

Background

Invasive fungal infections (IFI) have an important **morbidity** and **mortality** and their incidence is constantly **increasing** for more than twenty years due to the increase of immunocompromised patients. The complex medical care (related to diagnostic difficulties), the expansive treatments and emerging antifungals resistances require an appropriate prescribing.

Materials and Methods

Aim

To assess the **conformity of antifungal prescribing to local and international guidelines** for the treatment of IFI in a teaching hospital and to compare with similar studies.

- A prospective study was performed between April and May of 2018
- In six wards (pediatric oncology, hematology, and intensive care units)

- A multidisciplinary group produced a grid for prescription compliance
- For each initiation of antifungals drugs

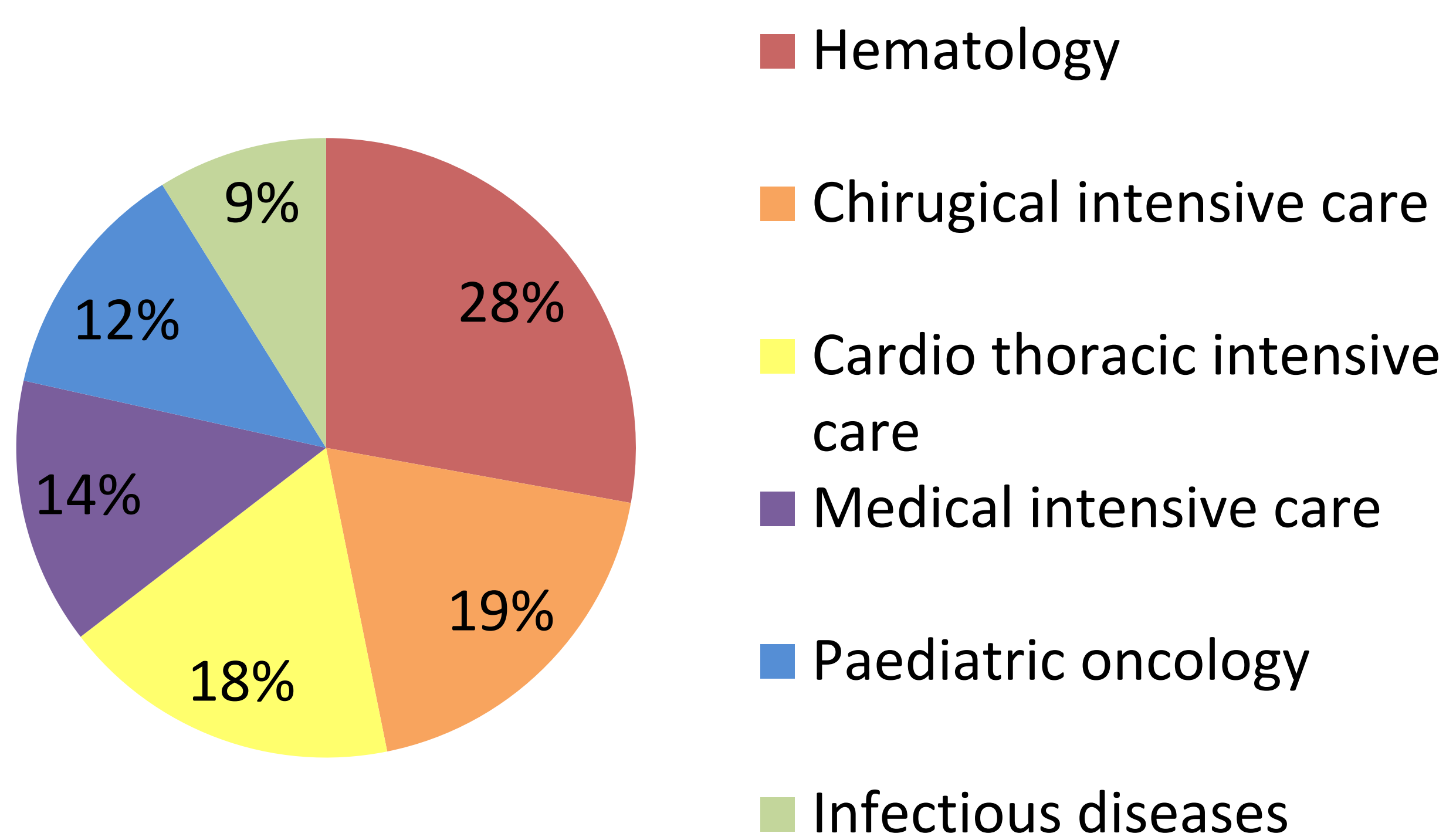
- In accordance with the local guidelines
- And international guidelines from ECIL and IDSA

