

ANALYSIS OF ADVERSE DRUG REACTIONS LEADING TO HOSPITAL ADMISSION IN A REGIONAL HOSPITAL

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BACKGROUND AND IMPORTANCE

Adverse Drug Reactions (ADR), which are harmful and unintended effects related to medication, can increase morbidity and mortality. According to literature, the incidence of hospital admissions (HA) due to ADR range between 1-28%; leading to hospital stays and related cost between 1-8 days and €2,000-6,000, respectively. Gastrointestinal and nervous systems disorders are the most common adverse effects; being drugs acting on nervous system as mainly involved on them.

OBJECTIVES

Primary objective is to determine the prevalence of HA due to ADR. Secondary objectives are to describe: groups of drugs involved, adverse effects, length of hospital stay, and associated costs.

MATERIALS AND METHODS

Retrospective Study on ADR-HA (Jan 2022 - Aug 2023)

Evaluate the proportion of ADR-HA in relation to:

Emergency department (ED) visits due to ADR

Total hospital admissions

Drugs involved → ATC Classification (1st level)
Adverse effects → MedDRA Classification (5th level)
Length of stay (LOS) → Days of hospitalization
Associated costs → Euros (official fees)

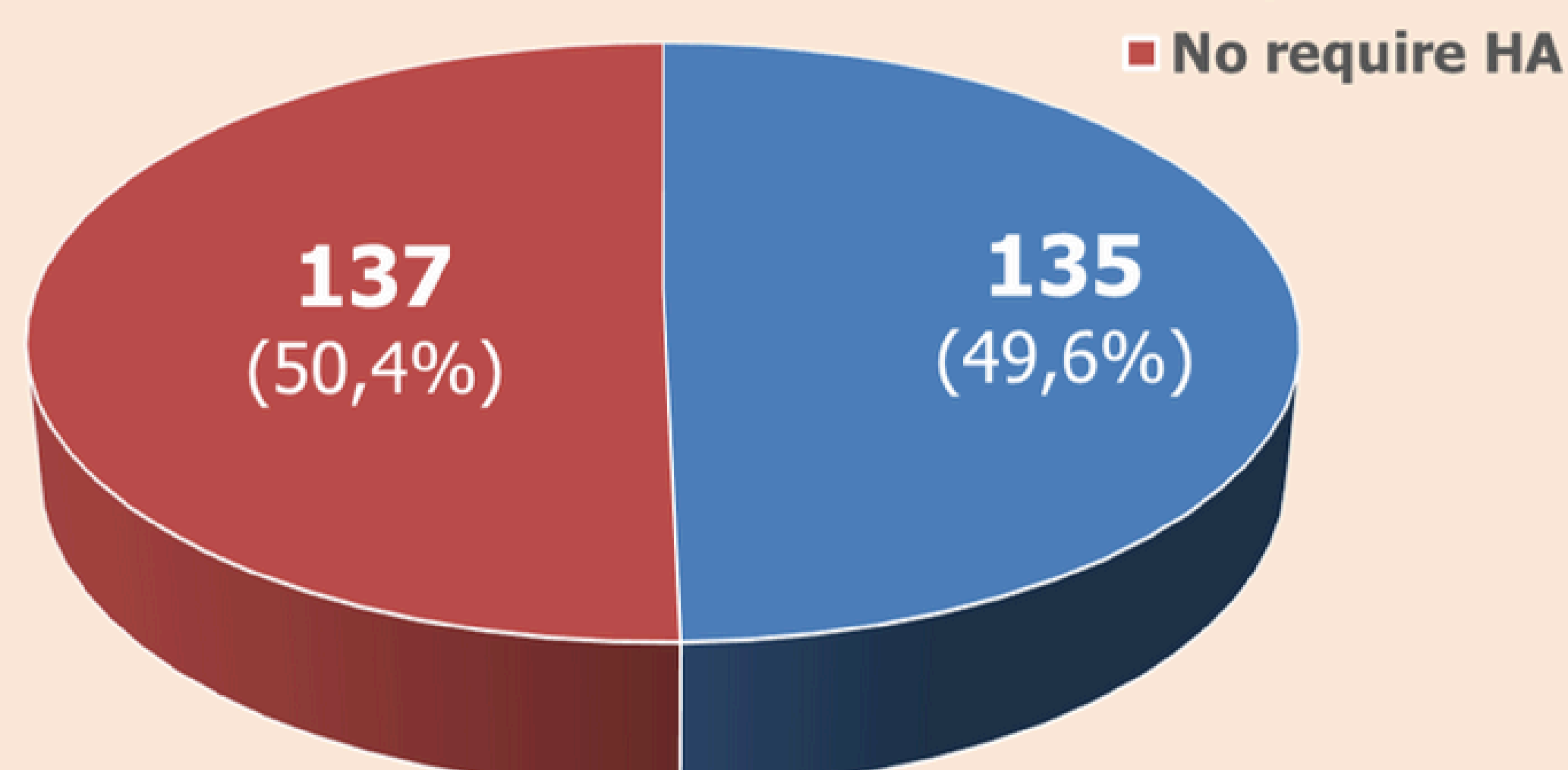
RESULTS

Mean age: 69±19 years.
Women: 53.3%. Men: 46.7%.

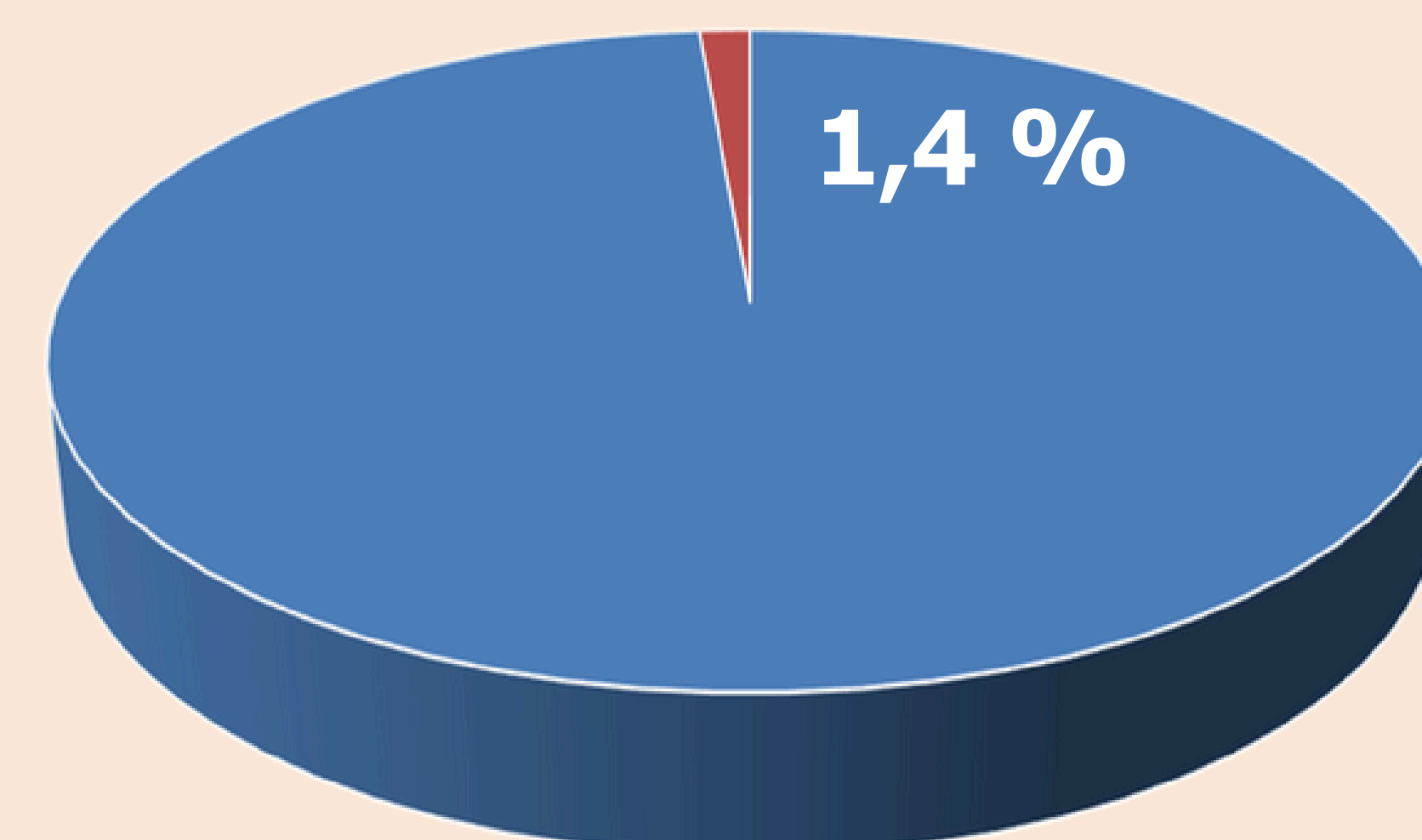
Mean IH duration per ADR:
6.3±4.6 days.

