Geriatrics Literature Update

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Learning objectives

- identify areas in clinical medicine where new strong evidence has been uncovered that may affect geriatric practice

- describe the results of a critical appraisal of this evidence including limitations and pitfalls of published articles;

- discuss clinical advances in caring for older adults from a review of recent select peer-reviewed journal articles.

Disclosures

- No relevant financial relationships.

1

The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Trial of Solanezumab in Preclinical Alzheimer's Disease

Reisa A. Sperling, M.D., Michael C. Donohue, Ph.D., Rema Raman, Ph.D., Michael S. Rafii, M.D., Ph.D., Keith Johnson, M.D., Colin L. Masters, M.D., Christopher H. van Dyck, M.D., Takeshi Iwatsubo, M.D., Gad A. Marshall, M.D., Roy Yaari, M.D., Michele Mancini, M.D., Karen C. Holdridge, M.P.H., Michael Case, M.S., John R. Sims, M.D., and Paul S. Aisen, M.D., for the A4 Study Team*

***N Engl J Med 2023;*389:1096-107.**

ABSTRACT

BACKGROUND

Trials of monoclonal antibodies that target various forms of amyloid at different stages of Alzheimer's disease have had mixed results.

BACKGROUND

Trials of monoclonal antibodies that target various forms of amyloid at different stages of Alzheimer's disease have had mixed results.

METHODS

We tested solanezumab, which targets monomeric amyloid, in a phase 3 trial involving persons with preclinical Alzheimer's disease. Persons 65 to 85 years of age with a global Clinical Dementia Rating score of 0 (range, 0 to 3, with 0 indicating no cognitive impairment and 3 severe dementia), a score on the Mini–Mental State Examination of 25 or more (range, 0 to 30, with lower scores indicating poorer cognition), and elevated brain amyloid levels on ^{18}F-florbetapir positron-emission tomography (PET) were enrolled. Participants were randomly assigned in a 1:1 ratio to receive solanezumab at a dose of up to 1600 mg intravenously every 4 weeks or placebo. The primary end point was the change in the Preclinical Alzheimer Cognitive Composite (PACC) score (calculated as the sum of four z scores, with higher scores indicating better cognitive performance) over a period of 240 weeks.

Clinical Dementia Rating global score

RATING

CDR-0: no cognitive impairment

CDR-0.5: questionable or very mild dementia

CDR-1: mild

CDR-2: moderate

CDR-3: severe

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Score is calculated via an algorithm

CDR™ Scoring Table

Subject Initials ___

CLINICAL DEMENTIA RATING (CDR™):	0	0.5	1	2	3

	Impairment				
	None 0	Questionable 0.5	Mild 1	Moderate 2	Severe 3
Memory	No memory loss or slight inconsistent forgetfulness	Consistent slight forgetfulness; partial recollection of events; "benign" forgetfulness	Moderate memory loss; more marked for recent events; defect interferes with everyday activities	Severe memory loss; only highly learned material retained; new material rapidly lost	Severe memory loss; only fragments remain
Orientation	Fully oriented	Fully oriented except for slight difficulty with time relationships	Moderate difficulty with time relationships; oriented for place at examination; may have geographic disorientation elsewhere	Severe difficulty with time relationships; usually disoriented to time, often to place	Oriented to person only
Judgment & Problem Solving	Solves everyday problems & handles business & financial affairs well; judgment good in relation to past performance	Slight impairment in solving problems, similarities, and differences	Moderate difficulty in handling problems, similarities, and differences; social judgment usually maintained	Severely impaired in handling problems, similarities, and differences; social judgment usually impaired	Unable to make judgments or solve problems
Community Affairs	Independent function at usual level in job, shopping, volunteer and social groups	Slight impairment in these activities	Unable to function independently at these activities although may still be engaged in some; appears normal to casual inspection	No pretense of independent function outside home Appears well enough to be taken to functions outside a family home	Appears too ill to be taken to functions outside a family home
Home and Hobbies	Life at home, hobbies, and intellectual interests well maintained	Life at home, hobbies, and intellectual interests slightly impaired	Mild but definite impairment of function at home; more difficult chores abandoned; more complicated hobbies and interests abandoned	Only simple chores preserved; very restricted interests, poorly maintained	No significant function in home
Personal Care	Fully capable of self-care		Needs prompting	Requires assistance in dressing, hygiene, keeping of personal effects	Requires much help with personal care; frequent incontinence

Score only as decline from previous usual level due to cognitive loss, not impairment due to other factors.

https://naccdata.org/data-collection/tools-calculators/cdr

Morris, J.C. (1993). The Clinical Dementia Rating (CDR): current version and scoring rules. Neurology, 43, 2412–2414.

Preclinical Alzheimer Cognitive Composite (PACC) score

1. The Total Recall score from the Free and Cued Selective Reminding Test (FCSRT) (0–48 words),[20,30]
2. The Delayed Recall score on the Logical Memory IIa sub-test from the Wechsler Memory Scale (0–25 story units),[31]
3. The Digit Symbol Substitution Test score from the Wechsler Adult Intelligence Scale–Revised (0–93 symbols),[32] and
4. The MMSE total score (0–30 points).[33]

RESULTS

A total of 1169 persons underwent randomization: 578 were assigned to the solanezumab group and 591 to the placebo group. The mean age of the participants was 72 years, approximately 60% were women, and 75% had a family history of dementia. At 240 weeks, the mean change in PACC score was –1.43 in the solanezumab group and –1.13 in the placebo group (difference, –0.30; 95% confidence interval, –0.82 to 0.22; P=0.26). Amyloid levels on brain PET increased by a mean of 11.6 centiloids in the solanezumab group and 19.3 centiloids in the placebo group. Amyloid-related imaging abnormalities (ARIA) with edema occurred in less than 1% of the participants in each group. ARIA with microhemorrhage or hemosiderosis occurred in 29.2% of the participants in the solanezumab group and 32.8% of those in the placebo group.

CONCLUSIONS

Solanezumab, which targets monomeric amyloid in persons with elevated brain amyloid levels, did not slow cognitive decline as compared with placebo over a period of 240 weeks in persons with preclinical Alzheimer's disease.

JAMA | Original Investigation

Donanemab in Early Symptomatic Alzheimer Disease
The TRAILBLAZER-ALZ 2 Randomized Clinical Trial

John R. Sims, MD; Jennifer A. Zimmer, MD; Cynthia D. Evans, PhD; Ming Lu, MD, MS, MPH; Paul Ardayfio, PhD; JonDavid Sparks, PhD; Alette M. Wessels, PhD; Sergey Shcherbinin, PhD; Hong Wang, PhD; Emel Serap Monkul Nery, MD; Emily C. Collins, PhD; Paul Solomon, PhD; Stephen Salloway, MD; Liana G. Apostolova, MD; Oskar Hansson, MD, PhD; Craig Ritchie, MD, PhD; Dawn A. Brooks, PhD; Mark Mintun, MD; Daniel M. Skovronsky, MD, PhD; for the TRAILBLAZER-ALZ 2 Investigators

JAMA 2023; 330(6):512-527

IMPORTANCE There are limited efficacious treatments for Alzheimer disease.

OBJECTIVE To assess efficacy and adverse events of donanemab, an antibody designed to clear brain amyloid plaque.

DESIGN, SETTING, AND PARTICIPANTS Multicenter (277 medical research centers/hospitals in 8 countries), randomized, double-blind, placebo-controlled, 18-month phase 3 trial that enrolled 1736 participants with early symptomatic Alzheimer disease (mild cognitive impairment/mild dementia) with amyloid and low/medium or high tau pathology based on positron emission tomography imaging from June 2020 to November 2021 (last patient visit for primary outcome in April 2023).

INTERVENTIONS Participants were randomized in a 1:1 ratio to receive donanemab (n = 860) or

Visual Abstract

Editorial pages 503, 505, 507, and 510

Supplemental content

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JANUARY 5, 2023 VOL. 388 NO. 1

CLARITY AD

Lecanemab in Early Alzheimer's Disease

C.H. van Dyck, C.J. Swanson, P. Aisen, R.J. Bateman, C. Chen, M. Gee, M. Kanekiyo, D. Li, L. Reyderman, S. Cohen, L. Froelich, S. Katayama, M. Sabbagh, B. Vellas, D. Watson, S. Dhadda, M. Irizarry, L.D. Kramer, and T. Iwatsubo

N Engl J Med 2023;388:9-21.

