

Coronavirus

Pfizer seeks EMA OK

FDA panel endorses J&J COVID boosters

WASHINGTON, Oct 16, (AP): US health advisers endorsed a booster of Johnson & Johnson's COVID-19 vaccine Friday, citing growing worry that Americans who got the single-dose shot aren't as protected as those given two-dose brands.

Advisers to the Food and Drug Administration weighed J&J's proposal for a flexible booster schedule. The company said the extra dose adds important protection as early as two months after initial vaccination — but that it might work better if people wait until six months later.

The FDA's advisory panel voted unanimously that the booster should be offered at least two months after immunization but didn't suggest a firm time. The advisers cited growing evidence that J&J recipients are more vulnerable to infection than people who got vaccines from competitors Pfizer or Moderna and that most got their single dose many months ago.

Although Friday's meeting is part of an ongoing evaluation of vaccine boosters, many of the experts said it makes more sense to think of J&J's vaccine as a two-dose vaccine.

"I think this frankly was always a two-dose vaccine," said FDA adviser **Dr. Paul Offit** of Children's Hospital of Philadelphia. "It would be hard to recommend this as a single-dose vaccine at this point."

The government says all three US vaccines continue to offer strong protection against hospitalization and death from COVID-19, and that the priority is getting first shots to the 66 million eligible but unvaccinated Americans who are most at risk. But J&J's vaccine has consistently shown lower effectiveness across a series of studies, while "breakthrough" infections become a bigger concern due to the extra-contagious delta variant of the coronavirus.

"This is really — with the second dose — bringing it I think on par with those other vaccines in terms of effectiveness," said Dr. Archana Chatterjee of Rosalind Franklin University.

Expand

The FDA isn't bound by the vote but its ultimate decision could help expand the nation's booster campaign.

Booster doses of Pfizer's vaccine began last month for people at high risk of COVID-19 at least six months after their last shot, and the FDA advisory panel has recommended the same approach for Moderna recipients. In contrast, the panel Friday backed boosters for anyone who received the J&J vaccine, which is authorized for people 18 and older.

The FDA will use its advisers' recommendations to decide whether to authorize boosters for both J&J and Moderna, after which another government agency will rule on who should roll up their sleeves.

Adding another twist, the experts also discussed preliminary data from a government "mix-and-match" study that suggested J&J recipients may have a far stronger immune response if they get either a Moderna or Pfizer booster rather than a second J&J dose.

J&J's single-shot vaccine is made with a different technology than the two-shot Pfizer and Moderna vaccines.

The vast majority of the 188 million Americans who are fully vaccinated against COVID-19 have received the Pfizer or Moderna options, while J&J recipients account for only about 15 million.

On Friday, J&J executives pitched a booster as a way to strengthen a robust vaccine that they said has retained its protective power over eight months. But FDA scientists pointedly challenged that assertion.

"There are data that suggest the effectiveness of this vaccine is actually less robust than the company's presentation here," said Dr. Peter Marks, FDA's top vaccines official. "And that is a finding of concern particularly because that's been seen in minority communities potentially and others."

As for its booster, J&J presented results from a large study that found giving a second dose just two months after the first bumped protection against symptomatic COVID-19 to 94% from 70% in US recipients. Giving that booster six months later instead prompted an even bigger jump in virus-fighting antibodies.

But in their own review, FDA scientists flagged a number of shortcomings with J&J's booster studies, including only a tiny portion of cases involving the delta variant, by far the dominant strain in the US. Reviewers also warned that J&J had only followed booster recipients for a little more than a month after a second dose, making it hard to draw conclusions about the durability of protection. Finally, FDA staff emphasized that they had not had time to independently confirm J&J's findings, which were submitted shortly before the meeting.

FDA's reviewers found no new safety concerns after a second J&J dose, but again, they cautioned about the small number of patients studied and short follow-up period.

