

What dinosaurs would look like according to Neil Ferguson's models.

Dr. Jessica Rose

Museum für Naturkunde

NATIONAL
CITIZENS
INQUIRY
TESTIMONY
JESSICA ROSE,
PHD

WINNIPEG, CANADA

APRIL 13, 2023

MY BACKGROUND AND TRAINING

Abbr. Curriculum Vitae - Jessica Rose

1. Post-doc – Technion Institute of Technology (2016-2019)

Biochemistry/protein biology

copper binding proteins

2. Visiting senior scientist – Weizmann Institute of Science (2016 spring)

Immunology

Subject: Intravital two-photon microscopy for visualization of the affinity maturation process in living mice

3. Post-doc – Hebrew University of Jerusalem (2013-2015)

Molecular biology

Research topic: epidemiological study of rickettsia spp. Transmitted by ixodid ticks in Israel

4. PhD – Bar Ilan University (2008-2013)

Computational biology

Dissertation title: kinetics of chronic human viruses -

DATA ANALYSIS CRITICAL IN EACH DISCIPLINE

5. MSc medicine – Memorial University of Newfoundland and Labrador (MUN) (2003-2006)

Immunology

Thesis title: dynamical systems analysis of HIV immunopathogenesis and the effects of antiretroviral treatment interruption

6. BSc – MUN (1992-2002)

Applied mathematics

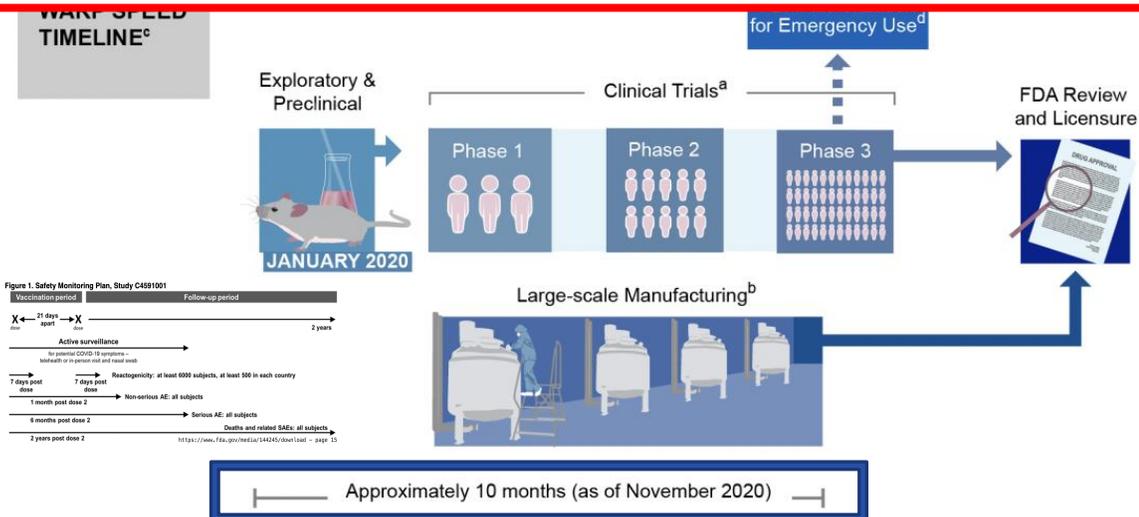
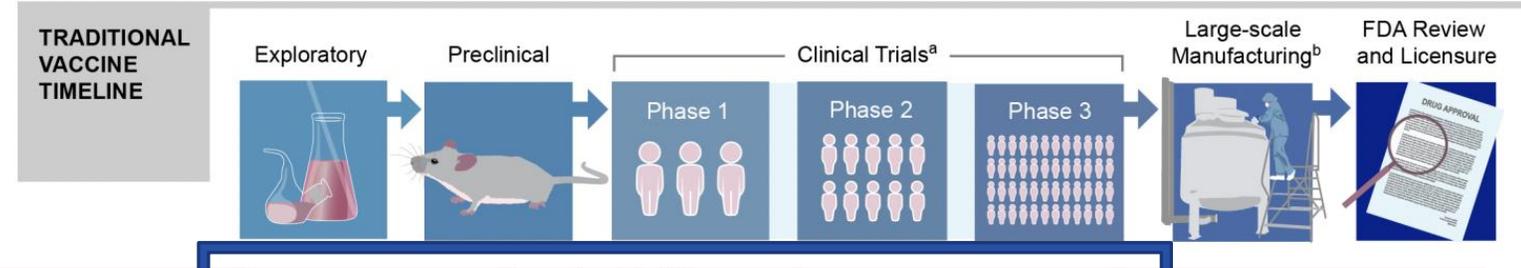
Mathematical modeling of viral dynamics

BACKGROUND: PFIZER CLINICAL TRIAL NCT04368728

RUSHED TRIALS – GENUINE SAFETY TESTING IMPOSSIBLE

- Long exclusion criteria list of phase III Pfizer trial (NCT04368728 – estimated study completion date: February 10, 2023)
- Included pregnancy, age requirements and health-related associations
- ~42,086 (42,079 by latest count) participants in their ‘landmark’ trial
- Safety data did not look good*

Figure 1: Traditional Vaccine Development Timeline Compared To Potential Operation Warp Speed (OWS) Timeline



Source: GAO Analysis of Food and Drug Administration (FDA), Pharmaceutical Research and Manufacturers of America, and Operation Warp Speed Information. | GAO-21-319

10 YEARS TO TEST A NEW PLATFORM AND A NEW mRNA-BASED TECHNOLOGY

MODERNA: <https://clinicaltrials.gov/ct2/show/NCT04470427>

*https://www.nejm.org/doi/suppl/10.1056/NEJMoa2113017/suppl_file/nejmoa2113017_appendix.pdf

*<https://jessicar.substack.com/p/i-dont-know-what-to-say>

*<https://stevекirsch.substack.com/p/surprise-the-covid-vaccines-were>

[https://merylnass.substack.com/p/foiaed-email-from-fdas-2-vaccine/Marion Gruber](https://merylnass.substack.com/p/foiaed-email-from-fdas-2-vaccine/Marion%20Gruber)

PFIZER/BIONTECH: <https://clinicaltrials.gov/ct2/show/NCT04368728?term=nct04368728&draw=2&rank=1>

<https://www.documentcloud.org/documents/7212814-C4591001-Clinical-Protocol.html>

*https://phmpt.org/wp-content/uploads/2022/03/125742_S1_M2_26_pharmkin-tabulated-summary.pdf

<https://www.fda.gov/media/151710/download>

<https://jessicar.substack.com/p/exposure-during-pregnancy>

PFIZER CLINICAL TRIAL NCT04368728

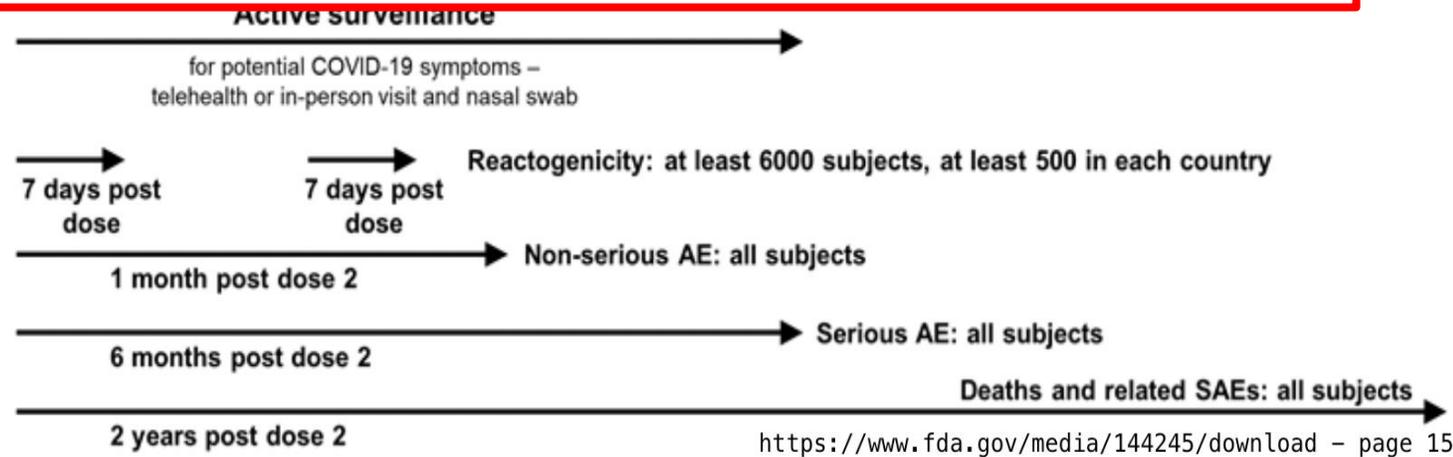
Figure 1. Safety Monitoring Plan, Study C4591001

Vaccination period

Follow-up period

THE PLACEBO GROUP WAS INTENTIONALLY LOST

years



- The t
phas
- Following **2 month follow up**, participants were unblinded and placebo participants injected – the control group was lost
- “Thank you for listening and for changing your study protocol to allow for speedy vaccination of your placebo arm,” Tovar wrote. “You have made this New Year so much brighter for the 22,000 placebo volunteers that stepped up for this vaccine.”*

<https://clinicaltrials.gov/ct2/show/NCT04368728?term=nct04368728&draw=2&rank=1>

<https://coronavirus.jhu.edu/vaccines/timeline>

<https://www.documentcloud.org/documents/7212814-C4591001-Clinical-Protocol.html>

*Unimaginable words from Michael Tovar. <https://www.statnews.com/2021/01/01/pfizer-and-biotech-speed-up-timeline-for-offering-covid-19-to-placebo-volunteers/>

THE PLACEBO GROUP WAS INTENTIONALLY LOST!

FDA-CBER VRBPAC

FDA's Vaccines & Related Biological Products Advisory Committee (VRBPAC)
Washington, D.C | June 14, 2022

NOTHING ELSE SHOULD NEED TO BE SAID

U.S. FOOD & DRUG ADMINISTRATION

Q & A

FOOD AND DRUG ADMINISTRATION (FDA)
Center for Biologics Evaluation and Research (CBER)
174th Meeting of the Vaccines and Related Biological Products Advisory Committee

ACCELERATION OF THE EFFICACY AND **SAFETY**
TESTING TIMELINE OF BIOLOGICAL PRODUCTS AT
THIS SCALE IS UNPRECEDENTED

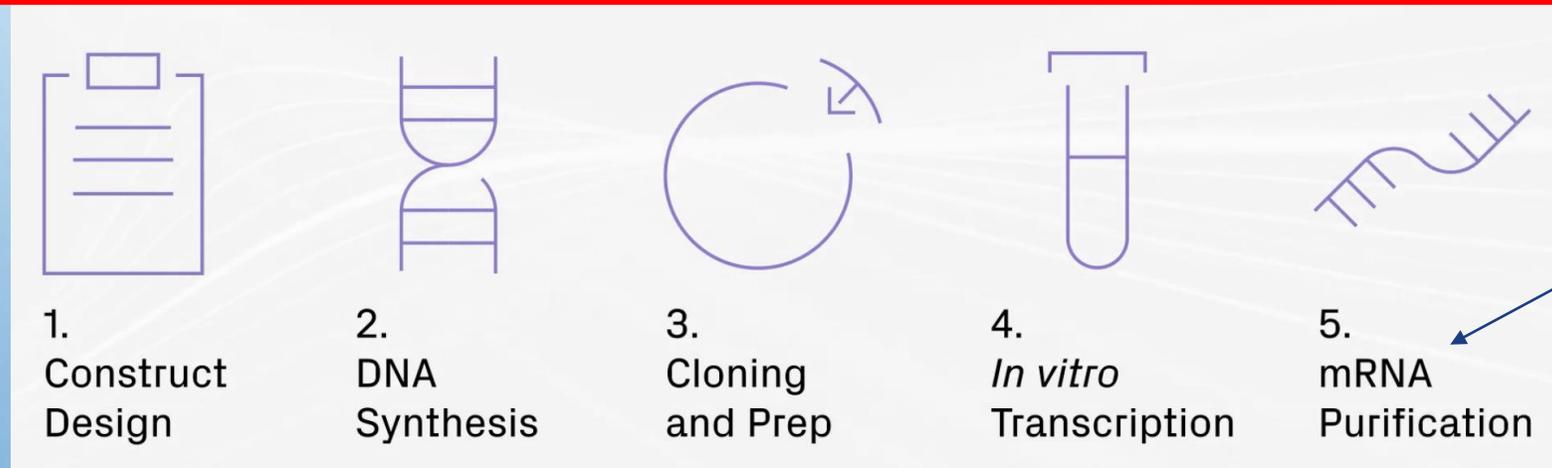
THE EFFECTS OF DOING SO IN THE CONTEXT OF
NOVEL TRANSFECTION TECHNOLOGIES IS

UNKNOWN

A WORD ON TRANSFECTION* (AS OPPOSED TO EXPOSURE TO FOREIGN PROTEINS)

- MRNA (PRODUCED VIA IVT) IS TRANSFECTED INTO CELLS VIA LIPID NANOPARTICLE CARRIER MOLECULES TO ENABLE PRODUCTION OF SPIKE PROTEIN BY THE HOST

TRANSFECTION IS VERY DIFFERENT FROM CONVENTIONAL VACCINATION: DID **THE PEOPLE** KNOW THIS?

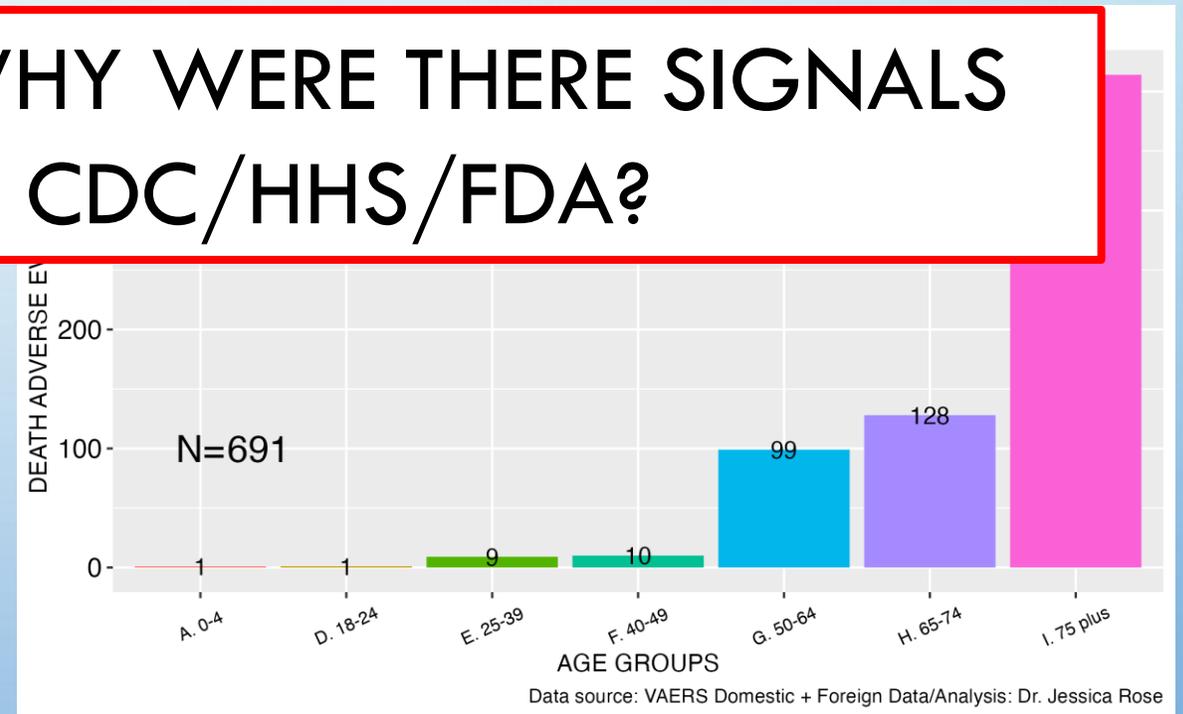
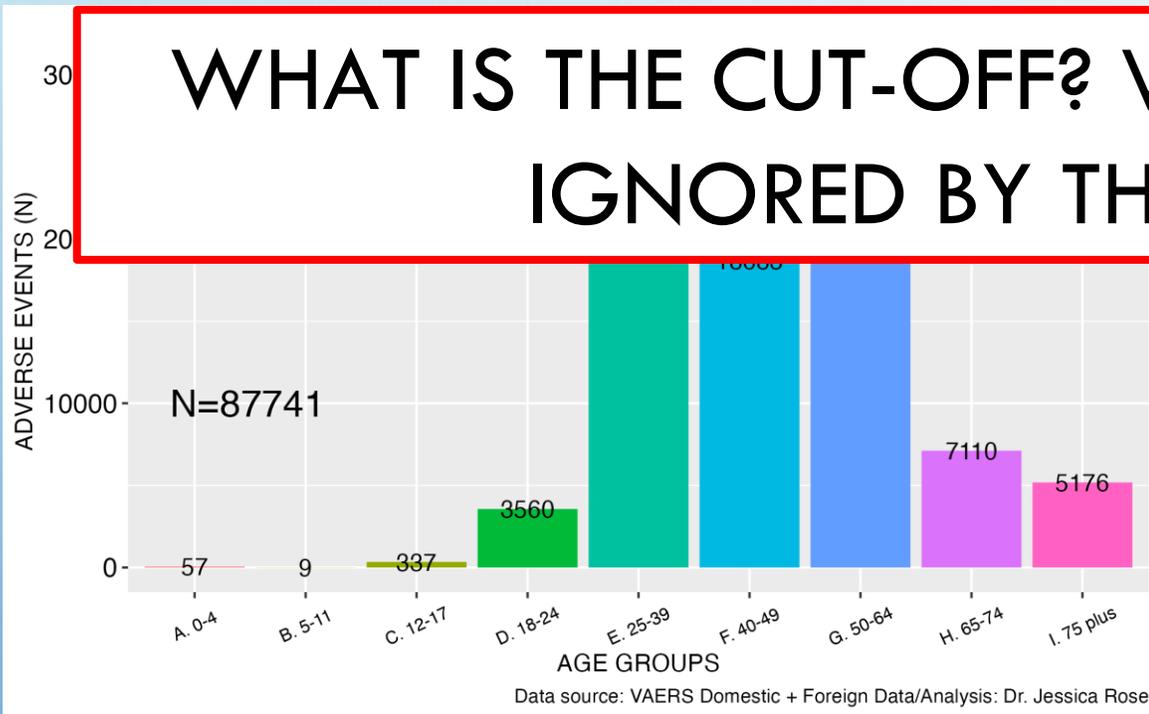


Ask me about this step at the end, if there's time.

*process of deliberately introducing naked or purified nucleic acids into eukaryotic cells

IMPORTANT POINT: WE HAD MORE THAN ENOUGH OF A SAFETY SIGNAL IN VAERS TO STOP THE ROLL-OUT IN **JANUARY 2021**

WHAT IS THE CUT-OFF? WHY WERE THERE SIGNALS IGNORED BY THE CDC/HHS/FDA?



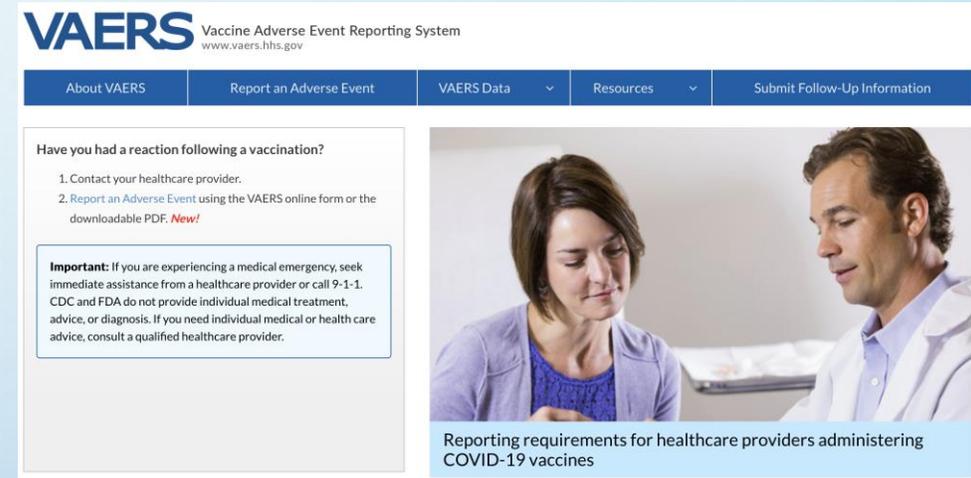
NB: THE UNDER-REPORTING FACTOR IS NOT CONSIDERED HERE AND THIS EFFECT IS NOT DUE TO MORE SHOTS HAVING BEEN DOLED OUT (SEE SUPPLEMENTARY SLIDE 69)

IF THE USE OF VAERS AS A PHARMACOVIGILANCE TOOL
IS **WAIVED** THEN
**IMMUNITY FROM LIABILITY OF PHARMACEUTICAL
COMPANIES**
SHOULD ALSO BE WAIVED

WHAT IS VAERS?

VACCINE ADVERSE EVENT REPORTING SYSTEM

- VAERS was created in 1990 by the Food and Drug Administration (FDA) and Centers for Disease Control and Prevention (CDC) to receive reports of AEs that may be associated with vaccines.
- The primary purpose for maintaining the database is to serve as an early warning or signaling system for adverse events not detected during pre-market testing and clinical trials.
- In spite of the fact that the National Childhood Vaccine Injury Act of 1986 (NCVIA) requires health care providers and vaccine manufacturers to report to the DHHS specific AEs following the administration of vaccines outlined in the Act, **under-reporting is a known imperfection of the VAERS system.**

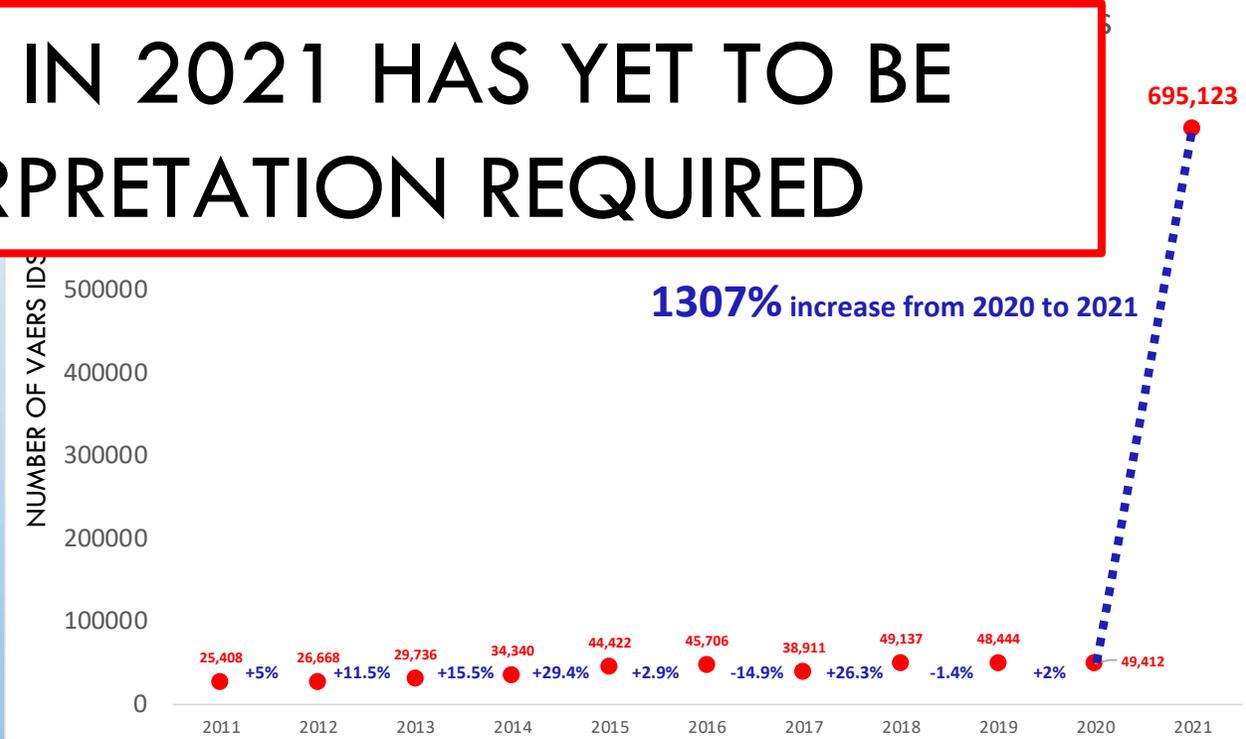
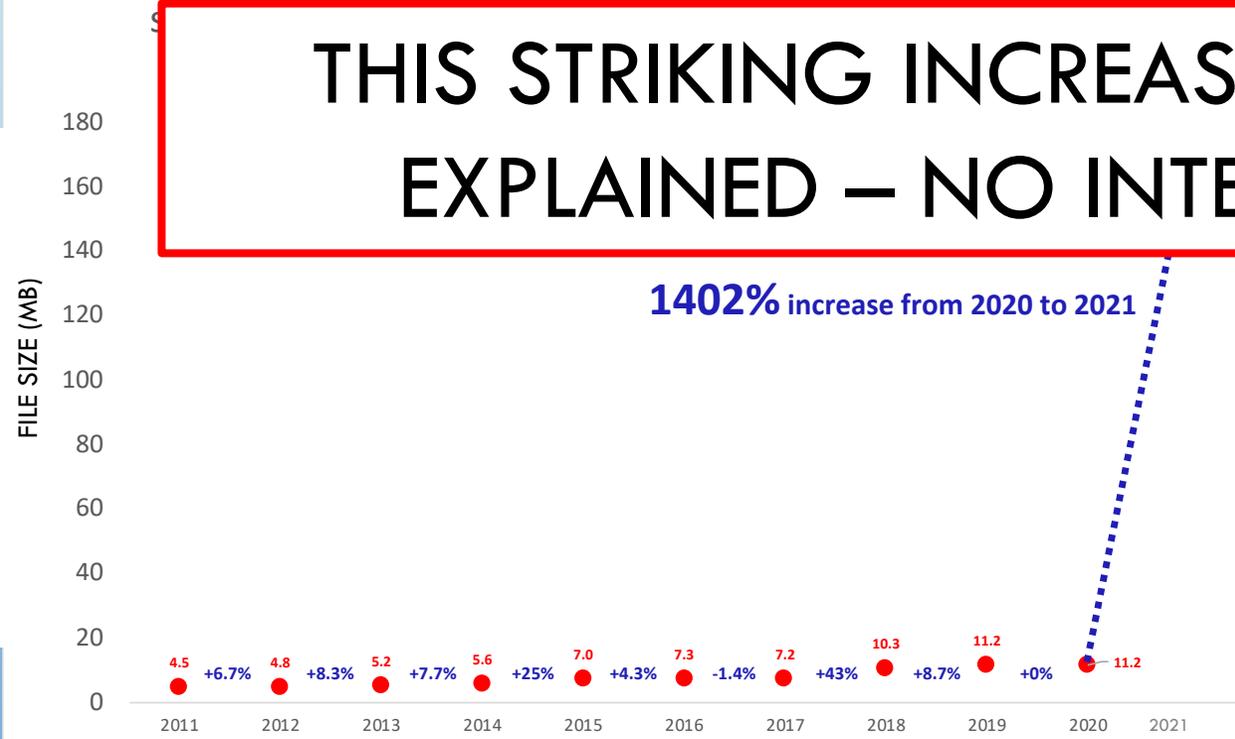


