

The continuation of the coronas plague

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Introduction

Experts warn: The following corona variant could be even more deadly.

With the removal of corona restrictions in many countries around the world, scientists are coming out against the feeling that the plague is behind us. "The notion that the next variant will be easier than the omicron is wrong, no one can guarantee it."

Subsequent variants of the Coronavirus may be more deadly and have more severe long-term effects-warn scientists and experts. Although relatively mild symptoms characterize the Omicron-no one guarantees that this will be the case for future virus mutations. This should be taken into account when removing restrictions and masks.

The theory that variants will become more and more moderate has been heard in many fountain talks since the Omicron variant bypassed Delta as the dominant mutation this winter. "This idea is fundamentally wrong," said Professor Lawrence Young, a virologist at the University of Warwick. "A new variant could prove even more dangerous than the Delta."

"There will be more variants after Omicron, they may cause different patterns of illness, and if they are more contagious, they will be the ones to dominate," explained David Navarro, a senior member of the World Health Organization. "That is, they may turn out to be more deadly or cause more complex 'long cube' effects." The experts claim it is impossible to predict where the following variant will grow or its characteristics. It can be just as moderate as it can be more severe-and this uncertainty should be taken into account when different countries remove the restrictions imposed on the omicron wave.

"People need to be encouraged to take care of themselves and others all the time," Navarro said. "The epidemic has a long way to go, and as it has been since the beginning, people and their leaders will have an impact on its long-term consequences through the actions they are now taking" [1].

Watch for more alarming versions of Covid-19 after Omicron say Scientists

Experts say there is no guarantee that future versions will cause milder diseases or that existing vaccines will work against them. When both Omicron and Delta are circulating, people can get dual infections that give rise to 'Frankeniorian' hybrids. Why you can trust SCMP.

Scientists warn that Omicron's vortex progress is in fact promising that this will not be the latest version of the corona virus to worry the world.

Each infection provides an opportunity for the virus to mutate, and Omicron has an advantage over its predecessors: it spreads much faster even though it has appeared on a planet with a stronger patch of immunity to previous vaccines and diseases.

This means that more people where the virus can develop even more. Experts do not know what the next variations will look like or how they may shape the epidemic, but they say there is no guarantee that Omicron's sequences will cause a milder disease or that existing vaccines will work against them.

They are calling for a broader vaccine now, while today's injections are still working.

Scientists are calling for more virus monitoring to detect newer versions earlier December 9, 2021.

"The faster the omicron spreads, the more opportunities there are for the mutation, which could lead to more variants," said Leonardo Martinez, an epidemiologist at Infectious Diseases at Boston University.

Since appearing in mid-November, Omicron has been racing around the world, and studies show that the version infects at least twice as much as Delta and infects at least four times the original version of the virus.

Omicron is more likely than Delta to re-infect people who have

previously suffered from Covid-19 and cause “breakthrough infections” in vaccinated people while attacking unvaccinated people. The World Health Organization reported a record 15 million new Covid cases in the week of January 3-9, an increase of 55 percent from the previous week.

The long and persistent infections are what appear to be the most likely growth area for new versions.

Dr. Stuart Campbell Ray

Along with keeping people relatively healthy outside of work and school, the ease with which the spread spreads increases the chances of the virus infecting and staying inside people with a weakened immune system-giving it more time to develop strong mutations.

“It’s the long and persistent infections that seem to be the most likely breeding ground for new versions,” said Dr. Stuart Campbell Ray, an infectious disease specialist at Johns Hopkins University. Because Omicron appears to cause less severe disease than Delta, its behavior has raised hopes that this could be the beginning of a trend that would eventually make the virus milder like the common cold.

South Korea becomes the first Asian country to use a Pfizer pill to fight Covid-19.

Experts say this is a possibility, given that viruses do not spread well if they kill their hosts very quickly. But viruses do not always become less deadly over time.

A version can also achieve its main purpose-replication-if infected people developed mild symptoms initially, spread the virus by interacting with others, and then contracted it much later, Ray explained as an example.

“People wondered if the virus would develop into a moderate. But there is no particular reason to do so,” he said. “I do not think we can be sure that the virus will become less deadly over time.”

Gradual improvement in evading immunity helps the virus to survive over time. When SARS-CoV-2 first hit, no one was immune. But infections and vaccines have given at least some immunity to a large part of the world, so the virus must adapt.

A gradual improvement in evading immunity helps the virus survive in the long run, scientists say.

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There are many possible ways for evolution. Animals may incubate and release new versions. Pet and feline dogs, deer and mink raised on farms are just a few of the virus-vulnerable animals that can mutate within them and leap back to humans.

