Todd Friedman (Investor Relations)

Good afternoon and welcome to PacBio's second-quarter 2023 earnings conference call.

Earlier today, we issued a press release outlining the financial results we will be discussing on today's call, a copy of which is available on the Investor's section of our website at www.pacb.com or as furnished on Form 8-K available on the Securities and Exchange Commission website at www.sec.gov.

With me today are:

- Christian Henry, President and Chief Executive Officer, and
- Susan Kim, Chief Financial Officer

Before we begin, I would like to remind you that on today's call, we will be making "forward-looking statements," including statements regarding predictions, progress, estimates, plans, intentions, guidance, and others, including expectations regarding our financial guidance and operating plans, our Revio and Onso systems and their commercialization plans, the future availability, uses, accuracy, coverage, advantages, quality or performance of, or benefits or expected benefits of using, PacBio products or technologies, including our Revio and Onso systems; expectations with respect to our acquisition of Apton Biosystems and its products and technologies; and expectations with respect to customer demand for our products and technologies and growth in our business. You should not place undue reliance on forward-looking statements because they are subject to assumptions, risks, and uncertainties that could cause our actual results to differ materially from those projected or discussed, including those inherent in developing and commercializing new products. We refer you to the documents that we file with the SEC, including our most recent Forms 10-Q and 10-K, and our recent press releases to better understand the risks and uncertainties that could cause actual results to differ. We disclaim any obligation to update or revise these forward-looking statements except as required by law.

During the call, we will also present certain 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. Management believes that non-GAAP financial measures, combined with U.S. GAAP financial measures, provide useful information to compare our performance relative to forecasts and strategic plans and benchmark our performance externally against competitors. Reconciliations between historical U.S. GAAP and non-GAAP results are presented in tables within our earnings release. For future periods we are unable to reconcile the non-GAAP gross margin and non-GAAP operating expenses without unreasonable effort due to the uncertainty regarding, among other matters, certain acquisition-related items that may arise during the year., including future amortization of developed technology.

We will also discuss our recently announced acquisition of Apton Biosystems. For more information, we have posted a presentation, which can be found Investor's section of our website at www.pacb.com.

In addition, please note that today's call is being recorded and will be available for audio replay on the Investor's section of our website shortly after the call. Investors electing to use the audio replay are cautioned that forward-looking statements made on today's call may differ or change materially after the completion of the live call.

Finally, we'll be hosting a question-and-answer session after our prepared remarks. We ask that analysts please limit themselves to one question only so that we can accommodate everybody in the queue.

I will now turn the call over to Christian.

Christian Henry (President and CEO)

Thank you, everyone, for joining our call. In today's prepared remarks, I'll update you on several aspects of our business.

First, I'll discuss PacBio's record performance in the second quarter and highlight our commercial activities.

Second, I'll comment on Revio field performance and customer uptake in its first full quarter since launch.

Next, I'll highlight our recent commercial launch of Onso and our acquisition of Apton Biosystems, which was announced earlier today.

Then Susan will take us through the financials and guidance in more detail.

And to close, with half of the year behind us, I'll share how we are executing against the 2023 priorities I set forth earlier this year.

Starting with Q2 performance, the rapid adoption of Revio drove another record quarter for PacBio as we grew revenue by 34% compared to the second quarter of last year, and we exceeded $40 million in quarterly revenue for the first time in our history, with each region posting record revenue.

The team did an excellent job scaling manufacturing and ramping installations, which enabled us to ship 45 Revios for revenue and brought our installed base to 77 Revio systems as of June 30. Additionally, we exited the quarter with a healthy backlog of Revio instruments.

Revio's momentum and our ability to meet customer demand have further increased our confidence to raise our revenue expectations for 2023. We now expect full-year revenue to be between $185 and $190 million, representing 44% to 48% growth over 2022.

A diverse set of customers have demonstrated their commitment to Revio, and we have now received orders from approximately one hundred different customers to date, including several multi-system orders, Revio/Onso bundles, and steady interest from new customers. In fact, about 45% of instruments ordered in the second quarter came from new PacBio instrument customers.

This included a university in the southeast U.S. that had previously used an alternative long-read technology due to throughput constraints on the Sequel IIe. Requiring scale, reproducibility, and accuracy, the customer decided to re-examine the sequencing landscape and decided to invest in Revio. They now aim to leverage HiFi on several research projects with an emphasis on structural variation and its link to human disease.