Results

Patients 79 patients for 87 prescriptions Average age 50,8 years ± 20, Sex ratio H/F 1,63 On average the patients had 3 risk factors for IFI

Prescriptions

Units

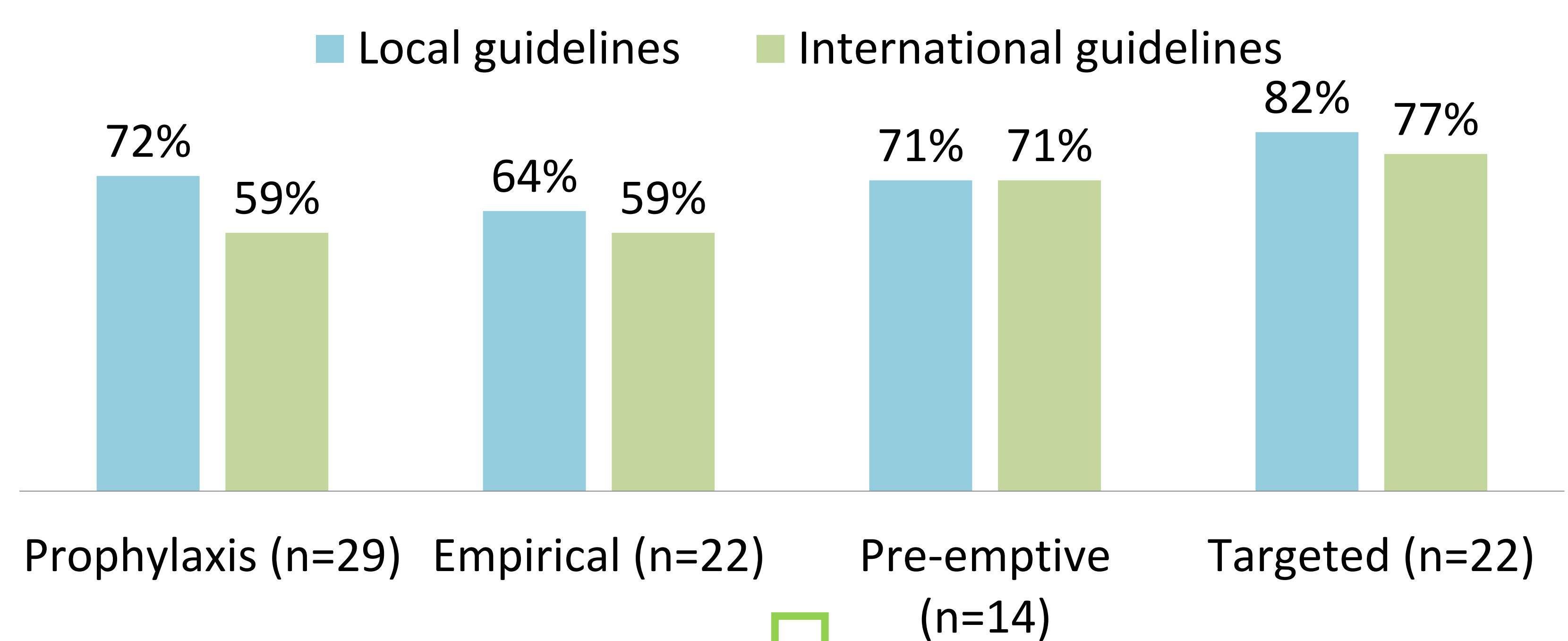


- ✓ The guidelines issued within the facility closely follow these international guidelines: 6% difference (p=0,41)

The most common inappropriate use:

