



Treatment Patterns in Alzheimer's Disease and Related Dementias Among Medicare Beneficiaries in the United States Between 2011–2021

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Background

- Alzheimer's disease is the most common type of dementia, accounting for 50%-75% of all cases. It is estimated that about 50 million people worldwide are affected by Alzheimer's disease and related dementia (ADRD).^{1,2}
- Anti-dementia drugs were in the top 15 drugs prescribed by cost in Medicare Part D in 2013 and continue to impact future Medicare spending.^{3,4}
- However, real world research on treatment patterns of ADRD medications in Alzheimer's disease and mild cognitive impairment (MCI) remained limited

Objective

- This study aimed to characterize treatment patterns and temporal trends in the use of ADRD medications among US Medicare beneficiaries.

Methods

- Used a 50% random sample of Medicare fee-for-service data from 2011–2021
- For each calendar year, identified beneficiaries with:
 - Continuous medical and pharmacy enrollment
 - ≥1 diagnosis claim for ADRD
 - ≥1 prescription claim for an ADRD medication
- Excluded beneficiaries with incomplete enrollment during the calendar year or any nursing home residence
- Conducted sensitivity analyses evaluating concomitant ADRD combination therapy and off-label antipsychotic use

Results

Table 1: Baseline demographic and characteristics of study participants

Characteristics	ADRD	MCI
Total ADRD episodes	2,242,917	428,819
Unique beneficiary	1,049,432	298,452
Age, mean (SD), years	81.5 (7.2)	78.3 (7.2)
Gender		
Female, N (%)	1,443,412 (64.4)	245,059 (57.1)
Male, N (%)	799,505 (35.6)	183,760 (42.9)
Race and Ethnicity		
White, N (%)	1,751,677 (78.1)	369,652 (86.2)
Black, N (%)	188,225 (8.4)	19,942 (4.7)
Hispanic, N (%)	180,466 (8.0)	19,295 (4.5)
Other, N (%)	122,549 (5.5)	19,930 (4.6)

Figure 2: Trends of ADRD combination therapies in ADRD cohort (2011-2021)

