

DEVELOPMENT OF ALZHEIMER'S DISEASE AND EXPOSITION TO BENZODIAZEPINES: A COHORT STUDY IN A HEALTH REGION OF CATALONIA BETWEEN 2002 AND 2015



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BACKGROUND

✓ Alzheimer's disease (AD) is the main cause of dementia in the western population. Sleep disturbances have been shown to increase the risk of AD, however, benzodiazepine (BZD) consumption has also been shown to increase this risk in some cohort studies.

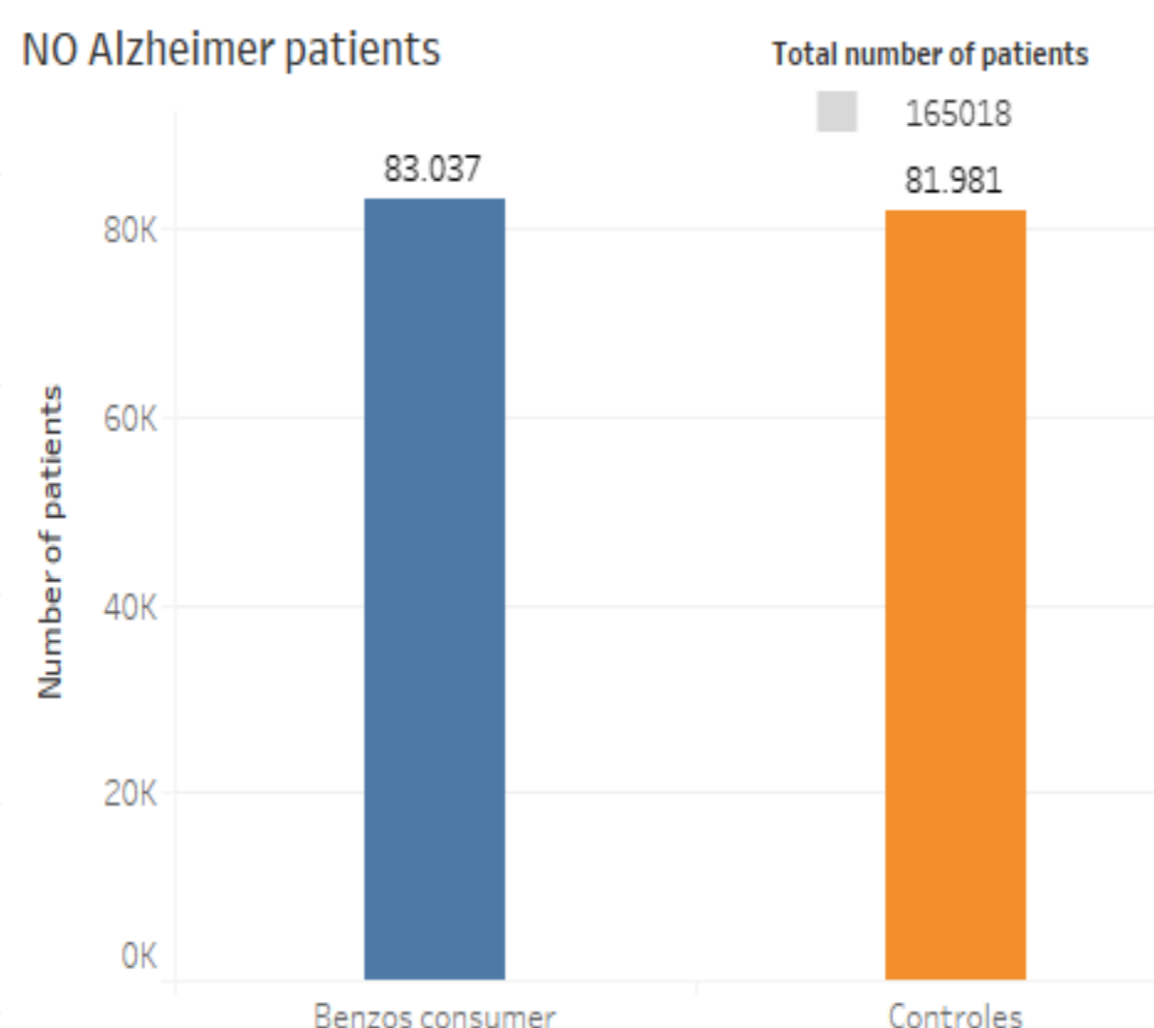
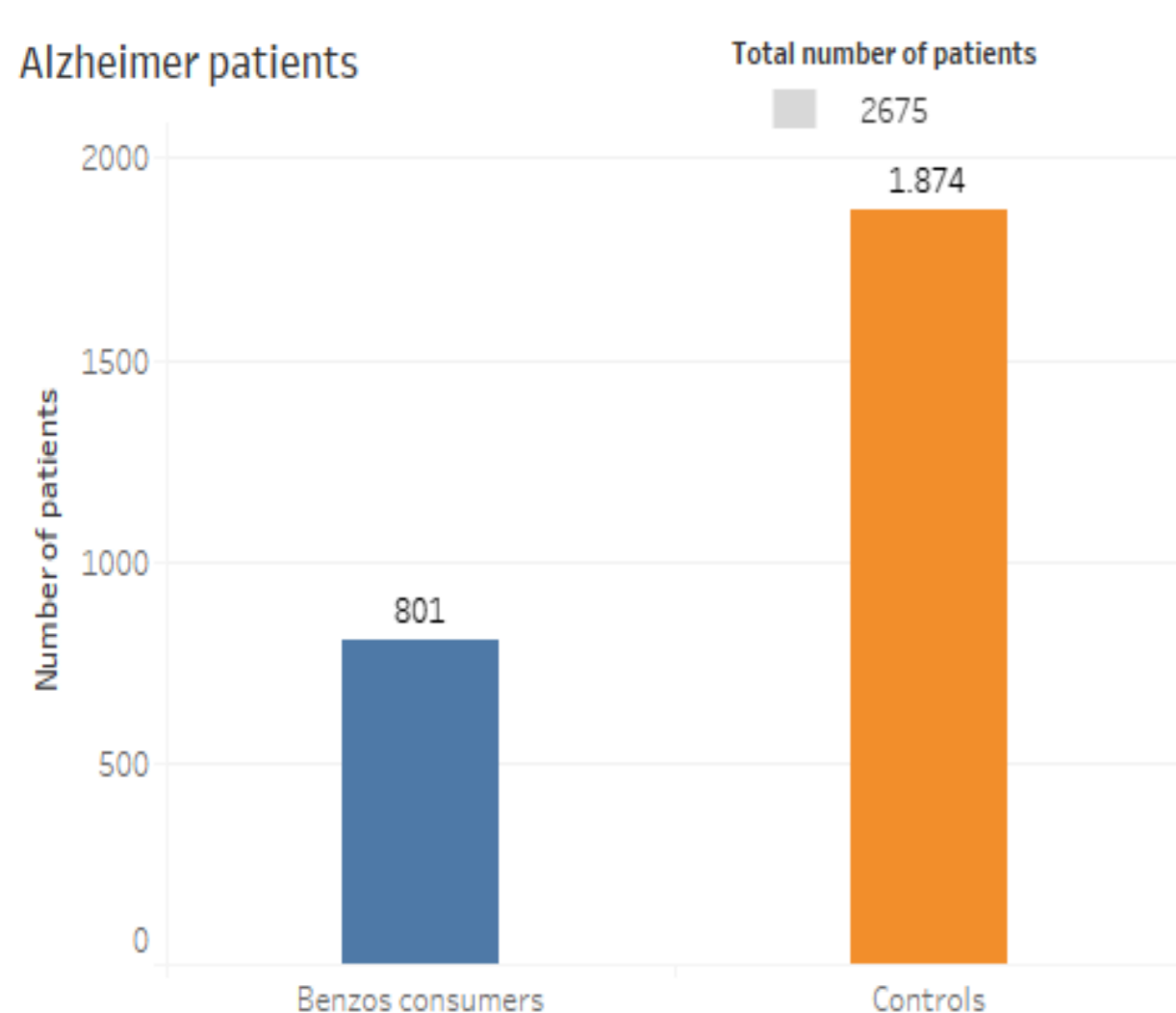
PURPOSE

