

Oral Chloroquine treatment for COVID-19 infection. Available data from literature & field practices on April 20, 2020

(ver 1.8) Gathered since March 13, 2020. M. Jamouille, MD, PhD, Dep of general practice, Liege University <https://orbi.uliege.be/handle/2268/246207>

Note: This compilation does not constitute a recommendation to use the HCQ in the treatment of Covid-19

Observational studies	Clinical trial	Theoretical study	Personal advice	Medical societies recommendation	Country law or decree
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Country	Scientific body	Drug regimen as stated by authors	Sources
Korea 2020-02-13	COVID-19 Central Clinical Task Force	400mg/ritonavir 100mg (Kaletra two tablets, twice a day) or chloroquine 500mg orally per day. Or Hydroxychloroquine 400mg/day	Kwak S-s. Physicians work out treatment guidelines for coronavirus Febr. 13, 2020 [Available from: http://www.koreabiomed.com/news/articleView.html?idxno=7428 .
China 2020-02-20	Health Commission of Guangdong Province for chloroquine in the treatment of novel coronavirus	Chloroquine, 500 mg each time, twice a day for 10 days. In case of severe gastrointestinal reactions, the dose can be reduced to 1 time / day, 500 mg each time (Google trad. Translated from Chinese by Google trad)	Mingxing H, Tiantian T, Multicenter collaboration group of the Department of Science and Technology of Guangdong Province, Health Commission of Guangdong Province for chloroquine in the treatment of novel coronavirus. 磷酸氯喹治疗新型冠状病毒肺炎的专家共识 [Expert consensus on chloroquine phosphate for the treatment of novel coronavirus pneumonia]. Zhonghua Jie He He Hu Xi Za Zhi (Chinese Journal of Tuberculosis and Respiratory Disease). 2020;43(0):E019 Available from: http://dx.doi.org/10.3760/cma.j.issn.1001-0939.2020.0019 . (in Chinese)
China 2020-03	Zhejiang University school of medicine	Chloroquine phosphate can be used on adults between 18-65 years old (weight ≥ 50 kg: 500 mg bid; weight < 50kg: 500 mg bid for first two days, 500 mg qd for following five days).	Handbook of COVID-19 prevention and treatment. Liang T, editor: Zhejiang University school of medicine; March, 2020. https://brandon-lighting.com/wp-content/uploads/2020/03/Handbook of COVID 19 Prevention en Mobile.pdf
China 2020-03-06	Department of Infection and Immunity & Fudan University, Shanghai	HCQ 400 mg per day for 5 days	Chen, Jun, et al. "A pilot study of hydroxychloroquine in treatment of patients with common coronavirus disease-19 (COVID-19)." <i>Journal of Zhejiang University (Medical Science)</i> 49.1 (2020): 0-0. http://www.zjujournals.com/med/EN/10.3785/j.issn.1008-9292.2020.03.03
China 2020-03-09	Drug Clinical Trial Center, Peking University Third Hospital, Beijing et all	400 mg twice daily of hydroxychloroquine sulfate given orally, followed by a maintenance dose of 200 mg given twice daily for 4 days is recommended for SARS-CoV-2 infection, Hydroxychloroquine was found to be more potent than chloroquine.	Yao X, Ye F, Zhang M, Cui C, Huang B, Niu P, et al. In Vitro Antiviral Activity and Projection of Optimized Dosing Design of Hydroxychloroquine for the Treatment of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). <i>Clin Infect Dis</i> . 2020 https://www.ncbi.nlm.nih.gov/pubmed/32150618
Belgium 2020-03-19	Grand hôpital de Charleroi GHDC.be	Hydroxychloroquine 800mg day 1 400mg day 2 to 5 With Azithromycine	Personal communication, Dr Fievez, senior pneumologist <pierre.fievez@ghdc.be>
Italy 2020-03-27	Italian Society of Infectious and Tropical Diseases & all.	Hydroxychloroquine: 800 mg day 1, 400mg day 2 to 10 Or Chloroquine 1000 mg day 1, 500M day 2 to 10 Azithromycin 500 mg 5 days	SIMIT, FIMMG, SIMG. Home management of early therapy Covid-19 March 27, 2020 [Available from: http://www.simit.org/medias/1588-flow-chart-gestionale-terapia-domiciliare-precoc-covid-19-versione-27-marzo-2020.pdf .
France / Vietnam 2020-03-15	Aix Marseille University et all.	Oral hydroxychloroquine sulfate 200 mg, three times per day during ten days Azithromycin added to hydroxychloroquine was significantly more efficient for virus elimination	Gautret P, Lagier J-C, Parola P, Hoang VT, Meddeb L, Mailhe M, et al. Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open label non-randomized clinical trial. Ahead of print. March, 2020 Study subject to retraction process (see https://retractionwatch.com/)
China 2020-03-18	Sun Yat-sen Memorial Hospital of Sun Yat-sen Univ, Guangzhou	≥50kg 500mg every time, twice daily 7 days <50kg for the 1st and 2nd days, 500mg every time, twice daily; from the 3rd to the 7th days, 500mg every time, once daily	Personal communication Dr Shanping Jiang, 江山平 <shanpingjiang@126.com>
USA 2020-03-23	Private practice New-York	Hydroxychloroquine 200mg twice a day for 5 days Azithromycin 500mg once a day for 5 days Zinc sulfate 220mg once a day for 5 days	Letter from Dr. Vladimir (Zev) Zelenko, Board Certified Family Practitioner 501 Rt 208, Monroe, NY 10950 https://docs.google.com/document/d/1SesxgaPnpT6OfCYuaFSwXzDK4cDKM/bivoALprcVFj48/edit

