Media & Investor Release

Roche announces the launch of AXELIOS 1, a transformative next-generation sequencing platform

- **AXELIOS 1 delivers a unique combination of accuracy, speed, scalability and cost efficiency, giving laboratories of all sizes the freedom to customise their workflows and explore a wider array of applications.**
- **Powered by innovative SBX technology, the platform is capable of end-to-end, same-day whole-genome sequencing in research workflows, with accurate results within hours.**
- **The AXELIOS 1 platform holds promise for research laboratories today, and potentially for a broad range of clinical settings in the future.**

Basel, 29 June 2026 – Roche (SIX: RO, ROP; OTCQX: RHHBY) announced today the launch of AXELIOS 1 based on the innovative SBX technology, with a unique combination of accuracy, speed, flexibility, scalability and cost efficiency that addresses critical bottlenecks in genomics and potentially in clinical research. AXELIOS 1 will enable researchers to make significant discoveries that enhance our understanding of diseases, with the potential to replace existing technologies in pivotal research areas.

"AXELIOS 1 will deliver a disruptive sequencing solution that combines high accuracy with unprecedented speed and scalability. These attributes, combined with our high level of cost efficiency, will enable the sequencing community to develop applications that previously were not feasible," said Matt Sause, CEO of Roche Diagnostics. "Additionally, in the future, AXELIOS 1 has the same potential to enable the next generation of clinical applications and unlock new frontiers in personalised healthcare."

The AXELIOS 1 platform's flexible sequencing run setup and high-throughput effortlessly handle everything from small-scale studies to massive genomic projects, ensuring laboratories can expand their research capabilities with a single instrument. For researchers, this flexible and open setup grants broader freedom of exploration and new workflows that can truly expand our knowledge of complex diseases.

Through collaborations with leading institutions, such as Hartwig Medical Foundation and Broad Clinical Labs, AXELIOS 1 launches with proven real-world capabilities, including studies that confirm the AXELIOS 1 platform delivers impressive accuracy and throughput with record-breaking speed and better cost efficiency.[1] These collaborations also extend to library preparation and analysis tools, including a partnership with 10x Genomics for single-cell and spatial application kits, and support for SBX via Google DeepVariant as well as the open-source suite of XOOS tools.

With a market value of USD 7.3 billion[2], sequencing continues to expand across both research and clinical sectors and overall growth is projected to reach double digits within the next few years. Since sharing early access data last and earlier this year, there has been strong interest in the SBX technology from the sequencing community.

About the AXELIOS 1 platform

AXELIOS 1 is Roche's next-generation single-molecule sequencing platform and the first powered by proprietary sequencing by expansion (SBX) technology. The platform converts DNA/RNA into high signal-to-noise 'Xpandomers,' which are measured by a sequencing instrument using a reusable complementary metal–oxide–semiconductor (CMOS) sensor containing millions of nanopores. This architecture enables accurate, ultra-rapid, flexible and high-throughput, single-molecule sequencing with near real-time analysis.

Fundamentally designed for flexibility and performance, the AXELIOS 1 platform can be used for smaller, faster batches or larger projects without changing systems or workflows, and it is capable of producing whole-genome results the same day.

Roche will be offering library prep kits and a free open-source bioinformatics analysis suite (XOOS) tailored for SBX technology. In addition, the platform is built to allow for the flexible use of other life sciences tools, enabling high compatibility across a broad breadth of research applications.

Since the SBX technology was unveiled in early 2025, multiple research applications have been tested on the technology as proof of principle, including whole-genome sequencing (WGS), RNA-sequencing, single-cell RNA, spatial, and methylation, among others. Early-access users have also demonstrated practical research applications across oncology, genetics and infectious diseases, as well as garnering the world record for fastest DNA sequencing technique. AXELIOS 1 is for research use only. Not for use in diagnostic procedures.

