

Niclosamide

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In news- The CSIR and Laxai Life Sciences Private Limited have initiated phase II clinical trials of **anti-helminthic drug** 'Niclosamide' for the treatment of COVID-19 patients.

More information-

- The trial is a **multi-centric, randomised, open label clinical study** to evaluate the efficacy, safety and tolerability of Niclosamide for treating hospitalised COVID-19 patients.
- The collaborative research between **CSIR-Indian Institute of Integrative Medicine (IIIM), Jammu and the National Centre for Biological Sciences, Bengaluru** had recently demonstrated that Niclosamide was also a potential SARS-CoV2 entry inhibitor, blocking the viral entry through pH dependent endocytic pathway.
- In a screen to identify drugs that can **inhibit syncytia formation**, Niclosamide was identified as a promising repurposed drug by a research group from King's College London, which collaborated in this project.
- The syncytia or fused cells observed in the lungs of patients with COVID probably result from the fusogenic activity of the SARS-CoV-2 spike protein.

About Niclosamide-

- Niclosamide, sold under the **brand name Niclocide** among others, is a medication used to treat **tapeworm infestations**.
- It is **not effective against** other worms such as pinworms or roundworms.
- Niclosamide is in the anthelmintic family of medications and **works by blocking the uptake of sugar by the worm**.
- It may be used during pregnancy and appears to be

safe for the baby.

- It is on the **World Health Organization's List of Essential Medicines** and is not commercially available in the United States.
- It is also effective in a number of other animals.
- It is used as a **general purpose piscicide in aquaculture.**

Niclosamide has a **short half-life in water in field condition** and hence is more valuable in ridding commercial fish ponds of unwanted fish.