# PHARMACEUTICAL INTERVENTION IN **BROAD-SPECTRUM ANTIBIOTIC** PRESCRIPTION IN HOSPITALIZED PATIENTS

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## Background

Indiscriminate use of broad-spectrum antibiotics implies a threat to public health and may cause multidrug-resistant pathogen infections.

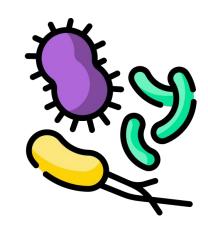
25.000

deaths every year in the EU from infections caused by multidrug resistant bacteria

## Objective

The aim of this study is to analyze the quality of antibiotic prescription (indication and duration of treatment) based on the recommendations of our Antibiotic use Optimization Program (AOP).









#### Material and methods

A retrospective study (January 2020 to April 2021) of hospitalized patients taking carbapenems, ureidopenicillins, quinolones, cephalosporins or glycopeptides was carried out. We collected demographic information, antibiotic regimen, type and site of the infection and microbiological data. Pharmaceutical interventions over antibiotic prescriptions were mainly associated with starting, interrupting, broadening the spectrum or switching to oral therapy.

#### Results

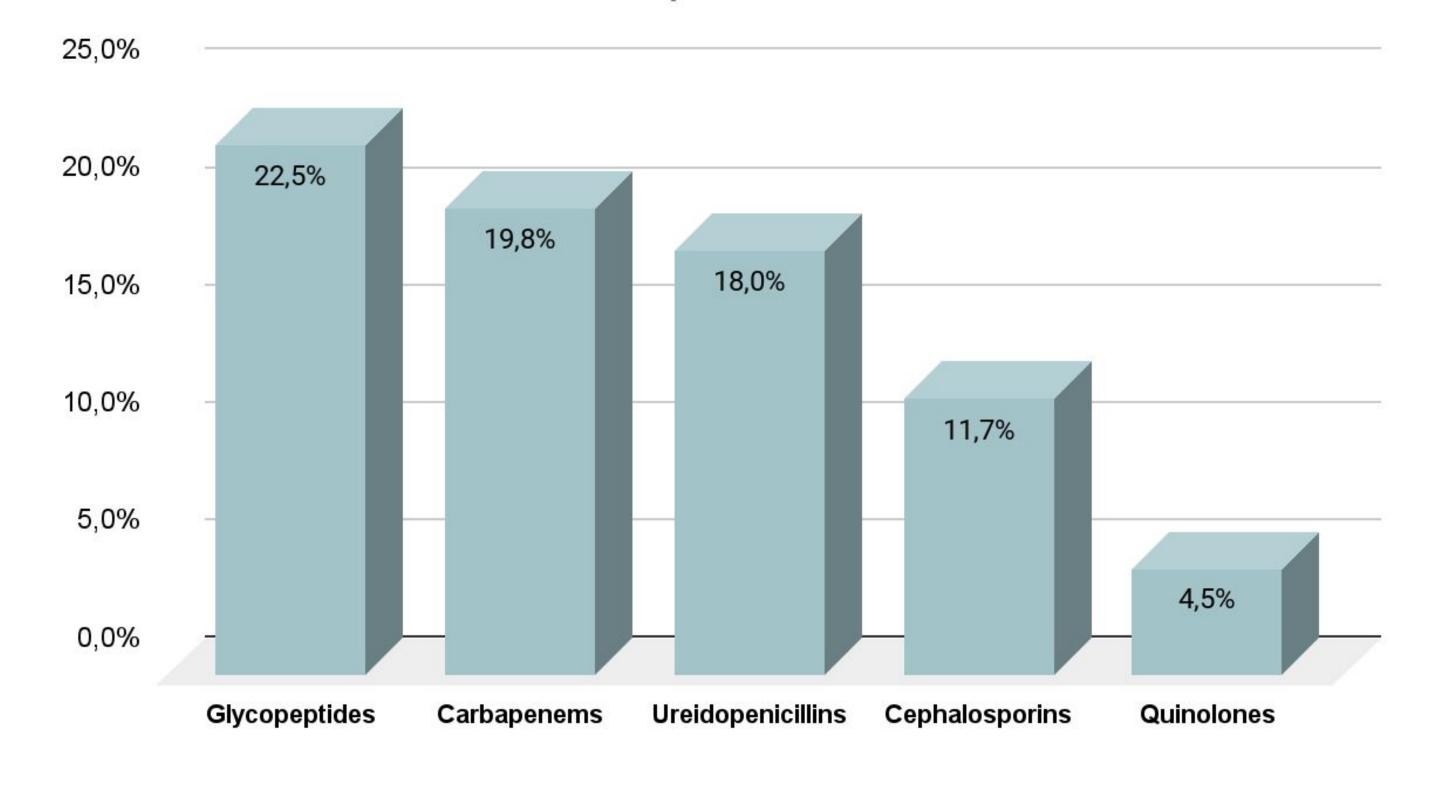
Patients
with an antibiotic prescription

