

# **ANTIHISTAMINES**

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## **Introduction**

Antihistamines have been widely used as treatment of different allergic conditions such as allergic rhinitis, allergic conjunctivitis and urticaria.<sup>1</sup> Recently, it was speculated that it can be used in the treatment of COVID-19 infection because of its action on mast cells.<sup>2</sup> Mast cells have been hypothesized as the primary source of cytokine release that leads to lung damage in SARS-CoV-2.<sup>2</sup>

## **Mechanism of Action**

H1-antihistamines downregulate allergic inflammation directly through the H1-receptor. They interfere with histamine action at H1-receptors on sensory neurons and small blood vessels. Through the inhibition of the ubiquitous transcription factor nuclear factor-kB, they also decrease antigen presentation, expression of proinflammatory cytokines and cell adhesion molecules, and chemotaxis. In a concentration-dependent manner they inhibit mast cell activation and histamine release.<sup>1</sup>

## **Clinical Studies**

There are no published clinical trials examining the use of antihistamines in COVID-19. However, antihistamines combined with low-dose systemic steroids can play a role in the control of COVID-19 related urticarial rashes.<sup>3,4</sup>

## **Conclusion**

There have been no studies examining the use of antihistamines in COVID-19. Clinical trials would be required to establish whether these drugs may be used for treatment of this disease.

## **REFERENCES:**

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