Donanemab Shows Promise in Slowing Early Alzheimer's Disease Progression

An INDJ review highlights findings from the TRAILBLAZER-ALZ 2 trial, suggesting that donanemab may help slow progression of early Alzheimer's disease.

Thai Nguyen, Vietnam Jun 2, 2026 (Issuewire.com**)** - A comprehensive review published in the **International Neuropsychiatric Disease Journal (INDJ)** has highlighted the growing promise of **donanemab**, an innovative anti-amyloid therapy that may significantly slow the progression of early-stage Alzheimer's disease. Drawing on evidence from the landmark Phase 3 TRAILBLAZER-ALZ 2 clinical trial, the review presents compelling findings showing that targeted removal of amyloid plaques from the brain can delay cognitive and functional decline in individuals with early symptomatic Alzheimer's disease.

As Alzheimer's disease continues to affect millions of people worldwide and remains one of the leading causes of disability and dependency among older adults, the findings represent an important step toward disease-modifying treatments that address the underlying biology of the disorder rather than simply managing symptoms.

A New Direction in the Fight Against Alzheimer's Disease

Alzheimer's disease is a progressive neurodegenerative condition characterized by memory loss,

declining cognitive abilities, and increasing difficulty performing everyday tasks. Despite decades of research, treatment options have remained limited, with most available therapies providing only modest symptomatic relief.

Scientists have long believed that the accumulation of beta-amyloid proteins in the brain plays a critical role in triggering the disease process. These proteins form plaques that disrupt communication between brain cells and contribute to further pathological changes, including the development of tau tangles and neuronal damage.

Donanemab is part of a new generation of monoclonal antibody therapies specifically designed to target and remove these amyloid plaques. By reducing one of the key biological hallmarks of Alzheimer's disease, researchers hope to slow the progression of cognitive decline and preserve patients' independence for longer periods.

Key Findings from the Research

The review discusses findings from the global Phase 3 TRAILBLAZER-ALZ 2 trial, which enrolled **1,736 participants** with early symptomatic Alzheimer's disease across **277 research centers and hospitals in eight countries**.

Participants receiving donanemab experienced significantly slower disease progression compared with those receiving a placebo.

Among patients with low-to-medium levels of tau pathology, a biomarker associated with disease severity, donanemab slowed clinical decline by approximately **35%** over 76 weeks. In the overall study population, which included individuals with higher tau levels, disease progression was slowed by approximately **22%**.

The treatment also demonstrated consistent benefits across multiple clinical measures assessing cognition, memory, daily functioning, and overall disease severity.

Researchers observed:

- Significant slowing of cognitive decline.
- Better preservation of daily living activities.
- Reduced risk of progressing to more advanced stages of Alzheimer's disease.
- Higher likelihood of maintaining stable clinical status during treatment.
- Meaningful delays in overall disease progression.

Importantly, nearly half of treated participants showed no measurable decline on one key clinical assessment after one year, compared with substantially fewer participants receiving placebo.

Remarkable Reduction in Brain Amyloid Plaques

One of the most striking outcomes reported in the review was donanemab's ability to remove amyloid plaques from the brain.

Brain imaging studies revealed dramatic reductions in amyloid burden among participants receiving treatment. By the end of the study, more than three-quarters of treated participants achieved amyloid clearance, whereas almost no participants in the placebo group reached similar levels.

The treatment also produced significant reductions in blood concentrations of phosphorylated tau-217 (P-tau217), an emerging biomarker linked to Alzheimer's disease progression.

These biological improvements provide strong evidence that donanemab is influencing the disease process itself rather than simply masking symptoms.

Why These Findings Matter

The significance of these findings extends beyond clinical statistics.

Alzheimer's disease places a tremendous burden on patients, families, caregivers, and healthcare systems worldwide. Even modest delays in disease progression can translate into additional months of independence, improved quality of life, reduced caregiving demands, and lower healthcare costs.

The review emphasizes that intervention during the earliest stages of Alzheimer's disease may offer the greatest benefits. Patients with lower levels of tau pathology appeared to respond more favorably to treatment, supporting growing evidence that earlier diagnosis and therapeutic intervention are critical for achieving optimal outcomes.

These findings reinforce the importance of biomarker-based diagnosis and precision medicine approaches in neurodegenerative disease management.

Understanding the Study Approach

The findings summarized in the review originate from a rigorous Phase 3 randomized, double-blind, placebo-controlled clinical trial—the gold standard in medical research.

Participants were randomly assigned to receive either donanemab or placebo infusions every four weeks and were monitored for approximately 18 months.

Researchers evaluated treatment effectiveness using multiple standardized assessments measuring cognitive performance, memory, daily functioning, and disease progression. Advanced imaging technologies were also used to track amyloid plaque levels and other disease-related biomarkers.

This comprehensive approach enabled investigators to assess both the clinical and biological effects of treatment.

Safety Considerations Remain Important

While the benefits of donanemab are encouraging, researchers also emphasized the importance of careful safety monitoring.

The most frequently reported treatment-related adverse events were **amyloid-related imaging abnormalities (ARIA)**, which can involve temporary brain swelling or small areas of bleeding detectable through MRI scans.

Most ARIA cases were mild to moderate and eventually resolved. However, some participants experienced symptoms such as headaches, dizziness, confusion, or other neurological effects.

The review notes that appropriate patient selection, regular imaging surveillance, and careful clinical

monitoring are essential components of safe treatment implementation.

Researchers stress that balancing potential benefits against possible risks remains an important consideration for clinicians and patients.

Future Outlook

The publication highlights the growing momentum behind disease-modifying therapies for Alzheimer's disease and suggests that anti-amyloid treatments may play an increasingly important role in future clinical practice.

Ongoing extension studies are expected to provide valuable information regarding the long-term durability of treatment benefits, optimal treatment duration, and strategies for improving safety outcomes.

Future research will also focus on identifying which patient groups derive the greatest benefit, refining monitoring approaches, and exploring combination therapies targeting multiple aspects of Alzheimer's pathology.

While donanemab is not a cure, the evidence reviewed in this publication suggests that it may represent a meaningful advance toward slowing the progression of a disease that has long resisted effective treatment.

About the Study

The article published in the *International Neuropsychiatric Disease Journal* provides a detailed review and analysis of current evidence regarding donanemab therapy for Alzheimer's disease, with particular emphasis on findings from the Phase 3 TRAILBLAZER-ALZ 2 clinical trial. The review examines treatment efficacy, biological effects, safety considerations, and future implications for Alzheimer's disease management, contributing to the growing body of research focused on disease-modifying therapies for neurodegenerative disorders.

References

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