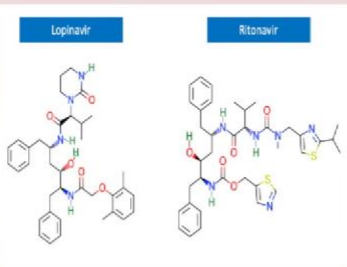
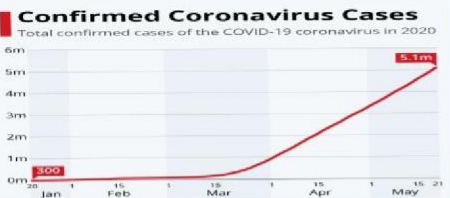
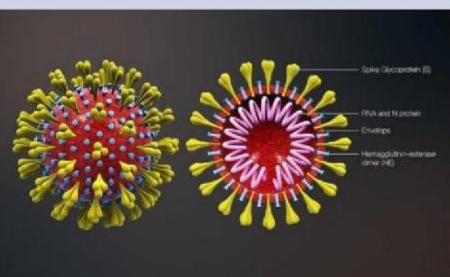




**ABSTRACT**

In december 2019 observed a novel COVID -19 virus in the Wuhan city of China. Further scientist worldwide started discovering medications for this pandemic SARS-COV-2 . It novel severe acute respiratory syndrome corona virus 2 (SARS-COV-2) which has challenged to invent effective drugs for prevention and treatment . Review describes pharmacology of all medications drugs used to treat novel COVID -19.



**INTRODUCTION**

SARS-COV-2 is the severe acute respiratory syndrome. In December 2019 unknown cause of pneumonia case identified in Wuhan city of China . In January 2020 this previously unknown virus was named corona virus , this name was given by WHO [World Health Organization ] in Feb. 2020. In April 5, 2020 there are over 1.2 million of cases were identified and around 69000of deaths over the 200 countries .In May 2020 over 4444670 cases were identified.

Corona virus is the viruses transmitted from animals to humans .

Symptoms of COVID -19 are as follows:

Fever , Cough, Shortness in breathing, Breathing difficulties, Fatigue, Sore throat.

This virus infects people from of all ages . Two groups have higher risk of getting infected by COVID-19 are, People over 70 years, People having serious chronic illness, Such as, Cardiovascular disease , Diabetes , Chronic liver disease, Hypertension, Cancer.

Person can be infected by the virus if person is within the close proximity of someone who is infected by COVID-19.

All the countries and World Health Organization (WHO) are trying to invent the drug for COVID-19. WHO has declared corona virus (SARS-COV-2) COVID-19 as 2019 pandemic.

**Review for selected reprocessed drugs:-**

**Chloroquinone / Hydrochloroquinone :-**

Hydroxychloroquinone-

Formula – C 18H26ClN3O

Molecular mass - 335.872 gm/mol

Chloroquinone having a deep down history in the prevention and treatment of malaria of chronic inflammatory disease .

Hydroxychloroquinone has EC50 for SARS – COV-2 with invitroactivities compared to chloroquine after 24 hours .

500 mg twice or once a day is given to patient of chloroquinone . Recommendation SLE is 400 mg /day. Till the date no adverse effect has been reported . hydroxychloroquinone is safe during pregnancy . 588 patients tested in 12 review studies there is no infant ocular toxicity found during pregnancy

Hydroxychloroquinone is effective for malaria but shows side effects like hypoglycemia , neuropsychiatric , retinopathy.

**Ribavirin :-**

Ribavirin inhibits viral RNA – dependent RNA polymerase it is a guanine analogue .To treat SARS – COV -2 necessary high dosage approximate 1.2 gm to 2.4 gm orally every 8 hours and combination therapy.

During treatment of SARS – COV – 2 ribavirin was given in the combination of IFN – a2b or IFN – a2a to give two mechanical of antiviral activities .

Clinical experience of ribavirin revealed in 26 of the 30 studies . In remaining 4 studies it showed adverse effect as hematological and liver toxicity.

In SARS trials 60% of patient resulted in hematological anemia because of use of very high dose dependent hematological severe dependent hematological toxicity . It also shows contraindication in pregnancy .

In middle east respiratory syndrome (MERS ) It is used in combination with interferons . If ribavirin is used with combination it provides best for clinical efficacy.

**Lopinavir / Ritonavir :-**

Lopinavir is antiretroviral. It is from the protease inhibitor class. It is used to treat HIV with the combination of Ritonavir in fixed dose.

This treatment is known as highly active antiretroviral therapy (HAART) .This oral combination for HIV is appropriate by US Food and Drug Administration (FDA)

400 mg dose twice / day orally is given to patient .

**SUPPORTIVE THERAPIES**

Corticosteroids

Anticytokine

Immunoglobulin Therapy

**Conclusion**

This article is written to get knowledge about SARS – COV-2 which is spreading all over the world. Article has information about ongoing clinical trials , investigation drugs and supportive therapies for corona virus . It has information about clinical trials to prepare vaccine and effective therapy to fight against corona virus . Remdesivir is the drug which shows the potential effect against corona virus .

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