**The description of study cohorts**

Deprenyl and Tocopherol Antioxidative Therapy of Parkinsonism (DATATOP**)** was a randomized clinical trial conducted between September 1987 and November 1989 at 28 sites across US and Canada. The primary objective was to test the efficacy of deprenyl and/or tocopherol. 800 patients with Parkinson’s disease diagnosed within 5 years and not requiring symptomatic treatment were observed for up to 2 years.[1](https://paperpile.com/c/RRWXMn/7hTMj) The study was supported by a Public Health Service grant (NS24778) from the National Institute of Neurological Disorders and Stroke; by grants from the General Clinical Research Centers Program of the National Institutes of Health at Columbia University (RR00645), the University of Virginia (RR00847), the University of Pennsylvania (RR00040), the University of Iowa (RR00059), Ohio State University (RR00034), Massachusetts General Hospital (RR01066), the University of Rochester (RR00044), Brown University (RR02038), Oregon Health Sciences University (RR00334), Baylor College of Medicine (RR00350), the University of California, San Diego (RR00827), Johns Hopkins University (RR00035), the University of Michigan (RR00042), and Washington University (RR00036); the Parkinson's Disease Foundation at Columbia-Presbyterian Medical Center, New York; the National Parkinson Foundation, Miami; the Parkinson Foundation of Canada, Toronto; the United Parkinson Foundation, Chicago; the American Parkinson's Disease Association, New York; and the University of Rochester, Rochester, N.Y.

Drug Interaction with Genes in Parkinson's Disease (DIGPD**)** is a cohort with 413 patients with Parkinson’s disease diagnosed by UK Parkinson’s disease society brain bank clinical diagnostic (UKPDSBB) criteria with disease duration less than 5 years at the entry.[2](https://paperpile.com/c/RRWXMn/qJqN) It is an ongoing study since 2009, and the participants are followed for up to 7 years at eight sites in France. (Corvol et al., in press in Neurology). DNA samples were collected from all of them. DIGPD is sponsored by Assistance Publique Hôpitaux de Paris, funded by a grant from the French Ministry of Health (PHRC 2008, AOM08010) and a grant from the Agence Nationale pour la Sécurité des Médicaments (ANSM 2013).

Harvard Biomarkers Study (HBS) is a longitudinal case-control study. More than 2,700 individuals with early-stage PD, patients with memory impairment, and controls without neurological disease were enrolled and longitudinally phenotyped since 2008.[3](https://paperpile.com/c/RRWXMn/Z9Ih) HBS was supported by the Harvard NeuroDiscovery Center, MJFF, NINDS U01NS082157, U01NS100603, and the Massachusetts Alzheimer’s Disease Research Center NIA P50AG005134.

NIH Exploratory Trials in Parkinson's Disease Large Simple Study 1 (NET-PDLS1**)** was a randomized study conducted between March 2007 and September 2013 to determine if the nutritional supplement creatine slows the clinical progression of Parkinson’s disease over time. 1741 patients from 50 sites in the US and Canada participated.[4](https://paperpile.com/c/RRWXMn/XKwrQ) They were within 5 years from diagnosis. The plan was for them to be followed for at least 5 years, but the study ended early for futility based on an interim analysis at which point the median follow-up time was 4 years. Financial support for the LS-1 study was provided by National Institute of Neurological Disorders and Stroke (NINDS) grant U01NS43128.

Oslo PD study[[Citation error]](http://127.0.0.1:8080/c/error) (Oslo**)** is an ongoing study since 2007, with 317 patients diagnosed with ULPDSBB criteria with modification of allowing family history. The participants are being followed up to 6 years in prospective (30 years in retrospective) at Oslo University Hospital in Norway.[5](https://paperpile.com/c/RRWXMn/XLTyf) Oslo PD is supported by the Research Council of Norway and South-Eastern Norway Regional Health Authority.

ParkFit cohort was originally a randomized trial evaluating a multifaceted behavioural change programme to increase physical activities in patients with Parkinson’s disease.[6](https://paperpile.com/c/RRWXMn/qFR3F) The study conducted from September 2008 to February 2012 at a single center in the Netherlands, with 586 patients with Parkinson’s disease diagnosed by UKPDSBB, with Hoehn Yahr stage 3 or lower, and with sedentary lifestyle at the entry. They were followed up for 2 years. The primary objective was concluded as not significant[6](https://paperpile.com/c/RRWXMn/qFR3F). ParkFit is supported by ZonMw (the Netherlands Organization for Health Research and Development (75020012)) and the Michael J Fox Foundation for Parkinson’s research, VGZ (health insurance company), GlaxoSmithKline, and the National Parkinson Foundation.

