

Covid don't directly kill infected cell, but proliferate in it by damaging it.
<cytopathic→causing visible(or less visible)secondary disaster>. 2021/08/13

So called enveloped virus(Covid, influenza) do not directly kill infected cell, but proliferate and go spread from it by way of budding(secretion),.....(1)6. *Virion release:* (2)(6)(7)

Then who really destroy infected cells of {our organs, and immune system} ??
“The Possible Conclusions by authors Web Research at now”.

① Covid invasion into **vascular epithelial cells** may be equivalent to **internal bleeding**, which needs rapid recovery and is to cause so called **cytokine(hemokine)storms**⁽³⁾ and trouble in the blood coagulation system. This is to cause “various organ ill symptom”.

*Covid invasion in to cell is a digging hole? ,so higher pressure blood leaks into?.

... (1)(2)(3)(4)(5)(6)(7)(8)

② Disabled Covid<=no binding to receptor ACE2 at many organ surface>but invading into **immune cells as Trojan virus due to evil ADE antibody** may cause infected immune cells **cytopathic**<not being killed, but something damages, of which long time? accumulation is to cause fatal collapse of immune system after the incubation period>. Now the disabled Covid due to **incomplete vaccine** has become insidious virus proliferator to cause infection rising.

... (1)(2), (9)(10)(11)

REFERENCE:

(1) ***Virus Replication***

Covid the enveloped virus do not kill host cell, but damage it by various degree.

<https://www.immunology.org/public-information/bitesized-immunology/pathogens-and-disease/virus-replication>

6. *Virion release:* *There are two methods of viral release: lysis or budding. Lysis results in the death of an infected host cell, Enveloped viruses, Covid. influenza A virus, are typically released from the host cell by budding. These types of virus do not usually kill the infected cell and are termed cytopathic viruses.*

(2) ***Cytopathic effect: CPE***

structural changes in a infected cell resulting from viral infection.

https://en.wikipedia.org/wiki/Cytopathic_effect

(3) ***Organoids elucidate the mechanism of multi-organ injury caused by Covid.***

Covid itself do not kill host cell, then really who do kill organ cells ??

It is not only ACE2, another receptor is on **vascular epithelial cells**<source missing>

<https://bio.nikkeibp.co.jp/atcl/news/p1/20/07/12/07195/>

Abnormalities in the blood coagulation system due to SARS-CoV-2 infection of vascular endothelial cells may be the most important factor in the aggravation of COV-19. Infection was found to cause cell death in type II alveolar epithelial cells, and the response was shown to produce chemokines and cytokines. This cell death is likely to be one of the triggers for cytokine storms, but the mechanism has not yet been elucidated.

Chemokines: It is a basic protein that expresses its action via a G protein-coupled receptor, and is a group of cytokines. It causes **migration of leukocytes** and is involved in the formation of **inflammation**.

(4) **Roles and types of cytokines in immunity-may cause diseases!?**

<https://www.macrophil.co.jp/special/1608/>

Inflammatory and anti-inflammatory cytokines

When immune cells recognize foreign substances such as pathogens and cancer cells in the body, they induce **inflammation (elimination of foreign substances)** in the body by inducing inflammatory cytokines such as IL-1, IL-6, and TNF- α , and an immune response. Activates. On the other hand, anti-inflammatory cytokines such as IL-10 and TGF- β have the effect of suppressing inflammation so that these immune responses do not become excessive.

However, when the balance between inflammatory cytokines and anti-inflammatory cytokines is lost due to virus invasion or drug administration, and the secretion of inflammatory cytokines becomes excessive, inflammatory reactions occur one after another. **As a result, the phenomenon of damaging one's own cells is called "cytokine storm".**

(5) **About the New Coronavirus**

<https://yokohama-kekkan.com/uncategorized/%E6%96%B0%E5%9E%8B%E3%82%B3%E3%83%AD%E3%83%8A%E3%82%A6%E3%82%A4%E3%83%AB%E3%82%B9%E3%81%AB%E3%81%A4%E3%81%84%E3%81%A6-2880.html>

① As mentioned before, **cytokine storms** cause abnormalities in the **blood coagulation system**, resulting in the formation of **blood clots**. This can lead to myocardial infarction, pulmonary embolism, stroke, and lower extremity arterial embolism.

② It has also been reported that the new coronavirus itself may enter the blood vessels through the lungs and **directly attack the blood vessels to form blood clots**. The virus attaches to the surface of the **endothelial cells of blood vessels**, causing vasculitis and damaging the blood vessels, which can lead to blood clots.

(6) **Virology feature of Covid**

https://xn--eiken-i53dna.co.jp/uploads/modern_media/literature/P11-18.pdf

Fig 4 is easy to see the (5) process.

(7) **Coronavirus structure and replication cycle (life cycle)**

"amplified hundreds of times" means some damage to the host cell by the exploiting?!!

<https://www.jiu.ac.jp/features/detail/id=6822>

After going through the steps ① to ⑥ above, the amount of virus is **amplified hundreds of times** in the cell. After being released to the outside of the cell and **secreted**, it is adsorbed to the surrounding uninfected cells and the infection is repeated.

(8) <https://asakura.chiba.jp/archives/9407>

(9) **SARS-CoV-2 and Trojan horse phenomenon—caveat in vaccine quest?**

<https://onlinelibrary.wiley.com/doi/full/10.1111/sji.12969>

*These antibodies are non-neutralizing and are delivered to **antigen-presenting cells (APCs)** where they undergo aberrative processing after phagocytosis leading to high virion production, while surpassing the immunosurveillance. This may cause severe and potentially life-threatening syndromes like dengue haemorrhagic fever and/or dengue shock syndrome, in case of reinfection.*

(10) **About enhancement of infection (ADE) by antibody of new coronavirus** 2020/11/13

It has been suggested that different binding patterns to RBD may cause ADE,

<https://www.infront.kyoto-u.ac.jp/sars-cov-2/20201113-2/>

The antibody binds to the S protein on the surface of the virus particle, and the Fc region of the antibody binds to the Fc receptor Fc γ R II (CD32) of the immune system cells to establish infection of the immune system cells.

RBD=spike protein portion binding with antibody.

Fc receptor=gate guide into immune system cells(what kind ?)

(11) **Discovered an antibody that enhances infection with the new coronavirus-may be involved in the aggravation of COVID-19-**

https://www.amed.go.jp/news/release_20210525-02.html

Points of research results

**It was discovered that when infected with the new coronavirus, not only neutralizing antibodies that prevent infection, but also antibodies that enhance infection (infection-enhancing antibodies) are produced.*

**When the infection-enhancing antibody binds to a specific site of the peplomer of the new coronavirus, the antibody directly causes a structural change of the peplomer.*

As a result, it was found that the infectivity of the new coronavirus is higher.

**Infection-enhancing antibodies have been found to diminish the protective effect of neutralizing antibodies.*

Postscript:

After all, Covid could not be eradicated by vaccine, but by more primitive method such as ALL PEOPLE Testing,

<https://upsidedownworld.org/>