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# 20 Mechanisms of Injuries (MOI)

How COVID -19 Injections Can  
Make You Sick...Even Kill You



**\$14.95**

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**MOI #1:** Injections can lead to death through anaphylactic shock, a life-threatening allergic reaction. With COVID shots, the allergic reaction is suspected to be caused by previous exposure to and sensitization to polyethylene glycol [PEG].

**MOI #2:** Anti-Inflammatory macrophages, called M2, are inhibited by anti-spike-antibodies [**anti-S-Ab**]

**MOI #3:** All COVID shots lead to the creation of a **spike protein** through a process called **translation**. The spike protein can damage the body by at least **FOUR** pathways:

1. The spike protein behaves as a **hapten**, a small molecule that binds to the surface of organs, leading to an autoimmune response.
2. The spike protein can **damage organs** directly by promoting cardiovascular complications, damaging blood vessels in the lungs, and breaking through the **blood brain barrier (BBB)**, important for protecting the brain.
3. The spike protein can **incorporate into human DNA** through a process called **transfection**.
4. The spike protein evokes the release of **destructive anti-spike-antibodies**, [**anti-S-Ab**] discussed below.

**MOI #4:** Spike protein can trigger changes in blood vessel walls, leading to **pulmonary artery hypertension (PAH)**, which is fatal even under the best current conventional and alternative treatments.

**MOI #5:** The spike protein can bind to the ACE2 receptor on surface of **sperm and ovaries**. Risk of infertility is high but not yet proven.

**MOI #6:** Spike proteins cause inflammation and disruption of the **blood brain barrier (BBB)**, leading to **neuropathology and brain degeneration**.

**MOI #7:** Neurological degeneration: spike proteins can damage the *FUS* gene and mutate the *TDP-43 protein*, leading to **Amyotrophic Lateral Sclerosis (ALS)**.

**MOI #8:** Neurological degeneration: mutation and altered function of the *TDP-43 protein* can also lead to **frontotemporal lobe degeneration (FTLD)**, **a cluster of chronic, degenerative neurological diseases**.

**MOI #9:** Mutation of the *FUS* gene can also lead to **cancer**.

**MOI #10:** **Adenoviruses** used in both the Johnson & Johnson shot and the AstraZeneca shots pose a **risk of cancer**.

**MOI #11:** Anti-spike-antibodies [**anti-S-Ab**] can cause significant organ damage, specifically to the lungs. The antibodies can also cross-react with **28 different human tissue types**, establishing a mechanism for **multi-system autoimmune disorders and multi-organ failure**.

**MOI #12:** Previous coronavirus exposure and the concept called '**original antigenic sin**' stops true protection against the SARS-CoV-2 if a person has been previously ill with a common coronavirus infection.

**MOI #13:** There is an increased risk of COVID illness and COVID-related death in people who have had a previous **influenza vaccine**.

**MOI #14: The larger (highly elevated) SARS-CoV-2 antibody response** from a COVID infection or from a COVID shot, results in **prolonged and more severe illness**.

**MOI #15:** COVID shots can lead to **enlarged lymph nodes** that may have long term ramifications.

**MOI #16:** Widespread use of COVID shots results in **non-neutralizing antibodies**, especially in people who have already had a COVID infection. This may be leading to **virulent mutant viruses**.

**MOI #17: Antibody Dependent Enhancement (ADE)** is a phenomenon occurs when a person is exposed to a circulating coronavirus after being vaccinated. The **anti-S-Ab** enhances the entry of the SARS-CoV-2 virus into the cell (usually macrophages) and accelerates its replication, causing more severe illness than they would have experienced if they had not been vaccinated.

**MOI #18:** Johnson/Johnson and AstraZeneca shots release **a transgene** that can lead to potentially deadly side effects from injecting raw genetic material that **can induce anti-DNA antibodies and can integrate into human DNA**.

**MOI #19:** Both Johnson/Johnson and AstraZeneca shots carry a snip of double stranded DNA (**dsDNA**) [**transgene**] wrapped in an adenovirus outer "shell." **50-billion particles** are injected with each injection. **dsDNA-antibodies are diagnostic of a long list of autoimmune disorders**.

**MOI #20** – The AstraZeneca shot has been known to be associated with potentially **deadly blood clots**, a condition named **Vaccine-Induced Prothrombotic Immune Thrombocytopenia (VIPIT)**.

**"Approving a vaccine, utilizing novel RNA technology without extensive testing is extremely dangerous. The vaccine could be a bioweapon and even more dangerous than the original infection."**

- **REF:** Classen JB. COVID-19 RNA Based Vaccines and the Risk of Prion Disease. Microbiol Infect Dis. 2021; 5(1):1-3. <https://scivisionpub.com/pdfs/covid19-rna-based-vaccines-and-the-risk-of-prion-disease-1503.pdf>

By injecting the synthetically made SARS-CoV-2 spike protein into the entire population through these genetic-modification injections, the risk of long-term side effects and risk of developing an autoimmune illness will remain for an unknown period of time. However, with B-cell priming and irreversible genetic manipulation, the risk for developing chronic illness or sudden death could last forever.



## MOI #1 Anaphylactic shock

- ⊕ Anaphylaxis is a severe, potentially life-threatening allergic reaction. It can occur within seconds or minutes of exposure to something you're allergic to, such as peanuts or bee stings.
  - ⊕ Injections can lead to death through anaphylactic shock, life-threatening allergic reactions. With COVID shots, the allergic reaction is suspected to be caused by previous sensitization to polyethylene glycol [PEG].
  - ⊕ **Polyethylene glycol (PEG)** is a water-soluble synthetic polymer consisting of repeating units of ethylene glycol. It is used to cover injected proteins to protect them from being broken down by enzymes.
  - ⊕ PEG is widely used in cosmetics, hygiene products, dental products, food and pharmaceuticals. There are 20 approved childhood and adults vaccines that contain polysorbate 20 or polysorbate 80.
  - ⊕ **PEG and polysorbate** are structurally related, and cross-reactive hypersensitivity between these compounds may occur.
  - ⊕ So many products now contain PEG, exposure is nearly unavoidable. Upward of 70% of the general public have anti-PEG antibodies compared with 0.2% two decades ago.
  - ⊕ Patients with high levels of anti-PEG IgG antibodies can experience severe allergic reactions and anaphylaxis when re-exposed to injected PEG.
  - ⊕ Known allergy to PEG, or polysorbate, is a contraindication to vaccination.
- REF: Moreno, Angelo, et al. "Anti-PEG Antibodies Inhibit the Anticoagulant Activity of PEGylated Aptamers." *Cell Chemical Biology*. Vol 26, Issue 5, 2019. Pages 634-644.e3.  
<https://www.sciencedirect.com/science/article/pii/S2451945619300352>

**UPDATE:** March 5, 2021: A change from previous versions of the guidance, known polysorbate allergy is no longer a contraindication to mRNA vaccinations; avoiding the Pfizer or the Moderna shot is merely a “recommendation.” This is similar to people who have had anaphylactic reactions to eggs: for example, avoiding measles or influenza vaccines made with eggs is ‘recommended’ not a ‘contraindication.’