ABSTRACT

BACKGROUND

The accumulation of soluble and insoluble aggregated amyloid-beta (Aβ) may initiate or potentiate pathologic processes in Alzheimer's disease. Lecanemab, a humanized IgG1 monoclonal antibody that binds with high affinity to Aβ soluble protofibrils, is being tested in persons with early Alzheimer's disease.

METHODS

We conducted an 18-month, multicenter, double-blind, phase 3 trial involving persons 50 to 90 years of age with early Alzheimer's disease (mild cognitive impairment or mild dementia due to Alzheimer's disease) with evidence of amyloid on positron-emission tomography (PET) or by cerebrospinal fluid testing. Participants were randomly assigned in a 1:1 ratio to receive intravenous lecanemab (10 mg per kilogram

The authors' full names, academic degrees, and affiliations are listed in the Appendix. Dr. van Dyck can be contacted at christopher.vandyck@yale.edu or at the Alzheimer's Disease Research Unit, Division of Aging and Geriatric Psychiatry, Yale School of Medicine, 1 Church St., 8th Fl., New Haven, CT 06510.

This article was published on November 29, 2022, at NEJM.org.

N Engl J Med 2023;388:9-21.

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The accumulation of soluble and insoluble aggregated amyloid-beta (Aβ) may initiate or potentiate pathologic processes in Alzheimer's disease. Lecanemab, a humanized IgG1 monoclonal antibody that binds with high affinity to Aβ soluble protofibrils, is being tested in persons with early Alzheimer's disease.

CLARITY AD

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We conducted an 18-month, multicenter, double-blind, phase 3 trial involving persons 50 to 90 years of age with early Alzheimer's disease (mild cognitive impairment or mild dementia due to Alzheimer's disease) with evidence of amyloid on positron-emission tomography (PET) or by cerebrospinal fluid testing.

RESULTS:

CLARITY AD

- 1795 participants: 898 lecanemab and 897 placebo
- **Mean CDR-SB score** at baseline was approx. 3.2 in both groups AND Mean change from baseline at 18 months was

  1.21 with lecanemab and 1.66 with placebo

  (difference, −0.45; 95% confidence interval [CI], −0.67 to −0.23; P<0.001)
- In a substudy involving 698 participants, there were **greater reductions in brain amyloid burden with lecanemab than with placebo**

  (difference −59.1 centiloids; 95% CI, −62.6 to −55.6)
- Other mean differences b/w the two groups in the change from baseline **favoring lecanemab**:
  - for the ADAS-cog14 score, −1.44 (95% CI, −2.27 to −0.61; P<0.001);
  - for the ADCOMS, −0.050 (95% CI, −0.074 to −0.027; P<0.001); and
  - for the ADCS-MCI-ADL score, 2.0 (95% CI, 1.2 to 2.8; P<0.001)

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https://naccdata.org/data-collection/tools-calculators/cdr

Morris, J.C. (1993). The Clinical Dementia Rating (CDR): current version and scoring rules. Neurology, 43, 2412–2414.

Clinical Dementia Rating scale – Sum of Boxes (CDR-SB)

Table 5. Dementia Severity Categories Based on CDR-SB Scores

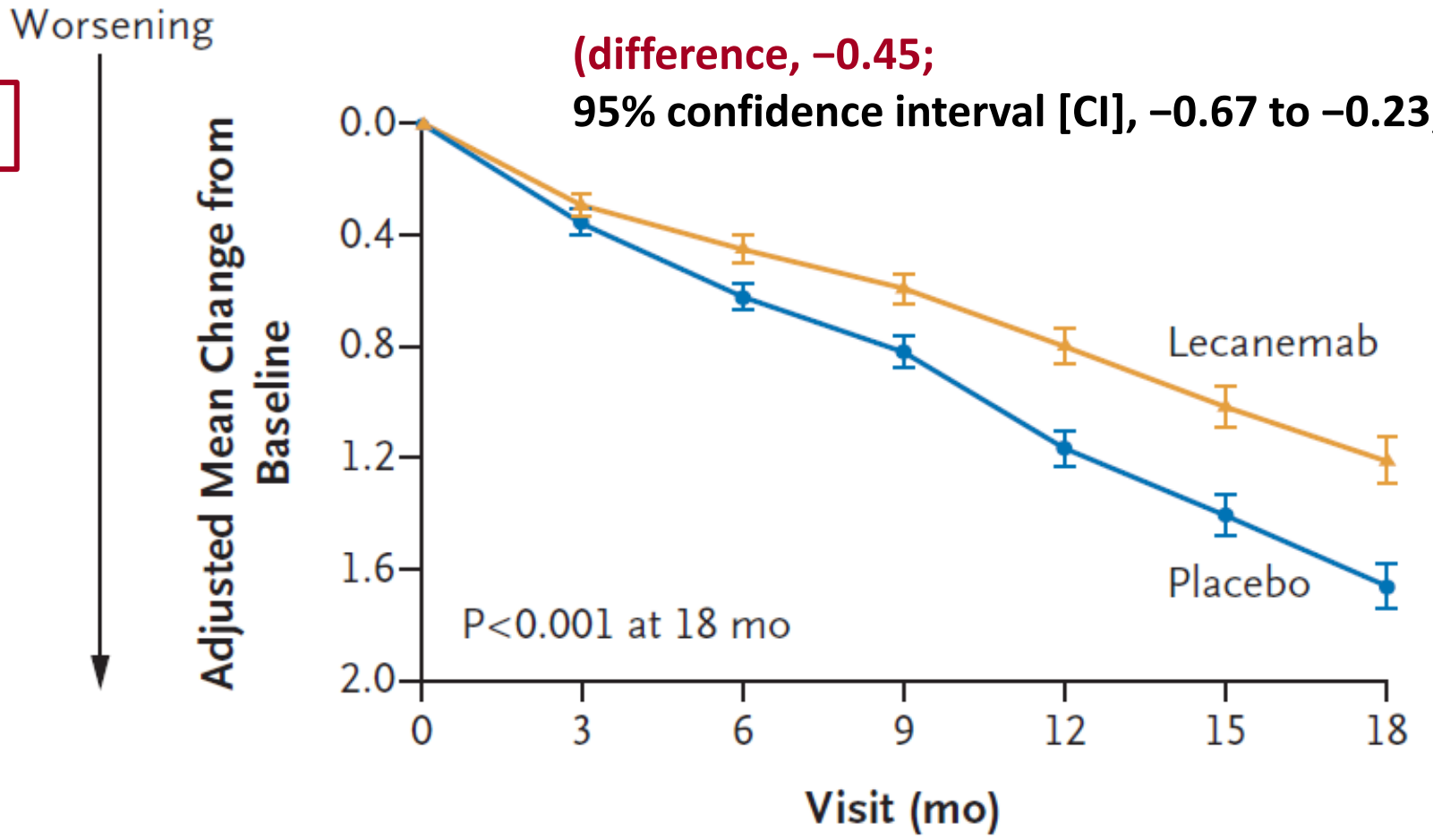
CDR-SB Range	Staging Category
0	Normal
0.5-4.0	Questionable cognitive impairment
0.5-2.0	Questionable impairment
2.5-4.0	Very mild dementia
4.5-9.0	Mild dementia
9.5-15.5	Moderate dementia
16.0-18.0	Severe dementia

Abbreviation: CDR-SB, Clinical Dementia Rating Scale Sum of Boxes score.