Another potential trajectory: When both Omicron and Delta are around, people can get dual infections that can give rise to what Ray calls “francorients,” hybrids with characteristics of both types.

When new variants do develop, scientists have said it is still very difficult to know which genetic traits may take off. For example, Omicron has many more mutations than previous versions, around 30 in the spike protein to attach to human cells. But the so-called IHU variant identified in France [2].

January 7, 2022

Following the discovery of the French variant: a discussion in the Ministry of Health. Professionals will discuss the extent of the impact of the variant discovered in the south of France

New ‘IHU’ variant B.1.640.2 Covid-19 Corona virus detected in France

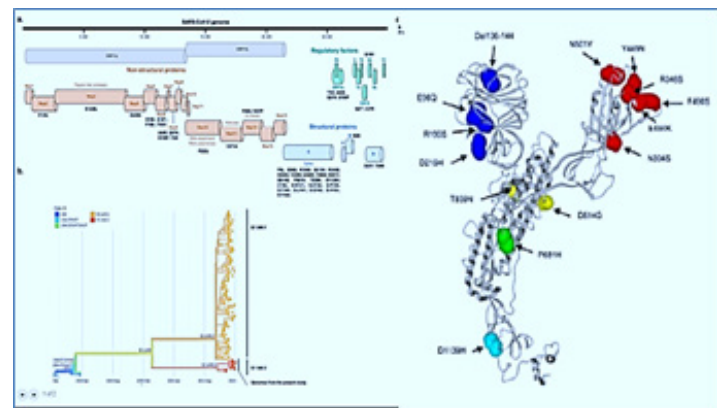


Figure 1: IHU B.1.640.2 Version of Covid-19 Corona Virus.

Virological features and scanning electron microscopy image of the SARS-CoV-2 IHU variant: a) Map of the IHU variant genome showing amino acid substitutions and deletions. b) Phylogeny reconstruction performed using the nextstrain tool (<https://github.com/nextstrain/ncov>) then visualized with Auspice (<https://docs.nextstrain.org/projects/auspice/en/stable/>). In addition, the genome of the original Wuhan-Hu-1 SARS-CoV-2 isolate (GenBank accession no. NC_045512.2) was added as an outgroup, in addition to SARS-CoV-2 genomes of Pangolin lineages B.1.640.1 and B.1.640.2. X-axis shows time. c) Representations of the spike of the IHU variant showing the location of all its amino acid substitutions. N-terminal domain (NTD) mutations are blue; receptor-binding domain (RBD) mutations are red; mutations involved in ACE-2 unmasking are yellow; mutations at S1-S2 cleavage site are green; mutations at fusion region are in cyan. d) Scanning electron microscopy image obtained using a SUV 5000 mi.(credit ref.[3])(credit rtf.croscope from a respiratory sample positive for the SARS-CoV-2 IHU variant (Hitachi High-Technologies Corporation, Tokyo, Japan).

Spike protein is the illustration of the Coronavirus you see in the pictures, and it is the part through which this virus attaches

to the cell to infect it. It is why most vaccine companies have used the principle of teaching your body to detect spike protein by vaccination so that your body can recognize it when a live coronavirus strikes you. But, because there are spike protein mutations in this version, your immune system may not recognize it even when you are vaccinated.

So what does this mean? Should you also be afraid of this new virus? Will this cube never end? Will you never be able, or will you be allowed to take off the mask? No answer is not because even though it seems like an unfinished thing for now you will believe that the hardware will go down over time and our immunity will defeat it as always [4]

Didier Raul, Professor of French Medicine and Director of the IHU Medical Institute for Infections

It is clear about the coronavirus Covid-19 virus that it can mutate. And mutate. And mutate. So it should come as no surprise that another new variant was identified in France with 46 mutations and 37 deletions in its genetic code, many of which affect the spike protein. This version now bears the name B.1.640.2, which may seem like the beginning of a phone number in New Jersey. It was also temporarily dubbed the “IHU version” because staff from the University Hospital for Infection at the Méditerranée (IHU) in Marseille, France, were the first to report the pre-printed version uploaded to MedRxiv on December 29.

Here’s a tweet from IHU in case you would like to see this news in French:

So does that mean the sky is falling? That you should start running around outside with your hands waving frantically in the air? To wear face masks forever? Worth adding to the 30,182 rolls of toilet paper in your bedroom? That this epidemic will last forever? Um, no, no, no, no, probably not, and hell no.