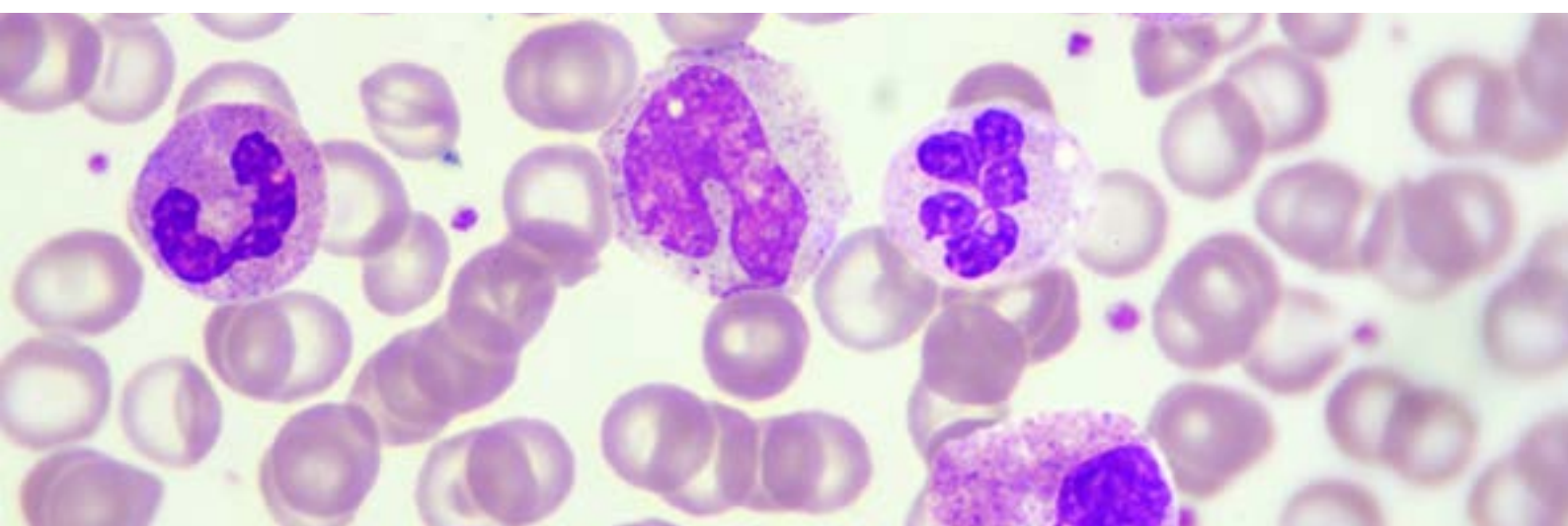
Known polysorbate allergy remains a contraindication to Janssen COVID-19 vaccine.

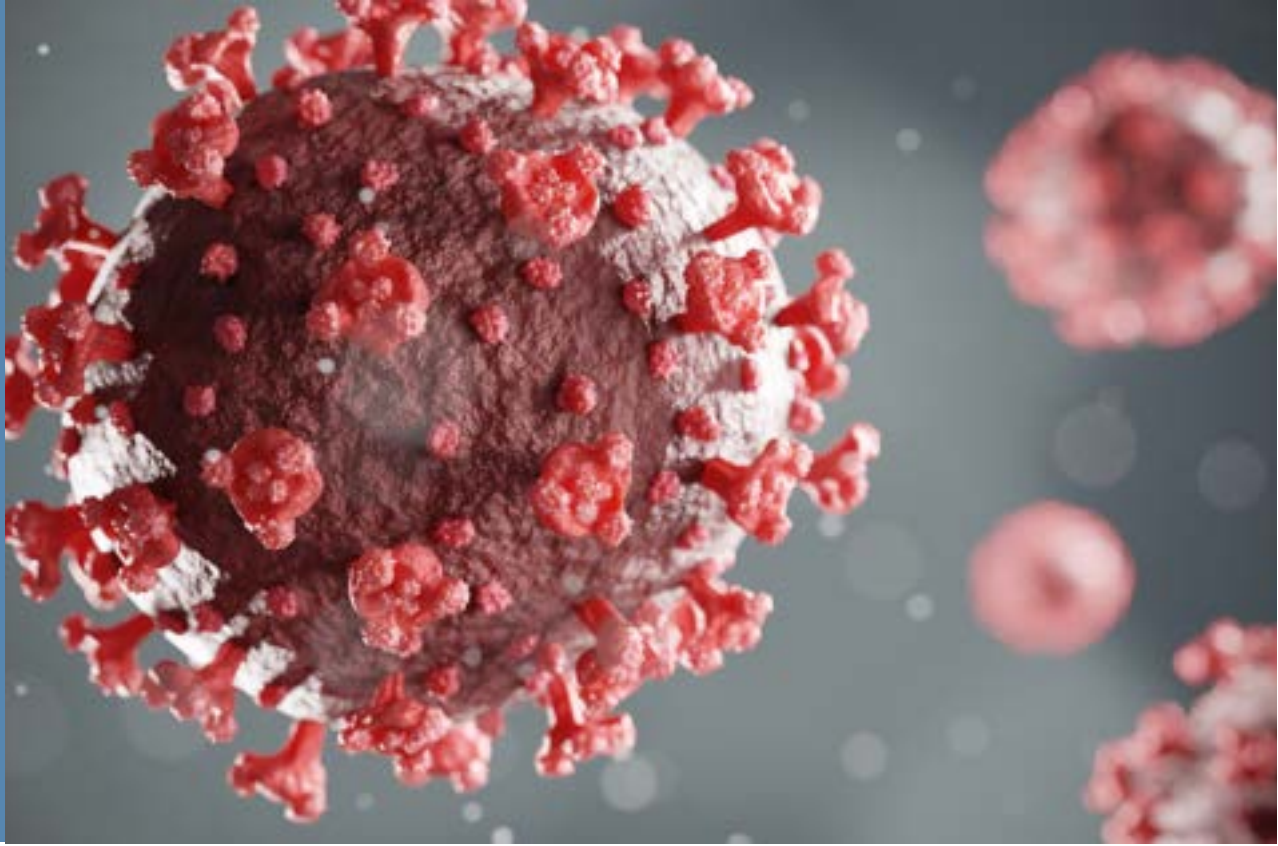
**REF:** <https://www.cdc.gov/vaccines/covid-19/info-by-product/clinical-considerations.html>

## MOI #2

### Anti-inflammatory macrophages, called M2, are inhibited by anti-spike -antibodies [Anti-S-Ab]

- ⊕ Macrophages are a type of white blood cell that leave the blood stream and migrate into tissues when the tissues become infected. They engulf the pathogen and eliminates it.
- ⊕ There are two primary types of macrophages: **type M1**, which are pro-inflammatory and are the first to arrive to “fight” the infection; and **type M2**, which are anti-inflammatory, which arrive as the “fire department” [to eliminate the cytokines] and the “clean-up crew” [to remove cellular debris as healing occurs.]
- ⊕ The anti-S-antibodies [anti-S-Ab] skew the configuration toward cytokine producing macrophages (M1) by inhibiting the inflammation-resolving (M2) macrophages. This causes lung injury by promoting the uncontrolled release of proinflammatory cytokines, IL-8, IL-10, MCP1 and others.
- ⊕ Animals that had been vaccinated and then contracted a SARS-CoV infection on re-exposure had an accumulation of pro-inflammatory macrophages (M1) and an **absence of wound-healing (M2) macrophages in the lungs.**
  - **REF:** Li Liu, et al. “Anti-spike IgG causes severe acute lung injury by skewing macrophage responses during acute SARS-CoV infection. JCI Insight. 2019;4(4):e123158. <https://doi.org/10.1172/jci.insight.123158>





