

1 BACKGROUND AND OBJECTIVE :

The development of bacterial resistance these last ten years is a public health major problem in the world and needs to implement actions.

In France, the national drug safety agency has defined a list of "critical antibiotics".

↳ This list includes :

- Antibiotics particularly generator of bacterial resistance (*amoxicillin-clavulanate, cephalosporine, fluroquinolone*)
- Antibiotics called "last resort" (*antibiotics against Gram-positive cocci, carbapenem...*)

▶ At our regional level, an evaluation of prescription of these critical antibiotics was proposed to all medical centers. The aim was to evaluate the quality of prescription of these critical antibiotics.

2 DESIGN :

The regional working group (*pharmacists, infectious diseases physicians and biologists*) had developed a collection grid including *data on patients, antibiotics* and *4 criterias* : **adequate molecule, compliance with medical prescriptions, duration of antibiotic therapy** and **reassessment at 72 hours**.

→ This is a **prospective study** proposed to all health institutions (public and private), which had to be completed **on a given day** in all care units and had to be conducted by a team of multiprofessional evaluators.

- The study included :
- a quantitative part (*number of patients hospitalized in the audited units, number of patients receiving antibiotics and number of critical antibiotic prescriptions*)
 - a qualitative part (*adequation to the 4 criterias*)

3 RESULTS :

Quantitative part :