China 2020-03-23	Renmin Hospital of Wuhan Univ, et all	400 mg/d (200 mg/bid) between days 1 and 5	Chen et al. Efficacy of hydroxychloroquine in patients with COVID-19: results of a randomized clinical trial https://doi.org/10.1101/2020.03.22.20040758
Brazil 2020-03-27	Ministério da Saúde do Brazil	Chloroquine 900 mg day 1 / 450 mg day 2 to 5 Hydroxychloroquine 800mg day 1 / 400mg day 2 to 5	Ministério da Saúde Secretaria de Ciência. Brasil Nota informativa Nº 6/2020-DAF/SCTIE/MS March 27, 2020 https://portalarquivos.saude.gov.br/images/pdf/2020/April/01/MS---0014223901---Nota-Informativa-n---6-2020-DAF-SCTIE-MS.pdf
India 2020-03-22	Hospital & Diabetes Institutes, India	Chloroquine phosphate: COVID-19 URTI: 1000 mg for 5 days. COVID-19 LRTI: 1000 mg for 10 days. Hydroxychloroquine: 800 mg day 1, 400mg day 2 to 5	Singh, A. K. & all (2020). Chloroquine and hydroxychloroquine in the treatment of COVID-19 with or without diabetes: A systematic search and a narrative review with a special reference to India and other developing countries. Diabetes & Metabolic Syndrome: Clinical Research & Reviews. https://www.ncbi.nlm.nih.gov/pubmed/32247211
France 2020-03-30	AP-HP, St Louis, Paris	600mg/dfor10days)andazithromycin(500mgday1and250mgdays2to5)	Molina JM,et al. No evidence of rapid antiviral clearance or clinical benefit with the combination of hydroxychloroquine and azithromycin in patients with severe COVID-19 infection. Med Mal Infect. 2020;S0399-077X(20)30085-8. doi:10.1016/j.medmal.2020.03.006 https://pubmed.ncbi.nlm.nih.gov/32240719/
USA 2020-04-02	Centre for Disease Control and Prevention, Atlanta	URTI & PCR+: • Chloroquine phosphate 500 mg BID for 5 days. • Oseltamivir 150 mg BID for 5 days. COVID-19 Pneumonia: • Chloroquine phosphate 500 mg BID for 5 days plus Darunavir 800 mg/Cobicistat 150 mg OD for 2 weeks. • Atazanavir 400 mg OD for 2 weeks plus Oseltamivir 150 mg BID for 5 days.	CDC MICC TEAM. Treatment of confirmed COVID-19 case Atlanta: CDC; April 02, 2020 [Available from: https://www.medcampus.io/mnotes/protocol-for-treatment-of-confirmed-covid-19-5e5e2781e86c5d0001f77303].
The Netherlands 2020-04-03	The Dutch Center of Disease Control	600 mg of Chloroquine followed by 300 mg after 12 h on day 1, then 300 mg x 2/day per person on days 2–5. Or 800 mg hydroxychloroquine on day 1, then 400 mg hydroxychloroquine on day 2-5	[Drug treatment options in patients with COVID-19 (infections with SARS-CoV-2)] https://swab.nl/nl/covid-19#to_9
Belgium 2020-04-07	IMT, Univ Antwerpen, Sciensano, CHU ST Pierre, AFMPS - FAGC.	Mild/Moderate/Severe COVID-19: Hydroxychloroquine 800mg day 1 , 400mg day 2 - 5, Or, Chloroquine 600 mg at diagnosis and 300 mg 12 hour later followed by 600 mg day 1 - 5 Critical COVID-19: Remdesivir 200 mg loading dose i.v within 30 minutes followed by 100 mg OD for 2-10 days (Hydroxychloroquine is second option if Remdesivir is unavailable)	IMT, Univ Antwerpen, Sciensano, CHU ST Pierre, AFMPS - FAGC. Interim clinical guidance for adults with suspected or confirmed Covid-19 in Belgium Apr. 07, 2020 [Available from: https://epidemiology.wiv-isp.be/ID/Documents/Covid19/COVID-19 InterimGuidelines Treatment ENG.pdf
France 2020-04-08	CHU Saint Etienne, University of Lyon	800 mg once daily on day 1, followed by 200 mg twice daily for 7 days	Perinel S, Launay M, Botelho-Nevers E, Diconne E, Louf-Durier A, Lachand R, et al. Towards Optimization of Hydroxychloroquine Dosing in Intensive Care Unit COVID-19 Patients. Clin Infect Dis. 2020 Available from: https://www.ncbi.nlm.nih.gov/pubmed/32255489 .
India 2020-04-08	Indian council of medical research Recommendations for use of hydroxychloroquine in COVID-19 prophylaxis	Patients with severe diseases; HCQ: 400 mg BD for one day followed by 200 mg BD for 4 days, in combination with Azithromycin: 500 mg OD for 5 days. Symptomatic healthcare workers involved in the care of suspected or confirmed cases of COVID-19: 400 mg twice a day on Day 1, followed by 400 mg once weekly for next 7 weeks, to be taken with meals Asymptomatic household contacts of laboratory confirmed cases: 400 mg twice a day on Day 1, followed by 400 mg once weekly for next 3 weeks; to be taken with meals.	Kapoor, A., Pandurangi, U., Arora, V., Gupta, A., Jaswal, A., Nabar, A., ... & Yadav, R. (2020). Cardiovascular risks of hydroxychloroquine in treatment and prophylaxis of COVID-19 patients: A scientific statement from the Indian Heart Rhythm Society. Indian Pacing and Electrophysiology Journal. https://www.sciencedirect.com/science/article/pii/S0972629220300383?via%3DIihub https://www.mohfw.gov.in/pdf/AdvisoryontheuseofHydroxychloroquinaspraphylaxisforSARSCoV2infection.pdf
France 2020-04-11	Aix Marseille University et all.	200 mg of oral hydroxychloroquine sulfate, three times per day for ten days combined with azithromycin (500mg on D1 followed by 250mg per day for the next four days).	Gautret P, Lagier JC, Parola P, et al. Clinical and microbiological effect of a combination of hydroxychloroquine and azithromycin in 80 COVID-19 patients with at least a six-day follow up: A pilot observational study [published online ahead of print, 2020 Apr 11]. Travel Med Infect Dis. 2020;101663. doi:10.1016/j.tmaid.2020.101663 https://pubmed.ncbi.nlm.nih.gov/32289548/