## MOI #3 The damaging effects of the spike protein

- ⊕ The spike protein can bind to the surface of the vaccine recipient's cells. This spike protein becomes a potential receptor for other more aggressive or more dangerous infectious agents.
  - **REF:** Classen JB. COVID-19 RNA Based Vaccines and the Risk of Prion Disease. *Microbiol Infect Dis.* 2021; 5(1): 1-3. <https://carterheavyindustries.files.wordpress.com/2021/02/covid19-rna-based-vaccines-and-the-risk-of-prion-disease-1503.pdf>
- ⊕ SARS-CoV-2 is the only coronavirus with a prion-like domain found in the receptor-binding domain of the S1 region of the spike protein. SARS-CoV-2 demonstrates a 10- to 20-fold higher affinity for ACE2 receptor, their primary binding site, than SARS-CoV and other common coronaviruses.
  - **REF:** Tetz, G.; Tetz, V. SARS-CoV-2 Prion-Like Domains in Spike Proteins Enable Higher Affinity to ACE2. *Preprints 2020*, 2020030422 (doi: 10.20944/preprints202003.0422.v1)  
[Note: The SARS-CoV-2 virus is the only coronavirus with this receptor and affinity because SARS-CoV-2 was made/manufactured in a lab. The tighter the spike protein binds to the ACE receptor, the easier it is to enter the cell and replicate.]
- ⊕ The SARS-CoV-2 spike protein may promote cardiovascular complications by binding to coronary (heart) blood vessels eliciting other cardiovascular diseases such as arrhythmias, coronary artery disease, hypertension, and stroke.
  - **REF:** Suzuki, Yuichiro J, and Sergiy G Gychka. "SARS-CoV-2 Spike Protein Elicits Cell Signaling in Human Host Cells: Implications for Possible Consequences of COVID-19 Vaccines." *Vaccines.* vol. 9,1 36. 11 Jan. 2021. <https://www.mdpi.com/2076-393X/9/1/36/htm>

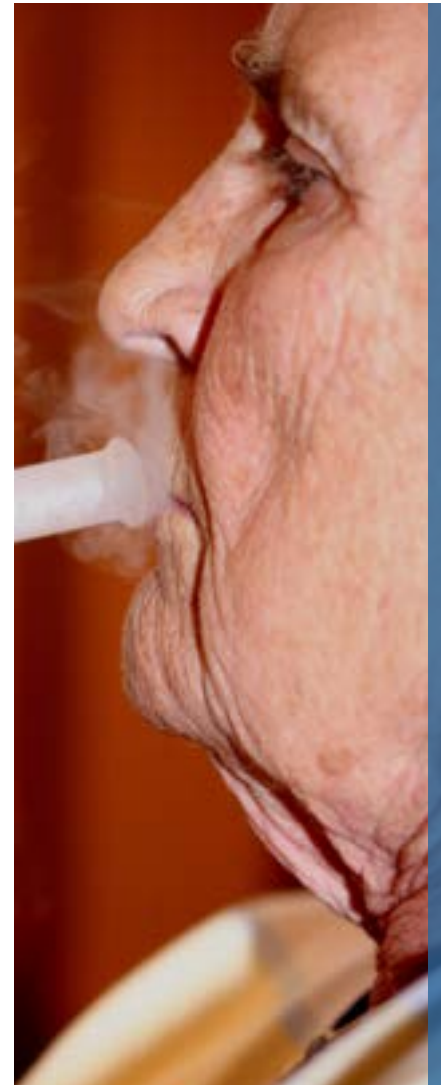
## MOI #4

# The spike protein and risk of pulmonary artery hypertension (PAH)

- + The SARS-CoV-2 spike protein can bind to ACE2 receptors and can promote pulmonary vascular wall thickening, that is a hallmark of pulmonary arterial hypertension (PAH).
- + It is important to consider that the spike protein produced by the COVID-19 vaccines may do the same things.

**NOTE: PAH is uniformly fatal. Even with currently available therapies, up to 70% die within 3yrs.**

- **REF:** Suzuki, Yuichiro J, and Sergiy G Gychka. "SARS-CoV-2 Spike Protein Elicits Cell Signaling in Human Host Cells: Implications for Possible Consequences of COVID-19 Vaccines." *Vaccines*. vol. 9,1 36. 11 Jan. 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7827936/>



## MOI #5

# The spike protein can bind to the ACE2 receptors on sperm and ovaries

- + SARS-CoV-2 uses its spike protein to bind to angiotensin-converting enzyme 2 (ACE2) to enter human host cells. **Risk of infertility is possible but not yet proven.**
- + ACE2 receptors are expressed on lung, intestine, and kidney tissues and also on the testis, sperm, ovaries, uterus, and vagina. The reproductive consequences of the spike protein – **whether from the virus or as a consequence of being injected with one of the COVID shots** – such as infertility and the risk of sexual transmission, are currently unknown. However, we should be alert to the possibility that there may be reproductive consequences of COVID-19 infection in males.
  - **REF:** Sheikh Zadeh Hesari F, et al. "Review of COVID-19 and male genital tract." *Andrologia*. 2021 Feb;53(1):e13914. <https://pubmed.ncbi.nlm.nih.gov/33236375>
  - **REF:** Morelli, Fabrício et al. "COVID-19 Infection in the Human Reproductive Tract of Men and Nonpregnant Women." *The American journal of tropical medicine and hygiene*, vol. 104,3 814–825. 18 Jan. 2021. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7941816/>

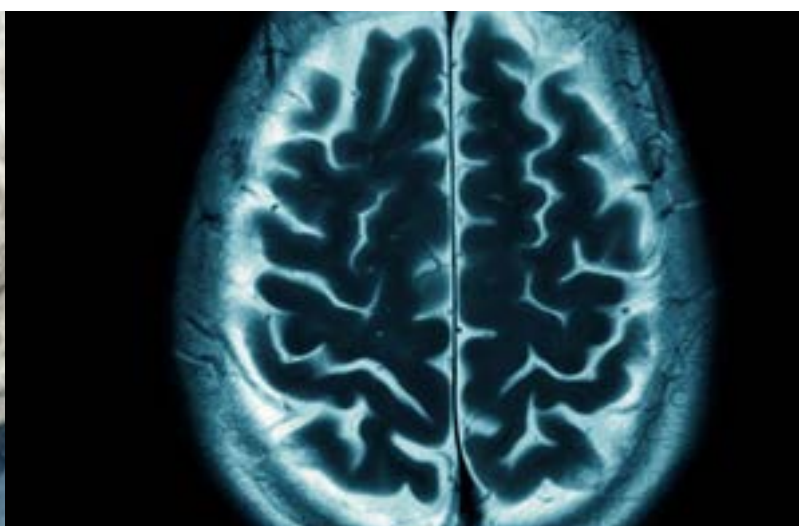


## Neurological degeneration: Penetrating the Blood Brain Barrier (BBB)

- ⊕ SARS-CoV-2 spike protein induces **loss of the BBB integrity** by triggering a pro-inflammatory response and upregulating enzymes (metalloproteinases - MMPs) in the barrier's cells.
- ⊕ Breaking down the BBB means many particles can pass directly into brain tissue. This explains the neurological conditions associated with the SARS-CoV-2 spike protein: **loss of smell, loss of taste, headache, seizures, uncontrolled tremors, etc.**
  - **REF:** Buzhdygana, Tetayna P, et al. "The SARS-CoV-2 spike protein alters barrier function in 2D static and 3D microfluidic in-vitro models of the human blood-brain barrier." *Neurobiology of Disease*. 146 (2020) 15113.  
<https://www.sciencedirect.com/science/article/pii/S096999612030406X?via%3Dihub>

