Investor Relations – Todd Friedman

Good afternoon, and welcome to PacBio's first-quarter 2024 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. A copy of our earnings presentation is also available on the Investor's section of our website at www.pacb.com.

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; our commitment to create a sustainable, cash-flow-positive company by the end of 2026; expectations with respect to certain customers being early in their ramp up and measures to increase their utilization; GAAP and non-GAAP guidance; expected benefits of using PacBio products or technologies; and new product expectations. 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 for joining our call today. In today's remarks, we will:

- Discuss some of the factors that contributed to our previously announced revenue shortfall and revised full-year guidance.
- We'll also discuss the steps we are taking to return to revenue growth and why we are confident in the assumptions underlying our updated financial forecasts.
- Finally, we'll share our re-focused priorities for 2024, which we believe will position us to build PacBio into a sustainable, cash-flow-positive company with the ability to execute in any macroenvironment.

While we forecast near-term growth to be lower than our original guidance for 2024, we have never been more confident in the value of our platforms, our long-term growth potential, and our ability to capture market share in the multi-billion dollar opportunity in sequencing.

But first, let's recap the first quarter.

Consistent with our preannouncement on April 16, revenue of $38.8 million for the first quarter was below expectations due to an increasing number of customers delaying instrument purchases and softness in consumable shipments. Based on the first-quarter results and our expectation that some of these external factors will likely persist through 2024, we expect full-year revenue to be in the range of $170 million to $200 million.

The instrument shortfall primarily resulted from elongated customer purchasing cycles, as the median sales cycle for Revio instrument purchases increased more than we expected in the first quarter of 2024. More specifically, we believe the sales cycles increased primarily because of:

- Uncertainty surrounding the timing of funding for new capital equipment, particularly in the U.S. and China;
- Smaller Sequel II and IIe customers who are planning to upgrade to a Revio are waiting for the samples to drive that upgrade and
- An increasing proportion of the sales pipeline was comprised of new customers in the first quarter of 2024, which have proven to have longer sales cycles compared to existing PacBio customers.

While consumable revenue grew 15% year-over-year, it was also below our expectations. We believe this was primarily attributed to:

- The slower-than-expected ramp-up in sequencing by our small- to mid-sized customers, many of whom are new to PacBio; the time for new Revio customers and new projects to reach full capacity has been slower than previously anticipated,
- Sample delays impacting sequencing volume in the quarter for certain large customers, and,

- Some smaller service providers in China operating at lower utilization as a result of the challenging funding environment.

In Q1, more customers than we expected utilized their Revio systems at less than 20% capacity. Many of these are newer customers and the average age of the systems in this category was less than four months, which we believe indicates that these customers are still early in their ramp up. The pace of the ramp is dependent on a number of factors including, the timing of sample availability, lab readiness, and funding among other reasons. We are putting measures in place that we believe will help these customers ramp to their full utilization as timely as possible, and help drive consumable growth going forward.

Moving forward, we are implementing several strategies aimed at accelerating instrument and consumable revenue.

First is an intense focus on the customer to drive new sales opportunities, close existing deals, and accelerate consumable revenue and ramp-up time. Among other activities, this involves,

- Launching our PRISM customer-focused roadshows. These events include discussions and workshops with PacBio users and key opinion leaders in genomics where they'll engage and share the groundbreaking science that Revio is enabling. We're organizing events across 6 global cities with approximately 1,000 registered attendees representing over 500 organizations – many of whom we believe will become future Revio users.
- We're reducing spans and layers in the commercial organization, which will allow leadership to get closer to and more involved in the sales process.
- We're also establishing 'tiger teams' to actively work with low-volume customers to accelerate their Revio ramp and collaborate with them to secure samples to feed their sequencer and,
- We're continuing to collaborate with customers to demonstrate the value of HiFi long-read sequencing to drive long-term durable revenue.

Second, we're addressing the upfront CapEx barrier some customers face when assessing HiFi, and we're doing this by,

- Implementing promotions that ease customers' upfront capex requirements – and we're doing this in ways that preserve PacBio's overall economic value. These promotions have already created more funnel opportunities, which we believe will close this year, and
- We're focusing our product development on a benchtop platform, which will allow for a lower capex entry and, upon launch, potentially open PacBio HiFi sequencing to hundreds of new global customers.

