BACKGROUND

Global rates of candidemia caused by C. parapsilosis are increasing with differences detected between neonates and adult patients (50% vs. 12%, respectively) and across geographic regions (5% vs. 25% in Iceland and Spain, respectively). SCY-078 is a novel, oral and intravenous, triterpenoid glucan synthase inhibitor under development for the treatment of invasive candidiasis. This study evaluated the in vitro antifungal activity of SCY-078 against a collection of clinical C. parapsilosis isolates.

METHODS

• In vitro MIC data (50% inhibition at 24 hrs) for SCY-078 against C. parapsilosis were compiled from across 7 independent studies.
• The studies included more than 200 C. parapsilosis isolates collected between 2008-2015 in the US and EU and included 191 wild-type, 14 azole-resistant, and 6 echinocandin-resistant isolates.
• Across the studies, in vitro susceptibility was determined by broth micro-dilution using CLSI methods (M27-S3).
• Comparator compounds varied by study and included micafungin (MCF), caspofungin (CSP), and anidulafungin (ANF).

CONCLUSION

SCY-078 demonstrated potent activity against C. parapsilosis clinical isolates. Notably, SCY-078 was effective against all the echinocandin- and azole-resistant C. parapsilosis isolates tested.

RESULTS

MIC50 values obtained for SCY-078 against the wild-type C. parapsilosis isolates across the 7 studies ranged from 0.25 to 1 µg/mL, MIC90 values ranged from 0.25 - 2 µg/mL. MIC50 values obtained for the echinocandins ranged from 0.5 to 2 µg/mL (CSP), 1 to 4 µg/mL (MCF) and 2 to 4µg/mL (ANF). SCY-078 was active against the 14 azole-resistant isolates (MIC ranging from 0.25 to 2 µg/mL). Similar activity was observed against the 6 echinocandin-resistant isolates with MIC values for SCY-078 ranging from 0.25 to 1 µg/mL. Consistent with reports of increased incidence of C. parapsilosis infections, this species represented from 14 – 20% of all the Candida isolates collected in the 4 most recent studies in the US and EU (2013-2015).

Assessment of the In Vitro Antifungal Activity of SCY-078 Against a Collection of C. parapsilosis Clinical Isolates

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