

# ALZHEIMER'S SCIENCE NEVS WINTER 2025



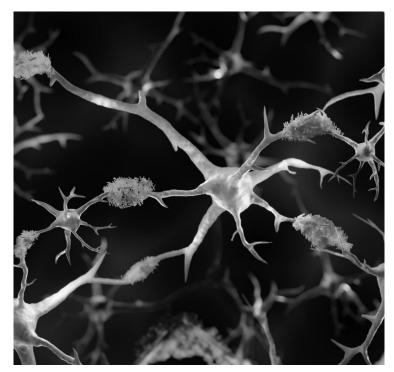
#### FDA APPROVES KISUNLA TO FIGHT ALZHEIMER'S

The U.S. Food and Drug Administration has approved a new Alzheimer's treatment, Kisunla. It's a monthly injection that removes amyloid plaques from the brain and can slow the disease's progression.

Paul Aisen, MD, from the University of Southern California, says, "The body is not able to get rid of amyloid. It's a glue-like substance. It sticks to the brain tissue and can't be cleared." Amyloid buildup damages brain cells and contributes to symptoms like memory loss.

Kisunla is an antibody that works by entering the brain and binding to amyloid, enabling the body to more effectively remove it. In a Phase 3 clinical trial, after one year of monthly infusions, nearly half (47%) of study participants taking Kisunla showed no Alzheimer's progression compared to 29% in the control group.

Individuals eligible to receive Kisunla are those with clinically diagnosed mild cognitive impairment or mild Alzheimer's. A spinal tap or specialized brain scan must also confirm the presence of amyloid plaques. "Treatment over time with this antibody removes amyloid from the brain," says Dr. Aisen. "It's quite a dramatic effect."



New drug slows Alzheimer's by removing harmful brain plaques.

The approval of Kisunla is an important step forward, giving hope to millions of people with Alzheimer's and their loved ones.

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PRESIDENT'S CORNER

Every day, researchers are making promising strides against Alzheimer's. And we have *you* to thank for that.

As you'll see in this newsletter, scientists we fund have discovered how fragmented sleep may provide a warning sign of Alzheimer's, opening the door to earlier life-changing interventions. Another researcher is exploring the link between heart health and Alzheimer's, which could unlock new ways to protect people's minds and memories.

This issue also includes helpful caregiver tips to make the home safer for people with this progressive disease.

Thank you for being such a valued partner in our work. Together, we will continue to push forward until we defeat Alzheimer's once and for all.

Stacy Pagos Haller

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## ALZHEIMER'S LINKED TO FRAGMENTED SLEEP AND BRAIN DEGENERATION

People with Alzheimer's often have trouble sleeping. Now, a study funded by Alzheimer's Disease Research is helping to answer whether sleep problems begin before symptoms appear and if tracking sleep patterns can help identify those at risk.

Led by Maxime van Egroo, PhD, at Maastricht University in the Netherlands, the team focused on the locus coeruleus, a brain structure known to play a role in the sleep-wake cycle and Alzheimer's.

They used data from a long-term study on memory and aging, where participants aged 60 and older underwent yearly medical testing and donated their brains for further research after death.

Sleep problems can begin years before Alzheimer's symptoms appear.

Researchers looked at their performance on cognitive tests and their 24-hour rest-activity patterns that were measured using a small tracking device. Brain imaging studies looked for locus coeruleus degeneration, as well as the presence of Alzheimer's tau tangles and amyloid plaques.

Results showed a direct link between fragmented sleep patterns and locus coeruleus degeneration, which was associated with cognitive decline. The research team found sleep disruptions in those with Alzheimer's an average of seven years before death, when many displayed mild or no cognitive symptoms.

This study suggests that sleep tracking in older adults could signal Alzheimer's risk and allow for earlier interventions, much like heart monitors are used to warn of cardiovascular problems. This could provide an important tool to slow or prevent Alzheimer's.



Degeneration of the locus coeruleus in the brain is linked to sleep disturbances in early Alzheimer's.

