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BACKGROUND AND IMPORTANCE

Adequate dose titration in patients with **renal impairment** is crucial to **avoid adverse effects** and to **achieve therapeutic goals**.

Dose reduction at baseline is not recommended to achieve desired plasma levels and to prevent the development of resistance.

AIM AND OBJECTIVES

- ✓ To assess the **inadequacy** of prescribed **antibiotic doses** according to **renal function**
- ✓ To identify the **medical services** involved.

MATERIAL AND METHODS

- Cross-sectional, descriptive study
- Patients > 18 years old with **antibiotic prescribed**
- **Variables:** age, sex, prescribing specialty, antibiotic, dose and glomerular filtration rate
- Data collection: **Medical history** and **electronic prescription programme**

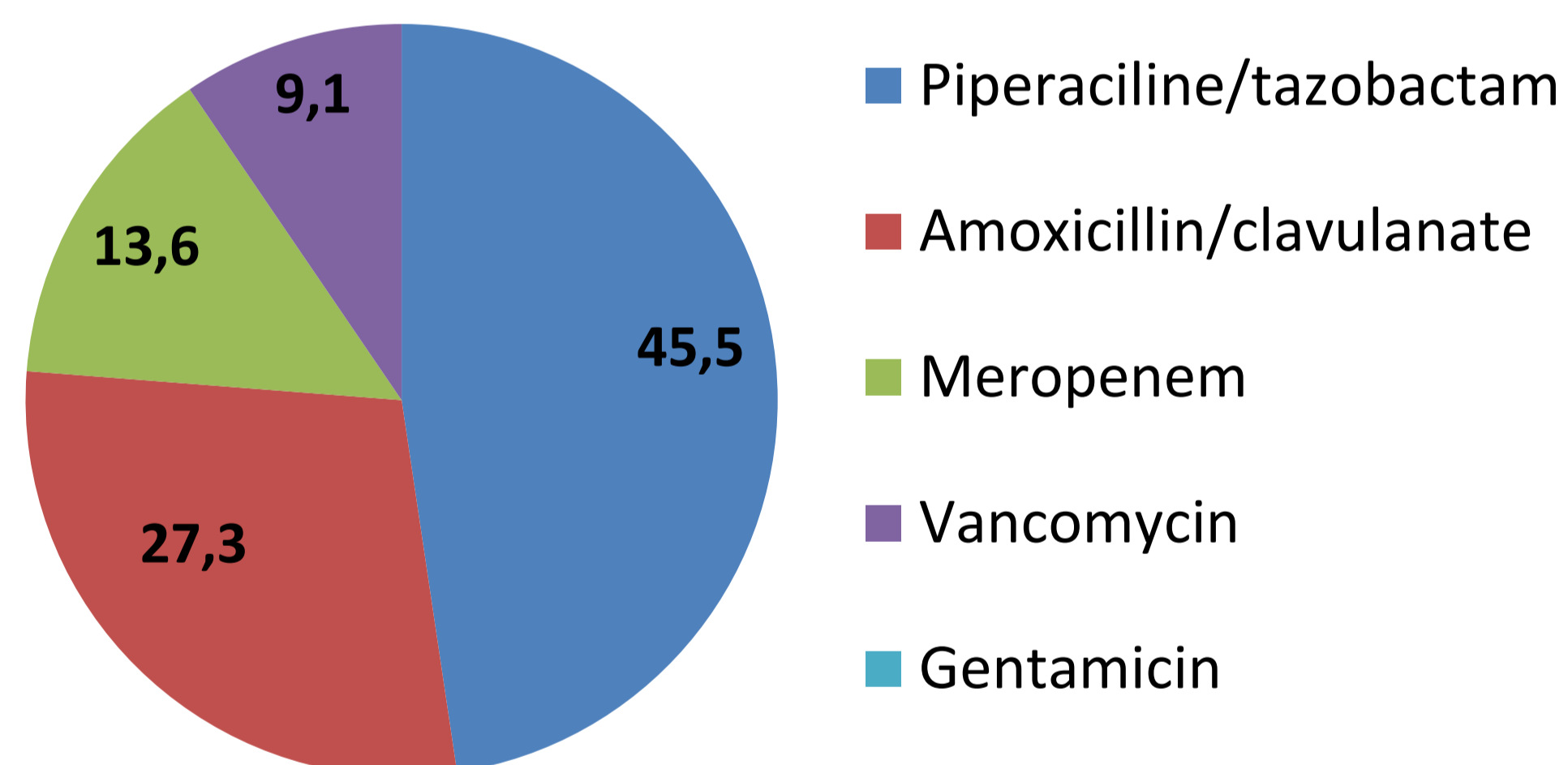
Prescriptions were reviewed according to the Hospital Antimicrobial's Guidelines.



