

Investor Relations – Todd Friedman

Good afternoon, and welcome to PacBio's fourth-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

On today's call, we will make "forward-looking statements," including statements regarding predictions, progress, estimates, plans, intentions, guidance, and others, including expectations with respect to our growth potential, instrument and consumable sales, and GAAP and non-GAAP guidance. 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.

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.

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 changes in fair value adjustments of contingent consideration and allocation of amortization expense attributable to certain acquired intangible assets.

Please note that today's call is being recorded and will be available for 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 today.

I'll start by recapping our results for the year and quarter. Then, I'll discuss our commercial activity around Revio and Onso. Finally, I'll discuss our latest product launches that we believe will further create value and differentiation around PacBio sequencing. I'll then pass it to Susan to discuss financials and guidance in more detail.

2023 marked PacBio's most transformative and successful year in our history. Our team executed aggressive goals to ramp Revio manufacturing and scale the installed base, which enabled PacBio to grow revenue 56% in 2023 to \$200.5 million – which was ahead of our expectations.

For the quarter, Q4 2023 revenue grew 113% year over year to \$58.4 million, and we shipped 44 Revio instruments in the quarter, bringing our installed base as of December 31, 2023, to 173 Revio systems.

We also grew consumable revenue in the fourth quarter to \$18.9 million, which included Revio consumables of approximately \$12.4 million and represented an annualized consumable pull-through of around \$385 thousand. The demand for long-read data continues to grow as total gigabase output on PacBio sequencers grew 68% in 2023 compared to 2022.

We believe this momentum sets us up for another year of growth as we continue to see growing interest in HiFi for larger-scale human genomics and see it becoming more mainstream in genomic testing. The market clearly demonstrates a shift towards long-read sequencing in a growing number of major applications, and I'll share some specific examples showing this shift today.

With that, our initial view on 2024 is that revenue will be between \$230 million and \$250 million, representing 15% to 25% growth compared to 2023. At the midpoint of this range, we expect Revio system shipments to be roughly flat to slightly up year-over-year.

As we have previously communicated, customers have lengthened their capital purchasing timelines, which impacts the timing of instrument orders and the pace of Revio adoption. We do not anticipate these current macro trends to fundamentally impact customers' desire to sequence with HiFi long reads.

Susan will touch more on guidance later.

Now, turning back to 2023, Revio, our flagship long read sequencer launched early last year, is making significant progress in transforming how researchers look at the genome – and we're still early in the adoption curve.

We've especially been pleased with the number of new customers adopting Revio, as nearly 30% of Revio systems ordered in the fourth quarter were from new PacBio customers, and almost 40% of Revio systems ordered in 2023 were from new PacBio customers.

New customers in the fourth quarter included Karolinska University Hospital in Sweden – a HiFi Solves consortium member planning to use Revio to address the limitations of short reads on structural variation, tandem repeats, and phasing to find more answers for genetic disease.

The HiFi Solves consortium was just announced last quarter, and by creating this collaboration of 15 leading genomics research institutions across ten countries, we expect best-practices sharing to accelerate the impact HiFi can have on human health.

We're also making solid progress on converting existing PacBio customers over to Revio as about one-third of Sequel II and IIe customers have now ordered a Revio – we are still early in the product transition cycle and expect most Sequel II/IIe users to migrate over to Revio over time.

Additionally, we expect customers who have adopted Revio in 2023 to continue to expand their fleets as they fill their Revios to capacity. We're already starting to see this with some customers ordering their second or third Revios in the fourth quarter, like Radboud University, which took its second Revio, expanding its fleet to ramp up its efforts in rare disease research. Additionally, Children's Mercy Hospital Kansas City ordered its third Revio to continue its effort to consolidate tests for genetics and epigenetics, increase efficiency, and improve solve rates while accelerating turnaround time. These fleet expansions demonstrate the elasticity and the demand to move samples over to HiFi long reads.

2023 was also a landmark year for PacBio as we launched Onso, our second major sequencing platform, just months after we started shipping Revio - enabling us to address a multi-billion-dollar short-read market.

With Onso, we've gradually ramped up manufacturing capacity and grew shipments sequentially in the fourth quarter. We have now received orders from a wide range of customers who plan to use it in applications ranging from - Oncology – including research into fragmentomics and targeted cell-free DNA panels, to exome sequencing and metagenomics.

