

Dr Vladamir Zelenko Protocol [September 29, 2021](#)

Quercetin and Zinc: Zelenko Treatment Protocol (September 2021)

Dr. Zelenko's main hypothesis based on the data showing that early intervention and treatment of high-risk patients with [COVID-19](#) results in significantly few hospitalizations and deaths. This treatment regimen involving zinc, low-dose hydroxychloroquine, and azithromycin is also apparently known as, "The Zelenko Protocol."



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COVID-19 outpatients: early risk-stratified treatment with zinc plus low-dose hydroxychloroquine and azithromycin: a retrospective case series study

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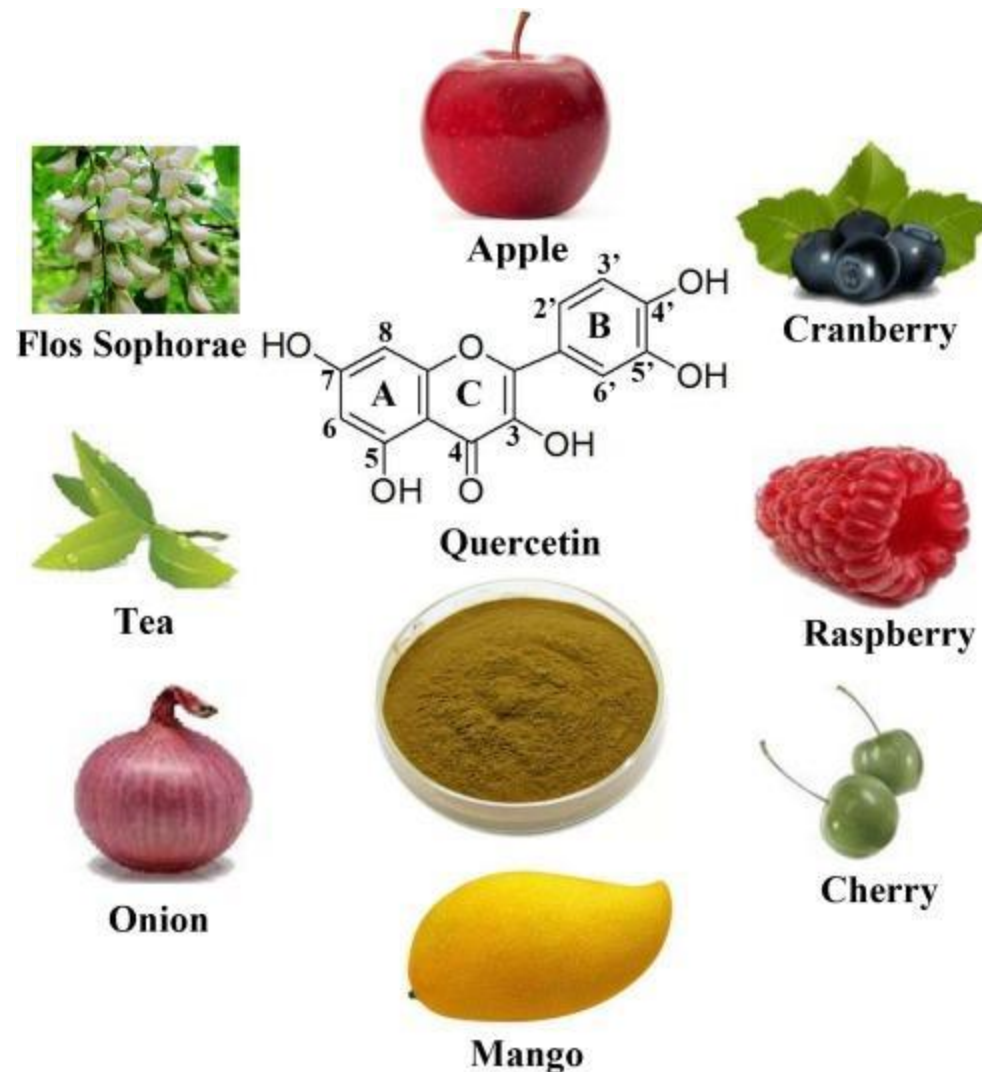
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Update: Recently, Ivermectin has come to the fore as a more effective (also long standing, cheap, generic drug), in all three stages of COVID-19. Dr Zelenko has also updated his protocols to incorporate ivermectin as an option for both the prophylactic

and treatment protocols as shown below. COVID-19 is a highly dynamic topic. Please refer to the latest [FLCCC protocol](#).



