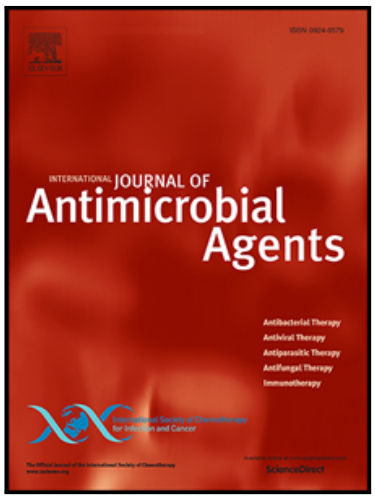


# Bioluminescence imaging increases in vivo screening efficiency for antifungal activity against device-associated Candida albicans biofilms

Greetje Vande Velde , Soňa Kucharíková , Patrick Van Dijck , Uwe Himmelreich

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**Highlights**

- Biofilms are currently a major problem in hospitals, especially for patients with a weakened immune system.
- Here, we introduce bioluminescence imaging (BLI) to monitor and quantify the efficacy of antifungals against mature *Candida albicans* biofilms developed in a mouse model.
- BLI allows monitoring fungal load repeatedly throughout the course of treatment and comparison with baseline in the same animal, thereby providing a better readout of antifungal efficacy against biofilms under in vivo conditions.
- Among several antifungals tested, fluconazole failed to be effective while caspofungin displayed the most efficient activity of the echinocandins tested against mature *C. albicans* biofilms, as documented by BLI and confirmed by CFU counts.
- BLI showed to be a very good method to quantify *C. albicans* biofilm formation and its susceptibility to antifungal drugs under in vivo conditions.