



## CENTOGENE Data on Novel Genetic Risk Factor for Parkinson's Disease in The Lancet Neurology

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- Rostock International Parkinson's Disease (ROPAD) Study demonstrates a significant link between the *RAB32* gene variant and Parkinson's disease, further supporting recent findings
- Data from over subcohort of 3,350 patients shows that the *RAB32* mutation is over 100 times more prevalent in Parkinson's patients than in the general population

CAMBRIDGE, Mass. and ROSTOCK, Germany and BERLIN, Sept. 25, 2024 (GLOBE NEWSWIRE) -- Centogene N.V., the essential life science partner for data-driven answers in rare and neurodegenerative diseases, today announced data from the Company's Rostock International Parkinson's Disease (ROPAD), further supporting the association of a *RAB32* gene mutation with Parkinson's disease (PD). The study, published in [The Lancet Neurology](#), builds on research from Emil K. Gustavsson and colleagues, who previously identified the *RAB32* c.213C>G (p.Ser71Arg; dbSNP rs200251693) variant as a novel monogenic cause of PD.

In the ROPAD Study, Whole Genome Sequencing (WGS) data from 3,354 PD patients revealed that nine patients from Germany, Italy, Spain, and Türkiye carried the *RAB32* c.213C>G mutation. This proportion of variant-positives — 0.3% of the cohort — is significantly higher than the 0.002% found in general population databases such as the Genome Aggregation Database.

"Over the past five years, CENTOGENE, alongside over 100 study sites globally, have partnered to diagnose Parkinson's patients and advance treatment options," said Prof. Peter Bauer, Chief Medical and Genomic Officer at CENTOGENE. "Building on the initial insights from Gustavsson and colleagues, we were able to dive into our ROPAD cohort to develop a deeper understanding of *RAB32* c.213C>G as a cause for Parkinson's and shed light on the way to a potential cure. These types of game-changing insights are what we are striving for every day."

### Key Findings:

- Nine ROPAD participants (0.3% of the cohort) were heterozygous for the *RAB32* c.213C>G mutation, supporting the mutation's causal role in Parkinson's disease
- Age at onset in mutation-positives and mutation-negatives did not differ, while gender proportions and certain clinical characteristics did
- The *RAB32* Ser71Arg-associated haplotype was as in the Gustavsson et al. study, supportive of a single founder mutational event

These findings underscore the importance of *RAB32* as an important cause of Parkinson's disease.

"Our collaborative efforts have highlighted the critical impact of genetics on Parkinson's disease and emphasize the importance of incorporating genetic testing into the standard care of these patients," said Christian Beetz, Senior Director Genomic Innovation at CENTOGENE. "This will not only open doors to potential treatments, but also expedite and mitigate risks in the development of gene-targeted therapies – shaping the future of Parkinson's care."

"The study results are a perfect reflection of the significance of data and collaboration in establishing a deep disease understanding," adds Krishna Kumar Kandaswamy, Vice President of R&D Bioinformatics at CENTOGENE. "By assembling the world's largest genetic Parkinson's disease cohort, we have gained unprecedented insights that will fuel further research, clinical development, and ultimately, improved patient outcomes."

The Company recently launched a ROPAD Consortium to continue driving PD research and treatment through collaborative efforts. The ROPAD Consortium will build on the vast network of neurologists, existing partnerships with non-profit organizations, and the largest genetic testing program for PD patients worldwide to streamline access to critical data, drive impactful research, and improve the potential for advancing treatment options. To find out more, email: [contact.pharma@centogene.com](mailto:contact.pharma@centogene.com)

### About ROPAD

The Rostock International Parkinson's Disease (ROPAD) Study is a global epidemiological study focusing on the role of genetics in Parkinson's disease (PD). The major goal of the study is to characterize the genetics of PD to establish a better understanding of the disease etiology, diagnosis, and severity.

CENTOGENE utilizes CentoCard<sup>®</sup>, the Company's proprietary, CE-marked Dried Blood Spot (DBS) collection kit in combination with state-of-the-art sequencing technologies to screen for mutations in all known PD-associated genes. To date, over 18,000 participants from around the world have been tested over a five-year period.

### 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 over 850,000 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 300 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 and drug screening, clinical development, market access and expansion, as well as offering CENTOGENE Biodata 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](http://www.centogene.com) and follow us on [LinkedIn](#).

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