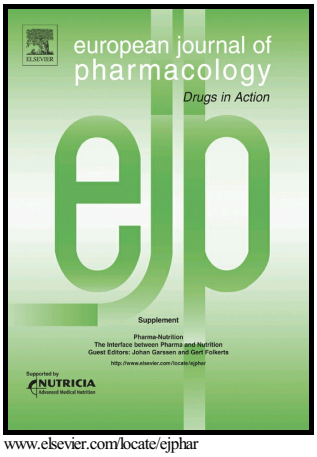

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Curcumin and its promise as an anticancer drug: an analysis of its anticancer and antifungal effects in cancer and associated complications from invasive fungal infections

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Abstract

Invasive fungal infections (IFI) are important complications of cancer, and they have become a major cause of morbidity and mortality in cancer patients. Effective anti-infection therapy is necessary to inhibit significant deterioration from these infections. However, they are difficult to treat, and increasing antifungal drug resistance often leads to a relapse. Curcumin, a natural component that is isolated from the rhizome of *Curcuma longa* plants, has attracted great interest among many scientists studying solid cancers over the last half century. Interestingly, curcumin provides an ideal alternative to current therapies because of its relatively safe profile, even at high doses. To date, curcumin's potent antifungal activity against different strains of *Candida*, *Cryptococcus*, *Aspergillus*, *Trichosporon* and *Paracoccidioides* have been reported, indicating that curcumin anticancer drugs may also possess an antifungal role, helping cancer patients to resist IFI