

Potential Medications for COVID-19

There is no exact treatment for COVID-19. Here are medications that are currently being investigated as potential treatments for COVID-19.

Remdesivir

- An investigational antiviral agent originally developed to treat the Ebola virus
- Decreases SARS-CoV-2 viral replication
- Preliminary data showed it reduced recovery time and showed trend toward decreased mortality
- Current [studies](#) to determine efficacy and safety as a COVID-19 treatment

Convalescent Plasma

- Liquid part of the blood that contains antibodies from recent illness
- Successfully used to fight SARS, Ebola and H1N1
- Believed that plasma from a recovered patient may help to provide passive immunity until a sick patient develops a strong, targeted ability to fight the virus
- [FDA](#) has issued guidelines but no approval for use as a treatment
- A [recent study](#) has shown that transfusions with plasma looks like a promising and safe treatment.
- [S309 antibody](#) – identified in blood samples from a person who contracted SARS-CoV during 2002 – 2003, neutralizes both the SARS-CoV and the SARS-CoV-2 viruses in laboratory tests

Sarilumab, Tocilizumab

- Human monoclonal antibody against the interleukin-6 receptor to treat rheumatoid arthritis
- Works to inhibit the cytokine storm caused by COVID-19
- [Clinical trials](#) to determine if it suppresses overactive immune response in COVID-19 patients
- Early results indicate it does not help hospitalized patients who are not using ventilators — they healed on their own
- Results pending as treatment for critical patients

Hydroxychloroquine (Plaquenil®) & Azithromycin

- Not recommended (by [NIH](#)) — potential abnormal heart rhythm and sudden death
- How it may work is not clearly known: changes the acid content of endosomes within the cell to prevent viral entry into the cell itself and post-entry events
- [Small randomized trial](#) (no control group) of hospitalized patients — 81 % were sent home or to other health care units for continued treatment — 15 % required oxygen therapy — 3.8 % required transfer to the ICU — 1.2 % died
- [Clinical trials](#) in development to test the safety and efficacy of this combination

Chloroquine

- Prevents and treats malaria
- How it may work is not clearly known: changes the acid content of endosomes within the cell to prevent viral entry into the cell itself and post-entry events
- Can treat a liver infection called extraintestinal amebiasis
- [FDA](#) cautions against using for COVID-19 outside the hospital setting — risk of heart rhythm problems

- Clinical trials do not show it effectively prevents or treats COVID-19

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- Can treat lupus and rheumatoid arthritis
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Vitamin C

- No evidence that vitamin C prevents or treats COVID-19
- Taking more than 2000 mg per day of Vitamin C is not recommended — may cause diarrhea, nausea and abdominal pain

Zinc

- No evidence shows zinc supplements prevent or treat COVID-19
- Talk with doctor before starting or stopping drugs or supplements
- Zinc may interact with prescription or over-the-counter drugs — too much can be harmful

Safety Concerns with non-COVID-19 Medications

Blood Pressure Medications (ACE-Inhibitors or ARBs)

- Treats high blood pressure by relaxing the blood vessels and decreasing blood volume
- Evidence does not support discontinuing blood pressure medicines with COVID-19 — [American College of Cardiology](#)
- Dehydration, high potassium levels, high serum creatinine or other abnormal labs may indicate stopping these medications — IF doctor advises the change

Ibuprofen or Non-Steroidal Anti-inflammatory (NSAIDs) Medications

- Pain reliever and fever reducer
- No evidence indicates ibuprofen or other NSAIDs worsen COVID-19 symptoms
- [WHO](#) does not recommend against using ibuprofen

COVID-19 Vaccine

A vaccine involves introducing an agent that resembles or includes part of the virus into the body to provoke an immune response to the virus. Currently, there is no vaccine for COVID-19. Vaccines can take years to create, but genetic engineering is being used to help create a vaccine for COVID-19 as quickly as possible.

- National Jewish Health scientists and others around the world are working to develop a vaccine.
- The U.S. government estimates that a COVID-19 vaccine is about 12-18 months away (from April 2020).
- [DNA vaccine](#) is showing promise to develop neutralizing antibodies
- [ChAdOx1 nCoV-19](#) is starting phase 1 of human vaccine trial in the United Kingdom. This vaccine uses a weakened common cold virus to teach the immune system to recognize SARS-CoV-2 and fight the virus. Researchers believe the vaccine will be available by fall.
- [Recombinant Adenovirus Type-5](#) (Ad5) concluded phase 1 trials with the vaccine showing the ability to help participants develop antibodies to SARS-CoV-2 with mild-to-moderate adverse effects. The research team is recruiting for phase 2 of the trial.
- Here is a list of [clinical trials](#) are underway in the U.S. and other countries.

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