association luxembourg alzheimer

13. März 2015

UNIVERSITÉ DU LUXEMBOURG

Demenz – State of the Art 2015

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felixplatterspital

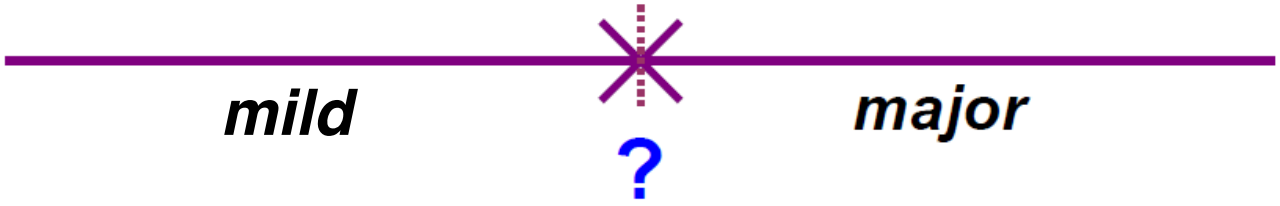
Universitäre Altersmedizin und Rehabilitation

UNI BASEL

DSM-5 (Mai 2013)

Mild Neurocognitive Disorder (MCI)

Major Neurocognitive Disorder (Dementia)



Kognition: -1 SD – -2 SD	**Kognition: < -2 SD**
Kompensation möglich	**Kompensation nicht möglich**
unabhängig	**abhängig**

www.dsm5.org/ProposedRevisions

Definition der Demenz im DSM-IV

Hirnleistungsstörung mit Defizit in kognitiven, emotionalen und sozialen Fähigkeiten, die zu einer **Alltagsbeeinträchtigung** sozialer und beruflicher Funktionen führt und gegenüber einem früheren Leistungsniveau eine deutliche Verschlechterung darstellt.

Demenz: Hirnleistungsminderung mit vielen möglichen Ursachen

Demenz ist ein Überbegriff für eine Vielzahl von Erkrankungen. Allen etwa 55 Unterformen der Demenz ist gemeinsam, dass sie zu einem Verlust der Geistes- und Verstandesfähigkeiten (Intelligenz) führen.
Demenzrisiko im Alter signifikant erhöht!

MMSE (Folstein, 1975)

DEMENZ Assessment

Mini Mental State Examination (MMSE)

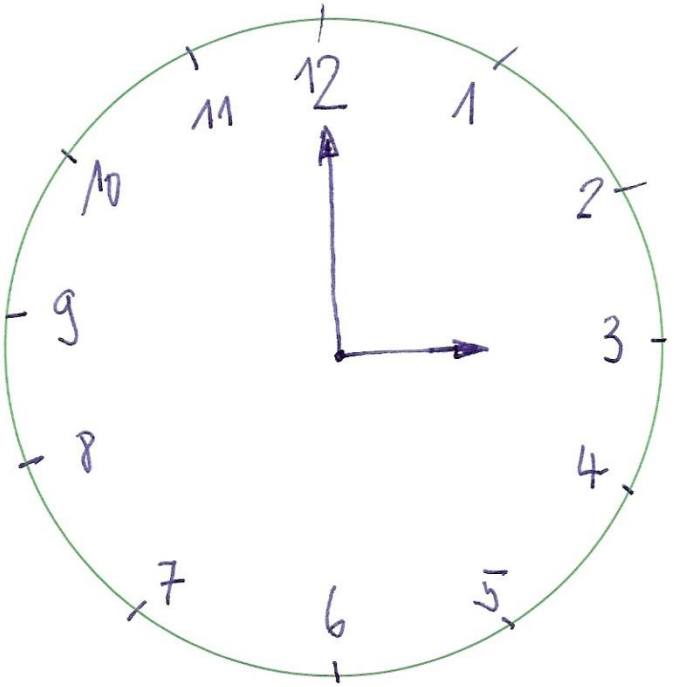
Referenz: Folstein MF: J Psychiat Res 1975; 12: 189-198

Parameter	Max. Score
1. Orientierung	
Zeitlich: Jahr, Jahreszeit, Monat, Wochentag, Datum von heute?	= 5
Örtlich: Land, Kanton, Ortschaft, Praxis/Klinik, Stockwerk?	= 5
2. Aufnahmefähigkeit	
Nachsprechen von drei Wörtern (Ein Wort/Sekunde; Untersucher wiederholt so lange bis der Pat. alle Wörter gelernt hat, max. 5 mal. Für die Bewertung gilt die erste Wiedergabe).	= 3
3. Aufmerksamkeit und Rechnen	
von 100 jeweils 7 subtrahieren (93/86/79/72/65) (Jede richtige Antwort ergibt einen Punkt, nach 5 Antworten aufhören).	= 5
4. Gedächtnis	
Frage nach den oben nachgesprochenen Wörtern. Pro Wort ein Punkt.	= 3
5. Sprache. Benennen:	
Was ist das? (Bleistift)	= 1
Was ist das? (Uhr)	= 1
Nachsprechen: "Keine wenn und oder aber".	= 1
6. Ausführen eines dreiteiligen Befehls	
Nehmen Sie das Blatt in die rechte Hand, falten Sie es in der Mitte und legen Sie es auf den Boden". (Jeder Teil ein Punkt)	= 3
7. Lesen und Ausführen	
(auf separatem Blatt vorbereiten) "Schliessen Sie Ihre Augen".	= 1
8. Schreiben	
Einen x-beliebigen Satz schreiben lassen. (nicht diktieren/muss spontan geschrieben werden)	= 1
9. Konstruktive Praxis	
Sich überschneidende fünfeckige Figur nachzeichnen lassen. (Extrablatt vorlegen)	= 1
Totalscore:	**(0 - 30)** =

Beurteilung: < 26 Punkte: mögliche Kognitionsstörung

Clock drawing test

Bitte zeichnen Sie eine Uhr!



15 : 00

Ehrensperger *et al. Alzheimer's Research & Therapy* 2014, **6**:69
http://alzres.com/content/6/9/69

alzheimer's research&therapy

RESEARCH Open Access

BrainCheck – a very brief tool to detect incipient cognitive decline: optimized case-finding combining patient- and informant-based data

Michael M Ehrensperger[1*], Kirsten I Taylor[1,2], Manfred Berres[3], Nancy S Foldi[4], Myriam Dellenbach[5,6], Irene Bopp[7], Gabriel Gold[8], Armin von Gunten[9], Daniel Inglin[10], René Müri[11], Brigitte Rüegger[7], Reto W Kressig[12] and Andreas U Monsch[1]

BrainCheck

iTunes

BrainCheck

- Ärztliche Befragung (drei Fragen)
- Uhrentest
- Befragung der Angehörigen (7 Fragen)

Ehrensperger et al. Alzheimers Res Ther 2014

Ärztliche Befragung

3 Fragen

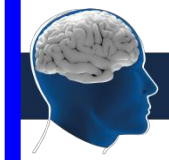
1. Haben Sie in der letzten Zeit erlebt, dass Ihre **Fähigkeit sich neue Dinge zu merken**, nachgelassen hat?

2. Haben **Angehörige oder Freunde Bemerkungen** gemacht, dass Ihr Gedächtnis schlechter geworden sei?

3. Sind Sie in Ihrem **Alltag** durch Gedächtnis- oder Konzentrationsschwierigkeiten **beeinträchtigt**?

Ehrensperger et al. Alzheimers Res Ther 2014, (in press)

Trennschärfen

	MMSE	3 Fragen + Uhrentest	IQCODE 7 items	
Sensitivität	80%	86%	81%	**97%**
Spezifität	83%	74%	76%	**82%**
Trennschärfe	81%	80%	79%	**89%**

Ehrensperger et al. Alzheimers Res Ther 2014

Clinical Assessment of Brain Function

Table 1
Diagnostic operating procedure at the Basel University Memory Clinic, Switzerland (see text for details).

Steps
1 Neuropsychological assessment
2 Gait analysis
3 Medical (internal medicine, neurological, psychiatric) examination
4 Blood workup
5 Brain imaging (usually MRI)
6 Interdisciplinary diagnosis conference, possibly further examinations, such as functional brain imaging or cerebrospinal fluid (CSF) analyses
7 A comprehensive report is sent to the referring physician
8 Meeting with patient and family to discuss diagnosis and treatment options
9 In very early or unclear cases, follow-up examination (neuropsychological assessment only) (usually after 12 months)

A.U. Monsch, R.W. Kressig/European Geriatric Medicine 1 (2010) 128–131

Demenz – Diagnostik

Obligat	Fakultativ
• (Fremd-)Anamnese • Psychopathologischer (Emotion, Hirnleistung), neurologischer, geriatrisch-internistischer Befund • Laboruntersuchungen (Basislabor, HIV, Lues, TSH, B12, Folsäure, Vitamin D) • CCT, MRT	• Motorische Analyse (Gang, Dual-Tasking) • Liquordiagnostik (Tau, Phosphotau, ß-Amyloid) • APO-E • PET (FDG, ß-Amyloid) • SPECT

Normal Walking

M.B., 72 years
Multiple falls

Velocity: 123 cm/sec
Cycle time CV: 1%

Kressig RW, Beauchet O. Guidelines for clinical applications of spatio-temporal gait analysis in older adults. Aging Clin Exp Res 2006;18:174-6.

Working Memory Task

M.B., 72 years
Multiple falls

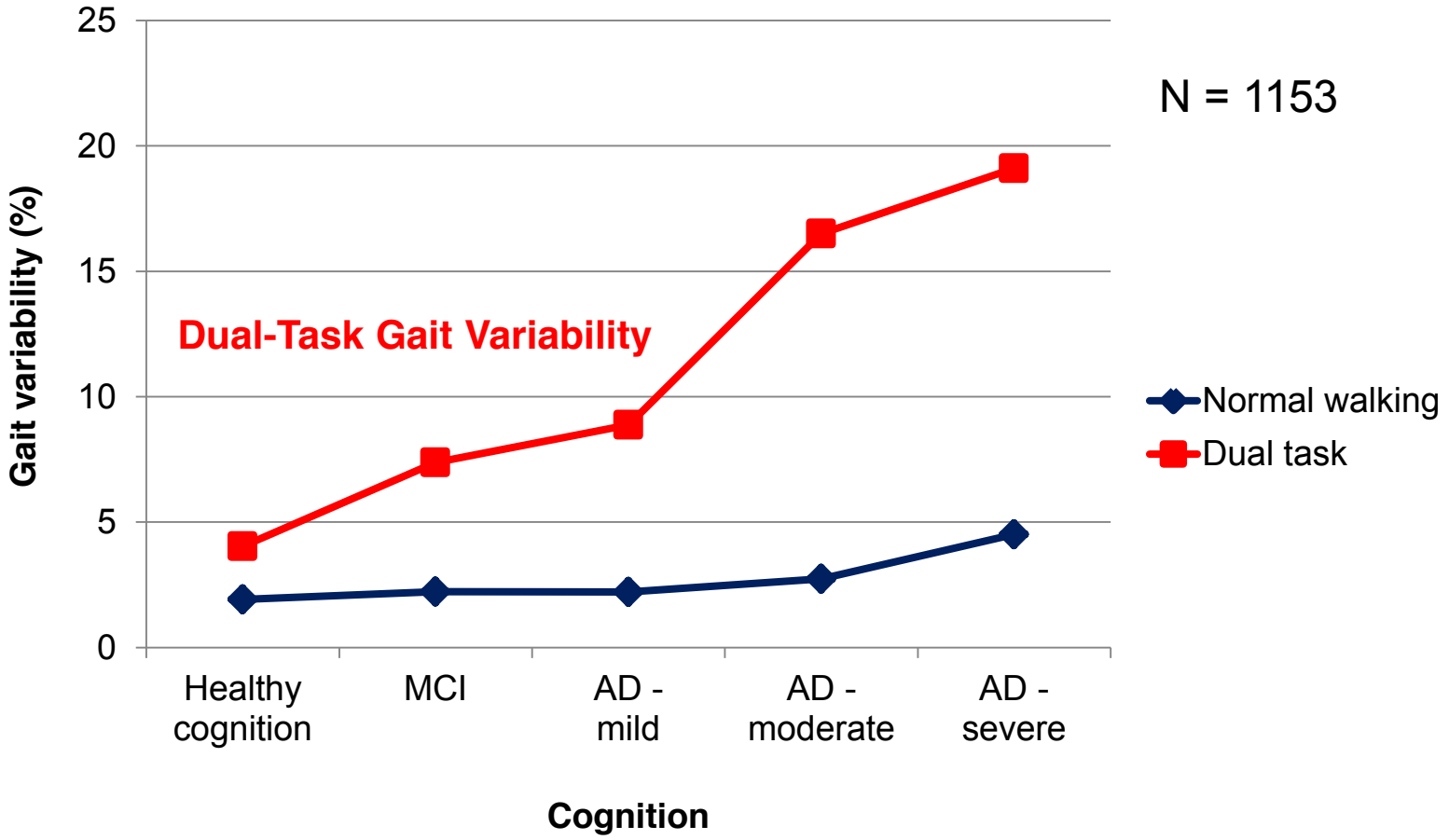
MCI
Mild Cognitive Impairment

Backward counting out loud

Velocity: 24 cm/sec
Cycle time CV: 74%

Kressig RW, Beauchet O. Guidelines for clinical applications of spatio-temporal gait analysis in older adults. Aging Clin Exp Res 2006;18:174-6.