Third, we're expanding the market and applications addressable with Revio and HiFi

- As I'll discuss shortly, we are investing in developing library prep and informatics solutions around Revio that enhance the platform's value proposition. These launches include PureTarget for targeted clinical research applications and Kinnex for transcriptomics, and 16S metagenomics, and
- We're also developing future enhancements that we believe will further reduce DNA inputs below one microgram of DNA for 30x human whole genome applications – potentially opening up more existing samples and new projects to HiFi sequencing.

Looking ahead, our pipeline of sales leads has continued to grow each quarter since we launched Revio. We believe our current sales pipeline is sufficient to at least support the midpoint of our guide of 120 Revio Systems, which provides further confidence in our revised revenue targets for 2024.

There's no doubt that PacBio and our industry are facing increasing headwinds this year. However, we remain incredibly optimistic about our business and the prospects for long-read sequencing. Our powerful sequencing technologies continue to play an important role in revolutionizing genomics, and the demand for, and interest in our products indicates the tremendous market opportunity ahead.

One encouraging indicator is the amount of data customers generate with their sequencers. Growth in this metric demonstrates increasing utility and broader acceptance of the long-read HiFi technology. In the first quarter, total data generated from PacBio long-read sequencers grew 2.5 times from the first quarter of last year. This growth is a testament to the overall interest in Revio and the continued market share gain for long-reads.

As of March 31st, just over one year after commercialization, we surpassed 200 cumulative Revio shipments, marking the fastest installed base ramp in PacBio history. From a throughput perspective, this has the same power as over 3,000 Sequel IIes, our previous–generation platform. This rapid scale-up demonstrates our customer's desire to sequence using PacBio HiFi more than ever, but it will take some time for them to migrate projects and samples to this newfound capacity.

We've been exceptionally pleased with the number of new customers adopting Revio, as 57% of the systems shipped in the first quarter went to new PacBio instrument customers.

These customers included the University of Tartu, host of Estonia's National Biobank. The team selected Revio exclusively over other short and long-read technologies to sequence 10,000 whole human genomes as part of their goal to adopt personalized medicine at scale and understand the underlying genetics of health, disease, and treatment outcomes. It also includes the first Revio in Latin America which will be used by a customer in support of a 1,000-sample human genome project.

These new Revio customers add to the existing multi-thousand sample projects that we've shared over the past year, such as a large-scale human genomics program in Singapore expected to start sequencing this quarter and continued sequencing for the All of Us and Million Veterans Program in the United States.

We're pleased to announce that Ambry Genetics has joined the collaboration with the GREGoR consortium and the University of California, Irvine and aims to sequence up to 7,000 long-read HiFi genomes over the next three years, focusing on developing new insights into rare disease etiology and treatment.

Revio enables more than just large-scale research studies. Hospitals increasingly seek to implement Revio to achieve unprecedented insights into genetic and rare disease.

It includes existing PacBio customers like Seoul National University Hospital, which utilized one of our recently-announced instrument promotions and plans to use HiFi long read technology to improve its testing capabilities in rare disease and cancer.

Also, a leading pediatric hospital in Canada purchased a Revio—its first PacBio system—to sequence 1,500 rapid whole genomes of critically ill infants. HiFi was the clear choice for this clinical-oriented customer, as the other long-read sequencing technology provided too high an error rate.

To support these customers, we are continuously enhancing our software, launching new library prep, and sample prep solutions which make PacBio sequencing turnkey and more accessible than ever. Additionally, we believe these new products will help contribute to a recurring revenue stream outside the core SMRT cells and sequencing reagents used to run Revio.

We've seen tremendous interest in our recently launched Kinnex full-length RNA kits. Launched in the fourth quarter of 2023, we've booked orders for 160 customers as of March 31, totaling over $1.5 million.

The PacBio PureTarget panel was launched and began shipping in late March, allowing for comprehensive characterization of repeat expansions. Expansions of repetitive DNA sequences have been linked to over 50 monogenic disorders and cancers. This kit enables customers to interrogate some of the most critical and hard-to-sequence genes related to these diseases and multiplex up to 192 samples on the Revio system. Combined with our TRGT repeat expansion caller and Nanobind DNA extraction kit, it allows for an easy and scalable workflow to capture repeat expansions, bringing customers from sample to answer in three days. We just started shipping kits in March, and we are already seeing great interest from customers ranging from pediatric hospitals to large commercial testing labs, biopharma, and academic labs.

