

# lableak

## "De Amerikaanse regering en Moderna werkten al lang voor de pandemie samen aan het mRNA-vaccin."

17:47 12/10/2021

0



De Amerikaanse politieke commentator Glenn Beck voegde zich woensdag bij Tucker Carlson om een verklaring over de show af te leggen over het partnerschap tussen Moderna en de regering van de Verenigde Staten over de ontwikkeling van het mRNA-vaccin tegen het coronavirus, maanden voor de aangekondigde start van de Kovid-19-pandemie.

# NIAID-Moderna vaccin deal 2014-2020

p. 105

"Jointly-owned by NIAID and Moderna" 

PUBLIC HEALTH SERVICE

## MATERIAL TRANSFER AGREEMENT

This Material Transfer Agreement ("MTA") has been adopted for use by the National Institutes of Health, the Food and Drug Administration and the Centers for Disease Control and Prevention, collectively referred to herein as the Public Health Service ("PHS") in all transfers of research material (Research Material) whether PHS is identified below as its Provider or Recipient.

Providers: *National Institute of Allergy and Infectious Diseases, National Institutes of Health ("NIAID")*  
ModernaTX, Inc ("Moderna")

Recipient: The University of North Carolina at Chapel Hill

1. Provider agrees to transfer to Recipient's Investigator the following Research Material:

mRNA coronavirus vaccine candidates developed and jointly-owned by NIAID and Moderna.

Annotated by Bob Herman, Axios

be used for commercial purposes such as screening, production or sale, for which a commercialization license may be required. Recipient agrees to comply with all Federal rules and regulations applicable to the Research Project and the handling of the Research Material.

a. Are the Research Materials of human origin?

Yes  No

b. If Yes in 2a, were Research Materials collected according to 45 CFR Part 46, "Protection of Human Subjects"?

Yes Please provide Assurance Number: \_\_\_\_\_  
 No

3. This Research Material will be used by Recipient's Investigator solely in connection with the following research project ("Research Project") described with specificity as follows (use an attachment page if necessary):

Perform challenge studies with the mRNA vaccine in a Proprietary Info model as described on Exhibit A.

4. Upon a Provider's reasonable request, Recipient will furnish a status report to such Provider regarding the use of the Research Materials and any data or results generated therefore. In all oral presentations or written



## Omicron variant more related to March 2020 SARS-CoV-II (from Livestream #107)

December 9th, 2021

2,176 views

 164  5  Support +  Save  Repost  Share





NEWS

SCALP: COVID Investigator Funded By  
Chinese Communist Party Removed  
From WHO Team Following National  
Pulse Exposé.

**MUST READ:** [Zuckerberg-Backed Election Influence Group Founder Served At Chinese State-Funded Center Pushing Beijing Propaganda.](#)

Koopmans has also authored scientific research papers and journal articles supported by Chinese Communist Party grants.

A July 2020 study – [Exploring utility of genomic epidemiology to trace origins of highly pathogenic influenza A/H7N9 in Guangdong](#) – was “supported by grants from National Key Research and Development Program of China [and] the National Key Research and Development Program of China.”

Another 2017 study [focusing](#) on Zika virus was also funded and executed by the Guangdong provincial government, according to a summary:

**From:** Fauci, Anthony (NIH/NIAID) [E]  
**Sent:** Sat, 1 Feb 2020 18:34:43 +0000  
**To:** Tabak, Lawrence (NIH/OD) [E]  
**Subject:** FW: Teleconference  
**Attachments:** Coronavirus sequence comparison[1].pdf

FYI

---

**From:** Jeremy Farrar (b) (6) >  
**Sent:** Saturday, February 1, 2020 1:13 PM  
**To:** Fauci, Anthony (NIH/NIAID) [E] (b) (6) >; Patrick Vallance (b) (6)  
(b) (6)  
**Cc:** Drosten, Christian (b) (6); Marion Koopmans  
(b) (6) >; R.A.M. Fouchier (b) (6); Edward Holmes  
(b) (6); Andrew Rambaut (b) (6)  
Kristian G. Andersen (b) (6); Paul Schreier (b) (6);  
(b) (6); Ferguson, Mike (b) (6); Collins, Francis (NIH/OD) [E]  
(b) (6)  
**Subject:** Re: Teleconference

Kristen and Eddie have shared this and will talk through it on the call. Thank you.

Hope it will help frame the discussions.

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**From:** Jeremy Farrar (b) (6)  
**Date:** Saturday, 1 February 2020 at 15:34

1st February (2nd Feb for Eddie)

**Information and discussion** is shared in **total confidence** and not to be shared until agreement on next steps.

**From:** Butler, Jay C. (CDC/DDID/OD)  
**Sent:** Fri, 21 Feb 2020 01:02:33 +0000  
**To:** Fauci, Anthony (NIH/NIAID) [E]; Cetron, Marty (CDC/DDID/NCEZID/DGMQ); Jernigan, Daniel B. (CDC/DDID/NCIRD/ID)  
**Cc:** Messonnier, Nancy (CDC/DDID/NCIRD/OD)  
**Subject:** Stafford Act Briefs for TTx Tomorrow  
**Attachments:** Stafford Act for Infectious Disease Response - Summary. 05.12.19.docx

Tony, Dan, and Marty—attached is a nice summary of Stanford Act prepared by Anita Patel after our Crimson Contagion adventures last August. The primer on the ASTHO website also provides a good general brief:

<https://www.astho.org/Programs/Preparedness/Public-Health-Emergency-Law/Emergency-Authority-and-Immunity-Toolkit/Robert-T--Stafford-Disaster-Relief-and-Emergency-Assistance-Act-Fact-Sheet/>

Jay

# Crimson Contagion

From Wikipedia, the free encyclopedia

**Crimson Contagion** was a joint exercise conducted from January to August 2019, in which numerous national, state and local, private and public organizations in the US participated, in order to test the capacity of the federal government and twelve states to respond to a severe pandemic of [influenza](#) originating in [China](#).

