

Fungal susceptibility

The following table provides a general guide to clinical fungal susceptibility. The table is intended to assist empirical selection of antifungals in the absence of laboratory confirmation of susceptibility; it is not a substitute for management advice from clinical microbiologists or infectious diseases specialists. Consider these data in conjunction with the clinical condition of the patient, site of infection, knowledge of local susceptibility patterns (which may vary) and evidence-based guidelines. When in doubt seek specialist advice.

The designation of susceptibility used in the table is 75%, ie an organism is deemed susceptible if at least 3 out of 4 cultures tested are susceptible to that antifungal. Data are based on accepted treatment regimens and have been derived from the medical literature and the National Mycology Reference Centre (SA Pathology, Adelaide).

Interpret in vitro studies with caution due to marked influences of methodology on minimum inhibitory concentration (MIC) values and lack of correlation between in vitro and in vivo results. The most reliable data are for echinocandins, fluconazole and voriconazole against *Candida* infections; the least reliable are for moulds.

Organism	Azoles					Echinocandins			Other antifungals			
	fluconazole	isavuconazole	itraconazole	posaconazole	voriconazole	anidulafungin	caspofungin	micafungin	amphotericin B	flucytosine ¹	griseofulvin	terbinafine
Yeasts												
<i>Candida albicans</i>												v
<i>Candida auris</i>	v	v	v	v	v	v	v	v	v	v		
<i>Candida parapsilosis</i>												
<i>Candida tropicalis</i>												v
<i>Clavispora (Candida) lusitaniae</i>									v			
<i>Cryptococcus neoformans-gattii</i> complex												
<i>Kluyveromyces marxianus (Candida kefyr)</i>												
<i>Malassezia furfur</i>												2
<i>Meyerozyma (Candida) guilliermondii</i>												v
<i>Nakaseomyces glabratus (Candida glabrata)</i>												
<i>Pichia kudriavzevii (Candida krusei)</i>			v							v		
<i>Rhodotorula</i> spp.	v	v	v	v								
<i>Trichosporon</i> spp.									v			
Dermatophytes												
<i>Epidermophyton floccosum</i>												
<i>Microsporum</i> spp.												
<i>Nannizzia</i> spp.												
<i>Trichophyton indotineae (T. mentagrophytes genotype VIII)</i>			v									v
<i>Trichophyton</i> spp.												
Dimorphic moulds												
<i>Histoplasma capsulatum</i> complex												
<i>Sporothrix schenckii</i> complex					v							
¹ do not use as monotherapy as resistance can develop rapidly ² topical use ³ may have synergistic effect with terbinafine												
Legend												
	susceptible											
	susceptibility dependent on achieving maximal blood concentration of antifungal agent											
v	variable susceptibility											
	resistant											
	no data available											

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Moulds												
<i>Aspergillus flavus</i> complex												
<i>Aspergillus fumigatus</i> complex												
<i>Aspergillus terreus</i> complex												
<i>Bipolaris</i> spp.	v											
<i>Cladophialophora</i> spp.									v	v		
<i>Curvularia</i> spp.	v											
<i>Exophiala</i> spp.										v		
<i>Fusarium</i> spp.				v	v				v			
<i>Lomentospora (Scedosporium) prolificans</i>					3				v			
<i>Paecilomyces variotii</i>												
<i>Penicillium</i> spp.	v									v		
<i>Phialophora</i> spp.												
<i>Purpureocillium lilacinum</i> (<i>Paecilomyces lilacinus</i>)			v									
<i>Scedosporium apiospermum</i> complex		v	v						v			
Mucorales												
<i>Absidia, Apophysomyces</i> spp.												
<i>Lichtheimia (Absidia) corymbifera</i>			v									
<i>Mucor</i> spp.		v		v								
<i>Rhizomucor, Rhizopus</i> spp.				v								
<i>Saksenaea</i> spp.												
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