Hitting the nail on the headAn effective new drug to treat covid-19 emerges from Merck

It hopes to make the drug available in poor countries as well as rich onesNov 4th 2021

Thor, the Norse thunder-god, was reputed to carry a hammer known as Mjollnir—a tool for destroying enemies and blessing friends. The hammer has provided suitable inspiration for the name of a powerful new drug to fight covid-19: molnupiravir. That drug has just been approved by Britain’s national medicines regulatory agency—the first in the world to do so. Molnupiravir, made by Merck, a big pharma firm, and a Florida-based biotech called Ridgeback Biotherapeutics, is the first oral antiviral medicine available to treat covid-19. The approval marks another milestone in the world’s fight against covid-19.

Other countries are also working quickly to approve the new medicine, which has provoked keen interest. Last month the interim results of a trial found that patients with a risk factor for covid-19 were 50% less likely to be hospitalised or die if the oral antiviral was taken in the first five days after symptoms. Britain has secured 480,000 courses of molnupiravir, and sales of the drug are already brisk. America, Australia, Britain, the Philippines, Indonesia, Japan, New Zealand, Malaysia, Thailand and Vietnam are some of the countries that have secured deals, or are in the process of doing so.

Demand is likely to be very high. The drug will be used to treat patients who have not been vaccinated, or who remain at high risk despite having had a jab. Doctors now have a medicine to offer those most at risk from covid, which patients can take at home. The drug is also expected to be affordable globally. It is expected that rich countries will pay $700 a course for the drug, but low-income ones will pay something closer to $20—and maybe less as time goes on.

Given the difficulties that low- and middle-income countries have faced in obtaining vaccines this year, it is reasonable to wonder whether rich countries are going to hoard the supply of this new drug, or even prevent it from being exported from the countries in which it is made. That seems unlikely. Since the summer of last year when it bought the rights to the new molecule from Ridgeback, Merck has been looking for ways to make the drug widely available, such was its promise.

Known then as eidd-2801 the molecule had been shown to inhibit the replication of RNA viruses including sars-cov-2 but had not yet been through trials in humans to test its efficacy. As part of its covid-19 response, Merck chose to work on two vaccines and two drugs. With the exception of molnupiravir all its other products failed during development.

Merck increased its own production and has licensed the drug to be made by others. It expects to produce 10m courses of treatment by the end of 2021 and hopes to be able to double manufacturing capacity next year. At the same time, five Indian manufacturers of low-cost generic drugs, including Cipla, Dr Reddy’s and Sun Pharmaceuticals have already signed deals to make generic versions of molnupiravir. Merck says it is also setting aside 3m courses of its own supply for low- and middle-income countries, to make sure not all early supplies are snaffled up by rich countries.

Another notable move came on October 27th. Merck signed a voluntary licensing agreement with the Medicine Patent Pool—a United Nations-backed organisation that negotiates drug licences on behalf of less wealthy countries. The agreement will allow many more firms around the world to manufacture generic versions of molnupiravir. (One lesson of the pandemic has been the need to have a global manufacturing footprint.)

Trevor Mundel, president of global health at the Gates Foundation, says that because many generic drug firms are waiting to gauge demand for molnupiravir in less wealthy countries, the foundation has made $120m available to get manufacturing going. This money will support guarantees to manufacturers that a certain volume of the new drug will be bought. The foundation says it is hoping to speed up production by generic manufacturers, some of which can make as many as 10m courses a month.

In the past year firms such as Pfizer and Moderna have been criticised for the lack of global access to their vaccines and their unwillingness to share the know-how to make them. Will Merck get much thanks for all its generosity? Mr Mundel thinks the speed and global breadth of the launch of molnupiravir will be without precedent in history. If so, that will mark a high-water mark in global health. Not everyone is happy. Médecins Sans Frontières, a humanitarian charity, says the Merck licence from the MPP does not go far enough. James Love, director of Knowledge Ecology International, a “social justice” non-profit, disagrees, saying that the agreement goes further than any other company has done during the pandemic.

Asked how much Merck had invested in its covid-19 research programme so far, the firm would only say “billions”. It is not likely to recoup this soon from low- and middle-income countries. There are also concerns about whether the drug will be safe for everyone to take. Its ability to cause mutations in viruses could also pose a risk to fetal development. Regulatory agencies may thus choose to limit the use of the drug to certain groups for these reasons. Nonetheless, countries struggling to beat down high numbers of covid hospitalisations and deaths, will find molnupiravir a powerful new hammer.