The [simulation](#), which was conducted by the Trump administration's Department of Health and Human Services in a series of exercises that ran from January to August 2019, involved a scenario in which a group of about 30 tourists returning from China spread a novel influenza A respiratory [virus](#) in the United States, beginning in [Chicago](#). In less than two months the virus had spread from a single index case (a 52 year-old man returning to Chicago) to infect 110 million Americans; 7.7 million patients would require hospitalization, and 586,000 people would die from the novel virus. The 70-page report issued at the conclusion of the exercise outlined the government's limited capacity to respond to a pandemic. States experienced "multiple challenges" requesting resources from the federal government "due to a lack of standardized, well-understood, and properly executed resource request processes," the report said. Federal agencies lacked the funds, coordination, and capacities to implement an effective response to the virus.<sup>[1][2][3]</sup>

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- [Scenario](#)
- [Key findings](#)
- [State participants](#)
- [References](#)
- [External links](#)

## Scenario [edit]

Between January and August 2019, Trump's Department of Health and Human Services (HHS), headed by Alex Azar, runs a simulation—code-named "Crimson Contagion". In this "Full National Security Council, United States Department of Health and Human Services, United States Department of Agriculture, United States Department of Commerce, United States Department of Energy, United States Department of Homeland Security, United States Department of Housing and Urban Development, United States Department of Interior, United States Department of Labor, United States Department of State, United States Department of Transportation, United States Department of Treasury, between others State and Local government and private.



Lili Ren

At 2019-10-17 21:36:38, "Alison Andre" <[andre@ecohealthalliance.org](mailto:andre@ecohealthalliance.org)> wrote:

Dear All,

Our NIAID SARs-Cov call has been scheduled for Wednesday October 30<sup>th</sup> at 8:00pm Eastern time (Thursday October 31<sup>st</sup> at 8:00am China/Singapore time).

Call in details:

**US:**

**China:**

**Singapore:**

**Passcode:**

Calendar invite to follow.

Thank you,  
Alison

**Alison Andre**

*Executive Assistant to the President*

EcoHealth Alliance  
460 West 34th Street – 17th floor  
New York, NY 10001

(direct)

(fax)

[www.ecohealthalliance.org](http://www.ecohealthalliance.org)

**From:** Chen, Ping (NIH/NIAID) [E]  
**Sent:** Thu, 26 Oct 2017 09:01:13 +0000  
**To:** Handley, Gray (NIH/NIAID) [E]; Bernabe, Gayle (NIH/NIAID) [E]; Meegan, James (NIH/NIAID) [E]; Rosa, William (NIH/NIAID) [E]  
**Subject:** trip report  
**Attachments:** IMG\_5695.JPG

Hi,

This week I went to Wuhan to visit the Bio safety lab 4 in Wuhan Institute of Virology (WIV), an institute under the Chinese Academy of Sciences (CAS). My contact who helped arrange the visit is Dr. Zhengli Shi, who is a Chinese collaborator on a NIAID grant to EcoHealth for SARS like corona virus project.

The P4 lab is located in a new developing zone about one hour car ride from the current institute location in central Wuhan city. The location will be the new campus for the entire institute in the near future (a lot of construction is going on right now). Since we are not allowed to take photos so only the photo from the outside is attached.

(b) (5)



[Deyin Guo][Yuan Zhiming]

From: Chen, Ping (NIH/NIAID) [E] (b) (6)

Sent: Thursday, August 07, 2014 10:16 AM

To: LeDuc, James W.

Cc: (b) (6); Zackowitz, Gary (NIH/NIAID) [E]; Boyd, Nancy (NIH/NIAID) [E]

Subject: Contact to Wuhan Institute of Virology

Importance: High

Dear Dr. Leduc,

First let me express my sincere thanks for your immediate response to our request. It's my pleasure meeting you online.

You must be very familiar with Global Health Security Agenda (GHSA), which was launched in Washington DC and Geneva on February 13, 2014 followed by the Helsinki meeting in May 5-6. A meeting titled "Building Global Commitment to Multisectoral Approaches to Manage Emerging Zoonotic Diseases in Support of the Global Health Security Agenda within the Framework of Public Health" is going to be held in Jakarta, Indonesia later this month; 65 countries have been invited to attend. Another GHSA meeting will be held in Washington DC in late Sept. China's National Health and Family Planning Commission (Ministry of Health) and China CDC are supportive and should commit to be a part of the network. We do want to expand the Chinese participation in the network to include other partners and sectors, including agriculture and veterinary, which are important integral parts of GHSA. Thus, HHS, which has lead the effort to obtain China's commitment to GHSA, would like to visit Wuhan Institute of Virology to discuss GHSA with the institute leadership. HHS has approached me to acquire a contact at the Institute through NIH connection. I used to be a project officer at the drug development section of OBRRTTR and know Nancy and Gary. So I asked them for help. The visit is going to discuss GHSA only.

HHS would like to give WIV the opportunity to attend the Sept GHSA meeting in Washington. The only time we can make the visit is Aug. 18 and 19. It would be great if you can provide us a couple of contact persons (in case one is not available) at WIV for the embassy to request a visit. I apologize for the urgency and look forward to hearing from you very soon.

