



# Aktuelles zur Parkinsonkrankheit

Jens Schröder

22.02.2025

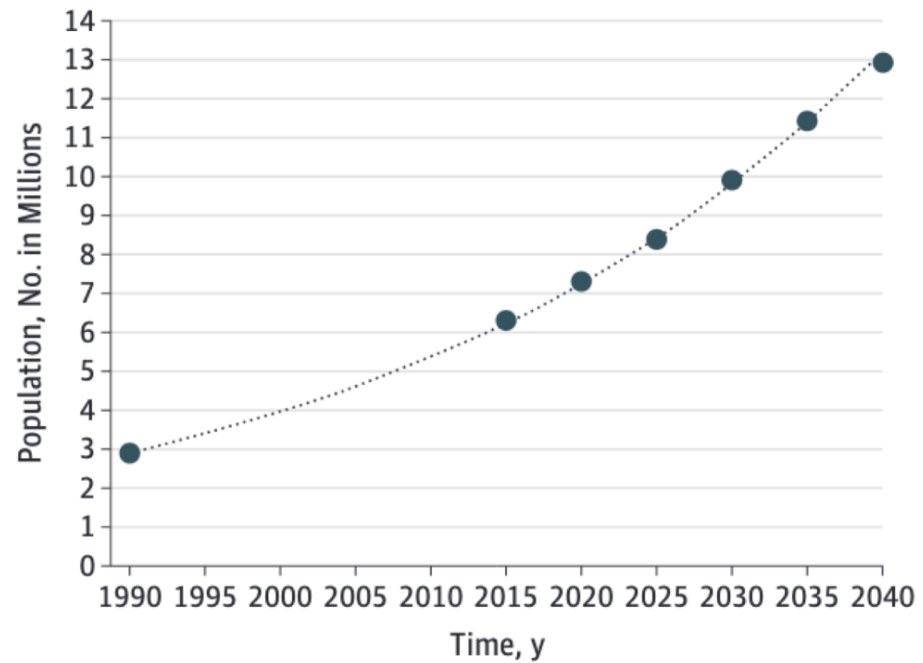
# Interessenkonflikte

- Vortragshonorare: Abbvie, Lilly, RG Ärztefortbildung
- Beratungstätigkeit: Abbvie

# Agenda

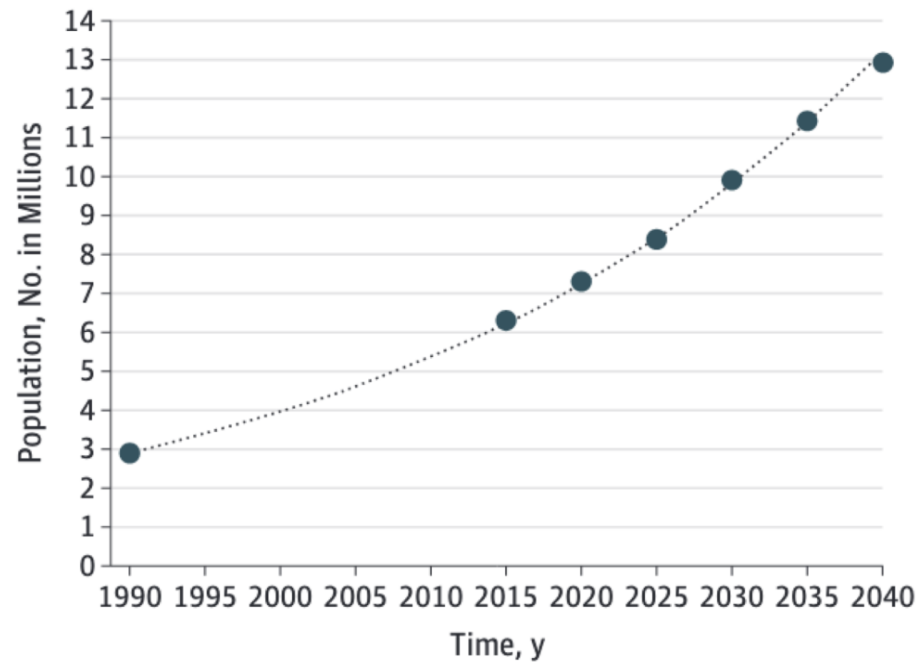
- Umweltfaktoren und die Parkinsonkrankheit – Ansatz zur Prävention ?
- Neues zur Verlaufsmodifikation
- Neues zur Behandlung motorischer Symptome
- Neues zur Behandlung nicht-motorischer Symptome
- Parkinsonnetzwerk Bremen (PNB +)

**Figure. Estimated and Projected Number of Individuals With Parkinson Disease, 1990-2040**



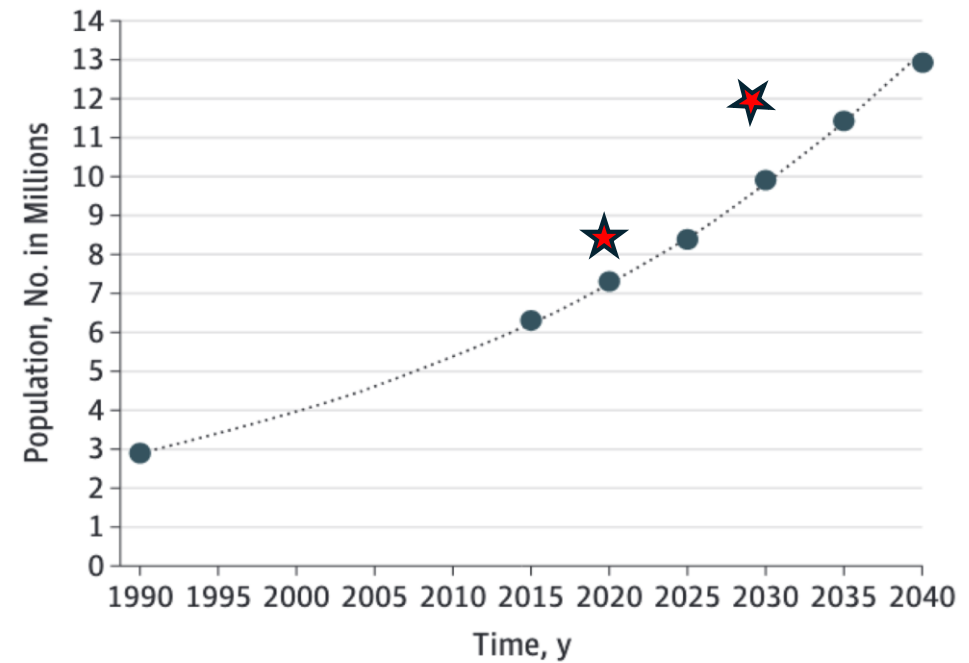
Sources: Global Burden of Disease Study (1990 and 2015) and projections based on published<sup>2</sup> and public<sup>3</sup> sources.

Figure. Estimated and Projected Number of Individuals With Parkinson Disease, 1990-2040



Sources: Global Burden of Disease Study (1990 and 2015) and projections based on published<sup>2</sup> and public<sup>3</sup> sources.

Figure. Estimated and Projected Number of Individuals With Parkinson Disease, 1990-2040



Sources: Global Burden of Disease Study (1990 and 2015) and projections based on published<sup>2</sup> and public<sup>3</sup> sources.

# Die „Leaky Gut“ - Theorie

Die Darmschleimhaut wird durchlässiger für  
Toxine, Bakterien, unverdaute Nahrung

Gehirn-Darm Verbindung über N. vagus und  
N. olfactorius

Fehlgefaltetes Alpha-Synuclein ist vielen  
Geweben nachweisbar, u.a. im Darm von  
Parkinsonpatienten

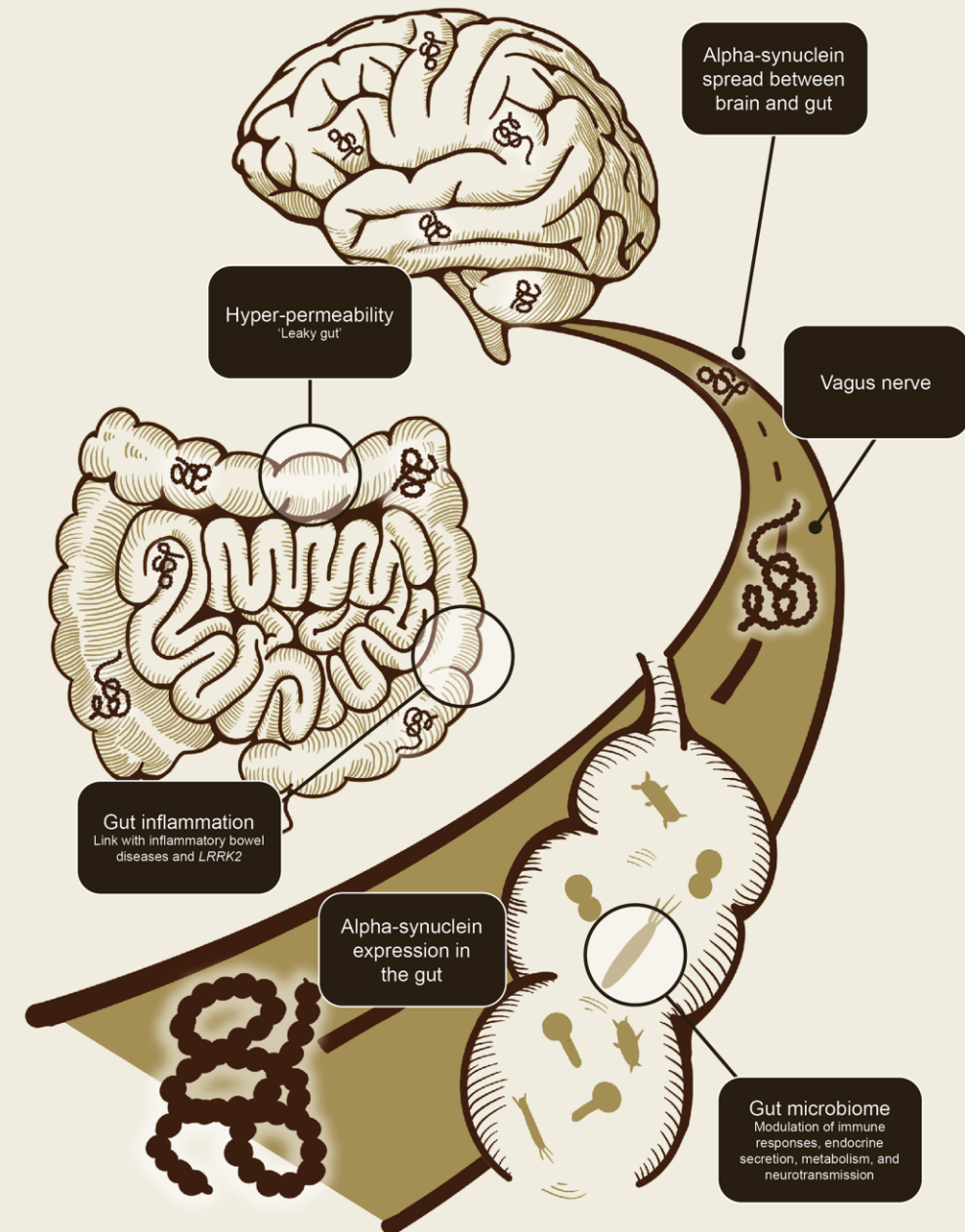
Parkinsonpatienten haben eine andere  
Darmflora. Entzündungsprozesse könnten  
eine Rolle spielen.

Parkinson's Disease, It Takes Guts: The Correlation between Intestinal Microbiome and Cytokine Network with Neurodegeneration

<https://neurotorium.org/the-microbiome-gut-brain-axis-in-parkinsons-disease/>

Fitzgerald E, Murphy S, Martinson HA. Alpha-Synuclein Pathology and the Role of the Microbiota in Parkinson's Disease. *Front Neurosci* (2019) 13:369. doi: 10.3389/fnins.2019.00369

Hirayama M, Ohno K. Parkinson's Disease and Gut Microbiota. *Ann Nutr Metab* (2021) 77 Suppl 2:28–35. doi: 10.1159/000518147





tagesschau

Sendung verpasst?