7026 patients hospitalized

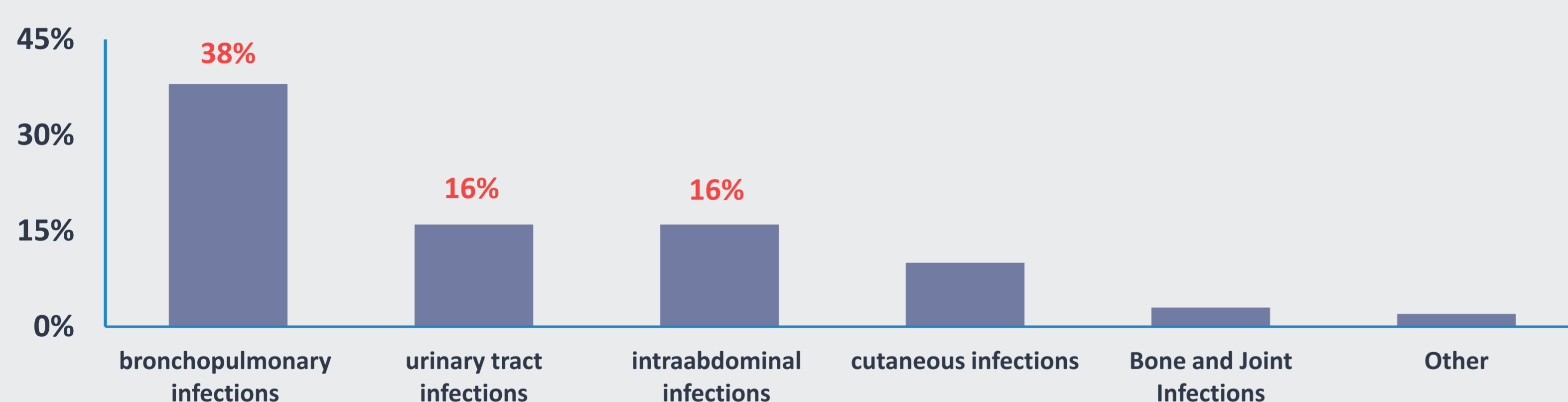
Response rate : 84%

1391 patients (20%) receiving antibiotics

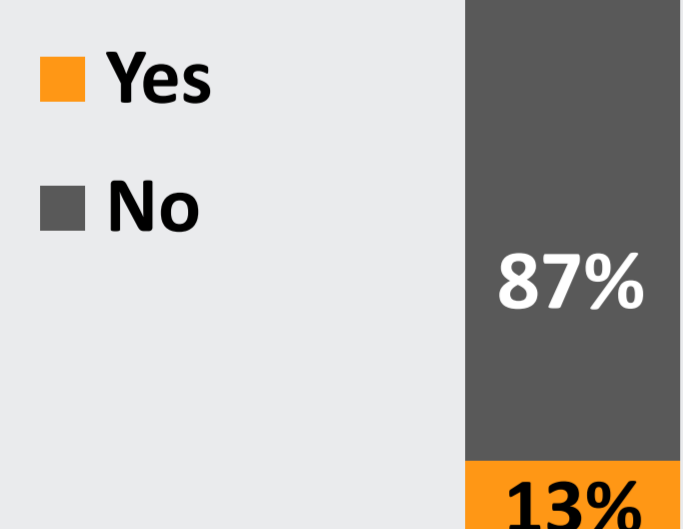
(89% were hospitalized in medical, surgery or obstetrics units)

- 42 prescriptions of antibiotics called "last resort"
 → 74% carbapenem

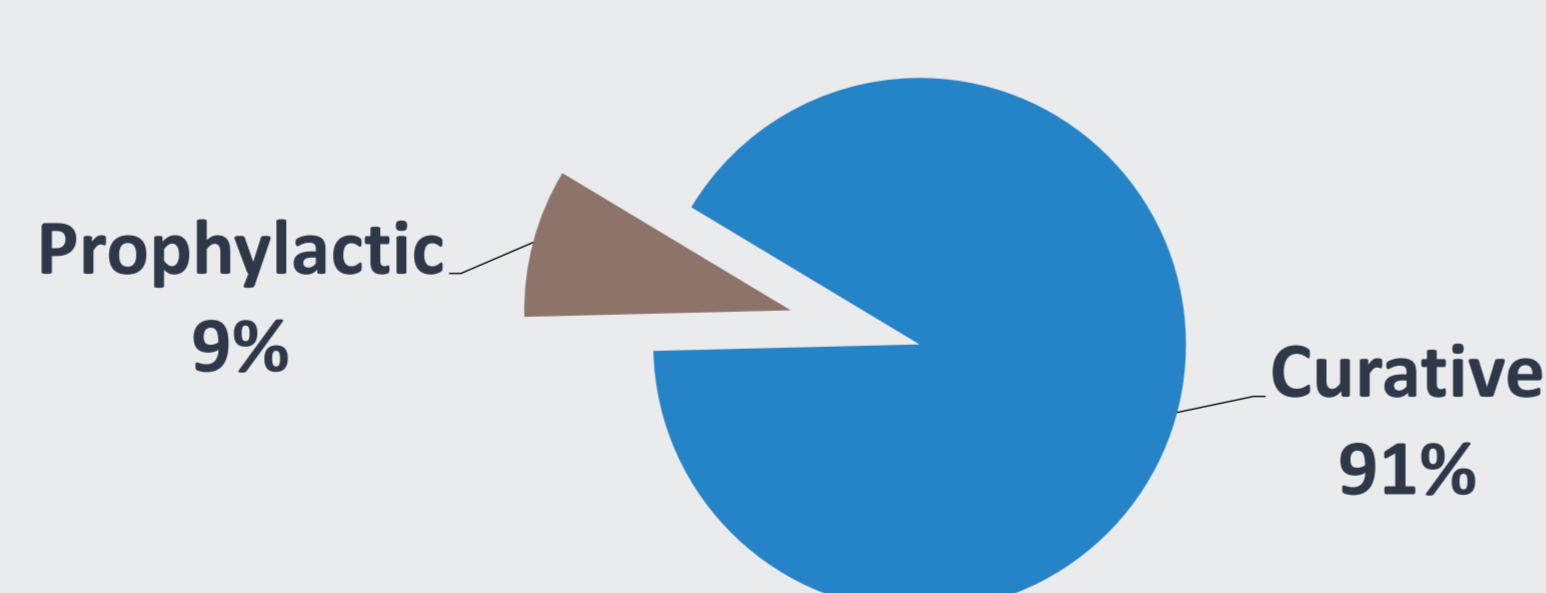
Indications



Expertise of infectious diseases physician :