CDR-SB Score

CLARITY AD

(difference, −0.45;
95% confidence interval [CI], −0.67 to −0.23; P<0.001)

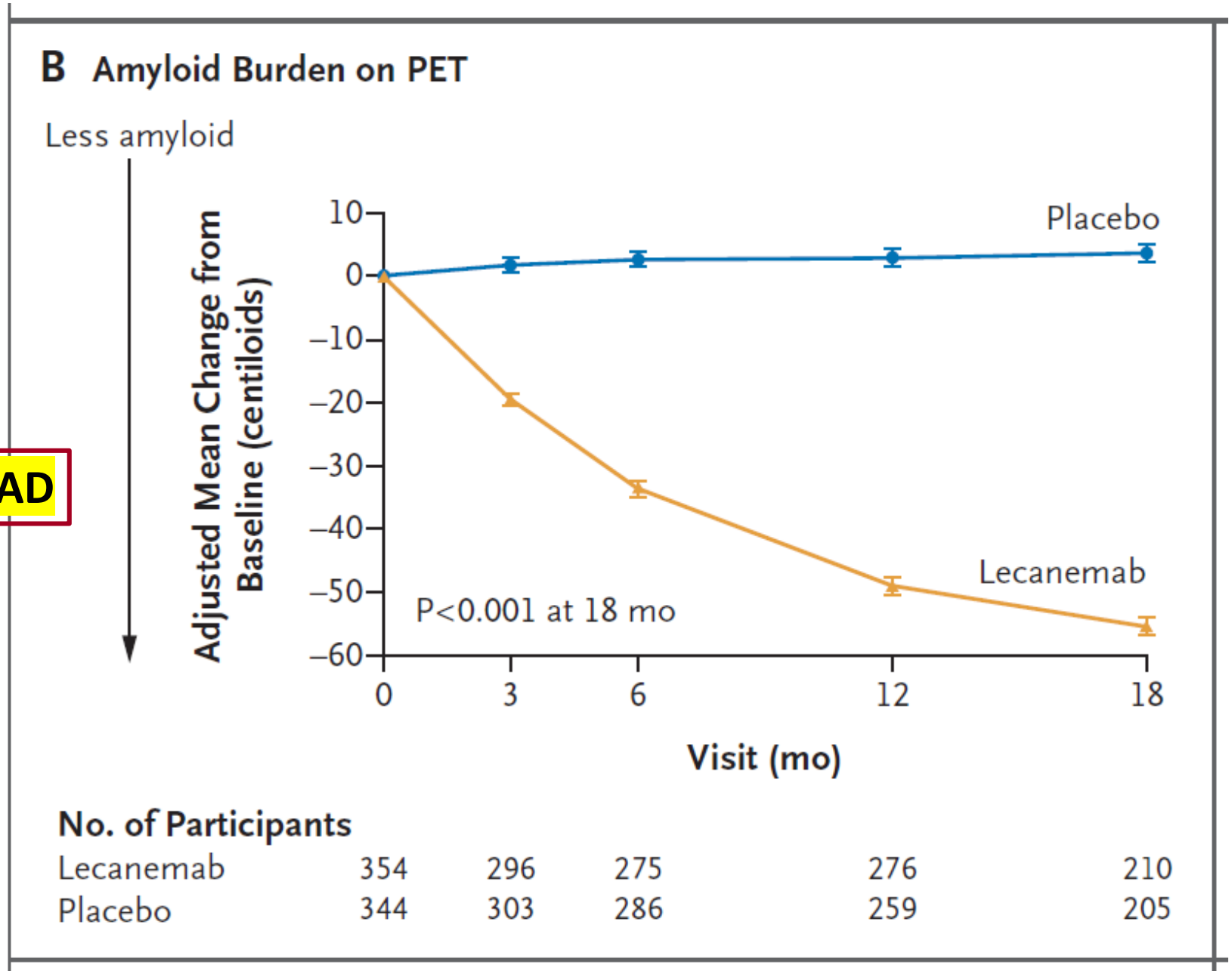


No. of Participants							
Lecanemab	859	824	798	779	765	738	714
Placebo	875	849	828	813	779	767	757

Which is a greater number, 0.025 or 25 ?

- 1 meter = 100 cm = 1000 mm
- 0.025 meters = 2.5 cm = 25 mm

CLARITY AD


B Amyloid Burden on PET
Less amyloid
Adjusted Mean Change from Baseline (centiloids)
10
0
−10
−20
−30
−40
−50
−60
Placebo
Lecanemab
P<0.001 at 18 mo
0
3
6
12
18
Visit (mo)
No. of Participants
Lecanemab 354 296 275 276 210
Placebo 344 303 286 259 205

Lecanemab resulted in infusion-related reactions in 26.4% of the participants

AND

amyloid-related imaging abnormalities with edema or effusions in 12.6%.

CLARITY AD

FDA NEWS RELEASE

FDA Converts Novel Alzheimer's Disease Treatment to Traditional Approval

Action Follows Confirmatory Trial to Verify Clinical Benefit

nmediate Release: July 06, 2023

https://www.fda.gov/news-events/press-announcements/fda-converts-novel-alzheimers-disease-treatment-traditional-approval

Today, the U.S. Food and Drug Administration converted Leqembi (lecanemab-irmb), indicated to treat adult patients with Alzheimer's Disease, to traditional approval following a determination that a confirmatory trial verified clinical benefit. Leqembi is the first amyloid beta-directed antibody to be converted from an accelerated approval to a traditional approval for the treatment of Alzheimer's disease. The drug works by reducing amyloid plaques that form in the brain, a defining pathophysiological feature of the disease.

Leqembi was approved in January under the Accelerated Approval pathway. This pathway allows the FDA to approve drugs for serious conditions where there is an unmet medical need, based on clinical data demonstrating the drug's effect on a surrogate endpoint—in the case of Leqembi, reducing amyloid plaques in the brain—that is reasonably likely to predict a clinical benefit to patients. As a postmarketing requirement of the accelerated approval, the FDA required the applicant to conduct a clinical trial, often referred to as a confirmatory study, to verify the anticipated clinical benefit of Leqembi. Efficacy of Leqembi was evaluated using the results of Study 301 (CLARITY AD), a Phase 3 randomized, controlled clinical trial.

J Prev Alz Dis 2023;3(10):362-377
Published online March 27, 2023, http://dx.doi.org/10.14283/jpad.2023.30

Review

Lecanemab: Appropriate Use Recommendations

J. Cummings[1], L. Apostolova[2], G.D. Rabinovici[3], A. Atri[4], P. Aisen[5], S. Greenberg[6], S. Hendrix[7], D. Selkoe[8], M. Weiner[9], R.C. Petersen[10], S. Salloway[11], For the Alzheimer's Disease and Related Disorders Therapeutics Work Group

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EDITORIALS

NEJM 388;1; January 5, 2023: 80-81

Moving the Needle on Alzheimer's Disease with an Anti-Oligomer Antibody

Sam Gandy, M.D., Ph.D., and Michelle E. Ehrlich, M.D.

Despite the efficient purging of Aβ fibrils by lecanemab, residual Aβ oligomers may explain, at least in part, why lecanemab does not produce a larger clinical effect.

2

BRIEF REPORTS

Journal of the
American Geriatrics Society

J Am Geriatr Soc. 2022; 70: 3560–3569.

Prolonged use of newly prescribed gabapentin after surgery

Tasce Bongiovanni MD, MPP[1] | Siqi Gan MPH[2] | Emily Finlayson MD[1] | Joseph Ross MD[3,4,5] | James D. Harrison MPH, PhD[6] | John Boscardin PhD[7] | Michael A. Steinman MD[8,9]

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[6]Division of Hospital Medicine, University of California San Francisco School of Medicine, San Francisco, California, USA

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[8]Division of Geriatrics, University of California San Francisco School of Medicine, San Francisco, California, USA

[9]Department of Medicine, San Francisco VA Medical Center, San Francisco, California, USA

- **DATA SOURCE:** 20% Medicare sample for years 2013–2018
- **STUDY POPUATION:** Patients ≥ 66 years at time of the procedure, without prior gabapentinoid use, and undergoing one of the 14 most common non-cataract surgeries performed in older adults
- Definition: patients who had a new discharge prescription for gabapentin at the time of surgery
  - considered a discharge prescription as any fill between 7 days before and 7 days after the surgery (or discharge for inpatients), as some surgical practices prescribe medications preoperatively
  - defined a new fill of a gabapentin if the medication had not been prescribed in the 3 months prior to surgery
- **OUTCOME:** Prolonged use of gabapentin in the postoperative period, defined as a prescription refilled at 90–180 days after discharge from surgery

14 most common non-cataract surgeries performed in older adults

Included Surgical Procedures
Total Shoulder Arthroplasty
Total Hip Arthroplasty
Prostatectomy, Laparoscopic
Hysterectomy, Laparoscopic
Cholecystectomy, Laparoscopic
Initial Inguinal Hernia Repair, Open
Initial Inguinal Hernia Repair, Laparoscopic
Lumbar Laminotomy
Lumbar Laminectomy
Hysterectomy, Vaginal
Carotid Endarterectomy
Total Knee Arthroplasty
Low Anterior Resection, Laparoscopic
Ventral Hernia Repair, Open

RESULTS

Of 604,356 eligible patients,

3% had a new prescription for gabapentin after surgery

New gabapentin prescription	**Prolonged use**	**No prolonged use**
(N = 17,481)	(**N = 4031**)	(N = 13,450)

- **prolonged use occurred in 22%**
- mean age was 73 years old and 62% were female
- most common procedures were
  - total knee (45%)
  - total hip (21%) replacements

RESULTS

Those with prolonged use were more likely to be

- be women (64% vs. 61%),
- be non-White (14% vs. 12%),
- have concurrent prolonged opioid use (44% vs. 18%), and
- have undergone emergency surgery (8% vs. 4%)

On multivariable analysis, factors associated with prolonged use of gabapentin were:

- being female,
- having a higher Charlson comorbidity score,
- having an opioid prescription at discharge and at >90 days, and
- having a higher care complexity

CONCLUSIONS

More than one-fifth of older adults prescribed gabapentin postoperatively filled a prescription >90 days after discharge, especially among patients with more comorbidities and concurrent prolonged opioid use, increasing the risk of adverse drug events and polypharmacy.