Startseite ▶ Wissen ▶ Gesundheit ▶ Wenn Pestizide Parkinson auslösen



00:21

04:59



Nervenkrankheit

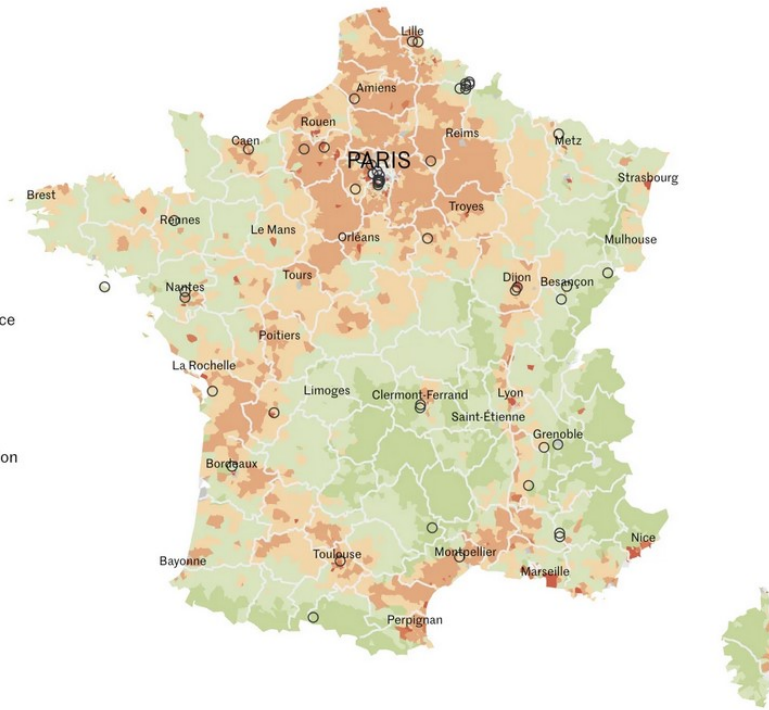
## Wenn Pestizide Parkinson auslösen

Stand: 17.12.2024 07:01 Uhr

Anerkennung als  
Berufskrankheit 2024 bei >  
100 nachweisbaren Tagen  
Kontakt zu Pestiziden

Bedeutung von Umwelt  
für unsere  
Gehirngesundheit

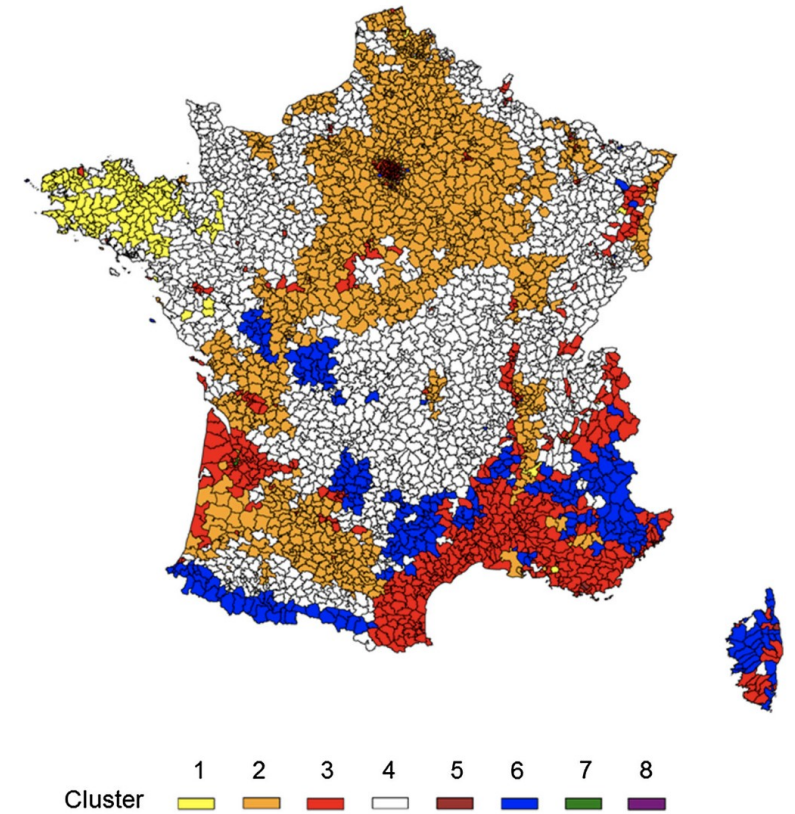
- Plus de 10 traitements
- De 5 à 10
- De 2 à 5
- De 1 à 2
- De 0,1 à 1
- Presque pas de traitement
- Absence de surface agricole utile
- Achat non communiqués
- Commune où le maire a pris un arrêté de restriction ou d'interdiction d'utilisation de pesticides au 20 septembre 2019




Le Monde 2019

Personen, die in dem Cluster mit der größten Weinbaudichte hatten eine um 8,5 % (4,4-12,6 %) höhere PD-Inzidenz ( $p < 0,001$ ).

**Fig. 2** Spatial distribution of the clusters of cantons. Please see Table S6 for the description of the clusters. Clusters 7 and 8 were excluded from the analyses as they included one and two cantons respectively and represent outliers



### Agricultural activities and the incidence of Parkinson's disease in the general French population

Sofiane Kab<sup>1,2</sup> · Johan Spinosi<sup>2,3</sup> · Laura Chaperon<sup>2,3</sup> · Aline Dugravot<sup>1</sup> · Archana Singh-Manoux<sup>1,4</sup> · Frédéric Moisan<sup>2</sup> · Alexis Elbaz<sup>1,2</sup> 



# Intake of dairy foods and risk of Parkinson disease

Katherine C. Hughes, ScD, Xiang Gao, MD, PhD, Iris Y. Kim, ScD, Molin Wang, PhD, Marc G. Weisskopf, PhD, ScD, Michael A. Schwarzschild, MD, PhD, and Alberto Ascherio, MD, DrPH | [AUTHORS INFO & AFFILIATIONS](#)

July 4, 2017 issue • 89 (1) 46-52 • <https://doi.org/10.1212/WNL.0000000000004057>



Letters to the Editor (2)



 GET ACCESS



## Anionic nanoplastic contaminants promote Parkinson's disease-associated $\alpha$ -synuclein aggregation

ZHIYONG LIU , ARPINE SOKRATIAN , ADDISON M. DUDA , ENQUAN XU, CHRISTINA STANHOPE, AMBER FU , SAMUEL STRADER , HUIZHONG LI 

YUAN YUAN , [...], AND ANDREW B. WEST  [+8 authors](#) [Authors Info & Affiliations](#)

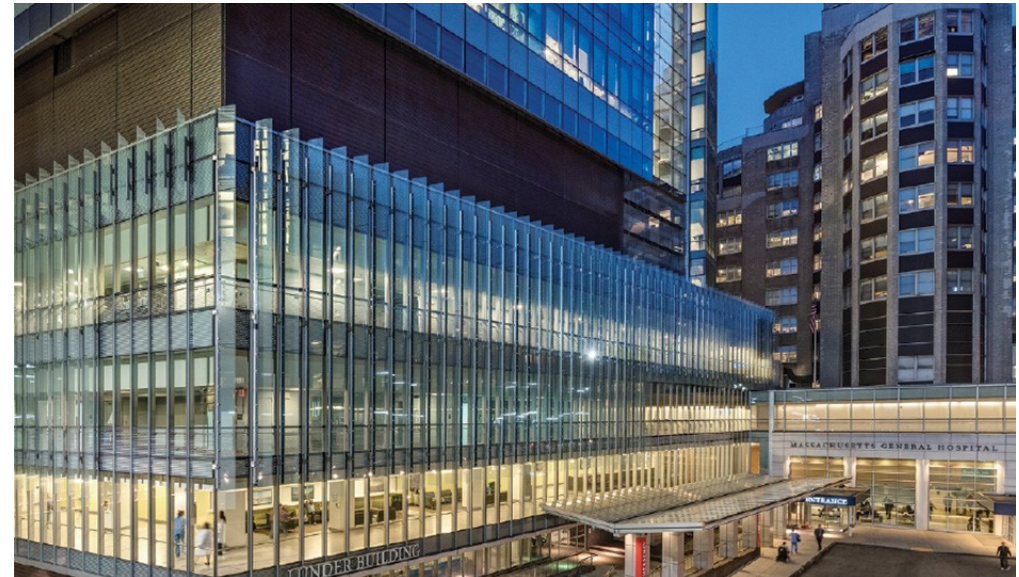


Original Investigation | Gastroenterology and Hepatology

# Upper Gastrointestinal Mucosal Damage and Subsequent Risk of Parkinson Disease

Jocelyn J. Chang, BS; Subhash Kulkarni, PhD; Trisha S. Pasricha, MD, MPH

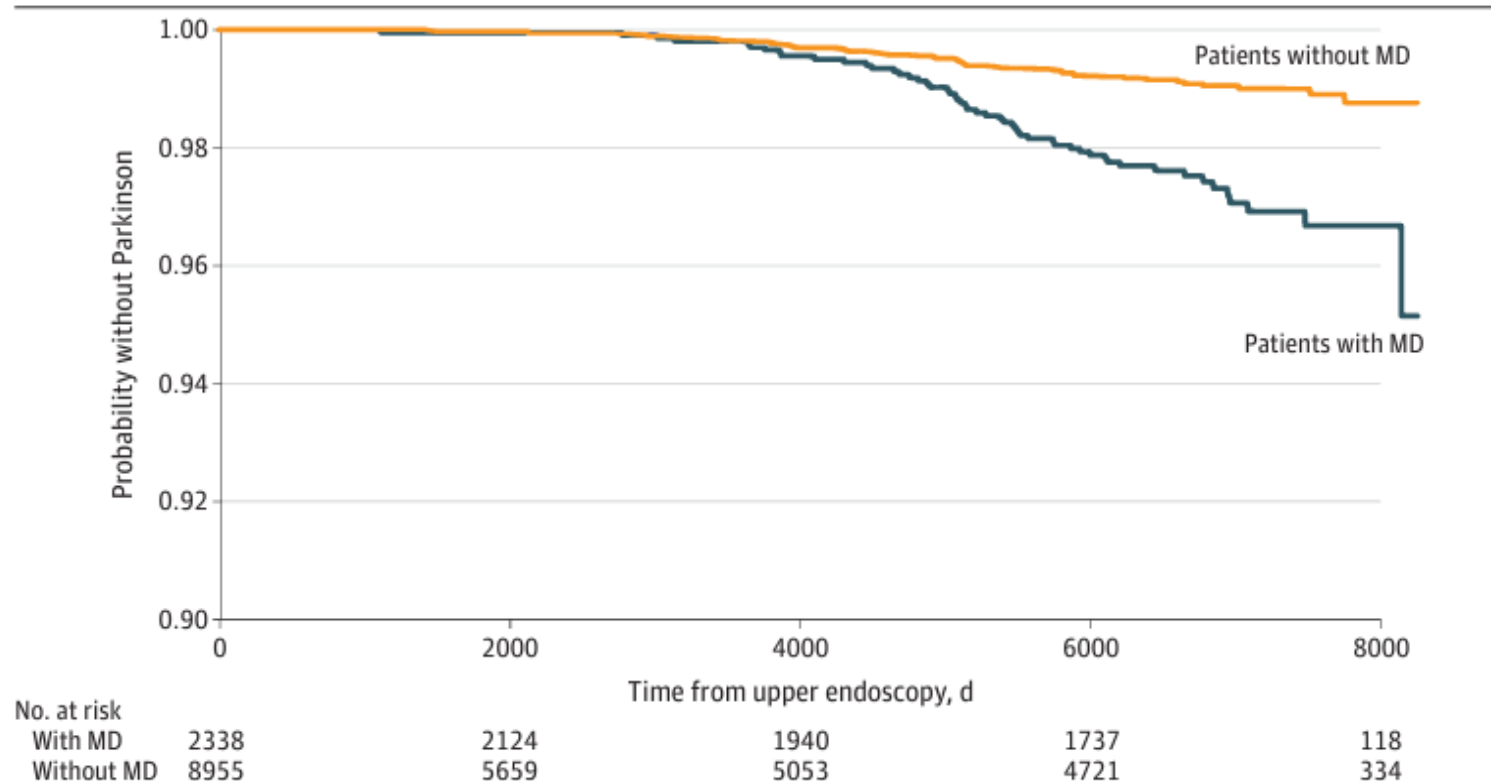
Retrospektive Kohortenstudie in Boston, USA  
ÖGD mit Biopsie zwischen 2000 und 2005  
Follow-Up Assessment 07/2023  
9350 Pat. wurden eingeschlossen  
1:3 aufgeteilt (mit MD und ohne MD)



# Ergebnisse

Multivariate Cox-Regressionsanalyse

Figure 2. Survival Curves for Time to Parkinson Disease Diagnosis



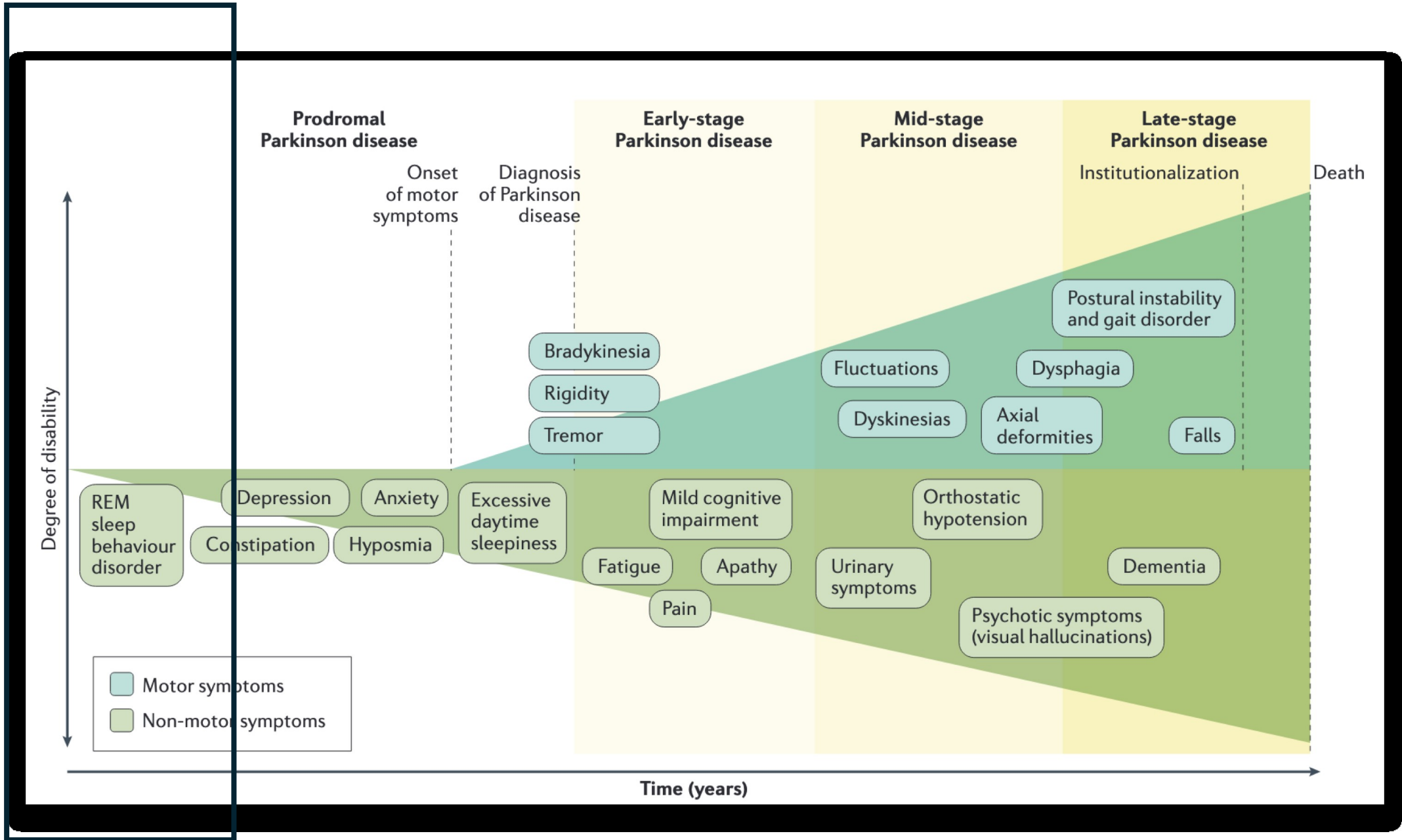
Das Risiko zu erkranken ist deutlich erhöht, wenn Schleimhautläsionen mit oder ohne *H. pylori* nachgewiesen wurden.