New customers in the quarter also included the Medical University of Innsbruck, which marks the first Revio in Austria. The customer plans to consolidate multi-approach workflows used to analyze difficult genes, which included short-read sequencing, sanger sequencing, and PCR, and streamline it into targeted long-read panels utilizing HiFi sequencing.

New customer orders in the quarter also included the first instrument order in Indonesia from the YSDS Foundation. The group collaborates with academic institutions and hospitals across the country to promote genomic research and improve health. They ordered the Revio/Onso bundle to match the best-suited sequencing approach with the appropriate sequencing application. They plan to use long reads in human whole genome sequencing to build a genomic repository across the diverse Indonesian population, as well as metagenomics and targeted applications in difficult-to-sequence genes. The customer plans to leverage the accuracy of Sequencing by Binding on Onso to develop targeted panels for liquid biopsy.

Revio's increased throughput, accuracy, and direct methylation detection continue to expand long-read sequencing into population genomics programs. In the second quarter, Sampled, a leading genomic services provider and biorepository based in New Jersey, received its first Revio and expects to start sequencing a cohort of samples for a large-scale population genomics program funded by the Department of Veteran Affairs.

And in the second quarter, the All of Us population program released data from over 1,000 PacBio genomes. This is an important milestone as more long-read data entering the public research realm can unlock discoveries prompting more research and interest in long-read genomes – exactly the type of flywheel effect we've been talking about that can accelerate HiFi adoption.

Customer utilization and Revio field performance in the second quarter indicate a strong start to the product launch. Customers are ramping up their Revios usage, with approximately $6 million of our total $13.7 million in consumables revenue attributable to Revio in the quarter.

This strength is from higher-than-anticipated utilization from early customers and some customers building a working inventory of consumables in anticipation of larger projects to come.

It was also encouraging to see customers place larger standing consumables orders in the quarter. This demonstrates that customers also anticipate a continual flow of samples to keep their Revio busy for quarters to come. As a reminder, our utilization and ordering trends, though positive, are early and represent the first wave of Revio customers. I expect that we will better understand normalized Revio pull-through sometime next year.

Regarding field performance, on average, customers that are sequencing libraries 15 kilobases and up continue to hit our specification of approximately 90 gigabases per SMRT cell. The hard failure rate continues to improve and is well below our launch target. Later this year, we anticipate launching system updates that will add more functionality and further improve performance. Overall, Revio is proving to be reliable in the field. As customers ramp up their sequencing on Revio, it's exciting to see the first wave of scientific publications that this new instrument has powered.

In one preprint, researchers from Washington University and the University of Maryland began sequencing on Revio and noted that "highly accurate long-read WGS on the PacBio Revio System is consistent and can generate 30× genome coverage on one SMRT Cell", and found they found consistency across SMRT Cells in coverage, detection of variation, methylation, and de novo assemblies.

In another preprint, researchers from the International Weed Consortium, a group of twenty-four institutions, reported the sequencing of eighty plant species with Revio, and they describe how this is enabling pangenomic analyses, with the goals to develop sustainable and effective weed control methods and to provide insights about environmental threats that can greatly reduce crop yields.

As a third example, a benchmark study by the All of Us consortium demonstrated that sequencing data, assemblies, and variant calling from Revio were essentially identical to Sequel II HiFi datasets but required only one Revio SMRT Cell instead of three Sequel II SMRT Cells. Additionally, this study also compared the latest PacBio HiFi and nanopore methods. Consistent with previous reports, they observed that nanopore data resulted in a much higher error rate in INDEL calling than HiFi data and that certain variant classes had lower precision with duplex nanopore data compared to standard nanopore data.

Customers are pleased not only with Revio and its game-changing throughput and economics but also with the quality of service that PacBio provides. With that, I am pleased that our annual customer survey was completed in the quarter, resulting in a final net promoter score of 62. This demonstrates our commitment to delighting our customers, and we look forward to continuing to offer best-in-class support to all of our customers around the globe.

Switching gears from long-read to short-read, I am excited to announce that earlier today we shipped our first commercial Onso system today. The sequencing by binding, or SBB, chemistry, which is at the core of the Onso system, was the early-stage technology we acquired from Omniome less than two years ago with the promise of delivering customers an extraordinary level of sequencing accuracy. I congratulate the entire team at PacBio for developing this technology into a highly-differentiated platform designed to offer customers sequencing accuracy of 90% bases at Q40+ levels or one error in every 10,000 bases – a specification that we believe no other sequencer currently advertises.