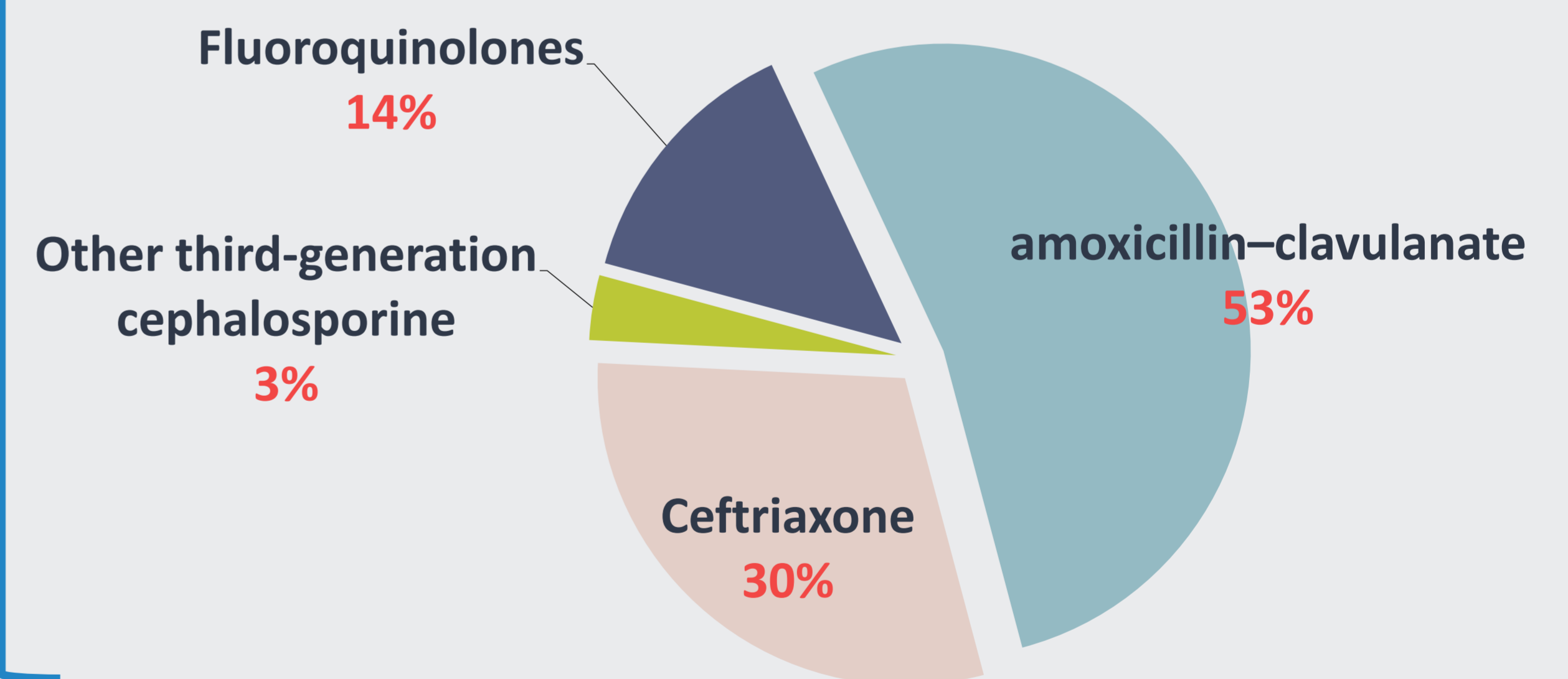


Types of treatment :



- 865 prescriptions of "critical antibiotics particularly generator of bacterial resistance"

Average age : 69.9 years (+/- 20 yr)
 Sex ratio : 1.1



Qualitative part :

- 92 % of the prescriptions had a proper indication
- 66 % of the prescriptions complied to the guidelines
- The duration of antibiotic therapy was adequate in 82 % of the cases
- 44 % of the prescriptions were reassessed and adapted by the physician

Only 45 % of the prescriptions were correct according to these 3 criterias

4 CONCLUSION :

This study is original because of its regional dimension and antibiotic analysis. The number of analysed prescriptions was significant with an overall proper prescription in adequation with the guidelines. However, actions must be implemented on duration and reassessment and adjustment of treatment. These results were presented to the participating hospitals. These 3 points will be reevaluated during a new regional audit.