NUMBER OF VAERS REPORTS FOR THE PAST 10 YEARS COMPARED WITH 2021

RESPECTIVE SIZES OF VAERS ZIPPED FILES FROM 2011-2021

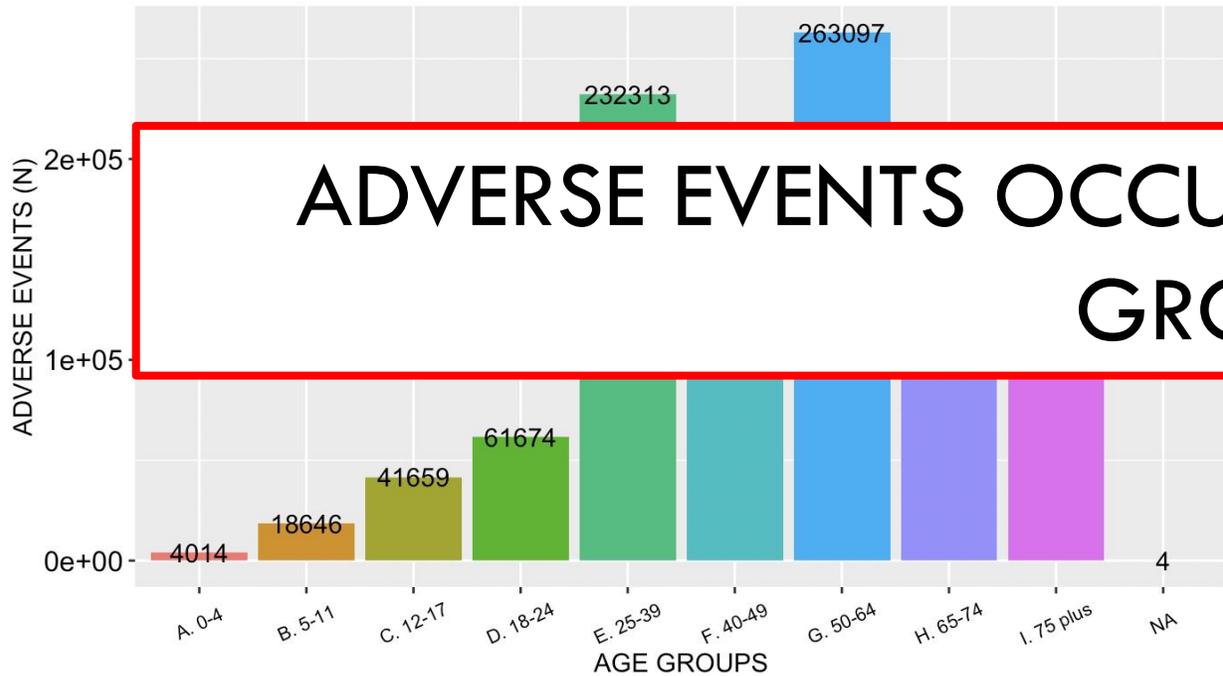
RESPECTIVE NUMBERS OF VAERS IDS FROM 2011-2021

THIS STRIKING INCREASE IN 2021 HAS YET TO BE EXPLAINED – NO INTERPRETATION REQUIRED



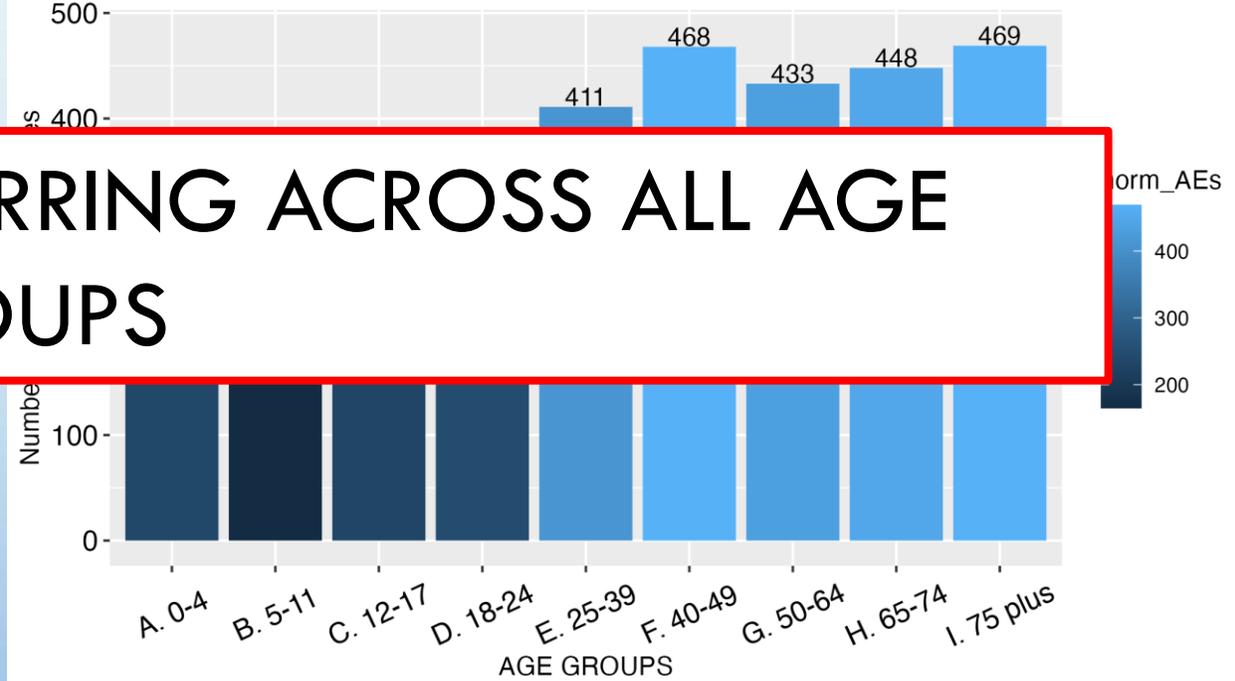
VAERS REPORTS OF ADVERSE EVENTS STATIFIED BY AGE GROUP AS OF APRIL 7, 2023

All AEs -> Distribution by age group as of Apr 7, 2023



Data source: VAERS Domestic + Foreign Data/Analysis: Dr. Jessica Rose

AE reports as of Apr 7, 2023 (normalized to Dose data - CDC)



Data source: VAERS Domestic Data/Analysis: Dr. Jessica Rose

ADVERSE EVENTS OCCURRING ACROSS ALL AGE GROUPS

N = 1,523,336
N_{w/age data} = 1,058,181

WHY ARE WE SEEING THESE ADVERSE EVENTS IN
ASSOCIATION WITH THE COVID SHOTS?

WHAT IS IN THEM?

Cationic lipid used by Pfizer: ALC-0315
Cationic lipid used by Moderna: SM-102

mRNA LNP formulation

Cationic/ionizable lipids

“Stealth” PEG lipids

CATIONIC LIPIDS HAVE DOCUMENTED TOXICITY PROFILE
PEG HAS DOCUMENTED ALLERGENIC PROFILE

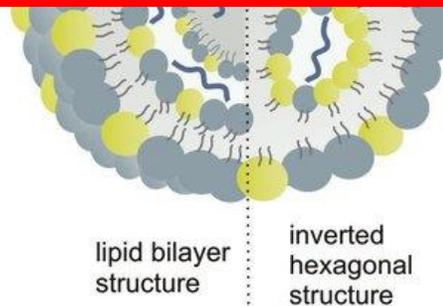
helper lipids

e.g., DSPC, DPPC

- bilayer support

Cholesterol

- integrity
- endosomal release



lipid bilayer structure

inverted hexagonal structure

Non-bilayer forming lipids

e.g., DOPE

- endosome destabilization

Lv H, Zhang S, Wang B, Cui S, Yan J. Toxicity of cationic lipids and cationic polymers in gene delivery. *J Control Release*. 2006 Aug 10;114(1):100-9. doi: 10.1016/j.jconrel.2006.04.014. Epub 2006 May 13. PMID: 16831482.

Soenen SJ, Brisson AR, De Cuyper M. Addressing the problem of cationic lipid-mediated toxicity: the magnetoliposome model. *Biomaterials*. 2009 Aug;30(22):3691-701. doi: 10.1016/j.biomaterials.2009.03.040. Epub 2009 Apr 15. PMID: 19371948.

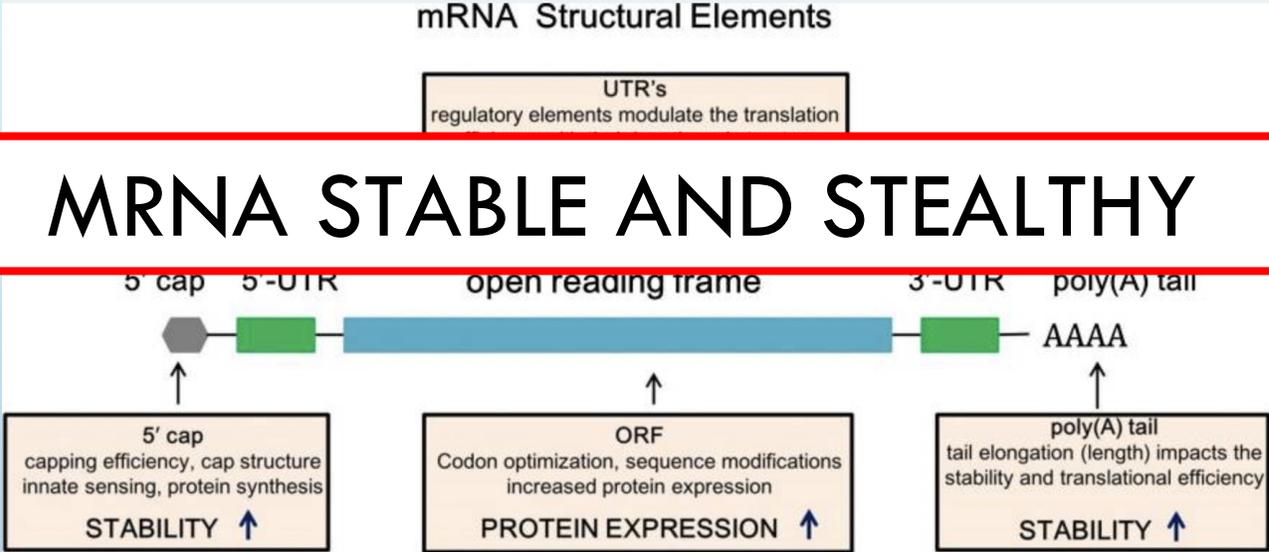
Cui S, et al., Correlation of the cytotoxic effects of cationic lipids with their headgroups. *Toxicol Res (Camb)*. 2018 Mar 22;7(3):473-479. doi: 10.1039/c8tx00005k. PMID: 30090597; PMCID: PMC6062336.

Wong-On-Wing A, et al., Severe Polyethylene Glycol Allergy Considerations for Perioperative Management: A Case Report. *A A Pract*. 2022 Oct 11;16(10):e01619. doi: 10.1213. PMID: 36219725.

McSweeney MD, Mohan M, Commins SP, Lai SK. Anaphylaxis to Pfizer/BioNTech mRNA COVID-19 Vaccine in a Patient With Clinically Confirmed PEG Allergy. *Front Allergy*. 2021 Sep 29;2:715844. doi: 10.3389/falgy.2021.715844. PMID: 35387046; PMCID: PMC8974707.

Wylon, K., Dölle, S. & Worm, M. Polyethylene glycol as a cause of anaphylaxis. *Allergy Asthma Clin Immunol* 12, 67 (2016). <https://doi.org/10.1186/s13223-016-0172-7>.

The humanized mRNA is like a stealth trojan horse.

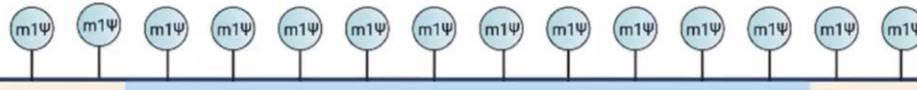


mRNA structural elements and their effect of modifications

Structural Element	Modification	Effect
Untranslated regions (UTR's)	Length and structure	Modulate translation efficiency
5' Capping	Cap structure	Increase protein synthesis, stability
Open reading frame (ORF)	Codon optimization, sequence modification	Enhance protein expression
Poly(A) tail	Tail elongation	Increase Stability, translational efficiency

Potential for ribosomal pausing very real
with introduction of Ψ s

Modified nucleotides



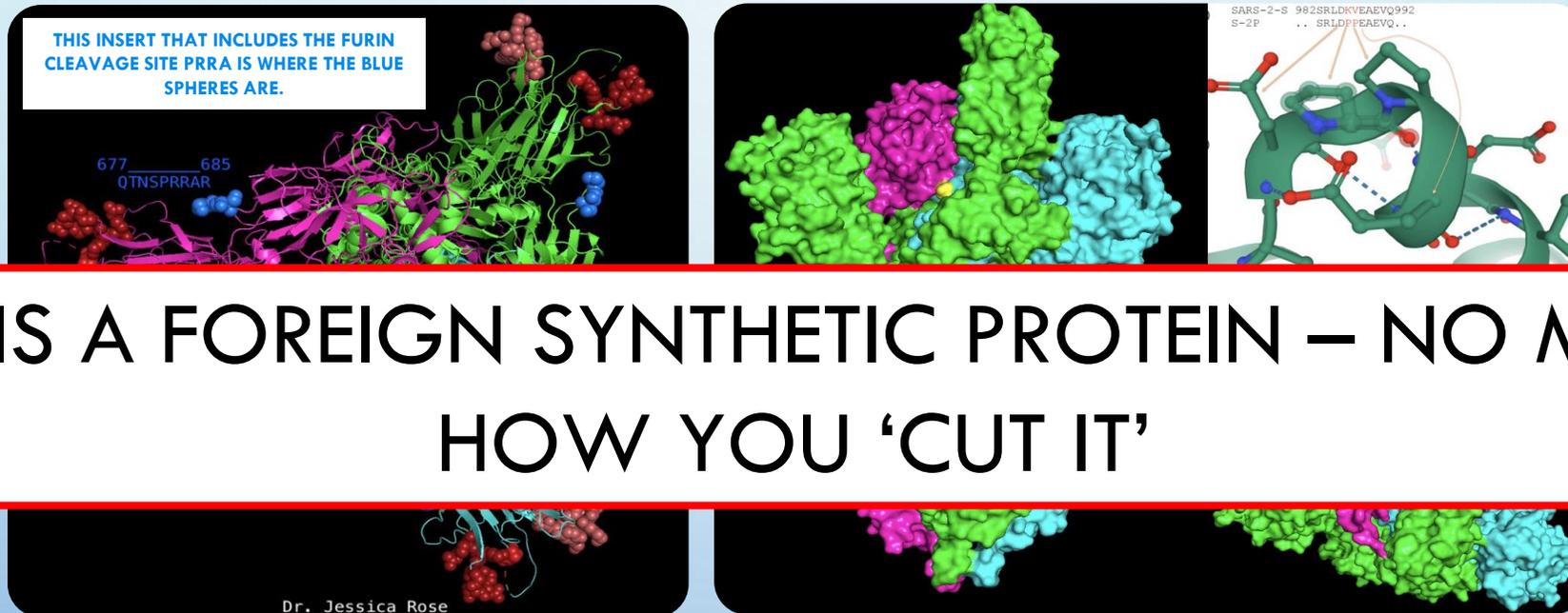
MRNA EVADES INNATE IMMUNE DETECTION

- mRNA vaccines contain the genetic code to make spike protein
- The RNA is carefully engineered to resist breakdown
 - All of the uridines are replaced with 1-methyl-pseudouridine (m1Ψ)
- The mRNA is incorporated into a lipid particle along with polyethylene glycol (PEG)
- A synthetic cationic (positively charged) lipid is added as an adjuvant – very toxic to the cells
- The “humanized” mRNA is a stealth entry system for massive production of spike protein

*S Seneff et al. Food and Chemical Toxicology 2022; 164: 113008.

“We show that RNA signals through human TLR3, TLR7, and TLR8, but incorporation of pseudouridine ablates this activity.”

Spike protein for injections was made in the image of the Wuhan spike (Wuhan-Hu-1 (GenBank: MN908947)) (maintained in pre-fusion state)



SPIKE IS A FOREIGN SYNTHETIC PROTEIN – NO MATTER HOW YOU ‘CUT IT’

- sAg site
- NLS site
- Amyloidogenic sites
- Molecular mimics
- Furin cleavage site

Insertions? → peptides (ie: the PRRA site)
enhances infectiousness + 2 proline substitutions
ensure stability of spike

Dai, L., Gao, G.F. Viral targets for vaccines against COVID-19. *Nat Rev Immunol* 21, 73–82 (2021). <https://doi.org/10.1038/s41577-020-00480-0>.

Renee I. Hajnik et al., Dual spike and nucleocapsid mRNA vaccination confer protection against SARS-CoV-2 Omicron and Delta variants in preclinical models. *Science translational medicine*. 14 Sep 2022.

Vol 14, Issue 662. DOI: 10.1126/scitranslmed.abq1945

Theoharides TC, Conti P. Be aware of SARS-CoV-2 spike protein: There is more than meets the eye. *J Biol Regul Homeost Agents*. 2021 May-Jun;35(3):833-838. doi: 10.23812. PMID: 34100279.

LOCATION, LOCATION, LOCATION

2.6.5.5B. PHARMACOKINETICS: ORGAN DISTRIBUTION CONTINUED

Test Article: [³H]-Labelled LNP-mRNA formulation containing ALC-0315 and ALC-0159
Report Number: 185350

Species (Strain): Rat (Wistar Han)
Sex/Number of Animals: Male and female/3 animals/sex/timepoint (21 animals/sex total for the 50 ug dose)

SARS-CoV-2 mRNA Vaccine (BNT162, PF-07302048)
2.6.5 薬物動態試験の概要表

マスキング箇所：調整中

2.6.5.5B. PHARMACOKINETICS: ORGAN DISTRIBUTION CONTINUED

Test Article: [³H]-Labelled LNP-mRNA formulation containing ALC-0315 and ALC-0159 Report Number: 185350

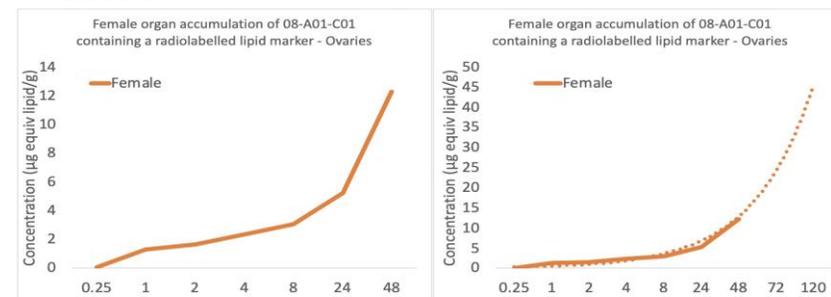
LNPS TRAFFIC TO LIVER (AND OVARIES)

Sample	Mean total lipid concentration (µg lipid equivalent/g (or mL) (males and females combined))							% of administered dose (males and females combined)						
	0.25, 1, 2, 4, 8, 24, and 48 hours post-injection							0.25, 1, 2, 4, 8, 24, and 48 hours post-injection						
	0.25 min	1 h	2 h	4 h	8 h	24 h	48 h	0.25 min	1 h	2 h	4 h	8 h	24 h	48 h
Adipose tissue	0.057	0.100	0.126	0.128	0.093	0.084	0.181	--	--	--	--	--	--	--
Adrenal glands	0.271	1.48	2.72	2.89	6.80	13.8	18.2	0.001	0.007	0.010	0.015	0.035	0.066	0.106
Bladder	0.041	0.130	0.146	0.167	0.148	0.247	0.365	0.000	0.001	0.001	0.001	0.001	0.002	0.002
Bone (femur)	0.091	0.195	0.266	0.276	0.340	0.342	0.687	--	--	--	--	--	--	--
Bone marrow (femur)	0.479	0.960	1.24	1.24	1.84	2.49	3.77	--	--	--	--	--	--	--
Brain	0.045	0.100	0.138	0.115	0.073	0.069	0.068	0.007	0.013	0.020	0.016	0.011	0.010	0.009
Eyes	0.010	0.035	0.052	0.067	0.059	0.091	0.112	0.000	0.001	0.001	0.002	0.002	0.002	0.003
Heart	0.282	1.03	1.40	0.987	0.790	0.451	0.546	0.018	0.056	0.084	0.060	0.042	0.027	0.030
Injection site	128	394	311	338	213	195	165	19.9	52.6	31.6	28.4	21.9	29.1	24.6
Kidneys	0.391	1.16	2.05	0.924	0.590	0.426	0.425	0.050	0.124	0.211	0.109	0.075	0.054	0.057
Large intestine	0.013	0.048	0.093	0.287	0.649	1.10	1.34	0.008	0.025	0.065	0.192	0.405	0.692	0.762
Liver	0.737	4.63	11.0	16.5	26.5	19.2	24.3	0.602	2.87	7.33	11.9	18.1	15.4	16.2
Lung	0.492	1.21	1.83	1.50	1.15	1.04	1.09	0.052	0.101	0.178	0.169	0.122	0.101	0.101

PEAKED AT 26.5 ug lipid AT HOUR 8

	0.25 min	1 h	2 h	4 h	8 h	24 h	48 h
(mandibular) Lymph node	0.050	0.146	0.530	0.489	0.689	0.985	1.37
(mesenteric) Muscle	0.021	0.061	0.084	0.103	0.096	0.095	0.192
Ovaries (females)	0.104	1.34	1.64	2.34	3.09	5.24	12.3

Accumulation of radiolabeled lipid marker in ovaries



Source: FOIA-requested tabulated-summary.pdf/Analysis: Dr. Jessica Rose

CONFIDENTIAL
Page 7

FDA-CBER-2021-5683-0013913

WHY IS THIS IMPORTANT?