This is a short, representative list of neurological disorders associated with loss of BBB integrity

- **Extrinsic:**
  - Multiple Sclerosis – autoimmune, infectious, traumatic initiation
  - Meningitis – bacterial, viral
  - Encephalitis – herpes, HIV, etc.
- **Intrinsic:**
  - Ischemia/hypoxia
  - Traumatic brain injury – edema, hemorrhage
  - Small vessel disease – hypertension, diabetes
- **REF:** Rosenberg, Gary A. "Neurological diseases in relation to the blood-brain barrier." *Journal of cerebral blood flow and metabolism : official journal of the International Society of Cerebral Blood Flow and Metabolism* vol. 32,7 (2012): 1139-51.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3390801/>





## MOI #7

# Neurological degeneration: Amyotrophic Lateral Sclerosis

- ⊕ At least 85 mutations in the *FUS* gene have been found to cause Amyotrophic Lateral Sclerosis (ALS), a condition characterized by progressive muscle weakness, loss of muscle mass, and inability to control movement.
- ⊕ People with ALS caused by *FUS* gene mutations tend to develop the disease **at a younger age** and have a **decreased life expectancy**.
- ⊕ At least 60 mutations in the TARDBP gene have been found to cause ALS. The TARDBP gene makes the *TDP-43 protein*. A change in a single amino acid in the *TDP-43 protein* can cause it to misfold and form clumps, leading to the inability to control movement.
- ⊕ The amino acid sequence of the **Pfizer spike protein** may induce mutations of the *FUS* gene and the *TDP-43 protein*, leading to pathologic configurations and brain degeneration. Mutation, or damage, to the *FUS* gene and/or the *TDP-43 protein* has been **strongly associated with ALS**.
  - **REF:** Baloh RH. "How do the RNA-binding proteins TDP-43 and FUS relate to amyotrophic lateral sclerosis and frontotemporal degeneration, and to each other?" *Current Opin Neurol*. 2012 Dec;25(6):701-7.  
<https://pubmed.ncbi.nlm.nih.gov/23041957/>
  - REF: MedlinePlus, National Library of Medicine. TARDBP gene  
<https://medlineplus.gov/genetics/gene/tarbdp/#conditions>

## Neurological degeneration: Frontotemporal Lobe Degeneration (FTLD)

- ⊕ The amino acid sequence of the **Pfizer spike protein** can lead to mutation and altered function of the TDP-43 protein, leading to neurodegenerative disease including a group of conditions known as frontotemporal lobe degeneration (FTLD), **a cluster of chronic degenerative neurological diseases**.
  - **REF:** Baloh RH. "How do the RNA-binding proteins TDP-43 and FUS relate to amyotrophic lateral sclerosis and frontotemporal degeneration, and to each other?" *Current Opin Neurol*. 2012 Dec;25(6):701-7.  
<https://pubmed.ncbi.nlm.nih.gov/23041957/>

### What is frontotemporal lobe degeneration? (FTLD)

Personality characteristics of FTLD include apathy, asplontaneity, inflexibility, disorganization, impulsivity, personal neglect, and poor judgment. FTLD is a collection of various forms of dementia. Defining features of Frontal Lobe Dementia (FLD) or Frontotemporal Lobe Degeneration (FTLD) include personality and behavioral disorders.

There are several subtypes thought to be associated with protein **modification or pathological transformation** of FDP-43 protein in the brain. Motor neuron degeneration often co-occurs with FTLD.

### Subtypes: (various sources):

- 1. Behavioral variant Frontotemporal Dementia (bv-FTD):** Early symptoms are dominated by **impairment in social behavior** and personal character. Patients say inappropriate things, ignore other peoples' feelings and have **difficulty in dealing with simple, daily situations**. Additional symptoms include a wide range of behaviors such as blurting out words and speech alterations. Binge eating is also common among bv-FTD patients.
- 2. Primary Progressive Aphasia (PPA):** Persons with PPA experience a **gradual loss of their ability to speak, write, read, and/or understand what others are saying. This progresses to complete loss of both language and memory due to deterioration of brain tissue**. Eventually, almost all patients become mute and unable to understand spoken or written language, even if their behavior seems otherwise normal.
- 3. Progressive non-fluent/agrammatic aphasia:** Persons with this form of FTLD have **difficulty forming words** but can retain the meaning of words. Grammar problems are a key feature, such as mixing up the order of words in a sentence.
- 4. Semantic variant Primary Progressive Aphasia (svPPA):** This disorder is characterized by the **progressive, profound loss of meaning of words**. They can speak but say things that don't make sense.

They also demonstrate behavioral abnormalities due to the degeneration of the anterior temporal lobes.

**5. Logopenic aphasia (also called progressive fluent aphasia):** People with this subtype have difficulty finding the right words when they try to speak.



## MOI #9 Risk of mutating the *FUS* gene and cancer

- ⊕ The amino acid sequence of the **Pfizer spike protein** may induce the *FUS gene* to form pathologic conformations, that may lead to cancer.
- ⊕ Mutations in the *FUS gene* are found in soft tissue sarcomas, which develop in bones or in soft tissues such as nerves or cartilage. *FUS* gene mutations have also been found in myxoid liposarcomas, which occur in fatty tissues of the body, and in cancer of the blood-forming cells in the bone marrow called acute myeloid leukemia (AML).
  - **REF:** *FUS* gene, MedlinePlus, National Library of Medicine.  
<https://medlineplus.gov/genetics/gene/fus/#references>

## MOI #10 Adenoviruses and the risk of cancer

The currently authorized Johnson and Johnson injection is made from Ad26.COV-2.S shell, a human **adenovirus** first isolated in 1956 from an anal specimen obtained from a 9-month old male infant (<https://doi.org/10.1016/j.vaccine.2020.09.018>)

The Oxford/AstraZeneca vaccine uses ChAdOx1, which is **an adenovirus** strain which normally infects **chimpanzees**.

- + More than 100 serologically distinct types of adenovirus have been identified, including 49 types that infect humans.
- + Most of the **adenovirus-induced tumors**, tumor cell lines, and transformed cell lines carry one or several copies of the viral genome integrated into the chromosomes.

