2104. Susceptibility Trends in Antifungal Resistance (STAR) Study: Preliminary Data from A New Prospective Antifungal Surveillance Study
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Background. The development of new anti-infectives has increased rapidly over the past ten years. The need to support these important, life-saving products has increased as well. The STAR program was developed in 2018 to provide a repository of real-world clinical fungal isolates with known susceptibility profiles and to monitor resistance trends over time. STAR reports the susceptibility patterns of the earliest STAR data concerning echinocandins, second-generation triazoles, and fluconazole against clinical Candida albicans and non-albicans strains including C. auris. Antifungals tested were amphotericin B (AMB), anidulafungin (ANID), fluconazole (FLU), isavuconazole (ISA), posaconazole (POS), and voriconazole (VOR). All testing was performed according to CLSI M27-A4 methodology.

Methods. Clinical isolates of Candida spp. (n = 203, from 2017–2018) from culture KOL investigator sites in the United States, Asia and the EU were tested. Of these, 203 were isolated from blood or body tissues, and the remaining 11 from miscellaneous sources. Species distribution included mainly C. albicans, C. glabrata, C. krusei, C. lusitaniae, C. parapsilosis, C. tropicalis, and the emerging pathogen C. auris. Antifungals tested were amphotericin B (AMB), anidulafungin (ANID), fluconazole (FLU), isavuconazole (ISA), posaconazole (POS), and voriconazole (VOR). All testing was performed according to CLSI M27-A4 methodology.

Results. Overall, MIC\textsubscript{50}, MIC\textsubscript{90} range and percent susceptibility for each drug are listed in Table 1. Our data showed that for ANID, ISA and POS ≥93% of isolates were susceptible. While 84 and 88% were susceptible to FLU and VOR, respectively. Moreover, only 78% of isolates were susceptible to AMB. Interestingly, our data show that C. auris isolates were resistant to at least 1 antifungal with 13% of the C. auris strains (n = 40) showing multidrug resistance.

Conclusion. Ongoing antifungal resistance surveillance like STAR is of utmost importance in order to monitor the efficacy of traditional empirical therapy and for the development of novel antifungal agents. This repository and ongoing STAR study will provide a resource to better support the biopharmaceutical industry’s goals to develop new and more potent antifungal agents. STAR will continue to monitor yeasts and will also include more unusual fungi including Macor, Rhizopus amongst others.

Table 1: Antifungals

| Antifungal | MIC\textsubscript{50} | MIC\textsubscript{90} | Range | % Susceptible |
|------------|----------------|----------------|-------|-------------|
| Amphotericin B | 1 | 4 | 0.125 - 8 | 78 |
| Anidulafungin | 0.03 | 1 | 0.03 - 16 | 73 |
| Fluconazole | 1 | >64 | 0.5 - >64 | 84 |
| Isavuconazole | 0.016 | 0.12 | 0.016 - 8 | 99.5 |
| Posaconazole | 0.03 | 0.25 | 0.03 - 16 | 99 |
| Voriconazole | 0.03 | 2 | 0.016 - 8 | 88 |

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2105. Liposomal Amphotericin B Use Before and After Implementation of Voriconazole Prophylaxis in Cancer Patients
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Background. Invasive fungal infections (IFI) are life-threatening complications of prolonged neutropenia in hematologic cancer or after hematopoietic stem cell transplantation (HSCT). Guidelines recommend mold prophylaxis (ppx) for patients at high risk of IFI. Patients receiving ppx with new signs of infection are often escalated to Liposomal Amphotericin B (L-AmB) for concerns of breakthrough mold infections. We describe the impact of implementing voriconazole (VZL) ppx in cancer patients.

Methods. We performed a quasi-experimental study of all adult patients pre- and post-implementation, respectively. There was an average 16% increase in L-AmB use, translating to a total of 17.6 L-AmB DOT per 1,000 PD for the study period. Mean periods was done using Χ\textsuperscript{2}-test.

Conclusion. There were 87 (24 pre, 63 post) unique patients included in the analysis, of whom 93% were male and median age was 57 (range 17-71) years. There were 87 (24 pre, 63 post) unique patients included in the analysis, of whom 93% were male and median age was 57 (range 17-71) years. There were 87 (24 pre, 63 post) unique patients included in the analysis, of whom 93% were male and median age was 57 (range 17-71) years. There were 87 (24 pre, 63 post) unique patients included in the analysis, of whom 93% were male and median age was 57 (range 17-71) years.

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2106. Evaluation of Isavuconazole for the Prophylaxis and Treatment of Invasive Fungal Infections at a Large Academic Medical Center
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Background. Isavuconazole is an azole antifungal with in vitro activity against various fungi, including Candida spp., Aspergillus, and Mucormycetes. Currently, isavuconazole is FDA approved for the treatment of invasive aspergillosis and mucormycosis; however, there remain limited data supporting prophylaxis use. Compared with other first-line azoles, isavuconazole's broad spectrum of activity, favorable safety