Renin-angiotensin system

Drop in blood pressure
Drop in fluid volume



ACE-II → ANGIOTENSIN-1-7



BECAUSE OF CRITICAL ROLES OF LIVER IN BLOOD PRESSURE AND COAGULATION PATHWAY REGULATION

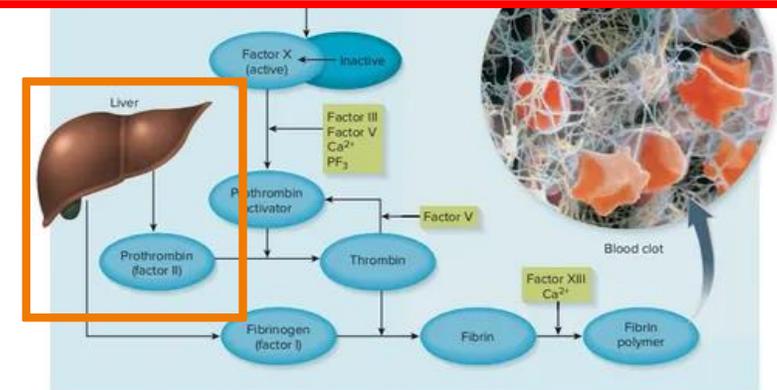
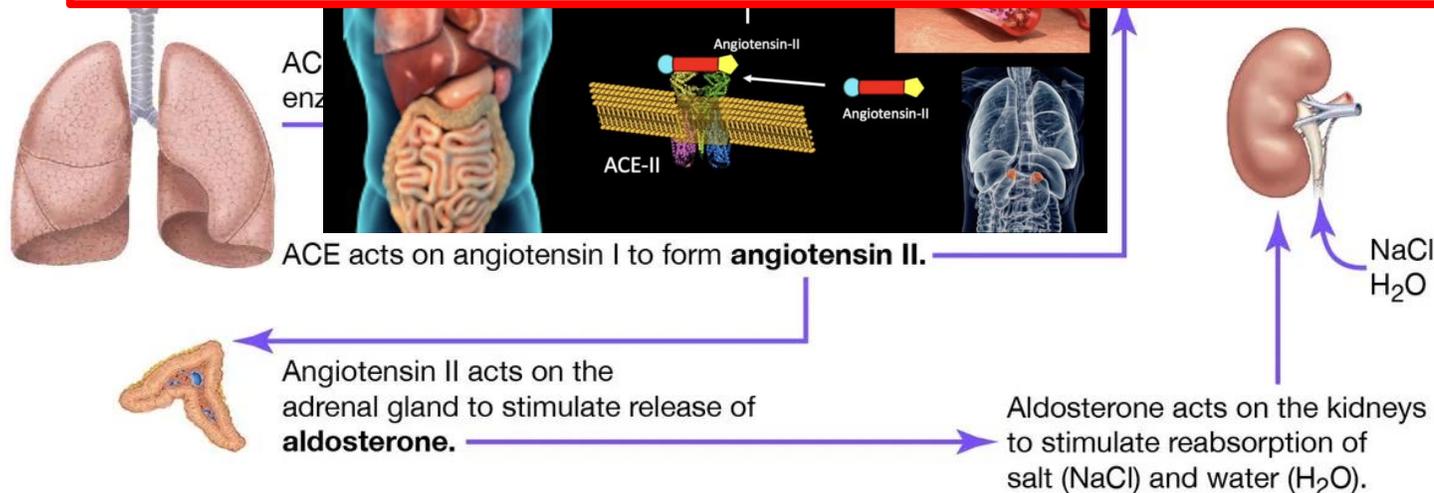
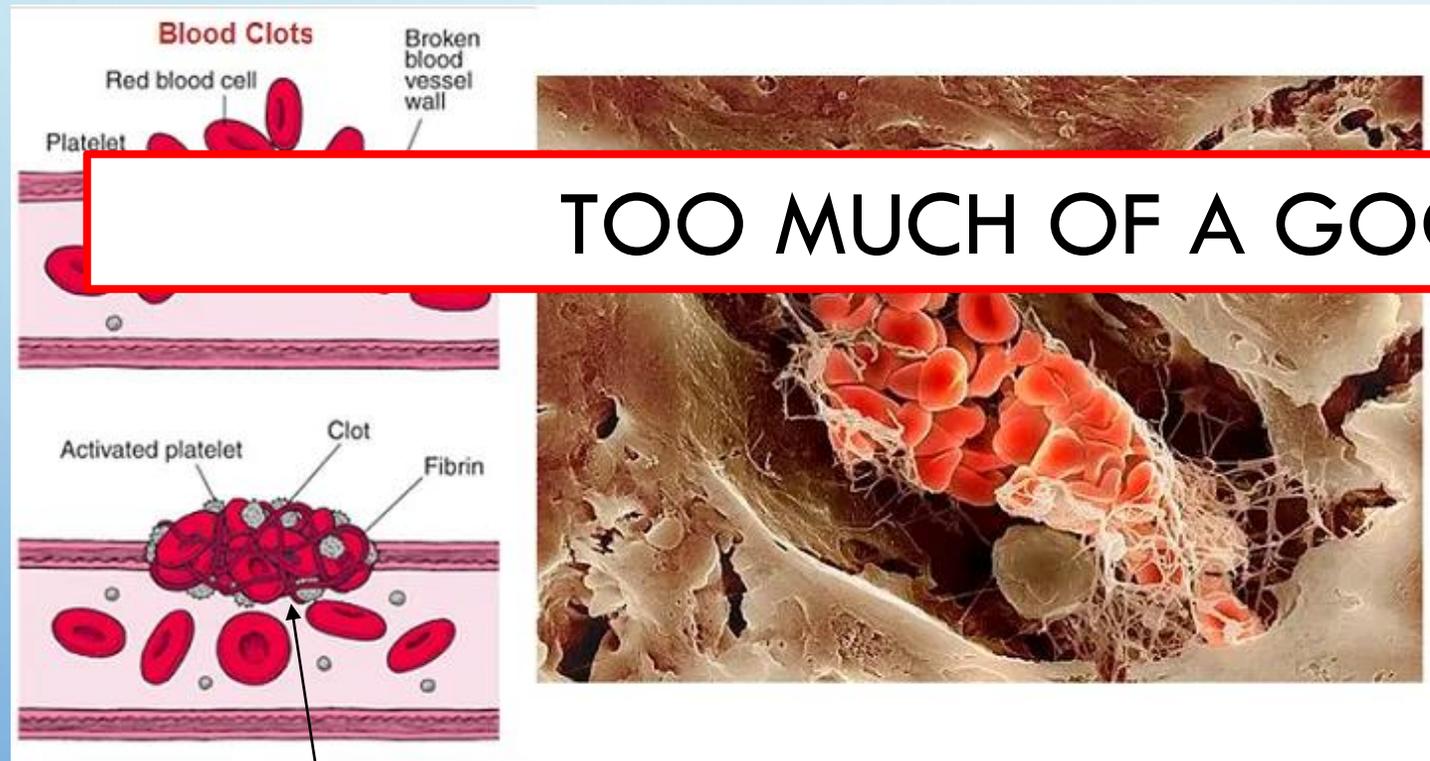


FIGURE 18.22 The Pathways of Coagulation. Most clotting factors act as enzymes that convert the next factor from an inactive form to an active form. One enzyme molecule at any given level activates many enzyme molecules at the next level down, so the overall effect becomes amplified at each step. Inset: Platelets (orange) trapped in a mesh of sticky fibrin polymer (gray).

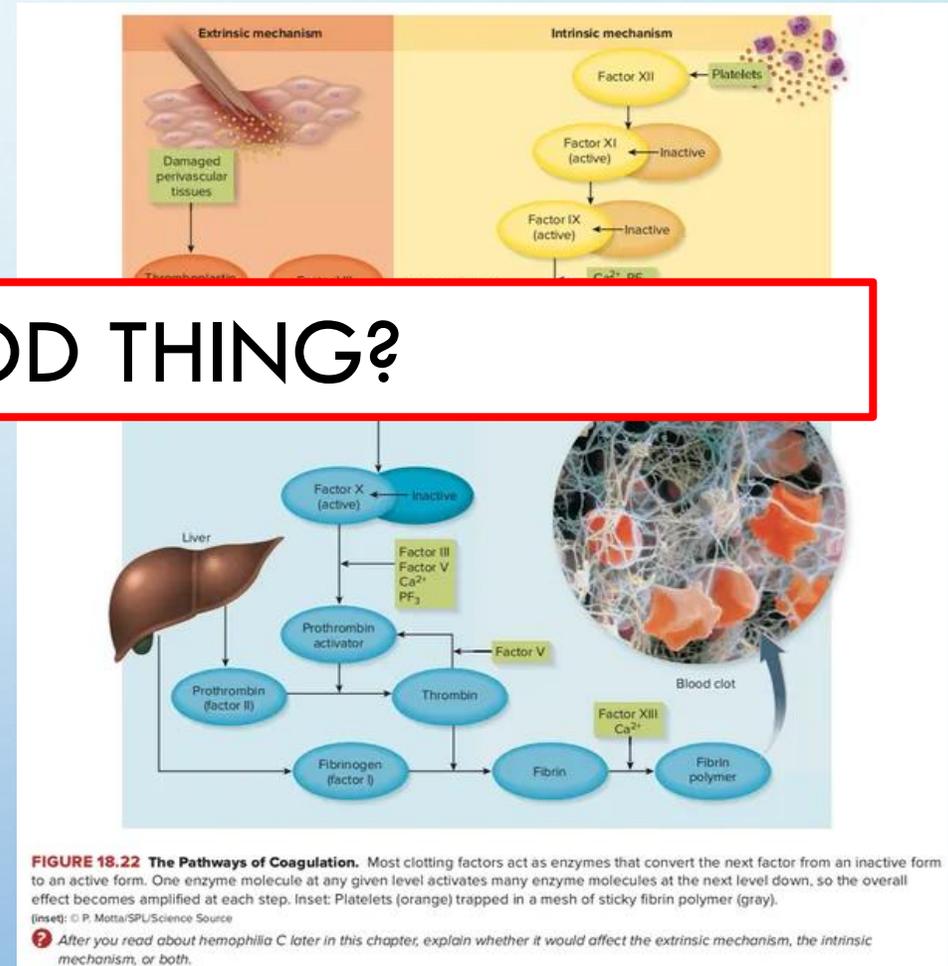
(inset: © P. Motta/SPL/Science Source)

After you read about hemophilia C later in this chapter, explain whether it would affect the extrinsic mechanism, the intrinsic mechanism, or both.

COAGULATION/CLOTTING/WOUND HEALING – NO OFF BUTTON?



TOO MUCH OF A GOOD THING?



Scaffolds to make bridges 😊

Britannica, The Editors of Encyclopaedia. "renin-angiotensin system". Encyclopedia Britannica, 11 Feb. 2023, <https://www.britannica.com/science/renin-angiotensin-system>. Accessed 8 April 2023.

Zhang, S., Liu, Y., Wang, X. et al. SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. *J Hematol Oncol* 13, 120 (2020). <https://doi.org/10.1186/s13045-020-00954-7>

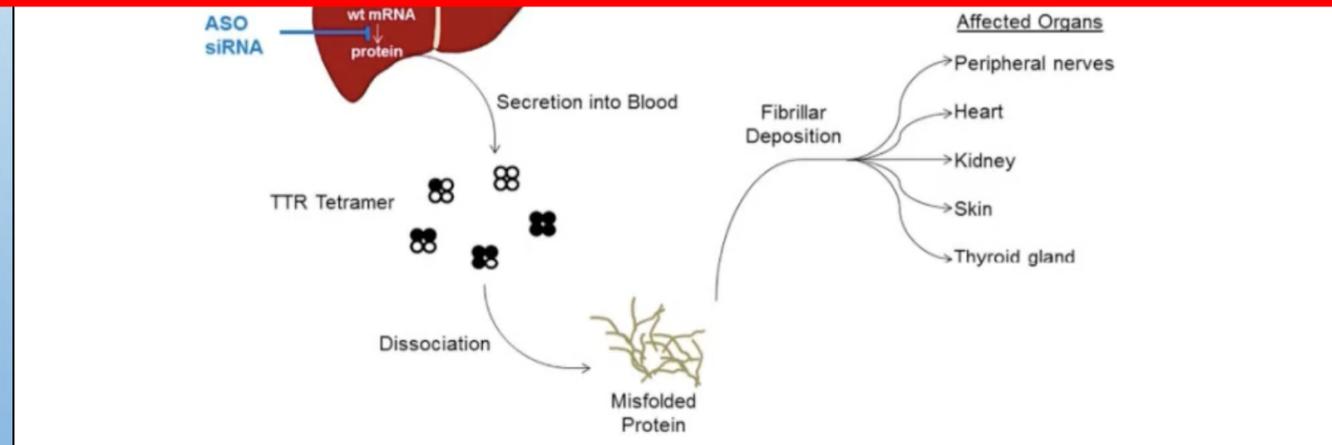
Andreas Greinacher, Thomas Thiele, Theodore E. Warkentin et al. A Prothrombotic Thrombocytopenic Disorder Resembling Heparin-Induced Thrombocytopenia Following Coronavirus-19 Vaccination, 28 March 2021,

PREPRINT (Version 1) available at Research Square [<https://doi.org/10.21203/rs.3.rs-362354/v1>]

IMPLICATIONS FOR (SPIKE-MEDIATED) CARDIAC AMYLOIDOSIS?

TTR – Familial or Hereditary Cardiac Amyloidosis

LIVER ALSO INEXTRICABLY INVOLVED IN TTR-CA
(TRANSTHYRETIN CARDIAC AMYLOIDOSIS)



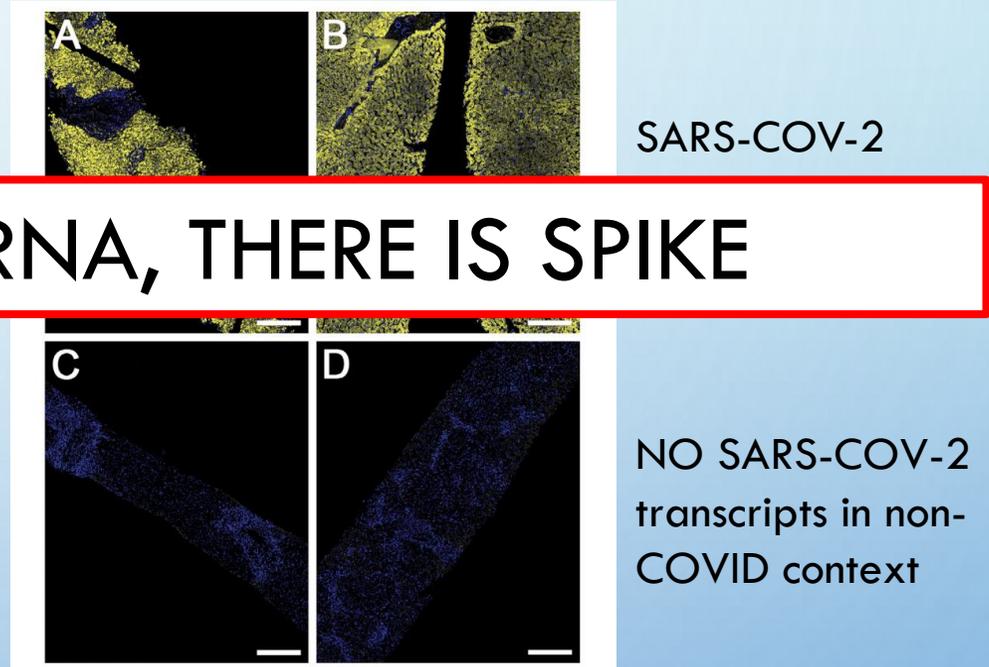
Griffin JM, Rosenthal JL, Grodin JL, Maurer MS, Grogan M, Cheng RK. ATTR Amyloidosis: Current and Emerging Management Strategies: **JACC: CardioOncology** State-of-the-Art Review. JACC CardioOncol. 2021 Oct 19;3(4):488-505. doi: 10.1016/j.jacc.2021.06.006. PMID: 34729521; PMCID: PMC8543085.

Jain A, Zahra F. Transthyretin Amyloid Cardiomyopathy (ATTR-CM) [Updated 2022 Sep 26]. In: StatPearls [Internet]. Treasure Island (FL): **StatPearls Publishing**; 2023 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK574531/> <https://www.youtube.com/watch?v=smLCm11zHko>

SPIKE MRNA PERSISTENCE IN HEPATOCYTES

- Detection of RNA encoding the spike protein within hepatocytes.

A 67-year-old female without past medical history was admitted to the emergency room 12 days after the second dose of Pfizer-BioNTech (BNT162b2), presenting abdominal pain, fatigue and jaundice.



- “In line with the case reported by Boettler et al

WHERE THERE IS SPIKE MRNA, THERE IS SPIKE

proteins can reach hepatocytes under certain circumstances and deliver mRNA in high quantities that could be used by the translational machinery of the cells to produce spike.”

Martin-Navarro L, de Andrea C, Sangro B, Argemi J. In situ detection of vaccine mRNA in the cytoplasm of hepatocytes during COVID-19 vaccine-related hepatitis. *J Hepatol*. 2023 Jan;78(1):e20-e22. doi: 10.1016/j.jhep.2022.08.039. Epub 2022 Sep 15. PMID: 36116717; PMCID: PMC9474959.

Boettler T, et al., SARS-CoV-2 vaccination can elicit a CD8 T-cell dominant hepatitis. *J Hepatol*. 2022 Sep;77(3):653-659. doi: 10.1016/j.jhep.2022.03.040. Epub 2022 Apr 21. PMID: 35461912; PMCID: PMC9021033.

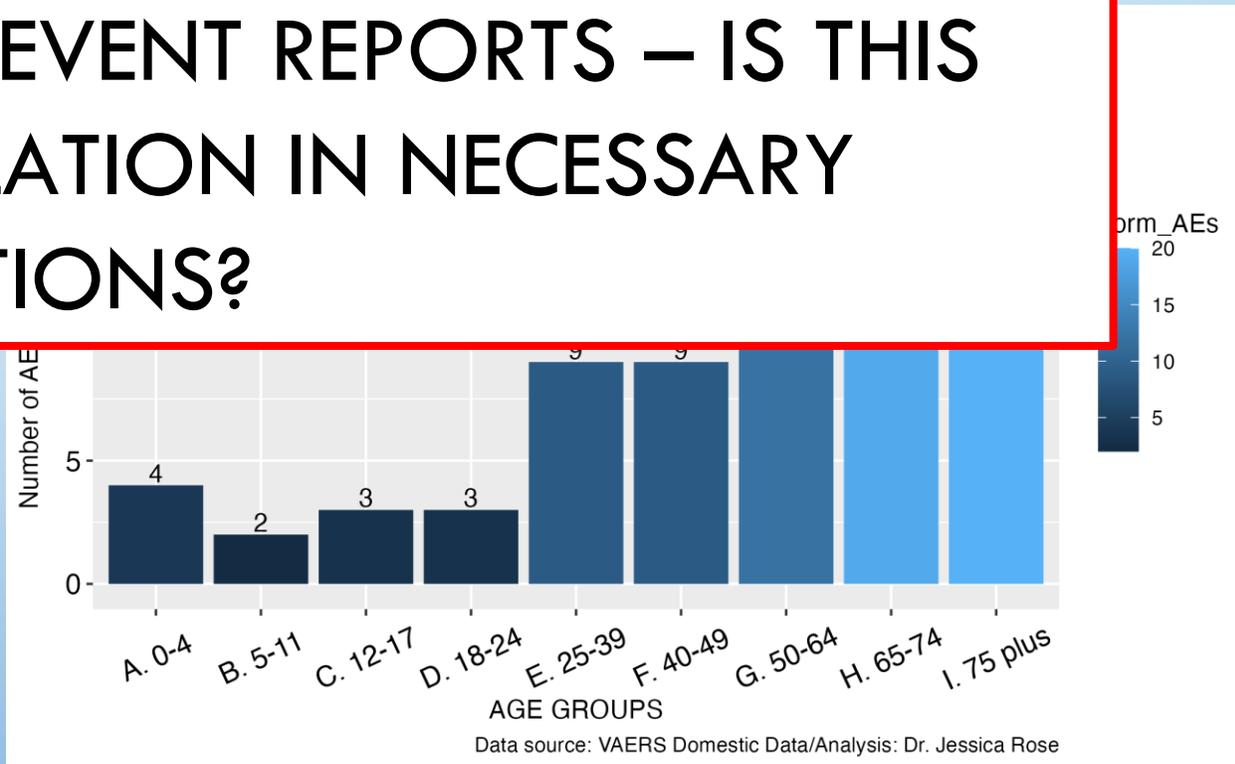
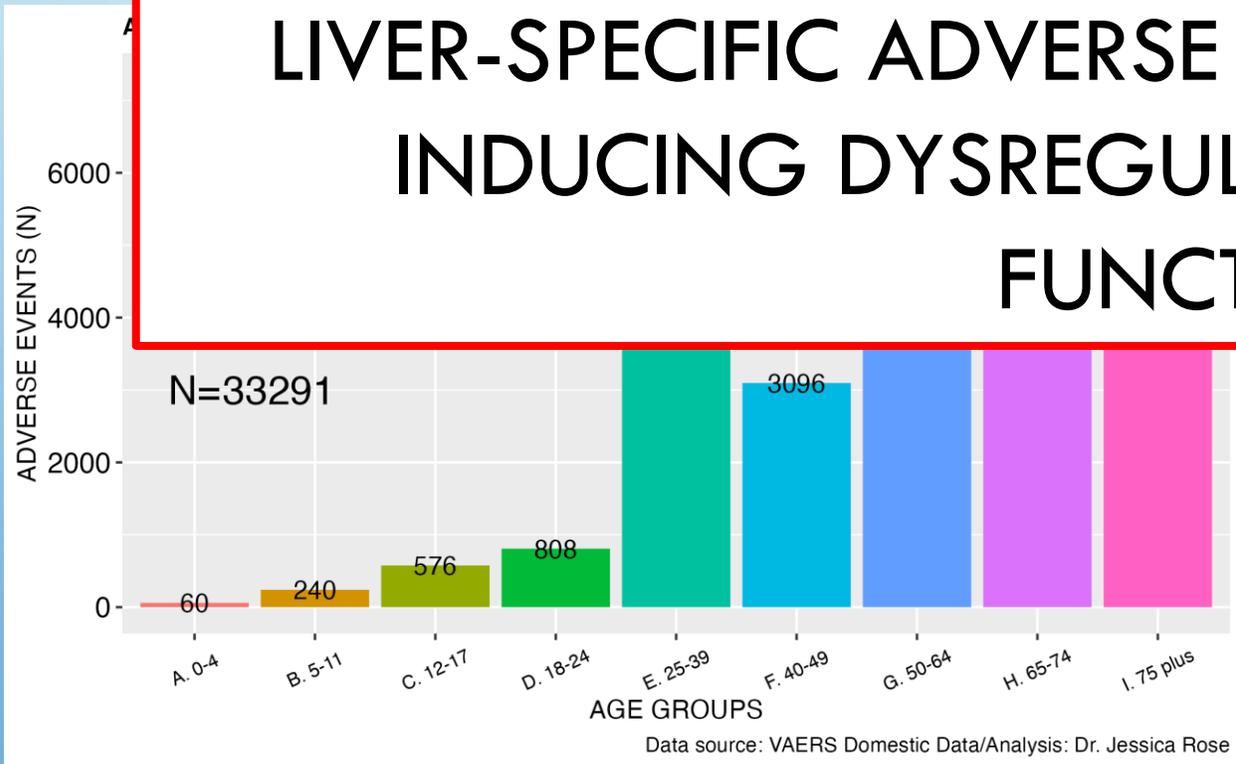
Shroff H, Satapathy SK, Crawford JM, Todd NJ, VanWagner LB. Liver injury following SARS-CoV-2 vaccination: A multicenter case series. *J Hepatol*. 2022 Jan;76(1):211-214. doi: 10.1016/j.jhep.2021.07.024. Epub 2021 Jul 31. PMID: 34339763; PMCID: PMC8324396.

Leng, L., Cao, R., Ma, J. et al. Pathological features of COVID-19-associated liver injury—a preliminary proteomics report based on clinical samples. *Sig Transduct Target Ther* 6, 9 (2021). <https://doi.org/10.1038/s41392-020-00406-1>.

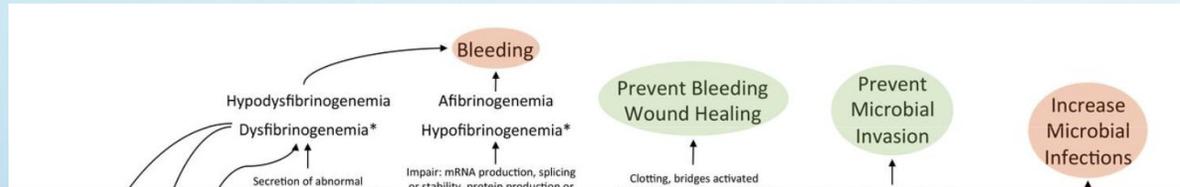
Sohrabi M, SobheRakhshankhah E, Ziaei H, AtaeeKachuee M, Zamani F. Acute liver failure after vaccination against of COVID-19; a case report and review literature. *Respir Med Case Rep*. 2022;35:101568. doi: 10.1016/j.rmcr.2021.101568. Epub 2021 Dec 14. PMID: 34926142; PMCID: PMC8668601.

VAERS REPORTS OF LIVER-ASSOCIATED ADVERSE EVENTS STRATIFIED BY AGE GROUP

LIVER-SPECIFIC ADVERSE EVENT REPORTS – IS THIS INDUCING DYSREGULATION IN NECESSARY FUNCTIONS?



REMEMBER, FIBRINOGEN AND PLASMINOGEN ARE BOTH PRODUCED IN THE LIVER



THERE ARE 15,042 ADVERSE EVENT TYPES IN VAERS IN THE CONTEXT OF THE COVID-19 SHOTS

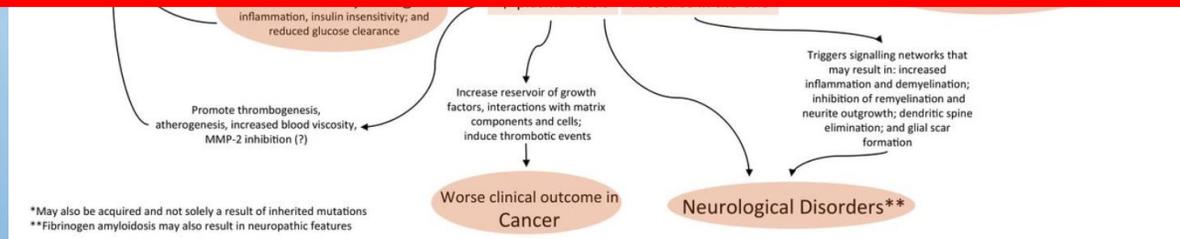
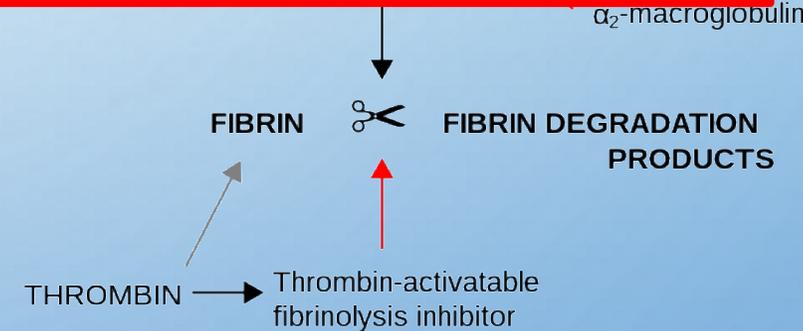


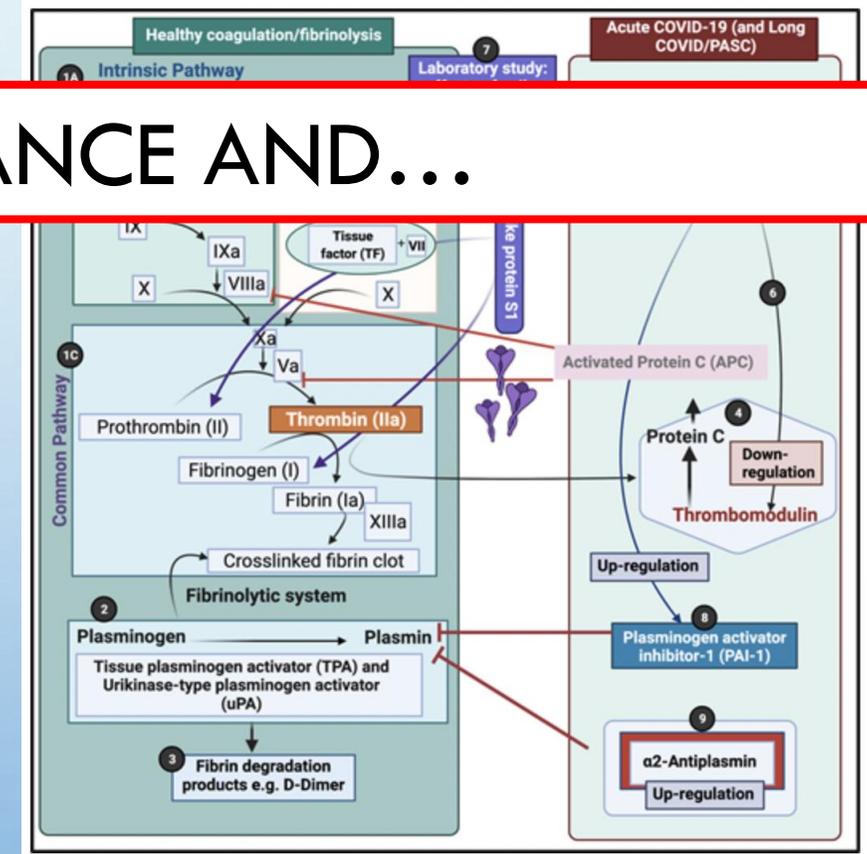
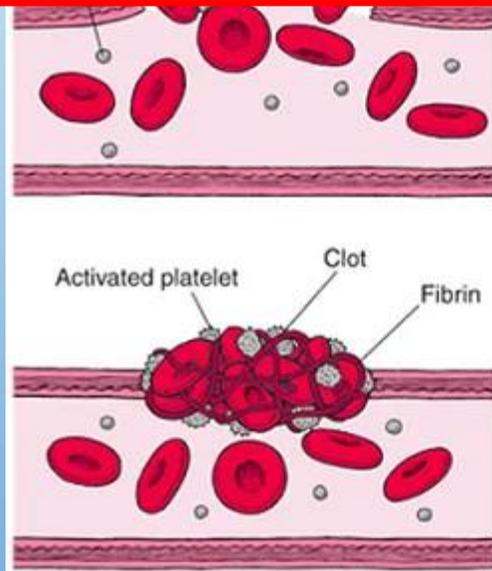
Figure 5.*Scheme summarizing the mechanisms of fibrin(ogen) as a friend (in green) and foe (in red) in human disease. Square boxes represent abnormalities that prompt fibrinogen involvement in illness settings. CNS: central nervous system; CVD: cardiovascular diseases; FCP: fibrinogen cleavage products; HFD: high-fat diet; MMP-2: matrix metalloproteinase 2; PTM: post-translational modifications; TLR4: toll-like receptor 4.



