Coronavirus

'Assess AZ vaccine'

Philippines, Thailand sign for Oxford shot

BANGKOK, Nov 28, (AP): Thailand on Friday signed a $200 million deal to procure 26 million doses of a trial coronavirus vaccine developed by pharmaceutical firm AstraZeneca in collaboration with Oxford University. It is expected to be delivered in mid-2021.

The doses would cover 13 million people in a population of about 69 million.

Thailand's National Vaccine Institute signed a non-refundable advance market commitment contract worth 2.38 billion baht ($79 million) with AstraZeneca to reserve the supply of the vaccine candidate. Another 3.67 billion baht ($121 million) agreement for the purchase of the trial vaccine, known as AZD1222, was signed by the Health Ministry's Disease Control Department.

"We have followed the vaccine manufacturers globally, but this group has achieved very high progress," Thai Prime Minister **Prayuth Chan-ocha** said at the signing. "They are likely to be able to produce the vaccine early next year. Most importantly, we have to get ourselves ready for the domestic process including packaging and logistics."

Chan-ocha

Government spokesperson Anucha Burapachaisri said officials are still considering how to prioritize vaccine recipients. "Those who work closely with COVID-19 patients, for example, doctors and nurses, should be among the first people. But this needs further discussion," he said.

Oxford and AstraZeneca reported Monday that their trial vaccine appeared to be 62% effective in people who received two doses, and 90% effective when volunteers were given a half dose followed by a full dose.

They did not mention at the time, but later acknowledged, that a manufacturing issue had resulted in "a half dose of the vaccine being administered as the first dose" to some participants, a development that led to criticism that its test results were flawed.

AstraZeneca has said it plans to conduct a new global clinical trial to make a fresh assessment of the vaccine's efficacy.

Advantages

The AstraZeneca trial vaccine is regarded as having several advantages over rival vaccines being developed so far for less-developed countries, including cheaper cost and the ability to be stored at temperatures not as cold as the others.

Under a separate deal in October, the Health Ministry, Siam Bioscience Co. and the SCG business conglomerate signed a letter of intent with AstraZeneca on the manufacturing and supply of the AZD1222 vaccine candidate. It would allow Siam Bioscience to produce the vaccine at its own plant, with a starting date targeted for the middle of next year.

Siam Bioscience said that if plans proceed smoothly, Thailand would become the first country in Southeast Asia to produce the vaccine.

Thailand has had 3,961 confirmed cases of the coronavirus since January, including 60 deaths. While it has coped well with the health aspects of the crisis, the measures it has taken to combat the disease, most notably stopping tourist flights into the country, have badly hurt its economy.

In the Philippines, more than 30 companies on Friday signed an agreement to purchase at least 2.6 million vaccine doses from AstraZeneca in the country's first such deal to secure coronavirus vaccines. They plan to donate a large part of the doses to the government for its planned vaccination program and use the rest to inoculate their employees, business officials said.

Business leader Jose Concepcion III said the vaccine is expected to be delivered in the second quarter of next year and would cover about 1 million people, but did not disclose other details.

The purchase would be crucial in restoring business confidence that has been shattered by months of the pandemic and lockdowns, he said.

"We want an end to this nightmare and this is the best alternative we have," Concepcion told an online news conference after the signing, describing it as an opportunity to open up the economy again.

The Philippine government says it's targeting about 60 million Filipinos to be vaccinated against the coronavirus over about two years starting next year. The action, at a cost of more than 73 billion pesos ($1.4 billion) is aimed at developing immunity in a majority of the population. The Philippines has recorded 425,918 confirmed cases of the coronavirus, including 8,255 deaths.

Also:

LONDON: The British government said Friday it has formally asked the country's medicines regulator to assess whether a coronavirus vaccine developed by AstraZeneca and Oxford University should be authorized for use.

The step comes amid questions about preliminary results from trials of the jab, after the company and the university acknowledged that the most encouraging part of their findings stemmed from a dosing error.

UK Health Secretary **Matt Hancock** said he had asked the Medicines and Healthcare Products Regulatory Agency to determine whether the vaccine "meets rigorous safety standards."

It's the second vaccine candidate to reach the formal assessment stage in Britain, following a shot developed by Pfizer and its German partner BioNTech. A third vaccine from US firm Moderna is not far behind.

The British government has ordered 100 million doses of the Oxford-AstraZeneca vaccine, and plans to start distributing it in December if it gains approval.

The regulator said it could not give a time frame for possible approval of the vaccines

MHRA Chief Executive **June Raine** said "no vaccine would be authorized for supply in the UK unless the expected standards of safety, quality and efficacy are met."

Oxford and AstraZeneca reported Monday that their vaccine appeared to be 62% effective in people who received two doses, and 90% effective when volunteers were given a half dose followed by a full dose. They did not mention at the time, but later acknowledged, that a manufacturing issue had resulted in "a half dose of the vaccine being administered as the first dose" to some participants.

The drugmakers informed the UK regulator of the issue when it was discovered, and it was agreed to complete the late-stage trial with two groups.

