

BACKGROUND

- Atopic dermatitis (AD) is a chronic inflammatory disease that affects approximately 2.7% of individuals in Brazil.
- Elderly patients, particularly those unresponsive to conventional treatments, may have higher health risks and associated healthcare costs.

OBJECTIVES

- To analyze risk of hospitalizations due to AD among elderly patients in the Brazilian public health system.

METHODS

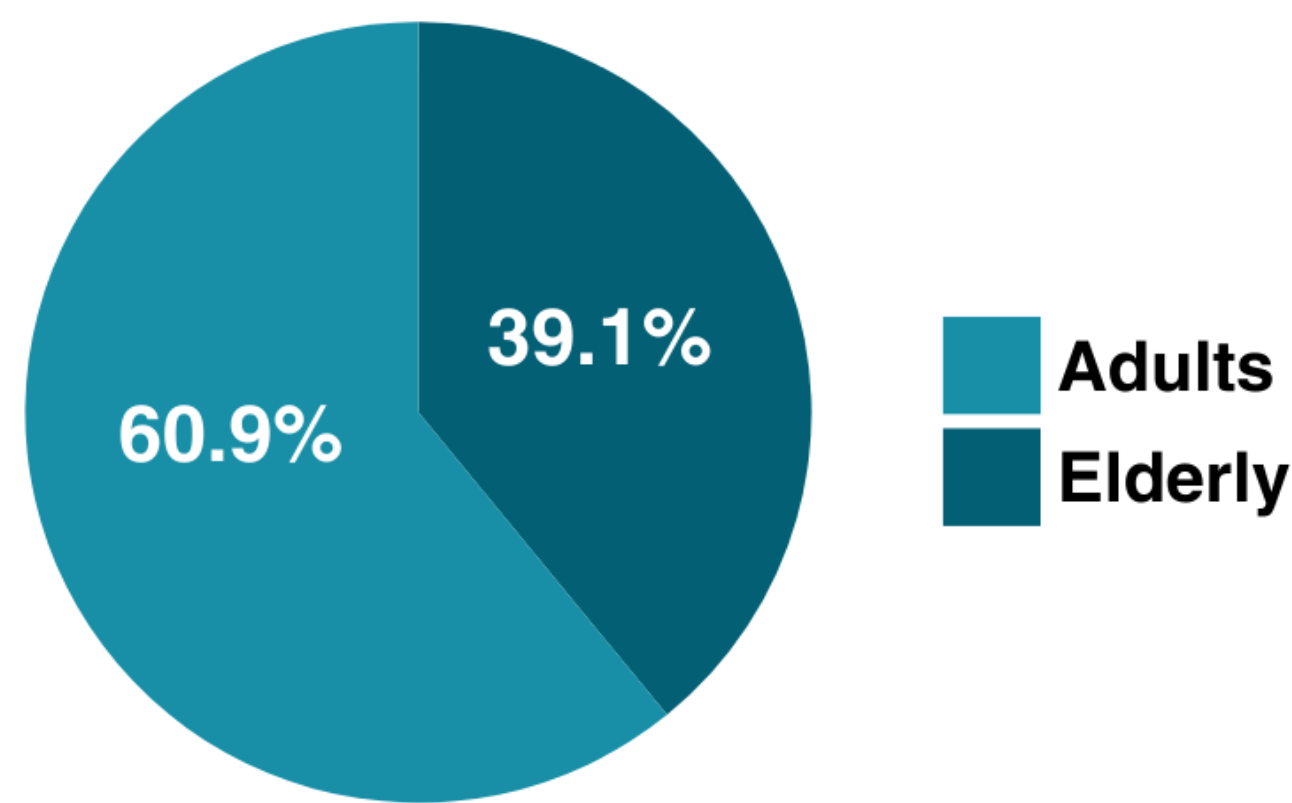
- The Brazilian population in 2023 was estimated based on projections from the Brazilian Institute of Geography and Statistics.
- The prevalence of AD was estimated according to the Global Burden of Disease Study (2021).
- Data extraction from the Brazilian public health database (DATASUS) was carried out using the "microdatasus" package in R Software, resulting in a database containing all Hospital Admission Authorizations (AIH) recorded in 2023 in the Hospital Information System (SIH).
- Hospitalization data were retrieved using the national procedure code for dermatitis and eczema treatment, and the ICD-10 codes for AD:
 - > L20.0 (Besnier's prurigo), L20.8 (other atopic dermatitis), L20.9 (atopic dermatitis, unspecified), L30.3 (infective dermatitis), L30.8 (other specified dermatitis), L30.9 (dermatitis, unspecified).
- Variables analyzed included the number and duration of hospitalizations, as well as associated costs, stratified by age (adults [≥ 18 to < 60 years old] and elderly [≥ 60 years old]) and sex (female and male).
- Relative risk of hospitalization was estimated according to age group.
- Cost are presented in Brazilian currency - Real (R\$).
- Data analysis was conducted on R. The Mann-Whitney test was used to compare groups. Results are presented as median (range) and relative risk (RR) with 95% confidence interval (95% CI).