Key points

- Prolonged use of medications for older adults can lead to adverse events and polypharmacy yet is relatively common among older surgical patients who receive a gabapentin prescription at discharge.
- Gabapentin is most commonly prescribed in patients going orthopedic or spine surgeries.
- Patients undergoing surgery are more likely to have prolonged use of gabapentin if they are women, have increased comorbidities, increased care complexity or who are prescribed opioids at discharge.

Why does this paper matter?

Prolonged use contributes to polypharmacy in an already at-risk population. As non-opioid medications are increasingly used in the surgical patient population, careful attention needs to be paid to ensuring that these medications are in fact substituting for opioids as opposed to be given together and that the medications are then appropriately discontinued. These findings suggest that broad-based shifts in pain management to avoid opioid prescribing have potential long-term effects and that close attention needs to be paid to medications meant to be used short-term in the post-surgical discharge period, especially those that are potentially inappropriate medications.

Research

JAMA Intern Med. 2022;182(11):1117-1127.

JAMA Internal Medicine | Original Investigation | LESS IS MORE

Perioperative Gabapentin Use and In-Hospital Adverse Clinical Events Among Older Adults After Major Surgery

Chan Mi Park, MD, MPH; Sharon K. Inouye, MD, MPH; Edward R. Marcantonio, MD, ScM; Eran Metzger, MD; Brian T. Bateman, MD, ScM; Jessica J. Lie, MD, MPH; Su Been Lee, BA; Raisa Levin, MS; Dae Hyun Kim, MD, ScD

IMPORTANCE Gabapentin has been increasingly used as part of a multimodal analgesia regimen to reduce opioid use in perioperative pain management. However, the safety of perioperative gabapentin use among older patients remains uncertain.

OBJECTIVE To examine in-hospital adverse clinical events associated with perioperative gabapentin use among older patients undergoing major surgery.

DESIGN, SETTING, AND PARTICIPANTS This retrospective cohort study using data from the Premier Healthcare Database included patients aged 65 years or older who underwent major surgery at US hospitals within 7 days of hospital admission from January 1, 2009, to March 31, 2018, and did not use gabapentin before surgery. Data were analyzed from June 14, 2021, to May 23, 2022.

Invited Commentary
page 1127

Supplemental content

METHODOLOGY

- **Study design:** retrospective cohort study to investigate the association of perioperative gabapentin use with in-hospital adverse clinical events using a nationwide administrative inpatient database of older adults undergoing major surgery.
- **Hypothesis:** gabapentin use would be associated with increased risk of delirium, pneumonia, and in-hospital death.
- **Study population:** adults aged 65 years or older who underwent major surgical procedures within 7 days of hospital admission from January 1, 2009, to March 31, 2018
- **Major surgical procedures included** cardiac, gastrointestinal, genitourinary, orthopedic, neurological (excluding procedures involving the brain), thoracic, and vascular surgery.

RESULTS

- 4958625 patients identified; 967547 selected:
  - mean age, 76.2 years; 59.6% female,
  - **rate of perioperative gabapentin use was 12.3%** (119087)
  - received gabapentin between the day of surgery and 2 days after surgery

After propensity score matching,

- 237872 (118936 pairs) gabapentin users and nonusers were identified and used in the analysis
  - mean age, 74.5 years; 62.7% female

RESULTS

- **Gabapentin users had increased risk of**
  - delirium
  - new antipsychotic use
  - pneumonia
- but **there was no difference in in-hospital death**
- Risk of delirium among gabapentin users was **greater in subgroups with**
  - high comorbidity burden
  - chronic kidney disease
- **higher gabapentin dose** was assoc. with progressively **increased risk of**
  - delirium
  - Pneumonia

CONCLUSION AND RELEVANCE:

Clinicians should **reconsider routine use of gabapentin for perioperative pain management among older adults** and individualize the treatment decision after assessing the risk of immediate harms vs opioid-sparing benefits of perioperative gabapentin use.

For older patients who receive gabapentin as part of multimodal analgesia, daily assessment of the appropriateness of gabapentin use may be necessary to avoid unintended harm.

Key Points

Question Is perioperative gabapentin use associated with in-hospital adverse clinical events among older adults after major surgery?

Findings In this cohort study of 237 872 propensity score–matched adults aged 65 years or older, perioperative gabapentin users had significantly increased risk of delirium, new antipsychotic use, and pneumonia compared with nonusers after major surgery.

Meaning This study suggests that careful risk-benefit assessment is needed before prescribing gabapentin for perioperative pain management to older patients.

NEED TO reconsider multimodal pain management pathways for older adults, which will require data driven nonopioid pain management strategies that can be translated into routine clinical practice.

Bongiovanni, T, et al. Perioperative Gabapentin Use in Older Adults Revisiting Multimodal Pain Management. JAMA Internal Medicine November 2022 Volume 182, Number 11

3

Clinical Review & Education

JAMA | US Preventive Services Task Force | RECOMMENDATION STATEMENT

Hormone Therapy for the Primary Prevention of Chronic Conditions in Postmenopausal Persons

US Preventive Services Task Force Recommendation Statement

US Preventive Services Task Force

JAMA November 1, 2022 Vol 328, No. 17; 1740-1746

IMPORTANCE Menopause is defined as the cessation of a person's menstrual cycle. It is defined retrospectively, 12 months after the final menstrual period. Perimenopause, or the menopausal transition, is the few-year time period preceding a person's final menstrual period and is characterized by increasing menstrual cycle length variability and periods of amenorrhea, and often symptoms such as vasomotor dysfunction. The prevalence and incidence of most chronic diseases (eg, cardiovascular disease, cancer, osteoporosis, and fracture) increase with age, and US persons who reach menopause are expected on average to live more than another 30 years.

Editorial page 1712

Multimedia

Related article page 1747 and JAMA Patient Page page 1780

Supplemental content

Summary of Recommendations

Population	Recommendation	Grade
Postmenopausal persons	The USPSTF recommends against the use of combined estrogen and progestin for the primary prevention of chronic conditions in postmenopausal persons.	D
Postmenopausal persons who have had a hysterectomy	The USPSTF recommends against the use of estrogen alone for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy.	D

Grade	Definition	Suggestions for Practice
A	The USPSTF recommends the service. There is high certainty that the net benefit is substantial.	Offer or provide this service.
B	The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.	Offer or provide this service.
C	The USPSTF recommends selectively offering or providing this service to individual patients based on professional judgment and patient preferences. There is at least moderate certainty that the net benefit is small.	Offer or provide this service for selected patients depending on individual circumstances.
D	The USPSTF recommends against the service. There is moderate or high certainty that the service has no net benefit or that the harms outweigh the benefits.	Discourage the use of this service.
I Statement	The USPSTF concludes that the current evidence is insufficient to assess the balance of benefits and harms of the service. Evidence is lacking, of poor quality, or conflicting, and the balance of benefits and harms cannot be determined.	Read the clinical considerations section of USPSTF Recommendation Statement. If the service is offered, patients should understand the uncertainty about the balance of benefits and harms.