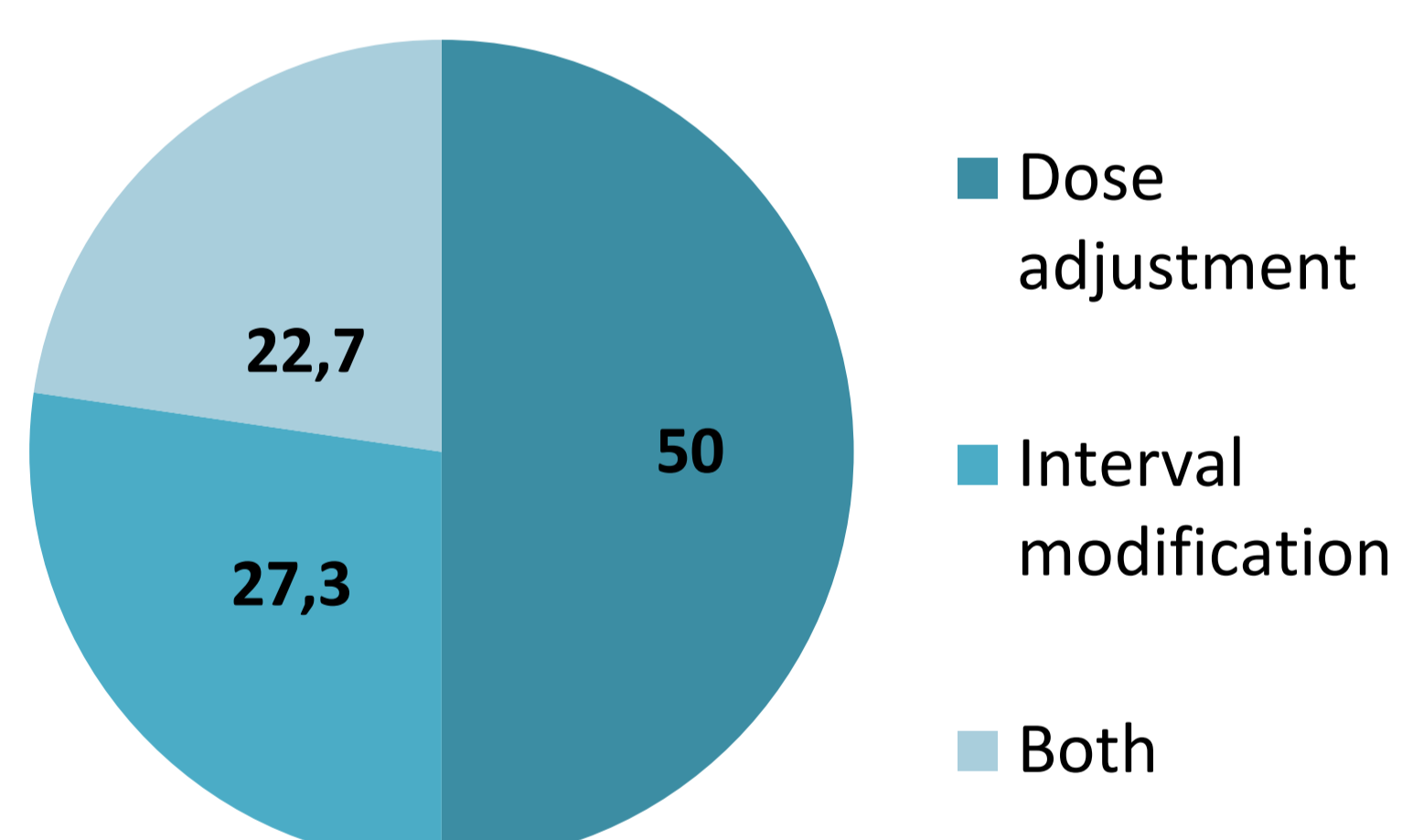
RESULTS

227 prescriptions from 200 patients (54% men, mean age 68 years) were reviewed.
9.7% of these prescriptions were **not correctly adjusted to glomerular filtration rate**.

