# Methodologies for *in vitro* and *in vivo* evaluation of efficacy of antifungal and antibiofilm agents and surface coatings against fungal biofilms.

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Details




## Abstract

Unlike superficial fungal infections of the skin and nails, which are the most common fungal diseases in humans, invasive fungal infections carry high morbidity and mortality, particularly those associated with biofilm formation on indwelling medical devices. Therapeutic management of these complex diseases is often complicated by the rise in resistance to the commonly used antifungal agents. Therefore, the availability of accurate susceptibility testing methods for determining antifungal resistance, as well as discovery of novel antifungal and antibiofilm agents,

are key priorities in medical mycology research. To direct advancements in this field, here we present an overview of the methods currently available for determining (i) the susceptibility or resistance of fungal isolates or biofilms to antifungal or antibiofilm compounds and compound combinations; (ii) the in vivo efficacy of antifungal and antibiofilm compounds and compound combinations; and (iii) the in vitro and in vivo performance of anti-infective coatings and materials to prevent fungal biofilm-based infections.

## Involved units

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