

# A Real World Study of Lecanemab Treatment in Participants with Early Onset Familial Alzheimer's Disease: Preliminary results



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| BACKGROUND                                                                                                                                                                                                                                                                                      | METHODS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | RESULTS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | CONCLUSIONS                                                                                                                                                                                                                                                |
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| <p>Anti-amyloid therapy has been shown to delay clinical decline in Alzheimer’s disease (AD). However, its clinical and biological efficacy remains insufficiently investigated, particularly in early-onset familial AD, with few relevant reports from Chinese clinical practice to date.</p> | <p>This multicentre, prospective, observational study aimed to evaluate the efficacy of lecanemab in early-onset familial AD patients under the age of 65 with a family history of AD (Clinical Trial Registry: NCT06883019). Participants were administered lecanemab at a dosage of 10 mg/kg every two weeks for a period of 18 months, and underwent regular cognitive assessments, amyloid-β/tau positron emission tomography and multimodal magnetic resonance imaging scans, and blood biomarker tests at baseline, 9 months and 18 months. All participants underwent whole exome sequencing.</p> | <p>The recruitment is being conducted across 15 hospitals in 11 cities throughout China. As of March 2026, 37 patients had been enrolled in total, and data from 29 of them is presented here. Within this cohort of 29 patients, 13 were diagnosed with mild cognitive impairment (MCI) due to AD, 15 with mild AD dementia, and 1 with moderate AD dementia. The mean age was 59.03 ± 4.68 years, with 68.97% (20/29) of the participants being female. The prevalence of <i>APOE</i>-ε4 carriers was 62.07% (18/29) and two of them were homozygotes. The mean CDR-SB score was 3.36 ± 2.21. Whole exome sequencing results were available for seven patients: four of them exhibited a negative result, one had <i>ABCA7</i> variations, one had <i>SLC26A4</i> variations, and one carried the <i>PSEN1</i> missense mutation (c.677T&gt;G, p.Leu226Arg). Among 9 patients with 9-month follow-up, the mean change in CDR-SB score from baseline was 0.06 ± 1.74 indicating high inter-individual variability in treatment response. Four patients had completed the lecanemab treatment for 18 months and the mean reduction in amyloid burden was 31.88 ± 9.39 centiloids.</p> | <p>This study will further explore the relationship between genetic variation types in patients with early-onset familial AD and the amyloid clearance as well as the impacts of genetic and hereditary factors on the clinical efficacy of lecanemab.</p> |