One Onso customer is TGen, which is taking advantage of the platform's accuracy to detect rare populations associated with disease in a high background of non-diseased material for applications like early cancer detection and infectious disease research. Last month, researchers from the institute presented data that shows Onso is achieving well beyond its Q40 spec on customer liquid biopsy samples, with the majority of bases over Q50 – or 1 error in 100,000 bases of sequencing.

Since Onso's launch, peers in the industry have been increasingly discussing the value of accuracy, which we believe underscores accuracy as an unmet need that PacBio is differentially positioned to address with our Sequencing by Binding chemistry.

Moving on, as we do every year, I want to share an update on our internal market segmentation from the previous year. Our customers use our products across a diverse set of sequencing applications.

In 2023, human genomics was the largest portion of our business, accounting for approximately 40% of our revenue. This includes a wide range of customers, like UC Irvine and the GREGoR consortium looking to run a multi-thousand sample project in rare disease, or Bioscentia who is now using HiFi for routine testing for certain sensory disorders.

Plant, animal, and Agri-genomics again was the second largest part of our customer base, making up approximately 25% of our revenue as long reads have been well-positioned to interrogate these often large and complex genomes. This includes agricultural companies that are adopting Revio to incorporate low-pass genome sequencing to improve their workflows and get better insights into crop development and production.

Microbiology and infectious disease makes up about 20% of our business and include a wide array of customers across public health labs, research institutes, and academic labs across a dynamic range of applications from pathogen surveillance to biology of host-pathogen dynamics, drug resistance, and more.

Cancer genomics was roughly 10%, and this is really an application that we believe can be further addressed with Onso's accuracy. For example, McGill University researchers used Onso, and preliminary results presented at the Early Detection of Cancer Conference in October indicate that Onso's ability to accurately sequence through homopolymer regions has the potential to increase the detection of microsatellite instability.

The remaining approximately 5% is from other and emerging markets, including biopharma, and in the fourth quarter, it included a new gene-editing customer planning to implement Revio as part of its cardiovascular disease therapeutic development.

Turning to product launches, last week at AGBT, we announced new library prep kits that eliminate bottlenecks in the HiFi workflow and make PacBio long-read library prep on par with that of short-read sequencing, making it easier for our customers to make the most of their Revio system. Our HiFi Prep kit and HiFi Plex prep kit 96 offers customers the potential for an up to 60% decrease in workflow time, up to a 40% reduction in costs, and further lowers DNA input requirements. It also allows customers to automate the sometimes tedious library prep process by integrating with the Hamilton NGS STAR system with other automation platform partners to be announced in the future.

In the fourth quarter, we launched our Kinnex kits for scalable, cost-effective RNA sequencing. We've been extremely pleased with customer enthusiasm and uptake for these kits, and we now have orders from over 115 different customers.

An early adopter at UCSD Sanford Consortium commented on how demand for full-length RNA sequencing is outpacing genomic DNA sequencing, and the customer shared that the Kinnex kit enables competitive pricing, high throughput, ease of use, and automation and has provided for consistent sequencing yields across various samples.

Kinnex can help researchers glean more insights into RNA across various applications. For example, another early user from a leading pediatric hospital in Columbus, Ohio, used Kinnex to study somatic mosaic diseases – like cancer and epilepsy – and, with Kinnex, was able to pinpoint specific cell types harboring disease-causing genomic variants from single-cell data. The customer explained that Kinnex can help identify cell types harboring the mutation and then understand the mutation's influence on the transcriptome, which could lead to a better basic biological understanding of how the disease occurs but can also give clues into the timing of disease occurrence and onset in children.

These are just a couple of examples, and we believe Kinnex will continue to accelerate long-read sequencing as the preferred method in several RNA-seq applications.

Lastly, we rolled out our V13 software last quarter, and 93% of Revio runs are using the new V13 software. As a result, customers are getting a better user experience, we've seen over a 4x decline in overloading, and customers are starting to realize increased yields on their SMRT cells.