It’s still unclear if this B.1.640.2 version will be so narrow or something like the Delta and Omicron versions. Before the World Health Organization (WHO) submits some Pi and gives this version B.1.640.2 a new Greek letter. There must be evidence that this version is somehow more transmitted, more likely to cause severe Covid-19, or able to evade existing immune protection Than previous versions. So far there are no clear signs that one of these may be the case. Remember different does not necessarily mean worse. However, this new version is indeed worthy of careful viewing.

The “IHU variant” may not even be newer than the Omicron version. The first reported case was identified in mid-November 2021. It may have preceded reports of the spread of the Omicron version in South Africa, which I covered in late November for Forbes. A man living in southeastern France has returned home from a trip to Cameroon. Two days later he began to suffer from mild respiratory symptoms. The next day, the man, who had already been v9 vaccinated against Covid-19, was tested for severe acute respiratory syndrome Corona 2 virus (SARS-CoV-2). This

nasopharyngeal specimen returned positive and was eventually containing version B.1.640.2. Since then, at least 11 more people in the same environment have tested positive for version B.1.640.2. A virus with an RNA molecule inside. Concept of viral genetics. Processed 3D illustration

This figure shows an RNA molecule (in yellow) within a cleaved virus.

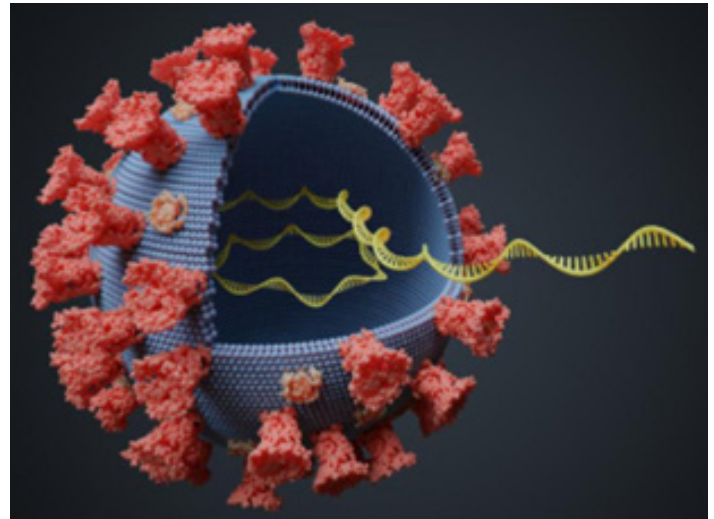


Figure 2: RNA molecule (in yellow) within a cleaved virus. (Photo: Getty) GETTY.

In the early print, the IUH team (consisting of Philip Coulson, Jeremy Delers, Emily Burrell, Jordan Dahan, Agnes Joffer, Florence Penoller, Noara Yahi, Jacques Pentini, Bernard La Scola and Didier Raul) noted that this version has 46 nucleotide substitutions and 37 deletions.

What is a nucleotide? Well, it’s not some radioactive Tide backpack. The National Institute for Human Genome Research (NHGRI) defines nucleotide as “the basic building block of nucleic acids.” The virus’s genetic material is made up of many different nucleotides linked together in a chain called ribonucleic acid (RNA). All three consecutive nucleotides in this chain can form a codon. And guess what this codon can do? It can “encode on” amino acids. So each trio of nucleotides can encode to form a particular amino acid. Amino acids, in turn, are the building blocks for proteins. Therefore, if you mess with the nucleotides in RNA by deleting or replacing new ones, you can affect the amino acids used to make different proteins.

The nucleotide changes in this so-called “IHU variant” resulted in the deletion of 30 amino acids and 12 amino acids in various virus proteins. It included 14 amino acids in the spike protein of the virus that had been replaced, including N501Y and E484K, and nine deleted. Any change in spike protein will get the attention of scientists, much like when your significant other suddenly buys a new wardrobe and starts showering much more frequently.

This is because the spike protein plays a number of key roles. As you may know, the spike protein pads the surface of the SARS-CoV-2, making the virus look like a thorny massage ball or one of those [5].

The variant is worrying because it has 46 mutations-more than Omicron has it probably originated in a traveler who returned from Cameroon to the south of France and infected 14 more people.

Professionals in the Ministry of Health are expected to hold a discussion on the new variant that was discovered in France, the N12 learned today (Wednesday). The discussion of the variant, called in professional language B.1.640.2, is intended to track the extent of its impact. The variant is of concern because it has 46 mutations, more mutations than the Omicron, and one of them has been identified as one that may cause a decrease in vaccine effectiveness.

According to French media reports, he was identified after a French citizen returned from Cameroon to the south of the country. Upon his return, the hiker caught up with another 12 people. The variant contains the E484K mutation- which can cause a decrease in the effectiveness of the vaccine. In Israel, the new variant is expected to be monitored as part of the monitoring conducted around the various variants that are being discovered around the world.