Quercetin and Zinc

The Zelenko Covid-19 Protocols was developed by Dr Vladimir Zelenko. The protocol has as its centerpiece, but not exclusive piece, the combined use of [Hydroxychloroquine](#) (HCQ) and Zinc as a means by which a person can both help to prevent or mitigate the contraction of COVID-19, or can actually treat the disease once it has been diagnosed.

Quercetin is a natural antihistamine and anti-inflammatory plant pigment that boosts your immune system and may work to control viral replication, according to some research. It allows

zinc to exert its proven antiviral properties; in treating COVID-19, [quercetin](#) may also lower inflammation, help clear mucus, prevent ventilator-induced damage and support immunity.

Foods high in quercetin include onions, kale, tomatoes, broccoli, asparagus, berries, red wine, citrus fruits, cherries, and tea.

According to the research, quercetin has been shown to help fight obesity, Type 2 diabetes, circulatory dysfunction, chronic inflammation and mood disorders. It has even been found to help lower blood pressure. Researchers have found that quercetin can trigger tumor regression and begin the process of apoptosis. This is programmed cell death, without which cells can grow uninterrupted and develop into cancerous growths.

Quercetin was initially found to provide broad-spectrum protection against SARS coronavirus in the aftermath of the SARS epidemic that broke out across 26 countries in 2003. Now, some doctors are advocating its use against SARS-CoV-2, in combination with vitamin C, noting that the two have synergistic effects.

Quercetin helps zinc by acting as a zinc ionophore ([PubMed 2014](#)), the same mechanism of action that hydroxychloroquine has via helping zinc pass the cell wall where it might halt viral replication.

This [zinc ionophore activity of quercetin](#) facilitates the transport of zinc across the cell membrane. It is known that zinc will slow down the replication of coronavirus through inhibition of enzyme RNA polymerase ([PubMed 2010](#)).

The COVID-19 is an RNA (RiboNucleicAcid) virus and requires the RNA polymerase to replicate. Do take note that the study publication was a 2010 publication and is referring to a different coronavirus as compared to the latest coronavirus (COVID-19); though both are from the same family of coronaviruses.

A word about quercetin: Some physicians are recommending this supplement to reduce viral illnesses because quercetin acts as a zinc ionophore to improve zinc absorption into cells. It is much less potent than HCQ (hydroxychloroquine) as a zinc transporter, and it does not reach high concentrations in lung cells that HCQ does. Quercetin may help reduce risk of viral illness if you are basically healthy. But it is not potent enough to replace HCQ for treatment of COVID once you have symptoms, and it does not adequately get into lung tissue.

That said, if you simply cannot get hydroxychloroquine or ivermectin, quercetin is a viable stand-in. Quercetin works best when taken with [vitamin C](#) and Bromelain, as vitamin C helps activate it and bromelain helps with the absorption.

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Note:

- *How much zinc you should take per day depends on the type and forms of zinc, as each supplement contains a different amount of 'elemental zinc'. The percentage of elemental zinc varies by form. For example, approximately 23% of zinc sulfate consists of elemental zinc; thus, 220 mg of zinc sulfate contains 50 mg of elemental zinc ([Ref](#)). Zinc picolinate (20% of elemental zinc), zinc ascorbate (15%), zinc chloride (48%), zinc carbonate (52%), zinc citrate (31%), zinc bisglycinate (25%) ([Ref](#)) and zinc gluconate (14%) and zinc oxide (80%) ([Ref](#)).*

Zelenko Covid-19 Prophylaxis Protocol

Prophylaxis is an action taken to prevent or protect against a specified disease i.e. action taken before getting the infection. Greek in origin, from the word "phylax", meaning "to guard" and "watching." The Zelenko prophylaxis protocols are categorised based on the risk profile of the patients i.e. low, moderate or high risk.

- **Low Risk Patients:** Young healthy people do not need prophylaxis against Covid-19. In young and healthy people, this infection causes mild cold-like symptoms. It is advantageous for these patients to be exposed to Covid-19, build up their antibodies and have their immune system clear the virus. This will facilitate the development of herd immunity and help prevent future Covid-19 pandemics. However, if these patients desire prophylaxis against Covid-19, then they should take the protocol noted below.
- **Moderate Risk Patients:** Patients from this category are healthy but have high potential viral-load exposure. This group includes medical personnel, caregivers of high-risk patients, people who use public transportation, first responders and other essential personnel who are crucial to the continued functioning of society. These patients should be encouraged to take prophylaxis against Covid-19 in accordance with the protocol noted below.
- **High Risk Patients:** Patients are considered high risk if they are over the age of 45, or if they are younger than 45 but they have comorbidities, that is, they have other health conditions that put them at risk. These patients have between a 5 to 10% mortality rate if they are infected with Covid-19. These patients should be strongly encouraged to take prophylaxis against Covid-19 in accordance with the protocol noted below.