✓ The objective of the study was to assess the risk of AD incidence in a cohort of patients exposed to BZD.

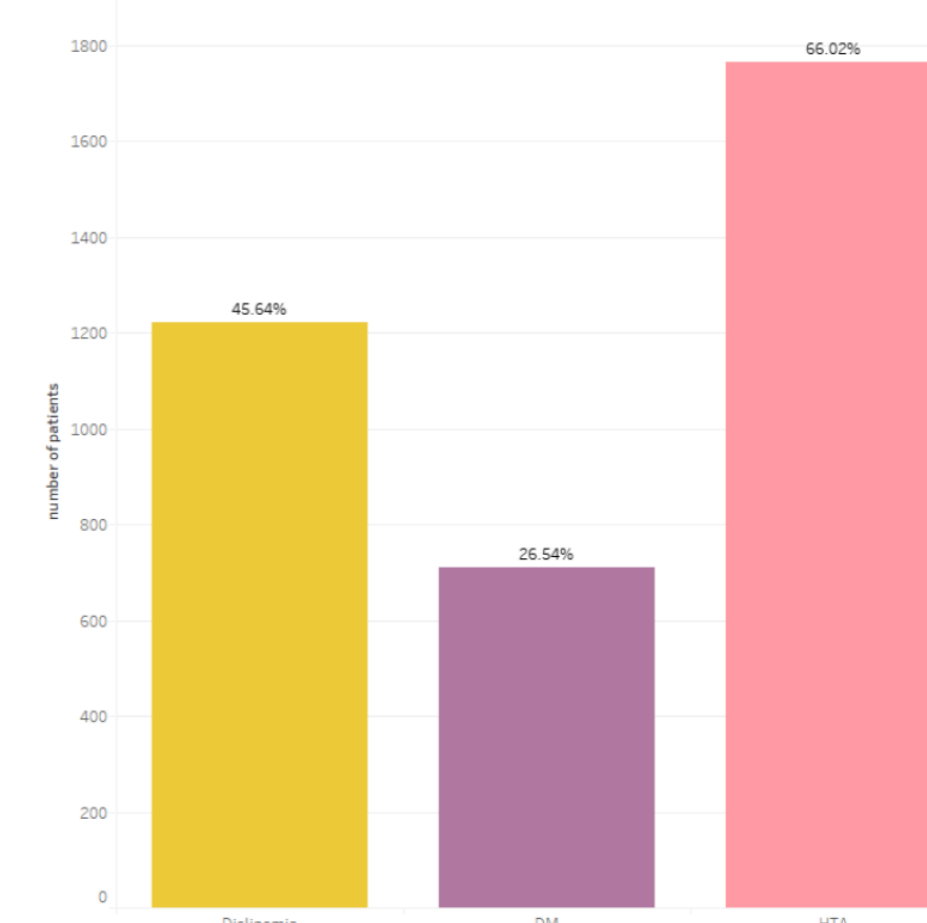
METHODS

- ✓ Community-based retrospective cohort study from January 1, 2002 to December 31, 2015.
- ✓ Consumptions were expressed in defined daily doses (DDD) accumulated by individual.
- ✓ Three DDD intervals were established (1 - 90, 90 - 180 and > 180).
- ✓ The patients treated with BZD during the 5 years immediately prior to diagnosis were excluded.

RESULTS



Alzheimer patients other illness prevalence



Alzheimer Benzos consumer
Num of different types of the consumed benzos



Dose consumption (90, 180DDD)

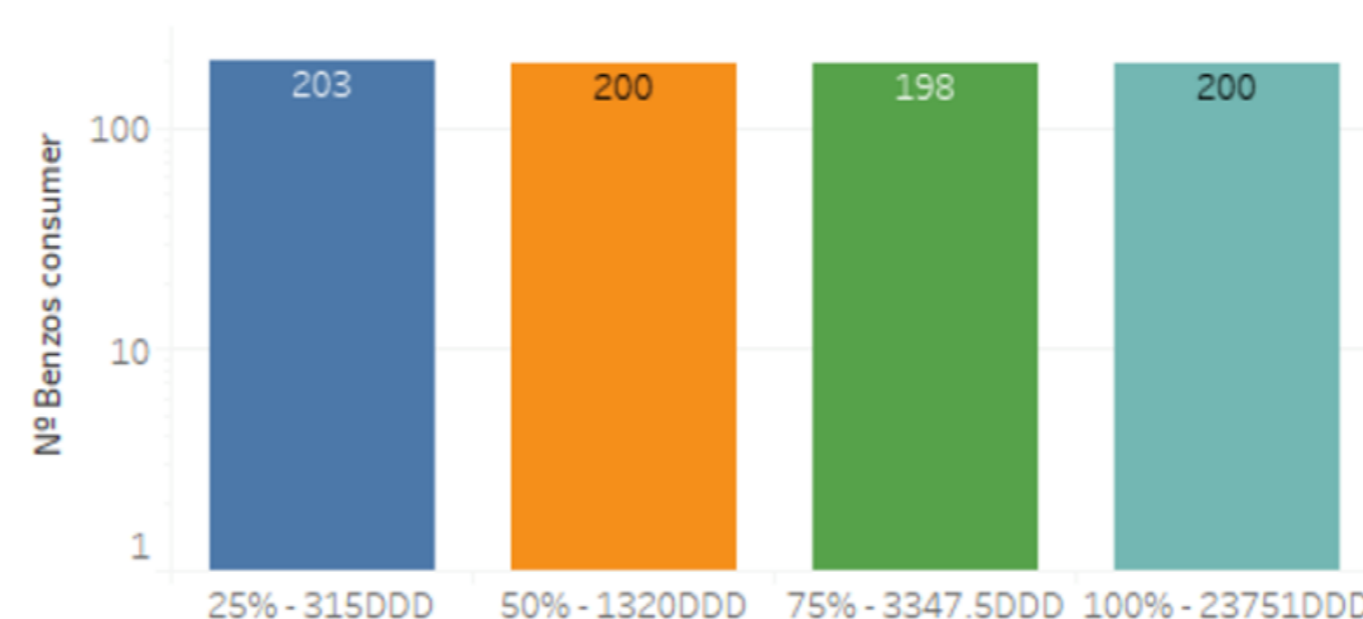
num patients

801

num type benzos consumed

Alzheimer Benzos Quartiles

Dose consumption (Quartile)



features	coefficient
6	EDAT_T 0.584489
10	total_benzos 0.110106
11	Short to intermediate consumption 0.092505
7	total_corta_intermedia 0.090555
5	hta 0.052132
2	ansietat 0.024976
0	SEXE 0.015351
8	total_int_larga 0.009234
4	diabetes 0.007828
3	ci 0.006092

Random Forest

CONCLUSION

- ✓ The long-term use of BZD increases the risk of developing AD.
- ✓ The establishment of new treatments with BZD should be restricted to the most serious cases and programs of de-prescription should be developed.