



Twist Bioscience and CENTOGENE Launch Three Panels to Advance Rare Disease and Hereditary Cancer Research and Support Diagnostics

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Combining expertise to advance precision medicine, while enabling efficient and timely insights into the diagnosis of rare diseases and hereditary cancer around the world

SOUTH SAN FRANCISCO, Calif. & CAMBRIDGE, Mass. & ROSTOCK, Germany & BERLIN--(BUSINESS WIRE)--Jan. 10, 2023-- [Twist Bioscience Corporation](#) (NASDAQ: TWST), a company enabling customers to succeed through its offering of high-quality synthetic DNA using its silicon platform, and [Centogene N.V.](#) (Nasdaq: CNTG), the essential life science partner for data-driven answers in rare and neurodegenerative diseases, today announced the launch of three next-generation sequencing (NGS) target enrichment panels to support rare disease and hereditary cancer research and support diagnostics.

This press release features multimedia. View the full release here: <https://www.businesswire.com/news/home/20230110005063/en/>

Target enrichment panels enable more in-depth sequencing on target genes, reducing the need for comprehensive sequencing. This allows for more sensitive detection of target genetic sequences and provides higher confidence that variants will be detected, further driving the understanding of diseases and supporting healthcare professionals in providing precision medicine.

Labs and research institutions can purchase these ready-made panels to help accelerate their research, and also have the option of using CENTOGENE's [CentoCloud®](#) for the identification, prioritization, and classification of human genetic variants to expedite diagnostic analysis.

"There are over 7,000 rare diseases impacting over 350 million patients, many of whom are not diagnosed until the late stages of the disease. Our mission is to provide data-driven, life-changing answers as early as possible to ultimately accelerate the development of treatments," said Kim Stratton, Chief Executive Officer at CENTOGENE. "By partnering with Twist to develop these custom panels, we are enabling access to diagnostics and generating novel insights for the medical community, fueled by multidimensional data from the CENTOGENE Biodatabank."

All three new Alliance Panels are highly curated using the CENTOGENE Biodatabank, with nearly 700,000 patients represented from over 120 highly diverse countries, over 70% of whom are of non-European descent. Identified sequences are then synthesized by Twist as biotinylated capture probes which are compatible with Twist's library preparation solution and target enrichment workflows. The panels offered through Twist will include:

- The Twist Alliance CNTG Exome Panel, which enables whole exome analysis of genetic markers relevant to rare diseases.
- The Twist Alliance CNTG Rare Disease Panel, which offers analysis of focused rare-disease-related sequences.
- The Twist Alliance CNTG Hereditary Oncology Panel, which enables the detection of biomarkers that indicate a high risk of developing cancer.

"Twist Alliance panels enable research by providing access to expert-developed panels tailored to specific research areas. CENTOGENE brings highly curated expertise and data in rare diseases, an important complement to our existing Alliance panels," said Emily M. Leproust, Ph.D., CEO and co-founder of Twist Bioscience. "As we expand our offering of Alliance panels, we believe it is critical to offer expert-developed content in an off-the-shelf format, compatible with Twist's extended custom panel offering, enabling a wider user base for these important tools."

For inquiries about the Twist Alliance CNTG panels please visit: <https://www.twistbioscience.com/contact>.

About Twist Alliance CNTG Exome

Twist Alliance CNTG Exome is designed using Twist's core exome and reference sequencing, a full mitochondrial genome and exclusive content for enhanced coverage of relevant genes and variants related to rare diseases.

About Twist Alliance CNTG Rare Disease Panel

The Twist Alliance CNTG Rare Disease Panel includes more than 2,500 relevant rare disease-associated genes and covers ≥99.5% of targeted regions, offering researchers a more lightweight tool for capturing the crucial rare disease coverage in the CNTG Exome without the full footprint. This panel can be used to detect genes associated with but not limited to rare treatable diseases, early onset childhood disorders, cardiac disorders, neurodegenerative diseases, skeletal abnormalities and metabolic disorders.

About Twist Alliance CNTG Hereditary Oncology Panel

The Twist Alliance CNTG Hereditary Oncology Panel includes 72 selected cancer-associated genes and covers ≥99.5% of targeted regions. The panel can be used to identify genetic predisposition to hereditary tumors including breast cancer, gastrointestinal tumors, Li-Fraumeni syndrome, MEN1, MEN2, paragangliomas and others.

About Twist Alliance Panels

In partnership with leading research institutions from around the world, Twist has curated a collection of high-quality target enrichment panels for applications ranging from carrier screening to cancer diagnostics and whole exome sequencing. The Twist Alliance Panels combine the strengths of precise, highly uniform oligonucleotide synthesis with the specialty expertise of leading scientific research partners.

Well-designed, custom target enrichment panels enable increased sequencing depth on target genes while reducing overall sequencing. This allows for more sensitive detection of target sequences and higher confidence variant detection.

About CentoCloud

Centocloud is a cloud-based Software as a Service (SaaS) platform specifically designed for the rapid bioinformatic analysis and interpretation of next-generation sequencing (NGS) data based on the proprietary CENTOGENE Biodatabank and external reference databases. It allows for the identification, prioritization, and classification of human genetic variants associated with genetic/inherited diseases.

The fully automated bioinformatics pipeline analyzes NGS data based on CENTOGENE's validated testing products provided by Twist Bioscience.

Powered by an end-to-end workflow with best-in-class bioinformatics as well as CENTOGENE's medical reporting service, CentoCloud encompasses the latest diagnostic insights – allowing physicians around the world to provide state-of-the-art individualized patient care, no matter where they are located.