Dual task-related gait variability increases as cognition worsens



MCI = Mild Cognitive Impairment; AD = Alzheimer's Dementia

Bridenbaugh SA, Monsch AU, Kressig RW. How does gait change as cognitive decline progresses in the elderly? Alzheimer's Association International Conference, Vancouver (Can), July 14 – 19, 2012

Galantamine improves dual-task-related gait performance in patients with Alzheimer's disease

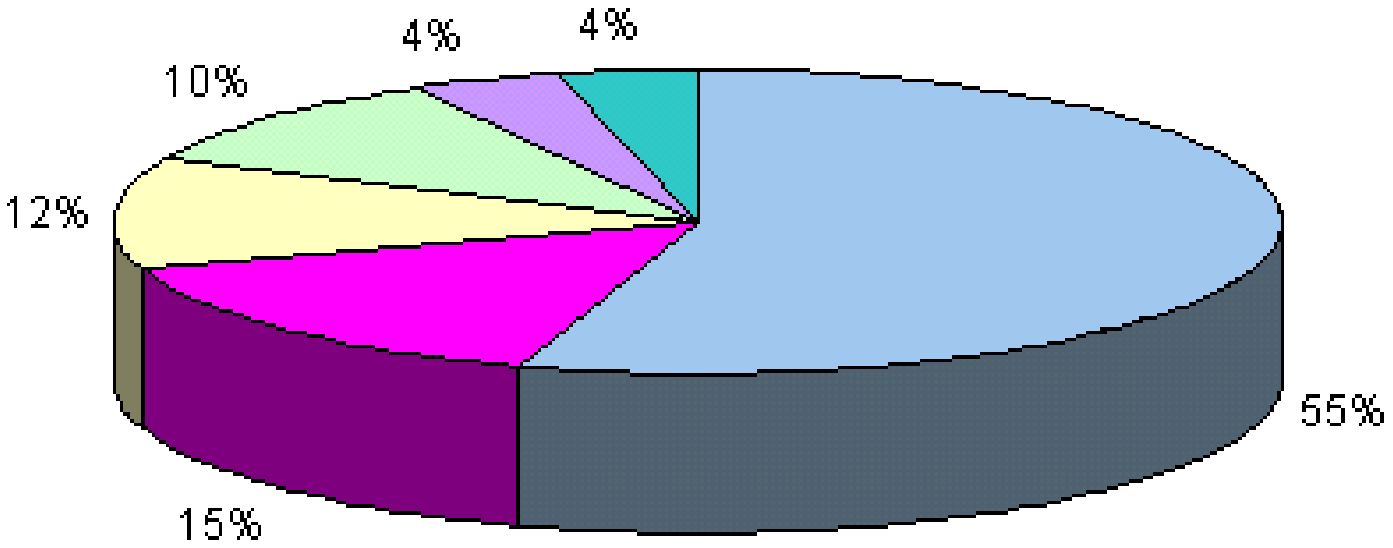
	Sitting	Walking		P-Value*
		Usual	Backward counting	
Control subjects (n=18)				
Stride time (ms)		1063.2 (66.6)	1075.4 (209.3)	0.744
Enumerated figures	9.5 (2.0)	-	10 (3.0)	0.501
AD subjects (n=9)				
Before treatment				
Stride time (ms)		1122.6 (84.6)	1499.1(250.9)	0.011
Enumerated figures	9.0 (4.0)	-	10 (2.5)	0.618
After treatment				
Stride time (ms)		1166.1 (175.0)	1278.5 (226.6)	0.092
Enumerated figures	9.0 (4.5)	-	10 (2.5)	1.00

*: Based on Wilcoxon matched-pairs signed-ranks test

ms: millisecond

Assal F, Allali G, Kressig RW et al. Galantamine improves gait performance in patients with Alzheimer's disease. J Am Geriatr Soc 2008;56:946-7.

Wichtigste Demenzursachen



- Demenz v. Alzheimer Typ 55%
- Vaskuläre Demenz 15%
- Gemischte Ursachen(MID,SDAT) 12%
- Sek.,Symptom.Ursachen(Depression) 10%
- Parkinson-Krankheit 4%
- Andere,seltene Ursachen 4%

Mendez & Cummings (2003). Dementia. A clinical approach.
3rd Ed. Philadelphia: Butterworth Heinemann, Elsevier Science.

Band 72 · Heft 4 · April 2015
ISBN 978-3-456-85479-3

Therapeutische Umschau

Demenz

Gastherausgeber
Prof. R. Kressig

Case-finding in der hausärztlichen Praxis und neuropsychologische Diagnostik an einer Memory Clinic
Andreas U. Monsch

Kognition und Motorik
Stephanie A. Bridenbaugh

Diagnoseeröffnung und Begleitung
Irène Bopp

Demenz vom Alzheimer Typ: Nicht-medikamentöse und Medikamentöse Therapie
Reto W. Kressig

Fahreignung bei Demenz
Rolf Seeger

Die Urteilsfähigkeit aus rechtlicher Sicht – insbesondere ihre Prüfung durch den Notar
Stephan Wolf, Isabelle Nuspliger

Behaviorale und psychologische Symptome der Demenz (BPSD): Was tun?
Egemen Savaskan

Möglichkeiten moderner Bildgebungstechnologien im Rahmen der Frühdiagnostik von Alzheimererkrankung
Paul G. Unschuld

Liquor-Biomarker zur Frühdiagnostik
Jens Wiltfang

Neue Therapieansätze
Alexander Kurz, Timo Grimmer

der informierte @rzt

Vol. 4 _ Ausgabe 11 _ November 2014 _ www.medinfo-verlag.ch

Neues und Erfolgversprechendes zur Alzheimer-Forschung: Update Demenz 2014

Prof. Dr. med. Reto W. Kressig, Basel

AAIC 2014 Copenhagen

Take-Home Message

- Die Inzidenz der Demenzerkrankung in Europa und Nordamerika ist im Vergleich zu vor 20 Jahren rückläufig, was auf die bessere Kontrolle von kardio-vaskulären Risikofaktoren zurückgeführt wird
- Lebensstilveränderungen verbessern Gedächtnis und Denkfähigkeit bei Demenz-Hochrisikopatienten in der finnischen FINGER-Studie
- Die Konversion von MCI in eine Alzheimer-Demenz lässt sich mittels neuen Bluttests mit einer Sicherheit von 87% voraussagen
- Mit Glitazone behandelte Diabetes-Patienten zeigen eine 50-prozentige Reduktion ihres Demenzrisikos, was durch eine verminderte Neuro-inflammation zustande kommen soll
- Psychologische Intervention für Familienbetreuer von Demenzkranken (START) senkt Anspannung, Depression und Kosten und verzögert die Institutionalisierung

Breaking News:

Jul 15, 2014
Alzheimer's disease can be delayed through lifestyle: New large study joins growing chorus

By: Sharp Brains

RESEARCH ADVANCES FROM 2014 ALZHEIMER'S ASSOCIATION INTERNATIONAL CONFERENCE

Two-Year Clinical Trial of Multifaceted Lifestyle-Based Intervention Provides Cognitive Benefits for Older Adults at Risk of Dementia

COPENHAGEN, DENMARK, July 13, 2014 – Positive results presented at the Alzheimer's Association International Conference® 2014 (AAIC® 2014) in Copenhagen include data from a two-year clinical trial in Finland of a multi-component lifestyle intervention, known as the Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER Study).

The study with 1,260 older adults at risk for cognitive impairment and Alzheimer's showed that **physical activity**, **nutritional guidance**, **cognitive training**, **social activities and management of heart health risk factors** improved cognitive performance, both overall and in separate measures of executive function, such as planning abilities, and the relationship between cognitive functions and physical movement.