1. Bleeding
2. Amyloidosis
3. Thrombosis
4. Increased Body Weight
5. Cancer
6. Neurological disorders
7. Allergic airway disease
8. Microbial infections

DYSREGULATION OF CLOTTING PATHWAY + SPIKE-MEDIATED DAMAGE TO BLOOD VESSELS

CLOT BREAKDOWN RESISTANCE AND...



AMYLOID FIBRIN MICROCLOTS ASSOCIATED WITH SARS-COV-2

AMYLOIDS ARE NOTORIOUSLY DEGRADATION-RESISTANT

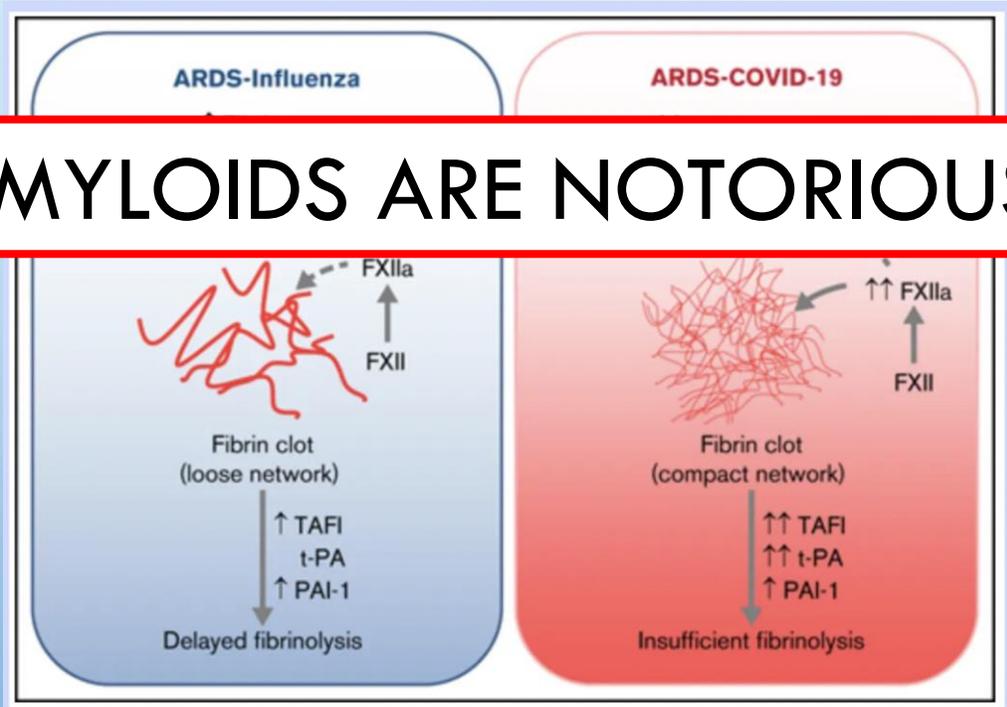
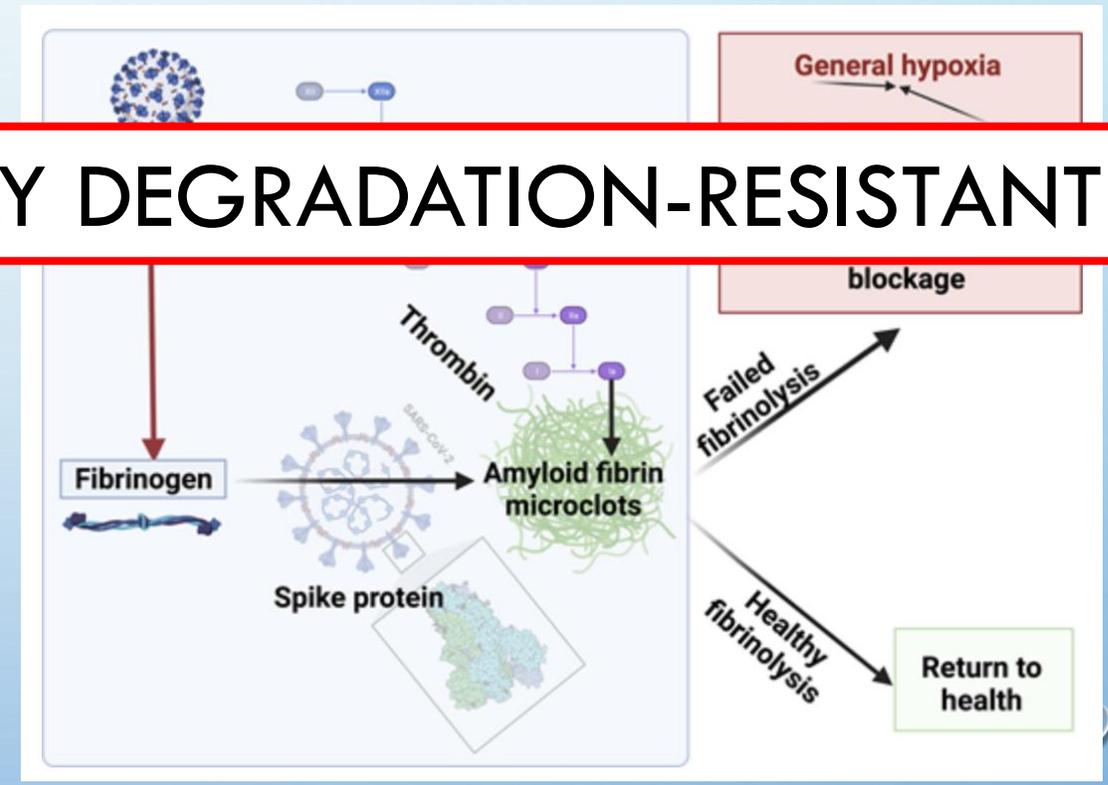


Figure 8: The difference in fibrin clots between influenza and SARS-nCoV-2 ARDS cases. <https://doi.org/10.1182/bloodadvances.2021004816>



Malgorzata Wygrecka, et al., Altered fibrin clot structure and dysregulated fibrinolysis contribute to thrombosis risk in severe COVID-19. *Blood Adv* 2022; 6 (3): 1074–1087. doi: <https://doi.org/10.1182/bloodadvances.2021004816>

Douglas B. Kell, Gert Jacobus Laubscher, Ethersia Pretorius; A central role for amyloid fibrin microclots in long COVID/PASC: origins and therapeutic implications. *Biochem J* 25 February 2022; 479 (4): 537–559. doi: <https://doi.org/10.1042/BCJ20220016>

IF DYSREGULATION IS SPIKE-MEDIATED THEN
THIS COULD BE BAD NEWS BECAUSE...

BOTH MRNA AND SPIKE ARE PERSISTENT

- Spike protein and mRNA found in

SPIKE IS DURABLE

- to 60 days post injection
- “mRNA vaccination stimulates robust GCs containing **vaccine mRNA** and **spike antigen** up to 8 weeks postvaccination in some cases”

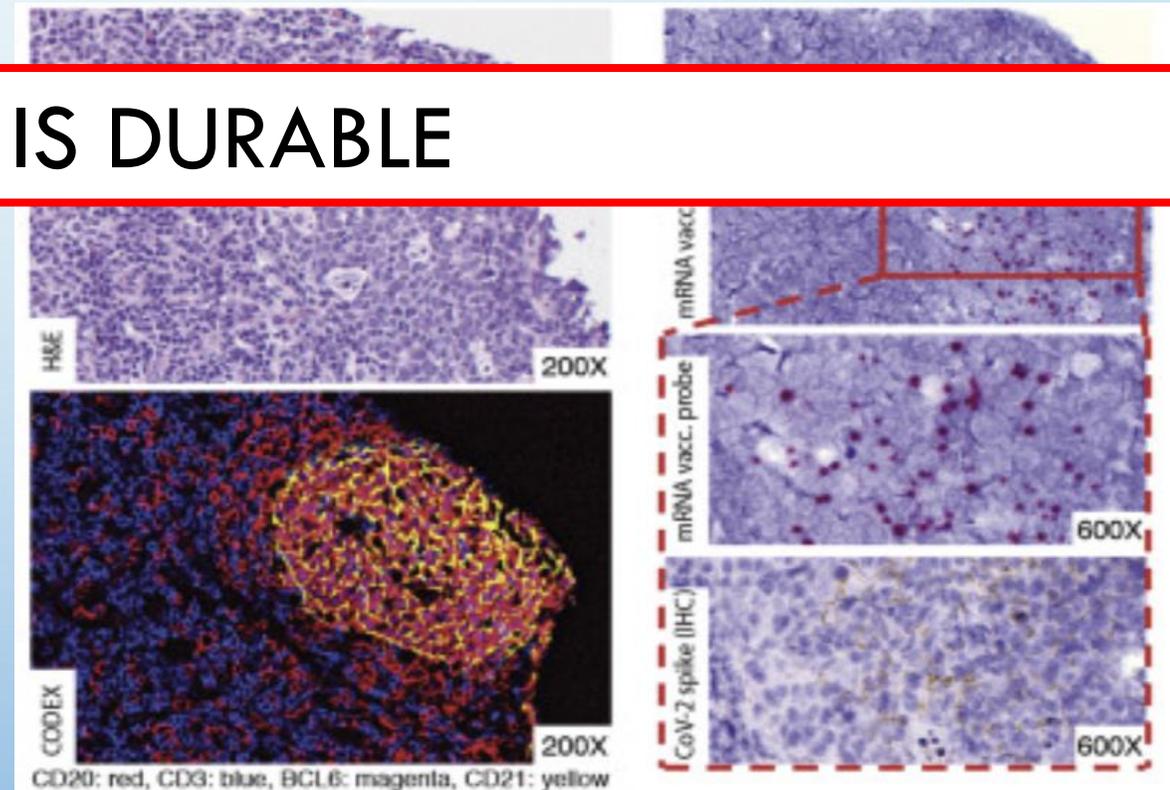
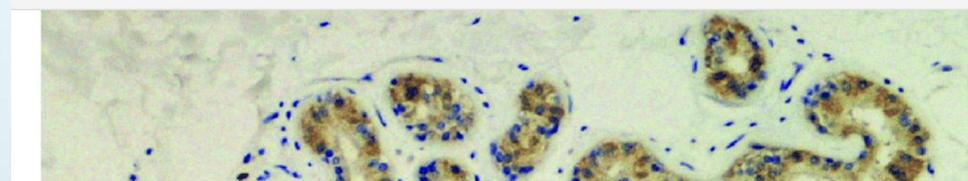


Figure 7A: Localization of SARS-CoV-2 proteins and vaccine mRNA in LNs.
DOI: 10.1016/j.cell.2022.01.018

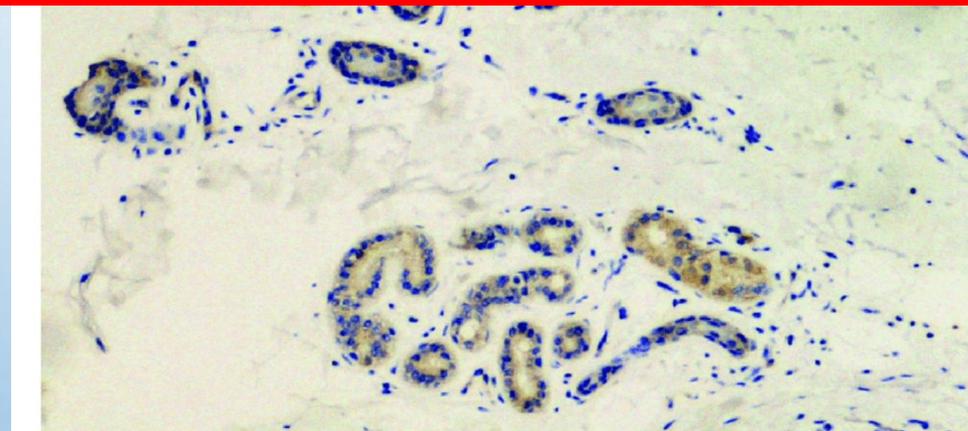
BOTH MRNA AND SPIKE ARE PERSISTENT

- Inflammatory skin lesions in three sars-cov-2 swab-negative



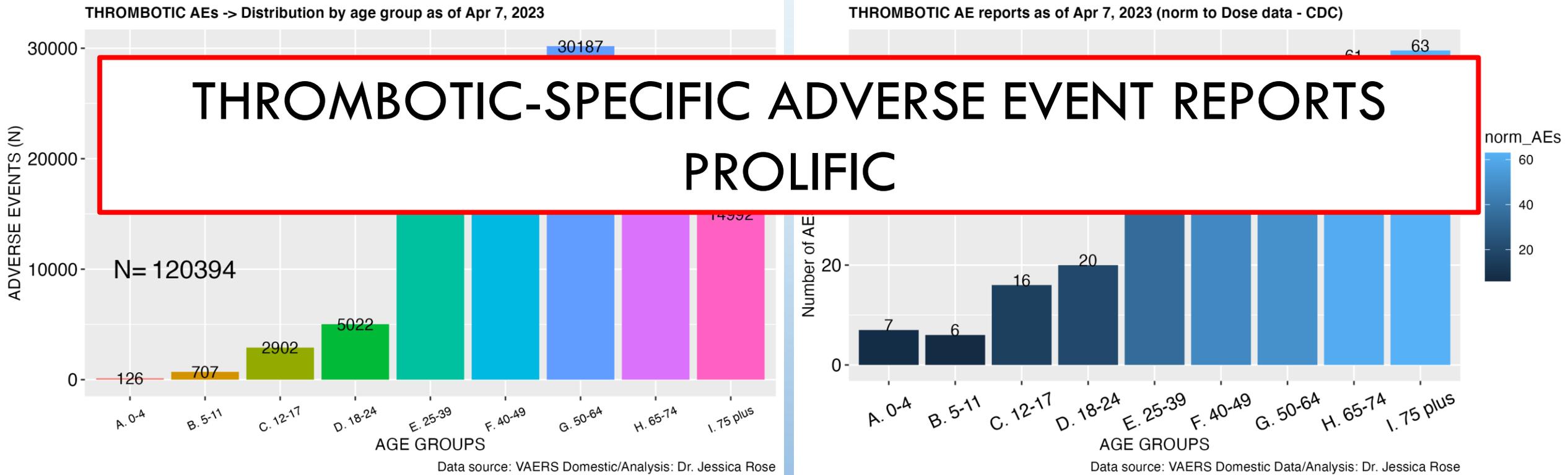
SPIKE FOUND IN MANY TISSUES

- Histological findings of chronic immune-mediated inflammation and immunohistochemical evidence of SARS-CoV-2 spike glycoproteins in endothelial cells and eccrine sweat glands



(a) Presence of viral spike proteins in the cytoplasm of epithelial cells of the secretory portion of eccrine sweat glands (brown color). Immunostaining for SARS-CoV-2, spike proteins. Original magnification 200×. (b) Presence of viral spike proteins in the eccrine sweat glands (brown stain). Immunostaining for SARS-CoV-2, spike proteins. Original magnification 400×.

AND LEADS TO THROMBOTIC EVENTS, INCLUDING MICROCLOTS AS SEEN REPORTED IN VAERS

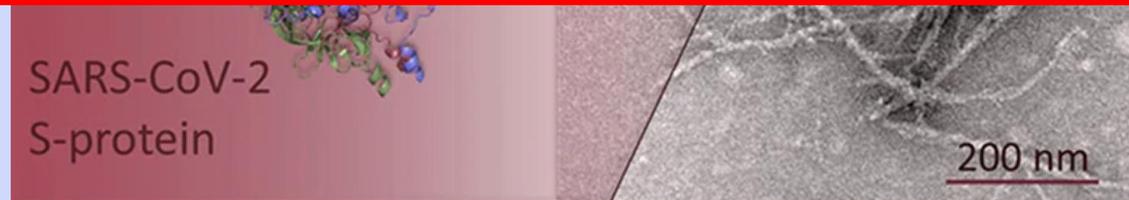
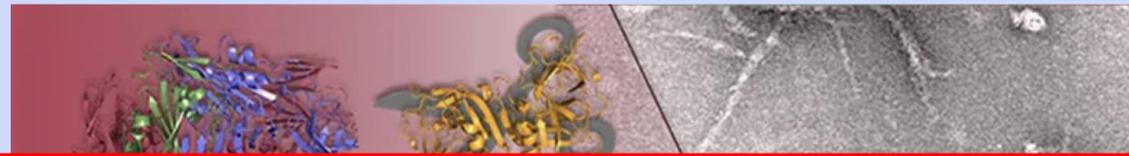


IT'S WORSE THAN JUST DYSREGULATION OF
NORMAL FUNCTIONS IF AMYLOIDS ARE ADDING TO
THE CLOT SCAFFOLDS

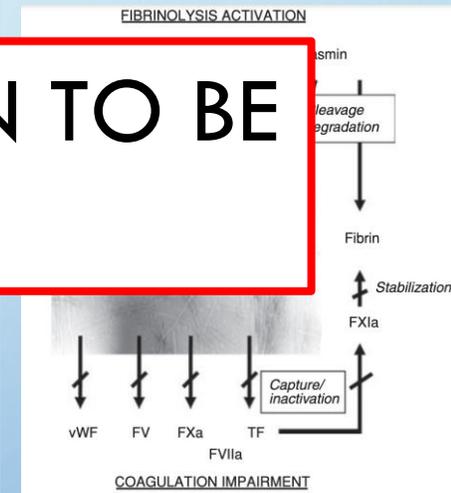
SYSTEMIC DEPOSITION OF 'BAD' PROTEINS IN ADDITION TO COAGULATION PATHWAY DEFECTS

- "COVID mRNA vaccine sequences contain **g-quadruplexes that can interact with telomeres, microRNAs, and proteins**"
- "SARS-CoV-2 S-protein ENDOGENOUSLY BINDS TO AMYLOID PRECURSOR PROTEIN SEGMENT 194–203"
- "Our data propose a molecular mechanism for potential amyloidogenesis of SARS-CoV-2 S-protein in humans."

AMYLOIDOGENIC PEPTIDES HAVE BEEN SHOWN TO BE PRESENT IN SARS-COV-2 SPIKE



J. Am. Chem. Soc. 2022, 144, 20, 8945–8950



Nyström S, Hammarström P. Amyloidogenesis of SARS-CoV-2 Spike Protein. *Journal of the American Chemical Society*. 2022 May 25;144(20):8945-8950. doi: 10.1021/jacs.2c03925. Epub 2022 May 17. PMID: 35579205; PMCID: PMC9136918.

Seneff S, Nigh G, Kyriakopoulos AM, McCullough PA. Innate immune suppression by SARS-CoV-2 mRNA vaccinations: The role of G-quadruplexes, exosomes, and MicroRNAs. *Food Chem Toxicol*. 2022 Jun;164:113008. doi: 10.1016/j.fct.2022.113008. Epub 2022 Apr 15. PMID: 35436552; PMCID: PMC9012513.

<https://jessicar.substack.com/p/is-the-spike-protein-acting-as-a>

<https://jessicar.substack.com/p/i-dont-think-its-myocarditis-i-think>

<https://jessicar.substack.com/p/rsfiedllfnkv-are-we-looking-at-weaponized>

<https://jessicar.substack.com/p/modified-spike-protein-rna-injection>

<https://jessicar.substack.com/p/its-sars-ncov-2-associated-systemic>

<https://jessica5b3.substack.com/p/a-paper-published-in-2017-provides>

AMYLOIDOGENIC PEPTIDES MAY BE ADDING TO SCAFFOLDING TO MAKE CLOTS EVEN MORE STURDY

PROTEINACEOUS DEPOSITS WE'VE BEEN HEARING ABOUT?

Primary structure
amino acid sequence

free amino group,

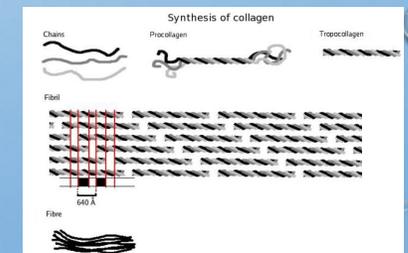
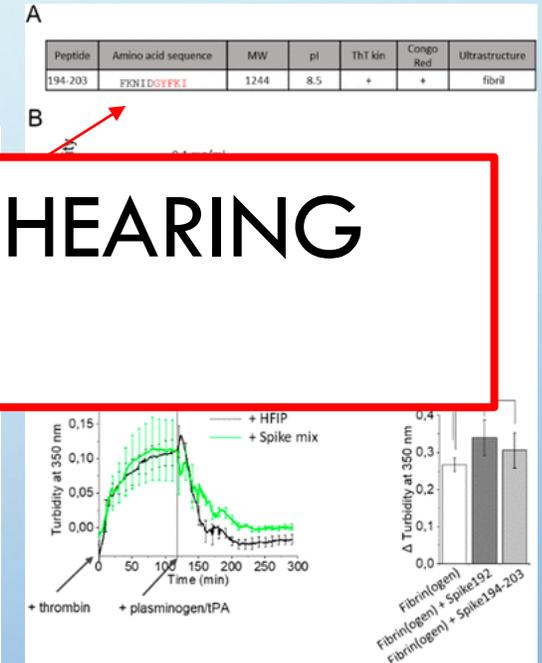
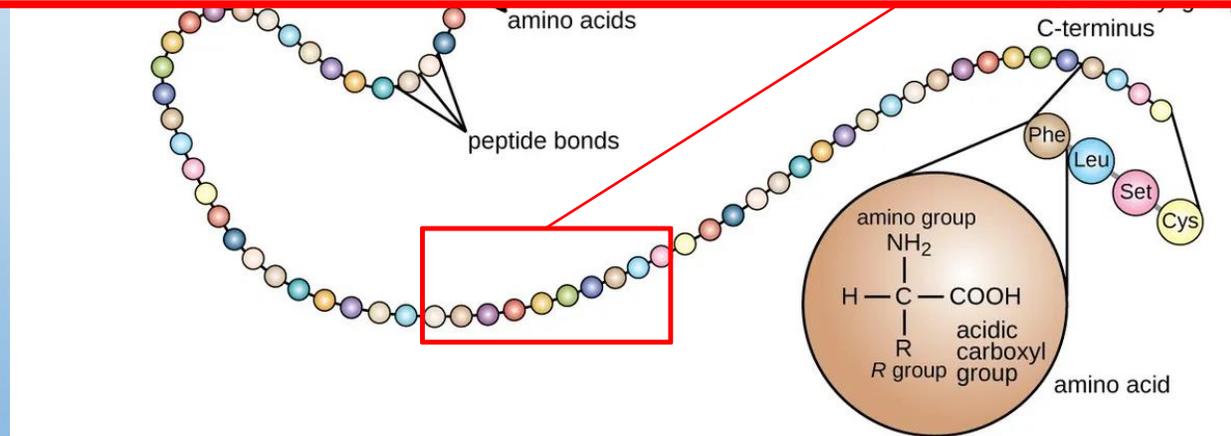
Secondary structure
regular sub-structures

Tertiary structure
three-dimensional structure

Quaternary structure
complex of protein molecules

©LadyofHats/ commons.wikimedia.org

free amino group,

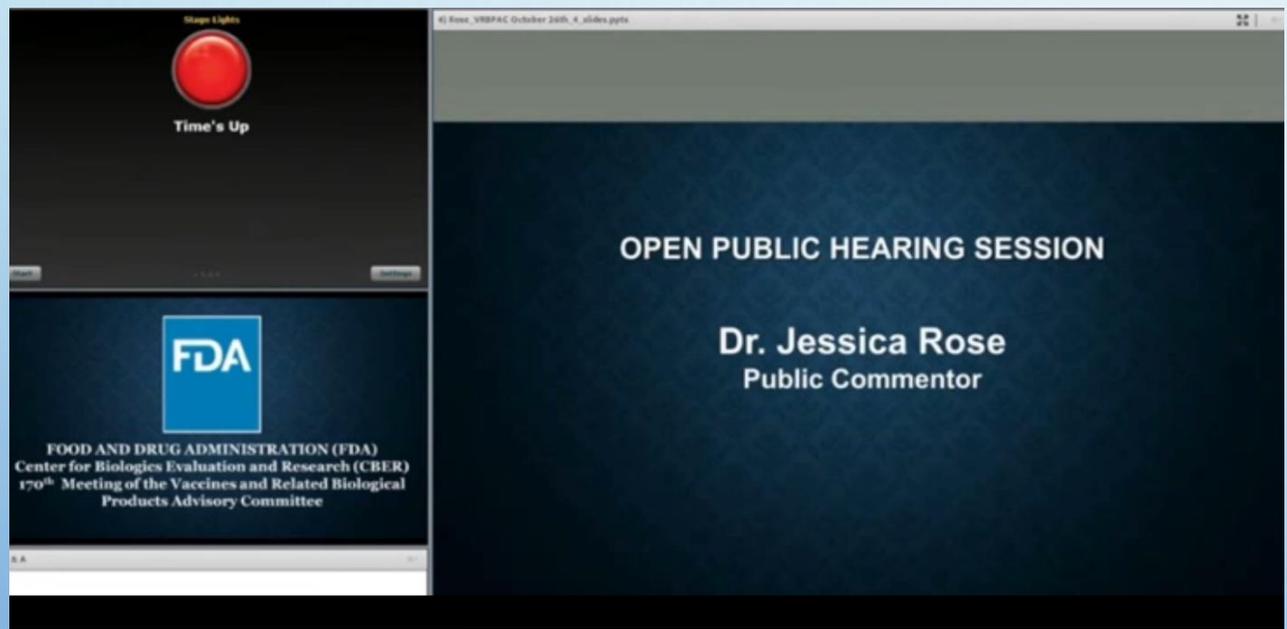


LAST, BUT NOT LEAST

MYOCARDITIS DIAGNOSES = CARDIAC AMYLOIDOSIS?

