

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.

Threatmentuchartspe unknown

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 <u>adverse effects</u>, 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 /əˈliːviˌeɪtɪŋ/ (verb): Making a problem or suffering less severe.
- 3. **Accumulation** /ə,kju:mjʊˈleɪ[ən/ (noun): The process of gradually gathering or building up.
- 4. **Independence** /,ɪndɪˈpɛndəns/ (noun): The state of being self-governing or free from control.
- 5. Considerable /kən'sıdərəbəl/ (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 plagues 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

CATEGORY

1. Sci/Tech - LEVEL5

Date Created 2025/03/13 Author aimeeyoung99