

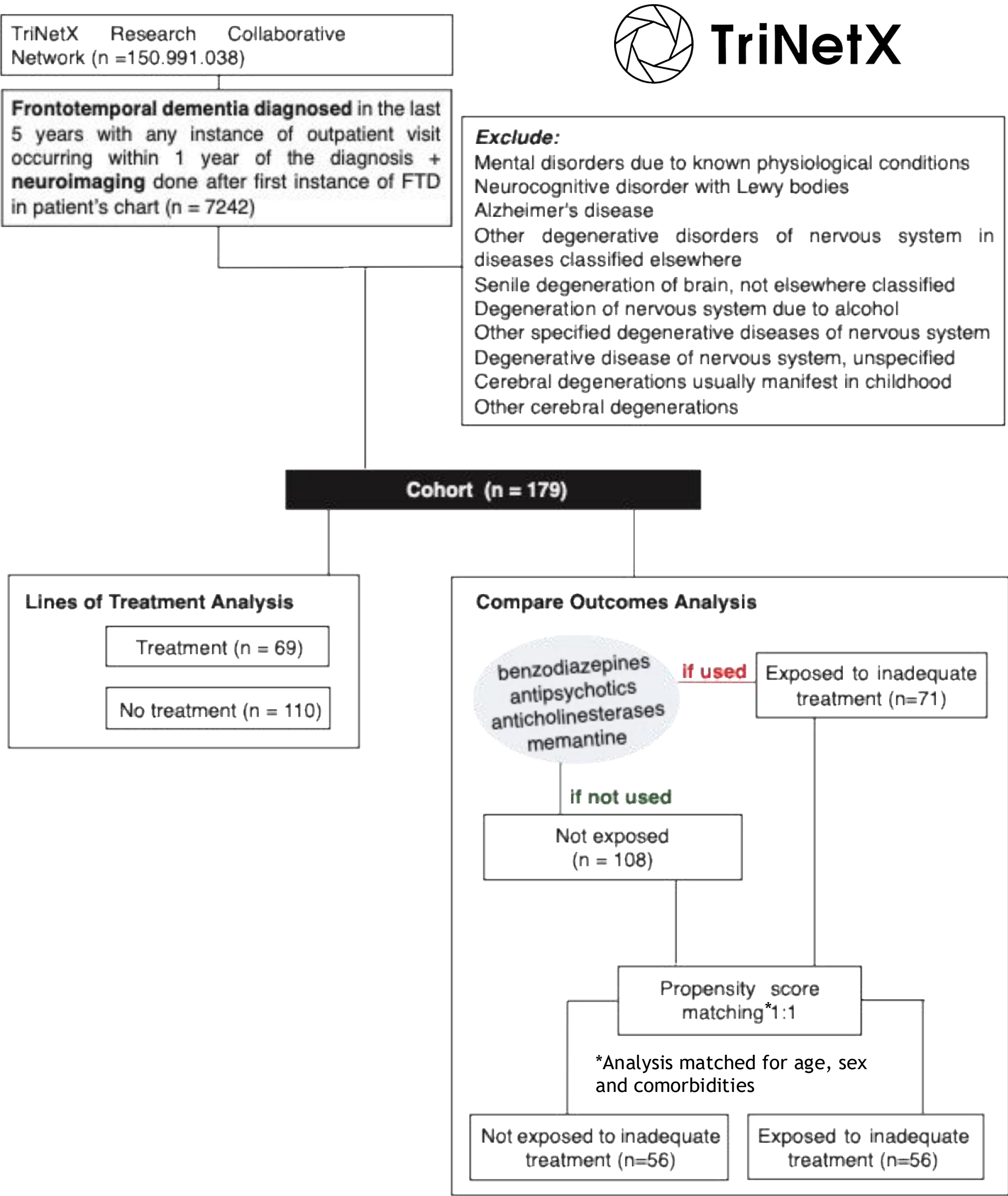
Pharmacological Management In Frontotemporal Dementia And Patient Outcomes: A Retrospective Cohort Study Utilizing The TriNetx Platform

Author Block: Lorenza Pabst Botton¹, Fernando Lazzaretti¹, Carlos Lockschin¹, Jaderson Costa da Costa², Bruce Miller³, Lucas P. Schilling¹, Cristiano Schaffer Aguzzoli²
¹School of Medicine, PUCRS, Porto Alegre, Brazil, ²Brain Institute of Rio Grande do Sul, Porto Alegre, Brazil, ³Department of Neurology, University of California, San Francisco, CA, USA.