The J&J vaccine was highly anticipated for its one-and-done formulation. But its rollout earlier this year was hurt by a series of troubles including manufacturing problems and some rare but serious side effects including a blood clot disorder and a neurological reaction called Guillain-Barre syndrome. In both cases, regulators decided the shot's benefits outweighed those risks.

Also:

**BERLIN:** Pharmaceutical company Pfizer and biotechnology company BioNTech said Friday they have requested to have their coronavirus vaccine licensed for children ages 5 to 11 across the European Union. If EU regulators agree, it would be the first opportunity for younger children in Europe to get immunized against COVID-19.

Pfizer and BioNTech said they submitted data to the European Medicines Agency, including late-stage results from a study testing their COVID-19 vaccine in more than 2,200 children ages 6 months to 11 years. The children received a lower dose than what's normally given to adults.

The companies said in a statement that the results showed a "strong immune response" in the children and that the vaccine was also found to be safe. There are currently no COVID-19 vaccines licensed for use in children younger than 12 in Europe or North America; the ones made by Pfizer-BioNTech and Moderna are authorized for children 12 and older in the European Union.

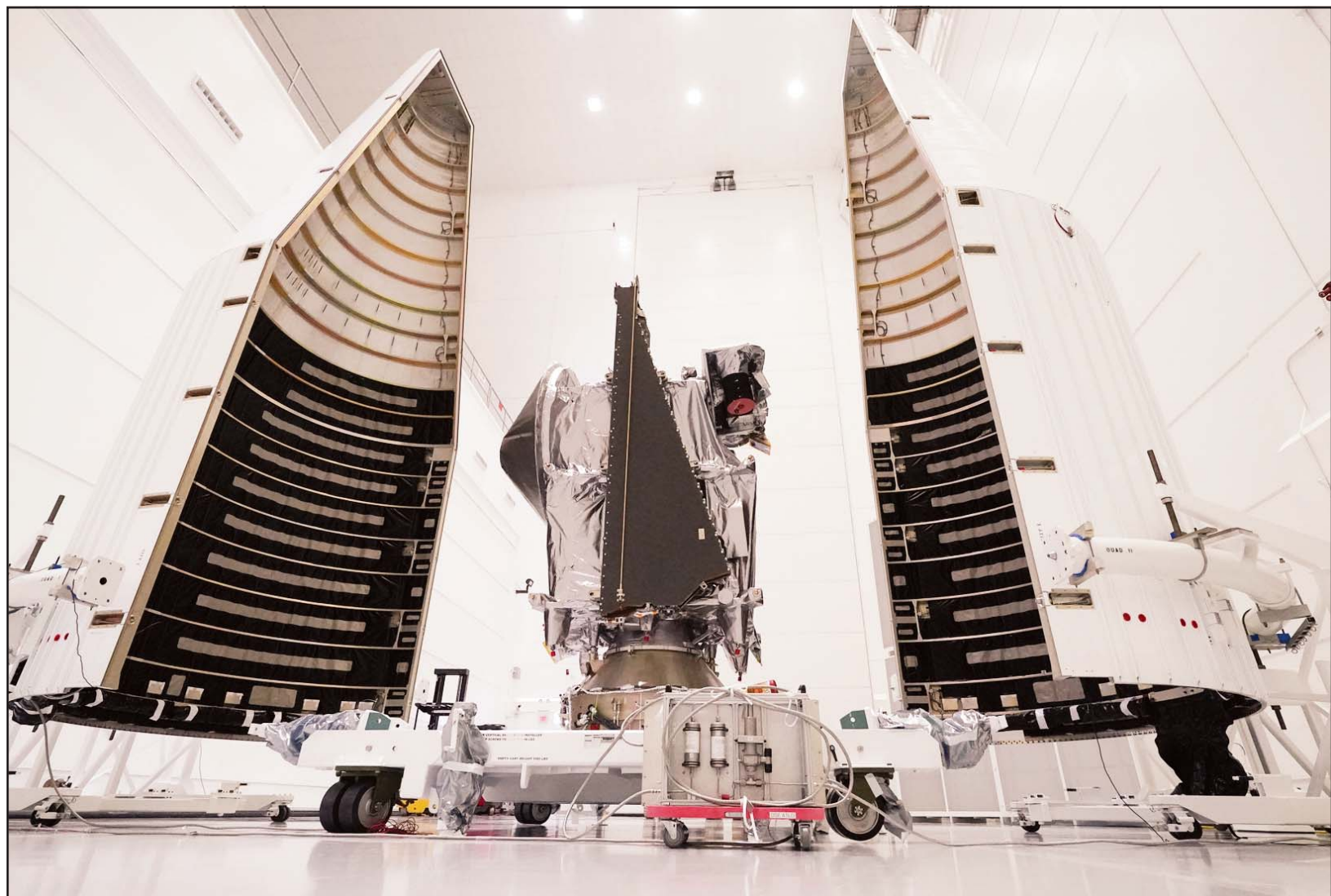
Earlier this month, Pfizer and BioNTech asked the US Food and Drug Administration to greenlight their vaccine for children ages 5 to 11.