Protocol for Low and Moderate Risk Patients

The Zelenko protocol for low to moderate risk patients contains four nutrients that can be easily purchased over-the-counter or online i.e. [quercetin](#), [zinc](#), [vitamin C](#) and [D3](#).

- [Zinc](#) (elemental) 25mg 1 time a day ([PubMed](#)) ([Amazon](#)) ([iHerb](#))
- [Vitamin D3](#) 5000 iu 1 time a day ([vdmmeta.com](#)) ([Amazon](#)) ([iHerb](#))

- [Vitamin C](#) 500 mg twice a day ([PubMed](#)) ([Amazon](#)) ([iHerb](#))
- [Quercetin](#) 500mg 1 time a day ([Amazon](#)) ([iHerb](#))

If Quercetin is unavailable, then use Epigallocatechin-gallate (EGCG) 400mg 1 time a day

Protocol for High Risk Patients:

- Hydroxychloroquine (HCQ) 200mg once a day for 5 days, then HCQ 200-400mg one time a week ([ScienceDirect](#)) ([Find a Doctor](#))
- Vitamin D3 5000 IU/day or 50000 IU once a week ([Amazon](#))
- Vitamin C 1000mg once a day ([Amazon](#))
- Zinc 25-50mg/day ([Amazon](#)) | How much zinc to take with hydroxychloroquine?

OR

- Ivermectin 0.2 mg/kg — one dose on day 1 and day 3, then take one dose weekly ([ivmmeta.com](#)). ([Find a Doctor](#))
- Vitamin D3 5000 IU/day or 50000 IU once a week ([iHerb](#))
- Vitamin C 1000mg once a day ([iHerb](#))
- Quercetin 500mg/day ([Amazon](#)) ([iHerb](#))
- Zinc 25-50mg/day ([iHerb](#))

Z-Stack Supplement: In an effort to make it easier for patients, Dr Zelenko has developed an oral supplement that contains all four: vitamin C, quercetin, vitamin D3 and zinc. It's called [Z-Stack Vitamins](#).

Related:

- [List of Doctors that will prescribe Ivermectin](#)
- [List of Pharmacies that will fill Ivermectin](#)

Notes:

Although ivermectin and hydroxychloroquine are relatively safe drugs, they are still synthetic chemicals that can have side effects. Vitamin D, C, Zinc and Quercetin are nutrients that your body require for optimal health. Nutrients are safer alternatives especially if your risk is low e.g. age below 50 and no other chronic illness. Discuss with your doctor on the benefit vs risk for each treatment.

The use of HCQ is highly controversial. The best scientific evidence from randomized controlled trials suggests that HCQ has limited/no proven benefit for post exposure prophylaxis, for the early symptomatic phase and in hospitalized patients. Considering, the unique pharmacokinetics of HCQ it is unlikely that HCQ would be of benefit in patients with COVID-19 infection (it takes 5–10 days to achieve adequate plasma and lung concentrations). Finally, it should be recognized that those studies which are widely promoted to support the use of HCQ are methodologically

flawed.

Source: [Page 16 of FLCCC Alliance – COVID-19 Management Protocol](#) (version Aug 6, 2021)

Zelenko Protocol - Treatment Plan for Patients with Covid-19 symptoms

Fundamental Principles (Dr Zelenko Protocol When to Start)

Treat patients based on clinical suspicion as soon as possible, preferably **within the first 5 days of symptoms. Perform PCR testing, but do not withhold treatment pending results.**

Patient Categories

Low risk patient - Younger than 45, no co-morbidities, and clinically stable

High risk patient - Older than 45, younger than 45 with co-morbidities, or clinically unstable

Treatment Options

Low risk patients - over the counter options:

Supportive care with fluids, fever control, and rest

1. Zinc (Elemental) 50mg 1 time a day for 7 days ([PubMed](#)) ([Amazon](#))
2. Quercetin 500mg 2 times a day for 7 days ([PubMed](#)) ([Amazon](#))
3. Vitamin C 1000mg 1 time a day for 7 days ([Amazon](#))
4. Vitamin D3 5000 IU 1 time a day for 7 days ([Amazon](#))

Alternative for Quercetin: Epigallocatechin-gallate (EGCG) 400mg 1 time a day for 7 days ([J. Agric. Food Chem](#)) ([Amazon](#))