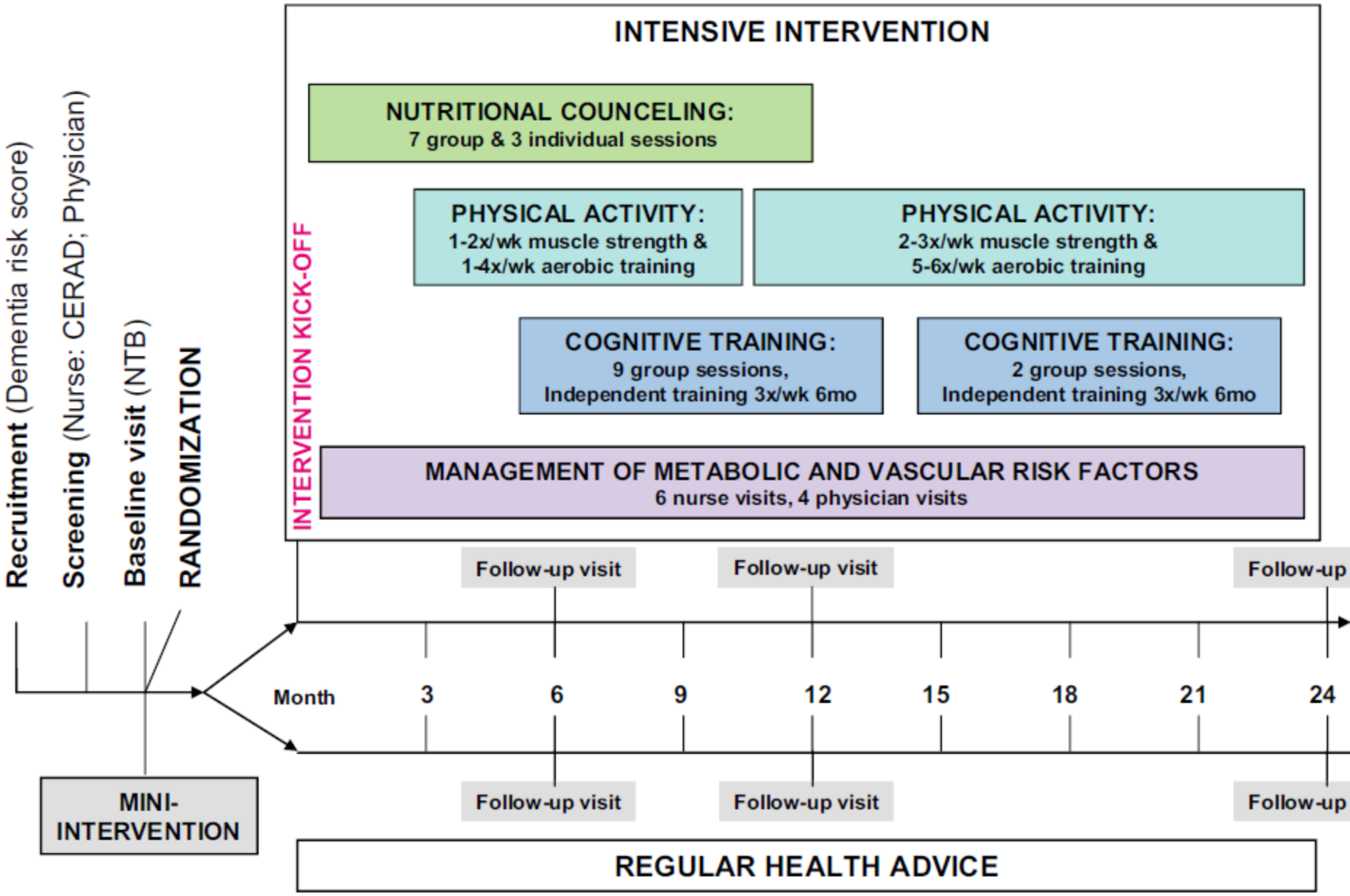
ELSEVIER

Alzheimer's & Dementia 9 (2013) 657–665

Alzheimer's & Dementia

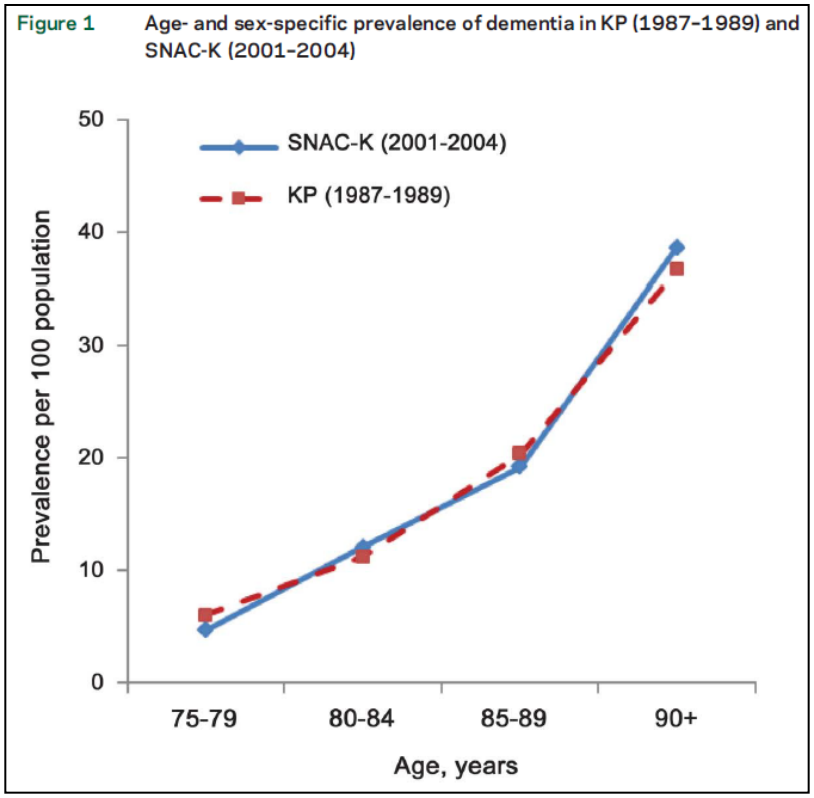
The Finnish Geriatric Intervention Study to Prevent Cognitive Impairment and Disability (FINGER): Study design and progress

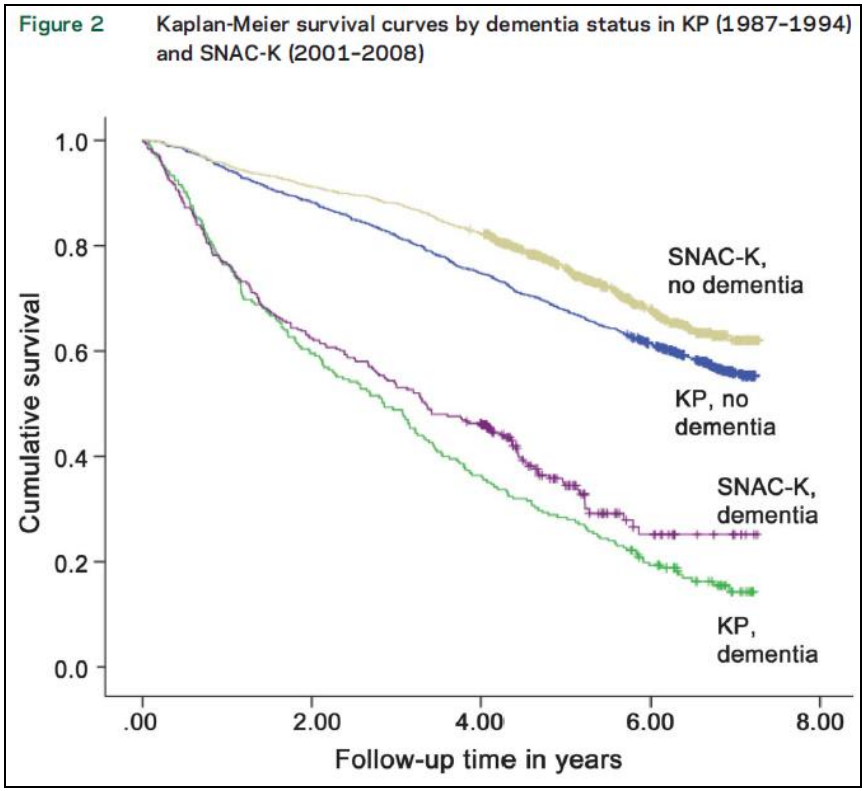
Miia Kivipelto[a,b,c,d,*], Alina Solomon[a,c,d], Satu Ahtiluoto[b], Tiia Ngandu[b,d], Jenni Lehtisalo[b], Riitta Antikainen[e,f], Lars Bäckman[c], Tuomo Hänninen[g], Antti Jula[b], Tiina Laatikainen[b], Jaana Lindström[b], Francesca Mangialasche[c], Aulikki Nissinen[b], Teemu Paajanen[a], Satu Pajala[h], Markku Peltonen[b], Rainer Rauramaa[i], Anna Stigsdotter-Neely[j], Timo Strandberg[e,k], Jaakko Tuomilehto[l,m], Hilkka Soininen[a,g]


INTENSIVE INTERVENTION
NUTRITIONAL COUNCELING:
7 group & 3 individual sessions
PHYSICAL ACTIVITY:
1-2x/wk muscle strength &
1-4x/wk aerobic training
PHYSICAL ACTIVITY:
2-3x/wk muscle strength &
5-6x/wk aerobic training
COGNITIVE TRAINING:
9 group sessions,
Independent training 3x/wk 6mo
COGNITIVE TRAINING:
2 group sessions,
Independent training 3x/wk 6mo
MANAGEMENT OF METABOLIC AND VASCULAR RISK FACTORS
6 nurse visits, 4 physician visits
INTERVENTION KICK-OFF
Recruitment (Dementia risk score)
Screening (Nurse: CERAD; Physician)
Baseline visit (NTB)
RANDOMIZATION
Follow-up visit
Follow-up visit
Follow-up
Month
3
6
9
12
15
18
21
24
Follow-up visit
Follow-up visit
Follow-up
MINI-
INTERVENTION
REGULAR HEALTH ADVICE

Stable prevalence of dementia from the late 1980s to the early 2000s in Sweden, whereas survival of patients with dementia increased!

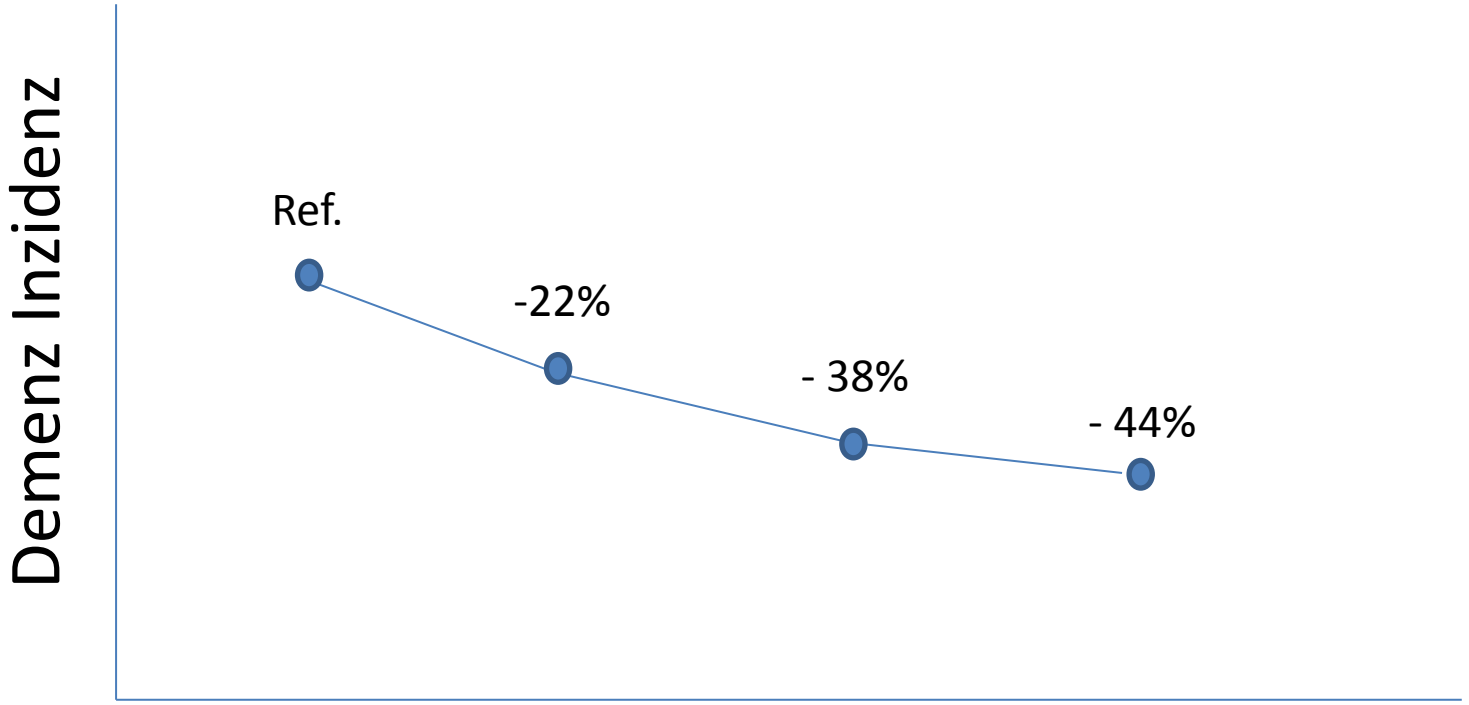
Decrease of dementia incidence!





Qiu C et al. Twenty year changes in dementia occurence suggest decreasing incidence in central Stockholm, Sweden. Neurology 2013;80:1888-94.

FRAMINGHAM Studie 1978 - 2006



	1978	1989	1996	2006
Durchschnittsalter bei Demenzbeginn (Jahre)	80	82	84	85

Satizabal CL, Boston University School of Medicine

Potential for primary prevention of Alzheimer's disease: an analysis of population-based data

Around a third of Alzheimers' diseases cases worldwide might be attributable to potentially modifiable risk factors…

	Relative risk (95% CI)*	Communality (%)†
Diabetes mellitus	1·46 (1·20–1·77)	50·9%
Midlife hypertension	1·61 (1·16–2·24)	65·0%
Midlife obesity	1·60 (1·34–1·92)	43·7%
Physical inactivity	1·82 (1·19–2·78)	49·0%
Depression	1·65 (1·42–1·92)	37·4%
Smoking	1·59 (1·15–2·20)	58·1%
Low educational attainment	1·59 (1·35–1·86)	45·6%

*Sources are provided in the appendix. †The proportion of the variance in each risk factor shared with the other risk factors, estimated using the Health Survey for England 2006.[17]

Table 1: Relative risks for Alzheimer's disease and shared variance between risk factors

Norton S et al. Lancet Neurol 2014;13:788-94.