It is mis- and under-diagnosed... testing is important

WITHDRAWN WITHOUT NOTICE 5 DAYS PRIOR TO VRBPAC MEETING



A report on Myocarditis in VAERS

Published: October 2021

Jessica Rose PhD, MSc, BSc, Peter A. McCullough MD, MPH. A Report on Myocarditis Adverse Events in the U.S. Vaccine Adverse Events Reporting System (VAERS) in Association with COVID-19 Injectable Biological Products, *Current Problems in Cardiology* (2021), doi: <https://doi.org/10.1016>

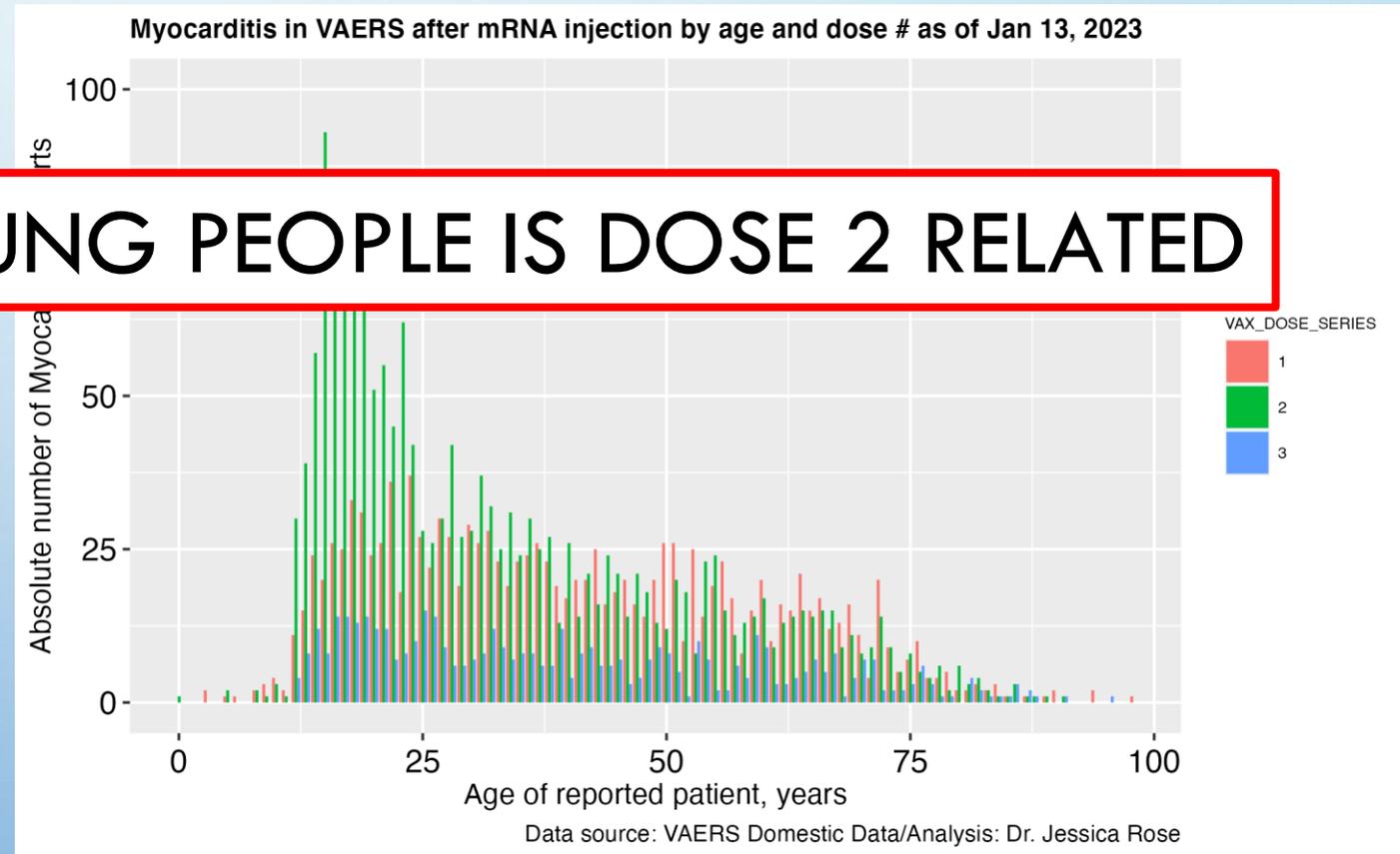
[Download pdf](#)

MYOCARDITIS REPORTS FROM VAERS DOMESTIC DATA REVEALS DOSE RESPONSE

- The absolute number of myocarditis

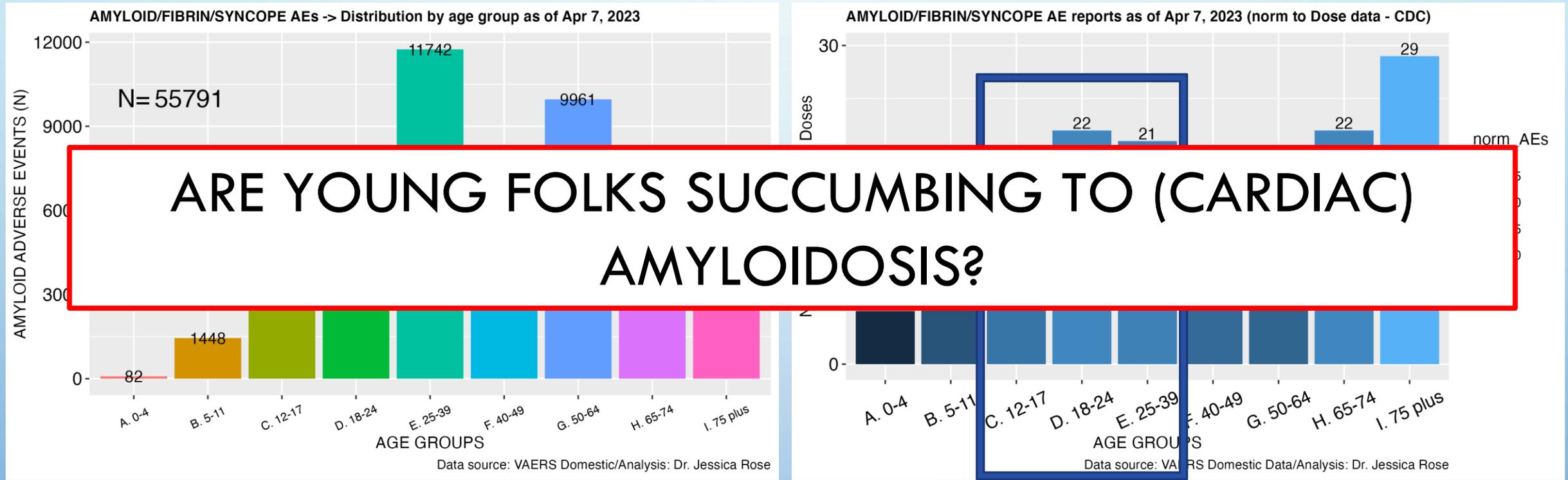
‘MYOCARDITIS’ IN YOUNG PEOPLE IS DOSE 2 RELATED

reveals dose response pertaining to dose 2 for domestic data



**IS MYOCARDITIS BEING MISDIAGNOSED? IS THE
PREVALENCE OF CARDIAC ISSUES IN YOUNG PEOPLE
ACTUALLY CARDIAC AMYLOIDOSIS?**

YOUNG FOLKS REPORTING SYNCOPES IN ASSOCIATION WITH AMYLOIDOSIS IN VAERS IN COVID-19 SHOT CONTEXT



“When the heart is involved, amyloidosis can manifest with a multitude of presentations such as heart failure, arrhythmias, orthostatic hypotension, syncope, and pre-syncope.”

Hoyer C, Angermann CE, Knop S, Ertl G, Störk S. Kardiale Amyloidose [Cardiac amyloidosis]. *Medizinische Klinik* (Munich). 2008 Mar 15;103(3):153-60. German. doi: 10.1007/s00063-008-1022-2. PMID: 18344065.

Pour-Ghaz I, Bath A, Kayali S, Alkhatib D, Yedlapati N, Rhea I, Khouzam RN, Jefferies JL, Nayyar M. A Review of Cardiac Amyloidosis: Presentation, Diagnosis, and Treatment. *Curr Probl Cardiol*. 2022 Aug 20;47(12):101366. doi: 10.1016/j.cpcardiol.2022.101366. Epub ahead of print. PMID: 35995246.

WE NEED TO FOLLOW ARNE BURKHARDT'S LEAD

- Autopsies

- \$
- t
- \$

birefringence)

- Detection of deposition of tissue-specific spike protein

Pathologist Dr. Arne Burkhardt:

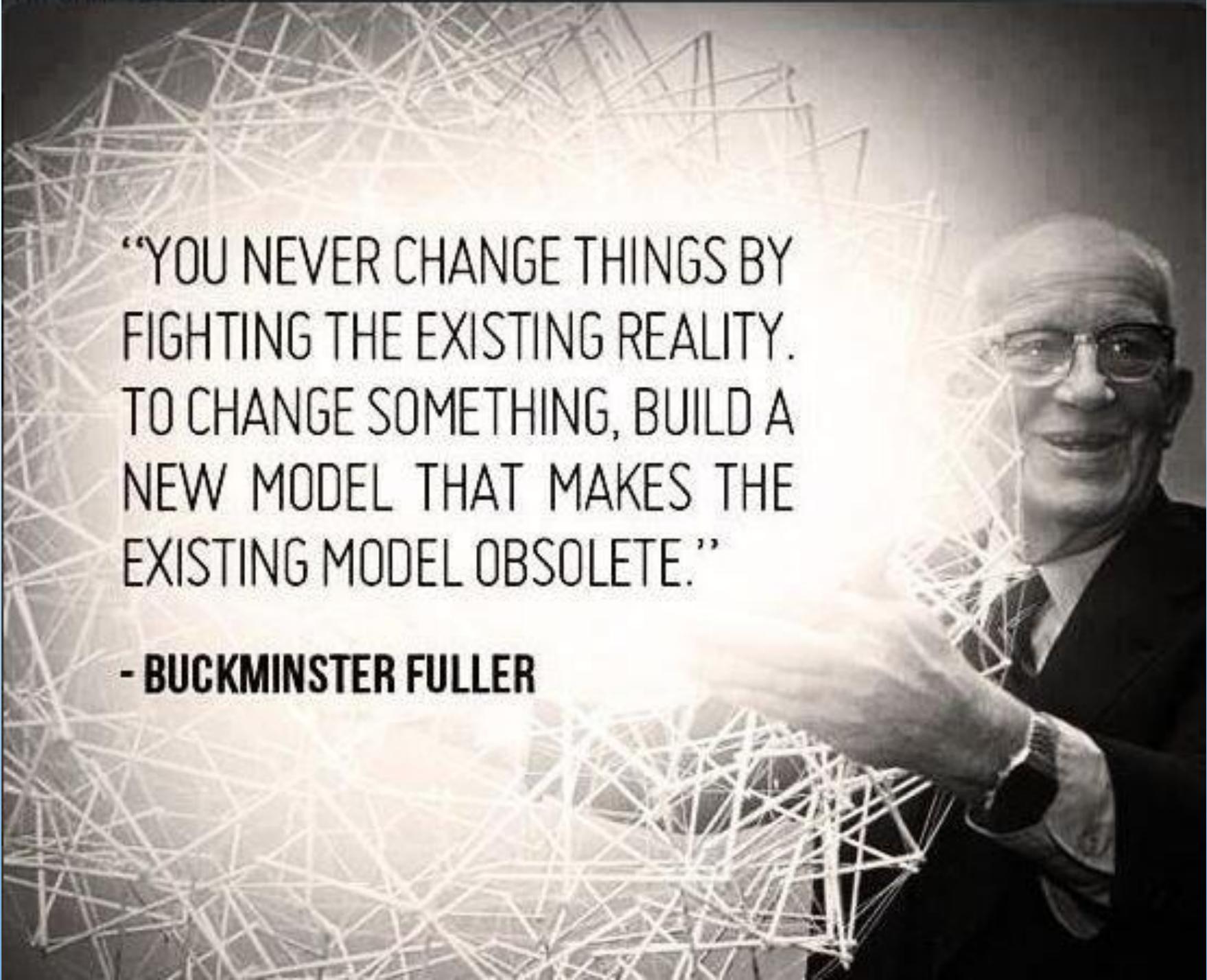
IDENTIFICATION OF SPIKE DEPOSITION CAN HELP EXPEDITE ITS TREATMENT/REMOVAL



"If I were a woman in fertile age, I would not plan a motherhood from a person, from a man, who has been vaccinated."

3 YEARS LATER...

- Biological plausibility  biological evidence
- Temporal associations between shots and injuries lend credence to causal effect (as does biological evidence)
- Policy makers need to get up-to-date on the data and science behind the real modus operans and effects of these novel gene therapies
- Litigators need to litigate
- Medical licenses need to be reinstated (or a new system of licensing needs to be created)
- Journal articles need to be reinstated (or a new system of peer review needs to be created - https://twitter.Com/kevin_mckernan/status/1348822032004349952)
- Censorship of science needs to stop



“YOU NEVER CHANGE THINGS BY
FIGHTING THE EXISTING REALITY.
TO CHANGE SOMETHING, BUILD A
NEW MODEL THAT MAKES THE
EXISTING MODEL OBSOLETE.”

- BUCKMINSTER FULLER

RECOMMENDATIONS: BUILD NEW MODELS

- Stop all injection roll-outs **as Switzerland has done**
- Clear spike: spike protein can be broken down using enzymes found in food sources
- Balance inflammatory response
- Testing for spike should be prolific to identify in whom it remains a problem
- Liver function tests should be done to determine health of liver
- Cardiac amyloidosis testing should become prolific to better diagnose and treat

FIN

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jessica5b3.substack.com

jessicasuniverse.com

@JessLovesMJK

SUPPLEMENTARY (ADDITIONAL) SLIDES

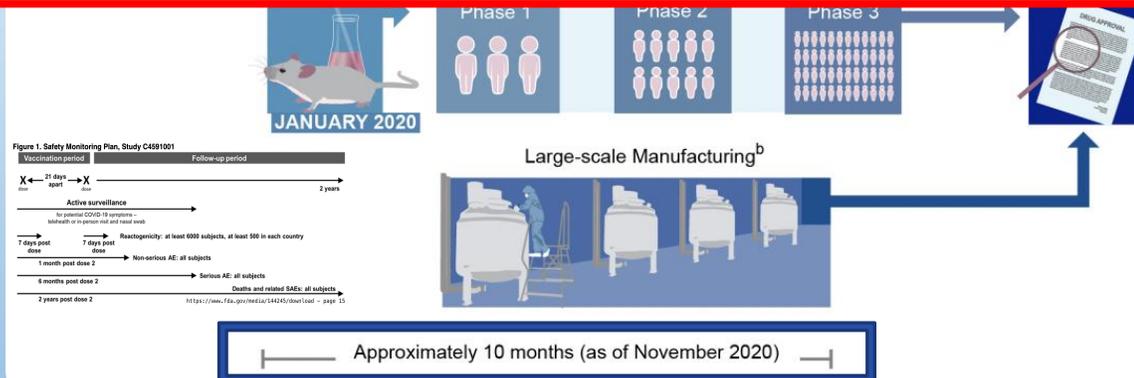
BACKGROUND: MODERNA CLINICAL TRIAL NCT04470427

Figure 1: Traditional Vaccine Development Timeline Compared To Potential Operation Warp Speed (OWS) Timeline



RUSHED TRIALS – GENUINE SAFETY TESTING IMPOSSIBLE

- Included pregnancy, age requirements (>19 - EU) and health-related associations
- 30,415 (30,000 by latest count) participants in their phase III trial
- Safety data did not look good*



**A NEW
PLATFORM
AND A NEW
mRNA-BASED
TECHNOLOGY**

Source: GAO Analysis of Food and Drug Administration (FDA), Pharmaceutical Research and Manufacturers of America, and Operation Warp Speed Information. | GAO-21-319

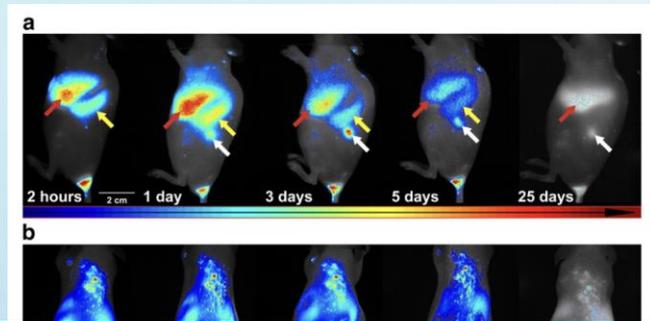
<https://clinicaltrials.gov/ct2/show/NCT04470427>

<https://jessicar.substack.com/p/exposure-during-pregnancy>

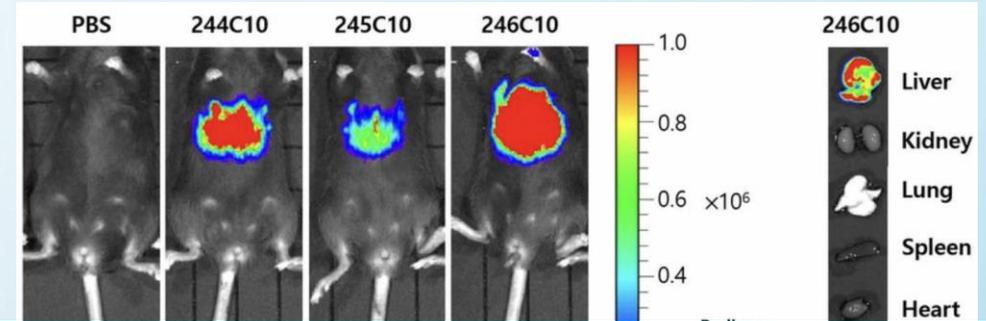
*https://www.nejm.org/doi/suppl/10.1056/NEJMoa2113017/suppl_file/nejmoa2113017_appendix.pdf

*<https://jessicar.substack.com/p/i-dont-know-what-to-say>

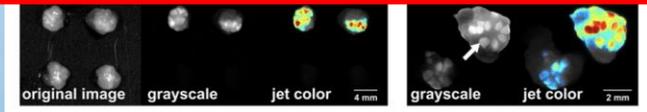
Accumulation of nanocarriers in the ovaries.



Accumulation of nanocarriers in the liver.



NANOPARTICLE TRAFFICKING ESTABLISHED IN THE LITERATURE: NEGLECTED TOXICITY RISKS?



In vivo evaluation of ionizable lipid candidates (mFLuc). Ionizable lipid candidates were formulated with mFLuc. mFLuc-loaded LNPs were injected to C57BL/6 mice at mRNA dose of 0.1 mg/kg. Three hours after injection, bioluminescence was analyzed. 244C10-to 246C10-formulated LNPs resulted in potent luciferase expression. Ex vivo organ image showed that LNPs were mostly uptaken into liver. p, photons; PDI, polydispersity index.

“Studies in different mouse species and wistar rats were conducted and a **high local accumulation of nanoparticles**, nanocapsules and nanoemulsions in specific locations of the **ovaries was found in all animals.**”

“Ionizable lipid nanoparticles (LNPs) have been widely used for *in vivo* delivery of RNA therapeutics into the liver. **Ex vivo organ image showed that LNPs were mostly uptaken into liver.**”

Schädlich, A., Hoffmann, S., Mueller, T., Caysa, H., Rose, C., Göpferich, A.M., Li, J., Kuntsche, J., & Mäder, K. (2012). Accumulation of nanocarriers in the ovary: a neglected toxicity risk? **Journal of controlled release: official journal of the Controlled Release Society**, February 2012. 160 1, 105-12.

Kim, M. & Jeong, M. & Hur, S. & Cho, Y. & Park, J. & Jung, H. & Seo, Y. & Woo, H. & Nam, K. & Lee, K. & Lee, H.. (2021). Engineered ionizable lipid nanoparticles for targeted delivery of RNA therapeutics into different types of cells in the liver. **Science Advances**. 7. eabf4398. 10.1126/sciadv.abf4398.

Witzigmann D, Kulkarni JA, Leung J, Chen S, Cullis PR, van der Meel R. Lipid nanoparticle technology for therapeutic gene regulation in the liver. **Adv Drug Deliv Rev**. 2020;159:344-363. doi: 10.1016/j.addr.2020.06.026. Epub 2020 Jul 2. PMID: 32622021; PMCID: PMC7329694.

COMPARISONS TO BACKGROUND RATES/HISTORICAL VALUES (DOMESTIC DATA AS OF APRIL 7, 2023)

TOTAL DOMESTIC AEs PER YEAR

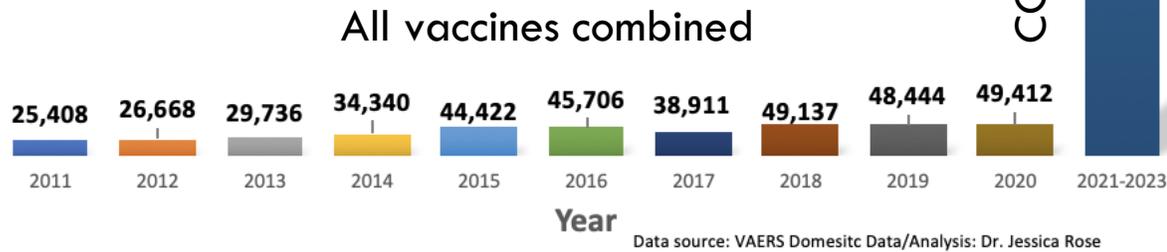
TOTAL DOMESTIC DEATH AEs PER YEAR

931,201

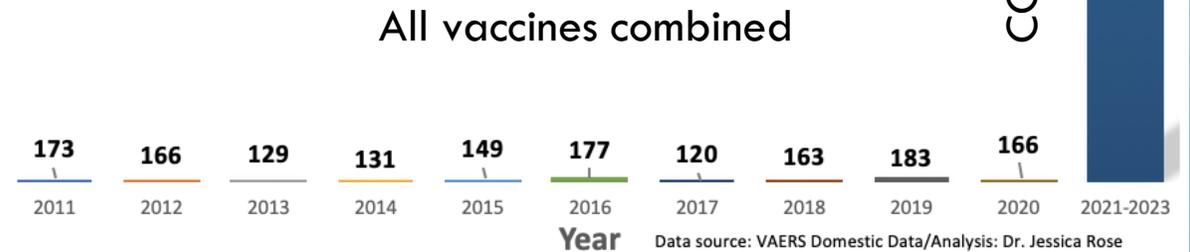
21,538

NO COMPARISON TO THE PAST 10 YEARS OF VAERS DATA FOR ALL VACCINES COMBINED

Absolute number of VAERS IDs (N)



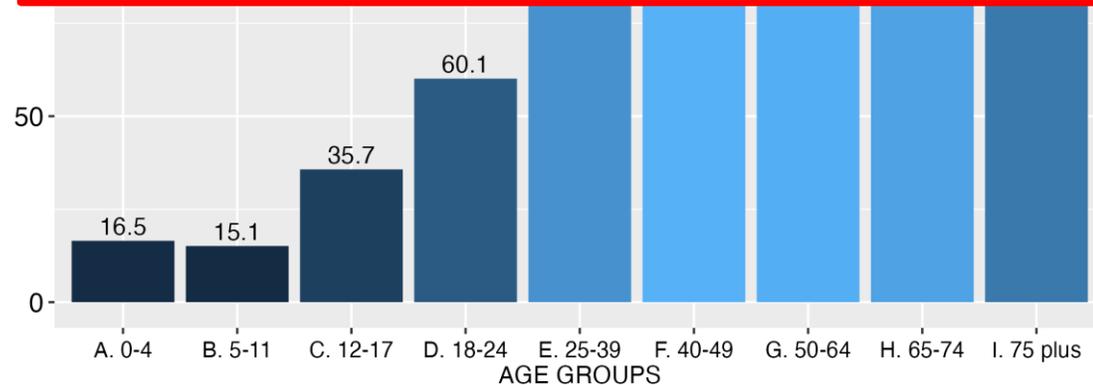
Absolute number of



NEUROLOGICAL AND CARDIOVASCULAR AES ARE OFF THE CHARTS

Neurological VAERS reports as of Mar 31, 2023 (normalized to CDC Dose data)

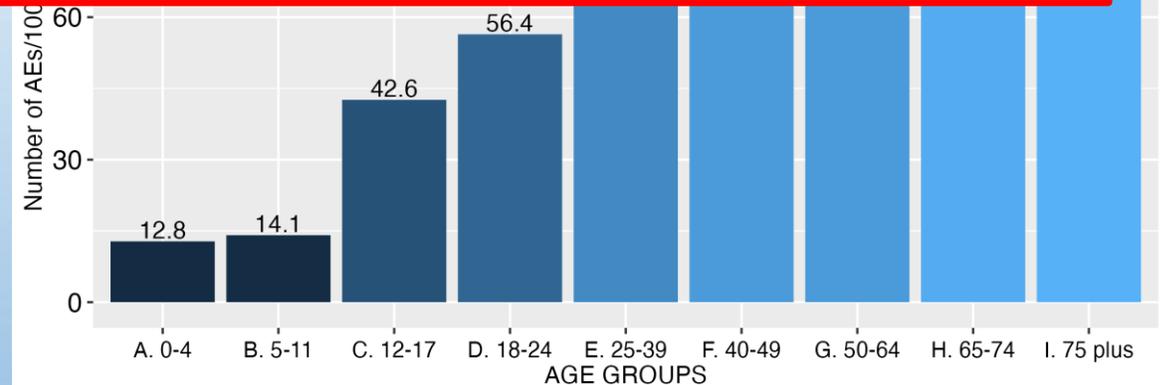
Number of AEs/100,000 Doses



Source: <https://vaers.hhs.gov>; <https://covid.cdc.gov/covid-data-tracker/Analysis>; Dr. Jessica Rose

Cardiovascular-associated VAERS reports as of Mar 31, 2023 (normalized to CDC Dose data)

Number of AEs/100,000 Doses



Source: <https://vaers.hhs.gov>; <https://covid.cdc.gov/covid-data-tracker/Analysis>; Dr. Jessica Rose

VERY HIGH REPORTING RATES FOR NEUROLOGICAL AND CARDIOVASCULAR-ASSOCIATED AES

THE RISK OF TRANSLATING/TRANSLATED PROTEINS/PEPTIDES OTHER THAN THE INTENDED SPIKE PROTEIN IS **UNKNOWN**

- RNA integrity was found to be 78% in clinical

TRANSLATION: WE HAVE NO IDEA WHAT PEOPLE'S CELLS ARE MAKING OR THE EFFECTS ON PHYSIOLOGY

mRNA of the COVID-19 injectable products was assessed by the EMA (European Medicines Agency)

Impact: The potential implications of this RNA integrity loss in commercial batches compared to clinical ones in terms of both safety and efficacy are yet to be defined. Whether or not the observed comparability issues could be a blocking point will depend on the relevance of these observations to safety and efficacy and the company will be requested to fully justify the lower %RNA integrity (and other differences noted).