Moderate / High risk patients

1. Zinc (Elemental) 50-100mg once a day for 7 days
2. Vitamin C 1000mg 1 time a day for 7 days
3. Vitamin D3 10,000 iu once a day for 7 days or 50,000 iu once a day for 1-2 days
4. Azithromycin 500mg 1 time a day for 5 days ([Clin Drug Investig](#)) OR Doxycycline 100mg 2 times a day for 7 days
5. Hydroxychloroquine (HCQ) 200mg 2 times a day for 5-7 days ([ScienceDirect](#))

and/or

Ivermectin 0.4-0.5mg/kg/day for 5-7 days ([ivmmeta.com](#)). ([Find a Doctor](#))

Hydroxychloroquine and ivermectin combined? Either or both HCQ and IVM can be used, and if one only, the second agent may be added after about 2 days of treatment if obvious recovery has not yet been observed etc.

If HCQ is not available, Quercetin 500mg 3 times a day for 7 days OR EGCG 400mg 2 times a day for 7 days

Both protocols can be viewed from his [website](#).

Other treatment options

- Dexamethasone 6-12mg 1 time a day for 7 days **OR** Prednisone 20mg twice a day for 7 days, taper as needed (not suitable during viral phase)
- Budesonide 1mg/2cc solution via nebulizer twice a day for 7 days (not suitable during viral phase)
- Blood thinners (i.e. Lovenox, Eliquis, Xarelto, Pradaxa, Aspirin) ([Amazon](#))
- Colchicine 0.6mg 2-3 times a day for 5-7 days ([MedRxiv 2021](#))
- Monoclonal antibodies
- Home IV fluids and oxygen
- Curcumin: 500 mg twice a day ([Ref](#)) ([Amazon](#))
- [Fluvoxamine](#): 50 mg twice daily for 10–14 days. *Add to ivermectin if: 1) minimal response after 2 days of ivermectin; 2) in regions with more aggressive variants; 3) treatment started on or after day 5 of symptoms or in pulmonary phase; or 4) numerous co-morbidities/risk factors. Avoid if patient is already on an SSRI (selective serotonin reuptake inhibitor).*
- If you can't get fluvoxamine (Luvox), using 30mg once a day of fluoxetine (Prozac) is equally effective (equivalent to 50mg twice a day of fluvoxamine).
- Bromhexine 8 mg three times a day ([Ref](#)) ([Lazada Malaysia*](#))
- Pulse Oximeter: Monitoring your oxygen saturation with a [pulse oximeter](#) and to go to the hospital if you get below 94%. ([Amazon](#))
- Mouthwash: 3 x daily – gargle (do not swallow) antiseptic mouthwash with cetylpyridinium chloride (e.g. [Crest, Scope mouthwash™](#)), Listerine™ with essential oils, or povidone/iodine 1 % solution as alternative ([Betadine® Antiseptic Sore Throat Gargle™](#)). ([Reference, page 13](#))
- Nasal Spray: Xlear Nasal Spray with Xylitol ([Ref](#)) ([Amazon](#))
- Aspirin: 325 mg/day unless [contraindicated](#). ([Amazon](#)) (not suitable during viral phase)

* Not available on Amazon

About Dr Vladimir Zelenko

He graduated with a B.A. degree with high honors in Chemistry from Hofstra University. After receiving an academic scholarship to attend S.U.N.Y. at Buffalo School of Medicine, he earned his M.D. degree in May 2000. Dr. Zelenko completed his family medicine residency at South

Nassau Communities Hospital in Oceanside, N.Y. in May 2004. Since then, Dr. Zelenko has practiced family medicine in New York's Hudson Valley. He has been described by his patients as like a family member to thousands of families, and is a medical adviser to the volunteer ambulance corps in Kiryas Joel, New York.

When asked about studies that seemed to discredit the efficacy of HCQ in treating the Chinese coronavirus, Zelenko explained "You don't fire a gun without a bullet in it and then say the gun doesn't work when you don't kill the target. The studies that were done on HCQ did not include the use of Zinc. HCQ is what opens the cell and enables Zinc to attack the virus. One is not effective without the other, or without a suitable substitute for HCQ. The studies were designed to fail."

Dr. Zelenko says that both prophylaxis measures and actual case treatments need to be customized to the individual. As a general rule, he says, those people who are in the higher risk groups, both by age and by other pre-existing conditions, require more aggressive actions on both the preventative and diagnostic side.

"This virus remains relatively stable inside the host for about the first five days," Zelenko says. "After that it starts to multiply rapidly. It also starts to migrate from sinus to lungs and cardio areas where involvement becomes more severe and treatment becomes more difficult. The key is early intervention." Zelenko again mentioned his 84% success rate in high-risk patients.

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