Thank you very much

Ping Chen, PhD

Director, NIAID Office in China

Office of Global Research

National Institute of Allergy & Infectious Diseases National Institutes of Health Bethesda Office: (b) (6)

RR: (b) (6)

Cell: **REDACTED**  
E-mail: [cchrisman@usaid.gov](mailto:cchrisman@usaid.gov)

*GHSI-III - Social Solutions International, Inc. prime contractor*

----- Forwarded message -----

From: **Jonna Mazet** <[jkmazet@ucdavis.edu](mailto:jkmazet@ucdavis.edu)>

Date: Tue, Dec 18, 2018 at 5:17 PM

Subject: Re: Agenda including Suggested GVP Board

To: Dennis Carroll <[dc Carroll@usaid.gov](mailto:dc Carroll@usaid.gov)>

Cc: Peter Daszak <[daszak@ccohealthalliance.org](mailto:daszak@ccohealthalliance.org)>, Eddy Rubin <[erubin@mctabiota.com](mailto:erubin@mctabiota.com)>, **REDACTED** <**REDACTED**>, <[maher@ecohealthalliance.org](mailto:maher@ecohealthalliance.org)>, Cara Chrisman <[cchrisman@usaid.gov](mailto:cchrisman@usaid.gov)>, Nathan Wolfe <[nwolfe@metabiota.com](mailto:nwolfe@metabiota.com)>

Some people to consider who are aware of the project & would likely be supportive board members:

Jennifer Gardy [https://en.wikipedia.org/wiki/Jennifer\\_Gardy](https://en.wikipedia.org/wiki/Jennifer_Gardy)

Suzan Murray <https://nationalzoo.si.edu/conservation/suzan-murray>

Elizabeth Mumford <https://ch.linkedin.com/in/elizabeth-mumford-09866934>

Others who may not be as aware and might need stewarding & exploration first:

Stacey Schultz-Cherry <https://www.stjude.org/directory/s/stacey-schultz-cherry.html>

Marion Koopmans [https://www.erasmusmc.nl/viroscience/research/researchers/marion\\_koopmans/](https://www.erasmusmc.nl/viroscience/research/researchers/marion_koopmans/)

Maybe for scientific advisory board:

Juliet Morrison <https://www.mailman.columbia.edu/research/center-infection-and-immunity/juliet-morrison-phd>

Sorry for the delay in delivery,  
Jonna



**From:** Andrew Clements <aclements@usaid.gov>  
**To:** Elizabeth Leasure <ealeasure@ucdavis.edu>  
**CC:** Jonna Mazet <jkmazet@ucdavis.edu>;predict Sympa List <predict@ucdavis.edu>;David John Wolking <djwolking@ucdavis.edu>;Hannah R Chale <hrchale@ucdavis.edu>;Alisa Pereira <apereira@usaid.gov>;cchrisman@usaid.gov <cchrisman@usaid.gov>  
**Sent:** 7/15/2019 9:11:27 PM  
**Subject:** Re: New subaward request: UC Berkeley for GVP (PREDICT)

Hi Liz,

I am providing AOR approval for this sub-award request. I will send you the signed AOR checklist early next week as I will be out of the office until then.

Andrew

*Andrew P. Clements, Ph.D.  
Senior Scientific Advisor  
Emerging Threats Division/Office of Infectious Diseases/Bureau for Global Health  
U.S. Agency for International Development  
Mobile phone: 1-571-345-4253  
Email: [aclements@usaid.gov](mailto:aclements@usaid.gov)*

On Jul 10, 2019, at 6:01 PM, Elizabeth Leasure <[ealeasure@ucdavis.edu](mailto:ealeasure@ucdavis.edu)> wrote:

→ Hi Andrew. Please find attached a request for approval to establish a new subaward with UC Berkeley for the Global Virome Project Benefit Cost Analysis (GVP/BCA). UC Berkeley is a domestic institution of higher education, and as such, only AOR approval is required. If you have any questions or need anything else to approve, please let me know.

Thanks,  
Liz

→ *Elizabeth Leasure  
Financial Operations Manager  
One Health Institute  
[REDACTED] cell)  
530-754-9034 (office)  
Skype: ealeasure*

# Dr. Oz says Fauci should be 'held accountable,' suggests he resign after 'misleading' Americans on COVID

Oz claims Fauci has lost the 'faith and confidence' of Americans

/ Kyle Morris | Fox News



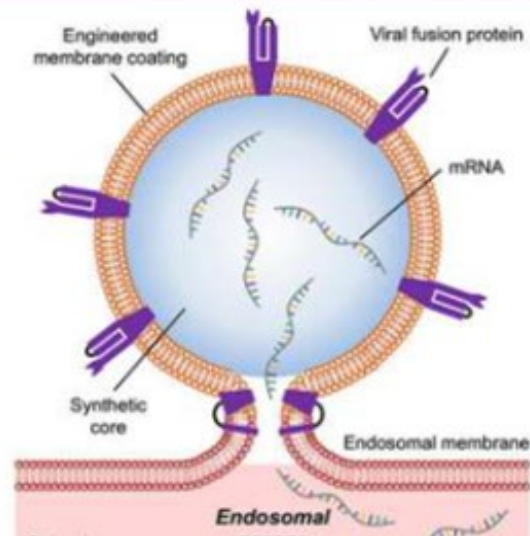
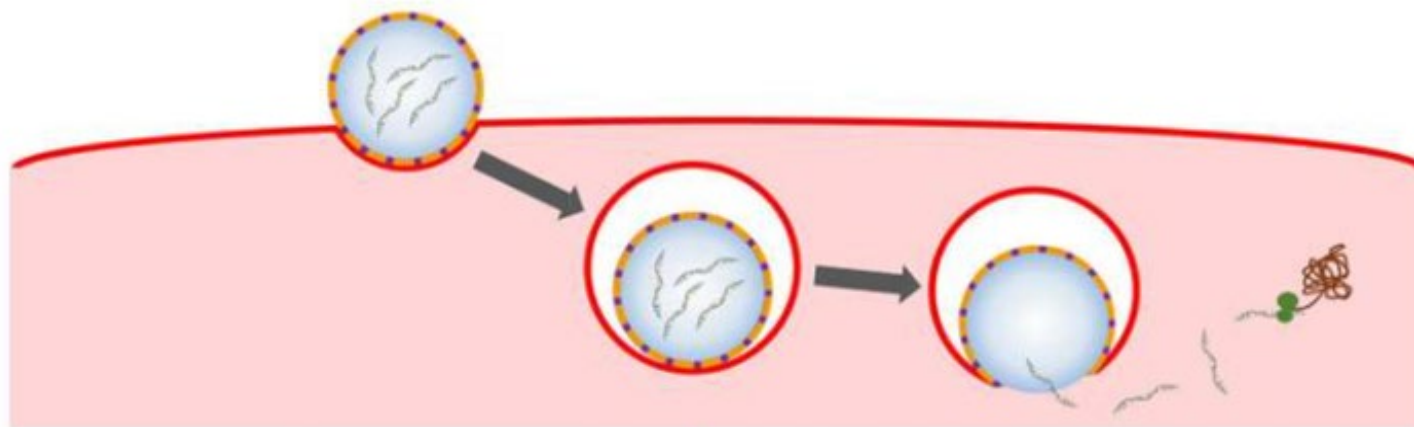
**Fox News First**   
MORNING HEADLINES