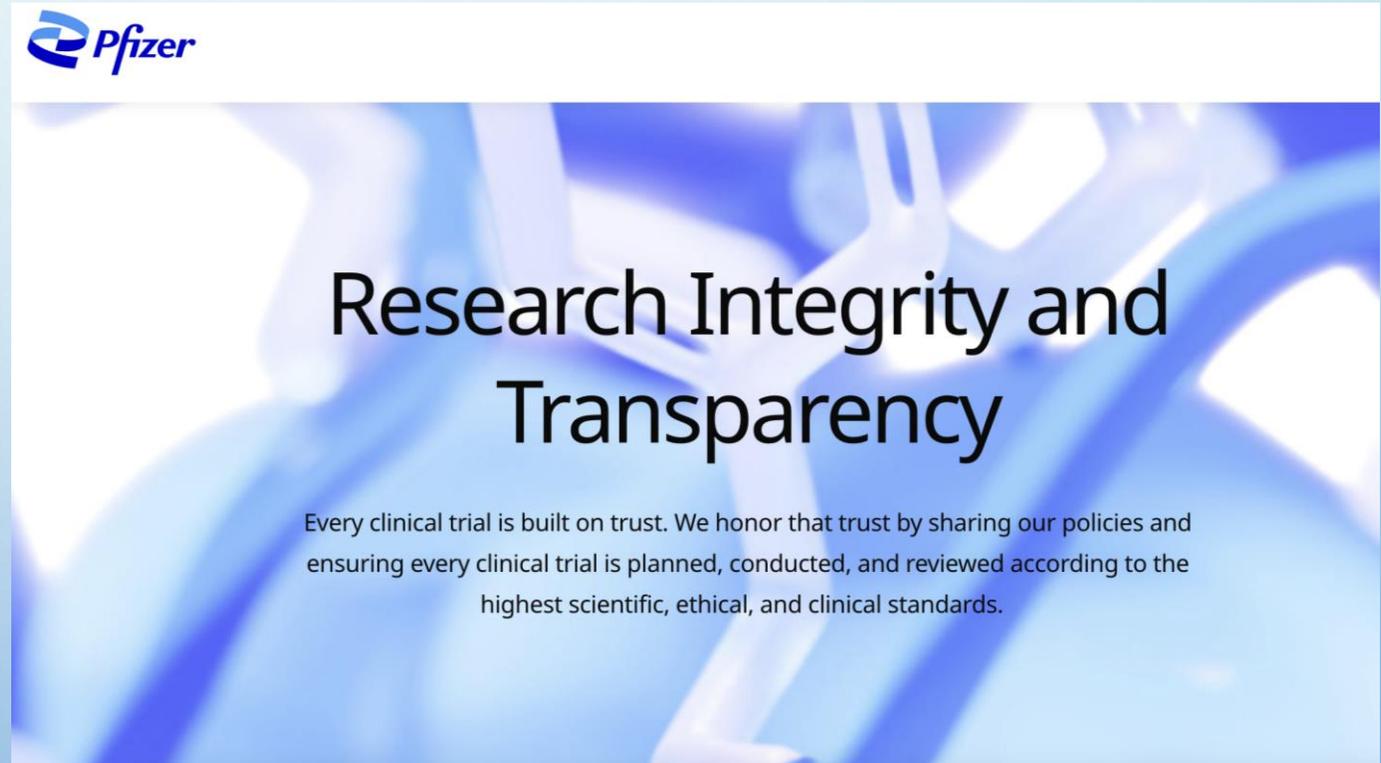
Tinari Serena. The EMA covid-19 data leak, and what it tells us about mRNA instability **BMJ** 2021; 372 :n627 doi:10.1136/bmj.n627
https://www.ema.europa.eu/en/documents/assessment-report/comirnaty-epar-public-assessment-report_en.pdf

<https://jessicar.substack.com/p/evidence-of-connection-between-severe>

*Crommelin DJA, Anchordoquy TJ, Volkin DB, Jiskoot W, Mastrobattista E. Addressing the Cold Reality of mRNA Vaccine Stability. **J Pharm Sci.** 2021 Mar;110(3):997-1001. doi: 10.1016/j.xphs.2020.12.006. Epub 2020 Dec 13. PMID: 33321139; PMCID: PMC7834447.

PFIZER ADMITS THAT EFFICACY OF PRODUCT IS DEPENDENT ON %MRNA INTEGRITY

- What's concerning is that the manufacturer (Pfizer/BioNTech) claimed, "The **efficacy** of the drug product is dependent on the expression of the delivered RNA, **which requires a sufficiently intact RNA molecule.**"
- **Sufficiently?**



%RNA INTEGRITY AND AUTOMATED WESTERN BLOTS

- Pfizer use an automated Western

AUTOMATED WESTERN BLOT RESULTS ARE QUESTIONABLE

%RNA integrity vs functionality



EUROPEAN MEDICINES AGENCY

Drug Substance BNT162b2 Expressed Protein Size by Western Blot

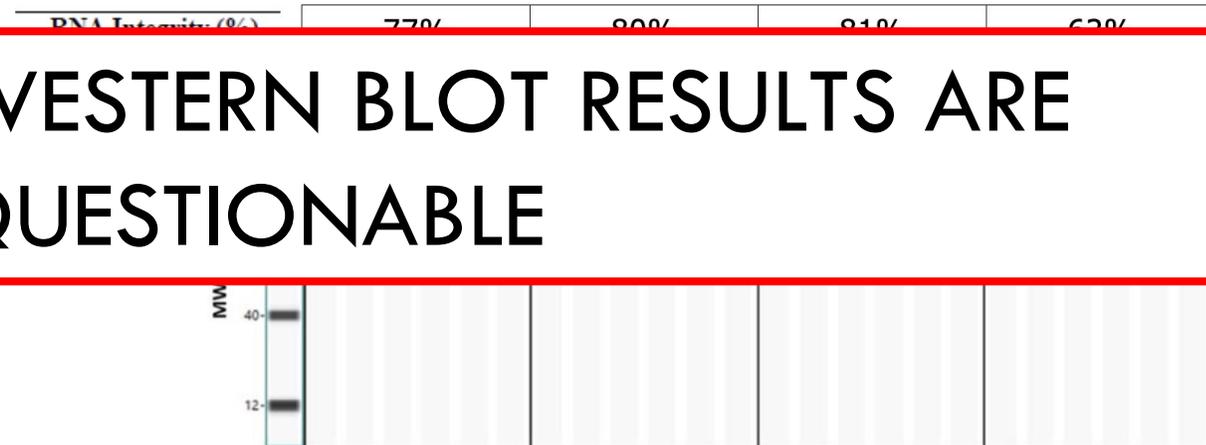


Figure 3.2.S.2.6-15. To evaluate expressed protein size, BNT162b2 DS was mixed with Lipofectamine and then transfected into HEK-293 cells. Following incubation, cell lysates were evaluated for the expressed protein antigen by Western blot using an antibody specific for the SARS-CoV-2 spike protein. The first lane shows a molecular weight (MW) marker. The concentrations shown for each DS batch correspond to the amounts of DS transfected per well of HEK-293 cells.



Classified as internal/staff & contractors by the European Medicines Agency

EMA QUALITY OFFICE CMC OBSERVATIONS OF BIONTECH COVID-19 MRNA INJECTABLE PRODUCTS

- RNA integrity assays revealed low %RNA integrity in 'real vax lots' versus lab lots
- Is 18% lower integrity in commercial batches 'sufficient'?

%RNA integrity vs functionality				
EUROPEAN MEDICINES AGENCY				
<i>BNT162b2 drug product in vitro expression comparability and release data.</i>				
RNA Integrity (%)	Lot	(150ng)	% Cells Positive	(100ng)
75	BCV40420-A	69 (comparability)		45
85	BCV40620-A	59 (comparability)		41
77	BCV40620-D	71 (comparability)		52
71	BCV40720-A	63 (comparability)		45
62	ED3938	50 (comparability)		?
63	EE3813	62 (comparability)		?
55	EE8492	63 (release)		?
55	EE8493	56; 65 (comparability; release)		21(!)

77% average

59% average

Clinical batches

Commercial batches

EMA 25 YEARS

Credit: BNT CMC Peer Reviewers Ton der Stappen and Brian Dooley

https://www.ema.europa.eu/en/documents/assessment-report/comirnaty-epar-public-assessment-report_en.pdf

THEY LOWERED THE THRESHOLD FOR ACCEPTABLE %RNA INTEGRITY FOR EU COMMERCIAL PRODUCTS TO GET AROUND THE LOW %RNA INTEGRITY ISSUE

- The stuff being injected into people likely has ~50% RNA integrity
- “...which requires a sufficiently intact RNA molecule” Pfizer
- **“However, when present in the cell there is a possibility that aberrant proteins will be expressed with possibilities for unwanted immunological events.”***

Batch Analyses Drug Product  EUROPEAN MEDICINES AGENCY

Batch Analyses for Nonclinical and Clinical BNT162b2 Drug Product Lots

Quality Attribute	Analytical Procedure	Acceptance Criteria ^a	Lot Number					
			BCV40420-A	BCV40620-A	BCV40620-B	BCV40620-C	BCV40620-D	BCV40620-E
RNA integrity	Capillary gel electrophoresis	≥ 60% ^b	75	85	86	83	77	85

Batch Analyses for Clinical BNT162b2 Drug Product Lots

Quality Attribute	Analytical Procedure	Acceptance Criteria ^a	Lot Number				
			BCV40720-A	BCV40720-B	BCV40720-C	ED3938	EE3813
RNA integrity	Capillary gel electrophoresis	≥ 60% ^b	71	72	69	62	63

≥ 60%

Batch Analyses for Emergency Supply BNT162b2 Drug Product Lots

Quality Attribute	Analytical Procedure	Acceptance Criteria ^a	Lot Number	
			EE8492	EE8493
RNA integrity	Capillary gel electrophoresis	≥ 50% in the peak corresponding to intact RNA	55	55

≥ 50%



Credit: BNT CMC Peer Reviewers Ton der Stappen and Brian Dooley*

*BioNTech COVID19 mRNA vaccine (nucleoside modified) EMA Quality Office CMC observations. BWP 24th November. Ton van der Stappen and Brian Dooley

<https://childrenshealthdefense.eu/eu-issues/a-further-investigation-into-the-leaked-ema-emails-confidential-pfizer-biontech-covid-19-vaccine-related-docs/>

https://www.ema.europa.eu/en/documents/assessment-report/comirnaty-epar-public-assessment-report_en.pdf

THEY LOWERED THE THRESHOLD FOR ACCEPTABLE %RNA INTEGRITY FOR EU COMMERCIAL PRODUCTS TO GET AROUND THE LOW %RNA INTEGRITY ISSUE

- The stuff being injected into people likely has ~50% RNA integrity

COVID-19 Vaccine (BNT162, PF-07302048)
R.1 BNT162b2 Comparability Overview

Table R.1-1. BNT162b2 Drug Product Comparability of Release Test Results

Manufacturing Information								
DP Manufacturing Site	Polymun	Pfizer, Puurs	Pfizer, Puurs	Pfizer, Puurs	Pfizer, Puurs	Pfizer, Puurs	Pfizer, Puurs	Pfizer, Puurs
DP Fill/Finish DOM	Apr-Jul 2020	Jul 2020	05-Aug-2020	05-Aug-2020	25-Sep-2020	05-Oct-2020	07-Oct-2020	16-Oct-2020
Drug Product Analytical Information								
Release Test	Acceptance Criteria	Clinical Range	Results					
RNA Integrity	≥55% Intact RNA	62-86	55	55	68	66	69	60
Bacterial Endotoxins	≤12.5 EU/mL	<1	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Sterility	No growth detected	Sterile	No growth detected					

- Clinical lots BCV40420-A, BCV40620-A, BCV40620-B, BCV40620-C, BCV40620-D, BCV40720-A, BCV40720-B, BCV40720-C
- Clinical lots BCV40720-P and BCV40820-P
- Data not available (NA) at the time of filing.
- Batch EE8493 also used in clinical trials.

- IF IT DOESN'T PASS, JUST LOWER THE THRESHOLD
- “However, when present in the cell there is a possibility that aberrant proteins will be expressed with possibilities for unwanted immunological events.”*

*BioNTech COVID19 mRNA vaccine (nucleoside modified) EMA Quality Office CMC observations. BWP 24th November. Ton van der Stappen and Brian Dooley

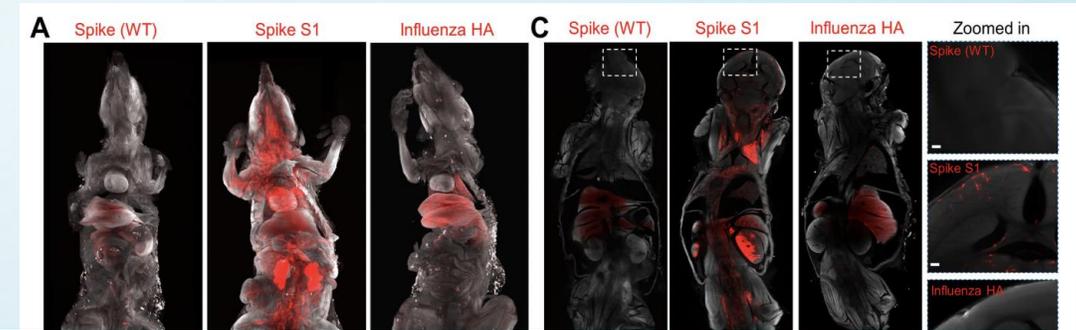
<https://childrenshealthdefense.eu/eu-issues/a-further-investigation-into-the-leaked-ema-emails-confidential-pfizer-biontech-covid-19-vaccine-related-docs/>

https://www.ema.europa.eu/en/documents/assessment-report/comirnaty-epar-public-assessment-report_en.pdf

Crommelin DJA, *et al.*, Addressing the Cold Reality of mRNA Vaccine Stability. *J Pharm Sci.* 2021 Mar;110(3):997-1001. doi: 10.1016/j.xphs.2020.12.006. Epub 2020 Dec 13. PMID: 33321139; PMCID: PMC7834447

COVID-19 Vaccine (BNT162, PF-07302048) R.1 BNT162b2 Comparability Overview. <https://files.catbox.moe/egah0n.pdf>

NEW EVIDENCE OF SPIKE PERSISTANCE



SPIKE READILY ACCUMULATES IN ORGANS INCLUDING BRAIN AND LIVER

3D re...
mouse...
(WT), spike S1 (N501Y), and HA injection.

Arrow heads (with spike) and arrows (without spike) indicate regions

Representative images of spike S1 (N501Y) protein in the head, skull and brain are shown as well.

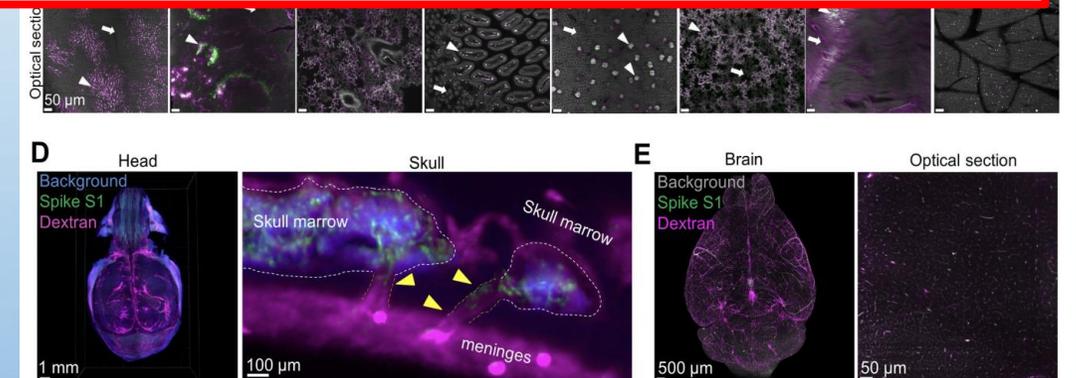


Figure 1 Spike protein exhibits multi-organ binding capacity

SARS-CoV-2 Spike Protein Accumulation in the Skull-Meninges-Brain Axis: Potential Implications for Long-Term Neurological Complications in post-COVID-19. Zhouyi Rong, *et al.*, **bioRxiv** 2023.04.04.535604; doi: <https://doi.org/10.1101/2023.04.04.535604>

Liu Y, Liu J, Plante KS, Plante JA, Xie X, Zhang X, Ku Z, An Z, Scharton D, Schindewolf C, Widen SG, Menachery VD, Shi PY, Weaver SC. The N501Y spike substitution enhances SARS-CoV-2 infection and transmission. **Nature**. 2022 Feb;602(7896):294-299. doi: [10.1038/s41586-021-04245-0](https://doi.org/10.1038/s41586-021-04245-0). Epub 2021 Nov 24. PMID: 34818667; PMCID: PMC8900207

https://en.wikipedia.org/wiki/Variants_of_SARS-CoV-2#N501Y

NEW EVIDENCE OF SPIKE PERSISTANCE

“The spike protein was associated

w

c

in

SPIKE PROTEIN PROTEOLYSIS BY NEUTROPHIL ELASTASE RESULTS IN AMYLOID-LIKE FIBRILS + COAGULATION PATHWAY DYSREGULATED

complement and **coagulation**

pathway.”

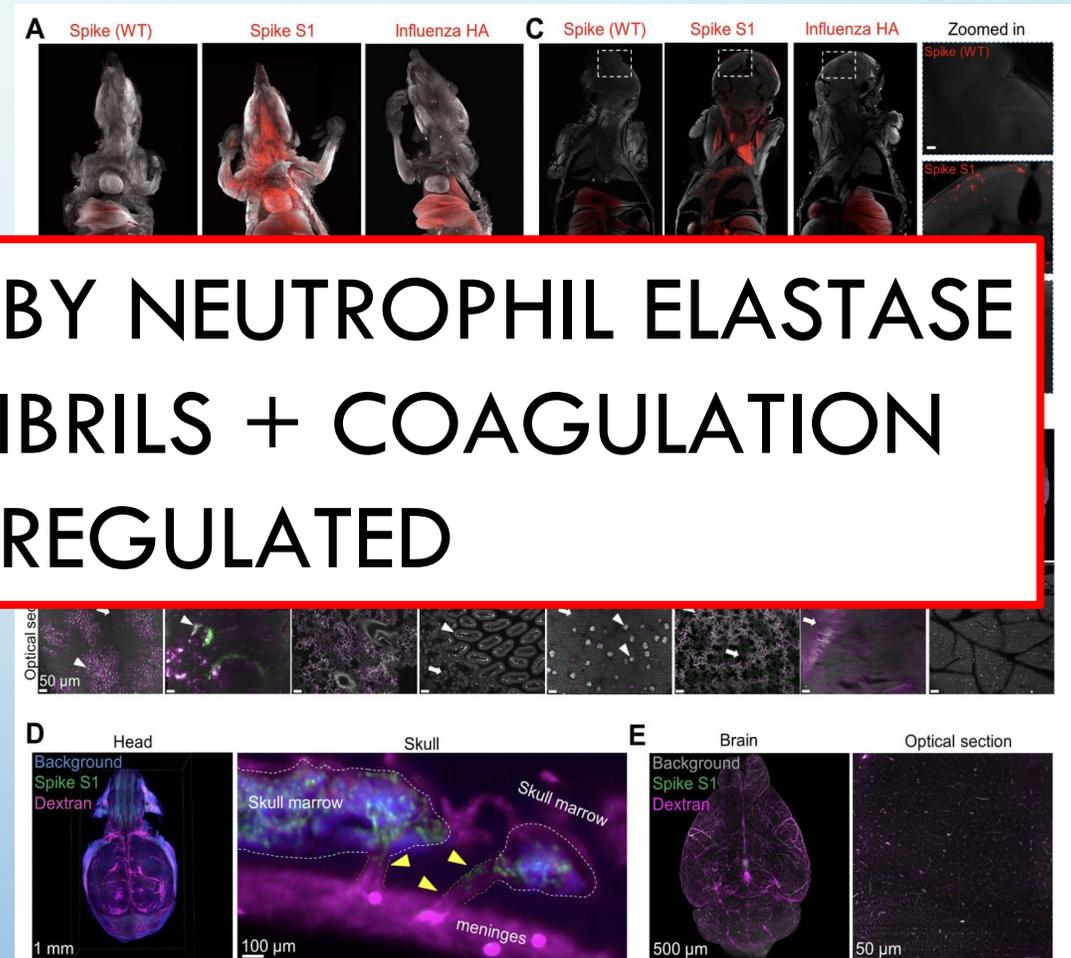


Figure 1 Spike protein exhibits multi-organ binding capacity

SARS-CoV-2 Spike Protein Accumulation in the Skull-Meninges-Brain Axis: Potential Implications for Long-Term Neurological Complications in post-COVID-19. Zhouyi Rong, *et al.*,

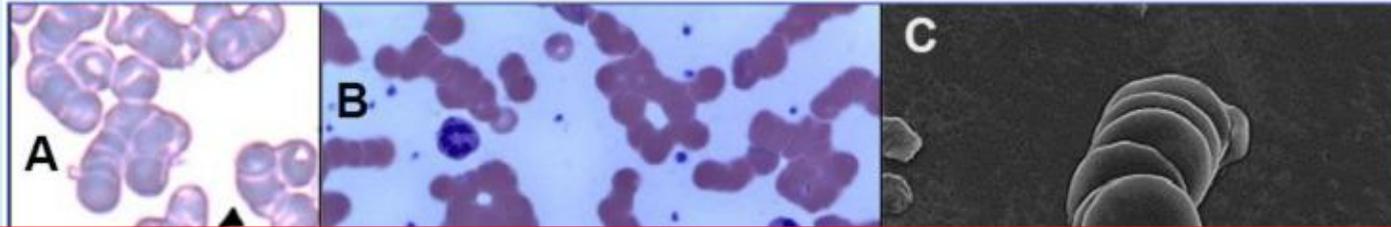
bioRxiv 2023.04.04.535604; doi: <https://doi.org/10.1101/2023.04.04.535604>

Liu Y, Liu J, Plante KS, Plante JA, Xie X, Zhang X, Ku Z, An Z, Schariton D, Schindewolf C, Widen SG, Menachery VD, Shi PY, Weaver SC. The N501Y spike substitution enhances SARS-CoV-2 infection and transmission.

Nature. 2022 Feb;602(7896):294-299. doi: [10.1038/s41586-021-04245-0](https://doi.org/10.1038/s41586-021-04245-0). Epub 2021 Nov 24. PMID: 34818667; PMCID: PMC8900207

https://en.wikipedia.org/wiki/Variants_of_SARS-CoV-2#N501Y

Hemagglutination Mediated by SARS-CoV-2 Spike Protein - Thromboses



SPIKE CAUSES HEMAGGLUTINATION ALSO LEADING TO THROMBOSES

Figure 2 images of RBC rouleaux (clumps) from the blood of COVID-19 patients, obtained using light ((A) [112], (B) [113]) and electron microscopy ((C) [114]). The first study (A) found huge rouleaux formation by RBCs in 85% of COVID-19 patients studied [112]; the second (B) found these in 33% of patients [113]; and the third (C) found these prevalent in its series of 31 patients, all with mild COVID-19 [114]. Reproduced with permission from (A) SIMTIPRO Srl; (B) CC-BY 4.0; (C) Georg Thieme Verlag KG.

