

New Alzheimer's Drugs Could Extend Independence for Years

Description

As researchers strive to discover a definitive cure for Alzheimer's disease, significant strides have been made in developing treatments aimed at alleviating symptoms and postponing their onset. This includes the recent approval of cutting-edge therapies such as [lecanemab](#) and [donanemab](#).

Both medications received approval from U.S. regulatory bodies in the past few years, functioning primarily by reducing the accumulation of amyloid protein plaques in the brain, a hallmark associated with Alzheimer's. Nevertheless, there remains [considerable debate](#) regarding their overall efficacy.

To evaluate the effectiveness of lecanemab and donanemab in a more quantifiable manner, researchers at the Washington University School of Medicine (WashU Medicine) conducted a study involving 282 volunteers diagnosed with Alzheimer's, examining the lasting impacts of these treatments over an average duration of almost three years.

Treatment charts

The researchers charted the impact of the two treatments on independence. (Hartz et al., *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, 2025)

According to Sarah Hartz, a professor of psychiatry at WashU Medicine, "Our objective was to provide patients with information that is relatable and aids them in making informed decisions about their care." She emphasizes that many individuals wish to understand how long they may maintain their independence, rather than abstract metrics of decline.

The researchers distinguished two facets of independence: one pertaining to the management of everyday responsibilities, such as handling appointments and bills, and another related to personal self-care, including basic hygiene and dressing.

For individuals with mild Alzheimer's symptoms—characterized by occasional difficulties in remembering dates and medications—the study estimates that, without treatment, they could expect to live independently for an average of 29 additional months.

Those with similar levels of dementia might anticipate approximately 10 extra months of independence when treated with lecanemab, and around 13 months with donanemab. Nevertheless, it's crucial to recognize that these estimates represent averages, and individual responses to the treatments may vary.

As Dr. Suzanne Schindler, a physician and professor of neurology at WashU Medicine, remarks, patients often inquire about the duration of their ability to drive, maintain personal hygiene, and how much time these treatments could provide. The decision to utilize these medications is multifaceted, influenced not only by medical considerations but also by the patient's priorities, preferences, and tolerance for risk.



It is essential to acknowledge that these therapies carry inherent challenges: they are not only costly but also necessitate regular infusions and may result in significant [adverse effects](#), including potential brain swelling and hemorrhaging.

Consequently, individuals with Alzheimer's, along with their families, must carefully weigh both the potential benefits and drawbacks, considering the implications for their future. "The intent of this study is neither to promote nor disparage these medications," adds Hartz. "Rather, it aims to contextualize the effects of these treatments in a manner that facilitates informed decision-making for patients and their families."

Vocabulary List:

1. **Efficacy** /'ɛfɪkəsi/ (noun): The ability to produce a desired or intended result.
2. **Alleviating** /ə'li:vi,etɪŋ/ (verb): Making a problem or suffering less severe.
3. **Accumulation** /ə,kju:mjʊ'leɪʃən/ (noun): The process of gradually gathering or building up.
4. **Independence** /,ɪndɪ'pendəns/ (noun): The state of being self-governing or free from control.
5. **Considerable** /kən'sɪdərəbəl/ (adjective): Significant in amount extent or degree.
6. **Facilitate** /fə'sɪlɪteɪt/ (verb): To make an action or process easier.

Comprehension Questions

Multiple Choice

1. What is the primary purpose of lecanemab and donanemab?
Option: Alleviating symptoms of Alzheimer's disease
Option: Curing Alzheimer's disease
Option: Preventing the onset of Alzheimer's disease
Option: Improving memory in Alzheimer's patients
2. How do lecanemab and donanemab primarily function?
Option: By reducing the accumulation of amyloid protein plaques in the brain
Option: By enhancing cognitive abilities
Option: By increasing brain cell regeneration
Option: By targeting tau protein in the brain
3. What is the average duration of the study conducted by researchers at WashU Medicine?



- Option: Almost 1 year
- Option: Almost 3 years
- Option: Almost 5 years
- Option: Almost 10 years

4. How many facets of independence did the researchers distinguish in the study?

- Option: One
- Option: Two
- Option: Three
- Option: Four

5. What type of responsibilities are included in one facet of independence identified by the researchers?

- Option: Financial responsibilities
- Option: Managing social relationships
- Option: Handling appointments and bills
- Option: Maintaining physical fitness

6. What is a potential adverse effect of lecanemab and donanemab treatment?

- Option: Enhanced memory function
- Option: Brain swelling and hemorrhaging
- Option: Improved physical strength
- Option: Reduced anxiety

True-False

7. Lecanemab and donanemab are definitive cures for Alzheimer's disease.

8. The study estimates that individuals with mild Alzheimer's symptoms could live independently for an average of 29 months without treatment.

