

SOLIDARITY TRIAL: WHO COVID-19 treatment trial



World Health
Organization

In an unprecedented effort to obtain scientific data during the SARS-CoV-2 pandemic, the World Health Organization (WHO) has announced the new SOLIDARITY trial that would include thousands of patients from around the world (45 countries and counting), and which has been designed to be as simple as possible in order to encourage all hospitals with confirmed cases to participate.

Although scientists have suggested various existing compounds for testing as potential therapeutic agents, the WHO will focus on the four most promising therapies:

1. An experimental compound called **Remdesivir**: [Originally designed for Ebola and related viruses, but showed no effect.](#) However, [this drug did have anti-viral effects against SARS and MERS causing coronaviruses in animal models.](#) Additionally, cases studies on COVID-19 patients suggest potential effectiveness ([Holshue et al., 2020](#); [Cohen Science Article 2020](#)).
2. The anti-malarial drugs **chloroquine** and **hydroxychloroquine**. This drug has been trending on many social media and news outlets as potential cure for COVID-19. However, results from a clinical trial did not convince the scientific community ([WHO working group report](#))
3. A drug combination used in HIV patients, which includes **lopinavir** and **ritonavir**. [This combination was tested in](#)

[a small cohort in China, but did not show any effect on very ill patients](#). Researchers hypothesise that the lack of effect was because it was tested on severe COVID-19 patients.

4. **Interferon- β** in combination with **lopinavir** and **ritonavir**. [This drug combination was shown to have an effect in an animal model of MERS.](#)

Enrolling subjects in SOLIDARITY is expected to be easy. When a positive case of COVID-19 is confirmed and the patient is eligible, the physician will enter the patient's data, including co-morbidities, into the WHO computer program. The participant must sign the informed consent for further submission to the WHO. Once the physician determines which drugs are available at the hospital, the website will randomise the patient to one of the drugs available.

Notably, this trial is not double-blinded, so there could be placebo effects from patients knowing they received a drug. More information about SOLIDARITY is available at:

Article by Christian David Barreto Vargas

References:

- [WHO launches global megatrial of the four most promising coronavirus treatments](#)
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- Arabi, et al., 2020. [Treatment of Middle East respiratory syndrome with a combination of lopinavir/ritonavir and interferon-B1b \(MIRACLE trial\):](#)

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