Candidemia, a leading cause of blood stream infections, causes significant morbidity and mortality. *C. albicans* remains the most common cause of candidemia, but blood stream infections due to *Candida non-albicans* species, which are more likely to be resistant to fluconazole, have been increasing. Fluconazole resistant candidemia has been classified as a serious threat level in the report of “Antibiotic Resistant Threats in the United States, 2013” by CDC, however the impact of fluconazole resistance on mortality remains poorly defined.

### Methods

Active population-based surveillance for candidemia was conducted in Atlanta and Baltimore as part of the Center for Disease Control (CDC)-sponsored Emerging Infections Program. Case-isolates were sent to CDC for speciation and susceptibility testing. Independent risk factors associated with fluconazole resistance and all-cause 2-30-day mortality were identified using logistic regression in patients with incident candidemia.

### Results

A total of 3,553 cases of candidemia were identified between 2008 and 2013, with an average yearly incidence of 18.9 cases/100,000. *C. albicans* remains the most common species (39.1%, Figure 1), however it is surpassed by *C. glabrata* among recurrent cases and those with previous azole exposure (34.5% and 36.2% respectively). Overall, 65.6% of incident cases were hospital-onset; 93% had at least one of the following risk factors: a central venous catheter, total parenteral nutrition, or antibiotics within 14 days (Table 1). A total of 21.1% of patients died between 2-30 days. Overall, 6.9% of case-isolates were resistant to fluconazole (Figure 2); 26.6% of cases with fluconazole resistance died between 2-30 days. Independent risk factors associated with fluconazole resistance and all cause 2-30 day mortality are shown in Tables 2 and 3. No association was found between fluconazole resistance and mortality.