Comparative genomics of serial *Candida glabrata* isolates and the rapid acquisition of echinocandin resistance during therapy.

Barber AE*, Weber M, Kaerger K, Linde J, Gölz H, Duerschmied D, Markert A, Guthke R, Walther G, Kurzai O (2019) Comparative genomics of serial *Candida glabrata* isolates and the rapid acquisition of echinocandin resistance during therapy. *Antimicrob Agents Chemother* 63(2), e01628-18.

Abstract

The opportunistic pathogen Candida glabrata shows a concerning increase in drug resistance. Here we present the analysis of two serial bloodstream isolates, taken 12 days apart. Both isolates show pan-azole resistance and echinocandin resistance was acquired during the sampling interval. Genome sequencing identified 9 nonsynonymous SNVs between the strains, including a S663P substitution in FKS2 and previously undescribed SNVs in MDE1 and FPR1, offering insight

into how C. glabrata acquires drug resistance and adapts to a human host.

Beteiligte Forschungseinheiten

Fungal Septomics Oliver Kurzai Mehr erfahren

Microbiome Dynamics Gianni Panagiotou Mehr erfahren

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Systembiologie von Erkrankungen

Identifier

doi: 10.1128/AAC.01628-18

PMID: 30478162