Introduction

- Frontotemporal dementia (FTD) is characterized by a progressive decline in behavior, executive functions, and/or language.
- In the absence of standardized treatment protocols, prescribing practices are largely empirical and often include potentially harmful medications (PHM) - such as antipsychotics, benzodiazepines, and Alzheimer’s disease medications (anticholinesterases, memantine).
- This study examined prescribing patterns after FTD diagnosis and compared hospital-based acute care (HBAC) outcomes between patients exposed and not exposed to PHM.

Methods



- Statistical Analysis:** logistic regression models and survival analysis to compare clinical outcomes between groups.

Results

- Among 179 individuals with FTD (mean age 67.9 ± 14.9 years; 48.0% women), 71 (39.7%) were exposed to potentially harmful medications (PHMs) (**Figure 1**).
- Overall, 38.6% of patients received at least one PHM, most commonly benzodiazepines (69.5%), followed by antipsychotics (30.4%) and Alzheimer’s disease medications (15.9%).
- In matched analyses, PHM exposure was associated with a significantly higher HBAC risk (RR 2.2, 95% CI 1.35-3.57) and lower event-free survival (12.8% vs. 62.7%) (**Figure 2**).

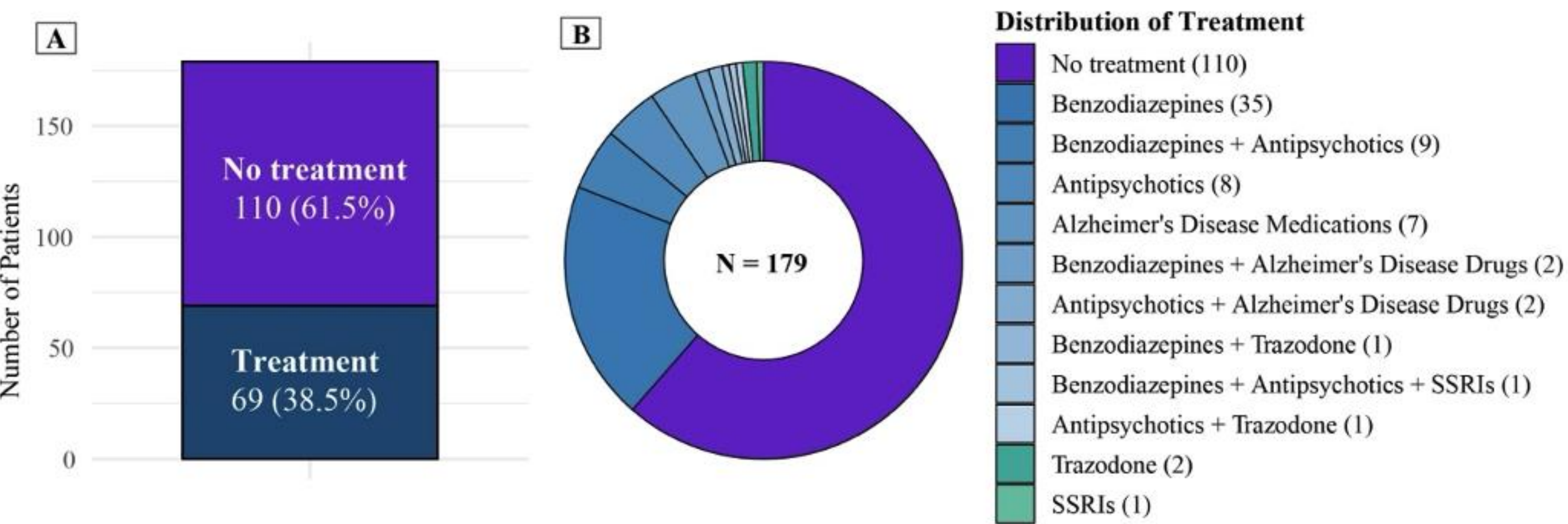


Figure 1: Panel A shows the total number of patients who did and did not receive any medications included in the query. Panel B breaks down the subgroup of treated patients (N = 69) by pharmacological regimen. Patients who received no pharmacological treatment or medications not included in the LOT module are grouped as “No treatment”.