Get all the stories you need-to-know from the most powerful name in news deliver

NOVEMBER 30, 2021

# Flu virus shells could improve delivery of mRNA into cells

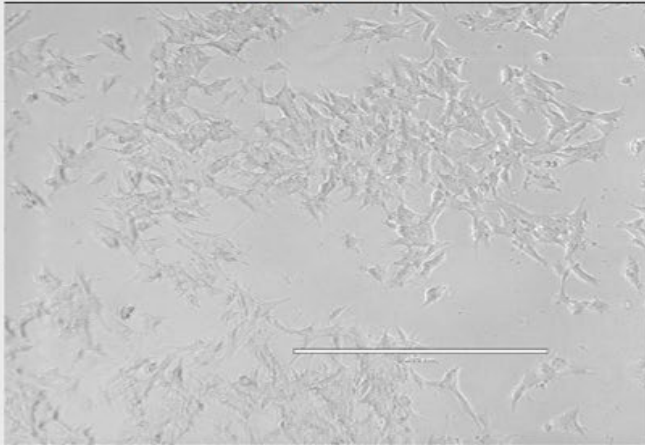
by University of California - San Diego



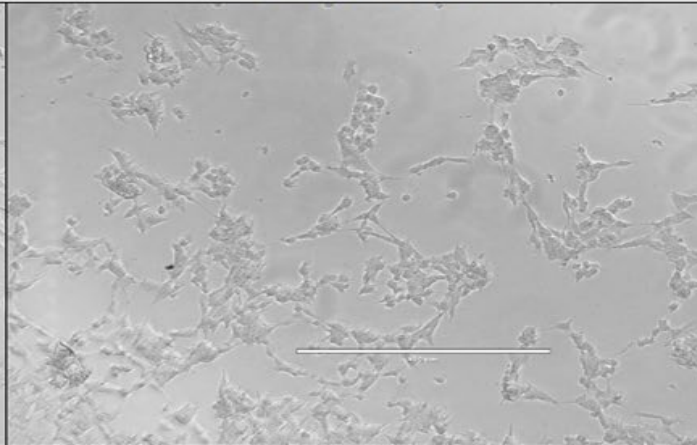
# Content injecties

after 3 hours incubation with half a human dose

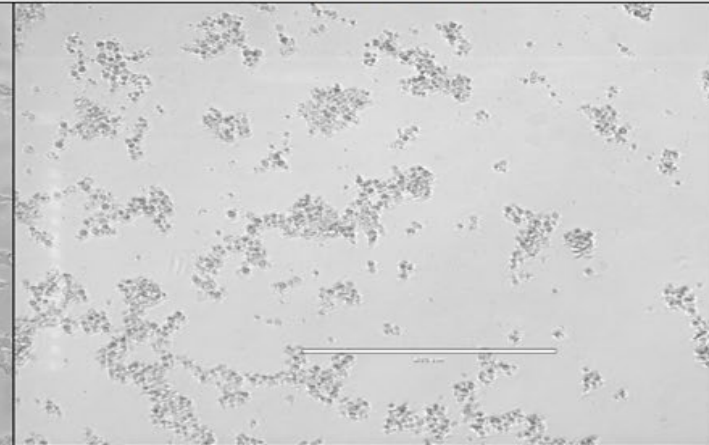
saline



AstraZeneca



Johnson





higher magnifications...

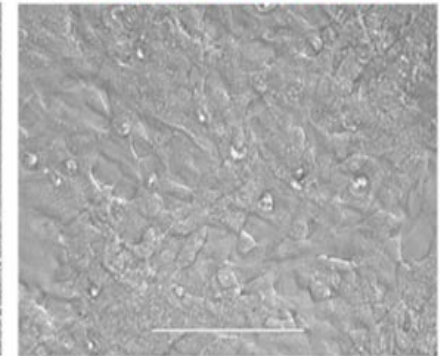
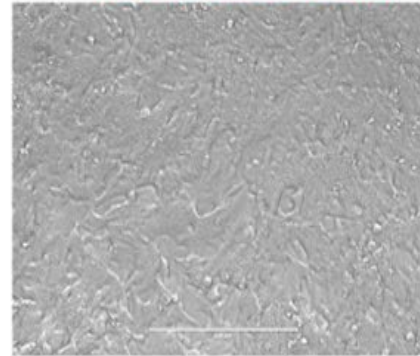
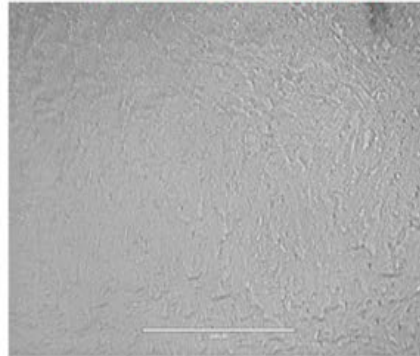
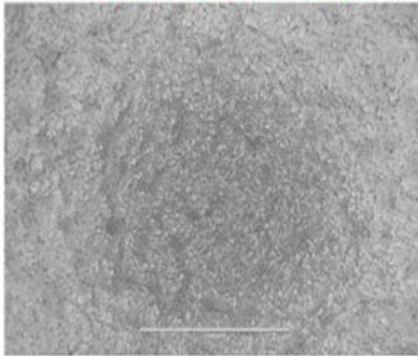
1/2 hu dose (4x)

1/2 hu dose (10x)