Expanding vaccine availability to roughly 28 million more US children was seen as another milestone in the fight against the virus and comes amid an alarming rise in serious infections in youngsters because of the extra-contagious delta variant.

In the United States, COVID-19 has killed at least 520 children so far, according to the American Academy of Pediatrics.

With much of Europe's adult population already immunized, many countries are seeing increasing outbreaks of the disease in children while schools are mostly open and operating with sometimes patchy guidance on mask-wearing and social distancing.

The World Health Organization has said that vaccinating children was not a priority because they are far less likely to develop serious disease or to die of COVID-19. The health agency has repeatedly urged rich countries to share their doses with poor countries instead of expanding domestic eligibility so the world's vulnerable populations can be immunized.



This Wednesday, Sept. 29, 2021 file photo shows NASA's Lucy spacecraft with its housing at the AstroTech facility in Titusville, Fla. It will be first space mission to explore a diverse population of small bodies known as the Jupiter Trojan asteroids. (AP)



In this combination of photos released by Xinhua News Agency, screen image captured at Beijing Aerospace Control Center in Beijing, Saturday, Oct. 16 shows China's Shenzhou-13 crewed spaceship docking with the radial port of the space station core module Tianhe. China's Shenzhou-13 spacecraft carrying three Chinese astronauts on Saturday docked at its space station, kicking off a record-setting six-month stay as the country moves toward completing the new orbiting outpost. (AP)

Discovery

**Climate scientist dies:** Respected Dutch climate scientist **Geert Jan Oldenborgh**, co-founder of a group that rapidly analyzes the possible effects of climate change on extreme weather events, has died at age 59, the Royal Netherlands Meteorological Institute said.

Van Oldenborgh's pioneering work with the World Weather Attribution network led to his recognition last month, along with co-founder Friederike Otto, as one of Time magazine's 100 most influential people of 2021.

The magazine lauded them for building a global team of researchers capable of swiftly analyzing data around extreme weather.

Van Oldenborgh continued his work after being diagnosed eight years ago with Kahler's disease, or multiple myeloma, a type of blood cancer. He died Tuesday, the Dutch meteorological institute said.

Over the summer the team concluded that the devastating heatwave in the American Pacific Northwest was "virtually impossible without human-caused climate change." The attribution network also said that the extreme rainfall which triggered flooding that left a trail of death and destruction through parts of Germany and Belgium in July was "made more likely by climate change."

Van Oldenborgh, who studied physics at Leiden University, joined the Dutch meteorological institute in 1996, where he studied the predictability of the Pacific region's El Nino weather pattern. (AP)

**'True lava tsunami':** The second 4.5 magnitude earthquake in two days rattled the Spanish island of La Palma on Friday, officials said, as scientists described a gushing river of molten rock from an erupting volcano as "a true lava tsunami."