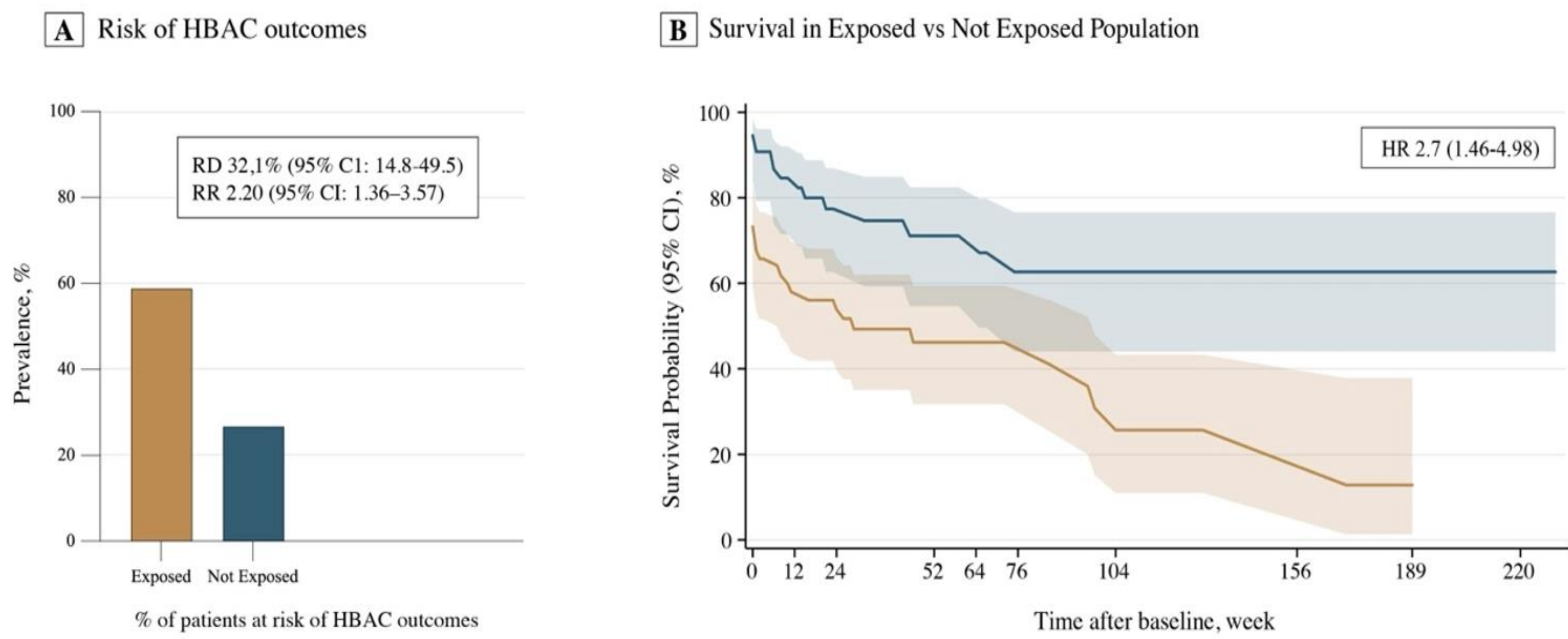


Figure 2: Individuals exposed to PHMs presented higher risk for HBAC outcome (RR 2.2; 95% CI 1,36-3,57) (**Panel A**). Survival analysis comparing exposed and non-exposed groups (**Panel B**) revealed lower event-free probability when exposed to PHMs (12.83% vs. 62.65%), with median time to event in the exposed group of 201 days. Log-rank test was significant (p < 0.001), with a 2.69-fold higher hazard in the exposed group.

Discussion

- Our findings suggest that PHM are frequently prescribed in FTD and are associated with increased HBAC outcomes in this patient population.
- Re-thinking prescription practices and continuous physician education in dementia care could help mitigate the risks associated with current treatment approaches.

Acknowledgments



References



Contact



Cognitive
Neurology Lab