“SARS-CoV-2 [spike protein] binds to RBCs in vitro and also in the blood of COVID-19 patients”

“SARS-CoV-2 [spike protein] initially attaches to sialic acid (SA) terminal moieties on [RBC] host cell membranes via glycans”

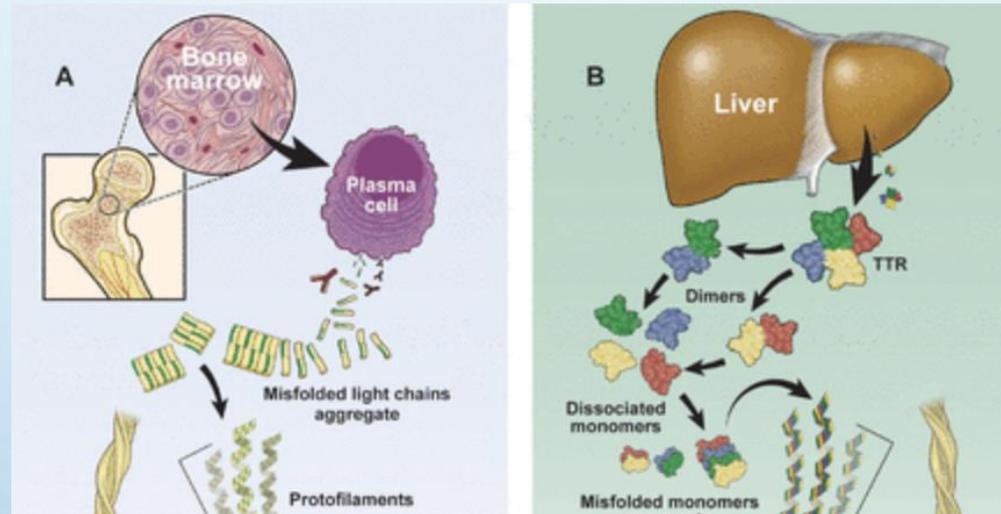
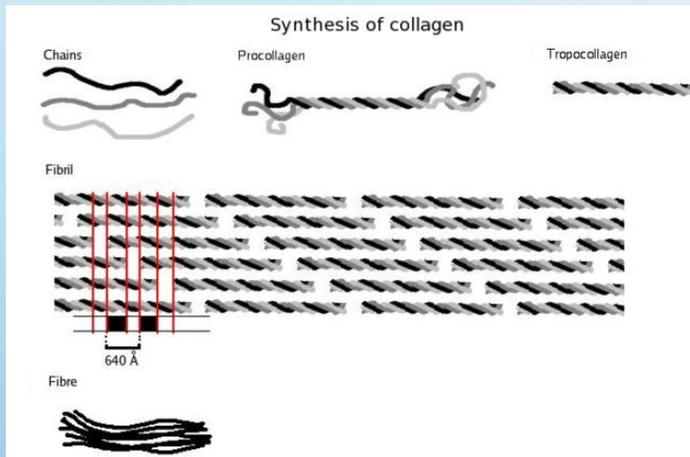
Schein, D.E. A Deadly Embrace: Hemagglutination Mediated by SARS-CoV-2 Spike Protein at Its 22 N-Glycosylation Sites, Red Blood Cell Surface Sialoglycoproteins, and Antibody. *Int. J. Mol. Sci.* 2022, 23, 2558. <https://doi.org/10.3390/ijms23052558>.

<https://jessicar.substack.com/p/are-red-blood-cells-agglutinating>

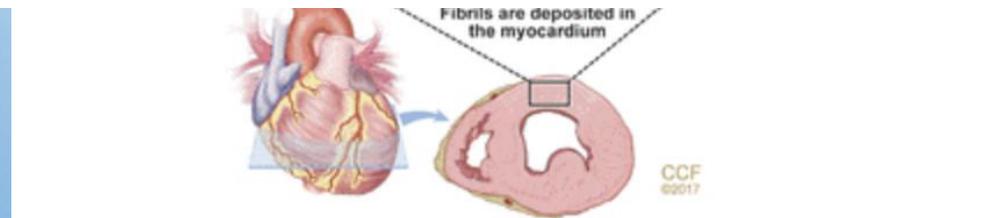
Stratton, F., Rawlinson, V. I., Gunson, H. H., & Phillips, P. K. (1973). The Role of Zeta Potential in Rh Agglutination. *Vox Sanguinis*, 24(3), 273–279. doi:10.1111/j.1423-0410.1973.tb02641.x

Boschi C, Schein DE, Bancod A, Militello M, Bideau ML, Colson P, Fantini J, Scola BL. SARS-CoV-2 Spike Protein Induces Hemagglutination: Implications for COVID-19 Morbidities and Therapeutics and for Vaccine Adverse Effects. *International Journal of Molecular Sciences*. 2022; 23(24):15480. <https://doi.org/10.3390/ijms232415480>

(CARDIAC) AMYLOIDOSIS AS DEPOSITION DISEASE



“Amyloidosis is a group of disorders that can affect almost any organ due to the **misfolding of proteins** with their subsequent deposition in various tissues, leading to various disease manifestations **based on the location.**”



Spike protein contains peptides that can induce autoimmunity via molecular mimicry

Table 1. 3D-mimics found for SARS-CoV-2 Spike.

Motif	Protein	Species	RMSD (Å)	Z-Score	EpiScore	PDB_Chain
TQLPP	Thrombopoietin	Human	0.46	-1.34	10.87	1V7N_X
QLPPA	SMYD3 protein	Human	0.38	-1.42	13.16	5CCL_A
KNLRE	Toll-like receptor 8	Human	0.87	-0.92	5.75	6WML_D
FTVEKG	Pollen allergen Phl p2	<i>Phleum pratense</i>	0.76	-1.03	7.89	1WHP_A
GEVEN	Integrin beta 1	Human	0.63	-1.16	7.94	7NWI_R

MOLECULAR MIMICRY IS A POSSIBLE MECHANISM OF ACTION FOR SPIKE-INDUCED AUTOIMMUNITY

GNCDV	Tryptophan-tRNA ligase	Human	0.91	-0.88	5.49	1O5T_A
SFKEE	Small subunit processome component 20 homolog	Human	0.32	-1.48	15.62	7MQA_SP
EELDK	Kynureninase	Human	0.22	-1.58	22.73	2HZP_A
ELDKY	Fusion glycoprotein F0	Respiratory syncytial virus	0.12	-1.68	41.67	6EAE_F
DKYFK	Cytoplasmic FMR1-interacting protein 1	Human	0.14	-1.66	35.71	4N78_A

“Molecular mimicry between viral antigens and host proteins can produce cross-reacting antibodies leading to autoimmunity.”

“Our findings illuminate COVID-19 pathogenesis and highlight the importance of considering autoimmune potential when developing therapeutic interventions to reduce adverse reactions.”

Angileri F, Légaré S, *et al.*, Is molecular mimicry the culprit in the autoimmune haemolytic anaemia affecting patients with COVID-19? **Br J Haematol**. 2020 Jul;190(2):e92-e93. doi: 10.1111/bjh.16883. Epub 2020 Jun 8. PMID: 32453861; PMCID: PMC7283741.

Nunez-Castilla, J. *et al.* Potential Autoimmunity Resulting from Molecular Mimicry between SARS-CoV-2 Spike and Human Proteins. **Viruses**. 2022, 14, 1415. <https://doi.org/10.3390/v14071415>
<https://jessica.substack.com/p/molecular-mimicry-of-sars-ncov-2>

Dotan A, Kanduc D, Muller S, Makatsariya A, Shoenfeld Y. Molecular mimicry between SARS-CoV-2 and the female reproductive system. **Am J Reprod Immunology** 2021 Dec;86(6):e13494. doi: 10.1111/aji.13494. Epub 2021 Sep 17. PMID: 34407240; PMCID: PMC8420155.

Spike protein contains peptides that can induce molecular mimicry

TABLE 1 (Continued)

Shared Peptides ^a	Human proteins and associated function(s)/pathologies ^{b,c}	Refs
PLVSS	<i>PAQR5. Membrane progesterin receptor gamma.</i> Plasma membrane progesterone (P4) receptor coupled to G proteins and implicated in oocyte maturation.	57
IITTD	<i>PCSK5. Proprotein convertase subtilisin/kexin type 5</i> Essential for the differentiation of uterine stromal fibroblasts into decidual cells (decidualization)	58

IMPLICATIONS FOR FERTILITY?

FGGFN, IVNNI	<i>SRC. Proto-oncogene tyrosine-protein kinase Src.</i> Protein tyrosine kinase that plays a role during oocyte maturation and fertilization.	65,66
LSSTA	<i>SYCY2. Syncytin-2 precursor</i> Participates in trophoblast fusion and the formation of a syncytium during placenta morphogenesis; correlates with the risk of severe preeclampsia	65,66
TESNK	<i>TDRD6. Tudor domain-containing protein 6.</i> Transcription factor that balances sexually dimorphic gene expression in postnatal oocytes.	34
GDSSS	<i>VDR. Vitamin D3 receptor</i> Recurrent pregnancy loss	67
LEPLV, ANLAA	<i>YTDC2. 3'-5' RNA helicase YTHDC2.</i> Plays a key role in the male and female germline by promoting transition from mitotic to meiotic divisions in stem cells	68

^aHexapeptides derived from overlapping pentapeptides given bold.

^bHuman proteins given by Uniprot accession and name in italics.

^cFunctions and/or associated pathologies: data from Uniprot, Pubmed, and OMIM public databases.

Pentapeptide sharing between SARS-CoV-2 spike glycoprotein and **27 human proteins linked to oogenesis, placentation, or decidualization**

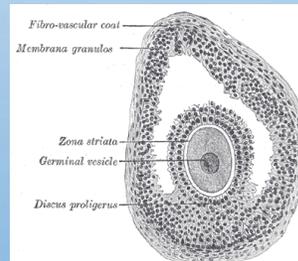
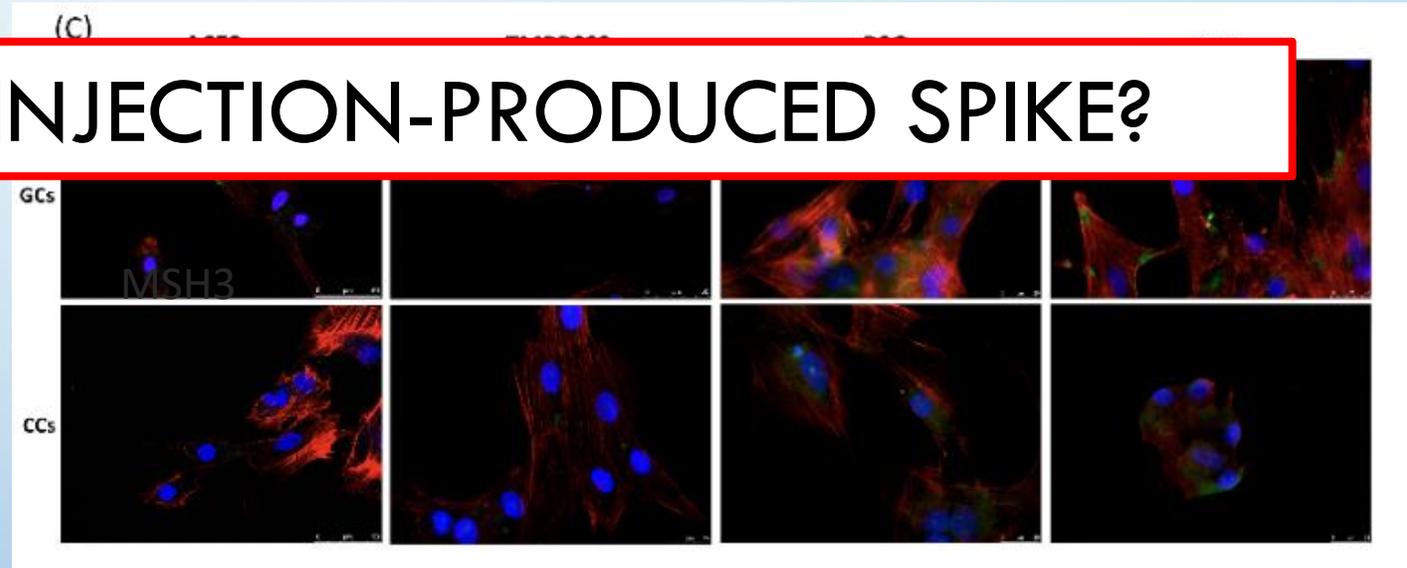
Our findings suggest potential cross-reactivity between the homologous peptides that may result in the development of autoantibodies and new-onset of related autoimmune manifestations.”

HUMAN OVARIAN CELLS INFECTABLE BY SARS VIA SPIKE/ACE-2

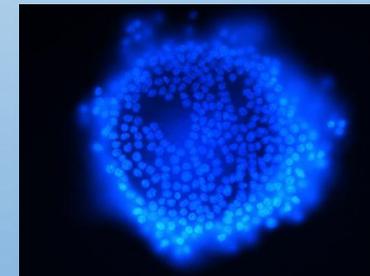
IMPLICATIONS FOR INJECTION-PRODUCED SPIKE?

susceptibility of human ovarian cells to SARS-CoV-2 infection, suggesting a potential detrimental effect of COVID-19 infection on female human fertility

- Particular granulosa (GCs) and cumulus cells (CCs) are infectable via ACE-2



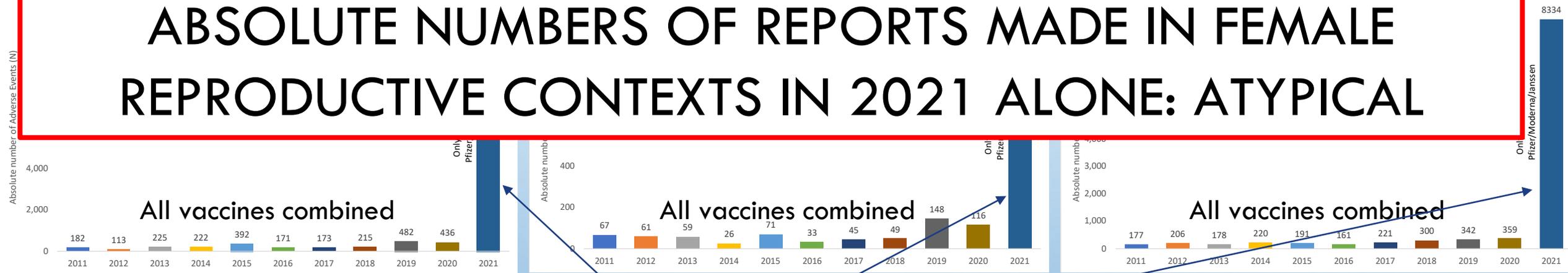
Cumulus oophorus coordinates of follicular development and oocyte maturation



A granulosa cell or follicular cell is a somatic cell of the sex cord that is closely associated with the developing female gamete (called an oocyte or egg) in the ovary of mammals.

MENSTRUAL ABNORMALITIES/SPONTANEOUS ABORTIONS/BREASTFEEDING PASSAGE*

ABSOLUTE NUMBERS OF REPORTS MADE IN FEMALE REPRODUCTIVE CONTEXTS IN 2021 ALONE: ATYPICAL



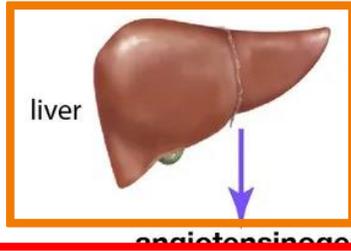
ONLY COVID SHOTS

*Not normalized to demonstrate the sheer differences in the numbers of people reporting and potentially irreversibly damaged.

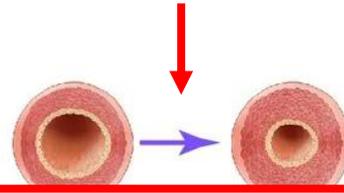
WHY IS THIS IMPORTANT?

Renin-angiotensin system

Drop in blood pressure
Drop in fluid volume

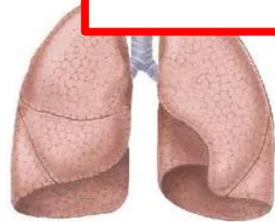


ACE-II → ANGIOTENSIN-1-7



The renin-angiotensin-aldosterone system (RAAS) may be tied into the pathogenesis of the COVID-19 viral illness. The traditional RAAS pathway utilizes ACE1, primarily a pulmonary capillary endothelial enzyme, to convert Ang-I to Ang-II. As such, significant lung injury decreases the activity of pulmonary capillary endothelial-bound ACE. Notably, inadequate ACE function is an independent predictor of mortality.

ACE-II BINDS ANGIOTENSIN-II AND CONVERTS IT TO ANGIOTENSIN-1-7



(enzyme) release from lungs

ACE acts on angiotensin I to form **angiotensin II**.

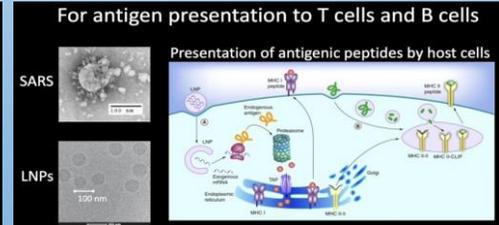
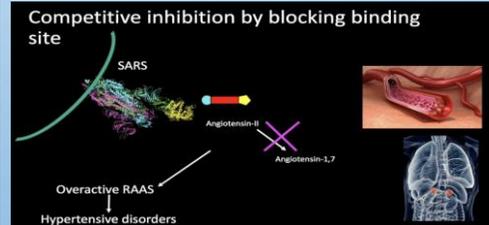
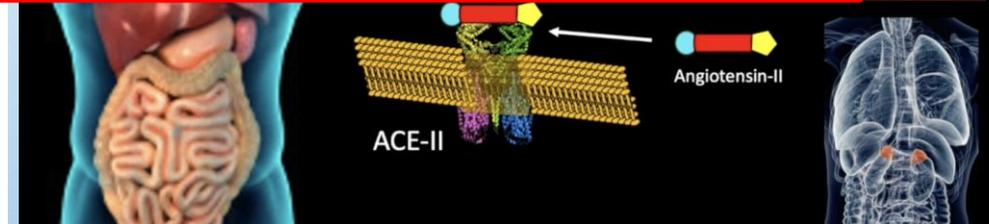


Angiotensin II acts on the adrenal gland to stimulate release of **aldosterone**.



NaCl
H₂O

Aldosterone acts on the kidneys to stimulate reabsorption of salt (NaCl) and water (H₂O).



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Britannica, The Editors of Encyclopædia. "renin-angiotensin system". Encyclopedia Britannica, 11 Feb. 2023, <https://www.britannica.com/science/renin-angiotensin-system>. Accessed 8 April 2023.

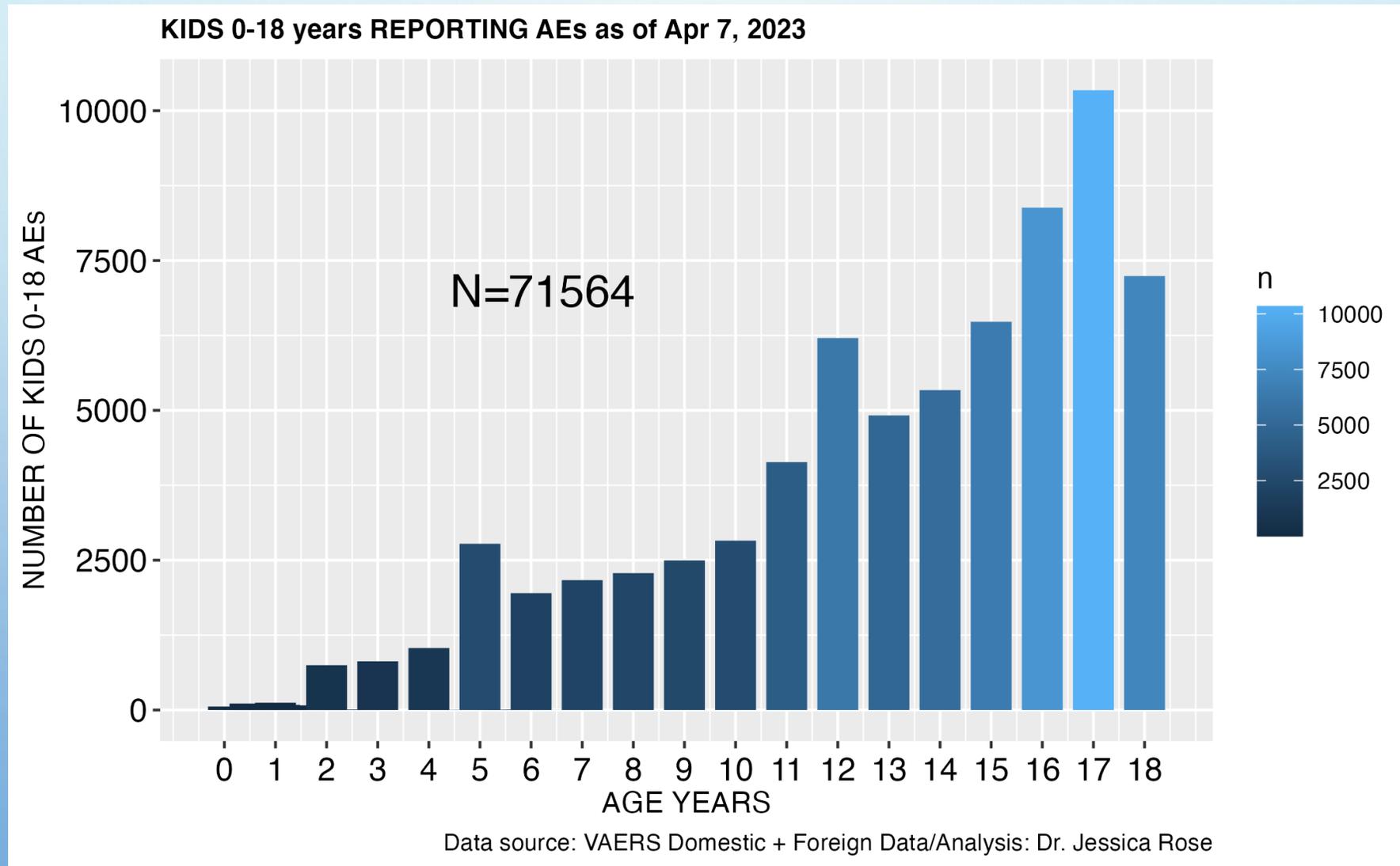
Zhang, S., Liu, Y., Wang, X. et al. SARS-CoV-2 binds platelet ACE2 to enhance thrombosis in COVID-19. *J Hematol Oncol* 13, 120 (2020). <https://doi.org/10.1186/s13045-020-00954-7>

Andreas Greinacher, Thomas Thiele, Theodore E. Warkentin et al. A Prothrombotic Thrombocytopenic Disorder Resembling Heparin-Induced Thrombocytopenia Following Coronavirus-19 Vaccination, 28 March 2021, <https://doi.org/10.21203/rs.3.rs-362354/v1>

PREPRINT (Version 1) available at Research Square [<https://doi.org/10.21203/rs.3.rs-362354/v1>]

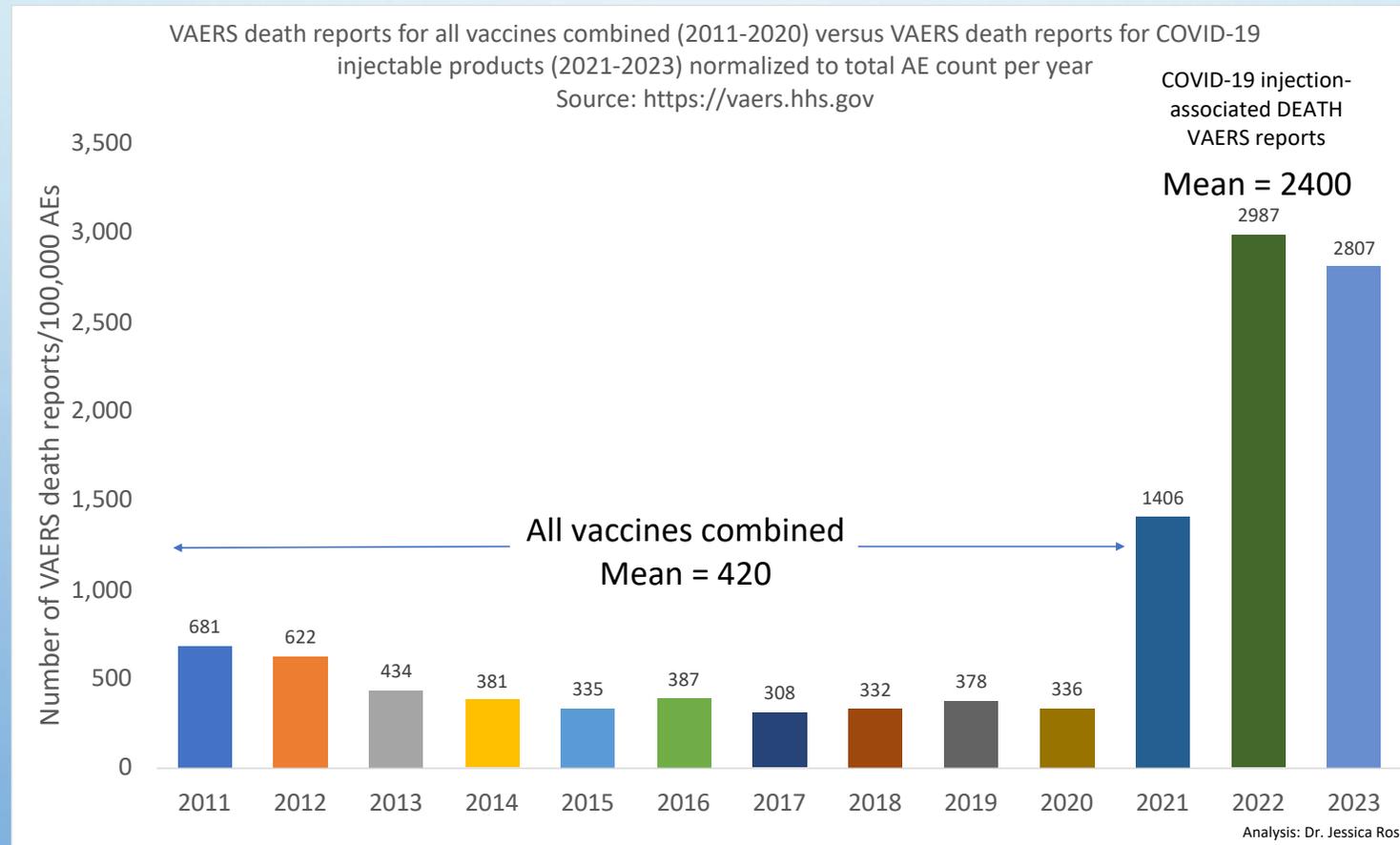
<https://www.youtube.com/watch?v=AsmwQzIYTho>

SPEAKING OF YOUNG FOLKS...



DEATH RATES FOR THE PAST 10 YEARS COMPARED TO COVID ERA AS PER VAERS REPORTS

1/238 reports were deaths from 2011-2020, and from 2021-2023, the rate has increased to 1/42.



THE EXTREME DIFFERENCES IN AE COUNTS IS NOT DUE TO THE NUMBER OF COVID SHOTS

Let's put the 'it's cuz there are so many COVID shots doled out' argument to bed.

Oh and causation is becoming undeniable!



JESSICA ROSE
MAR 25, 2022

367

33



Share



Please go to the [CDC website](#) to find out what you need to know!