REFERENCE: https://www.uspreventiveservicestaskforce.org/uspstf/about-uspstf/methods-and-processes/grade-definitions

Table. Summary of USPSTF Rationale

Rationale	Assessment for combined estrogen and progestin	Assessment for estrogen alone
Benefits	• Convincing evidence that use of combined estrogen and progestin has a moderate benefit in reducing the risk of fractures in postmenopausal persons • Adequate evidence that use of combined estrogen and progestin has a small benefit in reducing the risk of diabetes and colorectal cancer • Adequate evidence that use of combined estrogen and progestin does not have a beneficial effect on risk of coronary heart disease	• Convincing evidence that use of estrogen alone has a moderate benefit in reducing the incidence of fractures in postmenopausal persons • Adequate evidence that the use of estrogen alone has a small benefit in reducing the risk of developing or dying of invasive breast cancer and a small benefit in reducing the risk of diabetes • Adequate evidence that estrogen use does not have a beneficial effect on risk of coronary heart disease
Harms	Adequate evidence that use of combined estrogen and progestin is associated with moderate harms, including increased risk of invasive breast cancer, stroke, venous thromboembolism, dementia, gallbladder disease, and urinary incontinence	Adequate evidence that use of estrogen alone is associated with moderate harms, including increased risk of stroke, venous thromboembolism, gallbladder disease, and urinary incontinence
USPSTF assessment	The USPSTF concludes with moderate certainty that the use of combined estrogen and progestin has no net benefit for the primary prevention of chronic conditions in postmenopausal persons with an intact uterus	The USPSTF concludes with moderate certainty that the use of estrogen alone has no net benefit for the primary prevention of chronic conditions in postmenopausal persons who have had a hysterectomy

The USPSTF has made several recommendations about other ways to prevent cardiovascular disease and other chronic conditions in adults, including aspirin use for the prevention of cardiovascular disease, screening for high blood pressure, screening for prediabetes and type 2 diabetes, behavioral counseling to promote a healthful diet and physical activity for cardiovascular disease prevention in adults (with and without cardiovascular risk factors), screening for osteoporosis, screening for breast cancer, and screening for colorectal cancer.
• Natural menopause occurs at a median age of 51.3 years. • The prevalence and incidence of most chronic diseases (eg, cardiovascular disease, cancer, osteoporosis, and fracture) increase with age, and a person in the US who reaches menopause is expected on average to live more than another 30 years. • The excess risk for chronic conditions that can be attributed to menopause alone is uncertain.

For the fifth time, the USPSTF confirms that postmenopausal persons should not be encouraged to use MHT on the grounds that it will preserve their long-term health and functioning.

Huang, JA, et al. Menopausal Hormone Therapy for Prevention of Chronic Conditions. When Is Enough, Enough? JAMA November 1, 2022 Vol 328, No. 17; 1712

Even for younger, severely symptomatic menopausal patients, many clinicians now preferentially recommend nonhormonal medications such as selective serotonin reuptake inhibitors, gabapentin, and clonidine for vasomotor symptoms on the grounds that they offer better long-term health outcomes, whereas a more accurate statement would be that they have undergone much less robust or long-term scrutiny for potential adverse effects. These alternate medications have their own immediate adverse effects as well as potential pathways for worsening long-term adverse health outcomes; however, unlike MHT, none have been the subject of controlled trials like the WHI in which many thousands of women have been followed up for more than a decade to evaluate the extended, multisystem consequences.

Huang, JA, et al. Menopausal Hormone Therapy for Prevention of Chronic Conditions. When Is Enough, Enough? JAMA November 1, 2022 Vol 328, No. 17; 1712

4

NEJM 388;12; March 23, 2023: 80-81

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 MARCH 23, 2023 VOL. 388 NO. 12

Antidepressant Augmentation versus Switch in Treatment-Resistant Geriatric Depression

E.J. Lenze, B.H. Mulsant, S.P. Roose, H. Lavretsky, C.F. Reynolds III, D.M. Blumberger, P.J. Brown, P. Cristancho, A.J. Flint, M.A. Gebara, T.R. Gettinger, E. Lenard, J.P. Miller, G.E. Nicol, H.A. Oughli, V.T. Pham, B.L. Rollman, L. Yang, and J.F. Karp

BACKGROUND

The benefits and risks of augmenting or switching antidepressants in older adults with treatment-resistant depression have not been extensively studied.

METHODS

We conducted a two-step, open-label trial involving adults 60 years of age or older with treatment-resistant depression. In step 1, patients were randomly assigned in a 1:1:1 ratio to augmentation of existing antidepressant medication with aripiprazole, augmentation with bupropion, or a switch from existing antidepressant medication to bupropion. Patients who did not benefit from or were ineligible for step 1 were randomly assigned in step 2 in a 1:1 ratio to augmentation with lithium or a switch to nortriptyline. Each step lasted approximately 10 weeks. The primary outcome was the change from baseline in psychological well-being, assessed with the National Institutes of Health Toolbox Positive Affect and General Life Satisfaction subscales (population mean, 50; higher scores indicate greater well-being). A secondary outcome was remission of depression.

STUDY CHARACTERISTICS

- Multi site randomized trial
- 6119 patients were considered
- 742 patients underwent randomization (half the original anticipated enrollment)
- Mean age 69 years
- Excluded persons with physical illnesses
- No placebo group
- Each step of the trial lasted 10 weeks
- Adherence to the treatment strategies was in the range of 50 to 70%,
- The number of patients who belonged to traditionally underrepresented racial or ethnic groups was smaller than planned
- Findings do not apply to other augmentation and switching options.

ADDITIONAL FACTORS TO CONSIDER

- Risk of weight gain with antipsychotic use
- Akathisia is a common side effect of aripriprazole and was reported in 11% of the patients who received the drug in this trial
- Augmentation of pharmacologic strategies with cognitive behavioral therapy could be considered

RESULTS

- **Augmentation of existing antidepressant with aripriprazole was significantly better with respect to psychological well-being.**
- Percentage of patients with remission, not adjusted for multiple comparisons, was numerically higher with either aripriprazole augmentation or bupropion augmentation than with a switch to bupropion.
- **Bupropion augmentation** was numerically similar in effectiveness to aripriprazole augmentation BUT **was associated with a higher rate of falls** than aripriprazole augmentation.
- **Lithium augmentation and a switch to nortriptyline were similar in effectiveness and safety** in a population of patients who did not have a response to their assigned treatment in the first step of the trial or who were not eligible to enter the first step.

CONCLUSIONS

These results suggest that in the trial population studied, aripiprazole augmentation may have been a better overall antidepressant strategy than bupropion augmentation or a switch to bupropion.

Table 1

FDA-Approved Indications of Antipsychotics for Psychiatric Disorders

Treatment-resistant major depression
• quetiapine
• aripiprazole
• brexpiprazole
• cariprazine
• olanzapine (with fluoxetine)
Bipolar depression
• lurasidone
• quetiapine
• cariprazine
• lumetaperone
Bipolar mania
• most second-generation antipsychotics
Schizophrenia (including schizoaffective disorder)
• all antipsychotics
Autism with irritability
• risperidone
• aripiprazole
Parkinson disease psychosis
• pimavanserin
Severe agitation of Alzheimer dementia
• brexpiprazole

Appropriate Antipsychotic Use in Nursing Home Populations: A Wakeup Call to CMS. JAMDA 24 (2023) 1439e1441

5

The **MIND diet** recommends specific “brain healthy” foods to include, and five unhealthy food items to limit.

The **healthy items** the MIND diet guidelines* suggest include:

3+ servings a day of whole grains
1+ servings a day of vegetables (other than green leafy)
6+ servings a week of green leafy vegetables
5+ servings a week of nuts
4+ meals a week of beans
2+ servings a week of berries
2+ meals a week of poultry
1+ meals a week of fish
Mainly olive oil if added fat is used

The **unhealthy items**, which are higher in saturated and trans fat, include:

Less than 5 servings a week of pastries and sweets
Less than 4 servings a week of red meat (including beef, pork, lamb, and products made from these meats)
Less than one serving a week of cheese and fried foods
Less than 1 tablespoon a day of butter/stick margarine

The NEW ENGLAND JOURNAL of MEDICINE

NEJM 2023;389:602-11

ORIGINAL ARTICLE

Trial of the MIND Diet for Prevention of Cognitive Decline in Older Persons

L.L. Barnes, K. Dhana, X. Liu, V.J. Carey, J. Ventrelle, K. Johnson, C.S. Hollings, L. Bishop, N. Laranjo, B.J. Stubbs, X. Reilly, P. Agarwal, S. Zhang, F. Grodstein, C.C. Tangney, T.M. Holland, N.T. Aggarwal, K. Arfanakis, M.C. Morris,* and F.M. Sacks

ABSTRACT

BACKGROUND

Findings from observational studies suggest that dietary patterns may offer protective benefits against cognitive decline, but data from clinical trials are limited. The Mediterranean–DASH Intervention for Neurodegenerative Delay, known as the MIND diet, is a hybrid of the Mediterranean diet and the DASH (Dietary Approach-

BACKGROUND

Findings from observational studies suggest that dietary patterns may offer protective benefits against cognitive decline, but data from clinical trials are limited. The Mediterranean–DASH Intervention for Neurodegenerative Delay, known as the MIND diet, is a hybrid of the Mediterranean diet and the DASH (Dietary Approaches to Stop Hypertension) diet, with modifications to include foods that have been putatively associated with a decreased risk of dementia.