RESULTS

- An estimated 1.5 million adults and 438 thousand elderly individuals were affected by atopic dermatitis (AD) in Brazil. There were 411 hospitalizations among adults and 264 among the elderly (Figure 1).

Figure 1: Number of atopic dermatitis-related hospitalizations in adults and elderly individuals in 2023.

Adults: ≥ 18 to < 60 years old
Elderly: ≥ 60 years old



- Hospitalization costs were higher in elderly patients compared to adults (adult group: R\$ 361.31 [224 to 9,837]; elderly group: R\$ 375.39 [224 to 2,727]; $p < 0.001$).

Figure 2: Days of hospital admission in adults and elderly individuals in 2023.

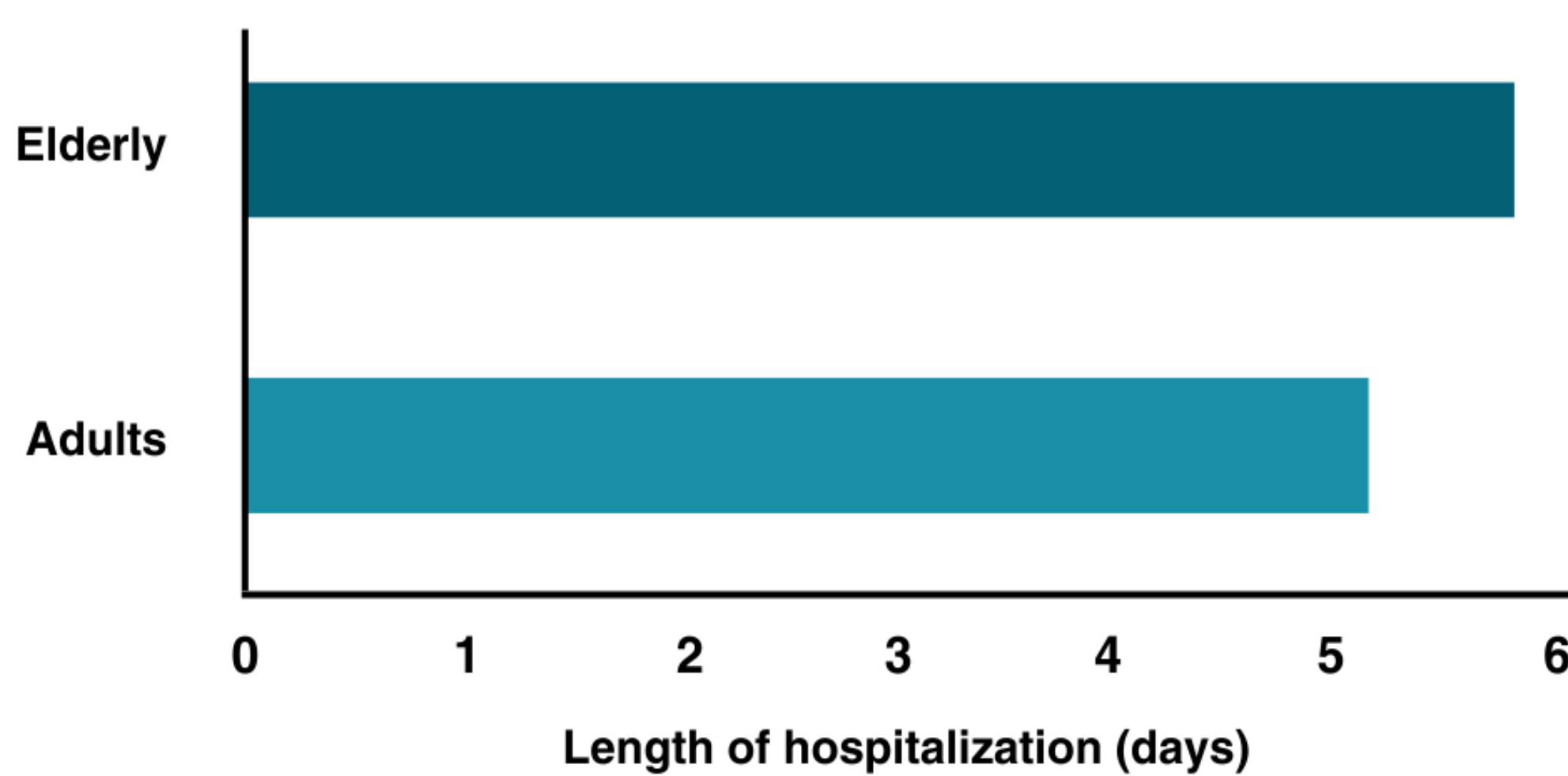


Figure 3: Costs of hospital admission in adults and elderly individuals in 2023.