**“Oncogenes in adenovirus-induced tumor or transformed cells have received surprisingly little attention.”**

- + Adenoviruses are excellent antigens. However, viral vaccines usually have not included them because **adenoviruses are involved in tumorigenesis in animals and in cell culture**.
  - **REF:** Baron S, editor. Medical Microbiology. 4th edition. Galveston (TX): University of Texas Medical Branch at Galveston; 1996. Chapter 67 Adenoviruses by Walter Loeffler. <https://www.ncbi.nlm.nih.gov/books/NBK8503/>
- + **Ad26.COV2.S used in the J&J shot** has been designed to deliver a transgene encoding to create the SARS-CoV-2 the spike protein. Ad26 vector-based vaccines are manufactured using **PER.C6 cell line**, from retina cells of an **aborted human fetus**.
  - **REF:** Janssen BioNTech, Inc. COVID-19 Vaccine Ad26.COV2.S VAC31518 (JNJ-78436735) Briefing document. VRBPAC meeting. Feb. 26, 2021. pg. 12 <https://www.fda.gov/media/146219/download#page=96>
- + **Transgenics refers to the movement of genes between organisms of different species.** The transferred gene is called a **transgene**. Transgenes can alter the phenotype [genetics] of the receiver. A transgene can be used by the cell to produce a new protein that the cell could not make before.
  - **REF:** How Genetic Engineering Can Be Used To Produce Human Insulin <https://diabetestalk.net/insulin/how-genetic-engineering-can-be-used-to-produce-human-insulin>
- + The transgene can randomly insert into the genome. When a transgene incorporates into the host's DNA, it can lead to **chromosome instability**.
  - **REF:** Davis, Jennifer, et al. Lost in Transgenesis: A User's Guide for Genetically Manipulating the Mouse in Cardiac Research. Circulation Research. 2012; 11:761-777. <https://www.ahajournals.org/doi/10.1161/CIRCRESAHA.111.262717>



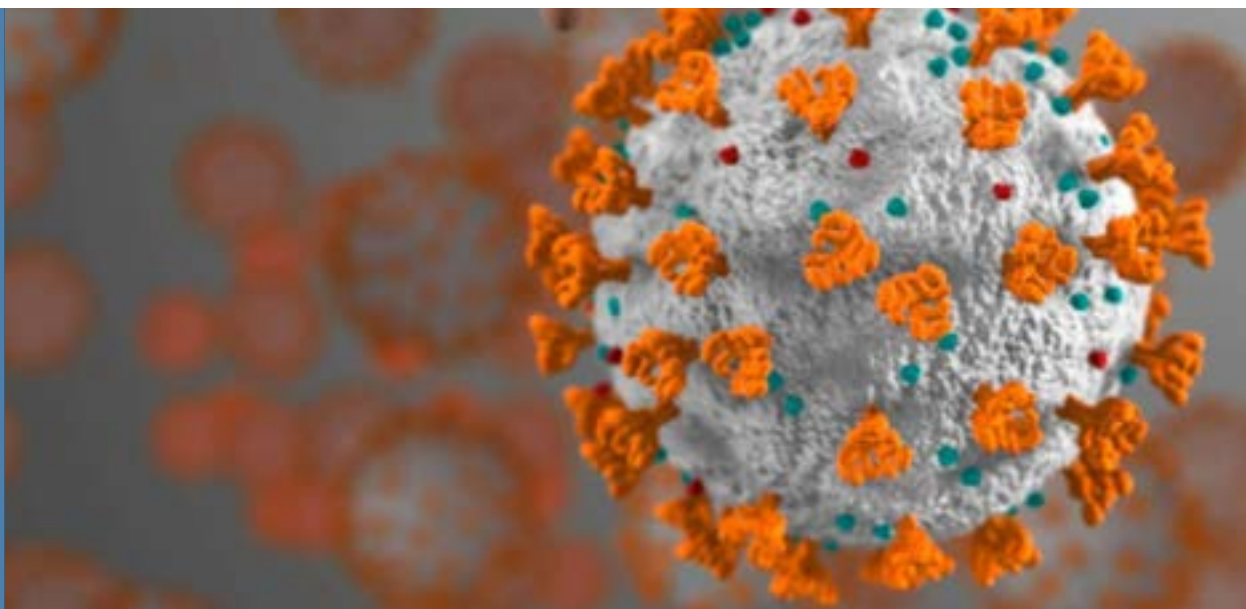
## MOI #11 The damaging effects of the anti-S-antibody

- ⊕ There was a direct, positive correlation between the level of anti-spike antibody in the blood stream and the **degree of serious lung injury** in the Macaque monkeys.
- ⊕ The lung tissue had evidence of **diffuse alveolar damage (DAD)**, with various degrees of exudate (pus-like fluid) and hemorrhage (bleeding).
- ⊕ **The anti-spike antibody caused severe acute lung injury (ALI) when the animals were re-infected by suppressing the inflammation-resolving M2 macrophages.**
  - **REF:** Li Liu, et al. "Anti-spike IgG causes severe acute lung injury by skewing macrophage responses during acute SARS-CoV infection. JCI Insight. 2019;4(4):e123158. <https://doi.org/10.1172/jci.insight.123158>
- ⊕ In severe cases of COVID illness, multiple organs can be inflamed, including the lung, heart, liver, and kidney. There can also be inflammation in the blood and nervous system, leading to multi-organ failure. **SARS-CoV-2 can directly invade the organ's cells through the ACE2 receptors on and within these organs.**
- ⊕ In addition, activation of the complement system, **cytokine storm**, dysregulated immune responses, coagulation dysfunction, and infiltration of inflammatory cells in SARS-CoV-2 infection can also lead to **multi-organ failure** in these patients.
  - **REF:** Mokhtari, Tahmineh et al. "COVID-19 and multiorgan failure: A narrative review on potential mechanisms." Journal of molecular histology vol. 51,6 (2020): 613-628. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7533045/>
- ⊕ **SARS-Cov-2 antibodies to the spike protein and the surface nucleoprotein cross-reacted with 28 out of 55 tissue types tested.** The reactions occurred in gut and barrier proteins, gastrointestinal system cells, the mitochondria, and in the tissues of the thyroid, nervous system, heart, joints, skin, muscle, and liver.
  - **REF:** Vojdani, Aristo, et al. "Reaction of Human Monoclonal Antibodies to SARS-CoV-2 Proteins With Tissue Antigens: Implications for Autoimmune Diseases." Front. Immunol., 19 January 2021. <https://doi.org/10.3389/fimmu.2020.617089>

## MOI #12 The concept called 'original antigenic sin' [See Diagram #4 below]

Let's use an example to explain "original antigenic sin"

- ⊕ When a person is exposed to a coronavirus, the immune system responds with the release of a very specific IgG antibody formed against this FIRST coronavirus.
  - ⊕ When later exposed to the SARS-CoV-2 virus, B-cells "remember" the first coronavirus exposure, even if it was many years ago.
  - ⊕ The B-cells produce "memory antibodies," not antibodies to the SARS-CoV-2 virus. These antibodies are inadequate and are referred to as non-neutralizing, non-binding antibodies.
  - ⊕ They do not protect against the new "invader" but instead, enhance the infection. The person can become very ill through a phenomenon called antibody dependent enhancement (ADE). ADE elicits sustained inflammation, lymphopenia, and sometimes, cytokine storm. All of these have been associated with coronavirus severe illness and death.
- **REF:** Firez, Walter Fierz and Walz, Brigitte Walz. "Antibody Dependent Enhancement Due to Original Antigenic Sin and the Development of SARS" Front. Immunol., 05 June 2020. <https://www.frontiersin.org/articles/10.3389/fimmu.2020.01120/full>
  - **REF:** Monto, Arnold S et al. "The Doctrine of Original Antigenic Sin: Separating Good from Evil." The Journal of Infectious Diseases. Vol. 215,12 (2017): 1782-1788. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5853211/#CIT0002>
  - **REF:** Vatti A, et al. "Original antigenic sin: A comprehensive review." J Autoimmune. 2017 Sep;83:12-21. <https://pubmed.ncbi.nlm.nih.gov/28479213/>