Mean age (± 13,4)

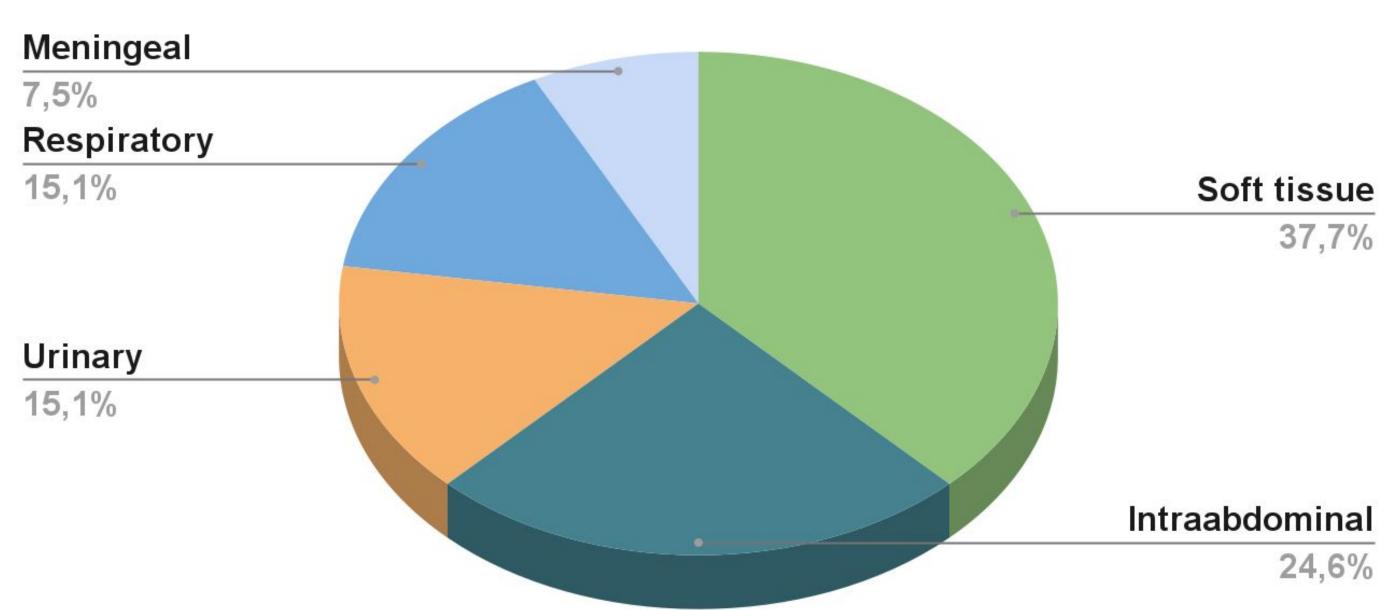
Average stay

Main pathogens isolated	Percentage (%)
Gram-positive cocci	49,4
Gram-negative bacilli	39,3
Anaerobic cocci	5,7
Fungi	5,6