Nach Korrektur für etablierte Covariablen

(HR, 1.76;95%CI,1.11-2.51;P=.01)

# Teil 1

- Umweltfaktoren spielen eine bedeutende Rolle bei der Entstehung der Krankheit, Patienten sollten aufgeklärt werden
- Entzündliche Prozesse an den Schleimhäuten des Magen-Darm-Traktes erhöhen das Risiko ebenso wie rheumatoide Erkrankungen und hoher Konsum von Milchprodukten
- Mikroplastik könnte eine zusätzliche Rolle spielen
- Politische Maßnahmen zur Prävention stehen aus

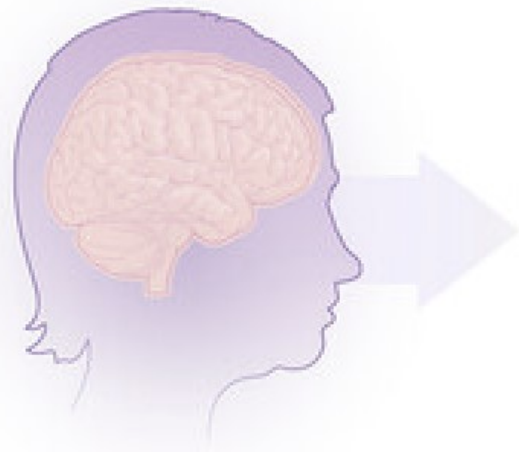


# Trial of Lixisenatide in Early Parkinson's Disease

**Authors:** Wassilios G. Meissner, M.D., Ph.D., Philippe Remy, M.D., Ph.D., Caroline Giordana, M.D., David Maltête, M.D., Pascal Derkinderen, M.D., Ph.D., Jean-Luc Houéto, M.D., Mathieu Anheim, M.D., Ph.D., **+37**, for the LIXIPARK Study Group\* [Author Info & Affiliations](#)

Published April 3, 2024 | N Engl J Med 2024;390:1176-1185 | DOI: 10.1056/NEJMoa2312323 | **VOL. 390 NO. 13**

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Participants with Parkinson's disease diagnosed <3 yr earlier



Lixisenatide  
(N = 78)

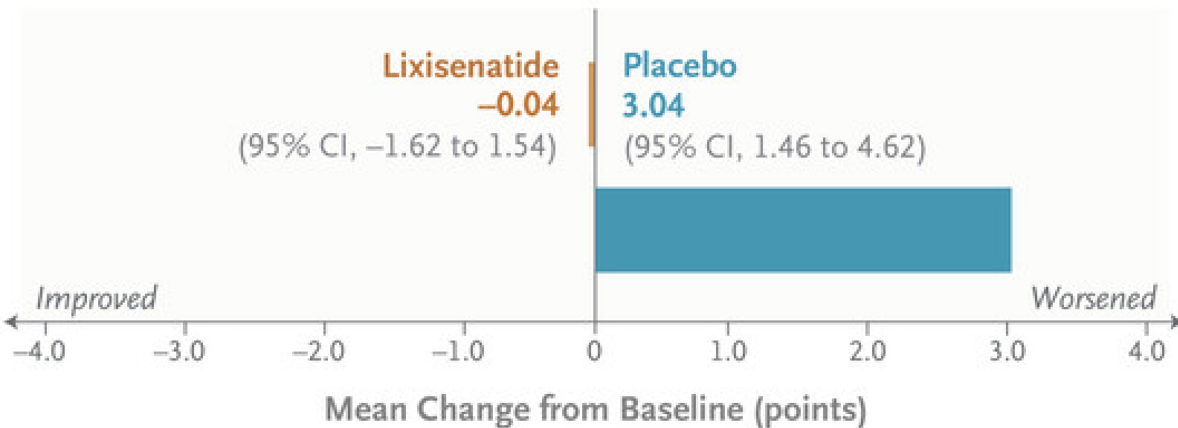


Placebo  
(N = 78)

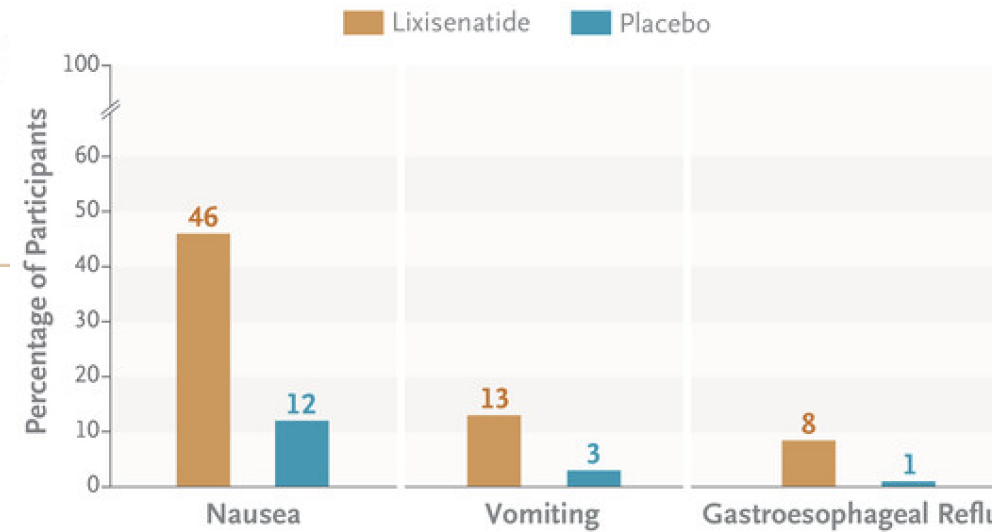
Administered subcutaneously every day for 12 mo

### Change in MDS-UPDRS Part III Score

Difference, 3.08 (95% CI, 0.86 to 5.30); P=0.007



### Adverse Events



### CONCLUSIONS

In participants with early Parkinson's disease, add-on treatment with lixisenatide for 12 months limited motor disability progression but was associated with gastrointestinal side effects.

The Lancet, 04.02.2025

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# Exenatide once a week versus placebo as a potential disease-modifying treatment for people with Parkinson's disease in the UK: a phase 3, multicentre, double-blind, parallel-group, randomised, placebo-controlled trial



*Nirosen Vijiaratnam, Christine Girges, Grace Auld, Rachel McComish, Alexa King, Simon S Skene, Steve Hibbert, Alan Wong, Sabina Melander, Rachel Gibson, Helen Matthews, John Dickson, Camille Carroll, Abigail Patrick, Jemma Inches, Monty Silverdale, Bethan Blackledge, Jessica Whiston, Michele Hu, Jessica Welch, Gordon Duncan, Katie Power, Sarah Gallen, Jacqueline Kerr, K Ray Chaudhuri, Lucia Batzu, Silvia Rota, Edwin Jabbari, Huw Morris, Patricia Limousin, Nigel Greig, Yazhou Li, Vincenzo Libri, Sonia Gandhi, Dilan Athauda, Kashfia Chowdhury, Tom Foltynie*

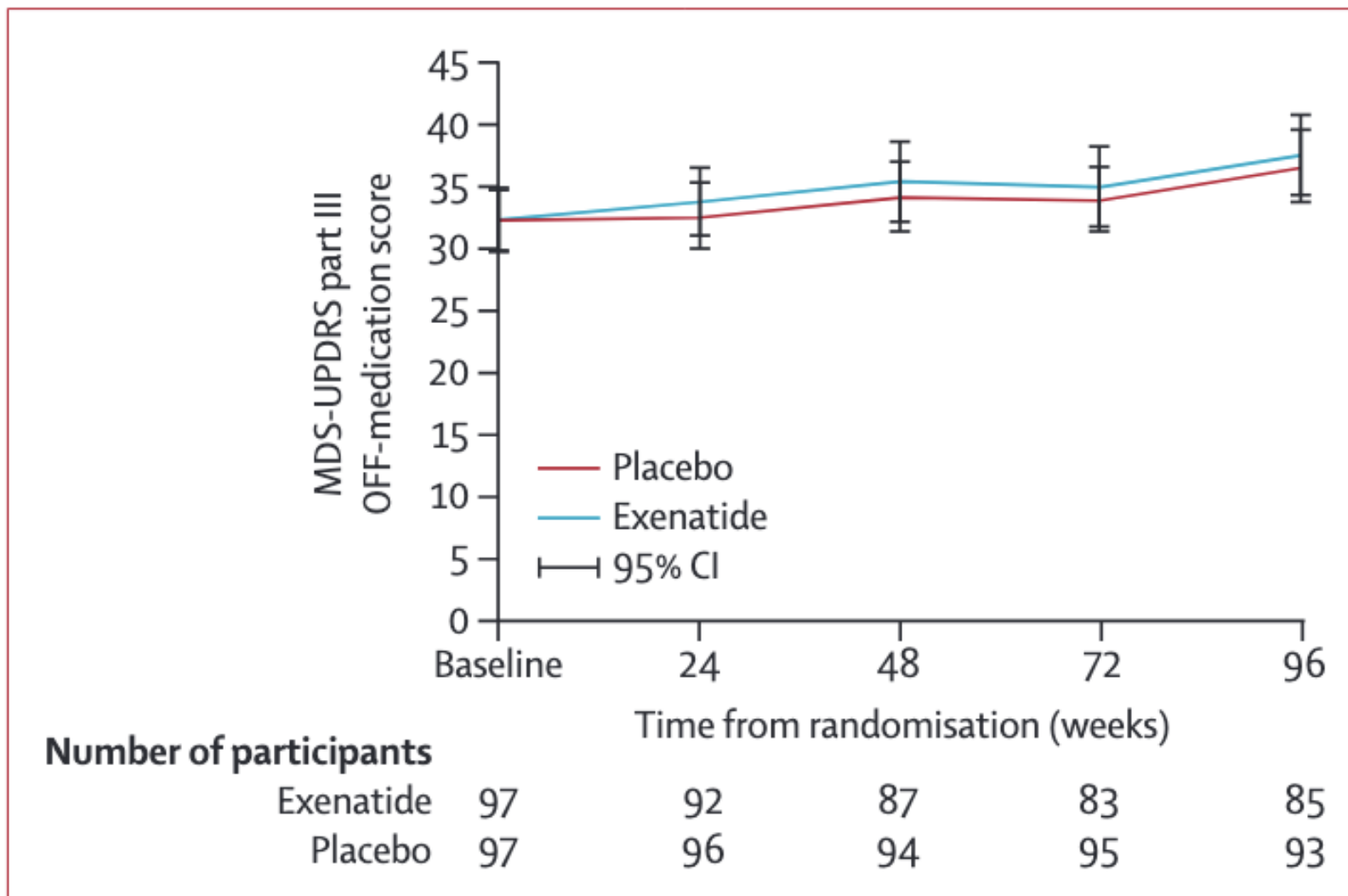




	Exenatide group (n=97)	Placebo group (n=97)	Total (n=194)
Age, years	61.02 (9.05)	60.35 (9.26)	60.68 (9.14)
Age at diagnosis, years	56.37 (9.60)	56.30 (9.53)	56.33 (9.54)
Weight, kg	79.57 (14.73)	78.39 (13.55)	78.98 (14.13)
Sex			
Female	28 (29%)	28 (29%)	56 (29%)
Male	69 (71%)	69 (71%)	138 (71%)
Ethnicity			
White	92 (95%)	88 (91%)	180 (93%)
Mixed	1 (1%)	1 (1%)	2 (1%)
Black or Black British	1 (1%)	0	1 (1%)
Asian or Asian British	3 (3%)	5 (5%)	8 (4%)
Other or prefer not to say	0	3 (3%)	3 (2%)
Hoehn and Yahr stage at randomisation			
≤2.0	83 (86%)	82 (85%)	165 (85%)
2.5	14 (14%)	15 (15%)	29 (15%)
BMI, kg/m <sup>2</sup>	25.80 (23.50–28.60)	25.20 (23.10–28.00)	25.60 (23.40–28.10)
Levodopa equivalent daily dose	475 (340–615)	475 (300–700)	475 (300–90)

Data are mean (SD), n (%), or median (IQR). All 194 randomly assigned participants were on Parkinson's disease medication at baseline.

