A Noteworthy Publication from our Faculty

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The celecoxib derivative AR-12 has broad spectrum antifungal activity in vitro and improves the activity of fluconazole in a murine model of cryptococcosis

AR-12 inhibits fungal acetyl CoA synthetase in vitro and is fungicidal at concentrations similar to those achieved in human plasma. AR-12 has a broad spectrum of activity including active against yeasts; molds and dimorphic fungi with minimum inhibitory concentrations of 2-4 μg/mL. AR-12 is active against azole- and echinocandin-resistant *Candida* isolates and sub-inhibitory AR-12 concentrations increase susceptibility of fluconazole- and echinocandin-resistant*Candida* isolates. AR-12 increases the activity of fluconazole in a murine model of cryptococcosis.

Full Citation: Koselny K, Green J, DiDone L, Halterman JP, Fothergill AW, Wiederhold NP, Patterson TF, **Cushion MT**, Rappelye C, Wellington M, et al. The celecoxib derivative AR-12 has broad spectrum antifungal activity in vitro and improves the activity of fluconazole in a murine model of cryptococcosis. Antimicrob Agents Chemother. 2016 Sep 19. pii: AAC.01061-16.