AstraZeneca has said it plans to conduct a new global clinical trial to assess the vaccine's efficacy but does not expect that to delay regulatory approval in Britain or the European Union -- though the US Food and Drug Administration may take longer.

Some scientists have expressed concerns about gaps in the data and the way the results were reported. Only 2,741 people received the half dose, making it hard to know if the effectiveness seen in the group is real or a statistical quirk. A total of 8,895 people received two full doses.

Eleanor Riley, professor of Immunology and Infectious Disease at the University of Edinburgh, said Oxford and AstraZeneca needed to answer questions about their results "clearly and completely."

"Trust is at a premium when it comes to vaccines and we must not do anything that might in any way undermine that trust," she said.

Full results are due to be published in medical journal The Lancet, though no date has been given.

Pfizer and BioNTech said earlier this month that their vaccine is 95% effective, and Moderna said its product appears to be 94.5% effective, according to preliminary data.

Unlike the Pfizer and Moderna vaccines, the Oxford-AstraZeneca jab does not need to be stored at freezer temperatures, making it potentially easier to distribute, especially in developing countries. It is also cheaper, because AstraZeneca has agreed not to profit from it during the pandemic.

Britain's Prime Minister Boris Johnson, wearing a mask because of the coronavirus, has a close look at a sample at the Lateral Flow Testing Laboratory during a visit to the Public Health England site at Porton Down science park near Salisbury, southern England, on Friday Nov. 27. (AP)

The Turning Torso building in Malmo, Sweden, is surrounded by sea smoke Friday Nov. 27. Colder temperatures, sun and sea smoke also known as steam fog, enveloped the coast of Oresund, the Sound strait between Sweden and Denmark. (AP)

Schmitt

Frederiksen

Discovery

Culled mink resurface: Some of the thousands of mink culled to minimize the risk of them re-transmitting the new coronavirus to humans have risen from their shallow graves in western Denmark after gases built up inside the bodies, Danish authorities said Thursday.

"The gases cause the animals to expand and in the worst cases, the mink get pushed out of the ground," Jannike Elmegaard of the Danish Veterinary and Food Administration said. He said it affected "a few hundred" animals.

The mink are buried in trenches that are 2.5 meters (8.25 feet) deep and 3 meters (10 feet) wide. A first layer of about 1 meter of dead mink are then covered with chalk before another layer of animals is laid, covered again with chalk and then with dirt, Elmegaard told The Associated Press.

But because the soil where they are buried is sandy, some have re-emerged. "We assume it is the mink that were in the upper layer that pop up," he added calling it "a natural process."

"Had the earth been more clayish, then it would have been heavier and the mink would not have resurfaced," he told the AP.

Denmark culled thousands of mink in the northern part of the country after 11 people were sickened by a mutated version of the coronavirus that had been observed among the animals.

Earlier this month, the Social Democratic minority government got a majority in parliament to back its decision to cull all of Denmark's roughly 15 million mink, including healthy ones outside the northern part of the country where infections have been found. The proposed law also bans mink farming until the end of 2021.

The government had announced the cull despite not having the right to order the killing of healthy animals, an embarrassing misstep that caused it to scramble to build political consensus for a new law.

Parliament also has to decide to pay compensation to the breeders. Danish mink farms are the world's biggest supplier of mink fur, accounting for 40% of global production. Most exports go to China and Hong Kong.

There are 1,139 mink farms in Denmark, employing about 6,000 people. Breeders have said the culling will put an end to the industry. Prime Minister **Mette Frederiksen** on Thursday visited a mink farm in northern Denmark and said it had been "emotional." The operators "had their life's work shattered in very, very short time," she said, before wiping tears away with her sleeve. (AP)

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Health

EU fines drug makers

WHO reminds all to get more active

GENEVA, Nov 28, (AP): As the coronavirus leaves many people housebound and many Americans sit to feast for Thanksgiving, the World Health Organization says people need to get more active, insisting that up to 5 million deaths worldwide could be avoided each year if people would run, walk and simply move more.

The UN health agency, launching updated guidelines on physical activity and its first advice on sedentary behavior, is pointing to figures that one in four adults - and four in five adolescents - don't get enough physical activity, a situation that's complicated by the COVID-19 crisis that has shut up many people indoors.

It recommends at least 2 1/2 hours of "moderate to vigorous aerobic activity" for adults per week, and an hour per day for kids and teens. A lack of physical activity leads to extra health care costs of $54 billion per year, plus another $14 billion in lost productivity, WHO said.

The findings come as the Geneva-based agency released an update on "WHO Guidelines on physical activity and sedentary behavior" - building upon, revising and expanding recommendations in the previous guidelines published a decade ago.

Improve

"Physical activity of any type and any duration can improve health and well-being, but more is always better," said Dr. Ruediger Krech, WHO's director of health promotion. "If you must spend a lot of time sitting still, whether at work or school, you should do more physical activity to counter the harmful effects of sedentary behavior."

"The old adage - prevention is better than cure - really applies here," Krech said. "WHO urges everyone to continue to stay active through the COVID-19 pandemic. If we do not remain active, we run the risk of creating another pandemic of ill-health as a result of sedentary behavior."

Dr. Fiona Bull, who heads the physical activity unit at WHO, said the guidelines offer advice on "sedentary behavior" for the first time.