**Table 1: Baseline characteristics**



**Figure 2: Mean MDS-UPDRS part III OFF-medication score by group over 96 weeks**

MDS-UPDRS=Movement Disorder Society-sponsored revision of the Unified Parkinson's Disease Rating Scale.

## Antikörpertherapie gegen $\alpha$ -synuclein

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

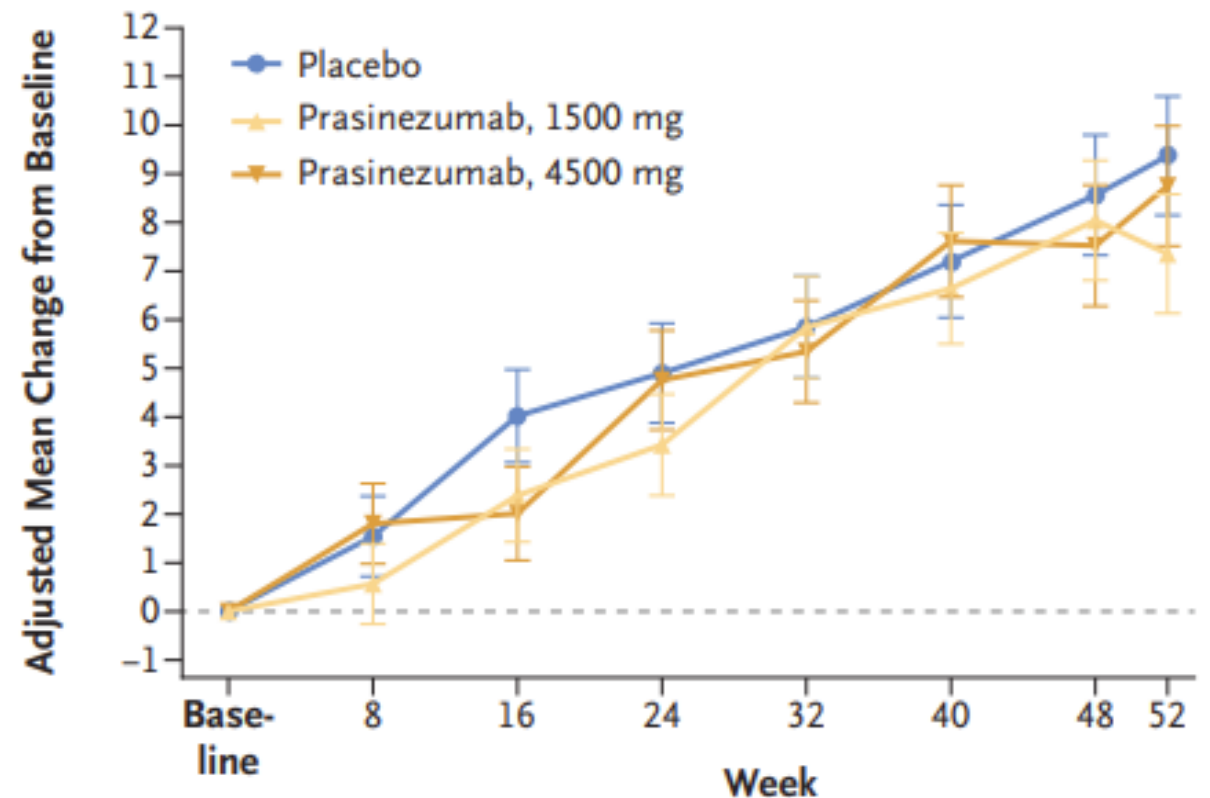
### Trial of Prasinezumab in Early-Stage Parkinson's Disease

G. Pagano, K.I. Taylor, J. Anzures-Cabrera, M. Marchesi, T. Simuni, K. Marek, R.B. Postuma, N. Pavese, F. Stocchi, J.-P. Azulay, B. Mollenhauer, L. López-Manzanares, D.S. Russell, J.T. Boyd, A.P. Nicholas, M.R. Luquin, R.A. Hauser, T. Gasser, W. Poewe, B. Ricci, A. Boulay, A. Vogt, F.G. Boess, J. Dukart, G. D'Urso, R. Finch, S. Zanigni, A. Monnet, N. Pross, A. Hahn, H. Svoboda, M. Britschgi, F. Lipsmeier, E. Volkova-Volkmar, M. Lindemann, S. Dziadek, Š. Holiga, D. Rukina, T. Kustermann, G.A. Kerchner, P. Fontoura, D. Umbricht, R. Doody, T. Nikolcheva, and A. Bonni, for the PASADENA Investigators and Prasinezumab Study Group\*

Table 1. Demographic and Clinical Characteristics of the Participants at Baseline.\*

Characteristic	Placebo (N=105)	Prasinezumab, 1500 mg (N=105)	Prasinezumab, 4500 mg (N=106)†
Age — yr	59.9±8.7	60.3±8.8	59.4±9.8
Male sex — no. (%)	71 (67.6)	71 (67.6)	71 (67.0)
Time since diagnosis — mo	10.0±6.8	10.3±6.3	10.1±6.5
Hoehn and Yahr stage — no. (%)‡			
Stage 1	20 (19.0)	29 (27.6)	29 (27.4)
Stage 2	85 (81.0)	76 (72.4)	77 (72.6)
Treatment with MAO-B inhibitor — no. (%)	38 (36.2)	38 (36.2)	39 (36.8)
Sum of scores on MDS-UPDRS parts I, II, and III§	32.0±13.0	31.5±13.3	30.8±12.1
Score on MDS-UPDRS part I¶	4.9±3.7	4.6±4.2	4.3±3.6
Score on MDS-UPDRS part II¶	5.6±4.1	4.9±4.0	5.5±4.1
Score on MDS-UPDRS part III	21.5±9.1	21.9±9.1	21.0±8.8

A Change in Sum of Scores on MDS-UPDRS Parts I, II, and III from Baseline to Week 52





# Sustained effect of prasinezumab on Parkinson's disease motor progression in the open-label extension of the PASADENA trial

Received: 7 April 2024

Accepted: 27 August 2024

Published online: 8 October 2024

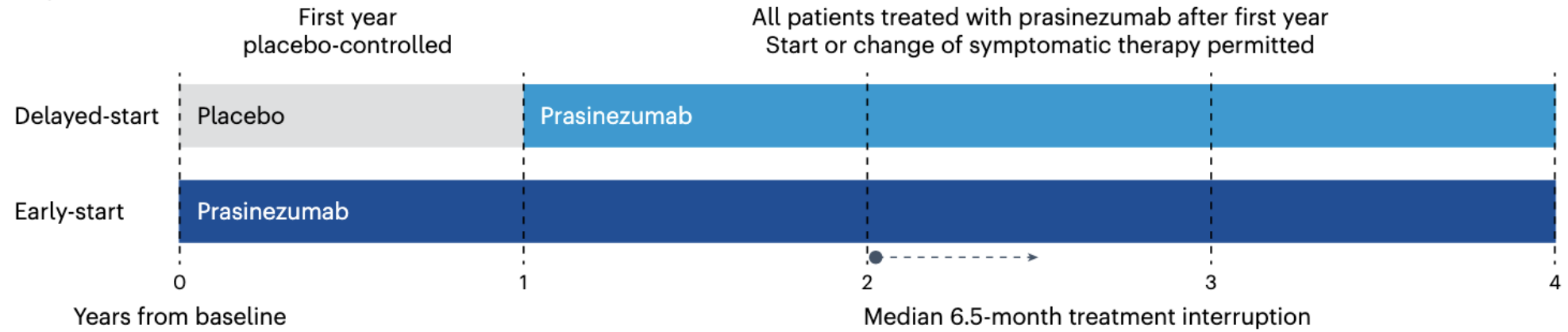


Check for updates

**A list of authors and their affiliations appears at the end of the paper**

The Phase II trial of Anti-alpha-Synuclein Antibody in Early Parkinson's Disease (PASADENA) is an ongoing double-blind, placebo-controlled trial evaluating the safety and efficacy of prasinezumab in early-stage Parkinson's disease (PD). During the double-blind period, prasinezumab-treated

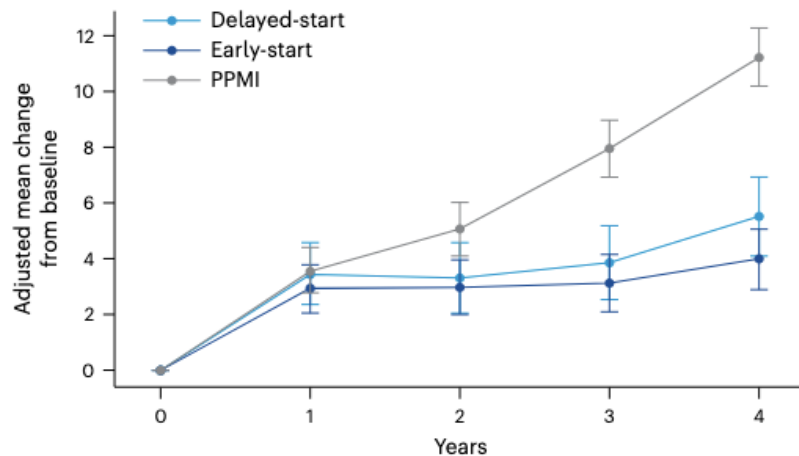
PASADENA



PPMI

No intervention (start of symptomatic treatment permitted after 6 months)

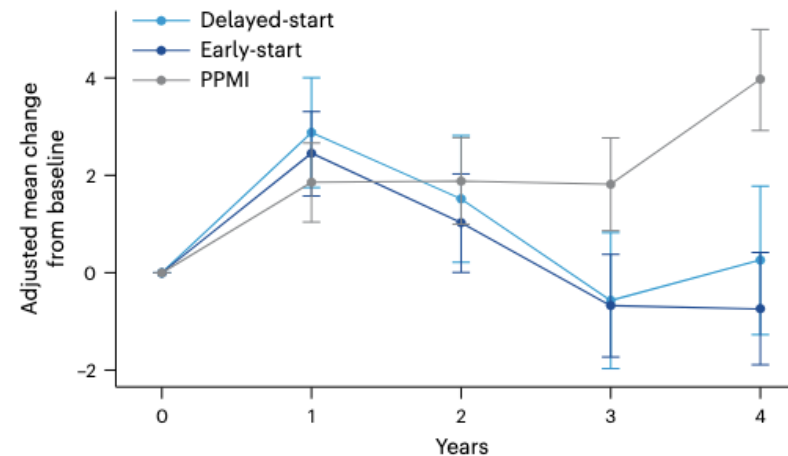
**a** MDS-UPDRS Part III OFF state



Number of patients

Delayed-start	94	93	83	83	75
Early-start	177	175	149	147	143
PPMI	303	215	185	182	180

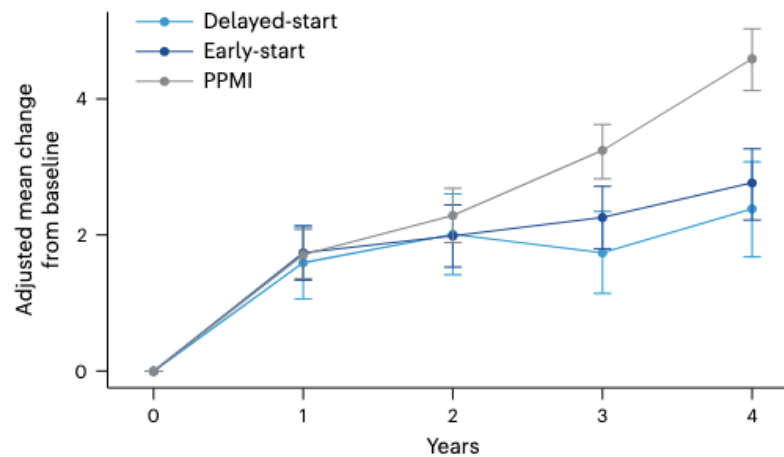
**b** MDS-UPDRS Part III ON state



Number of patients

Delayed-start	94	94	91	91	88
Early-start	177	177	167	167	165
PPMI	303	263	249	249	232

**c** MDS-UPDRS Part II



Number of patients

Delayed-start	94	94	93	91	90
Early-start	177	177	174	167	166
PPMI	303	268	262	265	248

**Fig. 2 | Adjusted mean change from baseline in MDS-UPDRS Part III in ON and OFF states and MDS-UPDRS Part II. a, MDS-UPDRS Part III in OFF state. b, MDS-UPDRS Part III in ON state. c, MDS-UPDRS Part II. Error bars represent 80% CI.**