This is a truly monumental moment for PacBio as it's our second sequencer launched in less than six months. We believe it positions PacBio as the only sequencing company to offer systems specifically designed for both long-and short-read sequencing and marks the next step in our strategic journey to becoming a multi-platform, multi-omic company that aims to deliver solutions across the genomics ecosystem.

One of the first Onso systems is going to The Translational Genomics Research Institute or Tgen, an early collaborator who found that SBB demonstrated the ability to accurately detect ultra-low variants without the need for high-complexity error correction in a broad range of applications, including infectious disease and liquid biopsy.

Now that we are shipping commercially, we plan to scale manufacturing through the second half of 2023. Additionally, PacBio expects to complete the installation of its first Onso instrument and ship related consumables later this month. The milestone payment associated with PacBio's acquisition of Omniome will be triggered once both the Onso instrument and related consumables have been shipped.

Onso is expected to address a significant portion of the short-read sequencing market, particularly where researchers are looking to find and understand very rare variants. As those discoveries are made, we believe that these researchers will then want to scale their experiments, which will require a highly accurate, high throughput short-read sequencing platform. Therefore, our strategy is to develop a multiproduct portfolio with both mid and high throughput short-read platforms based on our SBB chemistry.

As a result of our strategy, I'm pleased to share that earlier today, we announced that we entered into an agreement to acquire Apton Biosystems, a Bay-Area-based company developing a high throughput short-read sequencer using state-of-the-art clustering chemistry, optics, and imaging processing.

In working with Apton for the past few months, we found that Apton's sequencing platform is capable of generating SBB-quality data in a high-throughput sequencing system. As a combined company, we expect to integrate and further optimize the extraordinary accuracy of SBB chemistry with Apton's advanced optics and imaging technologies to develop a differentiated high-throughput sequencer. When launched, we expect this platform to deliver billions of reads per flow cell, sequencing output on par with other high-throughput offerings while providing differentiated accuracy and compelling economics.

Increasing density and throughput is one of the key development challenges in launching a high throughput sequencer – and Apton will give us a significant head start in that department. We're bringing over several talented engineers and scientists from Apton's lean organization and have already started planning the development of this next-generation sequencer.

Many of you may be wondering how this acquisition will impact our operating expenses going forward. Developing a high throughput short read sequencer has always been on our product roadmap, and the acquisition will accelerate our development of a high throughput sequencer and is likely to reduce our overall R&D expenses required to develop the system. Therefore, we remain committed to delivering on our long-range targets while keeping OpEx under 5% compound annual growth through 2026, and this acquisition is not expected to deviate PacBio from that target. In fact, as Susan will discuss shortly, we expect operating expenses to be lower than previously anticipated in 2023.

And with that, I'll pass the call over to Susan to discuss the financials. Susan?

Susan Kim (CFO)

Thank you, Christian. As discussed, we reported $47.6 million in product, service, and other revenue in the second quarter of 2023, which represented an increase of 34.1% from $35.5 million in the second quarter of 2022.

Instrument revenue in the second quarter was $29.9 million, an increase of 91.6% from $15.6 million in the second quarter of 2022. The continued momentum of Revio primarily drove the increase in revenue as we shipped 45 Revio systems for revenue in the quarter. We ended the quarter with an installed base of 77 Revio systems. Higher ASPs in the quarter were in part due to the lower customer loyalty discount extended to customers in addition to more new customers who ordered their first Revio in Q2 relative to Q1.

Turning to consumables, revenue of $13.7 million in the second quarter declined 5.7% from $14.6 million in the second quarter of last year, with approximately 44% of consumable revenue coming from Revio systems and the remainder from other systems and other consumables. We expect Sequel II and IIe as a percent of total consumables to decline throughout 2023 as we continue shipping Revio and customers transition to the new platform.

Finally, service and other revenue was $3.9 million in the second quarter compared to $5.3 million in the second quarter of 2022. From a regional perspective, as Christian mentioned earlier, all regions posted record revenue in the second quarter.

Americas revenue of $24.0 million grew 10% compared to the second quarter of 2022. Increased instrument placements with higher ASPs more than offset a year-over-year decline in consumables and services related to customers transitioning to the new platform. Instruments include continued adoption from children’s hospitals as Sick Kids became the first customer to receive a Revio in Canada and plans to utilize HiFi long reads for its Cystic Fibrosis variant calling project.

