# Treatment of COVID-19 with chloroquine or hydroxychloroquine

**Key Points:**

- There is insufficient evidence that chloroquine or hydroxychloroquine will prevent COVID-19
- Data to date are preliminary and pertain to viral shedding;[1] no effect on disease morbidity or mortality has been demonstrated
- Use of chloroquine or hydroxychloroquine for COVID-19 should be restricted to hospitalized patients until more data are available

**Background:**

Globally, there are reports of physicians prescribing chloroquine or hydroxychloroquine to otherwise healthy patients for prevention of COVID-19. This practice threatens the Canadian supply of these drugs and will prevent their use in the sickest patients, in whom the benefit may outweigh the risks associated with these medications.

In vitro studies suggest that chloroquine and hydroxychloroquine possess antiviral activity against COVID-19.[2] Several clinical trials are being conducted and preliminary reports suggest possible benefit; to date (March 23, 2020), the results of these trials have not been published. A small, open-label study conducted in France has shown that hydroxychloroquine (alone or in combination with azithromycin) may be effective in reducing viral load in nasopharyngeal samples.[1] These results should be interpreted with caution as they do not prove clinical benefit (i.e., reduction of morbidity or mortality associated with COVID-19). Until more data become available, the use of these agents is considered strictly experimental and as such should be undertaken only by infectious disease specialists in hospitalized patients.[3,4]

**Recommendation:**

Pharmacists must use their professional judgment to question the appropriateness of any prescriptions they receive for these medications that are outside the usual indications. This is important to protect patients from unnecessary adverse effects and to protect the supply of these medications for those patients who rely on them for treatment of medical conditions (e.g., systemic lupus erythematosus, rheumatoid arthritis) for which they are indicated.

The COVID-19 situation is evolving, and data collection is ongoing. The evidence regarding the use of chloroquine or hydroxychloroquine in the treatment of COVID-19 will be reviewed as it becomes available and this statement will be updated accordingly.

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**References**

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