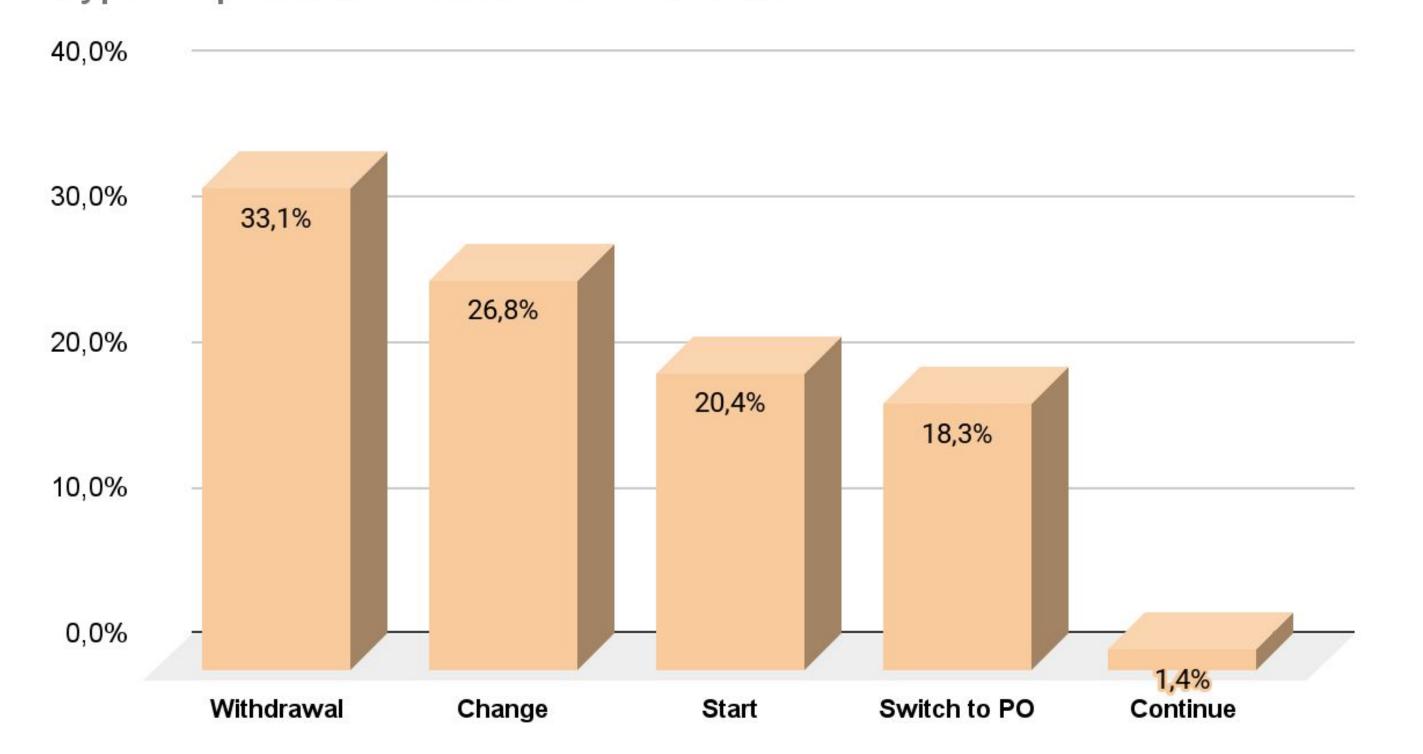
Antibiotics in which we had impact on







#### Type of pharmaceutical interventions



### **Conclusion and relevance**

Our study shows that hospital pharmacists and the Infectious Control Group play an important role in optimizing antibiotic regimes in a variable clinical context. Pharmaceutical recommendations have been widely accepted and should be particularly targeted on specific antibiotic classes. All these measures may contribute to decrease the incidence of multi-resistant bacterial infections in the hospital.