For Asia Pacific, revenue of $12.9 million grew 61% over the prior year, with both instrument and consumable revenue growth. We are pleased to see such strong performance from all regions in addition to China achieving record revenue in the quarter. Additionally, we’re excited to have onboarded a new distributor, DKSH, who will provide improved sales, marketing, and after-sales support in Southeast Asia, as well as best-in-class supply chain and warehousing. We’re seeing progress with the new distributor, as they have already booked an order for a Revio/Onso bundle in the quarter. And other customers in APAC are showing signs of initial interest in the Onso platform, with over 50% of our Onso orders coming from the region.

Finally, EMEA revenue of $10.7 million grew 87% over the prior year period driven by instrument growth – which included customers like the University of Oslo, who’s been a PacBio user for over a decade and, with Revio, they intend to scale their services to scientists and researchers across the country.

Moving down the P&L, a GAAP gross profit of $15.5 million in the second quarter of 2023 represented a gross margin of 33% compared to a GAAP gross profit of $16.2 million in the second quarter of 2022 which represented a gross margin of 46%. Second quarter 2023 non-GAAP gross profit of $15.7 million represented a non-GAAP gross margin of 33%, compared to a non-GAAP gross profit of $16.4 million or 46% in the second quarter of last year.

Gross margin declined year-over-year due in part to instrument mix, as Revio instruments sold during the quarter had a lower margin primarily due to loyalty discounts provided and higher initial manufacturing costs. Non-GAAP gross margin in the second quarter improved sequentially from the first quarter, largely due to higher average selling prices from lower average customer loyalty discounts in addition to more new customers who purchased their first Revio system.

While we expect gross margin to expand during the remainder of the year, gross margin could fluctuate depending on the pace at which Sequel II/IIe demand declines, Revio ASP improves, and unit manufacturing and material costs decline.

GAAP operating expenses were $88.7 million in the second quarter of 2023 compared to $84.2 million in the second quarter of 2022. Non-GAAP operating expenses were $86.7 million in the second quarter of 2023, representing a 3% decrease from non-GAAP operating expenses of $89.6 million in the second quarter of 2022. The increase in GAAP operating expenses primarily reflects an increase in the fair value of the contingent consideration liability during the second quarter of 2023 of $2.0 million related to the milestone payment to Omniome shareholders compared to a decrease of $5.4 million in fair value of contingent consideration in the second quarter of 2022.

Non-GAAP operating expenses declined year-over-year, primarily driven by lower R&D expenses resulting from the transition of Revio from development to commercialization, partially offset by increased sales and marketing expenses primarily related to increased investment in the commercial organization.

Regarding headcount, we ended the quarter with 818 employees compared to 793 at the end of Q1 2023 and 782 at the end of the second quarter of 2022.

Operating expenses in the second quarter included non-cash share-based compensation of $16.7 million, compared to $18.0 million in the second quarter of last year.

GAAP net loss in the second quarter of 2023 was $69.8 million, or net loss of $0.28 per share, compared to a GAAP net loss of $71.4 million in the second quarter of 2022, or net loss of $0.32 per share. Non-GAAP net loss was $65.6 million representing $0.26 per share, in the second quarter of 2023, compared to a non-GAAP net loss of $76.6 million, representing $0.34 per share in the second quarter of 2022.

Turning to our Balance Sheet items,

We ended the second quarter with $829.9 million in unrestricted cash and investments, compared with $874.9 million at the end of the first quarter of 2023. The change in cash primarily reflects our operating loss with interest income offsetting expenses associated with our convertible note exchange.

Inventory balances increased in the second quarter to $67.6 million, representing 2.0 inventory turns, compared with $62.0 million at the end of the first quarter of 2023, representing 2.1 inventory turns. The increase in inventory primarily reflects purchases of Revio and Onso instrument and consumables inventory.

Accounts Receivable decreased in the second quarter to $24.0 million compared with $29.6 million at the end of the first quarter of 2023, resulting in our DSO of 51 days declining in the second quarter compared to a DSO of 56 days in the first quarter of 2023.