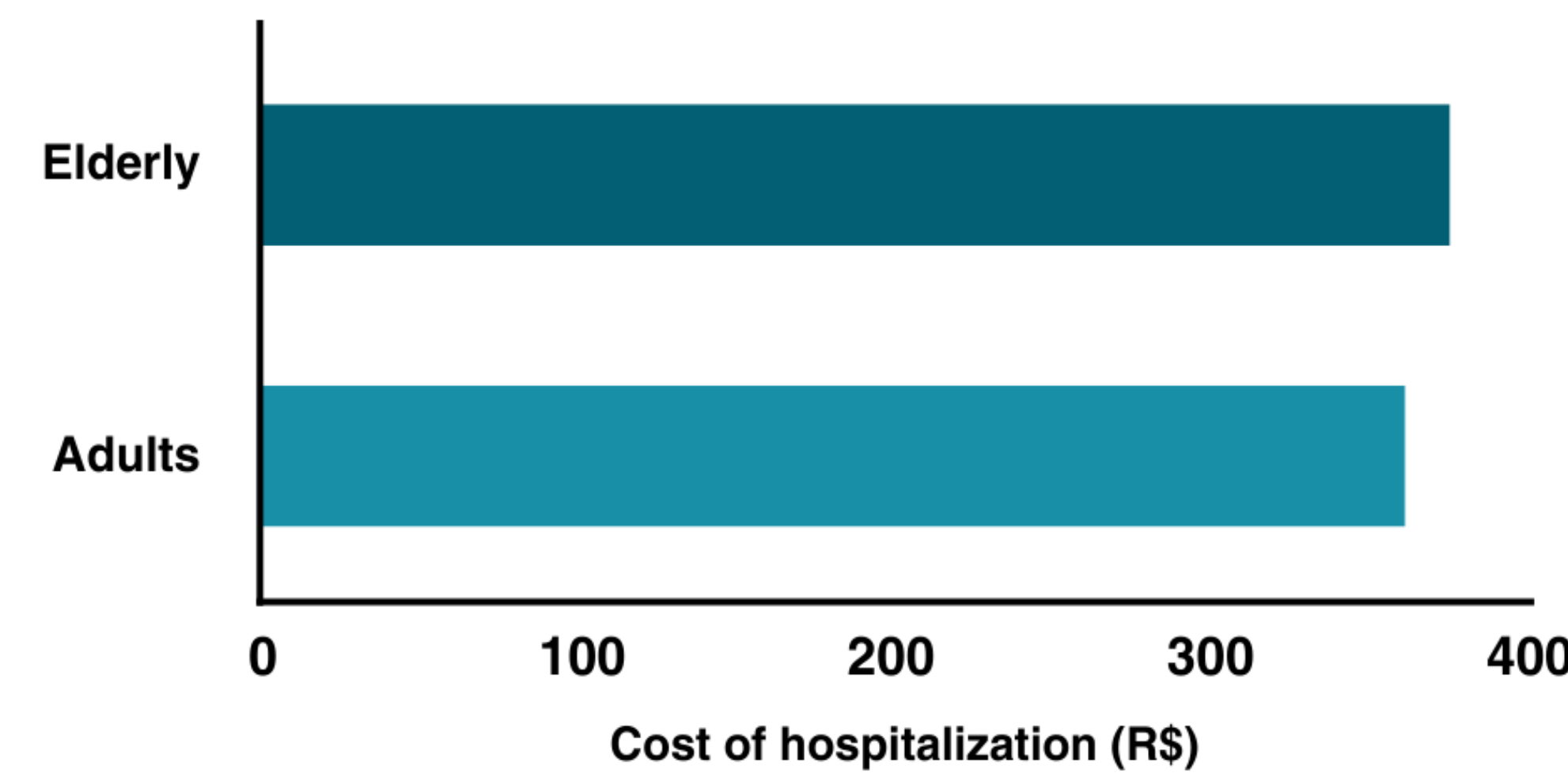
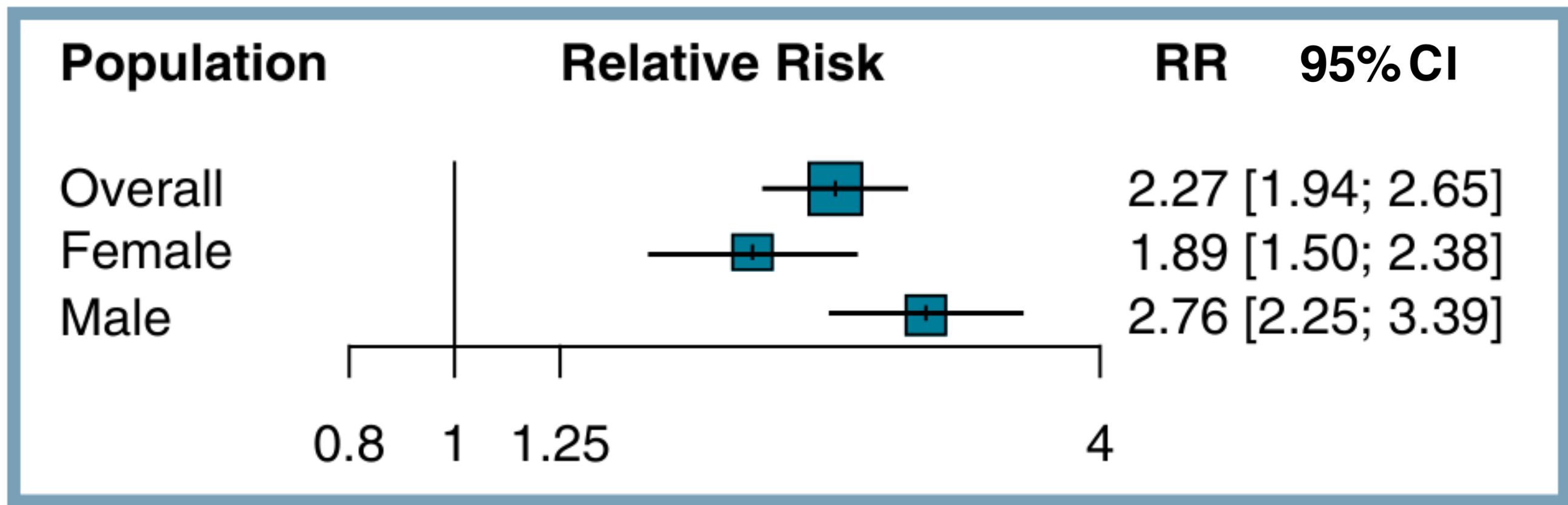


Figure 4: Overall and subgroup hospitalization risk of elderly (≥ 60 years old) compared to adults (≥ 18 to < 60 years old).



CONCLUSION

- The study highlights a higher risk of hospitalizations in elderly patients due to AD compared to adults, consistent in men and women.