

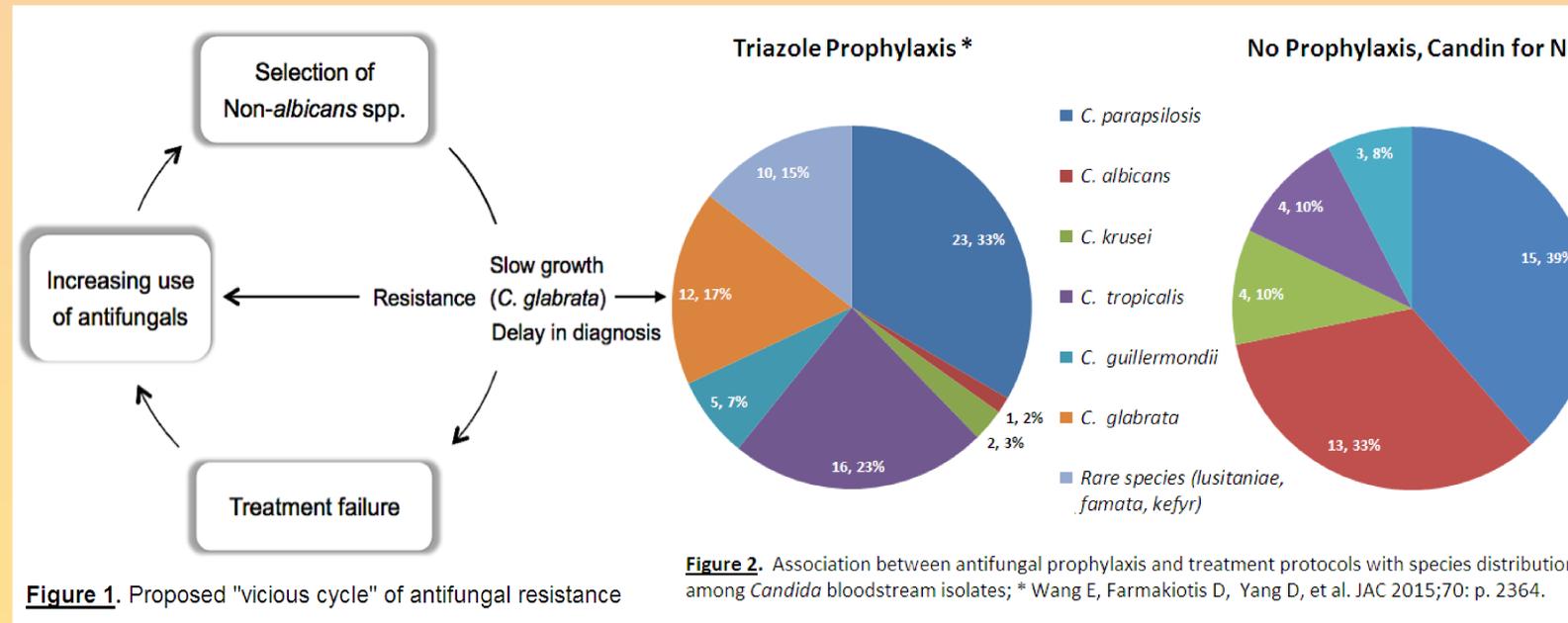
BACKGROUND

- Candidemia is one of the most frequent bloodstream infections in the US.
- Protocol-based azole prophylaxis is common in acute leukemia; thus, most cases of candidemia are caused by non-*albicans* species.
- In patients with acute leukemia, the epidemiology of candidemia has not been studied in the absence of routine antifungal prophylaxis.
- **The AIM of this study** is to describe the epidemiology and *Candida* spp. distribution in a contemporary series of patients with acute leukemia and candidemia, in the absence of routine antifungal prophylaxis

METHODS

- We reviewed medical records of adult (>18 year old) patients with acute leukemia, diagnosed with candidemia at Brigham and Women's Hospital, where antifungal prophylaxis is not routinely used, between 12/1/06 and 12/31/12.

FIGURES



CONCLUSIONS

- Without routine antifungal prophylaxis, *C. albicans* is a common cause of candidemia in patients with acute leukemia.
- Due to the rarity of antifungal resistance and slow *in-vitro* growth of *Candida* isolates (*C. glabrata*), the time to culture positivity was short, and appropriate antifungals were promptly initiated (Fig. 1).
- ***Candida* spp. distribution reflects institutional practices of antifungal administration.**
- **There is a need for multi-institutional registries of candidemia surveillance and antifungal stewardship protocols.**

RESULTS

- Of 302 first candidemia episodes, 39 (13%) occurred in patients with acute leukemia.
- Mean age (SD) was 47 years and 16/39 (41%) were female.
- The most common species were *C. parapsilosis* (38.5%) and *C. albicans* (33%) (Fig. 2).
- Seven strains (18%) were fluconazole-resistant.
- *C. parapsilosis* fungemia was associated with prior micafungin exposure (OR 9.4, p=0.004).
- At BWH, micafungin is used in the protocol for empiric treatment of persistent neutropenic fever after broad-spectrum antibacterials.
- All but one patients (38/39, 97%) received appropriate antifungal treatment at a median of 1 (IQR 0-2) day from blood culture collection.
- There was no association between appropriate antifungal treatment and 28-day crude mortality (28%) (time-varying p = 0.441).