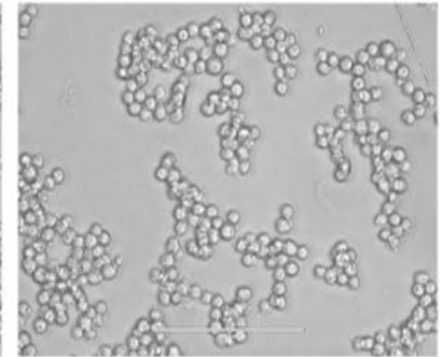
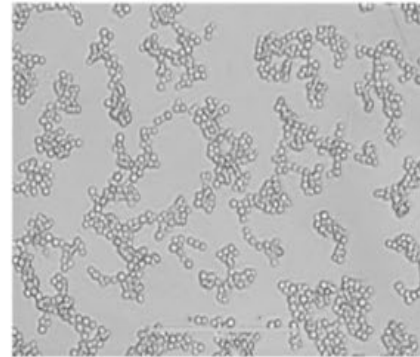
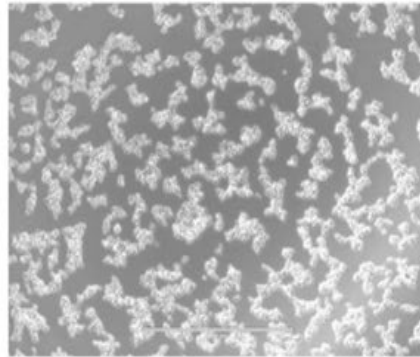
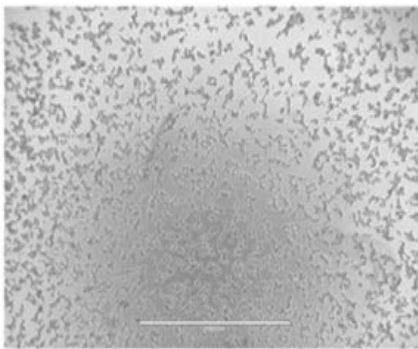
1/2 hu dose (20x)

1/2 hu dose (40x)

