

Evaluating SSRI/SNRI Use and Amyloid-Related Imaging Abnormalities in Anti-Amyloid Therapy in a Real World Cohort

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Key takeaway 1: In this real-world, retrospective cohort study, SSRI and SNRI use was not associated with increased ARIA risk
Key takeaway 2: Our study was likely underpowered to detect this risk and larger, prospective studies are needed to further evaluate

BACKGROUND	METHODS	RESULTS	CONCLUSIONS	REFERENCES
- Amyloid-related imaging abnormalities (ARIA) are a common and clinically significant adverse effect of anti-amyloid monoclonal antibody therapies (Fox et al. 2025; Sims et al. 2023; van Dyck et al. 2022) - Selective serotonin and serotonin-norepinephrine reuptake inhibitors (SSRIs/SNRIs) are frequently prescribed in patients with Alzheimer’s Disease (Mo et al. 2025) - SSRI/SNRI’s have been shown to reduce platelet aggregation (Kaye et al. 2025) and have been linked with increased risk of abnormal bleeding, particularly upper GI bleeding (Andrede et al. 2010) → Hypothesis: SSRI or SNRI use may be associated with increased ARIA risk in individuals receiving anti-amyloid therapies	- Retrospective chart review of 57 patients receiving lecanemab or donanemab infusions at University Hospitals (January 1, 2024- August 31, 2025) - ARIA incidence was compared between: - Individuals on SSRI’s or SNRI’s and those not receiving these medications - Secondary analyses: ARIA rates were compared between: - Antidepressant class (SSRI vs. SNRI) - Antidepressant dose (low vs. medium dose)	- There was no statistically significant difference in ARIA rates with vs. without antidepressant use: SSRI/SNRI vs. ARIA → χ^2 p = 0.68 - Descriptively, higher ARIA rates were observed among individuals on SNRI’s (50%) compared to SSRI’s (28.6%), though the sample size was insufficient to allow meaningful statistical comparison SSRI vs. ARIA → Fisher’s p = 0.53 (NS) SNRI vs. ARIA → Fisher’s p = n too low - Sample size was too low to draw conclusions about SSRI/SNRI dose (low vs. medium doses) and ARIA ARIA vs. Low/Medium dose SSRI/SNRI → n too low	- Summary: This provides an initial evaluation of the relationship between antidepressant use and ARIA risk in patients receiving anti-amyloid monoclonal antibody therapies. - We did not identify a statistically significant association between SSRI or SNRI use or dose and ARIA rate. - Limitations: Analyses were limited by small sample size and were retrospective. - Future directions: Larger, prospective studies are needed to further evaluate this relationship and to account for other relevant confounders, including vascular risk factors such as blood pressure.	Andrade C, Sandarsh S, Chethan KB, Nagesh KS. Serotonin reuptake inhibitor antidepressants and abnormal bleeding: a review for clinicians and a reconsideration of mechanisms. <i>J Clin Psychiatry</i>. 2010 Dec;71(12):1565-75. doi: 10.4088/JCP.09r05786bliu. PMID: 21190637. Fox N, Belder C, Ballard C et al. Treatment for Alzheimer's disease. <i>The Lancet</i>. 2025; 406, 1408-1423 Kaye, A.D., Cooper, H.D., Mashaw, S.A., et al. Clinical Implications of Antidepressants and Associated Risk of Bleeding: A Narrative Review. <i>Curr Pain Headache Rep</i> 29, 97 (2025). https://doi.org/10.1007/s11916-025-01412-0 Mo M, Abzhandadze T, Hoang MT, Sacuiu S, Jurado PG, Pereira JB, Naia L, Kele J, Maioli S, Xu H, Eriksdotter M, Garcia-Pladek S. Antidepressant use and cognitive decline in patients with dementia: a national cohort study. <i>BMC Med</i>. 2025 Feb 25;23(1):82. doi: 10.1186/s12916-025-03851-3. PMID: 39994788; PMCID: PMC11854023. Sims JR, Zimmer JA, Evans CD, Lu M, Ardayfio P, Sparks J, Wessels AM, Shcherbinin S, Wang H, Monkul Nery ES, Collins EC, Solomon P, Salloway S, Apostolova LS, Hansson O, Ritchie C, Brooks DA, Mintun M, Skovronsky DM. TRAILBLAZER-ALZ 2 Investigators. Donanemab in Early Symptomatic Alzheimer Disease: The TRAILBLAZER-ALZ 2 Randomized Clinical Trial. <i>JAMA</i>. 2023 Aug 8;330(6):512-527. doi: 10.1001/jama.2023.13239. PMID: 37459141; PMCID: PMC10352931. van Dyck CH, Swanson CJ, Aisen P, Bateman RJ, Chen C, Gee M, Kanekiyo M, Li D, Reyderman L, Cohen S, Froelich L, Katayama S, Sabbagh M, Vellas B, Watson D, Dhadda S, Irizarry M, Kramer LD, Iwatsubo T. Lecanemab in Early Alzheimer's Disease. <i>N Engl J Med</i>. 2023 Jan 5;388(1):9-21. doi: 10.1056/NEJMo2212948. Epub 2022 Nov 29. PMID: 36449413.
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