% to 20% below the prior year quarter due to COVID-related delays in instrument orders in APAC and Canada. Microfluidics revenue is projected to be approximately 85% to 95% above the prior year quarter, primarily driven by diagnostics testing demand. Other revenue is projected to be approximately \$1 million to \$2 million in the quarter.

And with that, I will open up the line for questions.

QUESTIONS AND ANSWERS

Operator

(Operator Instructions) Our first question comes from Sung Ji Nam with BTIG.

Sung Ji Nam - *BTIG, LLC, Research Division - Director and Life Science & Diagnostic Tools Analyst*

Maybe just a clarification on COVID testing in the quarter. I think you guys exited last quarter with over 43 systems that were enabled for COVID testing and you ended the year with 30. Could you kind of talk about the discrepancy there? Is it just a recategorization? And then also curious, I think maybe you talked about, I could be wrong, of launching or submitting for EUA, a combo assay for COVID testing with flu A, flu B, RSC, just wondering if there's any changes in terms of that plan.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

Thank you for the question.

Vikram Jog - *Fluidigm Corporation - CFO*

Chris, maybe, I can take the first question.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

Perfect. That's exactly what I was going to propose. You take the first, I'll take the second.

Vikram Jog - *Fluidigm Corporation - CFO*

Yes. Sung Ji, in the -- at the end of the third quarter, we had about 8 to 9 systems that were actually generating patient results. And so the higher number that you are correctly recollecting was the number of systems that were actually sold into diagnostics testing. But as we had, I believe, talked about the last time and then subsequently, there's a process between the time an instrument is placed at a testing lab until when it actually starts generating patient results. And the relevant metric is the number of instruments that are actually generating results. And that number has, in fact, grown from that 8 to 9 to 30 at the end of Q4.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

And then I'll kind of tackle the second part if you want to ask any clarifying on either one of those points, Sung Ji. So with regards to the EUA on a combo assay, I think as you will appreciate, the COVID environment is extremely dynamic. So we have actually spent a lot of time prioritizing, expanding our menu through things like the CE-IVD submission, which we were successful in achieving just in the back half of the quarter or early part of the year in the first quarter. We've also been looking at expanding claims. So we actually shifted more towards asymptomatic. So working on screening claims and at-home collection, which are areas that are pretty important to our strategic road map. And no way whatsoever is it a reflection on the interest in a combo assay, but we really looked at what we thought the commercial attractiveness for the near term was going to be for that product and then deprioritize that for the near term on our road map. And we have other things in the works, which will come on, too, perhaps later as far as menu expansion in the near term that we feel will have a much higher impact on the urgent needs of the market at this moment.

Sung Ji Nam - *BTIG, LLC, Research Division - Director and Life Science & Diagnostic Tools Analyst*

Okay. Got you. That makes sense. And then just on the microfluidics business outside of COVID testing. Would you be able to comment? It sounds like there are a lot of partnerships, potentially new product launches coming up. Anything you guys can comment on at this point in terms of potential milestones that we can anticipate over the next 12 or 18 months?

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

I mean the shortest answer is, I think what was important for us was to present the Vision 2025 so you can see really where we're headed. And now as you see these announcements come out, which we do have many planned this year, you can drop them in as context. So I don't think there'll be a number in that time period you just have mentioned, including partnerships that are outside of the diagnostics -- sorry, outside of COVID-related partnerships for the microfluidics platform.

Sung Ji Nam - *BTIG, LLC, Research Division - Director and Life Science & Diagnostic Tools Analyst*

Okay. Got you. And then lastly from me. Congratulations on the PLT Technology partnership. I was curious, is -- are they largely replacing what they were using flow cytometry for some of these applications? Or are these kind of new applications that they have been validating and developing more recently?

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

You're right, your instincts, it's a combination of both. So some of it represents flow cytometry business that they think will be better suited on mass cytometry in addition to some unique capabilities that our mass cytometer can provide that flow cytometry does not. It actually comes back to the theme we've been discussing around plexity and the power of getting that answer in a single experiment and our ability to build larger and larger panels and run them all on a single -- in a single experiment. So as you well appreciate the challenges of fluorescence-based technology, I think, is struggling to scale to the needs of the future. And this is a great -- I think, a great example of an organization that evaluated both and has moved towards mass cytometry.

Operator

Our next question comes from Dan Brennan with UBS.

