Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Treatment

Drug trials under way

We'll soon know if covid-19 can be treated with drugs developed for HIV and Ebola, reports **Alice Klein**

THE results of two clinical trials testing whether HIV and Ebola drugs are effective at treating the symptoms of covid-19, the disease caused by the new coronavirus, will be known soon, says the World Health Organization (WHO). And on 16 February, an antiviral called favilavir was approved by China's National Medical Products Administration for use in treating the disease, according to a report in *China Daily*.

Marie-Paule Kieny of the WHO told a press conference in Geneva, Switzerland, on 12 February that doctors in China have given a combination of two HIV drugs – lopinavir and ritonavir – to "quite a number" of people with covid-19. The results of the trial will be known within "a few days or a few weeks", she said.

Doctors in China will also start testing remdesivir, a drug first developed to treat the Ebola virus, in people with covid-19 very soon, Kieny said. The drug was tested without much success with Ebola, but may be more effective against covid-19, she said. "But we will have to wait for a few weeks to know whether this gives any positive signal," she added.

In addition, four vaccines are being developed to try to prevent people getting the disease in the first place, Soumya Swaminathan of the WHO told the press conference. "It's likely that there will be one or two that will go into human trials in about three to four months from now," she said. "However, it would take at least 12 to 18 months for a vaccine to become available for wider use."

Various drugs are being trialled in China to treat covid-19

CHINE NOUVELLE/SIPA/SHUTTERSTOCK

The press conference followed a global research forum held in Geneva on 11 and 12 February that brought together scientists, public health agencies and health ministries from around the world to discuss the research that needs to be done to tackle the covid-19 outbreak. Researchers from Wuhan, where the outbreak began, attended via video link due to travel restrictions.

The forum identified the most urgent research areas: working on treatments for people who are already sick, finding easier ways to test people to see if they are infected and understanding the behaviour of the virus.

At the moment, covid-19 testing involves analysing specimens in a lab using specialised equipment. It would be easier if there was a fast, simple test that could be done on the spot in community settings, Swaminathan said.

Dominic Dwyer at the University of Sydney, Australia, agrees that the development of these "point of care" tests should be a priority. "The quicker you can make a diagnosis, the quicker you can do something about it, like isolating the patient," he says. "If a cruise ship had an outbreak of coronavirus, for example, being able to come on board straight away with a point-of-care device would be very useful."

We also need to find out more about where the new coronavirus came from, how it jumped to humans, which people it affects most and why, and whether quarantine methods and travel bans are effective at containing it, Swaminathan told the press conference. "I think we have a lot to learn from studying all these," she said. ▮

Analysis Temperature

Will heat kill the coronavirus? We don't know if changing seasons will help stem the outbreak, says **Michael Le Page**

WILL the covid-19 outbreak caused by the new coronavirus fade as winter in the northern hemisphere comes to an end? This has been suggested by some researchers and repeated by some political leaders, including US president Donald Trump.

"We absolutely don't know that," says Trudie Lang at the University of Oxford. "I keep asking virologist colleagues this and nobody knows. So when you hear people say the weather will warm up and it will just disappear, it's a very unhelpful generalisation."

This is essentially what Trump said on 10 February. "The heat, generally speaking, kills this kind of virus," he told a meeting. "A lot of people think that goes away in April as the heat comes in."

Trump isn't the only politician to make this sort of claim. The UK's health secretary, Matt Hancock, recently told ITV reporter Tom Clarke that the hope was to slow the spread of the virus so any epidemic reaches the UK in spring and summer when coronaviruses, of which the new virus is just a specific example, are less transmissible.

"One scenario is that it will burn itself out in summer, another that it will reduce but then return in winter"

It is thought the virus – known as 2019-nCoV – can survive for up to four days on surfaces. Some researchers, including Paul Hunter at the University of East Anglia, UK, do think the new coronavirus won't survive for as long in warmer conditions.

"One extreme scenario is that it will burn itself out sometime in the summer," says Hunter. "The other extreme scenario is that it will reduce in the summer but it will come back again in the winter and become what we call endemic,