PBS treated

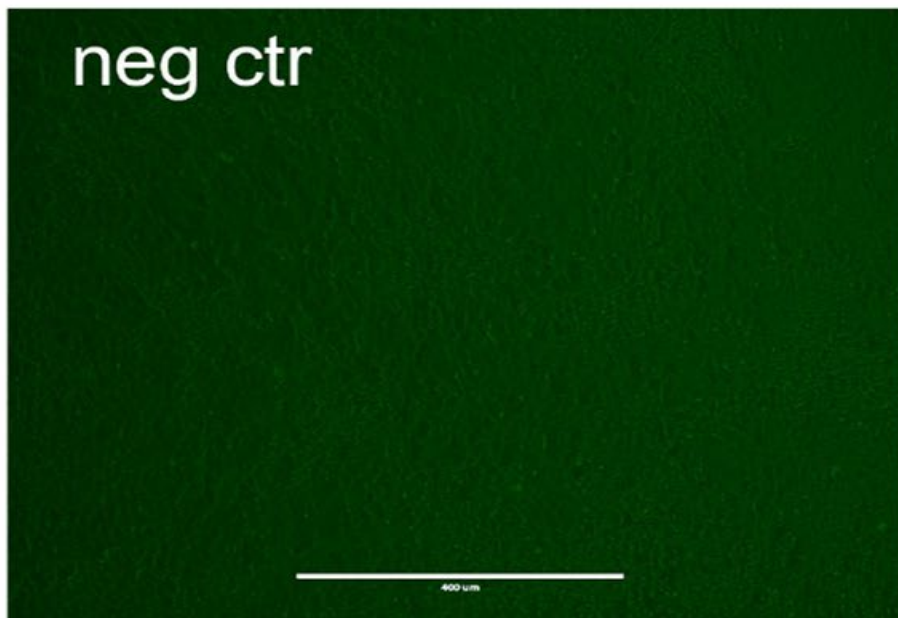


J&J treated

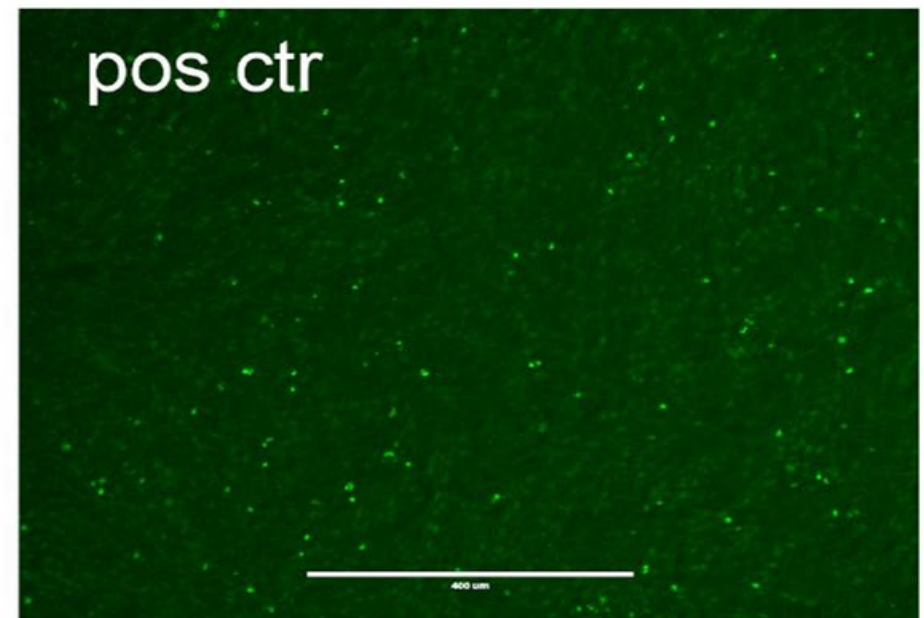


**Cells undergo apoptosis (cell death detection by TUNEL assay)**

cells treated with saline

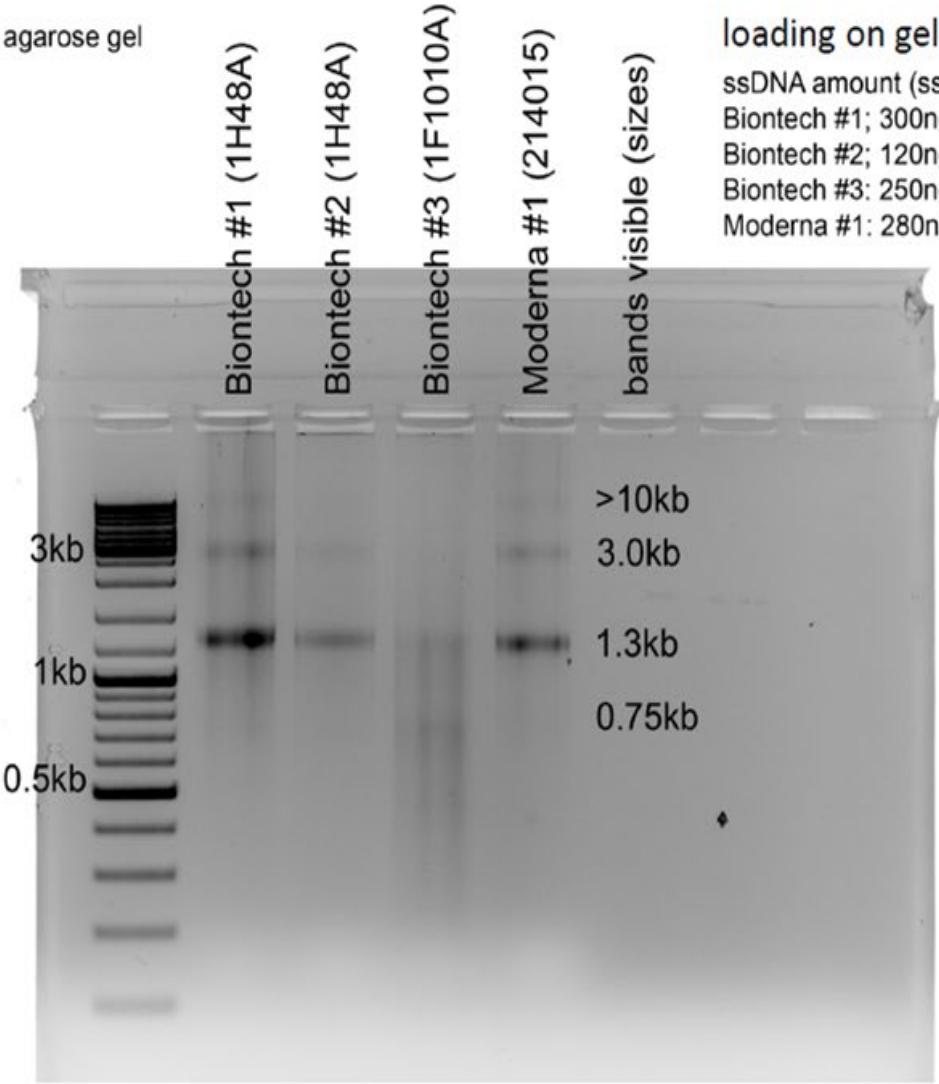


cells treated with saline and later DNase



# DNA

1.6% agarose gel



loading on gel:

ssDNA amount (ss or ds?)

Biontech #1; 300ng (2ul/30ul)

Biontech #2; 120ng (2ul/30ul)

Biontech #3; 250ng (2ul/120ul)

Moderna #1; 280ng (2ul/120ul)

this kit is actually not suitable for plasmid DNA isolation; only for genomic DNA isolation. Still, I got also smaller DNA fragments.

there are no kits for simultaneous plasmid DNA and RNA isolation, as this is not needed in research.

Nolte Alexis

Mon 23/11/2020 10:48

Sent Items

To:

Korakianiti Evdokia;

Evdokia,

One way to understand how the lower mRNA level in the finished product translates to efficacy would be to measure whether it affects significantly levels of protein expression. It could be that the level of antigenic protein expressed is not significantly affected. However, I don't know whether there is a test that would allow to predict impact on efficacy without clinical trial for comparability.

Alexis

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

Korakianiti Evdokia

Mon 23/11/2020 10:38

Inbox

Dear Colleagues,

This email is for awareness and to flag an important comparability issue with the BioNTech vaccine that needs to be addressed prior to approval.

**Issue:** A significant difference in %RNA integrity / truncated species has been observed between the clinical batches ( ~ 78% mRNA integrity) based on which the Interim analysis was performed and the proposed commercial batches (~ 55%).

The company claims that the efficacy of the drug product is dependent on the expression of the delivered RNA, which requires a **sufficiently intact RNA molecule**. The root cause for the lower %RNA integrity at commercial batches has not yet been identified

**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).

Point for discussion will be whether the comparability issues can be solved only by Quality data (additional functional/ in vitro biological data + available non-clinical) or that further clinical data (bridging studies are/will be performed) will be needed. It is difficult to make any projections on this.

**Way forward:** This issue and other MO ( but in our view not blocking to a potential approval) have been raised at ETF and are being discussed at BWP this week and in a TC with FDA on Wednesday

With many thanks to Ton who's is the Quality specialist for this vaccine together with Brian looking after the chemical elements

