opnMe by Boehringer Ingelheim

New therapeutic targets for Parkinson´s disease

How would you propose to identify and validate novel therapeutic targets for disease modification in early-stage Parkinson´s disease?

Answers to this question including a proposal for collaboration can only be considered if they arrive no later than July 28, 2026, 11:59 pm PST.

Boehringer Ingelheim

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What is the context of the problem that we would like to solve?

Parkinson's disease (PD) is a progressive neurodegenerative disorder driven by early and ongoing neuronal dysfunction and loss of dopamine-producing neurons in the brain, particularly within the substantia nigra. Alongside early neuronal dysfunction and substantial functional impairment, including disrupted synaptic connections and reduced dopamine signaling, there is a gradual neuronal loss resulting in a prolonged prodromal phase that can begin a decade or more before diagnosis. Early symptoms may include loss of smell, sleep disturbances, constipation, anxiety or depression, and fatigue, with motor features such as tremor, rigidity, bradykinesia, and balance problems emerging later, after significant neuronal loss has already occurred. This early functional and structural degeneration highlights a critical treatment window for disease-modifying therapeutic strategies.

While primary cause of PD remains unclear, it is considered a **multifactorial disease**, arising from a complex interplay of genetic susceptibility, environmental influences, and biological processes. Multiple pathomechanisms — including lysosomal and mitochondrial dysfunction, oxidative stress, inflammatory processes, and impaired protein homeostasis — are hypothesized to contribute to disease onset and progression to varying degrees across patients. Recognizing this complexity supports **mechanism-informed, disease-modifying strategies** tailored to dominant pathways in defined PD subgroups, which ideally may have benefits for broader patient populations.

To enable disease modifying therapies, we invite innovative proposals aimed at validating new therapeutic targets for Parkinson's disease. Proposals are expected to outline the published central and peripheral roles of the proposed target and strategies to validate its role in Parkinson's disease progression.

What potential solutions could be in scope?

- Any feasible approach considering the identification and validation of targets with a strong link to Parkinson's disease pathology, supported by human data.
- Validation of targets in human based disease-relevant *in vitro* models
- Drug discovery projects based on novel targets, as defined in point (1), such as small molecules, peptides, and new modalities proven to reach the target compartment, but not yet public, are of interest.

Proposals including one or more of the following elements will be prioritized

- Targets supported by data from large PD patient cohorts
- Targets relevant to broad Parkinson´s disease patient populations
- Comprehensive target expression data across brain and peripheral tissues, including evidence for systemic roles and implications of target modulation.

What potential solutions would be out of scope?

- Proposals that focus solely on human data analysis without substantial experimental validation of the identified targets in disease progression will be rejected (e.g., proposals limited to omics gene list triaging or validation based only on knock-down screens).
- Proposals focusing on rare genetic variants, unless mechanistic evidence indicates potential benefit for a broader patient population.
- Targets applicable only to late-stage Parkinson´s disease (moderate to severe pathology)
- Approaches focusing solely on protein aggregation, unless the approach addresses novel unprecedented pathomechanisms
- Sequencing, genotyping and characterizations for known PD risk factors and genetic variants without a clear translational or mechanistic advancement
- Targets expected to lead only to symptomatic improvement

What benefits do we offer to you in exchange for having submitted a solution?

This call represents a unique chance to impact discovery research for therapeutic targets for Parkinson´s disease. By participating, you have the opportunity to collaborate directly with Boehringer's Neuroscience Research experts.

Successful proposals will not only impact our understanding of Parkinson's disease progression but also be rewarded with tailored and scalable funding packages and / or if IP is involved, appropriate business options along well-defined parameters.

We predict that eligible solutions may come from scientists with very different backgrounds, ranging from academia, start-ups, biotech, or even larger enterprises such as pharmaceutical or digital life science companies.

Winning proposals should therefore expect appropriate funding that will help them to bring their conceptual idea and/or discovery (invention) to the next relevant inflection point within the next one to two years.

The following inflection points are in scope: Hit screening, preclinical *in vivo* proof of concept, lead structure and optimization, and candidate selection. Explicitly out of scope are IND related drug development packages that are not related to the new therapeutic concept validation. Depending on the complexity and maturity of a proposed solution, it may require different budget terms that would be negotiated with the selected partners in good faith. If applicable, respective business options will be negotiated with winning proposals.

Depending on the status of the project and applicability, we also offer a range of possibilities to support the winner besides funding. Examples are access to high-quality molecules, execution of pharmacokinetics studies, and collaboration with experts in fields from neuroscience.

In case a project proposal has reached sufficient maturity to build on existing – or reasonably soon to be filed – IP, licensing, or options to licensing agreements, or similar business collaborations could be considered as well. Upon successful outcome, we may engage in a long-term collaboration with the selected winner.

We are particularly interested in finding mutually agreeable solutions concerning each partner's rights and obligations (including intellectual property rights). Furthermore, winners will be encouraged to publish their findings in accordance with the collaboration agreement, which will be negotiated in good faith. We hope that this represents a great opportunity for your innovative ideas and solutions to gain recognition in the scientific community.

For some winners, it may be beneficial to announce their partnership with Boehringer Ingelheim. Depending on the conditions of the agreement and mutual needs, we would be open to such an arrangement.

What are the key success criteria on which we base our selection for the best answer?

Our scientific review will address the following key success criteria for selecting winning proposals:

- The proposed solution must be based on a compelling scientific hypothesis and addresses the in-scope and out-of-scope criteria of this call.
- A well-structured proposal with a clear outline of the required funding budget, actionable milestones, and a time plan where it should be assumed that Boehringer Ingelheim would fund the next step towards proof-of-concept of the proposed approach that lead to disease modification in early-stage Parkinson´s disease.
- Ideally, the proposed solution is backed up by relevant (preliminary) data, and it should be based on established and existing methods, assays and involve tools, reagents, or data that are accessible.
- A mitigation plan should be included to overcome the anticipated hurdles that also includes a contingency plan in case one approach may not lead to the desired outcome.
- Information regarding intellectual property / third party infringement used in the context of the submission.
- The access to relevant infrastructure to implement the proposed solution is a prerequisite of a collaboration with Boehringer Ingelheim.
- Ability to reach tangible results within a timeframe of approximately one to two years to reach the next decision point on preclinical or clinical research or milestone towards clinical readiness.

What information should be included in your answer submission?

Please use our answer submission template to provide a 3 - 4 page non-confidential proposal (available for download on the following site).

If confidential data exists that would strengthen the proposal, please indicate that information is available to share under a Confidential Disclosure Agreement (CDA). If we find the non-confidential concept proposal sufficiently interesting, we will execute a CDA for confidential discussions.

Anticipated Project Phases or Project Plan

Phase 1	Please complete your submission by **July 28, 2026, 11:59 pm PST at** the very latest.
Phase 2	Our review of all proposals will be completed by beginning of October and scientists will be informed after that.
Phase 3	Start of discussions for the collaboration agreement in Q4/2026.

Submitting a collaboration proposal

- Check the outline of the opn2EXPERTS "New therapeutic targets for Parkinson´s disease" on opnMe.
- Alternatively, you may click the "Get Submission Template" banner to access the collaboration proposal template.
- Follow the instructions to upload your submission document (requires login or registration).
- The upload allows you to attach additional application files if desired.
- You will be able to access your final submitted collaboration proposal in your personal dashboard and follow its review status.
- Please also visit the FAQ section on opnMe to learn more about our opn2EXPERTS program.