Launched in the first quarter, our HiFi prep and plex library prep kits further enable our customers to automate and scale on Revio. These kits allow Revio customers to prepare up to 96 libraries at a time at lower cost per library, and some of our largest customers are adopting these kits to help them further scale their projects. We expect the kits to be particularly beneficial for microbial genome and low-pass large genome sequencing, where library prep costs are a large percentage of the overall workflow cost.

The Nanobind PanDNA kit developed from the Circulomics technology supports high molecular weight extraction from cells, bacteria, blood, tissue, insect, and plant nuclei. This new product consolidates the

capabilities of our existing sample-specific offerings into a single solution for DNA extraction. Since we acquired it in 2021, over 1,000 customers have ordered Circulomics kits. This product line helps us deliver solutions to the thousands of lower throughput long-read users and can potentially serve as a funnel for our future benchtop long-read sequencer. We continue to be pleased with the traction of our sample extraction offerings, and excluding large OEM purchases from one customer, the first quarter was our most successful quarter for sample prep.

Finally, our V13 software continues to improve the Revio user experience. Nearly all customers are utilizing the recently launched adaptive loading feature, which improves customer experience by preventing overloading of the SMRT cell, allowing customers to load DNA more confidently and achieve higher and more consistent yields. With V13 enabled on almost every Revio, the mean yield per SMRT Cell for whole genome sequencing runs in 2024 is approximately 5 gigabases higher than in 2023.

We continue to see success with our Onso platform. Instrument shipments grew again in the first quarter, and the installed base now spans six continents. We've completed our consolidation of Onso instrument and consumable manufacturing into our Menlo Park facility, which allows us to fully leverage our operational infrastructure.

Looking ahead, we are focused on four strategic priorities.

First, improving commercial execution to drive adoption of both Revio and Onso;

We are placing a greater focus on the value proposition of HiFi sequencing and increasing collaboration with customers, purchasing departments, and decision-makers. We are also working to improve our partnership with customers post-instrument purchase to ensure they are getting samples into their lab to feed their Revio. With respect to Onso, in the first quarter, we scaled the manufacturing of the platform, enabling us to deliver instruments based on demand more rapidly, which will help drive our ability to sell the system. Additionally, we've identified opportunities to drive manufacturing improvements and lower the unit cost of consumables, which gives us the flexibility to lower the list price on Onso flow cells and reagents to as low as $8 per gigabase. With these advances, along with a more focused and targeted selling effort, we believe that we can be very competitive in the market.

Second, continuing the development of new platforms that are expected to broaden our product offering and drive revenue growth.

We continue to believe that developing a multi-platform portfolio is important for our success, enabling us to reach more customers and drive technology adoption. While we expect the Revio platform to be the primary contributor to revenue over the next couple of years, we are aggressively pursuing the development of a long-read benchtop platform which will have a much lower capital cost, enabling us to reach a new subset of lower

throughput customers and provide flexibility to existing Revio customers through fleet expansion. We believe this instrument will address a market of over 1,000 potential customers.

We are also developing a high-throughput short-read platform that is expected to enable us to serve high-throughput labs with our leading Sequencing by Binding technology. This highly accurate technology is perfect for needle-in-a-haystack applications such as liquid biopsy. We believe it will be highly competitive in terms of both throughput and cost relative to other high-throughput offerings. The addressable market for this platform is estimated to be well over $1 billion per year.

We are also continuing to develop our next generation of SMRT cell. This cell is expected to power a new, extremely high-throughput long-read platform, enabling throughput dramatically higher than that of the Revio platform.

Third, implementing projects to improve our gross margin and drive manufacturing efficiencies.

A cornerstone of our path to cash flow breakeven is our ability to improve gross margins through revenue mix and unit cost reduction. We've already reduced the production cost of both the Revio instrument and 25M SMRT cell and expect more improvements this year and beyond. Outside of our next-generation platforms, this is a critical R&D and operations effort we're continuing to invest in.