Best regards

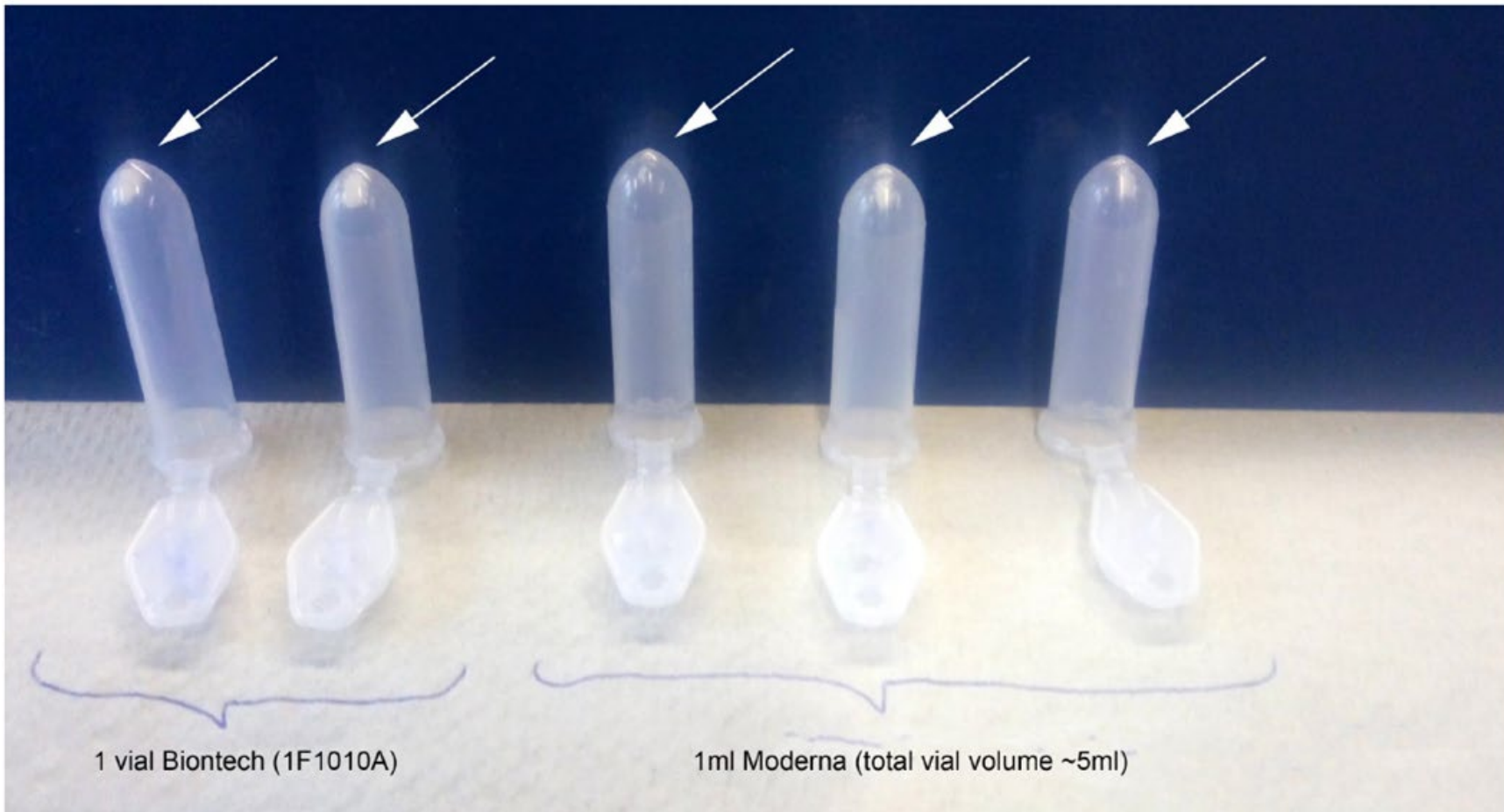
Evdokia

Ext. 7150



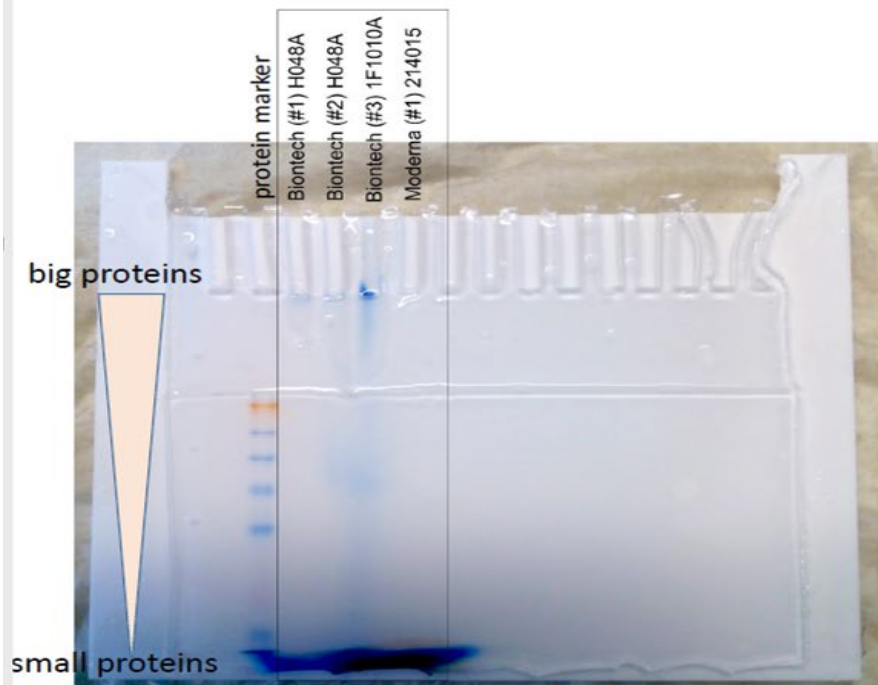
# protein

there is so much protein in the vials, that it is even visible by eye (white pellet)

