



CENTOGENE Joins Forces With Insilico Medicine for Niemann-Pick Disease Type C (NPC) Target Discovery, Applying Artificial Intelligence (AI) to Accelerate Orphan Drug Development

January 20, 2022

- CENTOGENE and Insilico Medicine will work together to identify, rank, and annotate proteins to identify novel therapeutic targets for NPC using AI
- NPC is a rare genetic disease occurring in approximately 1 in 120,000 live births, with many cases going mis- or undiagnosed
- There are currently no FDA-approved treatments for NPC

CAMBRIDGE, Mass. and ROSTOCK, Germany, and BERLIN, Jan. 20, 2022 (GLOBE NEWSWIRE) -- Centogene N.V. (Nasdaq: CNTG), a commercial-stage company focused on generating data-driven insights to diagnose, understand and treat rare diseases, and Insilico Medicine, an end-to-end Artificial Intelligence (AI) -driven drug discovery company, today announced a research and development collaboration to accelerate the discovery of novel therapeutic targets for Niemann-Pick disease type C. The duration of the research collaboration will initially last 20 weeks.

As the framework for the collaboration, CENTOGENE will leverage its Bio/Databank with multiomic patient data and NPC cell lines (for transcriptomic data and validation of identified candidates), through the use of Insilico's comprehensive novel target discovery AI platform for the identification of differential metabolites, pathways, and genetic modifiers. Both Companies will analyze identified targets before pursuing validation in CENTOGENE's cellular models, and CENTOGENE will retain exclusive rights to any intellectual property generated by the research.

"I am thrilled by the collaboration between CENTOGENE and Insilico. With the power of AI, we will accelerate the analysis and knowledge discovery of multiomic data from patients affected with NPC," said Patrice Denèfle, Chief Scientific Officer at CENTOGENE. "Using relevant human cellular models, we hope to crack the code and validate meaningful and valuable insights on a disease for which no cure has been found over the past decades using traditional pharma approaches."

"CENTOGENE's rare disease-centric Bio/Databank is unique in the richness of the data it holds. By leveraging Insilico's powerful proprietary AI platform, PandaOmics, with the multiomic research data from CENTOGENE, I hope our collaboration will result in the discovery of a therapeutic target for NPC," said Alex Zhavoronkov, Ph.D., Founder and CEO of Insilico Medicine. "Ultimately we want to improve the quality of life for those affected by the disease and bring tangible hope to thousands of NPC patients around the world."

If the research demonstrates translational robustness, a further stage of drug development would become accessible – identifying molecules that act on the identified targets. AI-based methods are expected to accelerate this process – ultimately turning years into months for both the target-to-hit and hit-to-lead phases.

"We are excited to be working together with Insilico as we seek to identify novel therapeutic targets for NPC," added Carsten Ullrich, Ph.D., Senior Director of Artificial Intelligence at CENTOGENE. "Combining both CENTOGENE's expertise in multiomics and unique global insights from the world's largest NPC cohort with Insilico's next-generation AI platform has the potential to enable an accelerated cure for this rare and often rapidly progressing disease."

To learn more about CENTOGENE's AI Program, visit: <https://www.centogene.com/science/artificial-intelligence-initiative.html>

This collaboration represents another significant step forward for CENTOGENE's mission to enable the cure of 100 rare diseases within the next 10 years. To learn more, visit: <https://www.centogene.com/virtual-investor-event>

About Niemann-Pick Disease Type C (NPC)

Niemann-Pick disease type C (NPC) is a genetic lipid storage disease caused by mutations in the NPC1 and NPC2 genes that lead to a heterogeneous spectrum of symptoms. This may include ataxia, dystonia, vertical supranuclear gaze palsy, severe liver disease, and interstitial lung disease, among others.

Onset may occur at varying ages, from neonatal to adulthood. Life expectancy is reduced, and the estimated incidence is approximately 1 in 120,000 births. It is important to note that many cases go mis- or undiagnosed – creating difficulty around determining the true frequency of NPC.

About Insilico Medicine

Insilico Medicine, an end-to-end artificial intelligence-driven drug discovery company, is developing artificial intelligence platforms. These platforms use deep generative models, reinforcement learning, transformers, and other modern machine learning techniques for novel target discovery and the generation of novel molecular structures with desired properties. Insilico Medicine is developing breakthrough solutions to discover and develop innovative drugs for cancer, fibrosis, infectious diseases, autoimmune diseases, and aging-related diseases. For more information, please visit www.insilico.com.

About CENTOGENE

CENTOGENE engages in diagnosis and research around rare diseases transforming real-world clinical, genetic, and multiomic data to diagnose, understand, and treat rare diseases. Our goal is to bring rationality to treatment decisions and to accelerate the development of new orphan drugs by

using our extensive rare disease knowledge and data. CENTOGENE has developed a global proprietary rare disease platform based on our real-world data repository of over 600,000 patients representing over 120 different countries.

The Company's platform includes epidemiologic, phenotypic, and genetic data that reflects a global population, as well as a biobank of patients' blood samples and cell cultures. CENTOGENE believes this represents the only platform focused on comprehensive analysis of multi-level data to improve the understanding of rare hereditary diseases. It allows for better identification and stratification of patients and their underlying diseases to enable and accelerate discovery, development, and access to orphan drugs. As of December 31, 2020, the Company collaborated with over 30 pharmaceutical partners.

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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 worldwide economic conditions and ongoing instability and volatility in the worldwide financial markets, the effects of the COVID-19 pandemic on our business and results of operations, 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 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 requirement for additional financing and our ability to continue as a going concern, 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 April 15, 2021, 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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