Finally, to wrap it up, last week was the annual Advances in Genome Biology and Technology conference, or AGBT, and it was encouraging to see the impact that HiFi long-read sequencing has had on the research community and the desire for researchers to look deeper and assemble more information from the genome than ever before. Our team walked away from the conference feeling like the inflection point for HiFi sequencing has truly just begun.

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

Susan Kim (CFO)

Thank you, Christian. As discussed, we reported \$58.4 million in product, service, and other revenue in the fourth quarter of 2023, which represented an increase of 113% from \$27.4 million in the fourth quarter of 2022.

Instrument revenue in the fourth quarter was \$35.1 million, an increase of 475% from \$6.1 million in the fourth quarter of 2022, driven by continued adoption of the Revio platform. We ended the quarter with an installed base of 173 Revio systems.

Turning to consumables, revenue of \$18.9 million in the fourth quarter increased 13% from \$16.7 million in the fourth quarter of last year and was a record for PacBio, with approximately \$12.4 million of consumable revenue coming from Revio systems, reflecting an annualized pull through for the Revio system of \$385K, and the remainder from other systems and other consumables.

Finally, service and other revenue was \$4.4 million in the fourth quarter compared to \$4.6 million in the fourth quarter of 2022.

From a regional perspective, Americas revenue of \$33.9 million grew 182% compared to the fourth quarter of 2022. The region's record quarter was driven by continued growth in instruments and consumables from both new and existing customers.

For Asia Pacific, revenue of \$13.4 million grew 31% over the prior year. With consumables in the region growing nearly \$2 million quarter-over-quarter which was in part due to stocking orders and year-end budget spend.

Finally, EMEA revenue of \$11.1 million grew 114% over the prior year period.

Moving down the P&L, a GAAP gross profit of \$9.6 million in the fourth quarter of 2023 represented a gross margin of 16% compared to a GAAP gross profit of \$5.1 million in the fourth quarter of 2022 which represented a gross margin of 19%. The GAAP gross profit in the fourth quarter of 2023 includes the amortization of acquired intangibles from the acquisition of Omniome as we allocate some of the amortization expense to the cost of goods sold now that we are generating revenue from the Onso product.

Fourth quarter 2023 non-GAAP gross profit of \$11.1 million represented a non-GAAP gross margin of 19%, compared to a non-GAAP gross profit of \$5.3 million or 19% in the fourth quarter of last year.

Gross profit in the fourth quarter of 2023 and fourth quarter of 2022 included inventory reserves and loss on purchase commitments totaling approximately \$9.3 million and \$7.1 million, respectively, primarily due to a continued decline in Sequel II/IIe consumable demand in the transition to the Revio platform as well as a decline in Sequel II instrument demand from predominantly one customer in China.

GAAP operating expenses were \$97.1 million in the fourth quarter of 2023 compared to \$92.2 million in the fourth quarter of 2022.

Excluding change in fair value of contingent consideration, amortization of acquired intangible assets and merger-related expenses, and restructuring costs, non-GAAP operating expenses were \$88.4 million in the fourth quarter of 2023, compared to \$87.6 million in the fourth quarter of 2022.

Regarding headcount, we ended the quarter with 796 employees compared to 844 at the end of Q3 2023 and 769 at the end of the fourth quarter of 2022. Headcount declined following Q3 2023 due to a reorganization primarily within our R&D org, which resulted in a reduction of approximately 55 positions in the fourth quarter

Operating expenses in the fourth quarter included non-cash share-based compensation of \$15.4 million, compared to \$16.8 million in the fourth quarter of last year.

GAAP net loss in the fourth quarter of 2023 was \$82.0 million, or \$0.31 per share, compared to a GAAP net loss of \$84.4 million in the fourth quarter of 2022, or \$0.37 per share. Non-GAAP net loss was \$72.5 million representing \$0.27 per share, in the fourth quarter of 2023, compared to a non-GAAP net loss of \$79.6 million, representing \$0.35 per share in the fourth quarter of 2022.

Turning to our Balance Sheet items,

We ended the fourth quarter with \$631.4 million in unrestricted cash and investments, compared with \$767.8 million at the end of the third quarter of 2023. The decline reflects approximately \$95.8 million in cash paid to the former Omniome shareholders in connection with the milestone achievement.

