



## Virulence factors of non-*Candida albicans* *Candida* species

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Infections caused by *Candida* species (candidosis) have greatly increased over recent years, mainly due to the escalation of the AIDS epidemic, population ageing, increasing number of immunocompromised patients and the more widespread use of indwelling medical devices. Besides *Candida albicans*, non-*Candida albicans* *Candida* (NCAC) species such as *Candida glabrata*, *Candida tropicalis* and *Candida parapsilosis* are now frequently identified as potential human pathogens. *Candida* species pathogenicity is facilitated by a number of virulence factors, most importantly adherence to medical devices and/or host cells, biofilm formation, and secretion of enzymes, such as proteases. Thus, we have been studying several of the most relevant virulence factors (adhesion, biofilm formation ability, tissue colonisation and invasion, expression of hydrolytic enzymes and antifungal agents susceptibility) of *Candida* clinical isolates recovered from different body sites (oral cavity and urinary and vaginal tracts).

In summary, this presentation underlines both species and strain differences in terms of virulence factors associated with *C. glabrata*, *C. parapsilosis* and *C. tropicalis*. Furthermore, there is clear evidence demonstrating the importance of the use of new techniques including Confocal Laser Scanning Microscopy and molecular analysis tools enabling the elucidation of the mechanisms of virulence. By increasing our knowledge on *Candida* pathogenesis, new potential therapeutic targets may be identified that can be used as adjuvants for novel therapies.