COVID-19 Treatment

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Since COVID-19 is a novel virus, there have been continuous efforts by the various health agencies to undertake trials of various drugs to find efficacy, safety of those. It has been work in progress, with scientists getting better understanding with greater experimentation.

Dexamethasone trial

- Preliminary findings shared with WHO have shown that **Dexamethasone**, a corticosteroid (which closely mimic cortisol, the hormone naturally produced by the adrenal glands in humans), can be lifesaving for patients who are critically ill with COVID-19.
- For patients on ventilators, the treatment was shown to reduce mortality by about one third, and for patients requiring only oxygen, mortality was cut by about one fifth.
- The benefit however was only seen in patients seriously ill with COVID-19, and was not observed in patients with milder disease.
- Dexamethasone is a steroid that has been used since the 1960s to reduce inflammation in a range of conditions, including inflammatory disorders and certain cancers.
- It reduces the production of the chemicals that cause inflammation and also reduces the activity of the immune system by affecting the way white blood cells function.

<u>Umifenovir Trial</u>

• The Central Drug Research Institute (CDRI), Lucknow, a constituent lab of the CSIR, has received permission for carrying out Phase III trials for the use of Umifenovir against COVID-19. It is found that the drug has a good safety profile and acts by preventing entry of the virus into human cells and also by priming the immune system.

• Umifenovir is mainly used for the treatment of influenza. CSIR-CDRI has developed the process technology for Umifenovir and licensed the process technology for manufacturing and marketing the drug to Medizest Pharmaceuticals.

Favipiravir Trial

- Glenmark Pharmaceuticals has received an approval from India's drugs regulator to make and sell oral antiviral drug favipiravir for treating mild-to-moderate Covid-19 patients in the country.
- Favipiravir is an antiviral drug and is also being used to treat new influenza viruses in Japan.