

## **Six Mechanisms of Action How IVERMECTIN Knocks Down COVID-19:**

### 1) IVERMECTIN prevents viral entry into host cells.

Viruses in general do not have its own machinery to replicate. It makes use of the host cells' ribosomal complex in order to transcribe and translate its genomic material. And this can only be achieved if the virus gains entry into the host cells. SARS CoV-2 has its spike protein that happened to have an exact configuration with that of the ACE-2 protein on the cell membranes of the targets cells (alveolar lining of the lungs, endothelium of the blood vessels, lining of the gut, the heart, the brain, and certain other organs). It works in a manner of a lock-and-key arrangement, that of the ACE-2 protein and the spike protein. IVERMECTIN specifically binds onto the spike protein (S-protein) and practically dismember the virus thereby disabling it to gain entry into its target cells.

### 2) IVERMECTIN prevents viral entry into the nucleus of the cells.

The virus attaches on a heterodimer protein Importin  $\alpha$  / Importin  $\beta$ -1 which serves as a transport system in order for it to gain entry into the nucleus. Then the virus shuts down the nucleus thereby immune responses against it is practically suppressed. IVERMECTIN inhibits this heterodimer protein and the virus is prevented from latching onto it and is thus prevented from being transported into the nucleus, thereby disabling the virus from performing this critical function.

### 3) IVERMECTIN inhibits genomic transcription and translation.

Helicase enzyme is necessary in order to initiate genomic transcription and eventually complete its replication through protein translation. IVERMECTIN was found to cause profound inhibition of this very crucial enzyme.

### 4) IVERMECTIN prevents cytokine storm.

SARS CoV-2 has 2 pathophysiologic pathways. The more common of this is that which leads to Acute Respiratory Distress syndrome. This results from the cytokine storm that was created as a result of overwhelming viral proliferation. IVERMECTIN was found to be a very potent immune system modulator as it

practically suppresses cytokine storm that causes leakage of fluids into the alveolar spaces consequently leading to ARDS.

5) IVERMECTIN prevents CD-147 vascular occlusion.

The second pathophysiologic pathway seen in COVID-19 is vascular occlusion caused by hyper-coagulation of blood mediated by the protein receptor present in the cell membrane of red blood cells called CD-147. This leads to a condition much similar to a disseminated intravascular coagulation and was observed to be occurring among COVID-19 patients. IVERMECTIN was found to inhibit the stimulation of this receptor by the virus and thereby preventing the hypercoagulability state.

6) IVERMECTIN increases interferon production and enhances its effects.

One very important mechanism of immune response against viruses is the production of interferon. Interferon are like the bullets fired directly against the viruses by the immune cells. IVERMECTIN was found to specifically stimulate interferon production and enhancement.