METHODS

We performed a two-site, randomized, controlled trial involving older adults without cognitive impairment but with a family history of dementia, a body-mass index (the weight in kilograms divided by the square of the height in meters) greater than 25, and a suboptimal diet, as determined by means of a 14-item questionnaire, to test the cognitive effects of the MIND diet with mild caloric restriction as compared with a control diet with mild caloric restriction. We assigned the participants in a 1:1 ratio to follow the intervention or the control diet for 3 years. All the participants received counseling regarding adherence to their assigned diet plus support to promote weight loss. The primary end point was the change from baseline in a

A total of 1929 persons underwent screening, and 604 were enrolled; 301 were assigned to the MIND-diet group and 303 to the control-diet group.

From baseline to year 3, improvements in global cognition scores were observed in both groups,

CONCLUSIONS

Among cognitively unimpaired participants with a family history of dementia, changes in cognition and brain MRI outcomes from baseline to year 3 did not differ significantly between those who followed the MIND diet and those who followed the control diet with mild caloric restriction. (Funded by the National Institute on Aging; ClinicalTrials.gov number, NCT02817074.)

6

NEJM July 28, 2022, Vol 387, No. 4

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JULY 28, 2022 VOL. 387 NO. 4

Supplemental Vitamin D and Incident Fractures in Midlife and Older Adults

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BACKGROUND

Vitamin D supplements are widely recommended for bone health in the general population, but data on whether they prevent fractures have been inconsistent.

METHODS

In an ancillary study of the Vitamin D and Omega-3 Trial (VITAL), we tested whether supplemental vitamin D_3 would result in a lower risk of fractures than placebo. VITAL was a two-by-two factorial, randomized, controlled trial that investigated whether supplemental vitamin D_3 (2000 IU per day), n–3 fatty acids (1 g per day), or both would prevent cancer and cardiovascular disease in men 50 years of age or older and women 55 years of age or older in the United States. Participants were not recruited on the basis of vitamin D deficiency, low bone mass, or osteoporosis. Incident fractures were reported by participants on annual questionnaires and adjudicated by centralized medical-record review. The primary end points were incident total, nonvertebral, and hip fractures. Proportional-hazards models were used to estimate the treatment effect in intention-to-treat analyses.

RESULTS

Among 25,871 participants (50.6% women [13,085 of 25,871] and 20.2% Black [5106 of 25,304]), we confirmed 1991 incident fractures in 1551 participants over a median follow-up of 5.3 years. Supplemental vitamin D_3, as compared with placebo, did not have a significant effect on total fractures (which occurred in 769 of 12,927 participants in the vitamin D group and in 782 of 12,944 participants in the placebo group; hazard ratio, 0.98; 95% confidence interval [CI], 0.89 to 1.08; P=0.70), nonvertebral fractures (hazard ratio, 0.97; 95% CI, 0.87 to 1.07; P=0.50), or hip fractures (hazard ratio, 1.01; 95% CI, 0.70 to 1.47; P=0.96). There was no modification of the treatment effect according to baseline characteristics, including age, sex, race or ethnic group, body-mass index, or serum 25-hydroxyvitamin D levels. There were no substantial between-group differences in adverse events as assessed in the parent trial.

In exploratory analyses, there was no significant effect modification on fracture incidence between the vitamin D and placebo groups according to baseline clinically relevant 25-hydroxyvitamin D thresholds (<12, <20, <30, or ≥50 ng per milliliter), serum calcium levels, or parathyroid hormone levels. There were no significant differences in fracture incidence among participants using osteoporosis medications or among those with a history of fragility.

CONCLUSIONS

Vitamin D_3 supplementation did not result in a significantly lower risk of fractures than placebo among generally healthy midlife and older adults who were not selected for vitamin D deficiency, low bone mass, or osteoporosis. (Funded by the

VITAL Findings — A Decisive Verdict on Vitamin D Supplementation

Steven R. Cummings, M.D., and Clifford Rosen, M.D.

An estimated one third or more of U.S. adults 60 years of age or older take vitamin D supplements, not including those who take multivitamins or other compounds containing vitamin D.[1] Yet controversy continues about its overall benefits. In this issue of the *Journal*, LeBoff and

7

NEJM, July 13, 2023, Vol 389, No. 2

The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 JULY 13, 2023 VOL. 389 NO. 2

Cardiovascular Safety of Testosterone-Replacement Therapy

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METHODS

In a multicenter, randomized, double-blind, placebo-controlled, noninferiority trial, we enrolled 5246 men 45 to 80 years of age who had preexisting or a high risk of cardiovascular disease and who reported symptoms of hypogonadism and had two fasting testosterone levels of less than 300 ng per deciliter. Patients were randomly assigned to receive daily transdermal 1.62% testosterone gel (dose adjusted to maintain testosterone levels between 350 and 750 ng per deciliter) or placebo gel. The primary cardiovascular safety end point was the first occurrence of any component of a composite of death from cardiovascular causes, nonfatal myocardial infarction, or nonfatal stroke, assessed in a time-to-event analysis. A secondary cardiovascular end point was the first occurrence of any component of the composite of death from cardiovascular causes, nonfatal myocardial infarction, nonfatal stroke, or coronary revascularization, assessed in a time-to-event analysis. Noninferiority required an upper limit of less than 1.5 for the 95% confidence interval of the hazard ratio among patients receiving at least one dose of testosterone or placebo.

RESULTS

The mean (±SD) duration of treatment was 21.7±14.1 months, and the mean follow-up was 33.0±12.1 months. A primary cardiovascular end-point event occurred in 182 patients (7.0%) in the testosterone group and in 190 patients (7.3%) in the placebo group (hazard ratio, 0.96; 95% confidence interval, 0.78 to 1.17; P<0.001 for noninferiority). Similar findings were observed in sensitivity analyses in which data on events were censored at various times after discontinuation of testosterone or placebo. The incidence of secondary end-point events or of each of the events of the composite primary cardiovascular end point appeared to be similar in the two groups. A higher incidence of atrial fibrillation, of acute kidney injury, and of pulmonary embolism was observed in the testosterone group.

CONCLUSIONS

In men with hypogonadism and preexisting or a high risk of cardiovascular disease, testosterone-replacement therapy was noninferior to placebo with respect to the incidence of major adverse cardiac events. (Funded by AbbVie and others;

8

The NEW ENGLAND JOURNAL of MEDICINE

NEJM, September 7, Vol 389, No. 10

ORIGINAL ARTICLE

Complete or Culprit-Only PCI in Older Patients with Myocardial Infarction

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BACKGROUND

The benefit of complete revascularization in older patients (≥75 years of age) with myocardial infarction and multivessel disease remains unclear.

METHODS

In this multicenter, randomized trial, we assigned older patients with myocardial infarction and multivessel disease who were undergoing percutaneous coronary intervention (PCI) of the culprit lesion to receive either physiology-guided complete revascularization of nonculprit lesions or to receive no further revascularization. Functionally significant nonculprit lesions were identified either by pressure wire or angiography. The primary outcome was a composite of death, myocardial infarction, stroke, or any revascularization at 1 year. The key secondary outcome was a composite of cardiovascular death or myocardial infarction. Safety was assessed as a composite of contrast-associated acute kidney injury, stroke, or bleeding.

RESULTS

A total of 1445 patients underwent randomization (720 to receive complete revascularization and 725 to receive culprit-only revascularization). The median age of the patients was 80 years (interquartile range, 77 to 84); 528 patients (36.5%) were women, and 509 (35.2%) were admitted for ST-segment elevation myocardial infarction. A primary-outcome event occurred in 113 patients (15.7%) in the complete-revascularization group and in 152 patients (21.0%) in the culprit-only group (hazard ratio, 0.73; 95% confidence interval [CI], 0.57 to 0.93; P=0.01). Cardiovascular death or myocardial infarction occurred in 64 patients (8.9%) in the complete-revascularization group and in 98 patients (13.5%) in the culprit-only group (hazard ratio, 0.64; 95% CI, 0.47 to 0.88). The safety outcome did not appear to differ between the groups (22.5% vs. 20.4%; P=0.37).