#### **RESEARCHER SPOTLIGHT: Brittany Butts, PhD**

When Brittany Butts, PhD, lost her grandmother to Alzheimer's, it had a profound impact, inspiring her to study this devastating disease.

"She was my favorite person, and due to Alzheimer's disease, I lost her twice," says Dr. Butts. "I lost my grandmother for the first time when her dementia progressed to the point that she was no longer herself, and again when she died."

Now, as an Alzheimer's Disease Research grant recipient at Emory University, Dr. Butts is studying middleaged adults with heart failure to understand



**Brittany Butts, PhD** 

the link between cardiovascular health and Alzheimer's. Her research focuses on the renin-angiotensin-aldosterone system (RAAS), which regulates blood pressure, to see how an overactive RAAS may limit blood flow to the brain and contribute to neurodegeneration.

"Alzheimer's doesn't happen overnight," says Dr. Butts. "By the time most people show symptoms, a lot of damage has already been done. If we can spot these issues early, it might give doctors a new way to detect Alzheimer's risk long before symptoms appear."

#### **ALZHEIMER'S DISEASE: HOME SAFETY PRECAUTIONS**

Home safety can be a concern for those with Alzheimer's, who may have:

- Shortened attention span
- Trouble recognizing familiar objects
- Difficulty making decisions, sensing danger, and communicating
- A problem with wandering, leading to safety concerns
- Physical challenges such as reduced vision, hearing, and depth perception
- Loss of strength, coordination, and motor skills

Modifying the home while keeping it familiar can help a person with Alzheimer's feel safe and comfortable.

#### **Basic safety tips:**

- Keep important and emergency phone numbers handy.
- Ensure adequate lighting throughout the home; install night lights.
- Keep floors clear of clutter, extension cords, and scatter rugs.
- Avoid placing furniture in walking areas.
- Secure locks on windows and doors.
- Use childproof locks for toxic substances, medications, and alcohol.
- Ensure smoke detectors are in working order.
- Keep hot water temperature below 120 degrees.



By making adaptations, you can help a loved one with Alzheimer's remain safe in their home.

- Install handrails on stairs and grab bars in bathrooms.
- Remove and safely store weapons, plastic bags, and power tools.
- Protect computers and the data stored on them.
- Consider investing in a sound monitor, such as those used with babies.
- Consider labeling doors, such as "bedroom," "bathroom," etc.
- Have emergency plans ready.

#### A special note regarding stairs:

- Mark the top and bottom with bright yellow tape.
- Install gates at the top and bottom.
- Install a handrail on both sides (if possible).

For more helpful resources and tips, visit **brightfocus.org/ADRtips.** 

# Zoom In on Dementia & Alzheimer's

Sign up for our FREE monthly live conversation series with renowned research scientists and clinicians to keep you informed about the latest findings—from treatments and genetics to risk reduction, supplements, and clinical trials! You can also ask questions during a live Q&A. All episodes are available on archive.

To register and catch up on previous episodes, visit: **brightfocus.org/ADRzoom** 

## EARN INCOME FOR LIFE WHILE FIGHTING ALZHEIMER'S

Are you tired of the uncertainties of the stock and real estate markets? Would you like to earn a guaranteed income for life while helping find a cure for Alzheimer's? If yes, then consider setting up a charitable gift annuity with Alzheimer's Disease Research.

A charitable gift annuity offers many benefits. Here's how it works:

- You transfer cash or property to Alzheimer's Disease Research.
- In exchange, we promise to make fixed payments to you for life. The payments can be quite high, depending on your age, and a portion of each payment may be tax-free.
- You will receive a charitable income tax deduction for the gift portion of the annuity.
- You also have the satisfaction of knowing you're supporting our mind-saving work.

To learn more about how a charitable gift annuity can offer you a reliable income stream and potential tax benefits, please contact us at 301-556-9362 or plannedgiving@brightfocus.org.



You can receive fixed income for life while also advancing Alzheimer's research.



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Please share this newsletter with someone you know who might be interested in learning about some of the latest advancements in research to diagnose, prevent, treat, and cure Alzheimer's disease. This newsletter is published by Alzheimer's Disease Research, a program of BrightFocus Foundation.

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