Daniel Gregory Brennan - *UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences*

Great. So I guess first question, just digging into COVID a bit. So Q4 results were definitely lighter than what we expected. Chris, just comment -- so comment a little bit about the traction that you saw, how it manifested versus what you expected? And then I'd be interested to get specifically, what's baked in for 1Q and for 2021 for COVID.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

Okay. Vikram, I'll probably have you take the second part of the question, and I'll address the first. Dan, I can only say that we are extremely pleased with the performance in the fourth quarter, including the performance in COVID testing. In 6 months' time period, we went from essentially the first emergency use authorization in August for symptomatic claims alone with essentially no installed base to delivering more than 2 million tests to the market. So I recognize that while others may have had aspirations even more aggressive, but we were -- we knew and we talked about it, I think, in our call colored commentary as best we could that we were really new into this. And we were only at that point, I think, maybe 90, 120 days in, into that call period. And so we were still in the learning process of what it takes for labs to stand up to validate for them to acquire their own samples and their own business model variability.

But I think our experiences in the fourth quarter have actually been quite instrumental and insightful in influencing and shaping our '21 priorities. So there's a number of things that we can do, we believe, to drive more success into this existing installed base as well as expand our installed base and consumable stream. And a couple of those is about getting more access to saliva-based approaches and specifically Fluidigm's saliva-based approach in the marketplace. And that's why digital partnerships and partnerships in general are really important to that and to feed more business into our core partner labs. In addition, we're going to continue to make improvements on innovation. So we've talked about the next-generation platform in IFC coming out later this year. And then the third is expanding our regulatory claims. So it's easier -- it is, so we can market our technology across more use cases to address many of these emerging market segments across the economy.

Vikram, I'll toss to you on the second part.

Vikram Jog - *Fluidigm Corporation - CFO*

Yes, sure. Dan, our microfluidics business is going to grow between 85% and 95% from Q1 of 2020 to Q1 of 2021, and most, if not all, of that growth is due to COVID-related testing revenues. Just if your question relates to how it compares to Q4, I would say, generally speaking, it's relatively in line with the Q4 revenues.

Daniel Gregory Brennan - UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences

And in terms of the '21 guidance, Vikram, for COVID?

Vikram Jog - Fluidigm Corporation - CFO

In terms of Q1. I thought your question was for Q1.

Daniel Gregory Brennan - UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences

Right. Yes, yes. No, no, it was both. It was 1Q and '21.

Vikram Jog - Fluidigm Corporation - CFO

Yes. For '21, I think, similarly, the microfluidics growth is going to be at or above the high end of the overall growth guidance. And all of that is going to be related to COVID testing revenue.

Daniel Gregory Brennan - UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences

So basically

(technical difficulty)

Stephen Christopher Linthwaite - Fluidigm Corporation - President, CEO & Director

Sorry, Dan, you're breaking up.

Daniel Gregory Brennan - UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences

Sorry, I'm saying, yes, the 22%, so just take 22% of your '21 -- '20 microfluidics number and that's the COVID number, I guess, for '21. Okay. So maybe second question. So Chris, you were obviously extremely bullish on the Vision '25, setting some pretty aggressive growth targets out there over the next 5 years. I guess the first question is, in 2021, the mass cytometry for Q1

(technical difficulty)

Stephen Christopher Linthwaite - Fluidigm Corporation - President, CEO & Director

Maybe we should take the next question in the queue and let Dan come back.

Operator

Our next question comes from Steven Mah with Piper Sandler.

Steven Mah - Piper Sandler & Co., Research Division - Director & Senior Research Analyst

Okay. I'll ask you guys first a non-COVID question. So on this new digital capabilities you mentioned for imaging mass cytometry, can you dig a little bit deeper and give us a little bit more color on what that's all about? I know you mentioned data management, but is that something that's going to help customers like integrate and archive their images or is there a remote pathology or analysis? Just a little bit more color, please. And then could you give us a sense on how you'll monetize that? Or are you going to offer it for free for more customer satisfaction purposes?

Stephen Christopher Linthwaite - Fluidigm Corporation - President, CEO & Director

I'll take that one, Steve. Good to hear your voice. Thanks for the question. You've kind of landscaped a number of areas and there's probably a few more in addition. So there's a lot of things that we can do to prepare for the health care decision-making of the future. And some of those relate to the pre-analytical workflows and then the post-analytical analysis. Other things are, as you described, kind of as all of us are moving now closer to pathology is adapting the technology for the needs of the pathologists, both clinical and anatomical pathologists and the way they analyze data. There's other things around connectivity of our platforms and storage of the data files, things you just identified also and even things such as remote monitoring and uptime on the instrument platforms. So monetization for us could have -- will have or could have multiple facets to it. So there's additional software plug ins. There is some of the things we will do that will drive value will be probably things we push through upgrade packages in the future. And then, of course, the final one, which would be kind of the data creation and algorithm development, which is an open area for further discussion. So at this time, I won't speculate, but I think that's -- the data generation is one of the -- and the insights is one of the most valuable things. But for the near term, the vast majority of our revenue will be generated from utilization of the instrument platforms.