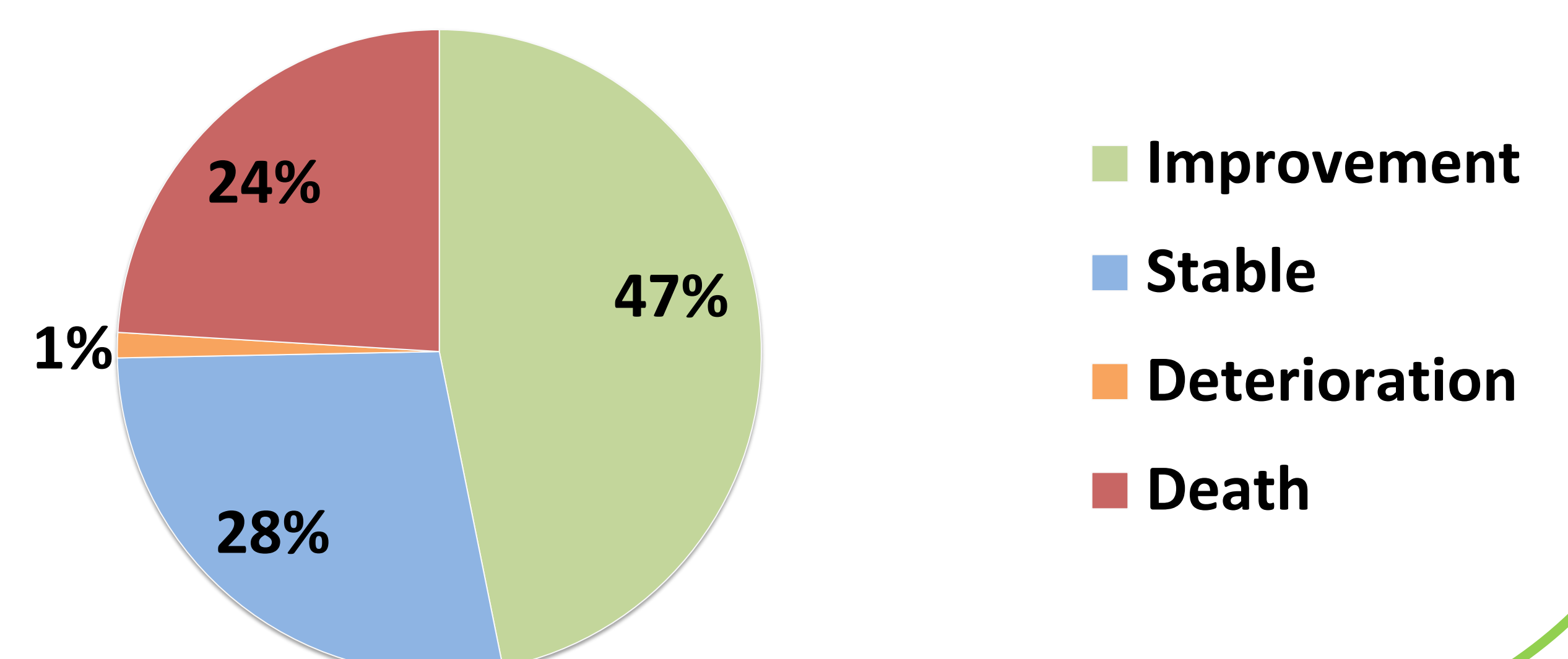
- ✓ Prescription of 2nd or 3rd-line while the 1st-line antifungal therapy was an option (14.9%), typically by an azole
- ✓ Antifungal prophylaxis indications (9.2%), leading to unnecessary exposure to antifungal agents

Prescriptions conformity



Global conformity:
72% with local guidelines
66% with international guidelines

Clinical evolution at the end hospitalisation



Conclusion

Few studies to date have assessed appropriate use of antifungals. In the studies published with a similar methodology, compliance with the international guidelines has been reported to be between 34% (1) and 58% (2).

- ➡ **A multidisciplinary antifungal group was implemented to curb IFI and to improve the use of antifungals.** In this context, guidelines were updated in the form of decision algorithms that, once adopted as a guide, should be able to improve practices (3).

References:

1. Nivoix, et al. "Adherence to recommendations for the use of antifungal agents in a tertiary care hospital." *Journal of antimicrobial chemotherapy* 67.10 (2012): 2506-2513.
2. Fabien, et al. "Évaluation de la prescription des antifongiques dans un centre hospitalier universitaire: encore trop de prescriptions inadaptées malgré des actions de formation." *La Presse Médicale* 43.9 (2014): e241-e250.
3. Alfandari, et al. "Antifungal stewardship: implementation in a French teaching hospital." *Medicine et maladies infectieuses* 44.4 (2014): 154-158.