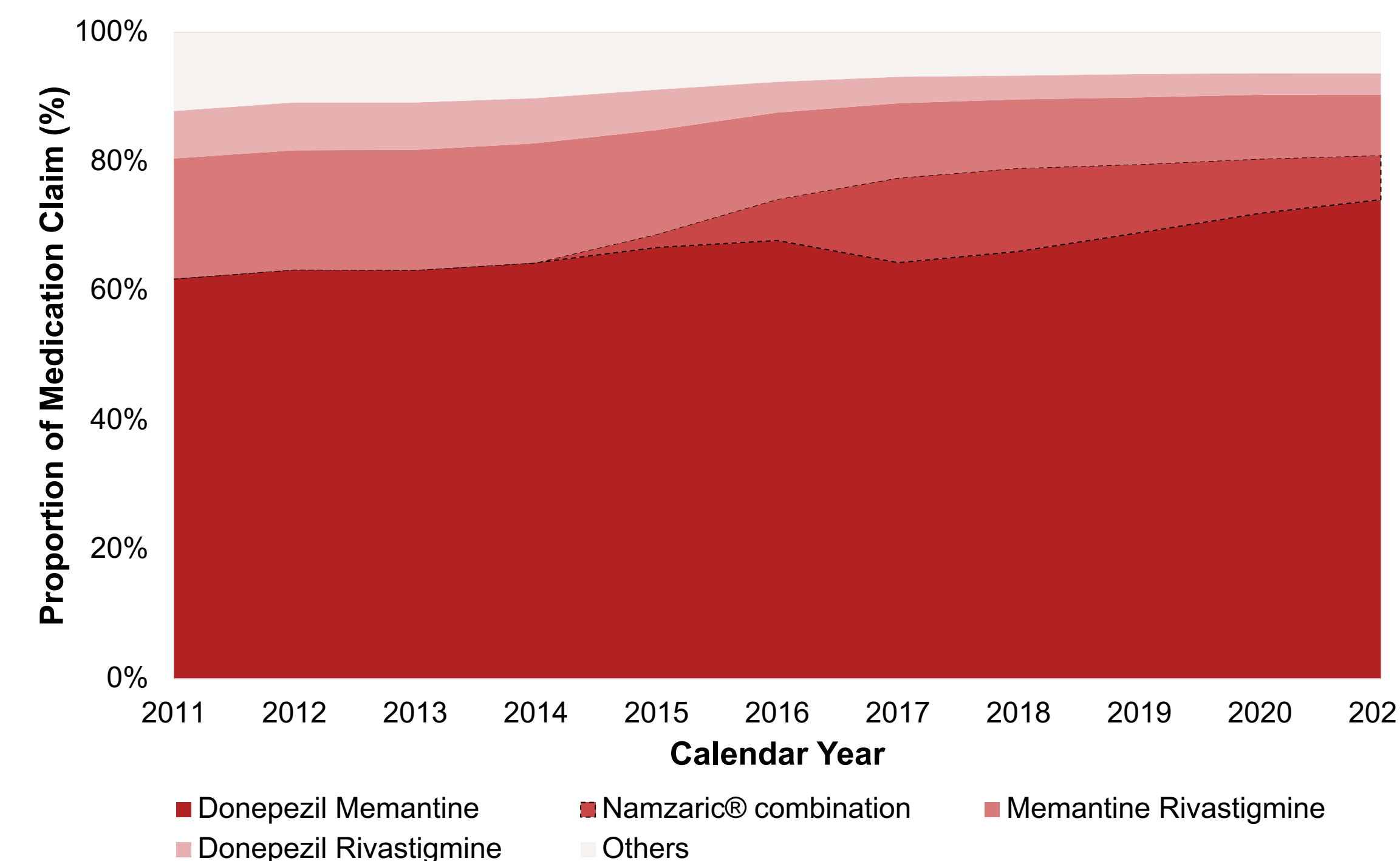


Figure 1: Trends of ADRD medication use in ADRD cohort (2011-2021)

