Management of SARS-CoV-2 Infection: Key Focus in Macrolides Efficacy for COVID-19

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- Macrolides possess anti-inflammatory and immunomodulatory effects.
- Macrolides have been extensively researched as broad adjunctive therapy for COVID-19 due to its immunostimulant abilities.
- Azithromycin, azalide class of macrolide antibiotic, is well-known for its ability to decrease the production of pro-inflammatory cytokines, including matrix metalloproteinases, tumor necrosis factor-alpha (TNF-α), interleukin (IL)-6, and IL-8.
- Azithromycin quickly prevents SARS-CoV-2 infection by raising the levels of both interferons and interferon-stimulated proteins at the same time which reduces the virus replication and release.

Azithromycin is a well-known antibiotic with good anti-inflammatory and immunomodulatory effects and considered to be generally safe, besides being reported as useful for the treatment of COVID-19.