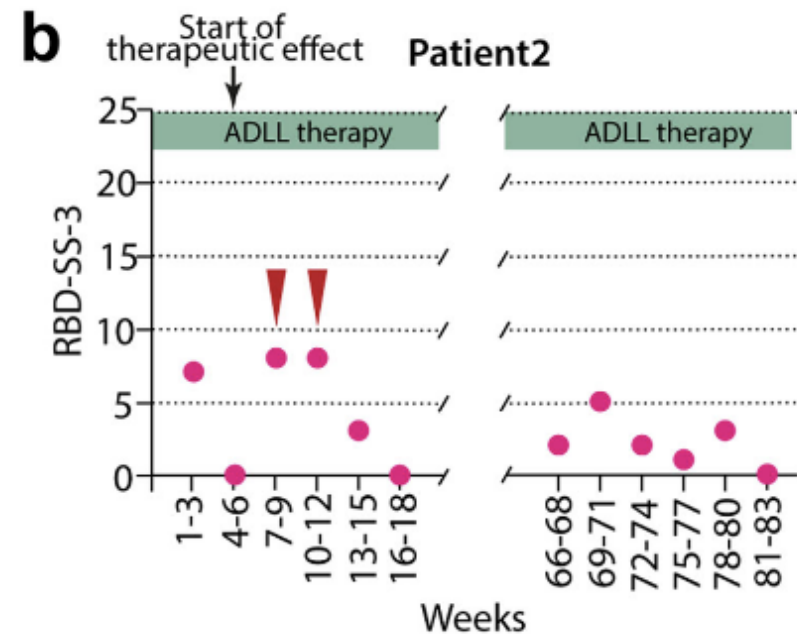
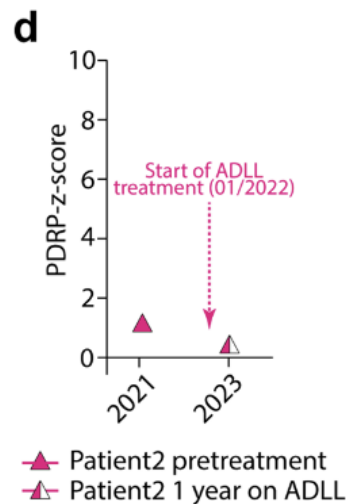
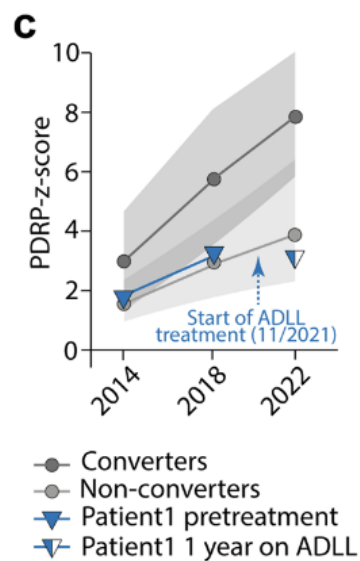
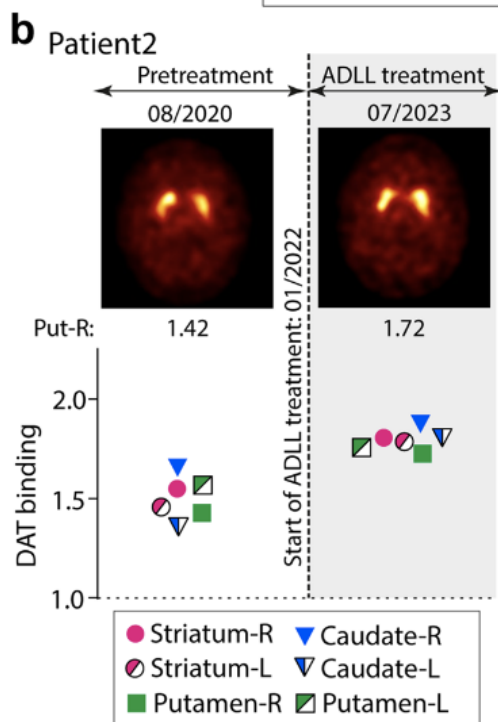
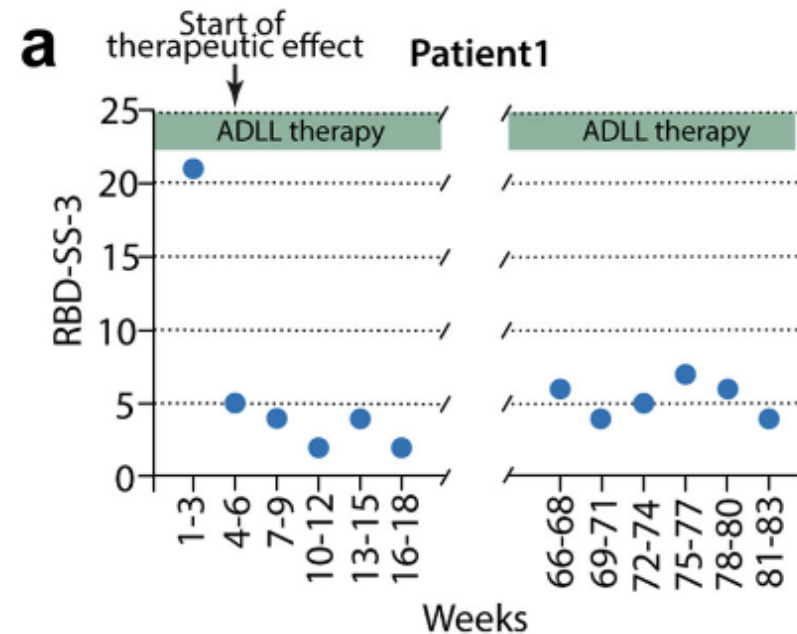
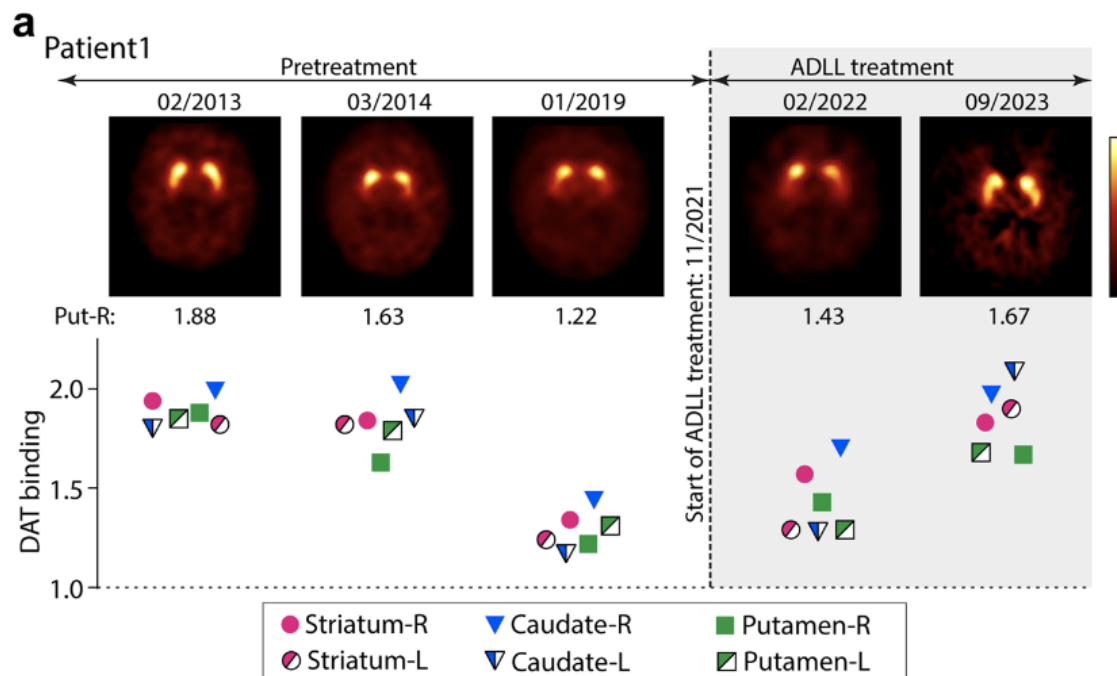
# Acetyl-DL-leucine in two individuals with REM sleep behavior disorder improves symptoms, reverses loss of striatal dopamine-transporter binding and stabilizes pathological metabolic brain pattern—case reports

Received: 28 February 2024

Accepted: 8 August 2024

Published online: 02 September 2024

Wolfgang H. Oertel <sup>1,2</sup> , Annette Janzen<sup>1</sup>, Martin T. Henrich<sup>1,3,4</sup>,  
Fanni F. Geibl<sup>1,3,4</sup>, Elisabeth Sittig<sup>1</sup>, Sanne K. Meles<sup>5</sup>, Giulia Carli<sup>6</sup>, Klaus Leenders<sup>6</sup>,  
Jan Booij<sup>7</sup>, D. James Surmeier <sup>4</sup>, Lars Timmermann<sup>1</sup> & Michael Strupp <sup>8</sup> 





Randomized Controlled Trial > Lancet Neurol. 2019 Nov;18(11):998-1008.

doi: 10.1016/S1474-4422(19)30285-6. Epub 2019 Sep 11.

## Effectiveness of home-based and remotely supervised aerobic exercise in Parkinson's disease: a double-blind, randomised controlled trial

Nicolien M van der Kolk<sup>1</sup>, Nienke M de Vries<sup>1</sup>, Roy P C Kessels<sup>2</sup>, Hilde Joosten<sup>3</sup>,  
Aeilko H Zwinderman<sup>4</sup>, Bart Post<sup>1</sup>, Bastiaan R Bloem<sup>5</sup>

Affiliations + expand

PMID: 31521532 DOI: 10.1016/S1474-4422(19)30285-6

npj | parkinson's disease

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Article | Open access | Published: 09 February 2024

## Intense exercise increases dopamine transporter and neuromelanin concentrations in the substantia nigra in Parkinson's disease

Maart de Laat<sup>✉</sup>, Jocelyn Hoye, Gelsina Stanley, Michelle Hespeler, Jennifer Ligi, Varsha Mohan, Dustin W. Vooten, Xiaomeng Zhang, Thanh D. Nguyen, Jose Key, Giulia Colonna, Yiyun Huang, Nabeel Nabulsi, Umar Patel, David Matuskey, Evan D. Morris & Sule Tinaz

npj Parkinson's Disease 10, Article number: 34 (2024) | Cite this article

2k Accesses | 9 Citations | 139 Altmetric | Metrics

Verlaufsmodifikation

Körperliche Aktivität !!

Kognitive Leistung !!

Kardiovaskuläre RF !!

> Mov Disord. 2019 Jan;34(1):67-77. doi: 10.1002/mds.27492. Epub 2018 Nov 23.

## Baseline predictors for progression 4 years after Parkinson's disease diagnosis in the De Novo Parkinson Cohort (DeNoPa)

Brit Mollenhauer<sup>1,2</sup>, Johannes Zimmermann<sup>3</sup>, Friederike Sixel-Döring<sup>1</sup>, Niels K Focke<sup>4</sup>,  
Tamara Wicke<sup>1</sup>, Jens Ebentheuer<sup>1</sup>, Martina Schaumburg<sup>1</sup>, Elisabeth Lang<sup>1</sup>, Tim Friede<sup>5</sup>,  
Claudia Trenkwalder<sup>1,6</sup>; DeNoPa Study Group

Affiliations + expand

PMID: 30468694 DOI: 10.1002/mds.27492

Neurology

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ARTICLES | March 12, 2014 |

## Cognitive training in Parkinson disease

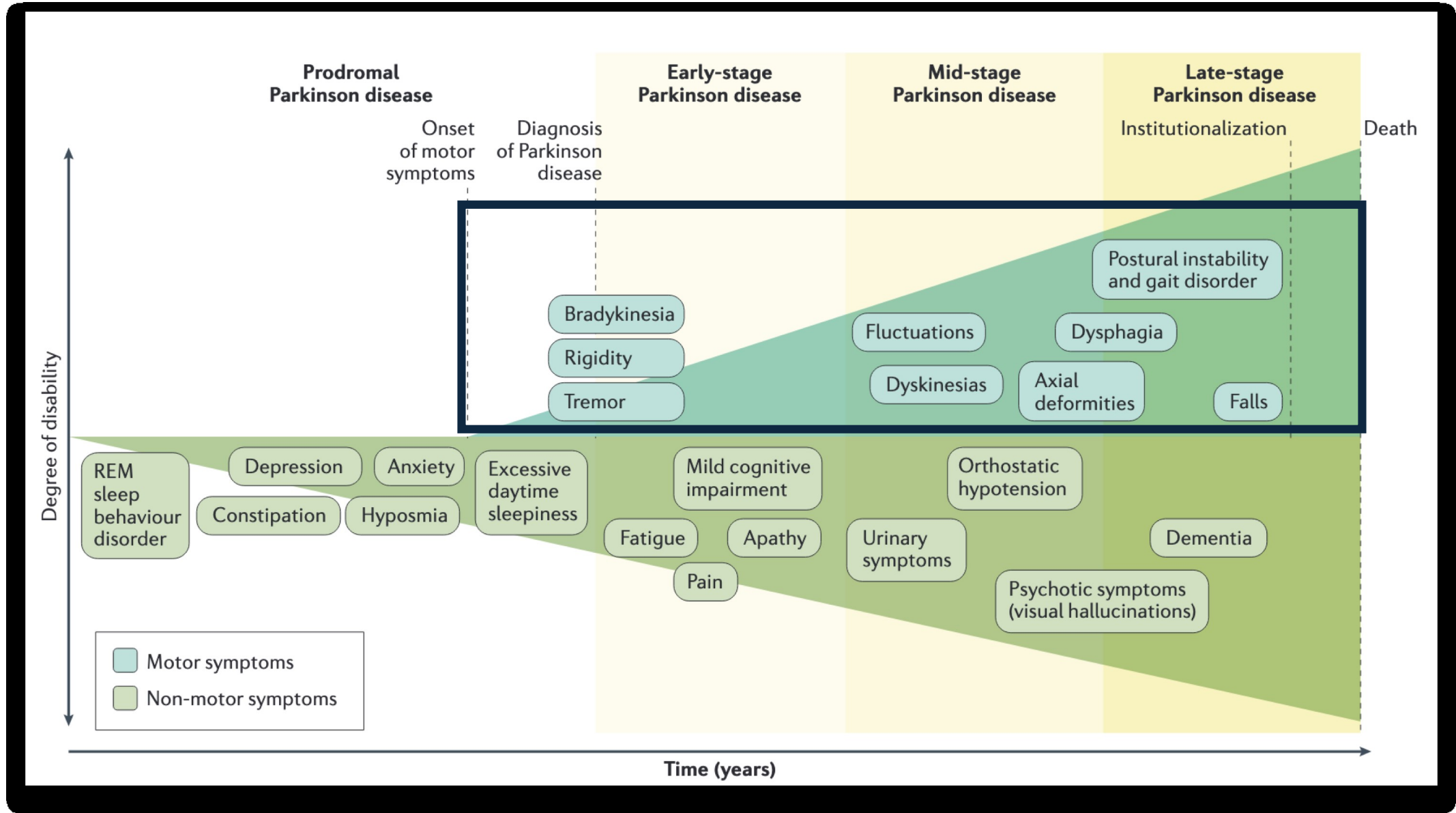
Cognition-specific vs nonspecific computer training