She added that experts previously believed physical activity should be done in blocks of at least 10 minutes. But the increasing use of fitness-monitoring devices has generated new science showing that it's really most important to get 150 minutes at least per week. "In fact, that 10-minute minimum is not so important and every move counts," she said. "It's the total amount we all achieve: Reaching 150 (minutes) and extending."

Bull said only 78 countries, based on WHO's most recent survey, have national guidelines on physical activity. She encouraged nations to leverage the new guidelines "as the basis for fast-tracking their policy development."

Regular physical activity is important to help prevent heart disease, diabetes and cancer while also reducing symptoms of depression and anxiety, and "boosting brain health," WHO said. People aged over 65 should focus on balance, coordination and muscle strength to help prevent falls, it said.

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The European Union has fined two pharmaceutical companies for colluding to keep a cheap alternative to a sleep disorder medicine off the market for their profit and at the expense of patients.

EU antitrust commissioner, **Margrethe Vestager,** said that Teva pharmaceuticals and Cephalon, a company it later acquired, must pay 60.5 million euros ($72 million) for agreeing between themselves to delay for years the launch of Teva's cheaper version of Cephalon's blockbuster Modafinil. In return for the delay, Teva got beneficial side deals and some payments.

Vestager said that "Teva's and Cephalon's pay-for-delay agreement harmed patients and national health systems, depriving them of more affordable medicines." Modafinil treats excessive daytime sleepiness and under the brand name Provigil it accounted for more than 40% of Cephalon's turnover. A cheap alternative would have had a serious impact on the company, and the EU argued that Cephalon enticed Teva in 2005 to stay out of its market. In 2011, Teva acquired Cephalon.

Teva said in a statement that it maintained its innocence. "We continue to believe the modafinil patent settlement agreement did not infringe EU competition law in relation to the principles" laid out by the EU's court of justice. "We are planning to file an appeal."

Also:

NAIROBI, Kenya: Vaccinations against COVID-19 in Africa might not start until the second quarter of next year, the continent's top public health official said Thursday, adding that it will be "extremely dangerous" if more developed parts of the world vaccinate themselves and then restrict travel to people with proof of a vaccination.

The director of the Africa Centers for Disease Control and Prevention, **John Nkengasong,** told reporters that "I have seen how Africa is neglected when drugs are available" in the past.

And he warned that "it's clear the second wave (of infections) is here on the continent" of 1.3 billion people. Africa last week surpassed 2 million confirmed coronavirus infections.

The Africa CDC is "very, very encouraged" by promising news from a handful of COVID-19 vaccines in clinical trials, though the cold storage needed to roll out some of them in Africa will be a major challenge, Nkengasong said. He cited such logistics in his prediction for when vaccinations in Africa will begin.

The Africa CDC has been discussing vaccine options with Russia, China and others as it seeks not to be left behind in the race to obtain doses. Nkengasong said the continent will need about 1.5 billion doses, assuming two per person, to reach the 60% coverage needed for herd immunity. "The worst thing we want for the continent is for COVID to become an endemic disease" in Africa, he said.

The World Health Organization's Africa chief, **Matshidiso Moeti**, in a separate briefing said the goal is to vaccinate 20% of the population on the continent by the end of next year.

But the WHO warned that a study of the 47 sub-Saharan African countries in its region found that only just under half, or 49%, have "identified the priority populations for vaccination and have plans in place to reach them," and just 24% have adequate plans for resources and funding.

'Danish Mayfly' insect of the yr: The Danish Mayfly was selected Friday by an international group of entomologists and others as the Insect of the Year for 2021, but it won't have long to celebrate its 15 minutes of fame.

The insect, whose scientific name is Ephemera danica, only has a few days to fly, mate and lay new eggs.

"What makes the mayfly unique is its life cycle: from the egg laid in the water to the insect capable of flight and mating, which dies after a few days," said **Thomas Schmitt,** chairman of the commission of scientists and representatives from research institutions and conservation organizations from Germany, Austria and Switzerland that made the choice.

Mayflies have existed for about 355 million years and today some 140 species live in Central Europe, the commission said.

Despite their fleeting time on earth in their final form, their developmental cycle is quite long.

Female mayflies zigzag over water between May and September, laying thousands of eggs that then sink.

Larvae hatch within a few days, and eventually develop gills. Buried in riverbeds, they take between one to three years to develop.

"Shortly before the transition from aquatic to terrestrial life, a layer of air forms between the old and new skin of the adult larvae," said Schmitt, who is also director of the Senckenberg German Entomological Institute in Muencheberg, east of Berlin. "By reducing its specific weight, the larva rises to the water surface. Once there, the larval skin bursts and within a few seconds a flyable mayfly hatches."

With no mouth parts nor a functioning intestine, the fully developed mayfly has only a few days then to mate and lay new eggs before it dies.

The commission has been selecting one unique insect each year since 1999 to "bring an exemplary species closer to people." (AP)

A nurse working with OptumServe assists COVID-19 testing at the Grass Valley Veterans Memorial Building, Nov. 24, in Grass Valley, Calif. (AP)