Potential for primary prevention of Alzheimer's disease: an analysis of population-based data

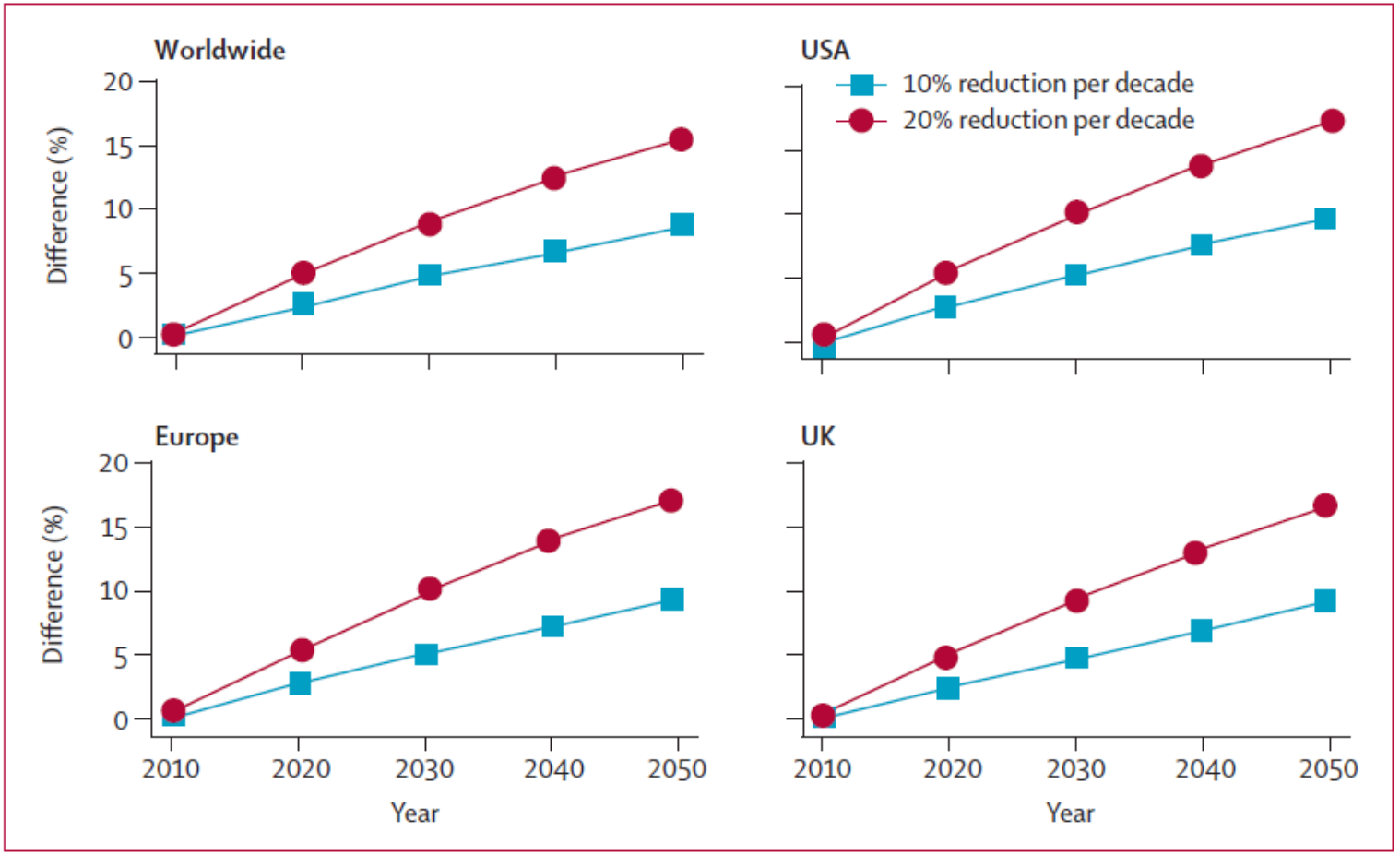


Figure: Projected percentages of Alzheimer's disease cases that could be prevented, with 10% or 20% reductions per decade in each risk factor

Norton S et al. Lancet Neurol 2014;13:788-94.

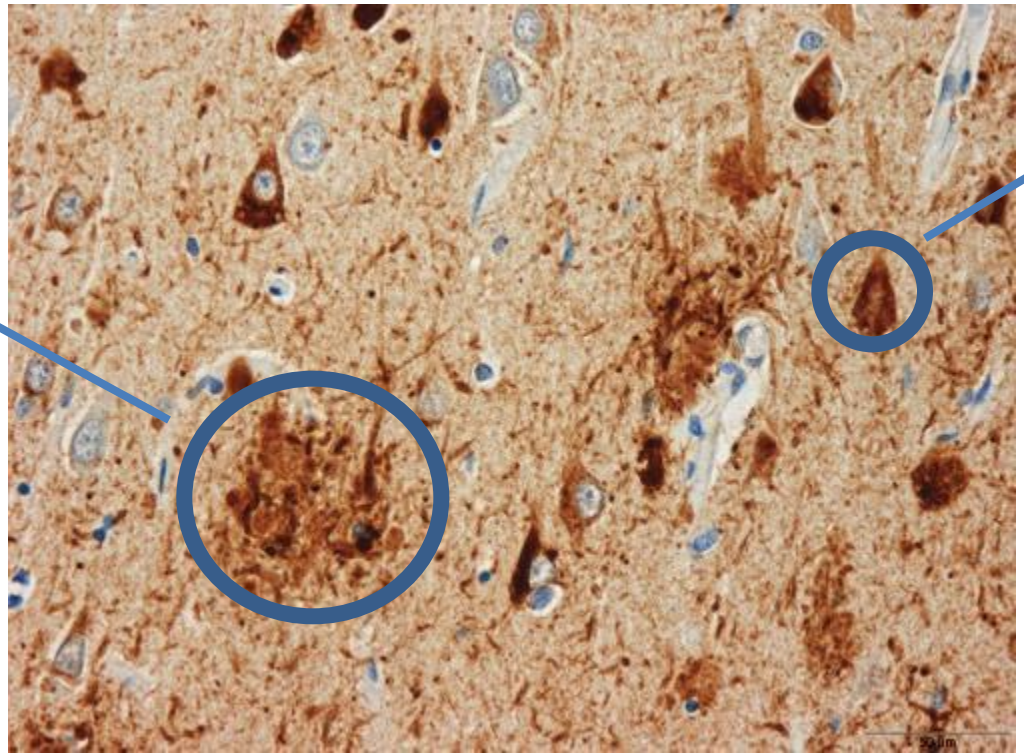
“a peculiar
disease of the cerebral cortex”,

Auguste Deter
1901
„Presenile Dementia“

Thinner cerebral cortex
Neurofribrillary tangles

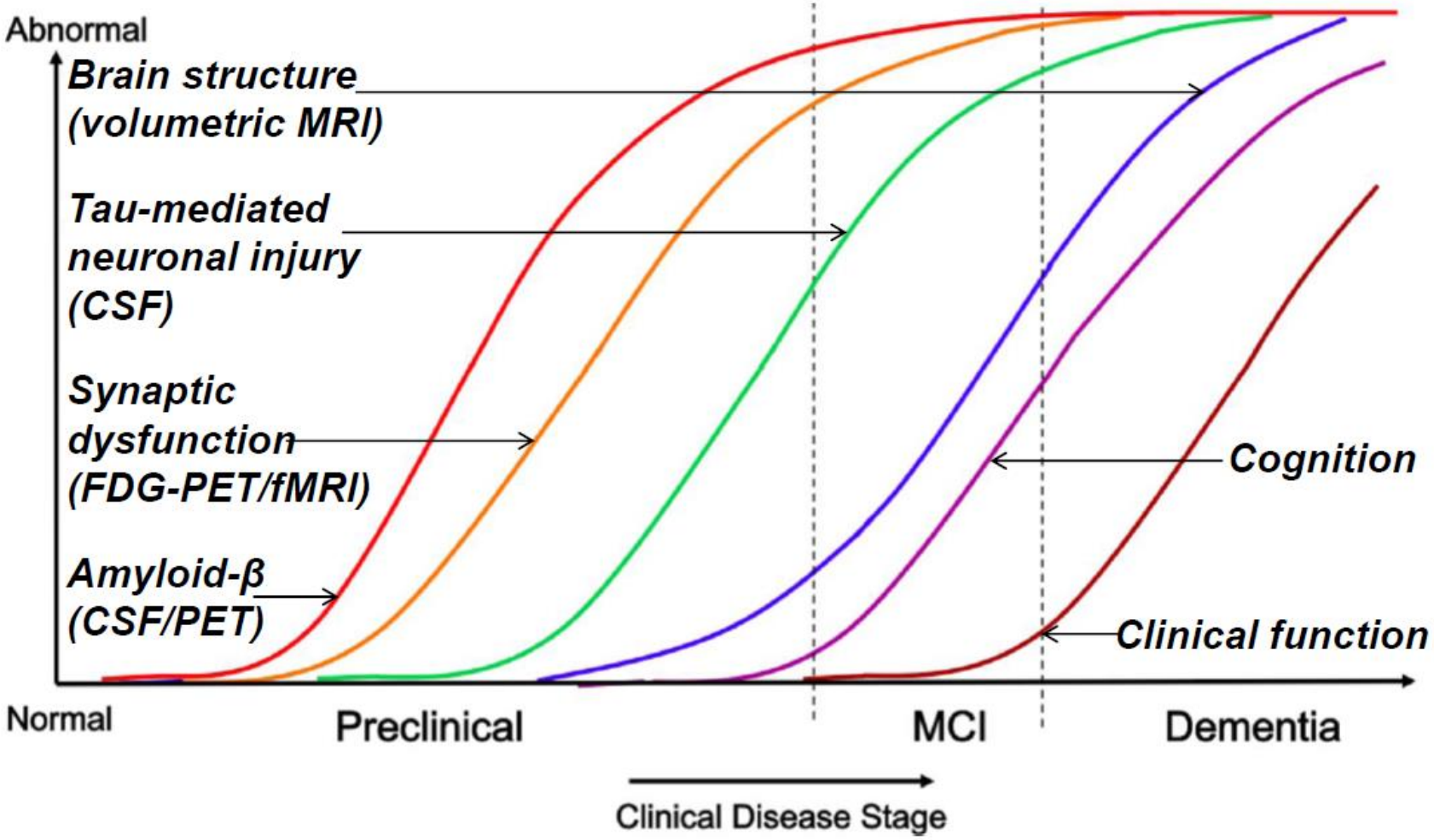
Dr. Alois Alzheimer, German Psychiatrist and Neuropathologist
(1864 – 1915)

Gewebe von der Hippocampus-Region im Hirn



Neurobrillary tangles (triangular shapes) : Tau Protein
Amyloid plaques (round, less dense structures): amyloid-beta

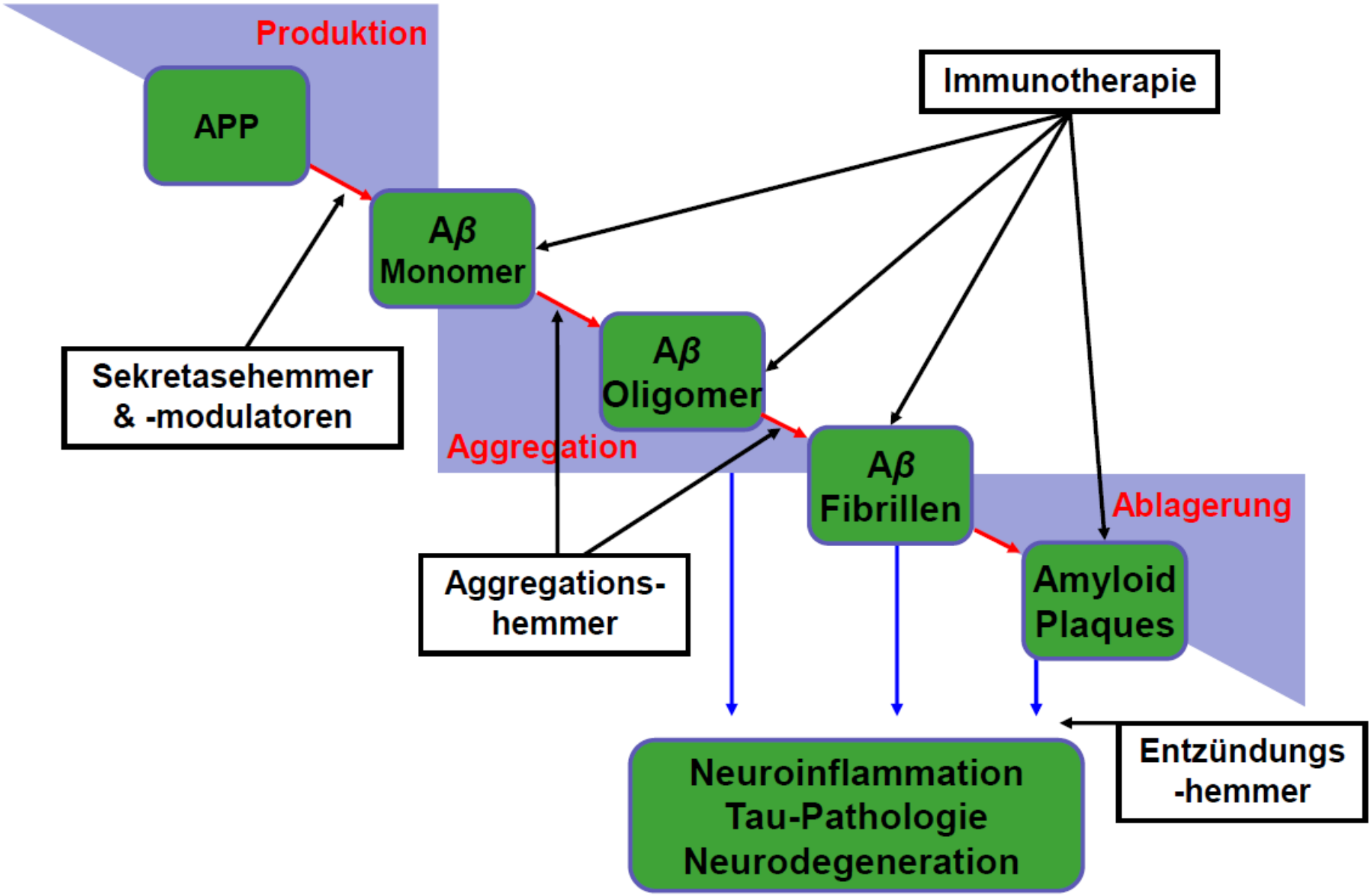
Hypothetische Entwicklung der Alzheimer Krankheit



Lancet Neurol. 2010 Jan;9(1):119-28.