Ronan Zimmermann, PhD, Ute Gschwandtner, MD, Nina Benz, DiplBiol, Florian Hatz, MD, Christian Schindler, PhD, Ethan Taub, MD, and Peter Fuhr, MD | AUTHORS INFO & AFFILIATIONS

April 8, 2014 issue • 82(14) 1219-1226 • <https://doi.org/10.1212/WNL.0000000000000287>

Letters to the Editor (2) GET ACCESS



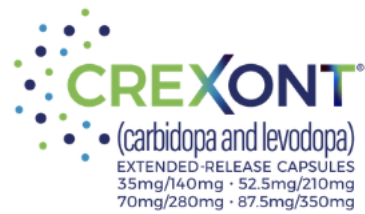


# KYNMOBI™

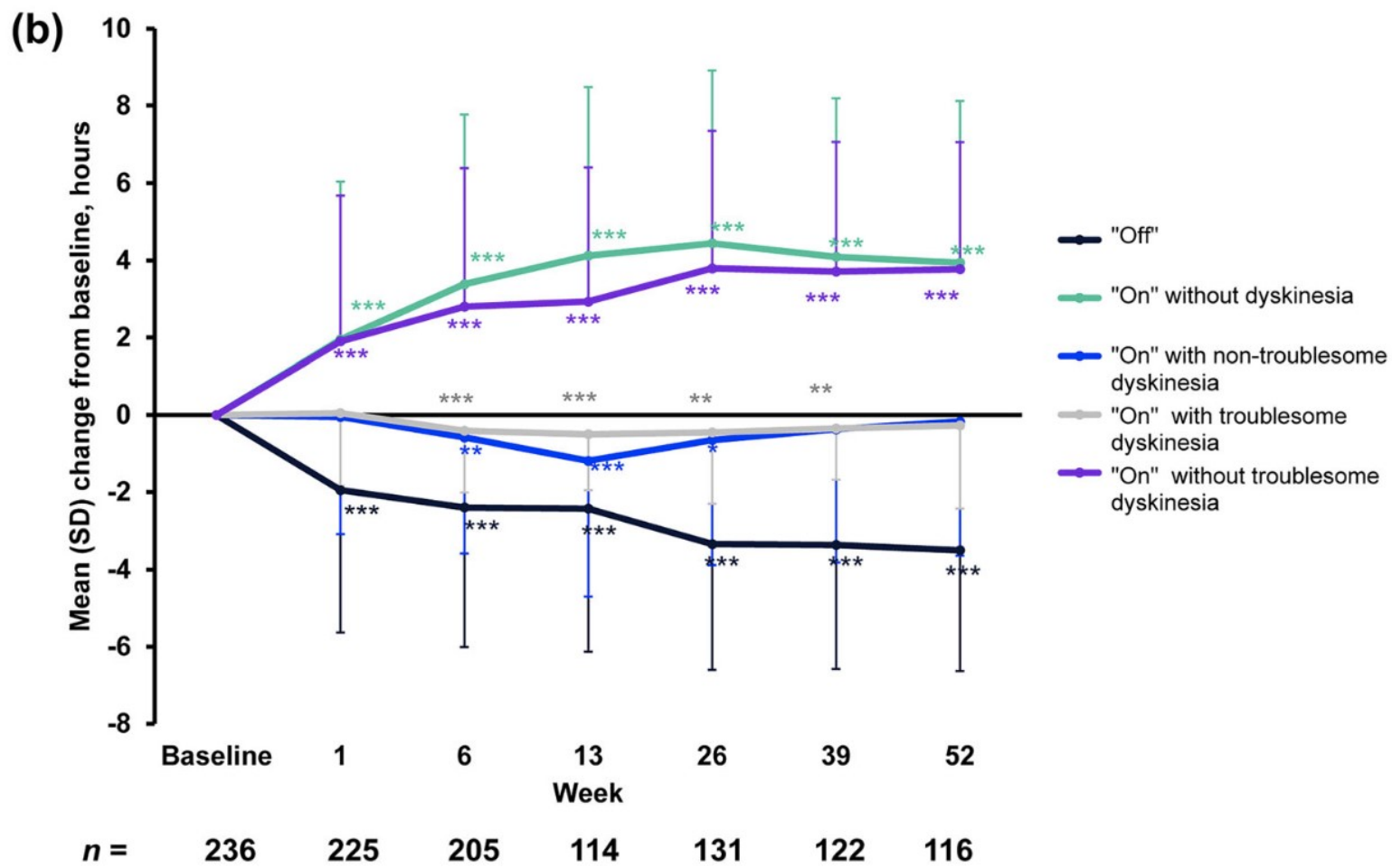
(apomorphine HCl) sublingual film



USA:



# Foslevodopa / Foscarbidopa





RESEARCH ARTICLE

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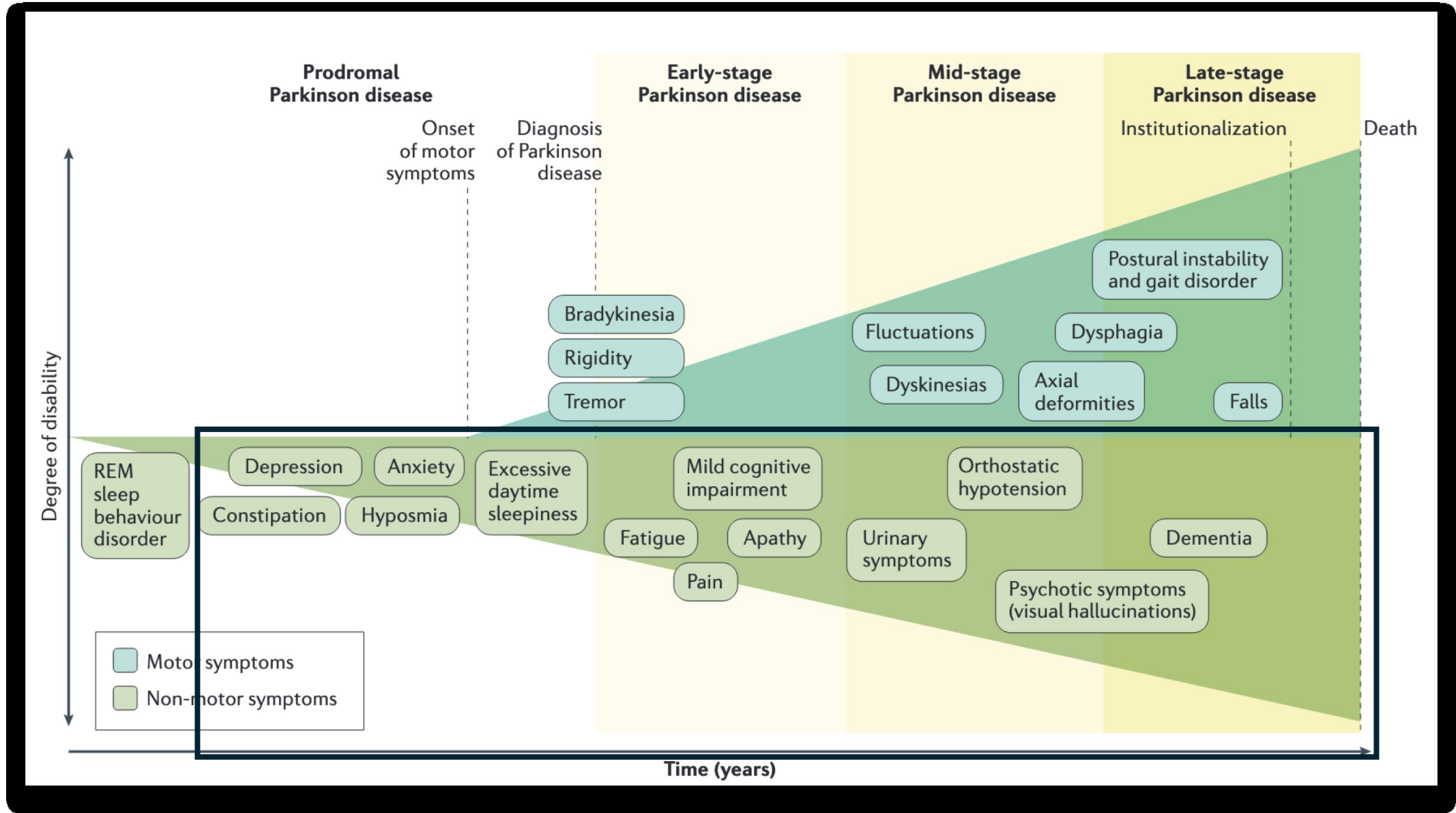


## Long-Term Follow-Up of the LEAP Study: Early Versus Delayed Levodopa in Early Parkinson's Disease

Henriette L. Frequin MD, Constant V.M. Verschuur MD, Sven R. Suwijn MD, PhD, Judith A. Boel PhD, Bart Post MD, PhD, Bastiaan R. Bloem MD, PhD, Johannes J. van Hilten MD, PhD ... [See all authors](#) ✓

First published: 21 April 2024 | <https://doi.org/10.1002/mds.29796> | Citations: 4

Outcomes	Unadjusted Change from Baseline		Estimated Difference (SE)	P Value
	Early-Start Group	Delayed-Start Group		
Levy A	0.6 ± 7.2	-0.4 ± 8.1	0.14 (0.11)	0.20
Levy B	0.7 ± 2.1	0.6 ± 2.2	0.02 (0.08)	0.83
LEDD	400 (300–600)	450 (300–600)	-0.61 (0.69)	0.38
5-Year follow-up				
UPDRS total (I+II+III)	11.5 ± 17.0	8.2 ± 16.2	0.24 (0.13)	0.07
UPDRS I	0.4 ± 2.2	0.2 ± 1.9	0.11 (0.08)	0.17
UPDRS II	3.7 ± 4.7	3.2 ± 5.3	0.09 (0.08)	0.25
UPDRS III	7.4 ± 13.7	4.7 ± 11.9	0.21 (0.12)	0.09
UPDRS IV	2.4 ± 2.9	2.2 ± 2.4	<0.01 (0.09)	0.97
Levy A	4.7 ± 10.9	2.9 ± 9.4	0.15 (0.12)	0.20
Levy B	2.1 ± 3.0	1.5 ± 2.4	0.11 (0.08)	0.16
LEDD	600 (400–800)	600 (450–800)	-0.16 (0.78)	0.84



RESEARCH ARTICLE

| August 7, 2024



Check for updates

## Long-Term Dementia Risk in Parkinson Disease

Julia Gallagher, BS, Caroline Gochanour, MS, Chelsea Caspell-Garcia, MS , Roseanne D. Dobkin, PhD, Dag Aarsland, MD, PhD , Roy N. Alcalay, MD , Matthew J. Barrett, MD, MSc , ... [SHOW ALL](#) ... for the Parkinson's Progression Markers Initiative | [AUTHORS INFO &](#)

[AFFILIATIONS](#)

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September 10, 2024 issue • 103 (5) • <https://doi.org/10.1212/WNL.0000000000209699>

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- **Parkinson und Demenz: Ergebnisse aus der PPMI- und Penn-Kohorte**
- **PPMI Kohorte:**
  - 417 Teilnehmende, international, viele neu diagnostizierte Parkinson-Patienten
  - Kognitive Leistung alle 2 Jahre mit **MOCA** und **UPDRS Part I**
  - Initial: Keine Demenz
  - Nach 10 Jahren: 7% dement
  - Über die gesamte Follow-up-Periode: 8,5% dement
- **Penn Kohorte:**
  - 389 Parkinson-Patienten, betreut an der **University of Pennsylvania**
  - Jährliche kognitive Untersuchung mit **MOCA** und **UPDRS Part I**
  - Initial: 10% dement
  - Während der Studie: 47% entwickelten Demenz
  - **Mittelwert** zwischen Parkinson-Diagnose und Demenz: **15 Jahre**
- **Geschlechterunterschiede:**
  - Männer: Demenz früher (13,3 Jahre nach Parkinson-Diagnose)
  - Frauen: Später (19,4 Jahre)
- **Einfluss des Bildungsstands:**
  - Niedriger Bildungsstand: **59%** Demenz
  - Hoher Bildungsstand: **46%** Demenz