But before you do that and before you recite the 'safe and effective' mantra, know this: 9 deaths have been causally-linked to the J&J injection and a warning made to women ages 30-49 years to beware the J&J product. It's connected to thrombocytopenia syndrome (TTS) and death. Could this be a little bit of throwing J&J under the bus? Ruh roh.



Unacceptable Jessica

Dashboard

As of today, March 25, 2022, according to the [WONDER/CDC](#) system, there are 1,696 different types of adverse events and 45,650 total adverse events reported to VAERS in the context of the 14 variations of flu vaccines. Also according to the WONDER/CDC system, there are 10,526 different types of adverse events and 5,368,444 total adverse events reported to VAERS in the context of the 3 variations of the COVID-19 products used in the United States. *N.B. These counts do not represent the individuals who experienced an adverse event but the total number of events reported.*

Napkin math drum-roll pleaseeeeeeee...

1. We have twice as many COVID shots than flu shots.
2. We have 6.2 times as many types of adverse event types reported in the context of the COVID shots
3. We have 117.6 times as many reports of adverse events in the context on the COVID shots.

So even though we omitted all the other vaccines (there are 82 other types!), we still have no comparison here with regard to the number of shots and the relationship to the number of adverse events occurring and being reported, and we certainly do not see the 'anticipated' doubling of the reports as we would have

MYOCARDITIS REPORTS FROM VAERS FOREIGN DATA REVEALED DOSE RESPONSE

Significant incidence of myocarditis after 3rd dose of anti-COVID 19 messenger RNA vaccine

Updated on Monday, October 24, 2022 in [Cardiomyopathies](#) [Risk factors](#)

Medicine

CCF Member Author:

Guillaume Le Pessec



MYOCARDITIS IN MIDDLE-AGED PEOPLE IS DOSE 3 RELATED

Paris

Nancy

■ Live from ESC Congress 2022

Based on the presentation by Christian Eugen Mueller (Basel, Switzerland): "Myocardial Inflammation/Myocarditis After COVID-19 mRNA Booster Vaccination"

The study population was composed of 835 employees of the University Hospital of Basel in Switzerland, who had received a dose of the mRNA vaccine Pfizer-BioNTech or Moderna.

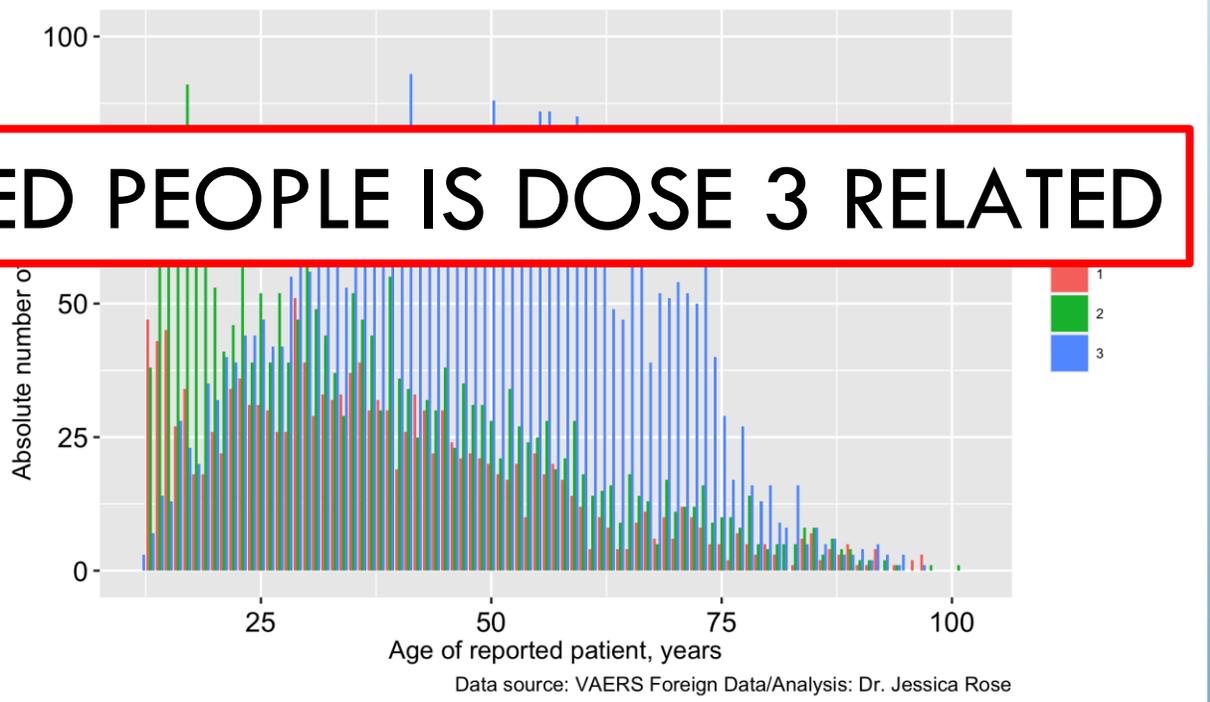
Conclusion

The incidence of myocardial lesions is 2.8% or 800 times higher than the usual incidence of myocarditis. It occurs mainly in women unlike the usual viral myocarditis.

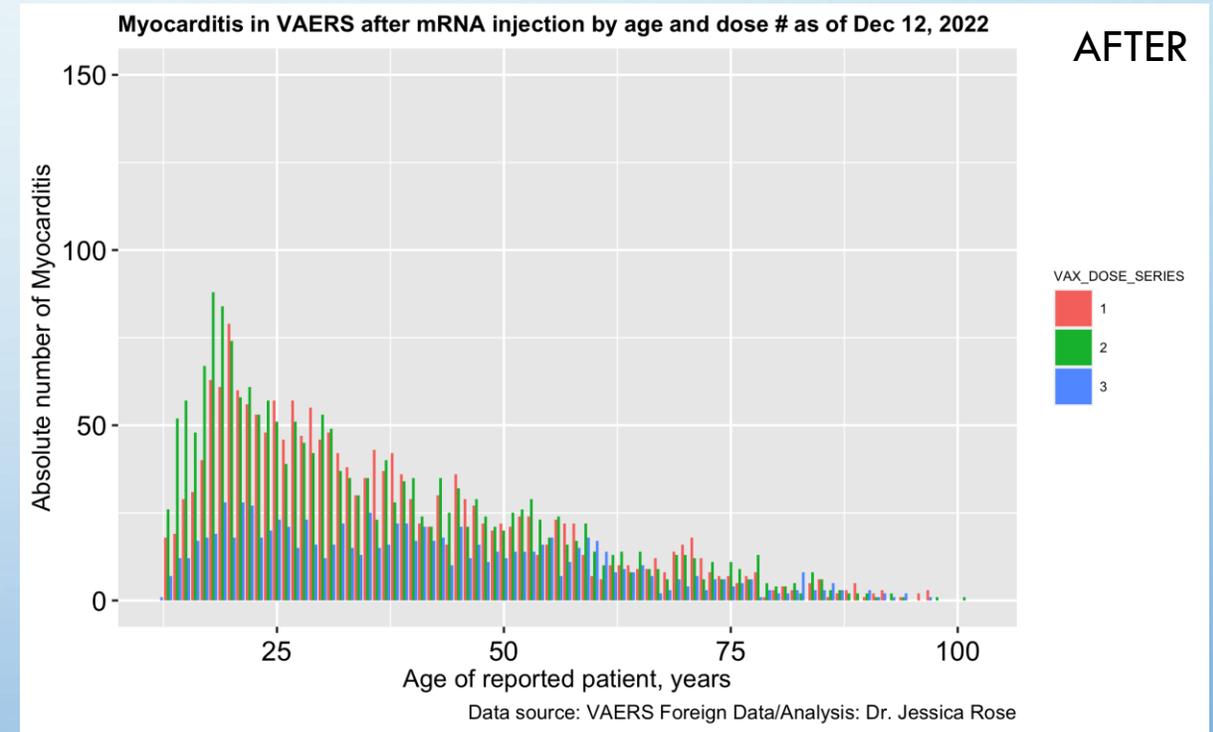
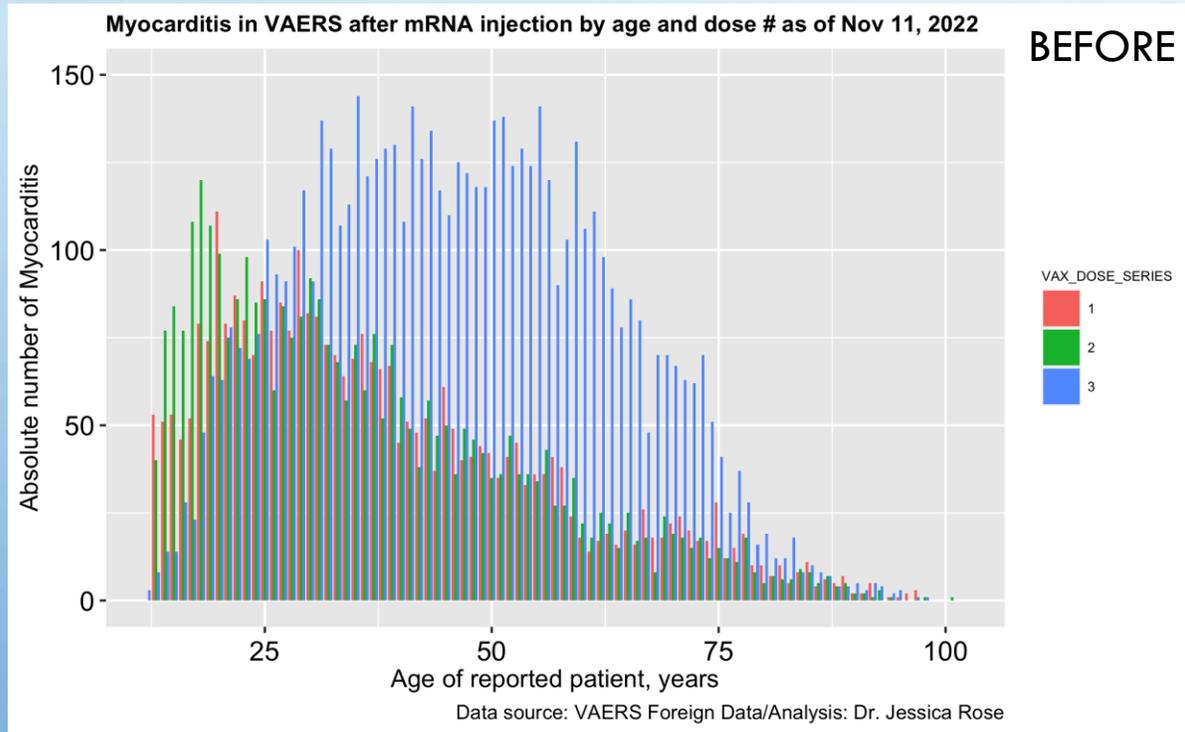
Guillaume Le Pessec, MD, et al, ESC 2022, study of hospital workers taking COVID-19 vaccine boosters shows 800-fold increased risk of heart damage above baseline. Stunning result. More healthcare workers declining vaccination for good reason—keep the heart healthy!

Peter McCullough
27.10.22 at 04:23

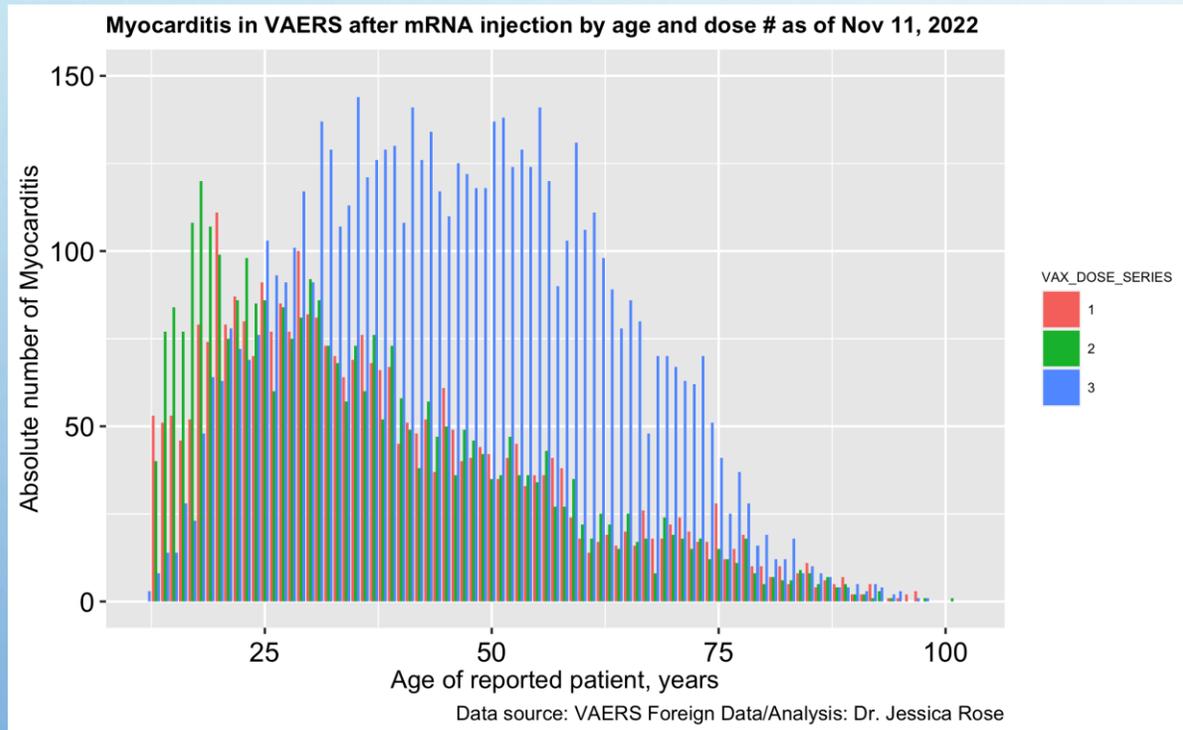
Myocarditis in VAERS after mRNA injection by age and dose # as of Oct 14, 2022



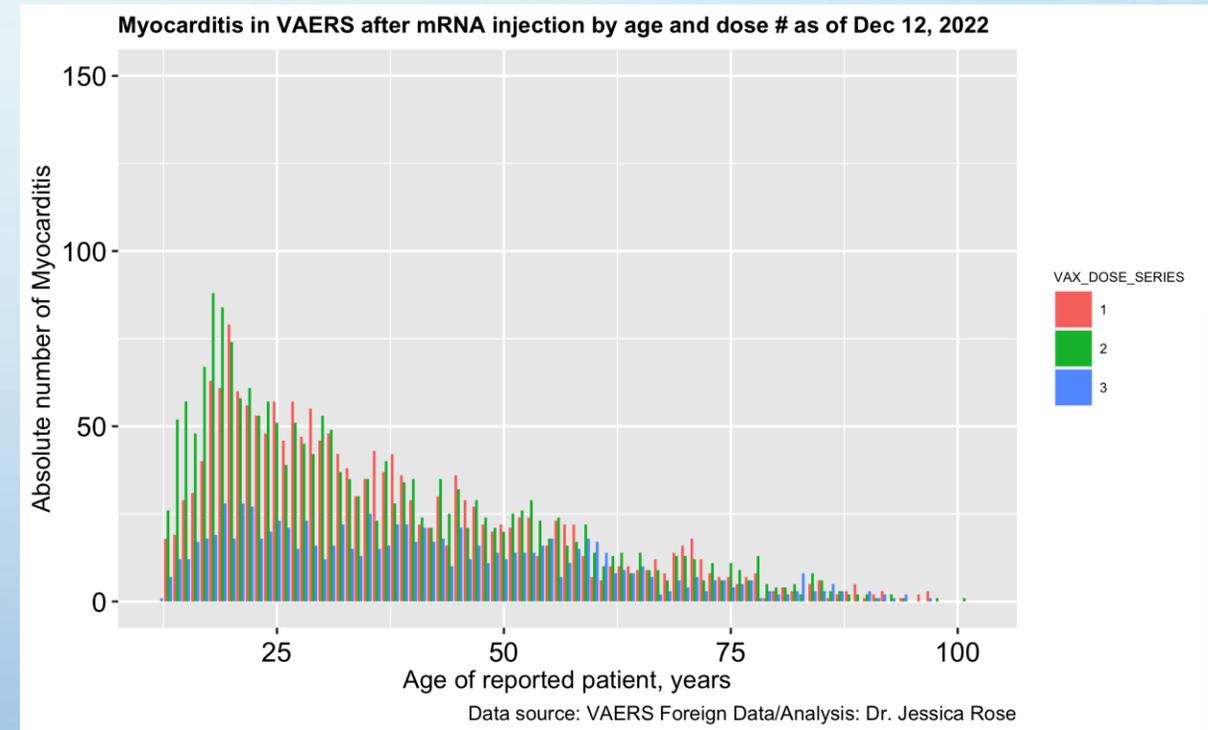
FOREIGN DATA SET WAS RECENTLY PURGED – DESTROYED DOSE 3 SIGNAL



FROM NOVEMBER 11, 2022 → DECEMBER 12, 2022
 1.4% INCREASE IN THE NUMBER OF PEOPLE
 66.3% DECREASE IN FILE SIZE
 59.9% DECREASE IN THE %AGE OF MYOCARDITIS REPORTS

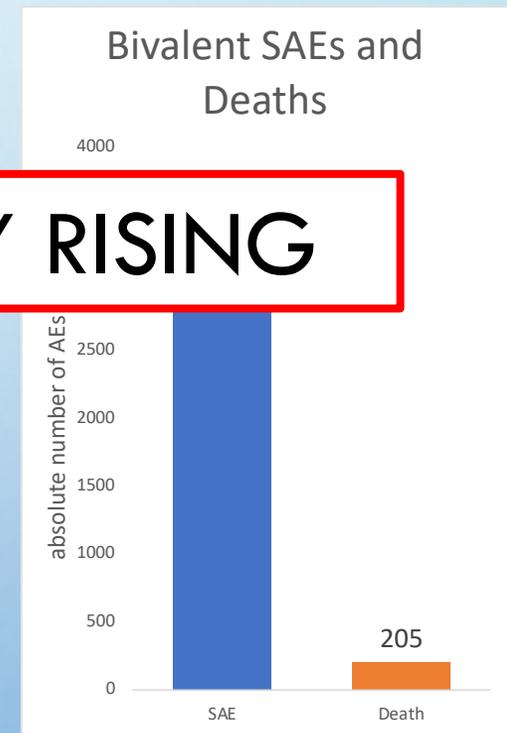
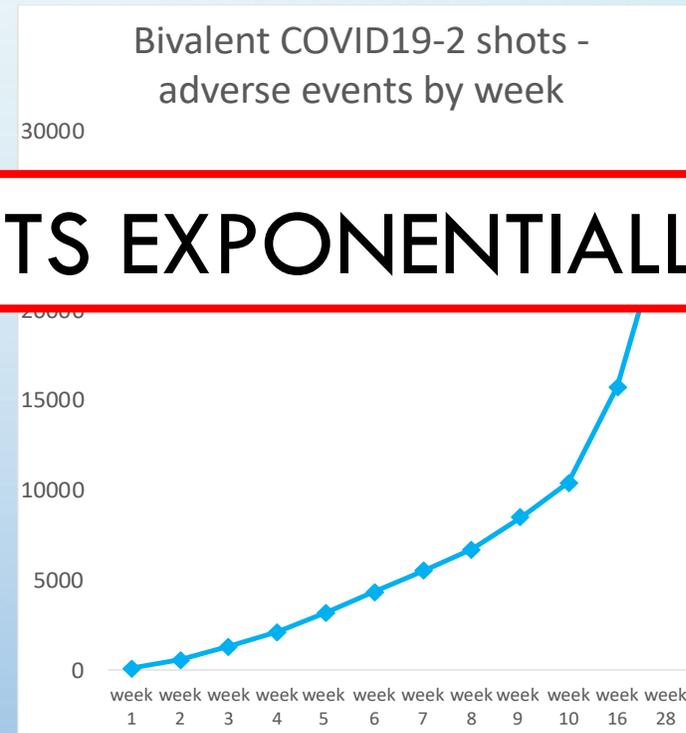
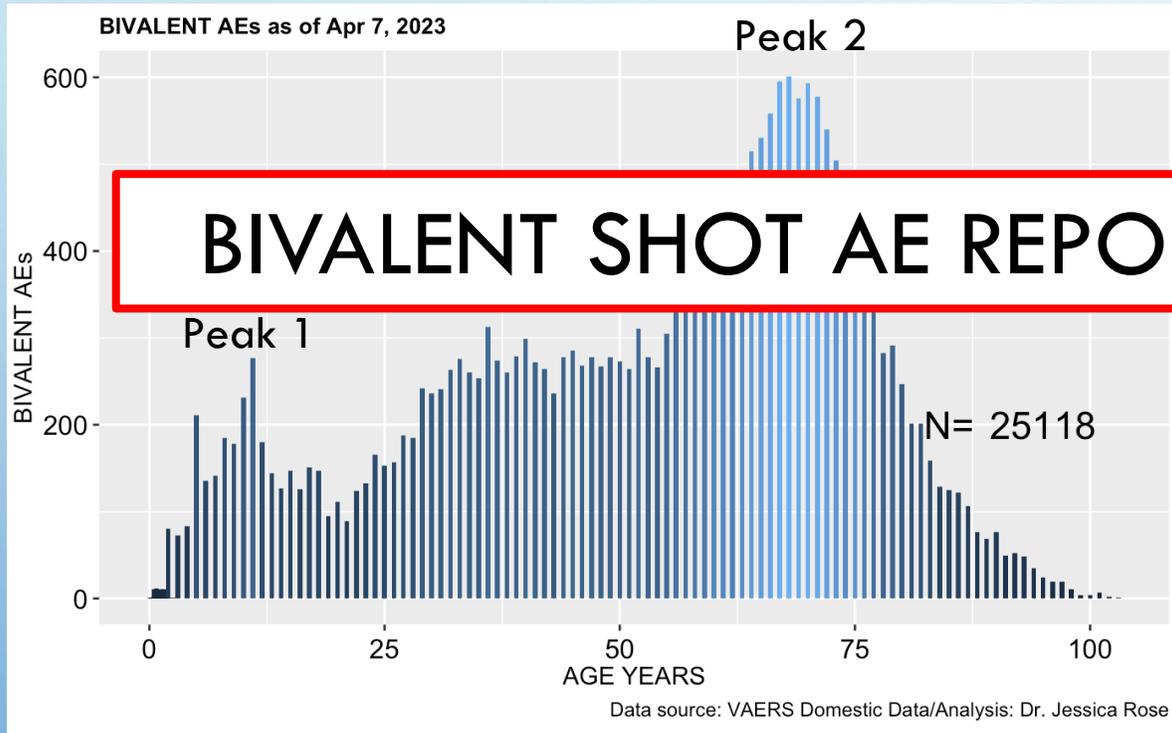


BEFORE, N = 563,456
 Myocarditis reports: 40,383
 7.16% of reports



AFTER, N = 571,525
 Myocarditis reports: 16,396
 2.87% of reports

'BIVALENT' SHOTS ARE NOT INNOCUOUS WITH REGARD TO DEATH AND SAEs



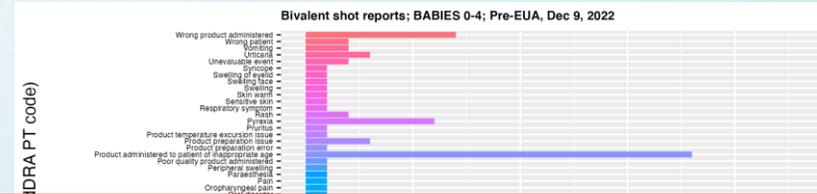
BIVALENT SHOT AE REPORTS EXPONENTIALLY RISING

WHY WERE BABIES AGES 0-4 BEING INJECTED PRIOR TO DECEMBER 9, 2022? AS A FIRST DOSE AS WELL!

What You Need to Know

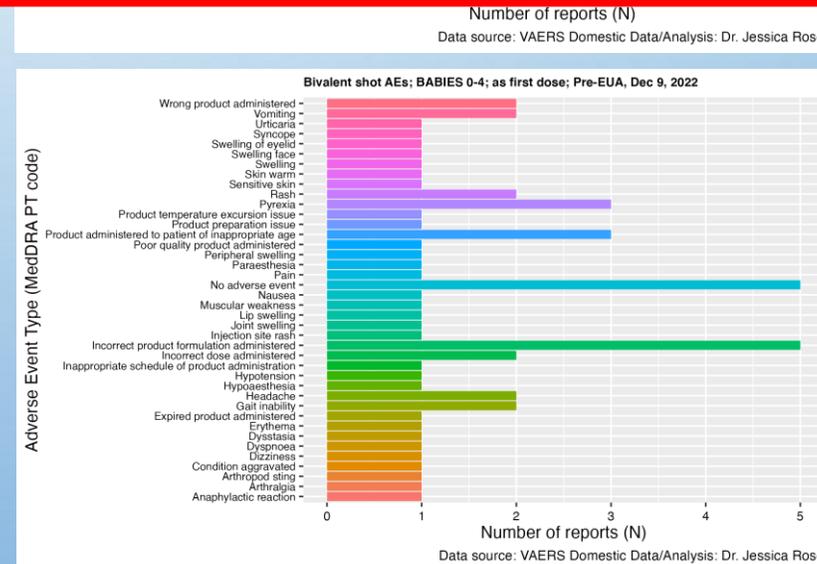
Updated Jan. 9, 2023

- Updated (bivalent) boosters became available on:
 - September 2, 2022, for people aged 12 years and older
 - October 12, 2022, for people aged 5-11 years



WHY WERE BABIES BEING INJECTED WITH THE 'BIVALENT' SHOTS PRIOR TO EVEN EUA?

- Can someone, like Walensky, explain why 0-4-year-olds were/are being injected with this crap as a first dose?
- Or at all? It was not even EUA authorized prior to December 9, 2022!



Pre-EUA as 1st dose

EVEN PAUL OFFIT IS SPEAKING OUT AGAINST THESE THINGS

“I believe we should stop trying to prevent all symptomatic infections in healthy, young people by boosting them with vaccines containing mRNA from strains that might disappear a few months later.” Paul Offit



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Perspective

Bivalent Covid-19 Vaccines — A Cautionary Tale

Paul A. Offit, M.D.

January 11, 2023

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