9. Patients are advised to use lecanemab and donanemab without considering their individual preferences or priorities.

10. The decision to use these medications is solely based on medical considerations.

11. Individual responses to lecanemab and donanemab treatments may vary.

12. The purpose of the study was to promote lecanemab and donanemab as the best treatment options for



Alzheimer's disease.

Gap-Fill

13. Without treatment, individuals with mild Alzheimer's symptoms could expect to live independently for an average of _____ additional months.
14. Those with similar levels of dementia might anticipate approximately _____ extra months of independence when treated with lecanemab.
15. Individual responses to the treatments may _____.
16. Patients must carefully weigh both the potential benefits and _____ of these therapies.
17. The study aimed to facilitate informed decision-making for patients and their _____ when considering these treatments.
18. It is essential for individuals with Alzheimer's to consider the implications for their _____ when evaluating these treatments.

Answer

Multiple Choice: 1. Alleviating symptoms of Alzheimer's disease 2. By reducing the accumulation of amyloid protein plaques in the brain 3. Almost 3 years 4. Two 5. Handling appointments and bills 6. Brain swelling and hemorrhaging

True-False: 7. False 8. True 9. False 10. False 11. True 12. False

Gap-Fill: 13. 29 14. 10 15. vary 16. drawbacks 17. families 18. future

Vocabulary quizzes

Multiple Choice (Select the Correct answer for each question.)



-
1. What are the paths followed by asteroids in space called?
Option: Orbits
Option: Trajectories
Option: Loops
Option: Routes
 2. Which term describes the potential danger posed by an asteroid collision?
Option: Friendly
Option: Safe
Option: Hazardous
Option: Predictable
 3. Which lifestyle choice is characterized by little physical activity?
Option: Active
Option: Sedentary
Option: Dynamic
Option: Vigorous
 4. What are new plans or strategies to address a particular issue called?
Option: Campaigns
Option: Endeavors
Option: Strategies
Option: Initiatives
 5. Which term refers to extreme tiredness resulting from mental or physical exertion?
Option: Energy
Option: Vitality
Option: Fatigue
Option: Enthusiasm
 6. What is the overall health and happiness of a person referred to as?
Option: Contentment
Option: Well-being
Option: Joy
Option: Satisfaction
 7. Which term describes relying on someone or something for support or aid?
Option: Independence
Option: Freedom
Option: Self-reliance
Option: Dependence



8. Which word means to display or show a quality or feeling clearly?

- Option: Hide
- Option: Conceal
- Option: Reveal
- Option: Manifest

9. What term is used to describe related to heat or temperature?

- Option: Cooling
- Option: Thermal
- Option: Chilled
- Option: Frozen

10. Which word means to isolate or hide away?

- Option: Presented
- Option: Exposed
- Option: Revealed
- Option: Sequestered

Gap-Fill (Fill in the blanks with the correct word from the vocabulary list.)

11. The asteroid _____ can have devastating effects on Earth.

12. The asteroid's _____ visits to our solar system create awe and concern among astronomers.

13. Genetic _____ can influence one's likelihood of developing certain health conditions.

14. Understanding the causes of _____ is crucial for improving healthcare outcomes.

15. Regular _____ of blood pressure is essential for managing hypertension.

16. The _____ of stress can lead to physical and mental health problems.

17. The team made _____ progress in a short amount of time.

18. Efforts must be made to address social _____ to ensure fairness for all.

19. The study aimed to assess the _____ of the new treatment method.



20. Periodic _____ of business strategies is essential for adapting to market changes.

Matching Sentences (Match each definition to the correct word from the vocabulary list.)

21. The bank required \\\ to secure the loan against default.
22. The marathon runner collapsed from \\\ after crossing the finish line.
23. The medication was effective in \\\ the patient's pain.
24. As a young adult she valued her \\\ and freedom.
25. The new software was designed to \\\ communication among team members.
26. Customer \\\ was evident in the negative online reviews.
27. In her artwork the \\\ color was vibrant red.
28. The mountain spring served as a natural \\\ for the nearby village.
29. The \\\ insulation in the building helped conserve energy.
30. His frustration was \\\ in his tone of voice.

Answer

Multiple Choice: 1. Trajectories 2. Hazardous 3. Sedentary 4. Initiatives 5. Fatigue 6. Well-being 7. Dependence 8. Manifest 9. Thermal 10. Sequestered

Gap-Fill: 11. impact 12. periodic 13. predispositions 14. mortality 15. self-monitoring 16. accumulation 17. considerable 18. inequities 19. efficacy 20. reevaluation

Matching sentence: 1. collateral 2. exhaustion 3. alleviating 4. independence 5. facilitate 6. dissatisfaction 7. predominant 8. reservoir 9. thermal 10. manifest

CATEGORY

1. Sci/Tech - LEVEL5

Date Created

2025/03/13

Author

aimeeyoung99