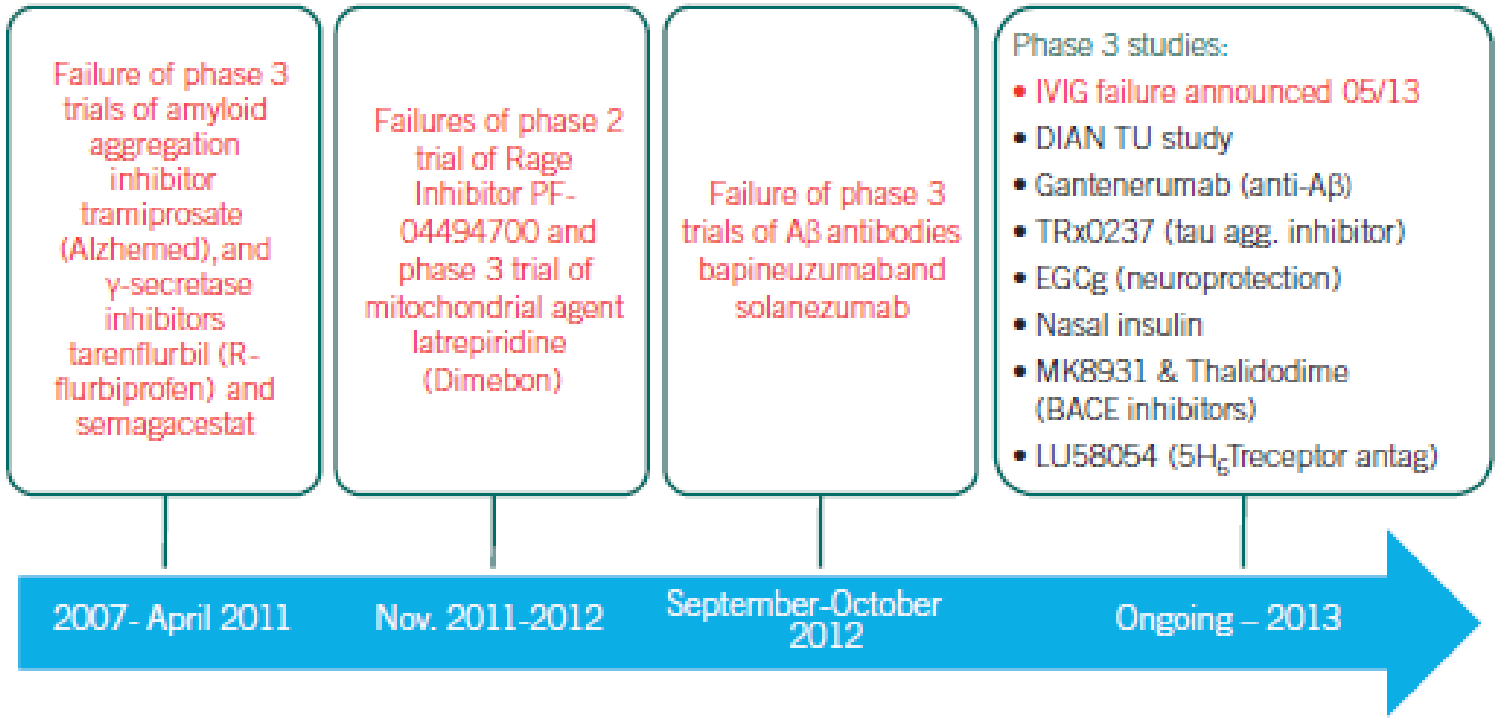
Hypothetical model of dynamic biomarkers of the Alzheimer's pathological cascade.

Jack CR Jr, Knopman DS, Jagust WJ, Shaw LM, Aisen PS, Weiner MW, Petersen RC, Trojanowski JQ.



Dellenbach et al. 2008

ABB. 2 **Aktuelle Trends: Evaluation potentieller krankheitsmodifizierender Therapien***



BACE = Beta-site APP-cleaving enzyme; DIAN = Do minantly Inherited Alzheimer Network Trial;
EGCg = Epigallocatechin-Gallate ; IVIG = intravenous immunoglobulin G;

*abgebrochene Studien in rot

Kressig RW. Der informierte Arzt 2013;3(08):18-21.

Therapie-Forschung: Ausblick 2015

Gantenerumab (Marguerite Road) (Roche)
Crenezumab (AC Immune, Roche)
CAD-106, BACE Inhibitor (Novartis)
Pioglitazone (Takeda)

Quelle: Alzheimer Association International Conference (AAIC) 2014, 12.–17. Juli, Kopenhagen

Pioglitazone

Datenanalyse basierend auf Patientenregister mit über 145’700 kognitiv gesunden Diabetespatienten (Alter 60 +):

Reduzierte Demenzinzidenz über 6 Jahre bei Einnahme von Pioglitazone

Tommorow Studie (Takeda): Prospektive Präventivstudie über 7 Jahre mit minimaler Dosis von Pioglitazone (0.5mg/d) bei kognitiv gesunden, aber APO-E4 positiven Probanden!

Quelle: Alzheimer Association International Conference (AAIC) 2014, 12.–17. Juli, Kopenhagen

Therapie Alzheimer Demenz:

State of the Art 2015

Demenztherapie: multifaktorieller Approach

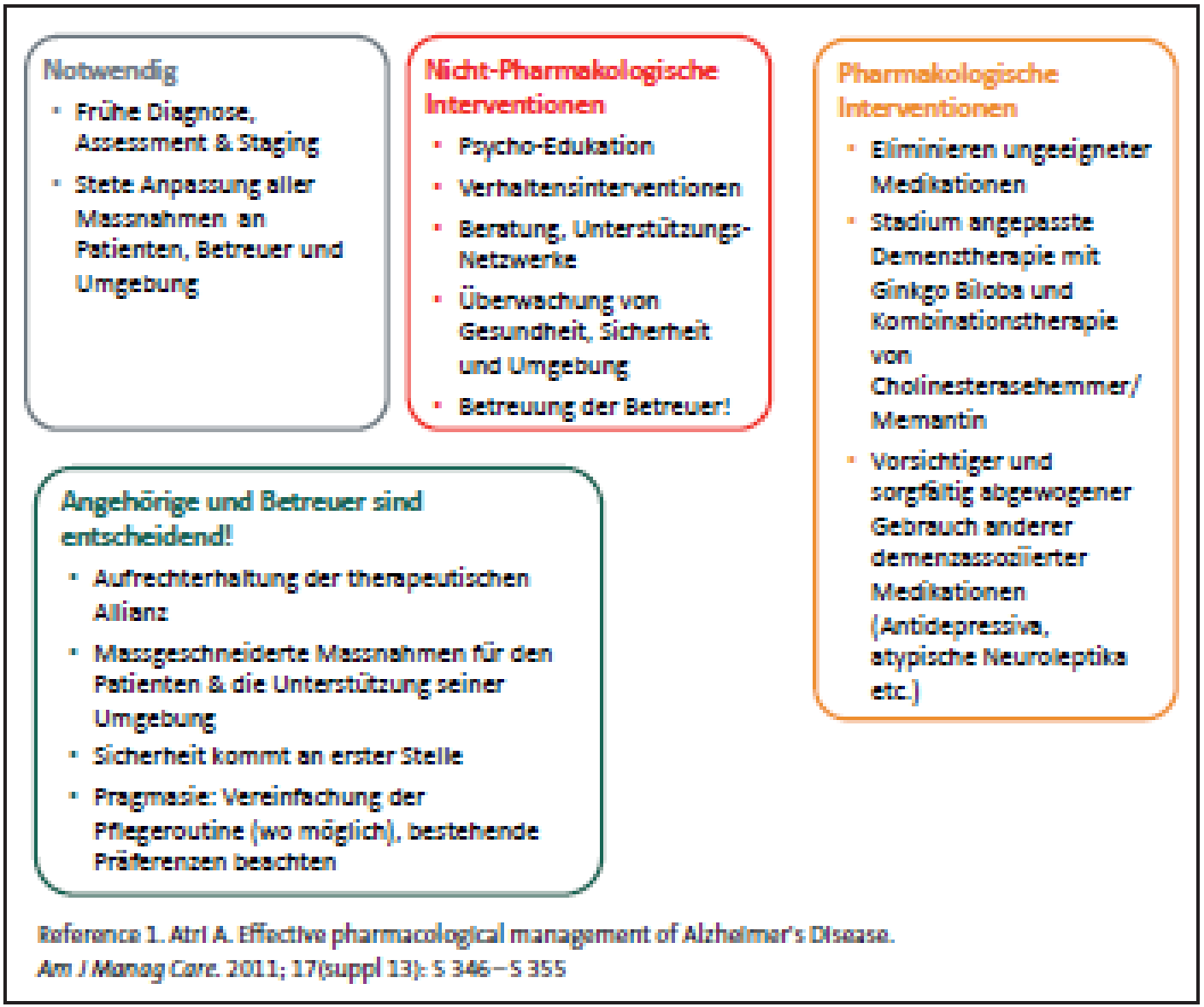


Abbildung 1 Multifaktorielles Management bei Alzheimer Erkrankung

Kressig RW. Therapeutische Umschau 2015; 72(4) in press

Effects of the Finnish Alzheimer Disease Exercise Trial (FINALEX)

A Randomized Controlled Trial

Kaisu H. Pitkälä, MD, PhD; Minna M. Pöysti, MD, PhD; Marja-Liisa Laakkonen, MD, PhD; Reijo S. Tilvis, MD, PhD; Niina Savikko, RN, PhD; Hannu Kautiainen, PhD; Timo E. Strandberg, MD, PhD

Importance: Few rigorous clinical trials have investigated the effectiveness of exercise on the physical functioning of patients with Alzheimer disease (AD).

Objectives: To investigate the effects of intense and long-term exercise on the physical functioning and mobility of home-dwelling patients with AD and to explore its effects on the use and costs of health and social services.

Design: A randomized controlled trial.

Setting and Participants: A total of 210 home-dwelling patients with AD living with their spousal caregiver.

Interventions: The 3 trial arms included (1) group-based exercise (GE; 4-hour sessions with approximately 1-hour training) and (2) tailored home-based exercise (HE; 1-hour training), both twice a week for 1 year, and (3) a control group (CG) receiving the usual community care.

Main Outcome Measures: The Functional Independence Measure (FIM), the Short Physical Performance Battery, and information on the use and costs of social and health care services.

