



## Should We Routinely Use Ivermectin to Treat Covid-19 in Early Stage?

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The FDA/CDC/NIH/WHO's negative campaign of labeling Ivermectin (IVM) as the drug for horses appears paradoxical because FDA had already approved IVM for use in human too for de-worming, river blindness and Scabies without any concern for any side effects. Then why does FDA have concern for side effects of IVM when used for COVID-19?

Whether IVM is a drug for horses or donkeys is not the point. The point is - what is the action of IVM on the virus causing COVID-19? Dr. Caly, *et al.* [1] had conclusively proven *in vitro* that IVM blocks the entry of SARS-CoV-2 into the cell thus preventing replication. The indicated biological mechanism of antiviral action of IVM is thought to be competitive binding with SARS-CoV-2 spike protein.

The Nobel Committee for Physiology or Medicine honored the discovery of IVM in 2015. IVM was recognized as a multifaceted drug deployed against some of the world's most devastating tropical diseases. In March, 2020, when IVM was first used against a new global scourge, COVID-19 [2], more than 20 randomized clinical trials have tracked such inpatient and outpatient treatments. Six of seven meta-analysis of IVM treatment reporting in 2021 found notable reductions in COVID-19 fatalities. During mass IVM treatments in Peru, excess deaths fell by a mean of 74% over 30 days in its ten states.

Although several Randomized Double blind control studies has already been done [3-7] and some are currently underway at different research institutions, but currently published plenty of Observational Studies [8] and Prospective Studies [9] show enough

evidence that IVM, if used early, does prevent hospitalization, ICU admission and need for ventilator.

Excuses of side effects of IVM do not stand well for not using it in covid-19 because FDA does not worry about side effects of IVM when used for other conditions - deworming in human, river blindness and scabies.

Negative campaign of IVM is really political, not scientific. The Big Pharma has already come up with antiviral drugs and they won't have a market for high cost antiviral drug compared to cheap drug IVM. So the Big Pharma is lobbying FDA/CDC for not approving IVM for COVID-19.

In conclusion, since IVM is approved by FDA for human use in other conditions mentioned above, it is the rule of FDA that Physicians under his/her judgment have the prerogative to use an approved drug for another use (called "Off-Label" Use) if it appears to be effective which is in this case.

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