The two quakes were the strongest to hit La Palma, part of the Canary Islands off northwest Africa, since the volcano erupted on Sept 19, Spain's National Geographical Institute said.

Lava rolling toward the Atlantic Ocean forced the evacuation of more than 300 people late Thursday, bringing the number of people forced from their homes since Tuesday to 1,200, according to the La Palma government. About 7,000 people in all have had to flee since the eruption, the government said.

Authorities have reported no casualties from the eruption on the island of some 85,000 people. Most of the island, where the economy is based mostly on farming and tourism, has been unaffected so far.

Two main rivers of lava were still flowing from the Cumbre Vieja ridge Friday. The initial one has slowed to a virtual stop, but a second one is spewing a large amount of molten rock and compelling authorities to stay alert for further possible evacuations. (AP)

**New protections for turtles:** California has added the Pacific leatherback sea turtle to its endangered species list, guaranteeing more protections for a rapidly dwindling population.

The California Fish and Game Com-

Space

Japanese billionaire set for December mission

NASA's asteroid hunter soars into sky

CAPE CANAVERAL, Fla., Oct 16, (AP): A NASA spacecraft named Lucy rocketed into the sky with diamonds Saturday morning on a 12-year quest to explore eight asteroids.

Seven of the mysterious space rocks are among swarms of asteroids sharing Jupiter's orbit, thought to be the pristine leftovers of planetary formation.

An Atlas V rocket blasted off before dawn, sending Lucy on a roundabout journey spanning nearly 4 billion miles (6.3 billion kilometers). Researchers grew emotional describing the successful launch — lead scientist Hal Levison said it was like witnessing the birth of a child. "Go Lucy!" he urged.

Lucy is named after the 3.2 million-year-old skeletal remains of a human ancestor found in Ethiopia nearly a half-century ago. That discovery got its name from the 1967 Beatles song "Lucy in the Sky with Diamonds," prompting NASA to send the spacecraft soaring with band members' lyrics and other luminaries' words of wisdom imprinted on a plaque. The spacecraft also carried a disc made of lab-grown diamonds for one of its science instruments.

In a prerecorded video for NASA, Beatles drummer Ringo Starr paid tribute to his late colleague John Lennon, credited for writing the song that inspired all this.

"I'm so excited - Lucy is going back in the sky with diamonds. Johnny will love that." Starr said. "Anyway, if you meet anyone up there, Lucy, give them peace and love from me."

The paleoanthropologist behind the fossil Lucy discovery, Donald Johanson, had goose bumps watching Lucy soar — "I will never look at Jupiter the same ... absolutely mind-expanding." He said he was filled with wonder about this "intersection of our past, our present and our future."

"That a human ancestor who lived so long ago stimulated a mission which promises to add valuable information about the formation of our solar system is incredibly exciting," said Johanson, of Arizona State University, who traveled to Cape Canaveral for his first rocket launch.

Lucy's \$981 million mission is the first to aim for Jupiter's so-called Trojan entourage: thousands — if not millions — of asteroids that share the gas giant's expansive orbit around the sun. Some of the Trojan asteroids precede Jupiter in its orbit, while others trail it.

Despite their orbits, the Trojans are far from the planet and mostly scattered far from each other. So there's essentially zero chance of Lucy getting clobbered by one as it swoops past its targets, said Levison of Southwest Research Institute, the mission's principal scientist.

Lucy will swing past Earth next October and again in 2024 to get enough gravitational oomph to make it all the way out to Jupiter's orbit. On the way there, the spacecraft will zip past asteroid Donaldjohanson between Mars and Jupiter. The aptly named rock will serve as a 2025 warm-up act for the science instruments.

Drawing power from two huge circular solar wings, Lucy will chase down five asteroids in the leading pack of Trojans in the late 2020s. The spacecraft will then zoom back toward Earth

New crew 'docks' at China's 1st permanent space station

BEIJING, Oct 16, (AP): Chinese astronauts began Saturday their six-month mission on China's first permanent space station, after successfully docking aboard their spacecraft.