Results: All groups deteriorated in functioning during the year after randomization, but deterioration was significantly faster in the CG than in the HE or GE group at 6 ($P=.003$) and 12 ($P=.015$) months. The FIM changes at 12 months were −7.1 (95% CI, −3.7 to −10.5), −10.3 (95% CI, −6.7 to −13.9), and −14.4 (95% CI, −10.9 to −18.0) in the HE group, GE group, and CG, respectively. The HE and GE groups had significantly fewer falls than the CG during the follow-up year. The total costs of health and social services for the HE patient-caregiver dyads (in US dollars per dyad per year) were $25 112 (95% CI, $17 642 to $32 581) ($P=.13$ for comparison with the CG), $22 066 in the GE group ($15 931 to $28 199; $P=.03$ vs CG), and $34 121 ($24 559 to $43 681) in the CG.

Conclusions and Relevance: An intensive and long-term exercise program had beneficial effects on the physical functioning of patients with AD without increasing the total costs of health and social services or causing any significant adverse effects.

Trial Registration: anzctr.org.au Identifier: ACTRN12608000037303

JAMA Intern Med. 2013;173(10):894-901.
Published online April 15, 2013.
doi:10.1001/jamainternmed.2013.359

Original article

Apathy in nursing home residents with dementia: Results from a cluster-randomized controlled trial☆

Y. Treusch [a,b,c,1], T. Majic [a,2], J. Page [b,3], H. Gutzmann [e,4], A. Heinz [d,*], M.A. Rapp [a,c,d,5]

[a] Geriatric Psychiatry Center, Psychiatric University Hospital St. Hedwig, Große Hamburger Str. 5–11, 10115 Berlin, Germany
[b] Institute of Occupational Therapy, School of Health Professions, Zurich University of Applied Sciences, Technikumstrasse 71, 8401 Winterthur, Switzerland
[c] Social and Preventive Medicine, Department of Sports and Health Sciences, University of Potsdam, Am Neuen Palais 10, 14469 Potsdam, Germany
[d] Department of Psychiatry and Psychotherapy, Charité Campus Mitte, Charitéplatz 1, 10117 Berlin, Germany
[e] Department of Psychiatry, Psychotherapy and Psychosomatics, Krankenhaus Hedwigshoehe, Höhensteig 1, 12526 Berlin, Germany

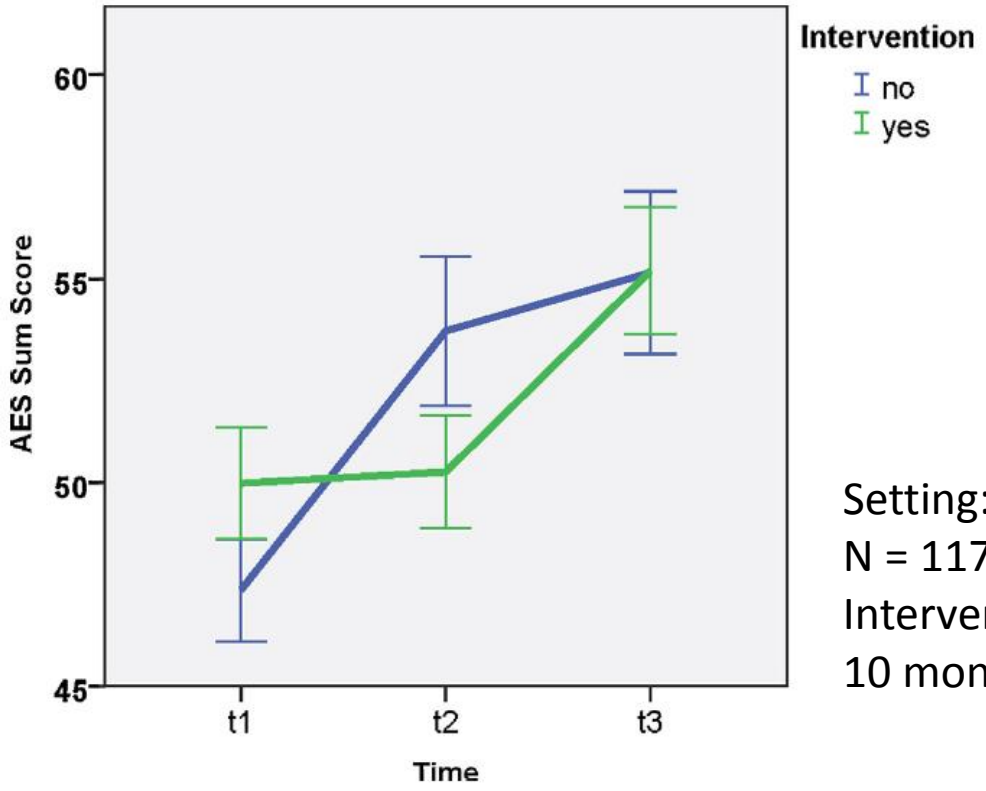


Fig. 2. Apathy in both groups over time.

Setting: 15 nursing homes in Berlin
N = 117 dementia patients with apathy
Intervention: brief activites once a week for 10 months («biographically oriented mobilization»)

European Psychiatry 2014 [Epub ahead of print]

Efficacy of musical interventions in dementia: evidence from a randomized controlled trial.

A single-center randomized controlled trial
N = 48 patients with Alzheimer's disease or mixed dementia

Intervention: to compare the effects of music versus cooking interventions

Each intervention lasted four weeks (two one-hour sessions a week)

Results: Both music and cooking interventions led to positive changes in the **patients' emotional state** and decreased the severity of their **behavioral disorders**, as well as reduced **caregiver distress**, but no benefit on the cognitive status.

Narme P et al. J Alzheimer Dis 2014;38(2):359-69.

START: STrAtegies for RelaTives

Division of Psychiatry,
University College London,
London, UK

Intervention: Manual-basierte psychologische Intervention für betreuende Familienmitglieder durch Psychologiestudenten (Wissensvermittlung zu Demenz, Betreuerstress, herausforderndem Verhalten, Umkehr von negativem Denken etc.)

Randomisiert-kontrolliertes Design, n = 260 betreuende Familienmitglieder

Interventionsdauer: 8 Sessionen über 2 – 4 Monate

Resultat: Interventionsgruppe bessere Resultate hinsichtlich Depression, Anspannung, Betreuungskosten. Herauszögerung der Institutionalisierung, Einsparung von zusätzlichen Betreuungskosten.

Quelle: Alzheimer Association International Conference (AAIC) 2014, 12.–17. Juli, Kopenhagen

ChEI treatment shows clinical efficacy in “Very Mild” AD

- **Two trials (1 donepezil; 1 galantamine) have shown the efficacy of ChEI treatment in patients with very mild AD**

Seltzer B, et al. Arch Neurol. 2004;61:1852-6;
Orgogozo J-M, et al. Curr Med Res Opin. 2004;20:1815-20.

Original Research Article

Dementia
and Geriatric
Cognitive Disorders

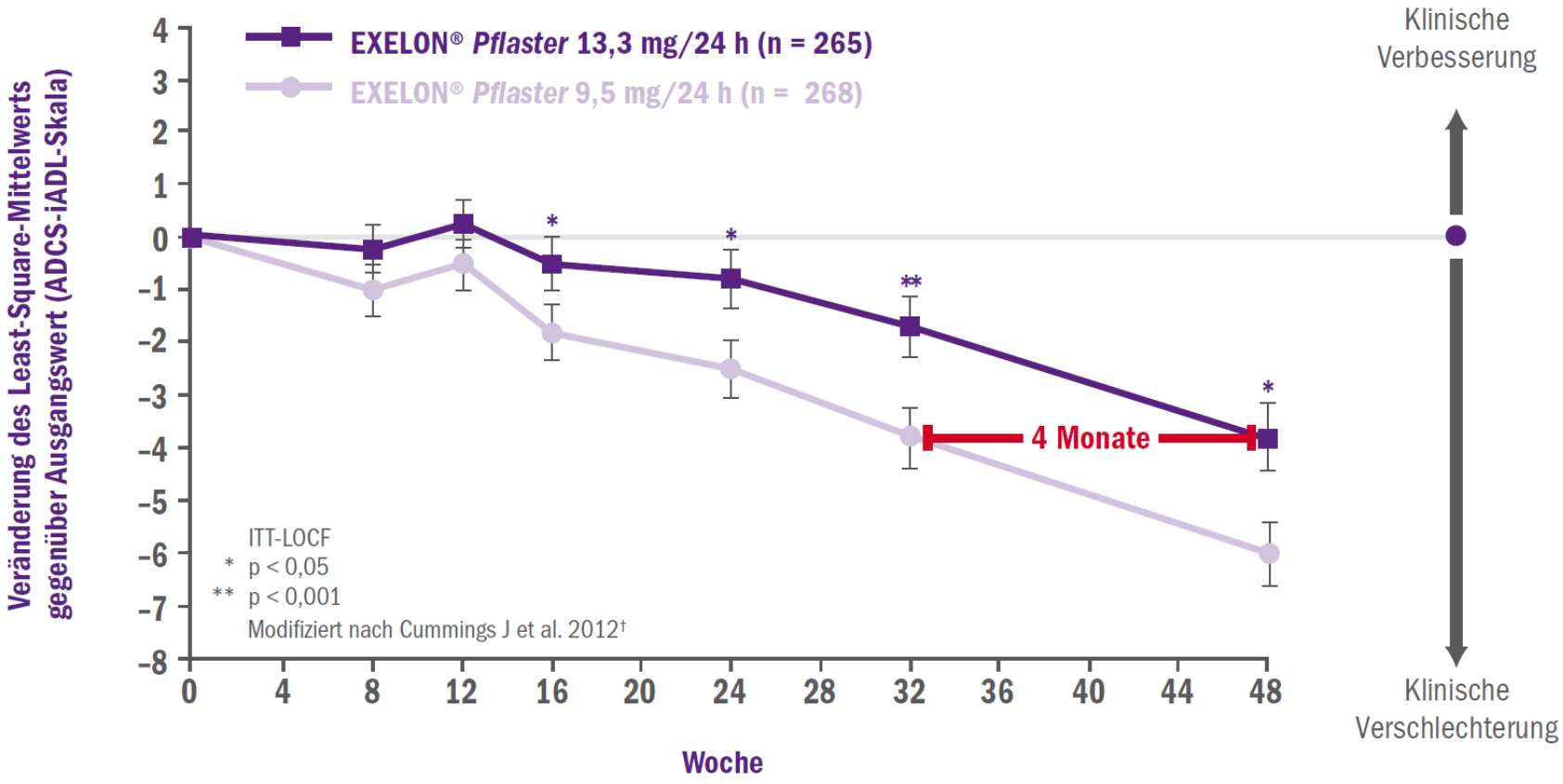
Dement Geriatr Cogn Disord 2012;33:341–353
DOI: 10.1159/000340056

Accepted: June 13, 2012
Published online: July 11, 2012

Randomized, Double-Blind, Parallel-Group, 48-Week Study for Efficacy and Safety of a Higher-Dose Rivastigmine Patch (15 vs. 10 cm^2) in Alzheimer's Disease

Jeffrey Cummings[a] Lutz Froelich[c] Sandra E. Black[d]
Serge Bakchine[e] Giuseppe Bellelli[f] José L. Molinuevo[g]
Reto W. Kressig[h] Pamela Downs[b] Angelika Caputo[i] Christine Strohmaier[i]

Wirksamkeit in **ADCS-iADL**



Signifikant stärkerer Effekt von Exelon Pflaster 13,3mg/24h in den Wochen 16 bis 48

Cummings J. et al. Dement Geriatr Cogn Disord 2012; 33: 341-353

Erhöhung von Exelon Patch-10 auf Patch-15

Rivastigmin-Pflaster 13,3 mg/24 h im September 2013 in der Schweiz zugelassen.

Bei Patienten, die die Behandlung mit der niedrigeren Rivastigmin-Dosis (9,5 mg/24 h) mindestens **sechs** Monate lang gut vertragen und einen **kognitiven** (z. B. auf der MMSE-Skala) und/oder **funktionellen** Abbau (nach Beurteilung durch den behandelnden Arzt) zeigen,

kann die Dosierung auf 13,3 mg/24 h erhöht werden!