About Twist Bioscience Corporation

Twist Bioscience is a leading and rapidly growing synthetic biology and genomics company that has developed a disruptive DNA synthesis platform to industrialize the engineering of biology. The core of the platform is a proprietary technology that pioneers a new method of manufacturing synthetic DNA by “writing” DNA on a silicon chip. Twist is leveraging its unique technology to manufacture a broad range of synthetic DNA-based products, including synthetic genes, tools for next-generation sequencing (NGS) preparation, and antibody libraries for drug discovery and development. Twist is also pursuing longer-term opportunities in digital data storage in DNA and biologics drug discovery. Twist makes products for use across many industries including healthcare, industrial chemicals, agriculture and academic research.

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About CENTOGENE

CENTOGENE's mission is to provide data-driven, life-changing answers to patients, physicians, and pharma companies for rare and neurodegenerative diseases. We integrate multiomic technologies with the CENTOGENE Biodatabank – providing dimensional analysis to guide the next generation of precision medicine. Our unique approach enables rapid and reliable diagnosis for patients, supports a more precise physician understanding of disease states, and accelerates and de-risks targeted pharma drug discovery, development, and commercialization.

Since our founding in 2006, CENTOGENE has been offering rapid and reliable diagnosis – building a network of approximately 30,000 active physicians. Our ISO, CAP, and CLIA certified multiomic reference laboratories in Germany utilize Phenomic, Genomic, Transcriptomic, Epigenomic, Proteomic, and Metabolomic datasets. This data is captured in our CENTOGENE Biodatabank, with nearly 700,000 patients represented from over 120 highly diverse countries, over 70% of whom are of non-European descent. To date, the CENTOGENE Biodatabank has contributed to generating novel insights for more than 260 peer-reviewed publications.

By translating our data and expertise into tangible insights, we have supported over 50 collaborations with pharma partners. Together, we accelerate and de-risk drug discovery, development, and commercialization in target & drug screening, clinical development, market access and expansion, as well as offering CENTOGENE Biodatabank Licenses and Insight Reports to enable a world healed of all rare and neurodegenerative diseases.

To discover more about our products, pipeline, and patient-driven purpose, visit www.centogene.com and follow us on [LinkedIn](#).

Twist Bioscience Legal Notice Regarding Forward-Looking Statements

This press release contains forward-looking statements. All statements other than statements of historical facts contained herein are forward-looking statements reflecting the current beliefs and expectations of management made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, including, but not limited to, statements regarding the ability of the Twist Alliance CNTG Exome Panel to enable whole exome analysis of genetic markers relevant to rare diseases; the ability of the Twist Alliance CNTG Rare Disease Panel to offer analysis of focused rare-disease-related sequences; and the ability of the Twist Alliance CNTG Hereditary Oncology Panel to enable the detection of biomarkers that indicate a high risk of developing cancer. Forward-looking statements involve known and unknown risks, uncertainties, and other important factors that may cause Twist Bioscience's actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, the risks and uncertainties relating to COVID-19; the ability to attract new customers and retain and grow sales from existing customers; risks and uncertainties of rapidly changing technologies and extensive competition in synthetic biology that could make the products Twist Bioscience is developing obsolete or non-competitive; uncertainties of the retention of significant customers; the ability of Twist Bioscience to successfully integrate acquired companies, including Abveris, and to achieve expected benefits from acquisitions; supply chain and other disruptions caused by the COVID-19 pandemic or otherwise; risks of third party claims alleging infringement of patents and proprietary rights or seeking to invalidate Twist Bioscience's patents or proprietary rights; and the risk that Twist Bioscience's proprietary rights may be insufficient to protect its technologies. For a description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to Twist Bioscience's business in general, see Twist Bioscience's risk factors set forth in Twist Bioscience's Annual Report on Form 10-K filed with the Securities and Exchange Commission on November 28, 2022 and subsequent filings with the SEC. Any forward-looking statements contained in this press release speak only as of the date hereof, and Twist Bioscience specifically disclaims any obligation to update any forward-looking statement, whether as a result of new information, future events or otherwise.

CENTOGENE Legal Notice Regarding Forward-Looking Statements

This press release contains “forward-looking statements” within the meaning of the U.S. federal securities laws. Statements contained herein that are not clearly historical in nature are forward-looking, and the words “anticipate,” “believe,” “continues,” “expect,” “estimate,” “intend,” “project,” and similar expressions and future or conditional verbs such as “will,” “would,” “should,” “could,” “might,” “can,” and “may,” are generally intended to identify

forward-looking statements. Such forward-looking statements involve known and unknown risks, uncertainties, and other important factors that may cause CENTOGENE's actual results, performance, or achievements to be materially different from any future results, performance, or achievements expressed or implied by the forward-looking statements. Such risks and uncertainties include, among others, negative economic and geopolitical conditions and instability and volatility in the worldwide financial markets, possible changes in current and proposed legislation, regulations and governmental policies, pressures from increasing competition and consolidation in our industry, the expense and uncertainty of regulatory approval, including from the U.S. Food and Drug Administration, our reliance on third parties and collaboration partners, including our ability to manage growth, execute our business strategy and enter into new client relationships, our dependency on the rare disease industry, our ability to manage international expansion, our reliance on key personnel, our reliance on intellectual property protection, fluctuations of our operating results due to the effect of exchange rates, our ability to streamline cash usage, our continued ongoing compliance with covenants linked to financial instruments, our requirement for additional financing, or other factors. For further information on the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to CENTOGENE's business in general, see CENTOGENE's risk factors set forth in CENTOGENE's Form 20-F filed on March 31, 2022, with the Securities and Exchange Commission (the "SEC") and subsequent filings with the SEC. Any forward-looking statements contained in this press release speak only as of the date hereof, and CENTOGENE's specifically disclaims any obligation to update any forward-looking statement, whether as a result of new information, future events, or otherwise.

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