The astronauts, two men and a woman, were seen floating around the module before speaking via a live-streamed video.

The new crew includes Wang Yaping, 41, who is the first Chinese woman to board the Tiangong space station, and is expected to become China's first female space-walker.

"We'll co-operate with each other, carefully conduct maneuvers, and try to accomplish all tasks successfully in this round of exploration of the universe," said Wang in the video.

The space travelers' Shenzhou-13 spacecraft was launched by a Long March-2F rocket at 12:23 a.m. Saturday and docked with the Tianhe core module of the space station at 6:56 a.m.

The three astronauts entered the station's core module at about 10 a.m., the China Manned Space Agency said.

They are the second crew to move into China's Tiangong space station, which was launched last April. The first crew stayed three months.

The new crew includes two veterans of space travel — Zhai Zhigang, 55, and Wang. The third member, Ye Guangfu, 41, is making his first trip to space.

The mission's launch was seen off by a military band and supporters singing "Ode to the Motherland," underscoring national pride in the space program, which has advanced rapidly in recent years.

The crew will do three spacewalks to install equipment in preparation for expanding the station, assess living conditions in the Tianhe module, and conduct experiments in space medicine and other fields.

China's military-run space program plans to send multiple crews to the station over the next two years to make it fully functional.

When completed with the addition of two more sections — named Mengtian and Wentian — the station will weigh about 66 tons, much smaller than the International Space Station, which launched its first module in 1998 and weighs around 450 tons.

Two more Chinese modules are due to be launched before the end of next year during the stay of the yet-to-be-named Shenzhou-14 crew.

China's Foreign Ministry on Friday renewed its commitment to cooperation with other nations in the peaceful use of space.

Spokesperson Zhao Lijian said sending humans into space was a "common cause of mankind." China would "continue to extend the depth and breadth of international cooperation and exchanges" in crewed spaceflight and "make positive contributions to the exploration of the mysteries of the universe," he said.

Station, the president of Space Adventures, a company that organized the flight, said Friday.

Fashion tycoon **Yusaku Maezawa** is set to rocket to space on Dec 8 on a Russian Soyuz spacecraft together with producer **Yozo Hirano**, who will film his mission, and Russian cosmonaut **Alexander Misurkin**.

**Tom Shelley**, the president of Space Adventures, said Maezawa compiled a list of 100 things to do in space during a 12-day mission after asking the public for ideas.

"His intention is to try to share the experience of what it means to be in space with the general public," Shelley said in an interview with The Associated Press, adding it will include "simple things about daily life to maybe some other fun activities, to more serious questions as well."

Maezawa has made his fortune in fashion retail, launching Japan's largest online fashion mall, Zozotown. His net worth is currently estimated at \$2 billion by Forbes magazine.

"I'm so curious, 'What's life like in space?' So, I am planning to find out on my own and share with the world," Maezawa said in a statement earlier this year.

He and his film producer will be the first self-paying tourists to visit the space station since 2009. The price of the trip hasn't been disclosed.



Van Oldenborgh



Kilduff

mission voted Thursday to add the turtles under the state's Endangered Species Act.

The world's largest turtle species have been on the federal endangered species list since 1973. But scientists now know more about how crucial California is to their survival, according to **Catherine Kilduff**, an attorney with the Center for Biological Diversity.

A subpopulation of leatherback sea turtles hatch on beaches in Indonesia. Once

fully grown, they swim nearly 6,000 miles (9,656 kilometers) to eat jellyfish off the California coast. Adult leatherback sea turtles weigh an average of 1,000 pounds (453 kilograms).

Scientists say these sea turtles have declined by about 5.6% in California each year for the past three decades. About 50 sea turtles visit the California coast each year, compared to about 178 turtles in the 1990s, according to the Center for Biological Diversity. (AP)