Inventory balances decreased in the fourth quarter to \$56.7 million, representing 2.9 inventory turns, compared with \$68.3 million at the end of the third quarter of 2023, representing 2.2 inventory turns.

Accounts Receivable increased in the fourth quarter to \$36.6 million compared with \$30.5 million at the end of the third quarter of 2023.

Total product backlog was approximately \$18.7 million as of December 31, 2023 compared to \$51.5 million as of December 31, 2022. The decline was primarily related to our record starting backlog in 2023 and the ramp-up of manufacturing to deliver Revio to customers throughout 2023.

As we've communicated before, we expect to share this backlog figure on an annual basis in our form 10K.

Now, to expand a bit on our financial guidance.

As Christian indicated, we continue to expect Revio to drive growth in 2024 and expect full-year revenue to be between \$230 million to \$250 million. Compared to 2023, this represents a growth rate of approximately 15% to 25%, which we believe will be well above the sequencing market growth rate.

At the mid-point of our guidance range, we expect Revio system shipments to be flat to slightly higher compared to the 173 units shipped in 2023.

Our growth expectations consider several macro factors that are impacting purchases of capital equipment. For example, the funding environment in China is impacting our ability to further expand our Revio installed base in the country, specifically with smaller volume academic labs. Additionally, persistent inflation and high interest rates are lengthening sales cycles globally.

In terms of linearity, we expect approximately 45% of revenue in the first half and 55% in the second half. Based on what we've seen quarter to date, we expect the first quarter revenue to be lower compared to the fourth quarter of 2023 with Revio system shipments flat to slightly down sequentially with lower ASPs and total consumables revenue approximately flat compared to fourth quarter of 2023.

As we continue to expect Revio instruments and consumables to make up the majority of revenue, we do not expect to share Sequel IIe or Onso placements or pull through on a quarterly basis for these platforms this year.

Moving down the P&L, we expect the 2024 non-GAAP gross margin to be in the range of 36% to 39%. We do believe that gross margins will improve over the course of the year. As a reminder, inventory reserve charges associated with the decline in Sequel II/IIe demand in place of higher Revio demand represented a headwind of approximately 700 basis points in 2023. Additionally, compared to the 2023 non-GAAP gross margin, we expect improvement driven by a mix-shift toward higher margin consumables and higher consumable manufacturing volumes, as well as instrument manufacturing optimization, helping to drive lower manufacturing unit costs.

We expect non-GAAP operating expenses to grow less than 5% compared to 2023, which is consistent with our long-term guidance.

We expect interest and other income to be between \$5 million and \$10 million in 2024 and the weighted average share count for EPS for the full year to be approximately 273 million.

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

Christian Henry (CEO)

Thanks, Susan. As we move forward in 2024, I want to reiterate our strategic priorities that I laid out last month.

Our top priority is increasing the adoption of our technology by driving more Revio placements at new customers, converting existing Sequel II and IIe accounts, and expanding Revio fleets at current customers. Additionally, as we expect to complete our scaling of Onso manufacturing this quarter, we will aggressively drive placements of the Onso platform, so that our leading SBB chemistry can get into the hands of more customers globally.

Another important priority is continuing to build the momentum for sales into the clinical and translational market. Earlier in the call, we discussed a few of our customers who are starting to use Revio in this setting, including Bioscientia and Children's Mercy Kansas City, and we aim to expand our support of this market in 2024.

Additionally, we are progressing the development of our groundbreaking technologies. We launched two transformative platforms in 2023, but our work is far from complete. I previewed three other instruments we're working on that we plan to launch over the coming years, and we expect to make meaningful progress on all these this year. I look forward to sharing more about these instruments when they near completion.

Finally, we intend to continue building our business with the goal of becoming cash flow positive during 2026. On top of our long-term revenue target of reaching at least \$500 million in 2026, we have several gross margin initiatives that are expected to lower production costs, better utilize manufacturing overhead, and improve our supply chain efficiency. These programs, along with a product mix shift toward consumables are expected to improve our gross margins. Further, we expect to continue to be disciplined in how we deploy our OpEx investments.

I continue to be encouraged by our customers' enthusiasm for our products and look forward to updating everyone on our progress as we continue to drive adoption of our technologies this year.

With that, let's start Q&A.