The discovery of the variant was reported yesterday in the French media networks. According to reports, the 46 mutations that the variant has may indicate that it is one that may be “more resistant to the vaccine and more contagious than the original virus”-similar to Omicron. However, information on the variant is still preliminary and has not yet been proven to be resistant to existing vaccines.

However, it is important to note that the variant was discovered at the end of November near the discovery of Omicron and since then 20 cases have been paved from it, compared to 120,000 Omicron pavements in the corresponding period in the reservoirs. So it is possible that Omicron has an advantage over it in adhesion and the chance of it expanding is not high. Apparently, he is starting to cause concern now due to his newly discovered mutations.

After the French institute in Marseille that found it, a temporary and unofficial nickname for the variant is IHU. The first and most vaccinated patient from Cameroon suffered from only a mild illness, and it is not clear what about the others he contracted [6].

Cyprus is reportedly discovering a variant of Covid that combines Omicron and Delta

Posted on Saturday, January 8, 2022: 03 PM ESTUPDATED SAT,

January 8, 2022, key points

A researcher in Cyprus has discovered a strain of the Coronavirus that combines the Delta and omicron variant, Bloomberg News reported on Saturday.

Claudius Kostrikis, professor of biological sciences at the University of Cyprus, called the strain “Deltacron”.

It is still too early to know if there are further cases of stress or what effects it may have.

The CSL team is working in a lab on November 8, 2020 in Melbourne, Australia. There they will start producing a vaccine against COVID-19 from AstraZeneca-Oxford University.

IN MELBOURNE, AUSTRALIA, the CSL team is working in a lab on November 8, 2020, to produce a vaccine against COVID-19 from AstraZeneca-Oxford University.

Darian Trainor|Getty Images

A researcher in Cyprus has discovered a strain of the Coronavirus that combines the Delta and omicron variant, Bloomberg News reported on Saturday.

Laudius Kostrikis, a professor of biological sciences at the University of Cyprus, called the strain “Deltacron” because of the genetic signatures of its omicron-shaped inside the Delta genome, Bloomberg said.

To date, Kostrikis and his team have found 25 cases of the virus, according to the report. However, it is still too early to know if there are further cases of stress or what effects it may have.

“It remains to be seen in the future if this strain is more pathological or more contagious or if it wins” against the two dominant strains, Delta and Omicron, Kostrikis said in an interview with Sigma TV Friday. He believes Omicron will overtake Deltacron as well, he added.

According to Bloomberg, the researchers sent their findings this week to GISAID, an international database that tracks viruses.

The Deltacron variant arrives when the Omicron continues to spread rapidly across the globe, causing an increase in Covid-19 cases. according to CNBC’s analysis friday of data from Johns Hopkins University, the U.S. reports a seven-day average of more than 600,000 new cases daily. That’s a 72 percent increase from the previous week and a plague peak [7].

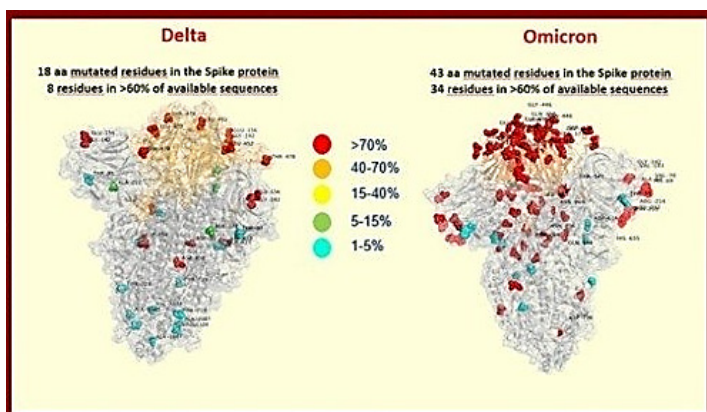


Figure 3: The Spike of Deltacon (cfredit ref. [8]).

Deltacron, is the new variant that combines Delta and Omicron: the first 25 cases detected in Cyprus.

The samples taken yesterday to the international database GISAID of the Pasteur Institute in Paris. Deltacron variant, first 25 cases in Cyprus: it is the new combination of Delta and Omicron 2 minutes of reading.