CONCLUSIONS

Among patients who were 75 years of age or older with myocardial infarction and multivessel disease, those who underwent physiology-guided complete revascularization had a lower risk of a composite of death, myocardial infarction, stroke, or ischemia-driven revascularization at 1 year than those who received culprit-lesion–only PCI. (Funded by Consorzio Futuro in Ricerca and others; FIRE ClinicalTrials.gov

9

JAMA Psychiatry | Original Investigation

JAMA Psychiatry 2022;79(6):550-559.

Association Between Physical Activity and Risk of Depression
A Systematic Review and Meta-analysis

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Supp

IMPORTANCE Depression is the leading cause of mental health–related disease burden and may be reduced by physical activity, but the dose-response relationship between activity and depression is uncertain.

OBJECTIVE To systematically review and meta-analyze the dose-response association between physical activity and incident depression from published prospective studies of adults.

DATA SOURCES PubMed, SCOPUS, Web of Science, PsycINFO, and the reference lists of systematic reviews retrieved by a systematic search up to December 11, 2020, with no language limits. The date of the search was November 12, 2020.

The aim of this systematic review and meta-analysis was to investigate the dose-response association between physical activity and depression. We also assessed the potential population changes in depression that may be preventable by higher physical activity levels.

Eligibility Criteria

We included prospective cohort studies of adults (≥18 years of age) that reported any dimension of physical activity at 3 or more exposure levels and reported risk estimates for depression. Stud-

Key Points

Question What is the dose-response association between physical activity and incident depression in adults?

Findings This systematic review and meta-analysis of 15 prospective studies including more than 2 million person-years showed an inverse curvilinear association between physical activity and incident depression, with greater differences in risk at lower exposure levels. Adults meeting physical activity recommendations (equivalent to 2.5 h/wk of brisk walking) had lower risk of depression, compared with adults reporting no physical activity.

Meaning In this study, relatively small doses of physical activity were associated with substantially lower risks of depression.

10

JAMA November 22/29, 2022
Volume 328, Number 20: 2018-2021

EDITORIAL

The International Code of Medical Ethics of the World Medical Association

Ramin Walter Parsa-Parsi, MD, MPH

One of the central missions of the World Medical Association (WMA) in its role as the global organization of physicians is to ensure the highest possible standard of ethical practice of the medical profession. Since its establishment in 1947 in the aftermath of one of the most egregious breaches of medical ethical principles, the WMA has adopted a comprehensive range of declarations, resolutions, and statements aimed at providing ethical and other guidance to the global medical profession.

The representative nature of the workgroup led to extensive discussions not only about the content of the revised ICoME, but also about the linguistic subtleties of the document and how certain concepts and terminology might be understood or interpreted differently from region to region. The workgroup invested great effort to ensure that the ICoME could be applicable to different cultures and political systems by carefully and transparently assessing proposals and comments from the different world regions.

Box. WMA International Code of Medical Ethics

Adopted by the 3rd General Assembly of the World Medical Association, London, England, October 1949

and amended by the 22nd World Medical Assembly, Sydney, Australia, August 1968

and the 35th World Medical Assembly, Venice, Italy, October 1983

and the 57th WMA General Assembly, Pilanesberg, South Africa, October 2006

and the 73rd WMA General Assembly, Berlin, Germany, October 2022

Preamble

The World Medical Association (WMA) has developed the International Code of Medical Ethics as a canon of ethical principles for the members of the medical profession worldwide. In concordance with the WMA Declaration of Geneva: The Physician's Pledge and the WMA's entire body of policies, it defines and elucidates the professional duties of physicians towards their patients, other physicians and health professionals, themselves, and society as a whole.

The physician must be aware of applicable national ethical, legal, and regulatory norms and standards, as well as relevant international norms and standards.

Such norms and standards must not reduce the physician's commitment to the ethical principles set forth in this Code.

The International Code of Medical Ethics should be read as a whole and each of its constituent paragraphs should be applied with consideration of all other relevant paragraphs. Consistent with the mandate of the WMA, the Code is addressed to physicians. The WMA encourages others who are involved in healthcare to adopt these ethical principles.

General Principles

1. The primary duty of the physician is to promote the health and well-being of individual patients by providing competent, timely, and compassionate care in accordance with good medical practice and professionalism.

   The physician also has a responsibility to contribute to the health and well-being of the populations the physician serves and society as a whole, including future generations.

   The physician must provide care with the utmost respect for human life and dignity, and for the autonomy and rights of the patient.

2. The physician must practise medicine fairly and justly and provide care based on the patient's health needs without bias or engaging in discriminatory conduct on the basis of age, disease or disability, creed, ethnic origin, gender, nationality, political affiliation, race, culture, sexual orientation, social standing, or any other factor.

3. The physician must strive to use health care resources in a way that optimally benefits the patient, in keeping with fair, just, and prudent stewardship of the shared resources with which the physician is entrusted.

4. The physician must practise with conscience, honesty, integrity, and accountability, while always exercising independent professional judgement and maintaining the highest standards of professional conduct.
5. Physicians must not allow their individual professional judgement to be influenced by the possibility of benefit to themselves or their institution. The physician must recognise and avoid real or potential conflicts of interest. Where such conflicts are unavoidable, they must be declared in advance and properly managed.
6. Physicians must take responsibility for their individual medical decisions and must not alter their sound professional medical judgements on the basis of instructions contrary to medical considerations.

7. When medically appropriate, the physician must collaborate with other physicians and health professionals who are involved in the care of the patient or who are qualified to assess or recommend care options. This communication must respect patient confidentiality and be confined to necessary information.
8. When providing professional certification, the physician must only certify what the physician has personally verified.
9. The physician should provide help in medical emergencies, while considering the physician's own safety and competence, and the availability of other viable options for care.
10. The physician must never participate in or facilitate acts of torture or other cruel, inhuman or degrading practices and punishments.
11. The physician must engage in continuous learning throughout professional life in order to maintain and develop professional knowledge and skills.
12. The physician should strive to practise medicine in ways that are environmentally sustainable with a view to minimising environmental health risks to current and future generations.

Duties to the Patient

13. In providing medical care, the physician must respect the dignity, autonomy, and rights of the patient.

    The physician must respect the patient's right to freely accept or refuse care in keeping with the patient's values and preferences.

14. The physician must commit to the primacy of patient health and well-being and must offer care in the patient's best interests. In doing so, the physician must strive to prevent or minimise harm for the patient and seek a positive balance between the intended benefit to the patient and any potential harm.

15. The physician must respect the patient's right to be informed in every phase of the care process. The physician must obtain the patient's voluntary informed consent prior to any medical care provided, ensuring that the patient receives and understands the information needed to make an independent, informed decision about the proposed care. The physician must respect the patient's decision to withhold or withdraw consent at any time and for any reason.

16. When a patient has substantially limited, underdeveloped, impaired, or fluctuating decision-making capacity, the physician must involve the patient as much as possible in medical decisions. In addition, the physician must work with the patient's trusted representative, if available, to make decisions in keeping with the patient's preferences, when those are known or can reasonably be inferred. When the patient's preferences cannot be determined, the physician must make decisions in the patient's best interests. All decisions must be made in keeping with the principles set forth in this Code.
17. In emergencies, where the patient is not able to participate in decision making and no representative is readily available, the physician may initiate an intervention without prior informed consent in the best interests of the patient and with respect for the patient's preferences, where known.

19. The physician should be considerate of and communicate with others, where available, who are close to the patient, in keeping with the patient's preferences and best interests and with due regard for patient confidentiality.
20. If any aspect of caring for the patient is beyond the capacity of a physician, the physician must consult with or refer the patient to another appropriately qualified physician or health professional who has the necessary capacity.

21. The physician must ensure accurate and timely medical documentation.
22. The physician must respect the patient's privacy and confidentiality, even after the patient has died. A physician may disclose confidential information if the patient provides voluntary informed consent or, in exceptional cases, when disclosure is necessary to safeguard a significant and overriding ethical obligation to which all other possible solutions have been exhausted, even when the patient does not or cannot consent to it.

    This disclosure must be limited to the minimal necessary information, recipients, and duration.
23. If a physician is acting on behalf of or reporting to any third parties with respect to the care of a patient, the physician must inform the patient accordingly at the outset and, where appropriate, during the course of any interactions. The physician must disclose to the patient the nature and extent of those commitments and must obtain consent for the interaction.