Peru 2020-04-14	Ministry of health	Chloroquine 500mg BID 7 to 10 days Hydroxychloroquine 200mg each 8 hours 7 to 10 days Prophylaxis : Exposed health workers ; 400mg day 1 followed by 400mg each week, 7 weeks Contact of confirmed cases : 400mg day 1 followed by 400mg each week, 3 weeks	Resolución Ministerial N° 193-2020-MINSA. Prevención, Diagnóstico y Tratamiento de personas afectadas por COVID-19 en el Perú. https://www.gob.pe/institucion/minsa/normas-legales/473575-193-2020-minsa
Brazil 202-04-15	Prevent Senior Institute, São Paulo,	Hydroxychloroquine 800mg on the first day and 400mg for another 6 days and azithromycin 500mg once daily for five days.	Rodrigo Esper et al Empirical treatment with hydroxychloroquine and azithromycin for suspected cases of COVID-19 followed-up by telemedicine . Journal not quoted. https://www.dropbox.com/s/5qm58cd4fneeci2/2020.04.15%20journal%20manuscript%20final.pdf?dl=0

Further readings:

- Plantone, D., & Koudriavtseva, T. Current and future use of chloroquine and hydroxychloroquine in infectious, immune, neoplastic, and neurological diseases: a mini-review. *Clinical drug investigation*, 2018; 38(8), 653-671. <https://sci-hub.si/10.1007/s40261-018-0656-y>
- Kim AHJ, Sparks JA, Liew JW, Putman MS, Berenbaum F, Duarte-Garcia A, et al. A Rush to Judgment? Rapid Reporting and Dissemination of Results and Its Consequences Regarding the Use of Hydroxychloroquine for COVID-19. *Ann Intern Med*. 2020 Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32227189>
- Yazdany J, Kim AHJ. Use of Hydroxychloroquine and Chloroquine During the COVID-19 Pandemic: What Every Clinician Should Know. *Ann Intern Med*. 2020 Available from: <https://www.ncbi.nlm.nih.gov/pubmed/32232419> .
- Prescrire Covid-19 et Hydroxychloroquine : prudence, 30 mars 2020. <https://www.prescrire.org/fr/203/1845/58619/0/PositionDetails.aspx>
- Zhou, D., Dai, S. M., & Tong, Q. (2020). COVID-19: a recommendation to examine the effect of hydroxychloroquine in preventing infection and progression. *Journal of Antimicrobial Chemotherapy*. <https://academic.oup.com/jac/advance-article/doi/10.1093/jac/dkaa114/5810487>
- Taccone, Fabio S., Julie Gorham, and Jean-Louis Vincent. "Hydroxychloroquine in the management of critically ill patients with COVID-19: the need for an evidence base." *The Lancet Respiratory Medicine* (2020). [https://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(20\)30172-7/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30172-7/fulltext)