Antifungal Susceptibility Results from a Worldwide Anidulafungin Surveillance Program (2002-2003)

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ABSTRACT

INTRODUCTION

Opportunistic fungal infections represent a significant risk to immunocompromised individuals and are associated with high rates of morbidity and mortality. Currently, only a limited number of antifungal agents are available for therapeutic use in these infections. New and alternative antifungal agents have been successfully developed to address this problem and to prevent fungal infections. In addition, due to the new realities in healthcare, the general trend is toward fewer hospital days, which could limit the time available for the effective treatment of fungal infections. The emergence of mould pathogen and yeast pathogen resistance to antifungal agents continues to represent a problem, and the development of new and alternative antifungal agents could help to alleviate these problems. C. parapsilosis currently ranks as the fourth most frequent source of antifungal susceptibility testing. Approved standard M38-A. Wayne, PA:NCCLS.

RESULTS

Materials and Methods: Both minimum inhibitory concentration (MIC) and minimum eradication concentration (MEC) were determined for all isolates using fractions of antifungal agents. The MIC for the echinocandin class that inhibits cell wall synthesis by blocking the β-D glucan.

Table 1: Comparative activity of anidulafungin and six other antifungal agents tested against 833 strains of yeast and mould species with at least 10 isolates.

Table 2: Variations in anidulafungin MIC results at two incubation times. The values are expressed as a percentage of samples in which the MIC values for all echinocandins were in the same range (19-100%)

Table 3: Distribution of anidulafungin MIC (yeasts) and MEC (moulds) results tested against 67 strains of truly isolated yeast and moulds.

Table 4: Distribution of anidulafungin MIC (yeasts) and MEC (moulds) results in the echinocandin class that inhibits cell wall synthesis by blocking the 

Table 5: Maximum in vitro activity of anidulafungin compared with other antifungals against different microbial species.

Table 6: Summary of published data on the in vitro activity of anidulafungin against different microbial species.

Table 7: Summary of published data on the in vitro activity of different echinocandin derivatives against different microbial species.

Table 8: Summary of published data on the in vitro activity of different echinocandin derivatives against different microbial species.

Table 9: Summary of published data on the in vitro activity of different echinocandin derivatives against different microbial species.