Finally, reducing annualized run-rate operating expenses

Last week, we began implementing our restructuring plan to reduce operating expenses. As part of that, we made the difficult decision to reduce our total headcount by approximately 25%, or 195 employees, and close our San Diego office. Virtually all functions within the Company were impacted. The reductions are being made based on our refocused priorities that I discussed above. As a result, I believe that we have the resources required to achieve our near-term priorities. With these reductions, along with other non-headcount related savings, we expect to lower our non-GAAP operating expenses on an annualized run rate basis by more than a $75 million reduction by year-end. This is above the range we provided in our preannouncement on April 16. We believe that it positions us to deliver on our commitment to our plan to create a sustainable, cash-flow-positive company by the end of 2026 and enable us to continue to provide scientists with some of the best technologies that push the boundaries of biological discovery.

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

Susan Kim (CFO)

Thank you, Christian. As previously mentioned, we reported $38.8 million in product, service, and other revenue in the first quarter of 2024, compared to $38.9 million in the first quarter of 2023.

Instrument revenue in the first quarter was $19.0 million, a decrease of 8% from $20.7 million in the first quarter of 2023. The decrease was due to lower Revio unit shipments. We ended the quarter with an installed base of 201 Revio systems.

Turning to consumables, we delivered revenue of $16.0 million in the first quarter, a 15% increase from $14.0 million in the first quarter of last year. Approximately 69% of consumable revenue came from Revio systems, which reflected an annualized pull-through of the Revio system of $254 thousand, and the remaining consumable revenue from other systems and other consumables. We expect Sequel II and IIe's share of total consumables to continue declining as we continue shipping Revio and customers transition to the new system.

Finally, service and other revenue was $3.8 million in the first quarter compared to $4.2 million in the first quarter of 2023. The decline was primarily due to customers transitioning to the Revio system, which includes a first-year warranty, and opting not to renew their Sequel II/IIe service plans.

From a regional perspective,

Revenue in the Americas was $17.7 million, a 7% decrease compared to the first quarter of 2023, This was driven by a decline in Revio shipments as Revio system sales took longer to close. We believe the majority of Revio system opportunities that slipped out of the first quarter pipeline encountered challenges with funding. Consumable growth in the quarter was partially offset by delays in large project spending and sample availability at high-utilization sites.

For Asia Pacific, revenue was $12.8 million, up 7% versus the prior year with headwinds in China partially offsetting growth in other countries, including Japan. We believe China Revio sales were impacted by capital funding challenges and lower Revio sequencing pricing offered by large service providers, delaying the need to directly purchase Revio instruments by the smaller labs. Looking ahead, we’re encouraged by new modernization initiatives in China. We believe these will boost R&D capital spend, including sequencing instruments, as several potential customers have already applied for Revio funding under this program, albeit it's too soon to factor this into our 2024 expectations.

Finally, EMEA revenue was $8.4 million, up 6% over the prior year period, but was lower than previously anticipated as some instrument deals were delayed and for some new system orders shipped, the associated consumable orders were pushed to the following quarter after installation.

Moving down the P&L, a GAAP gross profit of $11.3 million in the first quarter of 2024 represented a gross margin of 29% compared to a GAAP gross profit of $9.8 million in the first quarter of 2023, which represented a gross margin of 25%.

First quarter 2024 non-GAAP gross profit of $12.6 million represented a non-GAAP gross margin of 33%, compared to a non-GAAP gross profit of $9.9 million or 26% in the first quarter of last year. Non-GAAP gross profit in the first quarter excludes approximately $1.3 million of expenses for the amortization of acquired intangible assets.

Gross margin increased year-over-year primarily due to adjustments of approximately $3.5 million recognized in the first quarter of 2023 primarily related to excess Sequel II/IIe consumables inventory that resulted from a faster-than-expected decline in demand for Sequel II/IIe due to the product transition to Revio. We are pleased to have completed the consolidation of our short read consumable manufacturing for reagents and flow cells from San Diego to Menlo Park during the quarter helping to lower production costs for every consumable kit we manufacture starting in Q2 2024. In addition, we transitioned the build of a key component on the Revio system in-house, which, since being implemented in March, has helped reduce the contract manufacturing overhead expenses on each Revio instrument built by tens of thousands of dollars.

GAAP operating expenses were $92.6 million in the first quarter of 2024 compared to $101.0 million in the first quarter of 2023.

Non-GAAP operating expenses were $87.2 million in the first quarter of 2024. This represents a 2% decrease from non-GAAP operating expenses of $88.7 million in the first quarter of 2023.

Operating expenses in the first quarter included non-cash share-based compensation of $17.4 million, compared to $16.0 million in the first quarter of last year.

