



PacBio Begins Commercialization of the Onso Short-Read Sequencing System

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The Onso Platform Delivers Extraordinary Accuracy Which Creates New Possibilities for Research and Translational Sequencing Applications

MENLO PARK, Calif., Aug. 2, 2023 /PRNewswire/ -- [PacBio](#) (NASDAQ: PACB), a leading developer of high-quality, highly accurate sequencing solutions, announced that customer shipments of Onso short-read sequencing instruments will commence today. As previously [announced](#), the Onso system is designed to provide extraordinary accuracy through its novel [sequencing by binding](#) (SBB) chemistry in a user-friendly and flexible benchtop platform.



"When we announced the Onso platform last year, I knew it would be a game changer for genomics," said Christian Henry, President and Chief Executive Officer of PacBio. "We believe PacBio is the only company to offer both highly accurate, native short and native long-read sequencing technologies. As a result, we believe this uniquely positions us to offer more complete solutions to our customers' challenges and help researchers unlock novel insights in oncology and disease research, among other areas. I want to thank the Broad Institute of MIT and Harvard, Corteva Agriscience, and Weill Cornell Medicine for their invaluable feedback, helping us to improve this cutting-edge system and bring it to market."

"Over the last several months, we have tested out the Onso system in order to understand how high-quality sequence data can be used in the context of germline and somatic applications. We already have some novel findings and are excited to see where the platform goes from here," said Niall Lennon, Senior Director of Translational Genomics at Broad Institute of MIT and Harvard.

With Onso's potential to achieve Q40+ levels of accuracy (one error in 10,000 bases), we believe scientists will have the opportunity to gain more insight into ctDNA research applications like minimal residual disease (MRD) monitoring and other "needle-in-haystack" applications which require highly sensitive variant detection. This may ultimately allow researchers to detect rare variants missed by other short-read technologies.

"Since we started testing the Onso system across a range of different applications, my laboratory at Weill Cornell Medicine is seeing impressive data quality well above the industry norm of Q30," said Dr. Chris Mason. "We've had several runs with raw quality scores in excess of Q50, which I have not seen using alternative technologies. We see Onso's capabilities opening up new possibilities for research and translational applications where accuracy is a critical need for success."

In addition, we believe this level of accuracy can add value to common mid-throughput sequencer applications such as exome sequencing, single-cell RNA sequencing, and targeted panels to support inherited disease and oncology research.

PacBio plans to launch library preparation solutions to support a wide range of sample types, and library conversion kits to allow existing third-party libraries to be sequenced on the Onso system.

The Onso system is designed to deliver 400 to 500 million reads during a 48-hour sequencing cycle (for 2x150 paired-end reads). PacBio plans to offer 200 and 300-cycle kit configurations enabling paired- and single-end reads. The system list price in the U.S. is \$259,000.

Onso systems will begin shipping to customers across the globe, reflecting the global service and support capabilities of PacBio's commercial organization. The Translational Genomics Research Institute (TGen), part of City of Hope, is one of the first customers to receive an Onso system.

"We are excited to bring the Onso instrument in-house to TGen. Our early access data demonstrates the ability to accurately detect ultra-low variants without the need for high-complexity error correction across a broad spectrum of applications, including infectious disease and liquid biopsy research. We believe SBB technology will positively impact our research/clinical mission to enable early detection, monitor treatment response, and track resistant mutations," said Stephanie Pond, Vice President of Emerging Opportunities at TGen.

"With our first shipment of Onso today, we have launched our second major platform this year. I am extremely proud of the entire PacBio team for this remarkable achievement," said Mark Van Oene, Chief Operating Officer at PacBio. "Revio, our new flagship long-read sequencer and now Onso, demonstrate our commitment to providing genomics researchers with powerful tools that have the potential to revolutionize the genomics industry."

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.

About PacBio

PacBio (NASDAQ: PACB) is a premier life science technology company that is designing, developing and manufacturing advanced sequencing solutions to help scientists and clinical researchers resolve genetically complex problems. Our products and technology under development stem from two highly differentiated core technologies focused on accuracy, quality and completeness which include our existing HiFi long read sequencing and our emerging SBB® short read sequencing technologies. Our products address solutions across a broad set of research applications including human germline sequencing, plant and animal sciences, infectious disease and microbiology, oncology, and other emerging applications. For more information, please visit www.pacb.com and follow @PacBio.

PacBio products are provided for Research Use Only. Not for use in diagnostic procedures.

Forward-Looking Statements

This press release may contain "forward-looking statements" within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, and the U.S. Private Securities Litigation Reform Act of 1995. All statements other than statements of historical fact are forward-looking statements, including statements relating to the availability, pricing, uses, accuracy, coverage, throughput, specifications, advantages, quality or performance of, or benefits or expected benefits of using, PacBio products or technologies, including the Onso system; anticipated availability to ship sample preparation solutions and consumables for use with Onso; anticipated milestone achievement; PacBio's unique positioning as the only company with long- and short-read sequencing technologies; scientists' use of Onso to gain more insight into ctDNA research applications and detect rare variants missed by other short-read technologies; adding value to common mid-throughput sequencer applications; potential to revolutionize the genomics industry; and other forward-looking statements. Readers are cautioned not to place undue reliance on these forward-looking statements and any such forward-looking statements are qualified in their entirety by reference to the following cautionary statements. All forward-looking statements speak only as of the date of this press release and are based on current expectations and involve a number of assumptions, risks and uncertainties that could cause the actual results to differ materially from such forward-looking statements, including, among others, challenges inherent in developing, manufacturing, launching, marketing and selling new products; Onso remains subject to additional development and validation; potential product performance and quality issues and potential delays in development timelines; rapidly changing technologies and extensive competition in genomic sequencing that could make the products PacBio is developing obsolete or non-competitive; supply chain risks; customers and prospective customers curtailing or suspending activities utilizing our products; the impact of U.S. export restrictions on the shipment of PacBio products to certain countries; and third-party claims alleging infringement of patents and proprietary rights or seeking to invalidate PacBio's patents or proprietary rights. Readers are strongly encouraged to read the full cautionary statements contained in PacBio's filings with the Securities and Exchange Commission, including the risks set forth in PacBio's Forms 8-K, 10-K, and 10-Q. PacBio disclaims any obligation to update or revise any forward-looking statements.

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The PacBio logo is displayed in a large, bold, pink font. The word "PacBio" is written in a sans-serif typeface, with the "i" in "Bio" having a dot that is a solid pink circle. The "o" at the end of "Bio" is a larger solid pink circle.

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