## Increased risk of COVID illness and COVID-related death after an influenza vaccines

- ⊕ Receiving an influenza vaccination may increase the risk of illness by other respiratory viruses, a phenomenon known as **viral interference**. Viral interference has been significantly associated with coronaviruses and human metapneumoviruses.
- ⊕ Examining infection caused by non-influenza viruses showed **the odds of contracting coronavirus in individuals who have received an influenza vaccine were significantly higher when compared to unvaccinated individuals**.
- ⊕ The odds ratio (the association between an exposure and an outcome) of 1.36. In other words, **the vaccinated were 36% more likely to get coronavirus illness**.
  - **REF:** Wolf, Greg G. "Influenza vaccination and respiratory virus interference among Department of Defense personnel during the 2017–2018 influenza season." *Vaccine*, Volume 38, Issue 2, 2020, Pages 350-354.  
<https://www.sciencedirect.com/science/article/pii/S0264410X19313647?via%3Dihub>
- ⊕ For the US and 26 European countries assessed, the results indicated that COVID-19 deaths per million inhabitants [DPMI] and the COVID-19 case fatality ratio [CFR] were **positively and statistically significantly associated with influenza vaccination rate**, especially in people ≥65 years old. [i.e. COVID deaths were positively associated with flu shots].
  - **REF:** Wehenkel C. 2020. Positive association between COVID-19 deaths and influenza vaccination rates in elderly people worldwide. *PeerJ* 8:e10112 DOI 10.7717/peerj.10112.  
<https://peerj.com/articles/10112/>





## High (strong) antibody responses to both COVID illness and to the shots results in prolonged illness and worse outcomes

- ⊕ When an mRNA shot (Pfizer or Moderna) is given to a person who recovered from a COVID infection, small-scale studies have shown that a single mRNA injection rapidly boosts antibody titers (concentrations) to very high levels.
  - **REF:** Moore, John. "Approaches for Optimal Use of Different COVID-19 Vaccines: Issues of Viral Variants and Vaccine Efficacy." JAMA. Published online March 4, 2021. <https://jamanetwork.com/journals/jama/fullarticle/2777390>
- ⊕ **A robust antibody response is associated with delayed viral clearance and increased severity of infection.** Patients with a strong antibody response had only 9% of virus clearance at seven days, whereas 57% of people who had a weak antibody cleared the virus in seven days.
- ⊕ Further, if IgM antibody was released at the same time the person was developing a high IgG antibody response, the person had a much more severe infection.
  - **REF:** Fierz, Walter and Walz, Brigitte Walz. "Antibody Dependent Enhancement Due to Original Antigenic Sin and the Development of SARS." Front. Immunol., 05 June 2020. <https://www.frontiersin.org/articles/10.3389/fimmu.2020.01120/full>



## COVID shots lead to enlarged lymph nodes that may have long term ramifications

- ⊕ Efforts are being made to enhance the efficacy of COVID shots by using adjuvants, particularly adjuvants targeting the Toll-like receptors (TLRs).

mRNA can be used to create nearly any protein. Moderna's patent describes an mRNA for the production of an experimental adjuvant: **flagellin**. Moderna's patent lists dozens of possible mRNAs targeted to be in future shots, referring to them as "some embodiments"

- ⊕ The administration of flagellin or flagellin-based vaccines has been shown to rapidly achieve a **higher concentration in draining lymph nodes**.

### Is mRNA coded for flagellin already in the current shots?

- **Mammogram warning:** Lymphadenopathy was detected unilaterally in the arm and neck within 2-4 days of vaccination and lasted on average 10 days on exam. The duration of subclinical adenopathy on mammography is likely to be greater and is likely to last longer.

**RECOMMENDATION:** Schedule screening exams prior to the first dose of a COVID-19 vaccination or 4-6 weeks following the second dose of a COVID-19 vaccination.

- **REF:** Society for Breast Imaging: Recommendations for the Management of Axillary Adenopathy in Patients with Recent COVID-19 Vaccination. [https://www.sbi-online.org/Portals/0/Position Statements/2021/SBI-recommendations-for-managing-axillary-adenopathy-post-COVID-vaccination.pdf](https://www.sbi-online.org/Portals/0/Position%20Statements/2021/SBI-recommendations-for-managing-axillary-adenopathy-post-COVID-vaccination.pdf)



## MOI # 16

# Widespread use of COVID shots results in non-neutralizing antibodies and can lead to virulent mutant viral serotypes (strains)

- + The combination of high viral replication rate in individuals who also produce suboptimal, non-neutralizing antibodies creates the exact environment in which **resistant viruses are likely to emerge and spread.**
  - **REF:** Moore, John. "Approaches for Optimal Use of Different COVID-19 Vaccines: Issues of Viral Variants and Vaccine Efficacy." JAMA. Published online March 4, 2021. <https://jamanetwork.com/journals/jama/fullarticle/2777390>
- + The antibody response to mRNA shots is higher than titers seen in convalescent (recovering) individuals. This results in a high ratio of **non-neutralizing antibodies.**
  - **REF:** Amana, Fatima et al . "The plasmablast response to SARS-CoV-2 mRNA vaccination is dominated by non-neutralizing antibodies that target both the NTD and the RBD." medRxiv 2021.03.07.21253098. <https://www.medrxiv.org/content/10.1101/2021.03.07.21253098v1.full>

## MOI # 17

# Antibody Dependent Enhancement (ADE) upon re-exposure to circulating coronavirus causes extensive illness

**Because SARS-CoV and SARS-CoV-2 viruses have approximately 78-85% genetic overlap, it is presumed a reaction would be similar in both.**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7827936/>

- + There is a growing concern for individuals who have received a COVID shot and the pathology (illness) that will develop when these individuals are re-exposed to common coronaviruses or the SARS-CoV-2 virus.
  - **All test animals had autoimmune injury to their lungs after a re-exposure.**
  - Exposure to SARS-CoV is associated with prominent inflammatory infiltrates (pneumonia) characterized by a **predominant eosinophilic (allergic) component.**
- + **Vaccinated macaques monkeys:** Lung tissue revealed **acute diffuse alveolar (ADA)** injury with various degrees of severity at 7 and 35-days post-infection. Wound healing was blocked by **anti-S-IgG antibodies**, resulting in prolonged macrophage activity and **promotion of severe lung injury.**
- + **Unvaccinated macaques:** Lung tissue revealed **only minor to moderate inflammation.** Alveolar monocytes/macrophages assume a wound-healing function **as early as two days** after onset of infection in macaques who were unvaccinated.

