

# COVID-19-associated opportunistic infections: a snapshot on the current reports

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Treatment of the novel Coronavirus Disease 2019 (COVID-19) remains a complicated challenge, especially among patients with severe disease. In recent studies, immunosuppressive therapy has shown promising results for control of the cytokine storm syndrome (CSS) in severe cases of COVID-19. However, it is well documented that immunosuppressive agents (e.g., corticosteroids and cytokine blockers) increase the risk of opportunistic infections. On the other hand, several opportunistic infections were reported in COVID-19 patients, including *Aspergillus* spp., *Candida* spp., *Cryptococcus neoformans*, *Pneumocystis jirovecii* (carinii), mucormycosis, Cytomegalovirus (CMV), Herpes simplex virus (HSV), *Strongyloides stercoralis*, *Mycobacterium tuberculosis*, and *Toxoplasma gondii*. This review is a snapshot about the main opportunistic infections that reported among COVID-19 patients. As such, we summarized information about the main immunosuppressive agents that were used in recent clinical trials for COVID-19 patients and the risk of opportunistic infections following these treatments. We also discussed about the main challenges regarding diagnosis and treatment of COVID-19-associated opportunistic infections (CAOIs).

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