

Avoidance of hydroxychloroquine in outpatient settings

To date randomized clinical trials have failed to demonstrate benefit with hydroxychloroquine compared to standard of care or placebo for treatment or prevention of mild to moderate and severe COVID-19 among patients in the outpatient and inpatient settings. Use of hydroxychloroquine is not recommended due to lack of efficacy compared to standard of care as well as concern for potential adverse events.

- **Current expert recommendations:**
 - NIH: **Recommends against** use of hydroxychloroquine (HCQ) or chloroquine for treatment of COVID-19, particularly outside of a hospital, except in clinical trial¹
 - **Recommends against** HCQ plus azithromycin, except in clinical trial
 - WHO: Recommends that HCQ (+/- azithromycin) **should not be administered as treatment nor prophylaxis** for COVID-19, outside of clinical trials²
 - IDSA: **Suggests against** HCQ plus azithromycin outside of clinical trials³
 - FDA: **Cautions against use** of HCQ for COVID-19 outside of hospital or clinical trial due to risk of arrhythmias⁴
 - Revoked emergency use authorization (EUA) based on evidence demonstrating no benefit for decreasing likelihood of death nor speeding recovery
 - American College of Physicians: **Should not use** hydroxychloroquine alone or in combination with azithromycin for COVID-19 due to known harms and no available of evidence of benefit⁵
 - Northwestern Medicine ASP/ID Division: **Not recommended** for COVID-19 due to lack of definitive evidence differentiating outcomes benefit with HCQ compared to supportive care and increased risk of adverse events⁶
- Adverse events:
 - QTc prolongation, ventricular arrhythmia, cardiac death, drug-drug interactions, hypoglycemia
- Select evidence (see supporting evidence document for individual trial details):

Setting/Severity	Findings/Strength	References
Treatment for outpatients with mild/moderate COVID-19	Two randomized trials did not demonstrate benefit of symptom improvement nor reduction of viral load in patients receiving HCQ compared to placebo or no antiviral treatment (n=716 patients)	7, 8
Treatment for hospitalized patients with mild/moderate COVID-19	Two randomized trials observed no improvement in clinical status nor rate of negative viral conversion among those patients receiving HCQ compared to standard of care (n=654 patients)	9, 10
Treatment for hospitalized patients with severe COVID-19	RECOVERY randomized trial did not demonstrate mortality difference in patients receiving HCQ compared to usual care (n=4716 patients) Observational non-randomized study demonstrating HCQ benefit confounded by disproportional rates of steroid use, ICU-level care, and mechanical ventilation among those receiving HCQ compared to those who did not	11, 12
Post-exposure prophylaxis	Two randomized trials demonstrated no benefit in preventing development of confirmed or probable COVID-19 in high-risk groups receiving HCQ compared to placebo or no therapy (n=3135 patients)	13, 14

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