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Glenmark to test Favipiravir, Umifenovir for COVID-19 treatment

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Glenmark received approval from the Indian regulator to initiate the study

Glenmark Pharmaceuticals, a research-led, integrated global pharmaceutical company, has announced a new randomized, open-label study to test the combined efficacy of two antiviral drugs Favipiravir and Umifenovir as a potential COVID-19 treatment strategy.

The two antiviral drugs have different mechanism of action, and their combination may demonstrate improved treatment efficacy by effectively tackling high viral loads in patients during early stage of disease.

Early administration of a combination of antiviral medications acting by different mechanisms is desirable for the treatment of COVID-19, since the viral load of SARS-CoV-2 peaks around the time of symptom onset.

Thus combining antiviral drugs could result in greater clinical effectiveness and could also prevent, or delay, the emergence of resistance. Favipiravir is an oral antiviral drug approved in Japan since 2014 for the treatment of novel or re-emerging influenza virus infections.

It has a unique mechanism of action by which it inhibits viral replication: it is converted into an active phosphoribosylated form (favipiravir-RTP) in cells and recognized as a substrate by viral RNA polymerase, thereby inhibiting RNA polymerase activity that is required for viral replication.

Umifenovir is another oral antiviral drug licensed for the treatment and prophylaxis of influenza A and B infections in Russia and China.5 Umifenovir impedes the viral attachment to cells and acts as a viral entry inhibitor.

Additionally it exhibits modulatory effects on the immune system and induces interferon-production. Hence a combined use of Favipiravir and Umifenovir acting on different mechanisms offers a comprehensive antiviral cover on preentry and post-entry life-cycle of the SARS-CoV-2 virus. Both Favipiravir and Umifenovir inhibited virus infection in vitro and have shown efficacy in COVID-19 clinical trials.

The current Glenmark study will examine whether early administration of a combination of Favipiravir and Umifenovir, both acting by different mechanisms, enhances antiviral efficacy on COVID-19 patients.

The new combination clinical trial will be called FAITH – (FA vipiravir plus Um I fenovir (efficacy & safety) T rial in Indian H ospital setting).

Duration of treatment will be 14 days and patients will be discharged after clinical cure and two consecutive negative tests for COVID-19 based on RT-PCR.