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

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Projects

Adaptation of *Candida albicans* to non-commensal host environments induced by host circulating proteins and immune mediators

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.

Identifier

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