Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

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Letter to Editors

Clofazimine: A potential therapeutic option for severe COVID-19

To the Editor,

As of March 2020, coronavirus disease 2019 (COVID-19) was declared as pandemic. Since then, several studies were conducted to discover appropriate therapeutic management of this novel infection. Clofazimine was among the drugs that showed promising results [1–3]. Besides its-antiviral effect that was proven, we want to propose other suggested mechanisms, that can support its use in COVID-19 patients.

First, cytokine storm syndrome, a systemic hyperinflammation, is one of the main causes of high COVID-19 associated mortality [4]. As a result, many studies have been concerned with the use of anti-inflammatory drugs for COVID-19 treatment. As the anti-inflammatory effects of clofazimine have been documented multiple years ago [5], thus, it can have a beneficial impact on the novel virus.

Second, it was recently hypothesized that immunosuppressive agents could be beneficial in severe and critically-ill COVID-19 patients, where the hyperinflammatory phase is manifested [4]. The immunomodulatory properties of clofazimine via inhibition of T-lymphocytes activation and proliferation have supported its use in many autoimmune disorders, either cutaneous like leprosy and psoriasis or non-cutaneous as multiple sclerosis and type I diabetes [6]. These properties could also support its use as a potential therapy for COVID-19 severe cases.

Third, the administration of clofazimine via inhalation has showed successful results and is currently under investigation [7]. This could be a good route of administration for severe COVID-19 cases, as well as a way to reduce skin discoloration, depression and gastrointestinal discomfort, the main adverse effects caused by clofazimine.

In conclusion, using an already FDA approved drug like clofazimine for the treatment of severe COVID-19 patients, especially while facing a viral second wave, could reduce the number of deaths as the virus spreads throughout the world.

Declaration of Competing Interest

The author declares that she has no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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