SWISSMEDIC/Kompendium 2013

IQWiG Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen

IQWiG-Berichte - Jahr: 2008 Nr. 39

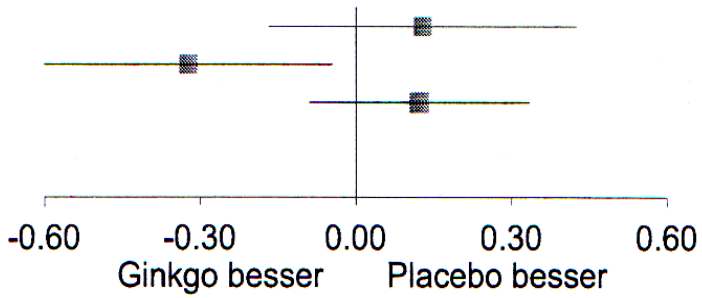
Ginkgohaltige Präparate bei Alzheimer Demenz

Abschlussbericht

Dosisabhängiger Einfluss von Ginkgo biloba auf kognitive Fähigkeiten

Ginkgo, kognitive Fähigkeiten, Dosierung 120 mg
Endpunkt: ADAS-cog, SKT - Gruppenunterschied zu Placebo
Distanzmaß: standardisierte Mittelwertdifferenz

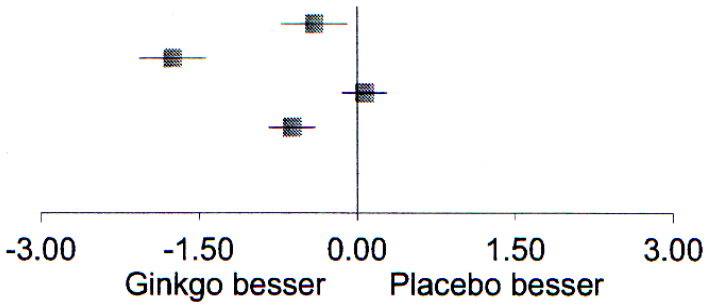
Studie	Effekt	SD	Cohens d 95%-KI
DIGGER 2007	0.82	6.36	0.13 [-0.17, 0.42]
Le Bars 1997	-1.70	5.27	-0.32 [-0.60, -0.05]
Schneider 2005	0.70	5.70	0.12 [-0.09, 0.33]



Heterogenität: Q=7.23, df=2 (p=0.027), I^2=72.3%, tau^2=0.046

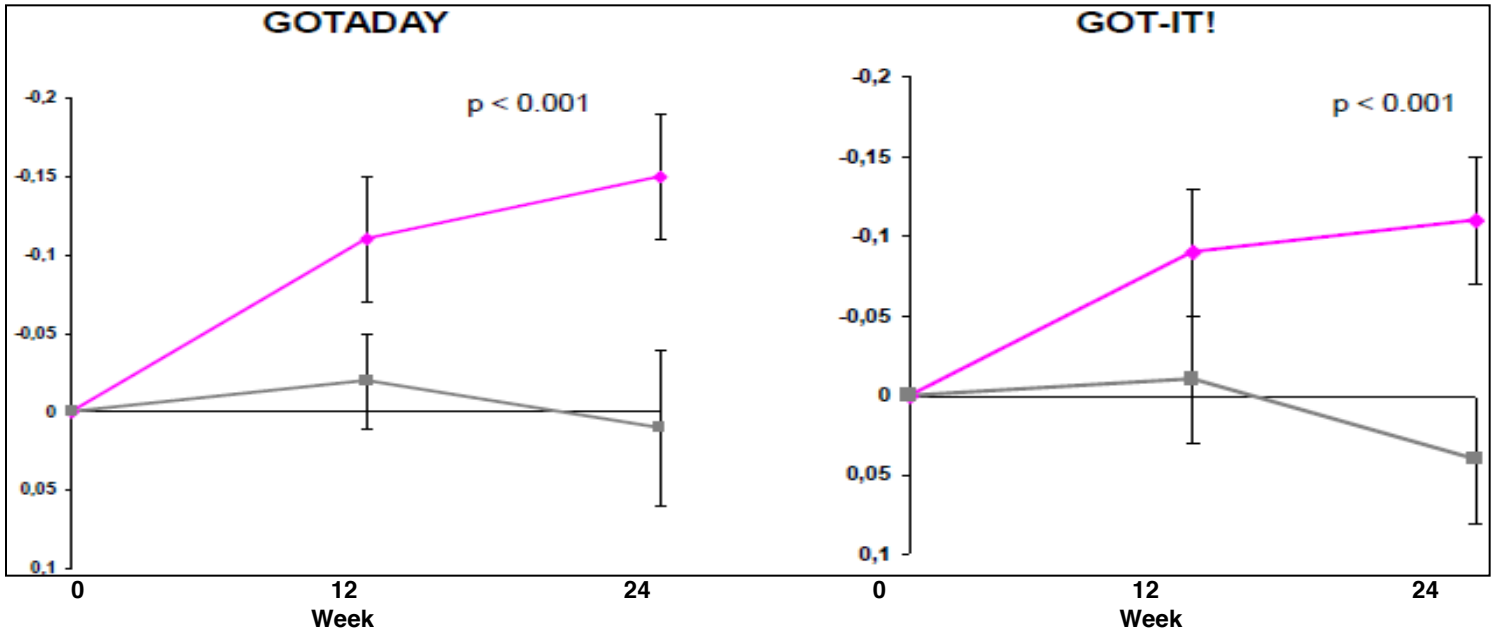
Ginkgo, kognitive Fähigkeiten, Dosierung 240 mg
Endpunkt: ADAS-cog, SKT - Gruppenunterschied zu Placebo
Distanzmaß: standardisierte Mittelwertdifferenz

Studie	Effekt	SD	Cohens d 95%-KI
Kanowski 1996	-1.30	3.21	-0.41 [-0.72, -0.09]
Napryeyenko 2007	-4.20	2.40	-1.75 [-2.06, -1.43]
Schneider 2005	0.40	5.55	0.07 [-0.14, 0.28]
Schwabe 2008	-1.70	2.75	-0.62 [-0.84, -0.40]



Heterogenität: Q=89.47, df=3 (p=0.000), I^2=96.6%, tau^2=0.497

Ginkgo biloba extract EGb 761®: Activities of Daily Life (dementia)



Ihl et al., Journal of the Neurological Sciences 299 (2010) 184–187,
Herrschaft et al. International Journal of Geriatric Psychiatry (2012)

Ginkgo biloba extract EGb 761®
in comparison and in combination with ACHIs:
NNT analysis NPI and CGI

Meta-analysis (Rainer et al. 2013) of dementia data with EGb 761® :

- NNT values in relation to the decrease in NPI score (by at least 4 points) comparable with ACHIs

- NNT values in relation to the improvement in overall clinical impression (by at least 4 points) are comparable with those with ACHIs

Table 4. Numbers needed to treat (NNT) calculated for the single studies and combined (Mantel–Haenszel method, fixed effects)

Study	Responder/N (response rate (%))		Difference of response rates (EGB 761®–Placebo) and 95 % CI (%)	NNT and 95 % CI
	EGb 761®	Placebo		
Improvement in NPI score ≥4				
Napryeyenko et al. [4]	149/198 (75.25)	14/197 (7.11)	68.15 (60.14; 76.15)	2 (1.3; 1.7)
Ihl et al. [5]	91/202 (45.05)	48/202 (23.76)	21.29 (10.96; 31.61)	5 (3.2; 9.1)
Herrschaft et al. [6]	113/200 (56.50)	78/202 (38.61)	17.89 (6.90; 28.87)	5 (3.5; 14.5)
Combined (MH, fixed)	*600*	*601*	*35.56 (31; 41)*	*3 (2.4; 3.2)*
Improvement in ADCS-CGIC score <4				
Ihl et al. [5]	109/202 (53.96)	52/202 (25.74)	28.22 (17.76; 38.67)	4 (2.6; 5.6)
Herrschaft et al. [6]	137/200 (68.50)	76/202 (37.62)	30.88 (20.27; 41.49)	4 (2.4; 4.9)
Combined (MH, fixed)	*402*	*404*	*29.55 (23; 36)*	*4 (2.8; 4.3)*

NPI neuropsychiatric inventory, *ADCS-CGIC* Alzheimer's disease cooperative study-clinical global impression of change

Rainer M et al. Wien Klin Wochenschr 2013;125:8-15.

Number needed to treat

- Cholinesterase-Hemmer: 3-10
- Memantine: 7-10
- EGb 761: 3 - 6

Livingston & Katona. Int J Ger Psychiatry 2000;15:203-7.
van Dyck et al. Am J Geriatr Psychiatry 2006;14:428-37.
Rainer M et al. Wien Klin Wochenschr 2013;125:8-15.

Kombination von Memantin und Cholinesterasehemmer bei Alzheimer Demenz:

Pflegeheimeintritte nach Therapiegruppe

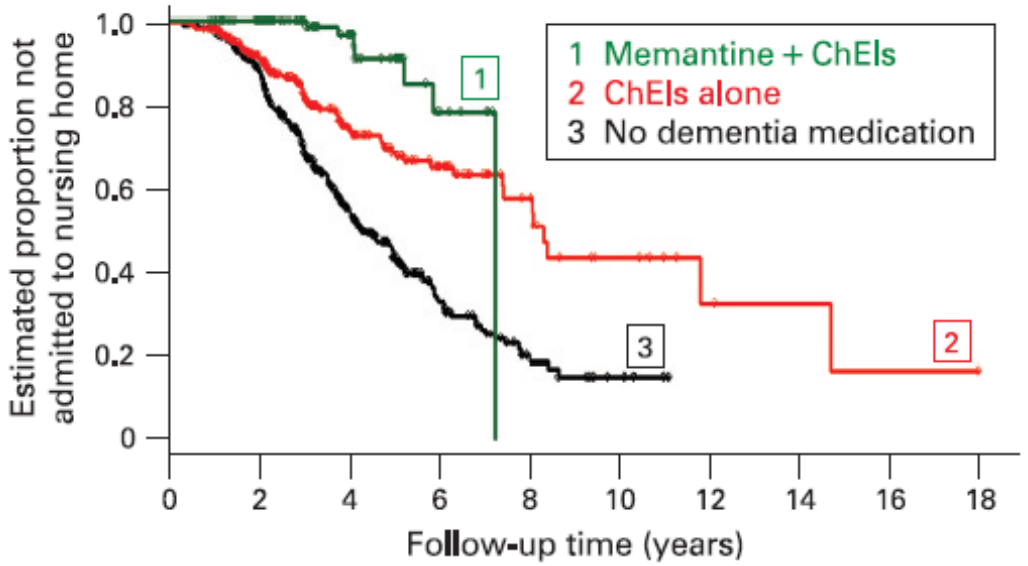


Figure 2 Time to nursing home admission in Cohort 1. ChEIs, cholinesterase inhibitors.

Lopez OL et al. Long-term effects of the concomitant use of memantine with cholinesterase inhibition in Alzheimer disease. J Neurol Neurosurg Psychiatry 2009;80:600-7.

12.24.2014 | Investors

Actavis and Adamas Announce FDA Approval of Namzaric™, a Fixed-Dose Combination of Memantine Extended-Release and Donepezil Hydrochloride

Indicated for Treatment of Moderate to Severe Alzheimer's Disease

Einsatz Antidementiva: State of the Art 2015

Krankheitsstadium

Mild Cognitive Impairment
Minor Cognitive Disorder

↓

Early Dementia (mild stage)

↓

Klinische Verschlechterung
(frühestens nach 6 Monaten)

↓

MMSE < 20

↓

End of life stage

Medikamentöser Therapieansatz

Ginkgo-Extrakt 2x120mg

* Limitatio, zulässig aber nicht kostenpflichtig!

