



## A Review on Preventive Treatments for COVID-19

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The 2019-novel coronavirus (CoV) is a major source of disaster in the 21<sup>st</sup> century. However, the lack of specific drugs to prevent an attack is a major need at this current point of time. COVID-19 is a disease occurred due to corona virus. In this regard, I have conducted a systematic review to identify possible treatment of corona virus (CoV). The search based on it including herbal and allopathic drugs as no any vaccines and medicines are available to treat COVID-19. Till 22<sup>nd</sup> September 2020, the numbers of patients currently infected are 31,174,627 from which 962,613 people were died. Thus, this review provides beneficial treatment in current situation. Starting from 2005 to 2020 some major studies have been done to treat this corona virus including traditional Chinese medicines. First time this disease was observed in china in 2002, so after 2003 the research was started on corona virus, currently known as COVID-19.

**Keywords:** Corona Virus; COVID-19; Allopathic Drugs; Herbal Medicines**Introduction**

The novel coronavirus (COVID-19) named describes severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Initially it was originated in a seafood market in Wuhan after that it has spread rapidly in China, and nowadays the whole world including major developed countries are suffering from corona. Till 2<sup>nd</sup>

May 2020, 3,467,476 cases were reported in the world including all countries, from which 243,750 people died and 1,113,549 people were treated. The SARS-CoV-2 was first time observed in China in 2002 [1]. Some treatment of COVID-19 are under study. Some allopathic antiviral drugs have been used in patients with corona and herbal drugs are in use nowadays [2].

**Applications**

Year	Name of active herbal drug	Source	Mechanism of action	References
2008	Houttuynia cordata extract	<i>Houttuynia cordata</i> Thunb	Inhibit SARS-CoV3C like protease (3CLpro) and RNA-dependent RNA polymerase (RdRp).	3
2005	Lycorine	<i>Lycoris radiata</i>	Increased of CD4+ and CD8+ T cells and used in the treatment of SARS	4
2005	Aloe emodin and hesperetin	<i>Isatis indigotica</i> root extract	Inhibits the cleavage activity of the 3CLpro.	5
2010	Phenanthroindolizidines and phenanthroquinolizidines	Tylophorine compounds	Blocks the TGEV-induced apoptosis.	6
2010	Apigenin, luteolin and quercetin	<i>Torreya nucifera</i>	Effect on 3CLpro inhibitory activity	7
2012	Myricetin and scutellarein	Natural compounds	as SARS-CoV chemical inhibitors	8
2020	26 potent antiviral agents	Chinese medical herbs	Produce direct anti-viral action	9

**Table 1:** Application of herbal medicines for COVID-19.

Year	Name of drug	Mechanism of action	References
2020	Teicoplanin	Inhibits cleavage of viral spike protein by capthepsin L, prevent replication of RNA	10
2020	Hydroxychloroquine and azithromycin	Produce antiviral effect by PCR	11
2020	Arbidol combined with LPV/r	Arbidol Inhibit early viral replication, in combination with LPV/r it found to decrease respiratory and GIT transmission to decrease COVID-19.	12

**Table 2:** Allopathic drugs for treatment of COVID-19.

## Conclusion

As the current situation of COVID-19 is too difficult to handle, above review describes structure of SARS-CoV 2 as well as structure related herbal treatment starting from 2005 to 2020 in and recently found drugs for COVID-19 in detail.

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