- **REF:** Li Liu, et al. "Anti-spike IgG causes severe acute lung injury by skewing macrophage responses during acute SARS-CoV infection. JCI Insight. 2019;4(4):e123158. <https://doi.org/10.1172/jci.insight.123158>
- **REF:** Jason A.Tetro. "Is COVID-19 receiving ADE from other coronaviruses?" Microbes and Infection Vol 22, Issue 2, March 2020, Pages 72-73. <https://www.sciencedirect.com/science/article/abs/pii/S1286457920300344?via%3Dihub>

## MOI #18

### Injecting raw genetic material can induce anti-DNA antibodies. DNA can integrate into the human DNA.

- + **Both the Johnson/Johnson shot and the AstraZeneca shot are designed to deliver double-stranded DNA (ds-DNA) fragments to the cytoplasm of the cells called a transgene.**
- + **A transgene** is a segment of DNA used to introduce genes from one organism to another organism. In this instance, the DNA is inserted into the recipient's DNA.
- + It is presumed that the DNA is translated into mRNA, leading to the production of the spike protein and anti-spike-antibody. **The use of a transgene is considered to be a genetic engineering technique.**
  - **REF:** Dr. Mae Wan-Ho. "Transgenic Lines Unstable hence Illegal and Ineligible for Protection." <https://www.i-sis.org.uk/transgenicLinesUnstable2.php>
- + **Induction of anti-DNA antibodies**
  - Stray DNA, similar to the spike proteins, can function as a hapten by binding to the surface of organs.
  - Haptens alone do not stimulate an immune response, but **when bound to a protein**, they can lead to autoimmune reactions.
- + **Integration of DNA into host genome**
  - The segment of DNA can be integrated into the human genome, which may have devastating consequences by inducing mutations in essential structural genes or in causing mutations that can lead to cancer.
    - **REF:** Bona, Constantin A, and Bot, Adrian. "Genetic Immunization." Kluwer Academic /Plenum Publishers. 2000. Pg. 9. [TEXTBOOK]



## MOI #19

# Antibodies to dsDNA can lead to a long list of autoimmune disorders

- + **anti-dsDNA antibody** is highly specific for **Systemic Lupus Erythematosus (SLE)**.
- + **anti-dsDNA antibodies** were also detected in the following conditions: other autoimmune diseases, other rheumatological disorders, malignancies, infections, autoimmune hepatitis and sarcoidosis.
  - **REF:** Attar SM, Koshak EA. Medical conditions associated with a positive anti-double-stranded deoxyribonucleic acid. Saudi Med J. 2010 Jul;31(7):781-7. [https://www.academia.edu/23304303/Medical\\_conditions\\_associated\\_with\\_a\\_positive\\_anti\\_double\\_stranded\\_deoxyribonucleic\\_acid](https://www.academia.edu/23304303/Medical_conditions_associated_with_a_positive_anti_double_stranded_deoxyribonucleic_acid)

## MOI #20

# AstraZeneca: Potentially deadly blood clots called Vaccine-Induced Prothrombotic Immune Thrombocytopenia (VIPIT)

- + VIPIT is a newly reported condition found after the injection of the **AstraZeneca COVID19 shot**. The shot may be associated with blood clots and thrombocytopenia (low levels of blood platelets).
- + Clots have formed in extremities and in veins draining blood from the brain. Called a cerebral venous sinus thrombosis (CVST), when a blood clot forms in the brain's venous sinuses, it prevents blood from draining out of the brain. As a result, blood cells may break and leak blood into the brain tissues, forming a hemorrhage.
- + Based on available information, the case fatality of VIPIT is approximately 40%. The exact mechanism by which the AstraZeneca shot triggers VIPIT is still under investigation.
- + **KEY:** Any patient with unusual symptoms following the injection (4 to 20 days) should be assessed by a health care provider. **Symptoms associated with VIPIT include:** persistent and severe headache; focal neurological symptoms (including blurred vision); shortness of breath; abdominal or chest pain; swelling and redness in a limb; or pale color and coldness in a limb.
  - **REF:** COVID-19 Vaccine AstraZeneca: benefits still outweigh the risks despite possible link to rare blood clots with low blood platelets <https://www.ema.europa.eu/en/news/covid-19-vaccine-astrazeneca-benefits-still-outweigh-risks-despite-possible-link-rare-blood-clots>
  - **REF:** Pai M, et al. "Vaccine-Induced Prothrombotic Immune Thrombocytopenia (VIPIT) following AstraZeneca COVID-19 vaccination." Version 1.0. Ontario COVID-19 Science Advisory Table. 2021 Mar 26. <https://doi.org/10.47326/ocsat.2021.02.17.1.0>

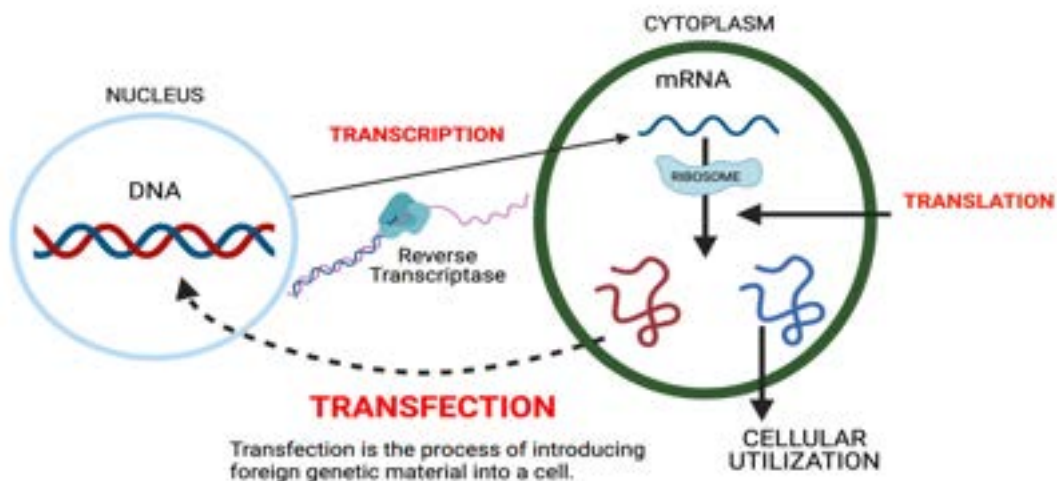
## Outcomes of Animal Study

“An inactivated vaccine preparation that does not induce this result in mice, ferrets and nonhuman primates has not been reported.” [translation: vaccine induces damage to lungs after re-exposure in all animals tested – mice, ferrets, monkeys]. When challenged, vaccinated mice developed Th2-type immunopathology suggesting hypersensitivity to SARS-CoV components. **Caution in proceeding to application of a SARS-CoV vaccine in humans is indicated.”**

- **REF:** Tseng C-T, et al. “Immunization with SARS Coronavirus Vaccines Leads to Pulmonary Immunopathology on Challenge with the SARS Virus.” PLoS ONE 7(4):e35421. 2012. doi:10.1371/journal.pone.0035421  
<https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0035421>