+ Cholinesterasehemmer
(Maximaldosierung, Rivastigmin 10)

Erhöhung Dosis
Cholinesterasehemmer
(Rivastigmin 15)

+ Memantine (20mg)
(«Kombinationstherapie»*)

Stop

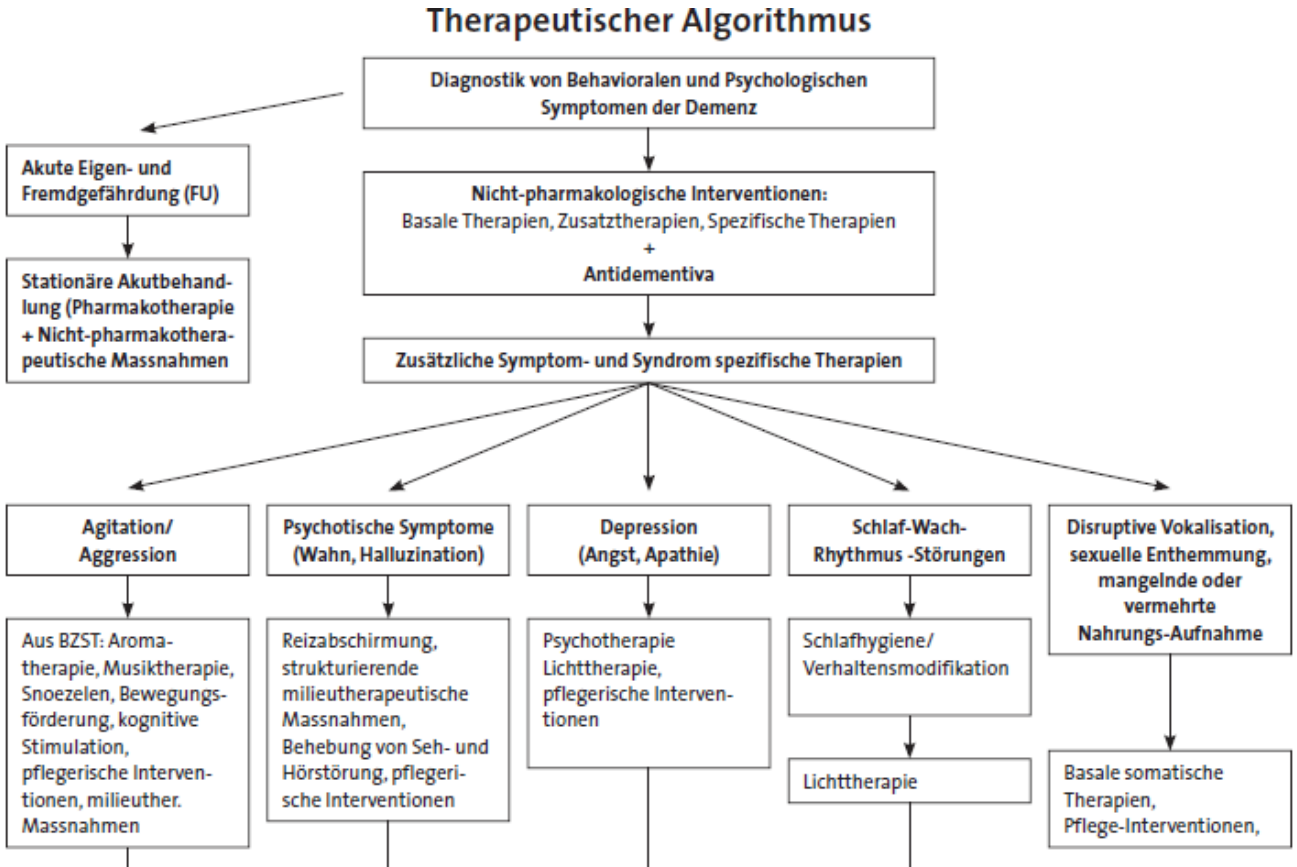
Kressig RW. Therapeutische Umschau 2015; 72(4) in press

Originalartikel Praxis 2014; 103 (3): 135–148

PRAXIS

[1]Egemen Savaskan, [3]Irene Bopp-Kistler, [5]Markus Buerge, [9]Regina Fischlin, [1,4]Dan Georgescu, [1]Umberto Giardini, [6]Martin Hatzinger, [1]Ulrich Hemmeter, [1]Isabella Justiniano, [3]Reto W. Kressig, [7]Andreas Monsch, [1]Urs P. Mosimann, [2]Renè Mueri, [9]Anna Munk, [1]Julius Popp, [8]Ruth Schmid, [1]Marc A. Wollmer

Empfehlungen zur Diagnostik und Therapie der behavioralen und psychologischen Symptome der Demenz (BPSD)



Souvenaid – food for thought?

UMP
Omega-3 fatty acids
Choline
Phospholipids
B vitamins
Antioxidants

Designed to support the formation of synapses

DHA 1200 mg
EPA 300 mg
UMP 625 mg
Choline 400 mg
Folic acid 400 µg
B6 1 mg
B12 3 µg
Vit C 80 mg
Vit E 40 mg
Se 60 µg
Phospholipids 106 mg

Souvenaid is a Food for Special Medical Purposes for the dietary management of early AD

Indication: For the dietary management of early AD

Journal of Alzheimer's Disease 31 (2012) 225–236
DOI 10.3233/JAD-2012-121189
IOS Press

Efficacy of Souvenaid in Mild Alzheimer's Disease: Results from a Randomized, Controlled Trial

Philip Scheltens[a,*], Jos W.R. Twisk[b], Rafael Blesa[c], Elio Scarpini[d], Christine A.F. von Arnim[e], Anke Bongers[f], John Harrison[g,h], Sophie H.N. Swinkels[f], Cornelis J. Stam[i], Hanneke de Waal[a], Richard J. Wurtman[j], Rico L. Wieggers[f], Bruno Vellas[k] and Patrick J.G.H. Kamphuis[f]

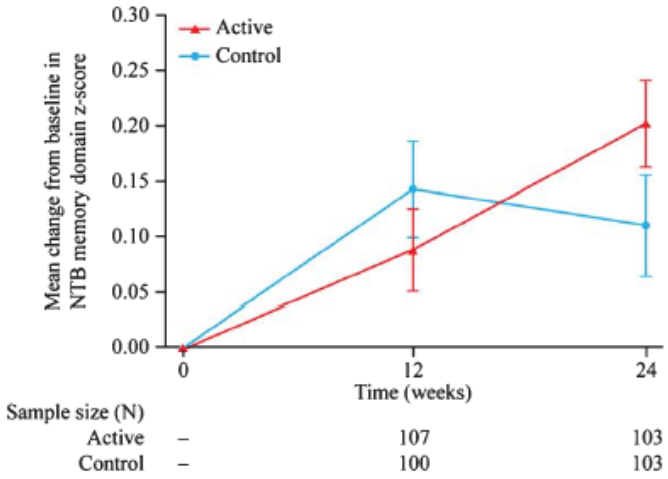
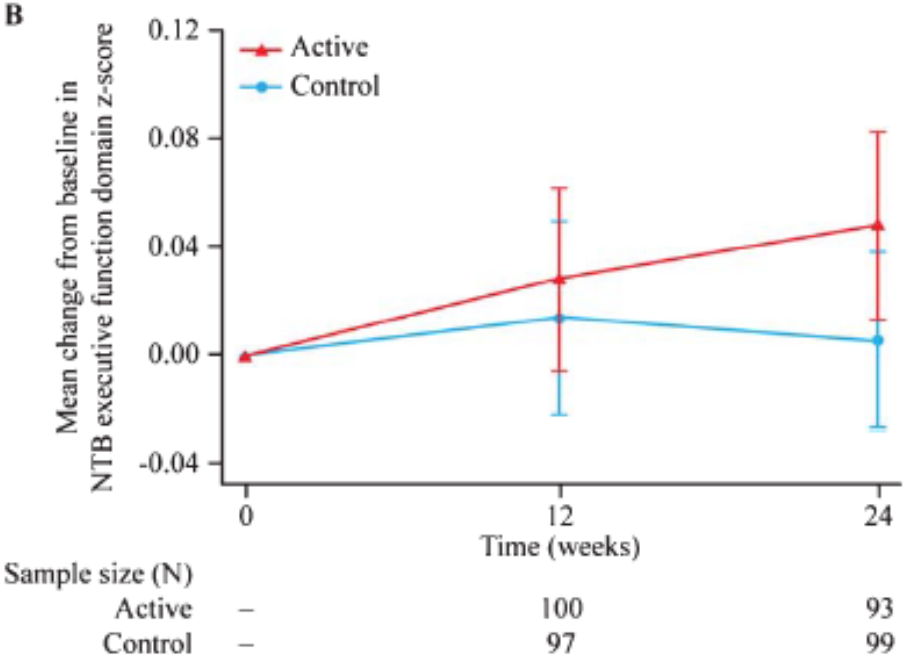


Fig. 2. Mean change from baseline in the Neuropsychological Test Battery (NTB) memory composite score. Error bars represent standard errors. The difference in trajectories over time between active and control groups during the 24-week intervention period: $p = 0.023$ (mixed model for repeated measures, 2 degrees of freedom contrast).



Association of vitamin D deficiency with cognitive impairment in older women

Table 1 Characteristics and comparison of the randomized sample subjects (n = 752) separated into 2 groups based on serum 25(OH)D concentrations

	Serum 25(OH)D concentration		
	<10 ng/mL (n = 129)	≥10 ng/mL (n = 623)	p Value*
Clinical measures			
Age, mean ± SD, y	80.7 ± 3.8	80.1 ± 3.4	0.129
Body mass index, mean ± SD, kg/m^2	25.5 ± 4.4	25.8 ± 4.4	0.577
Regular physical activity,† n (%)	61 (47.3)	336 (54.0)	0.459
No. of chronic diseases,‡ mean ± SD	3.1 ± 1.8	3.0 ± 1.8	0.340
Use of psychoactive drugs,§ n (%)	65 (50.4)	290 (46.6)	0.440
Hypertension,‡ n (%)	63 (48.8)	303 (49.0)	1.000
High education level,¶ n (%)	107 (83.6)	498 (80.2)	0.460
Neuropsychological measures			
Pfeiffer SPMSQ score, /10			
Mean ± SD	8.56 ± 1.67	9.05 ± 1.34	<0.001
<8, n (%)	22 (17.1)	56 (9.0)	0.006

Annweiler C, Schott AM, Allali G, Bridenbaugh SA, Kressig RW, Allain P, Herrmann FR, Beauchet O. Neurology 2010; 74:27-32.

COGNITIVE EFFECTS OF VITAMIN D SUPPLEMENTATION IN OLDER OUTPATIENTS VISITING A MEMORY CLINIC: A PRE–POST STUDY

Characteristic	Total Cohort (N = 44)	Vitamin D3 Group (n = 20)	Control Group (n = 24)	*P*-Value*
Clinical measures				
Age, median (IQR)	80.6 (14.0)	81.9 (13.2)	75.9 (15.0)	.78
Female, n (%)	24 (54.5)	11 (55.0)	13 (54.2)	.96
Body mass index, kg/m^2, median (IQR)	25.2 (3.0)	25.6 (2.0)	24.7 (4.0)	.32
Diagnosis of Alzheimer's disease, n (%)	10 (22.7)	3 (15.0)	7 (29.2)	.26
Number of comorbidities, median (IQR)†	3.0 (3.0)	3.0 (3.0)	3.0 (3.0)	.81
High school education or more, n (%)	19 (43.2)	9 (45.0)	10 (41.7)	.82
Use of psychoactive drugs, n (%)‡	5 (11.4)	2 (20.0)	3 (17.6)	.88
Time between visits, months, median (IQR)	15.7 (7.8)	16.6 (7.5)	15.4 (10.3)	.44
Neuropsychological measures, median (IQR)				
Mini-Mental State Examination score (/30)				
Before treatment	27.0 (4.0)	27.0 (4.0)	27.0 (4.0)	.63
After treatment	26.5 (5.0)	28.0 (4.0)	24.0 (4.0)	.04
Between-visit change§	0.0 (3.0)	1.0 (1.0)	–2.0 (4.0)	.01
Cognitive Assessment Battery score (/96)				
Before treatment	88.0 (9.0)	88.0 (10.0)	88.0 (12.0)	.41
After treatment	89.0 (10.0)	90 (12.0)	89.00 (6.0)	.03
Between-visit change§	1.0 (6.3)	2.0 (4.0)	0.0 (6.0)	.02
Frontal Assessment Battery score (/18)				
Before treatment	15.5 (4.0)	15.0 (5.0)	16.0 (3.0)	.83
After treatment	16.0 (2.0)	16.0 (2.0)	15.0 (3.0)	.04
Between-visit change§	0.0 (3.0)	1.0 (2.0)	–1.0 (1.0)	.01

Annweiler C et al. J Am Geriatr Soc 2012;60:793-5.

N = 44
Follow up: 16 months

Effective Multifactorial Management of AD

Early detection, education, communication, care coordination & support

Pharmacological: reduce potential for harm; slow clinical decline

Non-Pharmacological: behavioral strategies; ongoing monitoring of health & safety and providing support to patient & caregivers

Provide meani[illegible] to patients, familie[illegible]giv[illegible]rs

Atri A. *Am J Manag Care*. 2011.