**Demenz tritt seltener  
und später auf als bisher  
angenommen !**

# Suizid bei Parkinson

## Original Investigation

November 13, 2023

# Risk of Suicidal Ideation and Behavior in Individuals With Parkinson Disease

## A Systematic Review and Meta-Analysis

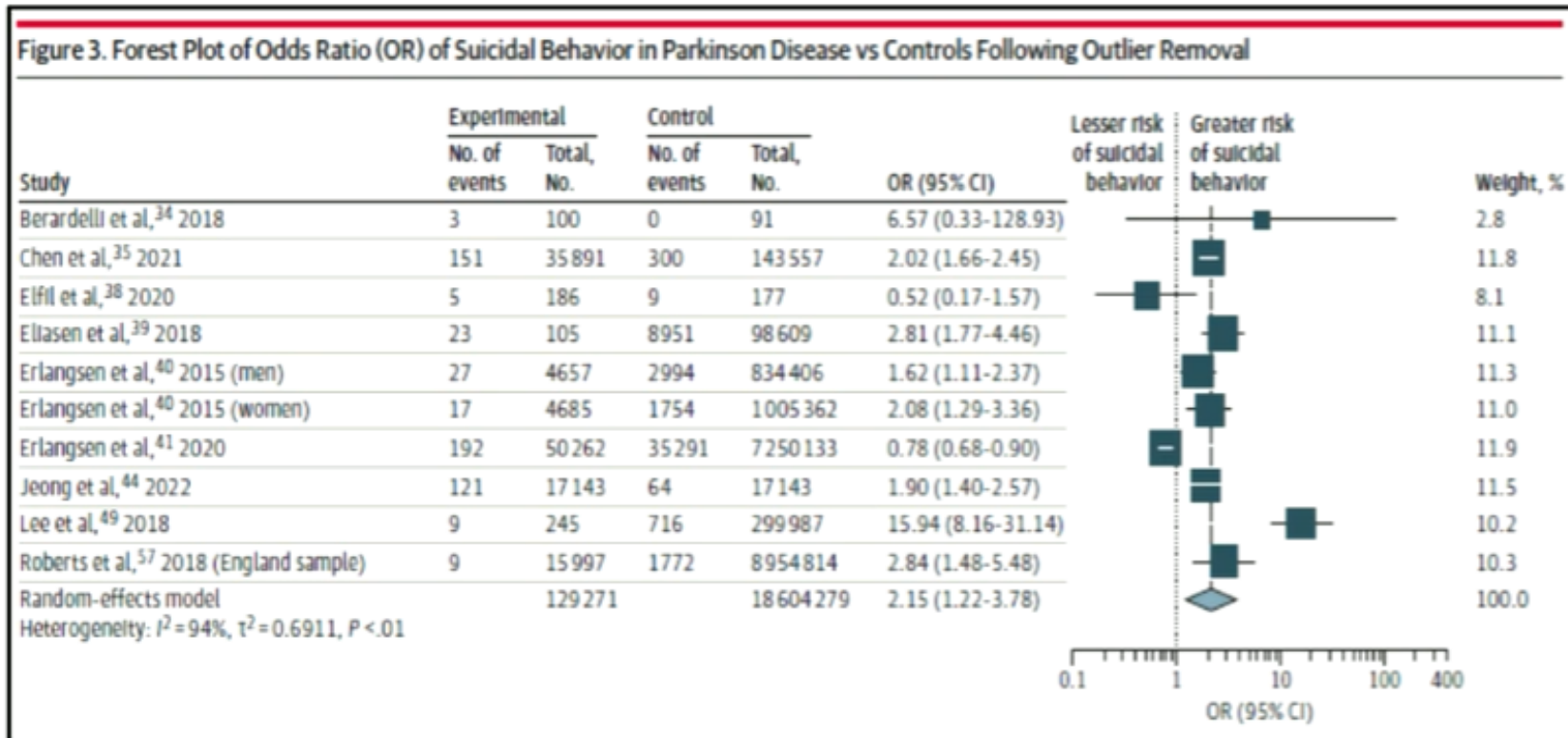
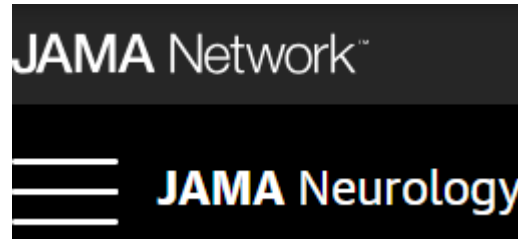
Aaron Shengting Mai, MS<sup>1</sup>; Yinxia Chao, MD, PhD<sup>2</sup>; Bin Xiao, MD, PhD<sup>2</sup>; et al

Meta-Analyse

505.955 Parkinson-Patienten

**Selbstmordabsichten: 22%**

**Durchgeführte Suizide: 1,25%**





RESEARCH ARTICLE



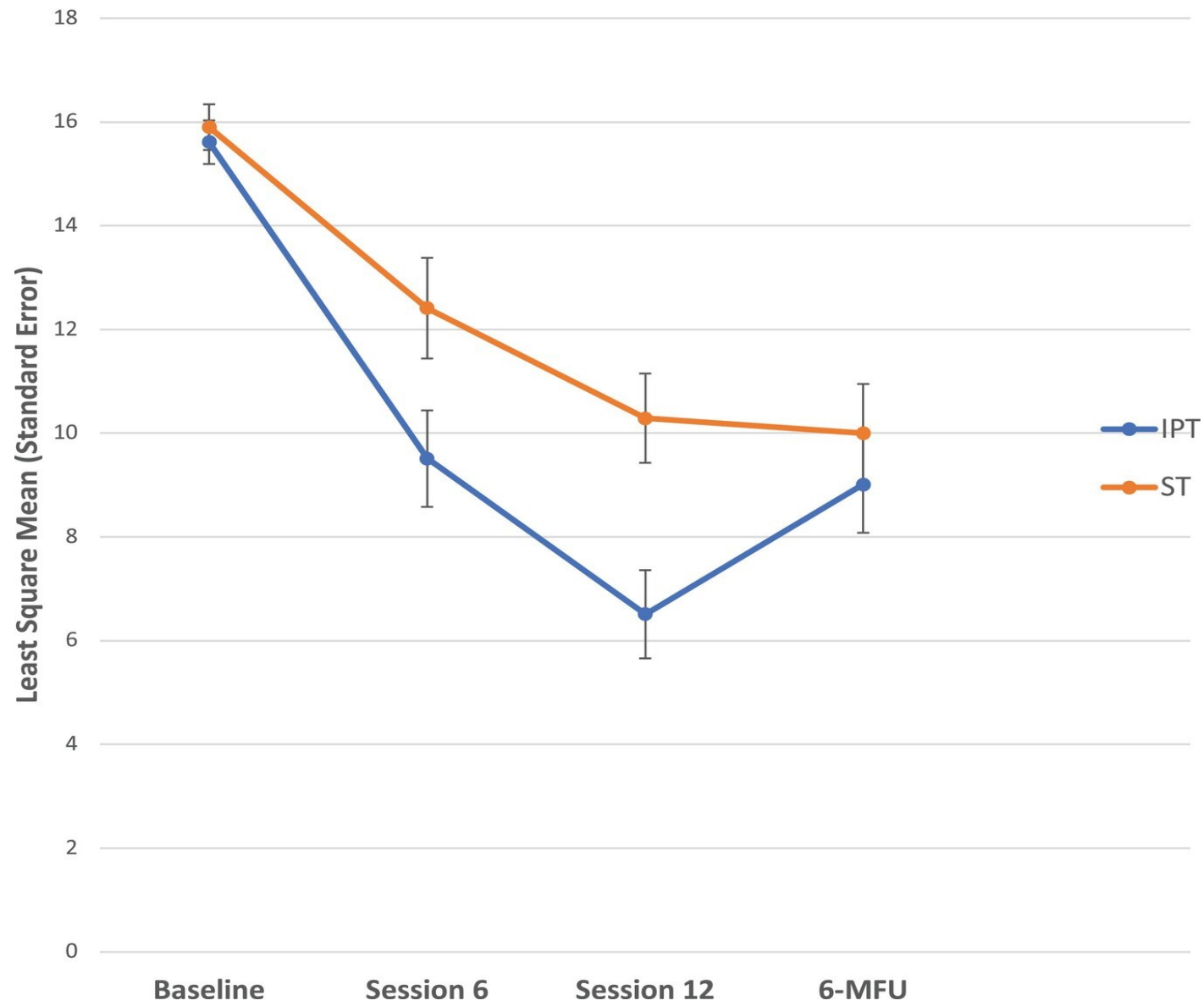
Open Access



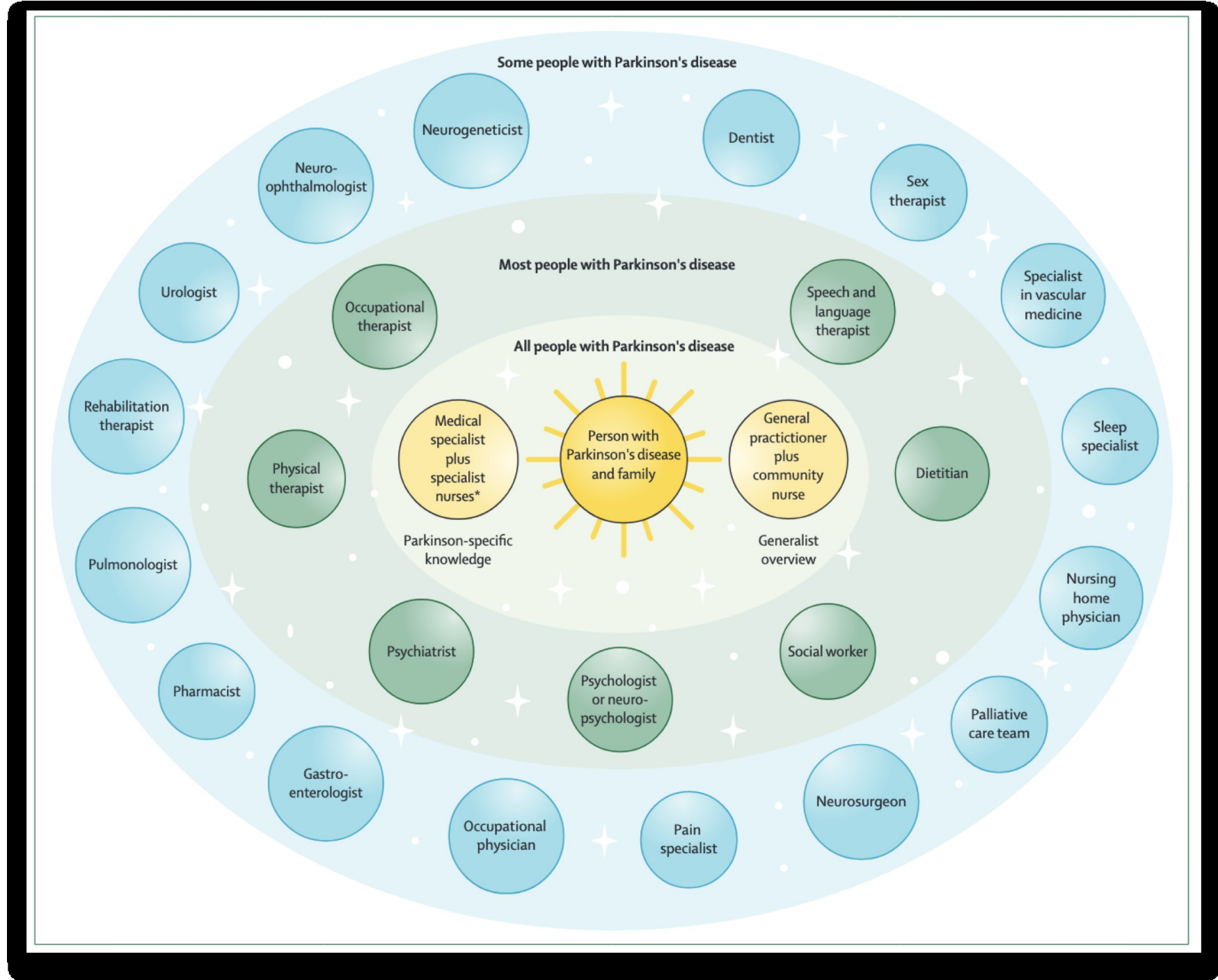
# Interpersonal Psychotherapy for the Treatment of Depression in Parkinson's Disease: Results of a Randomized Controlled Trial

Diana Koszycki PhD, Monica Taljaard PhD, Jacques Bradwejn MD, FRCPC, Caroline Lee MSc, Giorgio A. Tasca PhD, David A. Grimes MD, FRCPC 

