I want to break free - macrophage strategies to recognize and kill *Candida albicans*, and fungal counter-strategies to escape.

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Details



Abstract

Candida albicans is a major cause of fungal nosocomial infections. Host defense against disseminated infections caused by this yeast strongly relies on myeloid cells of the innate immune system. Recently, several breakthroughs have been made that significantly improved our understanding of the role of macrophages during candidiasis and how *C. albicans* and macrophages interact. Resident tissue macrophages and macrophages derived from monocytes that infiltrate infected tissues are essential for the initiation of the antifungal immune response, as well as elimination of *C. albicans* from the bloodstream and infected organs. These cells engulf and try to eliminate the invading fungi through specialized mechanisms. Concurrently, *C. albicans* tries to survive the stresses imposed by the macrophage, acquires nutrients, and can break free from their captive environment. This review focuses on the most recent insights into the strategies of macrophages to eliminate *C. albicans* and the fungal counterstrategies to overcome these threats.

Beteiligte Forschungseinheiten

Mikrobielle Pathogenitätsmechanismen Bernhard Hube Mehr erfahren

Adaptive Pathogenitäts-Strategien Mark S. Gresnigt Mehr erfahren

Leibniz-HKI-Autor*innen



Sophie Austermeier

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Mark Gresnigt

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Lydia Kasper

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