Regarding headcount, we ended the quarter with 787 employees compared to 796 at the end of 2023 and 793 at the end of the first quarter of 2023. As a reminder, in April, we began implementing reductions in our headcount by approximately 195 employees and, therefore, expect to end the second quarter and full year 2024 with a headcount of less than 600.

GAAP net loss in the first quarter of 2024 was $78.2 million, or $0.29 per share, compared to a GAAP net loss of $88.0 million in the first quarter of 2023, or $0.36 per share.

Non-GAAP net loss was $71.4 million, representing $0.26 per share, in the first quarter of 2024, compared to a non-GAAP net loss of $75.5 million, representing $0.31 per share in the first quarter of 2023.

Turning to our Balance Sheet items,

We ended the first quarter with $561.9 million in unrestricted cash and investments, compared to $631.4 million on December 31, 2023.

Inventory balances increased in the first quarter to $67.3 million, representing 1.7 inventory turns, compared to $56.7 million on December 31, 2023, representing 2.9 inventory turns. The increase in inventory primarily reflects purchases of Revio and Onso instruments and consumables inventory.

Accounts Receivable decreased in the first quarter to $30.3 million compared with $36.6 million at December 31, 2023.

Now, to expand a bit on our financial guidance

Consistent with our pre-announcement on April 16, we believe full-year 2024 revenue to be between $170 million and $200 million.

At the midpoint of this guidance, we assume $85 million of instrument revenue, which includes 120 Revio shipments – making Revio still the fastest-growing sequencer in PacBio history.

We expect $80 million in consumable revenue, which assumes an annual pull-through of $290,000 for the Revio platform.

Moving down the P&L to gross margin, we now expect full-year gross margin to be between 35% and 38%, lower by 1 point at the midpoint from our prior guidance due to lower volumes and revenue.

We have made significant progress on improving the per unit cost of both Revio instruments and Revio consumables and expect to end the year with Revio instrument costs 10% lower than when we launched the platform and consumable unit costs over 25% lower. These cost and operational improvements will continue beyond 2024, and are expected to drive quarterly gross margin expansion this year and going forward.

Moving to operating expenses, we now expect non-GAAP operating expenses to decline year-over-year from the $355 million we reported in 2023, and be approximately $300 million to $310 million. Specifically, at the midpoint, we expect $150 million in non-GAAP research and development expenses and $155 million in non-GAAP selling, general and administrative expenses.

As mentioned, we expect the non-GAAP annualized amount of these savings to be above the high end of our $50 to $75 million range by year end, and, as a result, we expect full-year non-GAAP operating expenses to decline in 2025 compared to 2024.

We continue to expect $5 million to $10 million in interest and other income, 273 million in weighted average shares outstanding for the full year 2024, and we continue to expect ending Cash, cash equivalents and investments to be in the range of $435 million to $450 million, representing a cash burn of $189 million at the mid-point.

As a reminder, we announced that we were unlikely to achieve our previous long term guidance. While we are not providing updated figures today, we remain committed to our plan of turning the business cash flow positive by the end of 2026 under various revenue scenarios, which include revenue growth in 2025 and beyond with new products and growing consumables off increasing Revio installed base, expanding gross margins with reduced manufacturing per unit costs and continued mix shift to consumables, and lower Non-GAAP operating expenses in 2025 compared to 2024 with minimal growth thereafter.

We will provide more details behind our assumptions and our updated long term guidance at a later date.

I'll now turn it back to Christian for some final remarks,

Christian Henry (CEO)

Before we move to Q&A, I wanted to leave you with three things I hope you take away from our call today.

One, our business and industry are facing headwinds, which we believe are short-term.

Two, we have a clear plan to address these issues, which includes proactively working with our customers and focusing our talented people and resources on our highest-potential technologies. It also involves right-sizing our organization and expenses to align with lower near-term revenue expectations. We are also firmly committed to our plan of achieving positive cash flow exiting 2026.

And finally, we remain optimistic about our technology and the power of our differentiated platforms. We are confident we have the right plan in place that will enable us to capitalize on the long-term growth and value-creation opportunity ahead of us –for the benefit of scientists and clinical researchers around the world.

We continue to be energized by countless stories of customers utilizing our technologies to look deeper into the genome and uncover biological insights that are otherwise undetectable.

With that, I'd like to open the call up to Q&A. Operator?