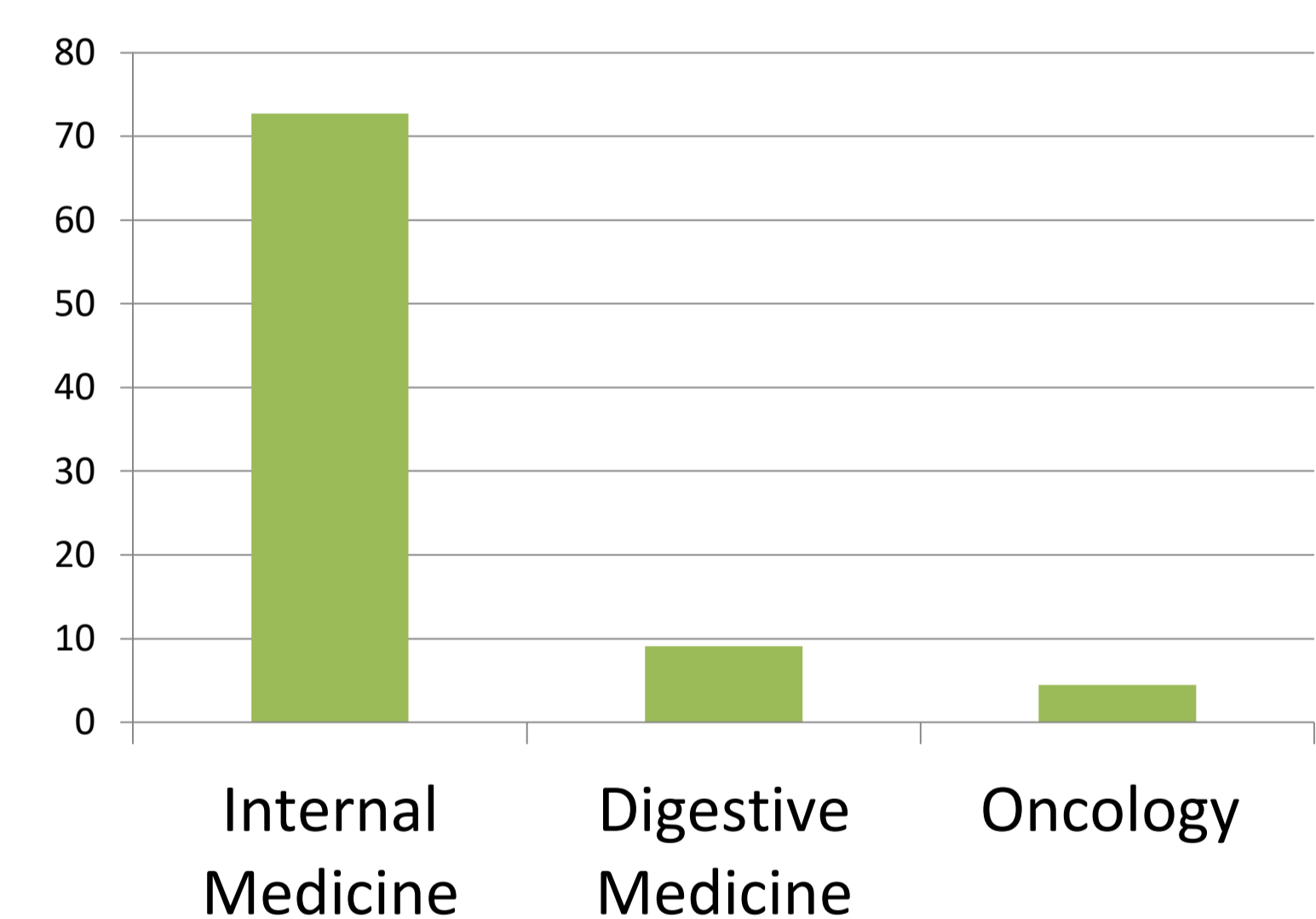
Antibiotics with inadequate dosage



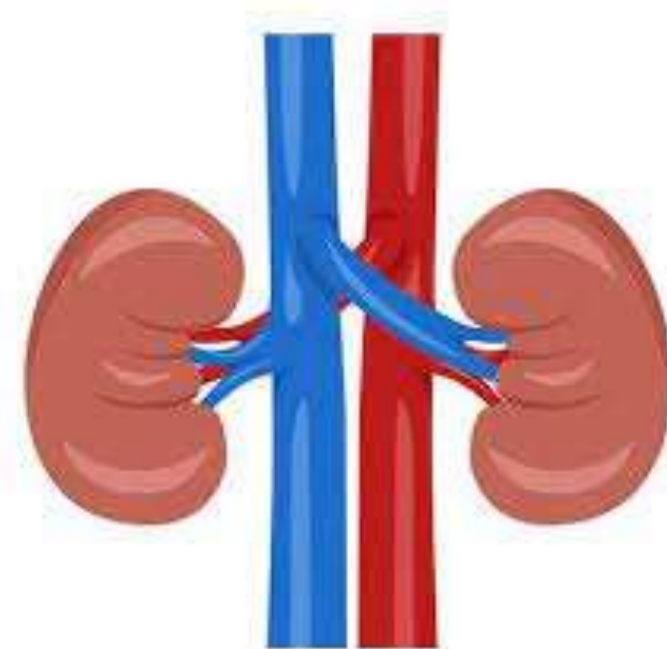
Adjustment required





Prescriber's Units



34/227 prescriptions required dose adjustment due to GFR < 30ml/min



35.3% inappropriately prescribed 
52.9% required a first loading dose different from the maintenance doses

88.9% of them was done incorrectly because the filtrate-adjusted dose was prescribed directly 

CONCLUSION AND RELEVANCE

A small but not negligible percentage of **patients with renal failure** do **not receive a correct dose**.

Training physicians in proper prescribing and optimising the pharmaceutical validation process in these patients is essential to ensure their correct use.

In addition, this study identifies the need to follow a **protocol on the correct initial loading doses** and the **time required for their adjustment**.