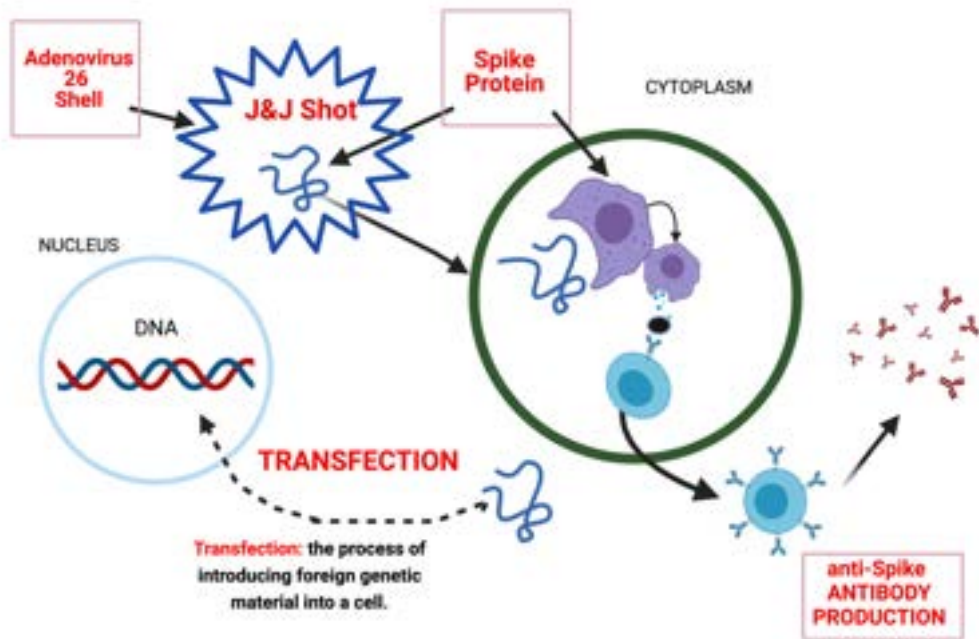
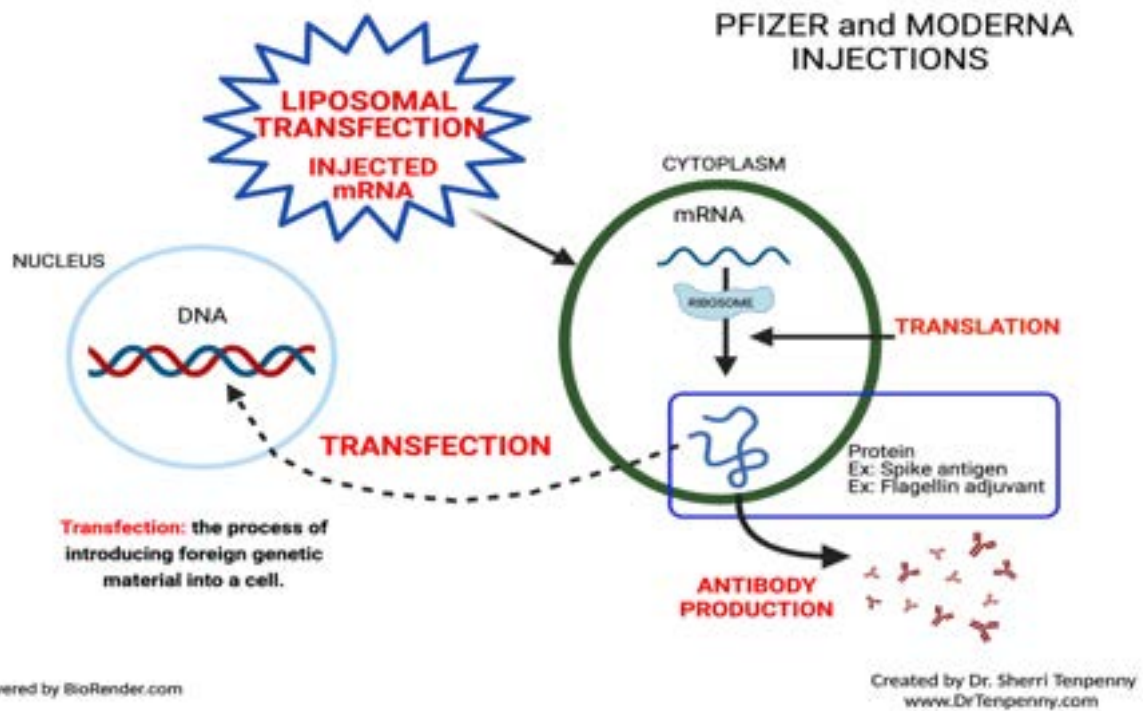
### NORMAL PROTEIN SYNTHESIS



Transfection is the process of introducing foreign genetic material into a cell.

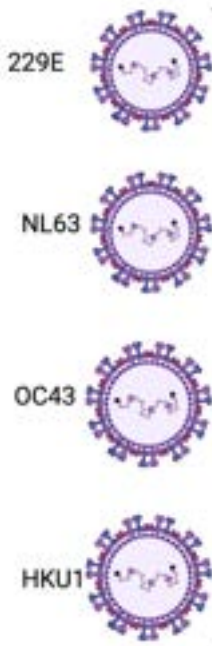
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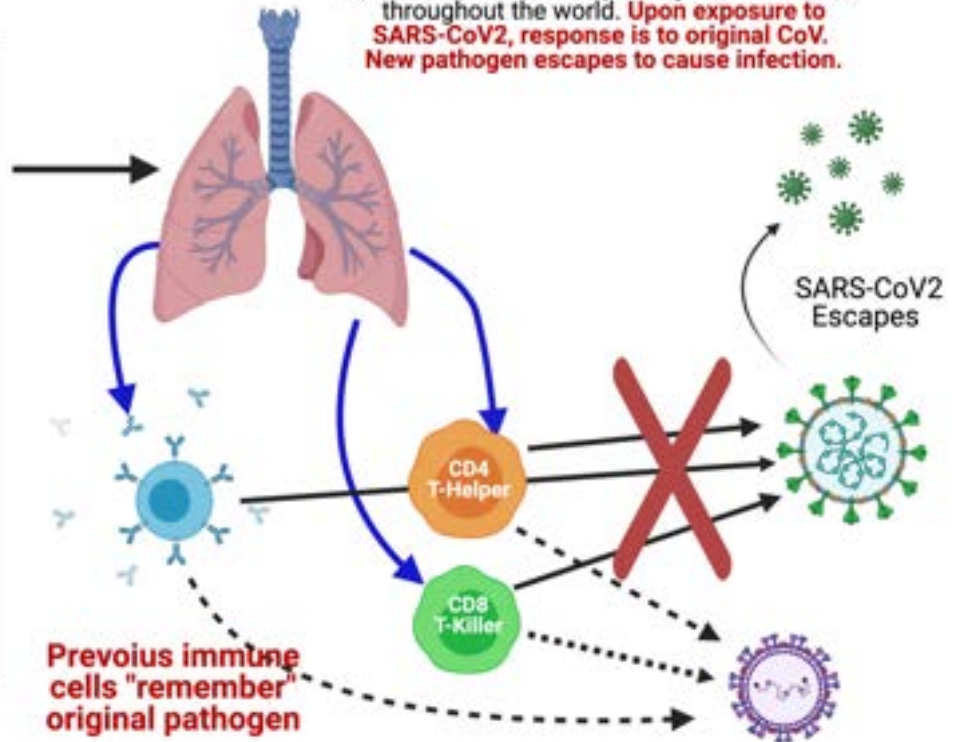
### Four Common Cold Coronaviruses



Created by Dr. Sheri Tenpenny www.DrTenpenny.com

### Original Antigenic Sin

Human coronavirus (HCoV) is one of the most common causes of respiratory tract infections throughout the world. Upon exposure to SARS-CoV2, response is to original CoV. New pathogen escapes to cause infection.



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