First published: 20 November 2024 | <https://doi.org/10.1002/mds.30061>

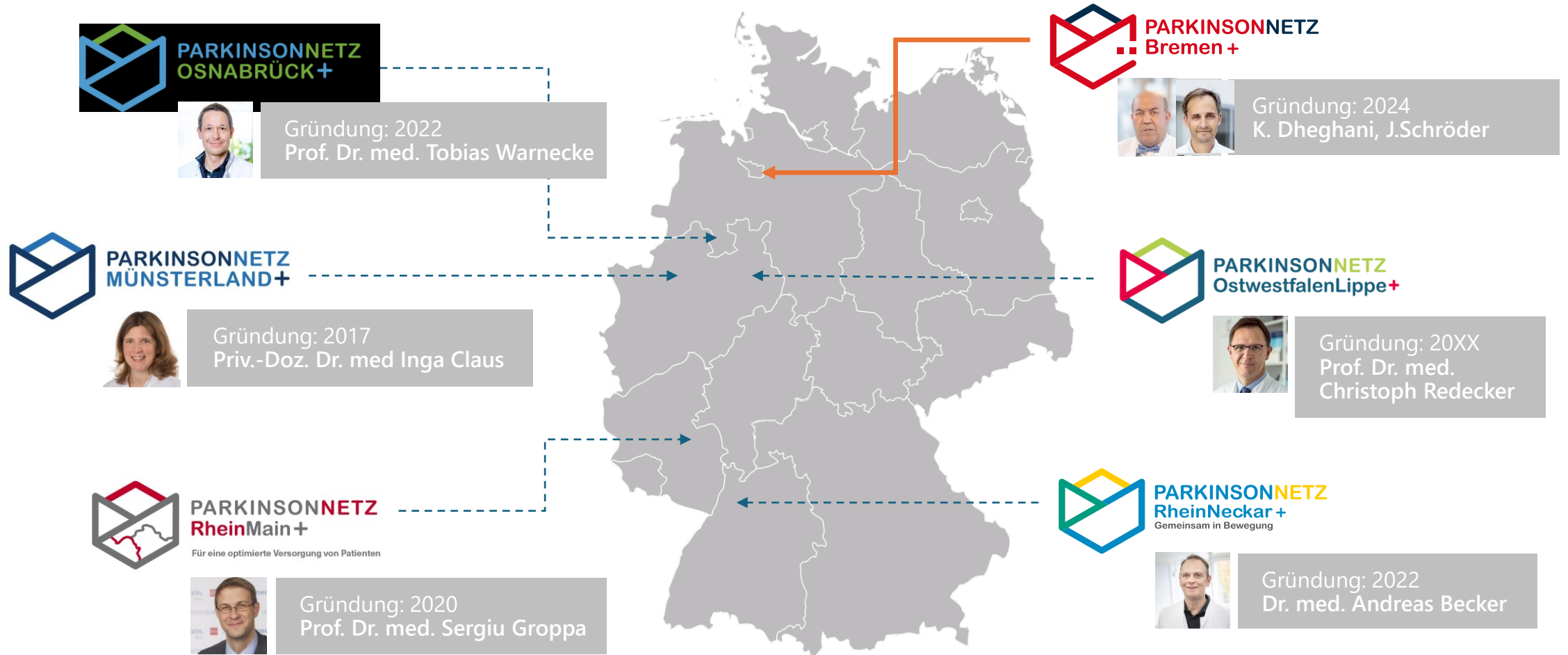


**Movement Disorders,  
First published: 20  
November 2024, DOI:  
(10.1002/mds.30061)**



Bastiaan R Bloem;Michael S Okun;Christine Klein;. (2021). Parkinson's disease . The Lancet, (), -. doi:10.1016/s0140-6736(21)00218-x

# Parkinsonnetze in Deutschland



## Effectiveness and costs of specialised physiotherapy given via ParkinsonNet: a retrospective analysis of medical claims data

[Jan H L Ypinga, MSc<sup>a</sup>](#) · [Nienke M de Vries, PhD<sup>b</sup>](#) · [Lieke H H M Boonen, PhD<sup>a,c</sup>](#) · [Xander Koolman, PhD<sup>d</sup>](#) · [Marten Munneke, PhD<sup>b</sup>](#) · [Prof Aeilko H Zwinderman, PhD<sup>e</sup>](#) · [Prof Bastiaan R Bloem, MD<sup>b</sup>](#)   Show less

[Affiliations & Notes](#)  [Article Info](#)  [Linked Articles \(1\)](#) 

	Specialised physiotherapy (n=2129)	Usual physiotherapy (n=2252)	Difference (95% CI)	p value
Any Parkinson's disease-related complications (hospital admissions for fractures, other orthopaedic injuries, or pneumonia)‡	368 (17%)	480 (21%)	4.0% (1.7 to 6.4)	0.001
Patients receiving care by the same physiotherapist during the entire study period	1204 (57%)	736 (33%)	-24% (-27 to -21)	<0.0001
Percentage of treatment sessions given by the same physiotherapist*	93% (11.59)	81% (18.95)	-12% (-13 to -11)	<0.0001
Patients with Parkinson's disease per therapist	3.89 (3.91)	1.48 (1.24)	-2.4 (-2.5 to -2.3)	<0.0001
Physiotherapy sessions per patient per year	33.72 (26.70)	47.97 (32.11)	14.2 (13.1 to 15.4)	<0.0001
Cost of physiotherapy (in €)†‡	933 (843)	1329 (1021)	395 (358 to 432)	<0.0001
Medical expenses (physiotherapy and hospital costs; in €)†‡	2056 (3272)	2586 (3756)	530 (391 to 669)	<0.0001
Mortality§	134 (6%)	205 (9%)	2.8 (1.2 to 4.4)	0.001

Data are n (%), % (SD), mean (SD), difference (95% CI), or p value. \*Mean percentage per group, calculated from the number of sessions with the therapist seen most often by each patient, as a percentage of the total number of sessions received by each patient per year. †The difference is significant after controlling for background characteristics including age, sex, socioeconomic status, and proxies for Parkinson's disease-specific health status. ‡Costs are discounted at 4%, and effects (mortality and percentage of complications) were in line with Dutch guidelines for cost-effectiveness studies. §Raw percentages are shown; analyses with discounted percentages at 1.5%, in line with Dutch guidelines for cost-effectiveness studies, yielded identical results (data not shown).

**Table 2: Health-care use and Parkinson's disease-related complications**



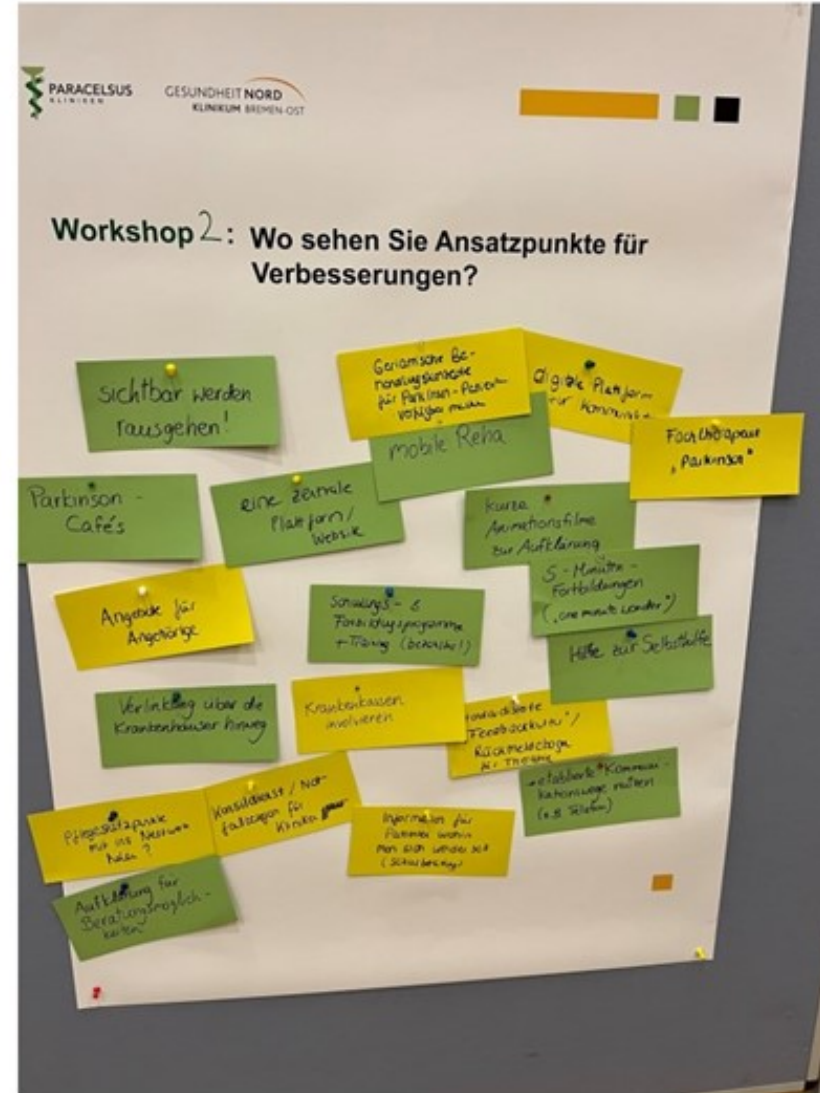
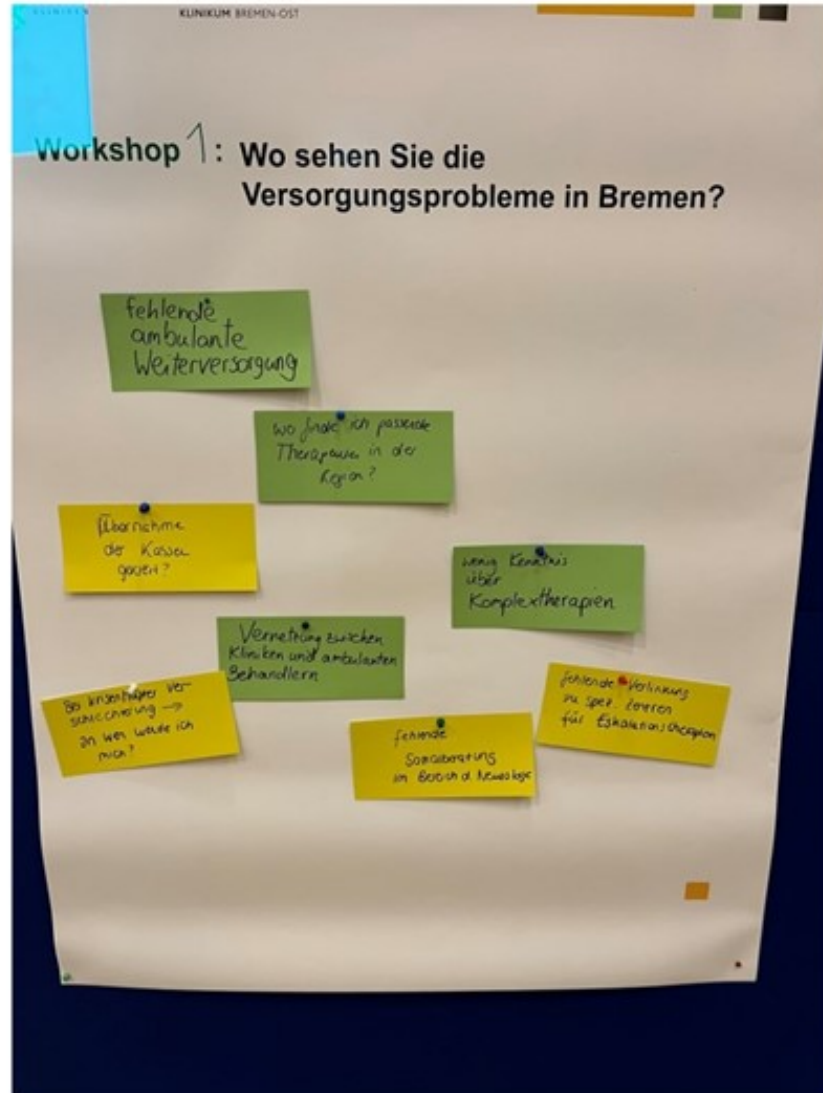
# WILLKOMMEN BREMEN!

Erfolgreicher Auftakt und Workshop im neuen Parkinsonnetz+ Bremen!



- 5.12.2024 **Gründungsveranstaltung** mit 2 Kliniken (Klinikum Bremen -Ost und Paracelsus Klinik Bremen)
- Multiprofessionelles Zusammenkommen (Neurologie, Neuropsychologie, Parkinson Nurses, Aktivierende Therapien, Selbsthilfe)
- **Begrüßung, Impulsvortrag** von Dr. Schröder zur Parkinson-Krankheit (Prävalenz / Komplexität der Erkrankung / Vorreiter Niederlande ParkinsonNet / Nutzen von Parkinsonnetzen), **Gemeinsames Kennenlernen**
- **Workshop** zu Herausforderungen in der regionalen Versorgung in Bremen und Entwicklung erster Ideen & Lösungsansätze

# Fehlende Vernetzung zwischen ambulanten und stationären Versorgern



# Next steps PNB+

- **Nächstes Netzwerktreffen am 27.03.2025**
  - **Vorläufige Agenda:**
  - **Netzwerkbewegung & Parkinsonnetze Deutschland e. V. Dr. Becker**
  - **Update Parkinson Vortrag Dr. Dehghani**
  - **Pause & Kennenlernen**
  - **Workshops zur Weiterentwicklung der Lösungsansätze:**
    - **Standardisierte Feedbackstruktur / Rückmeldebogen für Therapie (AbbVie)**
    - **„Fachtherapeut Parkinson“ (Bereich Physiotherapie)**
    - **Aufklärung von Patient\*innen**



Wir freuen sehr über Mitarbeit im Netzwerk !

Vielen Dank für Ihre Aufmerksamkeit