The Norwegian ParkWest study (ParkWest) is an ongoing prospective longitudinal multicenter cohort study of patients with incident Parkinson’s disease from Western and Southern Norway, designed to study the incidence, neurobiology and prognosis of PD.[7](https://paperpile.com/c/RRWXMn/v2ntq) Between November 1st 2004 and 31st of August 2006, all new cases of Parkinson Disease within the study area (Sogn and Fjordane, Hordaland, Rogaland and Aust-Agder) were recruited, and since the start of the study 212 of these patients and their age-/sex-matched control group were followed. The Norwegian ParkWest study is supported by the Research Council of Norway, the Western Norway Regional Health Authority, Stavanger University Hospital Research Funds, and the Norwegian Parkinson’s Disease Association.

The National Institute of Neurological Disorders and Stroke (NINDS) Parkinson’s Disease Biomarker Program (PDBP) is aiming to discover new diagnostic and progression biomarkers for Parkinson’s disease.[8](https://paperpile.com/c/RRWXMn/X5Yq) It is a combined cohort of 9 PDBP-funded research studies. The members have various stages of Parkinson’s disease and recruited throughout the United States.

Parkinsonism: Incidence and Cognitive and Non-motor heterogeneity In Cambridgeshire (PICNICS) is a population-based longitudinal study of 282 incident PD cases recruited between 2008 and 2013 with ongoing follow-up at 18 month intervals.[9,10](https://paperpile.com/c/RRWXMn/l9eI%2B0nTyY) PD cases were diagnosed based on the UKPDSBB criteria, and followed up at a single center in the UK. PICNICS has received funding from the Cure Parkinson’s Trust, the Van Geest Foundation and is supported by the National Institute of Health Research Cambridge Biomedical Research Centre.

Parkinson’s progression markers initiative (PPMI) is an ongoing study started on July 2010, enrolling 424 patients with Parkinson’s disease diagnosed within 2 years from the study entry date.[11](https://paperpile.com/c/RRWXMn/JRIOw) The study sites are located in 33 sites across the US, Europe, Israel and Australia[11](https://paperpile.com/c/RRWXMn/JRIOw). PPMI is supported by the Michael J Fox Foundation for Parkinson’s Research.

Parkinson Research Examination of CEP1348 Trial **(**PreCEPT**)** is a clinical trial of the mixed lineage kinase inhibitor CEP‐1357,4 sponsored by Cephalon, Inc. (West Chester, PA) and H. Lundbeck A/S (Valby-Copenhagen, Denmark). The study was conducted at 65 sites in North America. The trial enrolled 806 early, untreated PD patients within one year from the onset. The original trial was started in April 2002 and terminated in August 2005 due to the futility, but the participants were continuously followed-up in the prospective observational study (PostCEPT).[12](https://paperpile.com/c/RRWXMn/Xab5)

The studies were funded by NINDS 5U01NS050095‐05, Department of Defense Neurotoxin Exposure Treatment Parkinson's Research Program. Grant Number: W23RRYX7022N606, the Michael J Fox Foundation for Parkinson’s research, Parkinson's Disease Foundation, Lundbeck Pharmaceuticals. Cephalon Inc, Lundbeck Inc, John Blume Foundation, Smart Family Foundation, RJG Foundation, Kinetics Foundation, National Parkinson Foundation, Amarin Neuroscience LTD, CHDI Foundation Inc, National Institutes of Health (NHGRI, NINDS), Columbia Parkinson's Disease Research Center.

Profiling Parkinson’s disease study (ProPark) is an ongoing study started from May 2003. Initially, 420 patients recruited in several sites in the Netherlands by March 2006.[13](https://paperpile.com/c/RRWXMn/NbFn) Patients were diagnosed with UKPDSBB criteria and in various disease durations at the enrollment. They are evaluated annually with the SCOPA scale. This study is funded by the Alkemade-Keuls Foundation, Stichting Parkinson Fonds, Parkinson Vereniging, The Netherlands Organisation for Health Research and Development.

Udall Centers program (Udall), was established by the National Institute of Neurological Disorders and Stroke (NINDS) in 1997. It is a combined cohort of multiple studies conducted at Udall centers across the US. Participants have various degree of progression at the enrollment. Data contributed to this project were collected by the Morris K. Udall Center at the Perelman School of Medicine at the University of Pennsylvania (P50 NS053488).

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