Saturday January 8 2022, 18:53-Last update: January 9, 10:07

It is renamed Deltacron; according to the health authorities of Cyprus, there are already 25 cases of the new strain of the Sars-CoV-2 virus that combines the Delta and Omicron variants on the island. “We currently have co-infections of Omicron and Delta. However, we have found a variant that combines both,” said Professor Leondios Kostrikis, professor of biology at the University of Cyprus and director of the Laboratory of Biotechnology and Molecular Virology. Interviewed by the Signa tv broadcaster, Kostrikis stated that the new variant has the genetic signature of Omicron and the genome of Delta. At the moment, Kostrikis’ team has identified 25 cases of Deltacron, underlining that they are more frequent among patients hospitalized for Covid than among non-hospitalized positives [8].

BA.2 More contagious-and causes more severe disease: The alarming study of the new variant of the corona.

After the Omicron, the new variant- BA.2-worries researchers. According to the study, the new variant is about 30-50% more contagious than Omicron and is even able to bypass vaccines. It may also be resistant to some of the treatments found to be effective against previous variants. Today the variant Has become dominant in several countries, including Denmark, China, Pakistan and the Philippines

May cause more serious illness. Corona Department Hospital|Arranged by: Jonathan Zindel, Flash 90.

According to a new study published last week in Japan, the new BA.2 variant may cause more serious illness than the Omicron

variant. According to the study, the new variant is more contagious than Omicron and can even bypass vaccines. In addition, unlike Omicron, it can lead to more severe disease and may also be resistant to some of the treatments found to be effective against Omicron.

The findings were published as a study before peer review. Typically, before posting a study in a medical journal, it is reviewed by independent experts. “It may be a worse virus than BA.1, it is highly contagious and can cause more serious illness,” said Dr. Daniel Rhodes, head of the microbiology department at Cleveland Clinic in Ohio. Rhodes reviewed the study but was not involved. The study found that BA.2 underwent a high mutation compared to the original virus and that there are also dozens of changes in genes different from the omicron strain. In fact, the new variant differs from the Omicron in a similarly differentiated way between the alpha, beta, gamma and delta versions. According to researchers at the University of Tokyo, where the study was conducted, these findings show that BA.2 should not be treated as a type of Omicron and should be monitored more closely.

According to the study, BA.2 is about 30% to 50% more contagious than Omicron. The American Center for Disease Control and Prevention estimates that about 4% of American corona patients have contracted the new variant, but in large parts of the world there is more experience with it. BA.2 has become dominant in at least 10 countries: Bangladesh, Brunei, China, Denmark, Guam, India, Montenegro, Nepal, Pakistan and the Philippines.

Corona test in Jerusalem (Photo: Yonatan Sindel, Flash 90).

The “creeping omicron” is not detected in PCR tests. Corona test at MDA compound.

“As we all know, variant BA.2 is called ‘stealth omicron’ because it does not appear in PCR tests and therefore needs to be taken one step further and sequence tests performed to locate it,” explained Dr. Kai Sato, one of the research leaders. The variant will quickly be the first step to be taken against him, “he added.

However, in the real world, the damage from the new variant seems to be less unequivocal. In countries where the new variant has gained a significant foothold, such as South Africa or the United Kingdom, the downward trend in the number of hospitalizations continues. In Denmark, on the other hand, morbidity data are on the rise and so are deaths [9].

First survey on Omicron BA.2 in France

The present study highlights the need for:

- 1) close surveillance at the center, country, and global levels to monitor the occurrence and clinical outcome of the SARS-CoV-2 21L/BA.2 Omicron variant, as no such study exists to date. A study describing the prevalence of severe, mild, and asymptomatic forms of COVID-19 associated with 21 L/ BA.2;
- 2). Phenotypic evaluation using a vaccine on permissive cells to

determine the susceptibility of the SARS-CoV-2 variants evoked to neutralization by anti-S antibodies caused by COVID-19 infection or a previous vaccine.

3) Real-time close-up genomic and molecular tracking of the appearance, transmission, and disappearance of SARS-CoV-2 versions to predict the onset and outcomes of new SARS-CoV-2 versions [10].

Several variants of SARS-CoV-2 have been detected to date following its emergence in late 2019. However, the SARS-CoV-2 Omicron variant is currently the predominant variant of concern (VOC) due to its high transmissibility and the ability to escape from natural-and vaccine-induced immunity.

Three subvariants of SARS-CoV-2 Omicron have been identified so far, namely BA.3, 21L/BA.2, and 21K/BA.1. In contrast to the 21K/BA.1 Omicron variant with a rapid transmission rate even in highly vaccinated populations, 21L/BA.2 was observed less frequently in most countries worldwide. However, recently in Denmark, the 21L/BA.2 Omicron variant has become predominant over the SARS-CoV-2 21K/BA.1 variant, suggesting a possibility of epidemiological change of 21L/BA.2 in other nations.

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