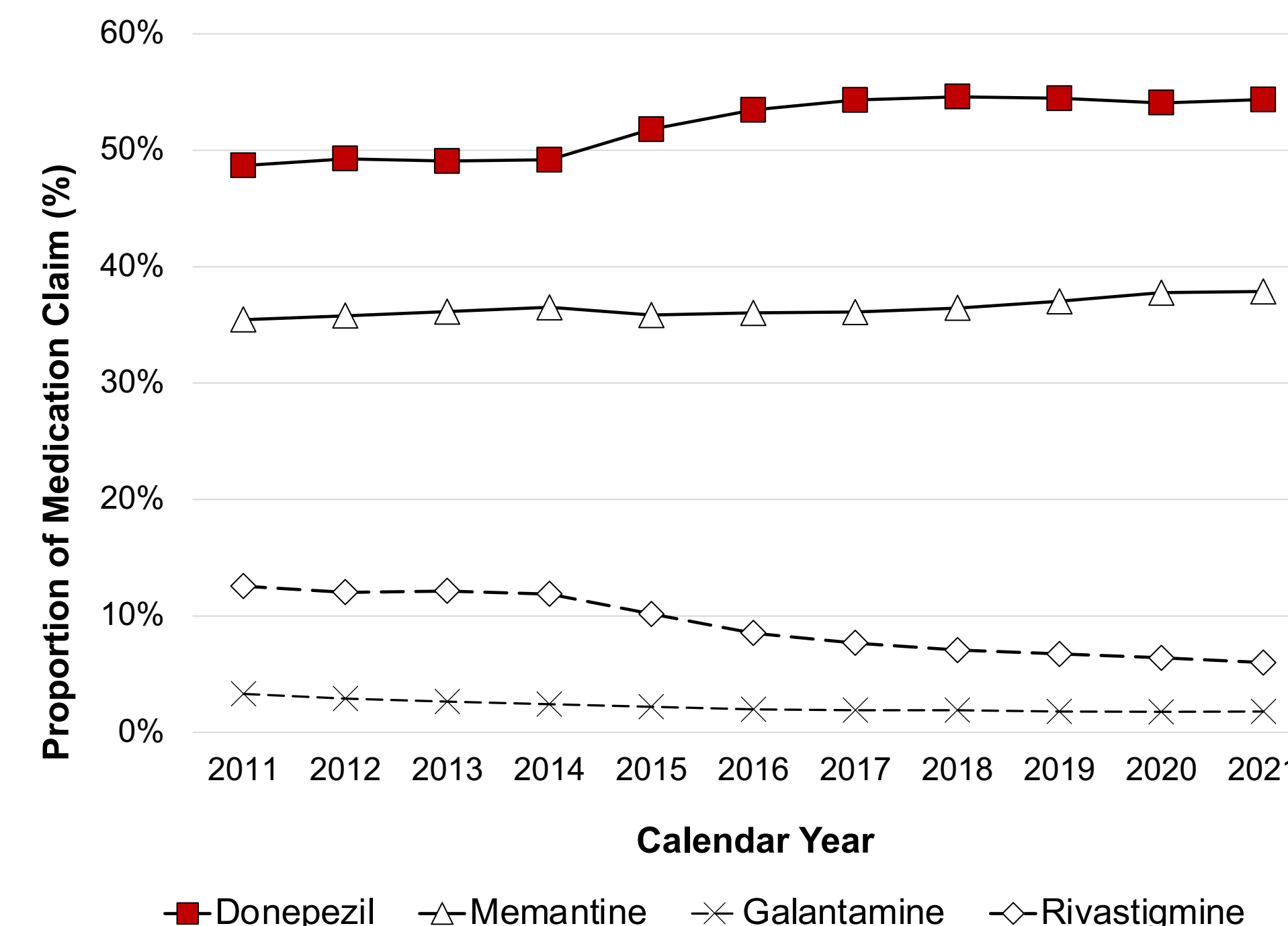
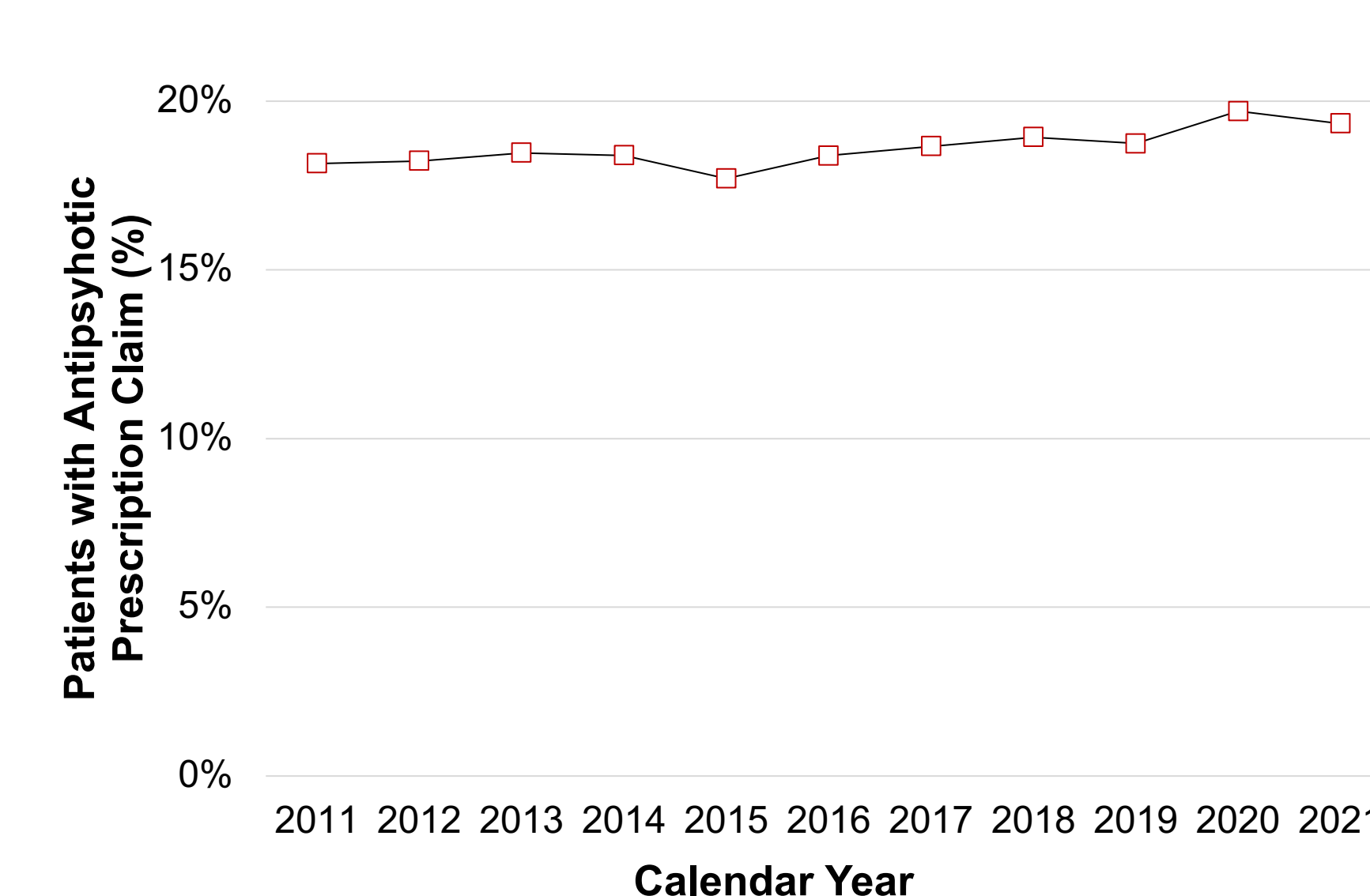


Figure 3: Proportion of antipsychotic prescriptions among ADRD patients without psychotic diagnosis (2011-2021)



Conclusions

- ADRD medication use remained largely stable over time, with donepezil and memantine continuing to dominate treatment patterns.
- Donepezil plus memantine remained the most common dual regimen; use of fixed-dose Namzaric® emerged after approval but remained notable despite availability of lower-cost generic alternatives.
- Antipsychotic use among ADRD patients without a documented psychotic diagnosis increased steadily over the study period, exceeding 18% by 2021.
- Findings were similar among patients with MCI.

References

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Author Contact and Disclosures

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