Steven Mah - Piper Sandler & Co., Research Division - Director & Senior Research Analyst

Okay. Great. And then one question. I know that you guys had talked before, there was a COVID-19-related research tailwind, especially using some of your panels, like Maxpar Immune. Have you seen utilization trends change given the vaccine news? Or has there been a drop-off in COVID-19-related research?

Stephen Christopher Linthwaite - Fluidigm Corporation - President, CEO & Director

I don't perceive that there's been a drop-off in COVID-related research. And kind of one example would be the Stanford announcement we just had yesterday. Although that's not strictly quoted, but it's the spin-out or potentially one of the hypotheses that it's COVID-related. I think the types of questions are going to evolve, and there's going to be a very durable need for immune analysis for immune system or immune profiling and phenotyping, for some of the reasons you just described. So what if exposure to various variants matter, what's the longitudinal impact on the population for different strains, what's the impact of the vaccine, having supporting panels for things such as vaccine developers for the future. So we actually think there's probably a pretty rich corridor of need here. And I don't perceive, although I can analytically qualitate or quantitatively describe what COVID-specific research will be, but we perceive it will be quite strong. And we've seen it in the retrospective of our publications that are coming out and the shift towards more and more infectious disease-related publication.

Steven Mah - Piper Sandler & Co., Research Division - Director & Senior Research Analyst

Okay. Got it. And one last question. So on your COVID-19 ASPs, it still looks like it's a high mix of universities. Do you think that mix will evolve over time? And I know you guys are doing surge testing as well. Maybe just a little bit of color on the ASP mix in COVID-19.

Stephen Christopher Linthwaite - Fluidigm Corporation - President, CEO & Director

I'll ask Vikram to jump in also. But I think we see a wide range on the commercial-oriented labs, the ASPs tend to be higher in the academic settings, where they have a captive audience. So meaning they have a student population they need to test. They generally are willing to put forward relatively large fixed-price contracts. And in return, they tend to have ASPs that reflect that commitment to us in larger purchase orders. So we

would imagine that over time, the more we increase commercial scale business through the platform and volume through that, that the ASPs will probably increase over the measurement period, but it's always a balance of mix between the 2.

Vikram, any other commentary you want to add?

Vikram Jog - *Fluidigm Corporation - CFO*

No, I think that's exactly right. It's all a balance of mix. We do have a base of instruments that have been placed at both universities and commercial labs. But the results so far, as you have correctly noted, have been skewed in favor of university testing and for which the prices remain on the low end of the fairly wide range of ASPs, and we do expect, over time, for that mix to be more balanced than it has been in Q3 and Q4.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

I guess, I'd just like to add is that -- I mean, it's important as we've talked about in the past that we feel that we have very attractive margin profile across that spectrum. Clearly, getting better ASPs is better. But even on the lower end, it's a very attractive recurring gross margin for the company that gives us room to reinvest. And we're really looking at about establishing toeholds and beachheads. And finally, it's about also positioning ourselves against antigen testing and alternative testing approaches. And I think there's -- the industry hasn't necessarily benefited from the fact that there's a perception that PCR testing has to be very high. And in fact, you can get access to gold standard-based PCR testing on a Fluidigm platform at a very attractive price.

Operator

Our next question comes from Dan Brennan with UBS.

Daniel Gregory Brennan - *UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences*

So I guess, can you help me, Chris and Vikram, because I mean the stock -- maybe because of inflated estimates for COVID, I mean the stocks off in the aftermarket say 20% and your message sounds extremely constructive given the 2025 plan and the new product and the trajectory of business, which is well above what I think is treated forecasting. So I guess I'm just hoping to get a few things. So first off, just -- could you just give the dollar COVID number right now that's implied in '21? I know you gave some color before. I just want to back in the -- trying to make sure I understand what the base number is for product and services ex COVID implied in your guidance for '21.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

I'll have maybe Vikram comment on that in just a second. I just -- I got to want to go at the first part of the setup, Dan, and welcome back by the way, which is I feel like part of the challenge here is I think we are significantly undervalued by every metric, shareholder -- general assessment of peers in the performance. I think what's been missing is our ability to communicate a longer-term vision. And I think putting a long-term vision with putting stakes in the ground around recurring revenue streams, around the growth performance of both portfolios and kind of shifting the narrative beyond COVID test 1, 2, 3 or the quarter in question has been one of the things that's been holding us back because it's -- if you step back and look at the body of the work, we're heading completely in the right direction of increasing shareholder value.

Maybe with that context, Vikram, if you'd like to comment on the COVID-specific.