24. The physician must refrain from intrusive or otherwise inappropriate advertising and marketing and ensure that all information used by the physician in advertising and marketing is factual and not misleading.
25. The physician must not allow commercial, financial, or other conflicting interests to affect the physician's professional judgement.
26. When providing medical care remotely, the physician must ensure that this form of communication is medically justifiable and that the necessary medical care is provided. The physician must also inform the patient about the benefits and limitations of receiving medical care remotely, obtain the patient's consent, and ensure that patient confidentiality is upheld. Wherever medically appropriate, the physician must aim to provide care to the patient through direct, personal contact.

27. The physician must maintain appropriate professional boundaries. The physician must never engage in abusive, exploitative, or other inappropriate relationships or behaviour with a patient and must not engage in a sexual relationship with a current patient.
28. In order to provide care of the highest standards, physicians must attend to their own health, well-being, and abilities. This includes seeking appropriate care to ensure that they are able to practise safely.

29. This Code represents the physician's ethical duties. However, on some issues there are profound moral dilemmas concerning which physicians and patients may hold deeply considered but conflicting conscientious beliefs.

The physician has an ethical obligation to minimise disruption to patient care. Physician conscientious objection to provision of any lawful medical interventions may only be exercised if the individual patient is not harmed or discriminated against and if the patient's health is not endangered.

The physician must immediately and respectfully inform the patient of this objection and of the patient's right to consult another qualified physician and provide sufficient information to enable the patient to initiate such a consultation in a timely manner.

Duties to Other Physicians, Health Professionals, Students, and Other Personnel

30. The physician must engage with other physicians, health professionals and other personnel in a respectful and collaborative manner without bias, harassment or discriminatory conduct. The physician must also ensure that ethical principles are upheld when working in teams.
31. The physician should respect colleagues' patient-physician relationships and not intervene unless requested by either party or needed to protect the patient from harm. This should not prevent the physician from recommending alternative courses of action considered to be in the patient's best interests.
32. The physician should report to the appropriate authorities conditions or circumstances which impede the physician or other health professionals from providing care of the highest standards or from upholding the principles of this Code. This includes any form of abuse or violence against physicians and other health personnel, inappropriate working conditions, or other circumstances that produce excessive and sustained levels of stress.
33. The physician must accord due respect to teachers and students.

Duties to Society

34. The physician must support fair and equitable provision of health care. This includes addressing inequities in health and care, the determinants of those inequities, as well as violations of the rights of both patients and health professionals.
35. Physicians play an important role in matters relating to health, health education and health literacy. In fulfilling this responsibility, physicians must be prudent in discussing new discoveries, technologies, or treatments in non-professional, public settings, including social media, and should ensure that their own statements are scientifically accurate and understandable.

    Physicians must indicate if their own opinions are contrary to evidence-based scientific information.

36. The physician must support sound medical scientific research in keeping with the WMA Declaration of Helsinki and the WMA Declaration of Taipei.
37. The physician should avoid acting in such a way as to weaken public trust in the medical profession. To maintain that trust, individual physicians must hold themselves and fellow physicians to the highest standards of professional conduct and be prepared to report behaviour that conflicts with the principles of this Code to the appropriate authorities.
38. The physician should share medical knowledge and expertise for the benefit of patients and the advancement of health care, as well as public and global health.

Duties as a Member of the Medical Profession

39. The physician should follow, protect, and promote the ethical principles of this Code. The physician should help prevent national or international ethical, legal, organisational, or regulatory requirements that undermine any of the duties set forth in this Code.
40. The physician should support fellow physicians in upholding the responsibilities set out in this Code and take measures to protect them from undue influence, abuse, exploitation, violence, or oppression.

11

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Physician Attitudes About Using Life Expectancy to Inform Cancer Screening Cessation in Older Adults—Results From a National Survey

Cancer screening's benefits typically lag by many years, whereas the harms occur quickly.[1] Guidelines recommend against routine cancer screening when life expectancy is less than 10 years, but many older adults continue to be screened for common cancers.[2,3] Physicians, however, may disagree with using life expectancy to guide cancer screening cessation. The aim of this study was to examine physicians' attitudes about using life expectancy as a criterion for stopping cancer screening in older adults.

Supplemental content

Discussion | This study found that approximately a quarter of physicians did not consider life expectancy a reasonable criterion for stopping cancer screening in older adults. Together with a study showing that older adults do not perceive life expectancy as relevant in cancer screening,[4] our findings question whether reframing guidelines away from the life expectancy label may be more acceptable to physicians and patients. For example, life expectancy and age-specific cancer mortality have been combined to estimate the risk of dying from that cancer in one's remaining lifetime.[1] Although this calculation fundamentally relies on life expectancy, framing screening cessation as when cancer mortality risk is too low to justify the harms involved may be more acceptable.

JAMA Intern Med. 2017;177(8):1121-1128.

JAMA Internal Medicine | Original Investigation

Older Adults' Views and Communication Preferences About Cancer Screening Cessation

Nancy L. Schoenborn, MD; Kimberley Lee, MD; Craig E. Pollack, MD, MHS; Karen Armacost, RN, MSA; Sydney M. Dy, MD; John F. P. Bridges, PhD; Qian-Li Xue, PhD; Antonio C. Wolff, MD; Cynthia Boyd, MD, MPH

IMPORTANCE Older adults with limited life expectancy are frequently screened for cancer even though it exposes them to risks of screening with minimal benefit. Patient preferences may be an important contributor to continued screening.

OBJECTIVE To examine older adults' views on the decision to stop cancer screening when life expectancy is limited and to identify older adults' preferences for how clinicians should communicate recommendations to cease cancer screening.

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page 1128

Supplem

Key Points

Question How do older adults think about stopping cancer screening when life expectancy is limited, and how do they prefer to discuss it with clinicians?

Findings In this qualitative interview study with 40 community-dwelling older adults, participants were amenable to stopping cancer screening in the context of a trusting relationship with their clinician. Participants did not often consider life expectancy important in screening or prefer to hear about life expectancy when discussing screening.

Meaning Better delineating patient-centered approaches to discuss screening cessation when life expectancy is limited is important for optimizing cancer screening in older adults.

12

ADVANCE DIRECTIVES TOOLS and RESOURCES

Links for information about Advance Directives forms, Health care surrogate designation, DNRO, and POLST:

- Florida Living Will

http://myfloridalegal.com/livingwill.pdf

- 5 Wishes

https://fivewishes.org/
https://www.fivewishes.org/five-wishes-sample.pdf

- Empath Choices for Care - Living Will and Healthcare Surrogate form

https://empathhealth.org/wp-content/uploads/2018/05/Living-Will-Directives.pdf

- PREPARE for your care

https://prepareforyourcare.org/en/welcome

- Florida Statute Chapter 765 Health Care Advance Directives
- Florida Statute 765.202 Designation of a health care surrogate

http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0700-0799/0765/0765.html

- Florida Statute 394.4598 Guardian advocate (6) – for sequence of selection of health care surrogate

http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&Search_String=&URL=0300-0399/0394/Sections/0394.4598.html

- Florida Statute Chapter 401 Medical Telecommunications and Transportation
- Florida Statute 401.45 Denial of emergency treatment; civil liability. (3)(a)

http://www.leg.state.fl.us/statutes/index.cfm?App_mode=Display_Statute&URL=0400-0499/0401/Sections/0401.45.html

- Florida Department of Health Do Not Resuscitate Order information

https://www.floridahealth.gov/about/patient-rights-and-safety/do-not-resuscitate/_documents/dnro-updated-form-bw.pdf

- Physician Orders for Life-Sustaining Treatment (POLST)

www.polst.org

- National POLST Maps

https://polst.org/programs-in-your-state/

- Proposed POLST form for Florida

https://polstfl.org/wp-content/uploads/2017/12/POLST-Form-July-10-2015.pdf

- Geri-Kit App has a state specific advanced care planning section available

https://apps.apple.com/us/app/gerikit/id1544200999
https://play.google.com/store/apps/details?id=com.gerikit.app&hl=en_US&gl=US&pli=1

https://www.floridahealth.gov/about/patient-rights-and-safety/do-not-resuscitate/index.html

- State of Florida Do Not Resuscitate Order

Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Search

STEADI—Older Adult Fall Prevention

Print

STEADI Stopping Elderly Accidents, Deaths & Injuries

https://www.cdc.gov/steadi/index.html

THANK YOU for LISTENING!