About the sequencing by expansion (SBX) technology

The SBX technology is a novel sequencing approach which uses a sophisticated biochemical process to encode the sequence of a target nucleic acid molecule (DNA or RNA) into a measurable surrogate polymer called an "Xpandomer". The Xpandomers, which are fifty times longer than the original molecule, encode the sequence information into high signal-to-noise reporters, meaning they provide clear signals with minimal background noise when threaded through a nanopore, thereby significantly improving the accuracy of single-molecule sequencing.

The SBX chemistry is coupled with a reusable, high-throughput CMOS sensor module and an advanced analysis module that enables ultra-rapid, near real-time base calls and analysis. This module is designed with a highly scalable and flexible architecture for cost-efficient

sequencing across different project sizes, from small-scale studies to large projects involving thousands of samples. Workflows can also be adapted for various experimental needs, including reads of up to ~1500bp under appropriate sample and library prep conditions and ultra-fast processing from sample to Variant Calling Format (VCF).

This versatility makes the SBX technology suitable for a variety of applications, including but not limited to whole genome sequencing, whole exome sequencing, and RNA sequencing.

To find out more about Roche's novel SBX technology, click here.

About Roche's Sequencing Portfolio

Roche has been committed to providing next-generation sequencing library prep solutions and application support for research in sequencing for several years. Today, next-generation sequencing solutions from Roche play an important role in the sequencing ecosystem. Our KAPA sample preparation products offer high-performance DNA, RNA library prep and target enrichment solutions for a variety of applications. Additionally, we offer the AVENIO Edge system that provides a true walk-away automated solution for many of our KAPA kits. This system does not require advanced programming skills and comes with ready-to-use kits and protocols. Our AVENIO assays offer robust solutions for oncology, including the AVENIO Tumor Tissue CGP Automated RUO Kit, a collaboration between Roche and Foundation Medicine.

About Roche

Roche (SIX: RO, ROP; OTCQX: RHHBY) is a healthcare company uniquely placed to prevent, stop and cure diseases by uniting leading science and technology across diagnostics, medicines and digital solutions.

Roche was founded in Basel, Switzerland in 1896 and today is a leading provider of transformative medicines and diagnostics for millions of people in over 150 countries around the world. It is dedicated to tackling healthcare challenges that place the greatest strain on patients, families, communities and healthcare systems. Across its Diagnostics and Pharmaceutical divisions, Roche focuses on areas including oncology, neurology, cardiovascular and metabolic diseases, ophthalmology, infectious diseases and immunology with the aim of providing real and positive change for patients, the people they love and the professionals who care for them.

Genentech in the United States is a fully owned subsidiary in the Roche Group. Roche is the majority shareholder in Chugai Pharmaceutical, a major innovator in the Japanese therapeutic antibody market.

For more information, please visit www.roche.com.

For Research Use Only. Not for use in diagnostic procedures.

References

[1] https://diagnostics.roche.com/us/en/products/product-category/lab-type/sequencing/ngs-next-generation-sequencing-platform.html
[2] DeciBio. (2025). 2025 NGS Manufacturer Market Size, Growth and Trends (2022–2028). DeciBio [1, 2]

Roche Global Media Relations

Phone: +41 61 688 8888 / e-mail: media.relations@roche.com

Hans Trees, PhD
Phone: +41 79 407 72 58

Lorena Corfas
Phone: +41 79 568 24 95

Simon Goldsborough
Phone: +44 797 32 72 915

Karsten Kleine
Phone: +41 79 461 86 83

Kirti Pandey
Phone: +41 79 398 38 53

Yvette Petillon
Phone: +41 79 961 92 50

Dr Rebekka Schnell
Phone: +41 79 205 27 03

Irène Stephan
Phone: +41 79 377 83 75

Roche Investor Relations

Dr Bruno Eschli
Phone: +41 61 68-75284
e-mail: bruno.eschli@roche.com

Dr Sabine Borngräber
Phone: +41 61 68-88027
e-mail: sabine.borngraeber@roche.com

Dr Birgit Masjost
Phone: +41 61 68-84814
e-mail: birgit.masjost@roche.com

Investor Relations North America

Loren Kalm
Phone: +1 650 225 3217
e-mail: kalm.loren@gene.com