Vikram Jog - Fluidigm Corporation - CFO

Yes, sure. So there's a lot of uncertainty from quarter-over-quarter. So as I said in -- that our expectations are tempered. So take that from that perspective. In 2020, we had roughly over \$20 million round numbers, about \$22 million of diagnostics testing revenue in microfluidics. And so that number, if you do the math, and I'll do it for you. In terms of the growth rate in microfluidics that we alluded to in our guidance, let's say, all of that comes in from diagnostics. So that number would go from the \$22 million number. So roughly between, say, \$32 million to \$38 million in 2021.

Daniel Gregory Brennan - UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences

Got it. Okay. And then maybe just on mass cytometry. So the guidance, I know in 1Q reflects I think a decline, you guys commented on some delays in Canada and Asia. And I guess the full year guide, you talked about, what, below the 14%, which would still be below 2019. So maybe just give us a bridge about what you're seeing and expecting in 2021, obviously, you're citing some COVID uncertainties, and the bullishness going forward beyond that. I know you've talked a lot about partnerships and new products and disruptive things. So can you just give us a sense of when: either a, when we're going to see some of this; b, how much conservatism maybe you're baking in for '21? Because while there's still uncertainty out there, presumably, I guess, from other peers, where I think we're seeing some better outlooks in terms of tracks and some recovery.

Stephen Christopher Linthwaite - Fluidigm Corporation - President, CEO & Director

Yes. Thanks. I appreciate the follow-up on this, Dan, and I'll ask Vikram to join in, too. I think there's a lot of ways to address this. I mean one of the things we're trying to do is create greater transparency on this kind of this feedback from shareholders and analysts like yourself over the past year. And part of that maybe there's a departure between our outlook on COVID as being maybe a little bit more, in this case, that it's going to be more durable, the impact. And so our -- the mass cytometry when we get down to the granularity to the best of our ability at this point, recurring revenue streams in terms of services and consumables should be -- continue to grow and grow well off the 2019 levels. It's the analytical instrument placement cycle through the course of the year that has the greatest uncertainty for us. And I think the COVID turmoil hasn't really fundamentally changed that in this period. So as budgets are still being finalized and money is being reallocated to testing needs, et cetera, et cetera, but utilization continues to increase. So I think that's probably the biggest driver of uncertainty in the near-term period, but we don't see any reason why there's a fundamental challenge to our thesis over a multiyear period.

And Vikram, if anything else you'd like to add?

Vikram Jog - Fluidigm Corporation - CFO

Sorry, I thought Dan had something to say.

Daniel Gregory Brennan - UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences

No, it's okay. You can go.

Vikram Jog - Fluidigm Corporation - CFO

Yes. No. I just want to echo what Chris said. We are expecting strong growth in consumables and service. So we expect the trend that was created at the second half -- Q4 of 2020 to continue into '21. We do have conservatism, and you can see from the Q1 guide why on instruments. The quarter-over-quarter visibility due to local reactions from governments on various issues related to permits and so on and so forth make that somewhat necessary for us to be cautious. So -- but we are very optimistic on the consumables and service side in terms of growth in 2021.

Daniel Gregory Brennan - *UBS Investment Bank, Research Division - Senior Equity Research Analyst of Healthcare Life Sciences*

And you -- are you planning to maybe host an Investor Day? It sounds like, Chris, from the language that you've got just a lot of things ready to go here. You've got competition on the spatial side continuing to ramp up as well. So I'm just wondering when you think we'll get some visibility on what the new product portfolio particularly will include?

(technical difficulty)

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

I think we completely agree with you, Dan, that an Investor Day or in this current digital medium maybe some series of events that can kind of lay out more granularity. I think we want to just take this one step at a time, which is start with Vision 2025. The overlay for the -- how we see the year playing out and how the individual portfolios are lining up and then what we want to accomplish over the next 5-year period. And as you said, there's a lot of value to then doing a click down to talking about each one of these. So we'll get back to you on the specifics but it's certainly something that's top of mind right now.

Operator

I see no further questions at this time. I would like to turn it back over to Chris Linthwaite for closing remarks.

Stephen Christopher Linthwaite - *Fluidigm Corporation - President, CEO & Director*

Thank you. I just want to, again, thank everyone for joining our call here to wrap up the Q4 and full year 2020 year in review. And just to summarize then, we're really focusing on innovation, establishing and mobilizing these beachheads to expand in new addressable markets. We're going to use partnerships quite aggressively throughout the year and look for us to talk about more expanded menu and offerings on both of our platforms. Thank you very much.

Operator

Ladies and gentlemen, this concludes today's conference call. Thank you for participating. You may now disconnect.

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