Mean IH cost per ADR:
6,749.6±4,964.7 €/patient.

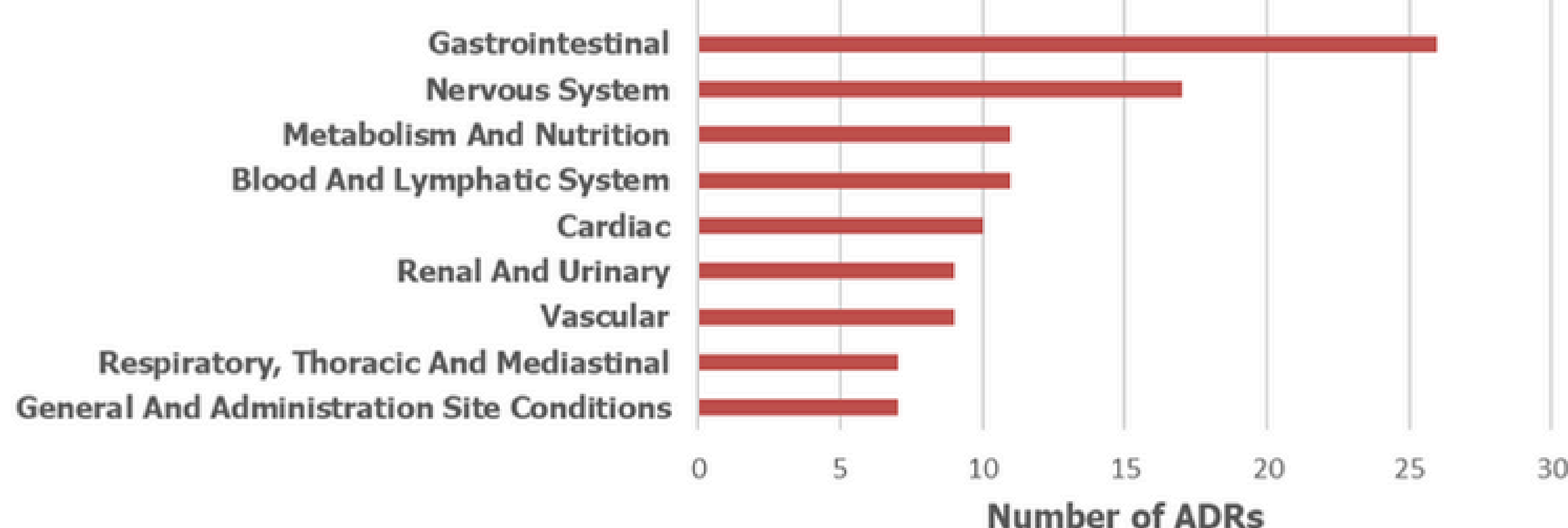
Visits for ADR



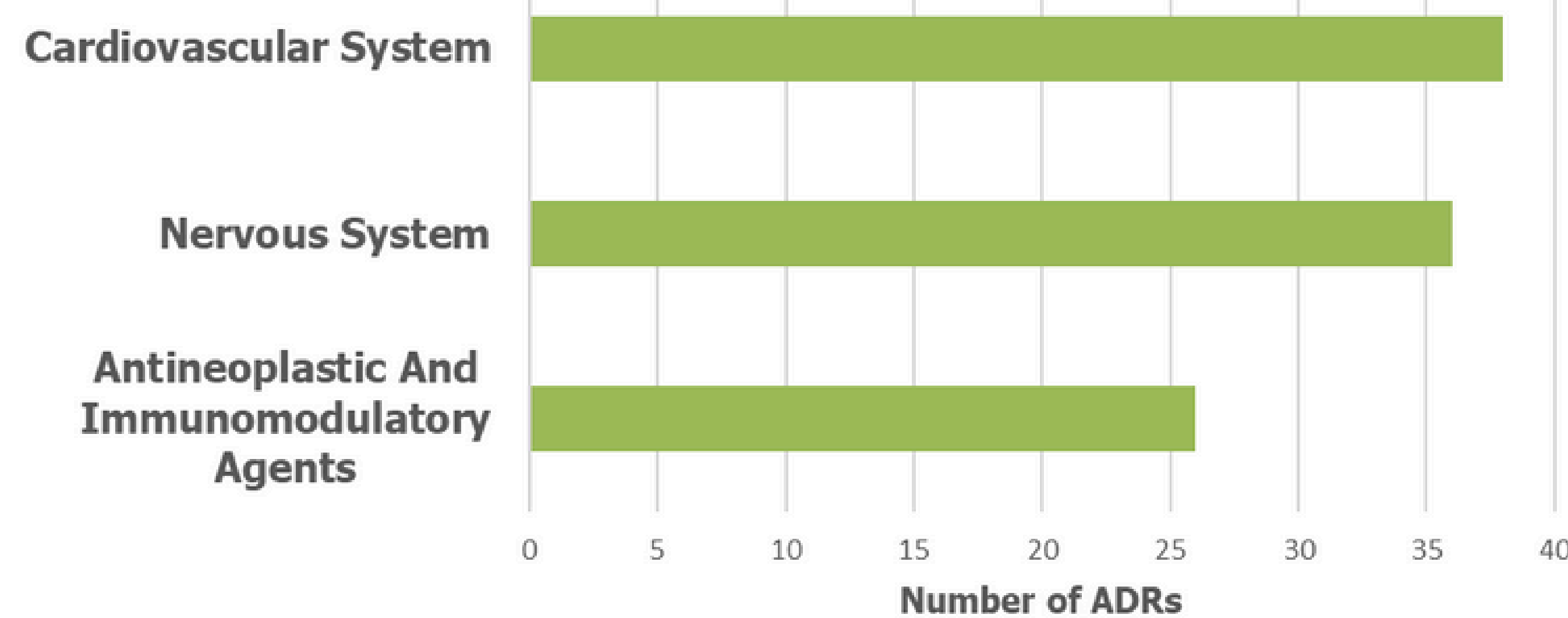
Incidence of HI due to ADR



Main Adverse Reactions



Main Drugs Involved



CONCLUSION AND RELEVANCE

Our ADR-HI incidence (1.4%) and its impact on hospitalization (6 days, €6,700) align with the literature. The most affected systems (gastrointestinal and nervous) are also consistent. However, in our study, cardiovascular drugs predominated, unlike other studies including the ED setting, where nervous system drugs are more common.

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