Turning to guidance, as discussed earlier, given the continued momentum in Revio, we are increasing our guidance for 2023. We now expect revenue to be $185 million to $190 million, representing a growth rate of approximately 44% to 48% compared to 2022. This represents an increase of $10 million at the midpoint. Our guidance assumes modest sequential growth in Revio system placements in the third and fourth quarters.

Moving down the P&L, we expect the 2023 non-GAAP gross margin, which will exclude the amortization of intangible assets, to be in the range of 32% to 34%.

We expect margin expansion beyond 2023 as Revio placements will help drive a mix shift toward higher margin consumables, and higher volume and manufacturing efficiencies drive lower unit costs.

We now expect non-GAAP operating expenses to grow less than previously expected at 3 to 4% growth compared to 2022.

As mentioned earlier today, PacBio acquired Apton for upfront consideration of approximately $85 million in an all-stock transaction consisting of approximately 6.3 million shares of PacBio common stock plus an additional $25 million in stock or cash at PacBio's option payable in connection with the achievement of $50 million in cumulative revenue related to the commercialization of a high throughput sequencer based on Apton's technology, for an overall transaction valued up to approximately $110 million. We expect the go-forward development expenses related to the acquisition to be absorbed within the non-GAAP operating expense growth guidance of 3-4% compared to 2022.

Additionally, we expect interest income to more than offset interest expense for the remainder of the year.

PacBio expects to complete the installation of the first Onso instrument and ship related consumables later this month. The milestone payment associated with PacBio's acquisition of Omniome will be triggered once both the Onso instrument and related consumables have been shipped. As a reminder, this commercial milestone represents $200 million with approximately half being paid in cash and half in equity.

We expect the weighted average share count for EPS for the full year to be largely unchanged at approximately 255 million.

I'll hand it back to Christian for some final remarks. Christian?

Christian Henry (President and CEO)

Thank you, Susan. With half the year now behind us, I wanted to provide a status update on the five strategic priorities for 2023 that I set out earlier this year.

Our first goal was to drive rapid adoption of Revio by converting existing Sequel II/IIe customers and attracting new PacBio customers.

In the first half of this year, 40% of our system orders were from new PacBio instrument customers. And looking at the pipeline in the second half, we continue to expect about 40% to be new customers, which exceeds our expectations. Further, as shown by our ramp in Revio consumables and decline in Sequel II consumables, customers are eager to begin sequencing on the new platform.

Our second goal was to demonstrate Onso's extraordinary level of accuracy in the field and show how it can transform research in needle-in-haystack applications.

As discussed earlier, we've heard excellent feedback from our early collaborators and beta sites about the quality of data they get from Onso and how that can translate into improved research. With one beta customer telling us he's had several runs with raw quality scores above Q50 – a level he has not seen using alternative sequencing technology.

With the beta program complete and commercial shipments underway, we look forward to getting Q40-plus accuracy into more customers' labs and continuing to hear customer success stories.

While commercializing Revio and Onso was a top priority this year, it was just as important that we drive our development efforts toward the next generation of long and short-read sequencers.

We continue to make progress on future long reads, shifting R&D resources from Revio onto the development of our benchtop long-read and our ultra-high throughput long read systems.

Further, Apton now gives us a significant head start in developing the high throughput version of Onso, which will allow us to address one of the largest parts of the sequencing market.

And, as I've been communicating, I expect PacBio to deliver new and differentiated instruments at a much faster cadence than the organization had previously delivered.

Next, was expanding partnerships across the ecosystem and workflow to drive SBB and HiFi customer adoption.

Earlier this year, we launched PacBio compatible and signed on nearly 20 partners across extraction and library prep automation, sample prep, and secondary and tertiary analysis. We expect to sign several more partners this year and we have already seen several examples where these collaborations have led to increased PacBio sequencing.

Last, but certainly not least, was to drive toward our goal of being cash flow positive during 2026.

On top of executing on our product launches, the PacBio team has done an excellent job in improving our financial position.

We achieved record revenues in the second quarter with an expectation of 46% growth this year at the midpoint of our updated guidance,

As discussed, we also expect OpEx growth for the year to be 3-4% over 2022 – which is below our 5% compound annual growth target through 2026.

Additionally, we further strengthened our financial position in the second quarter by exchanging a significant portion of our notes due 2028 and extending the duration of our debt while lowering our coupon payment.

As you can see, it has been an exciting and rewarding first half of the year for us at PacBio and we look forward to sharing more as the year progresses.

With that, I'd like to open the call up to questions. Operator?