Accelerating Parkinson's Disease Clinical Research Through CHDR's Monocentre Recruitment Capabilities

A Proven Model for Rapid, High-Quality PD Trials

Early-phase Parkinson's disease (PD) studies often face challenges with variability, slow enrolment, and fragmented data collection. A monocentre approach offers a solution: conducting data-intensive trials at a single site while leveraging a nationwide network of hospitals and neurologists. This model minimises variability and maximises scientific precision.

Rapid Enrolment and Streamlined Timelines

In 2025, 136 PD patients were successfully recruited into ongoing clinical trials under this framework. Most participated in a 28-day double-blind, placebo-controlled phase followed by a three- or six-month open-label extension. Recruitment rates of up to four patients per week are achievable through umbrella protocols that cover healthy volunteer SAD/MAD cohorts and phase 1b patient studies under one regulatory structure. This design significantly reduces development timelines and enables seamless progression into open-label extensions, generating continuous longitudinal data for proof-of-concept and dose optimisation.

Genetically Characterised PD Population

One of the strengths of this approach is access to a proprietary database of over 5,000 PD patients, enriched by large-scale genetic sequencing programmes. For example, a nationwide GBA1 sequencing study1 involving more than 3,400 Dutch PD patients revealed one of the highest global frequencies of GBA1 variants, including the Dutch founder allele p.D140H + p.E326K. This genetic richness enables targeted enrolment of subpopulations such as GBA-positive or cognitively impaired patients, facilitating trials for investigational therapies and disease-modifying compounds.

Integrated Data Quality and Operational Control

By maintaining full control over screening, clinical conduct, and pharmacodynamic assessments at a single site, this model ensures consistent biomarker evaluation and tight data quality control. Sponsors benefit from accelerated decision-making and reduced operational complexity compared to traditional multicentre frameworks.

A Platform for Innovation and Partnership

CHDR has pioneered this monocentre approach in the Netherlands, combining short recruitment timelines, genetic stratification capabilities, and extended follow-up potential. For global drug developers seeking rapid, high-fidelity early-phase data, this model offers a scalable and reliable solution to de-risk early development and move faster towards late-phase efficacy trials.

In summary: CHDR's experience demonstrates how single-site Parkinson's disease research can deliver a new standard in early clinical development, accelerating the path from molecule to meaningful therapy.

References

1. den Heijer, J. M., Cullen, V. C., Quadri, M., Schmitz, A., Hilt, D. C., Lansbury, P., ... & Groeneveld, G. J. (2020). A large-scale full GBA1 gene screening in Parkinson's disease in The Netherlands. Movement Disorders, 35(9), 1667-1674.