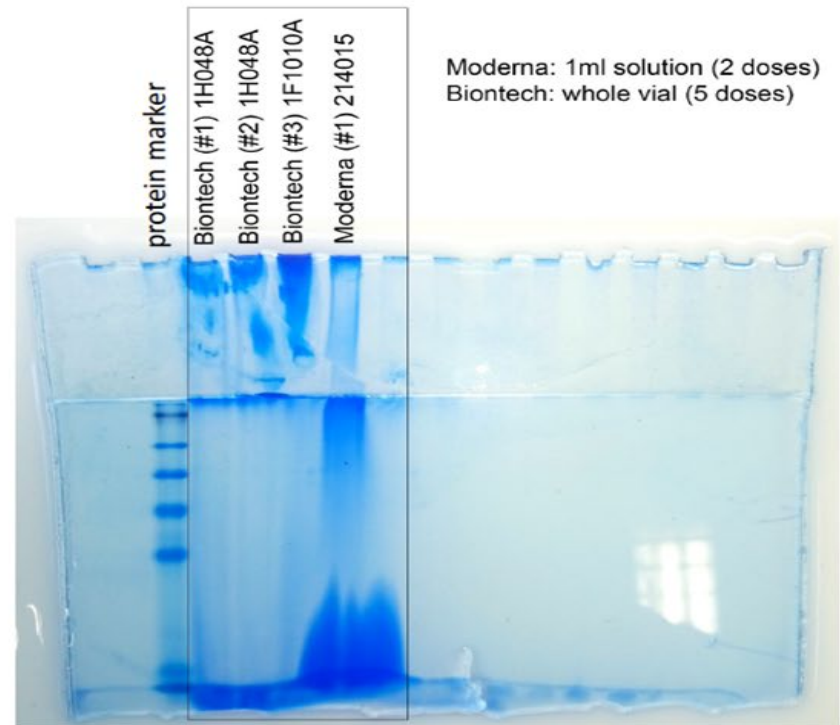


# protein

before protein staining

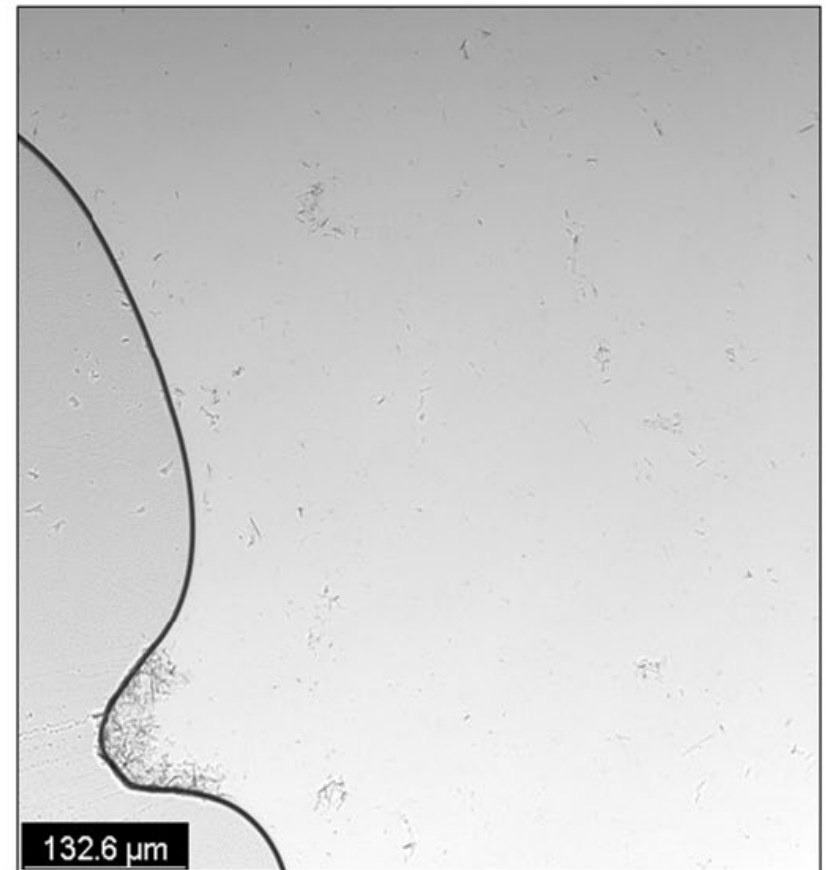
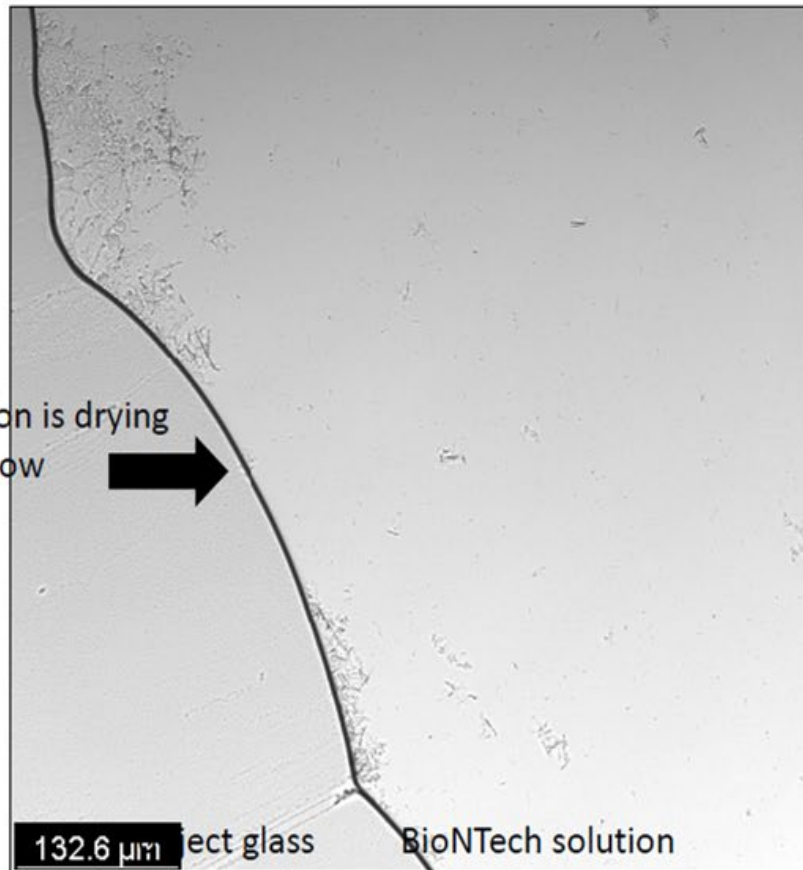


after protein staining (coomassie)

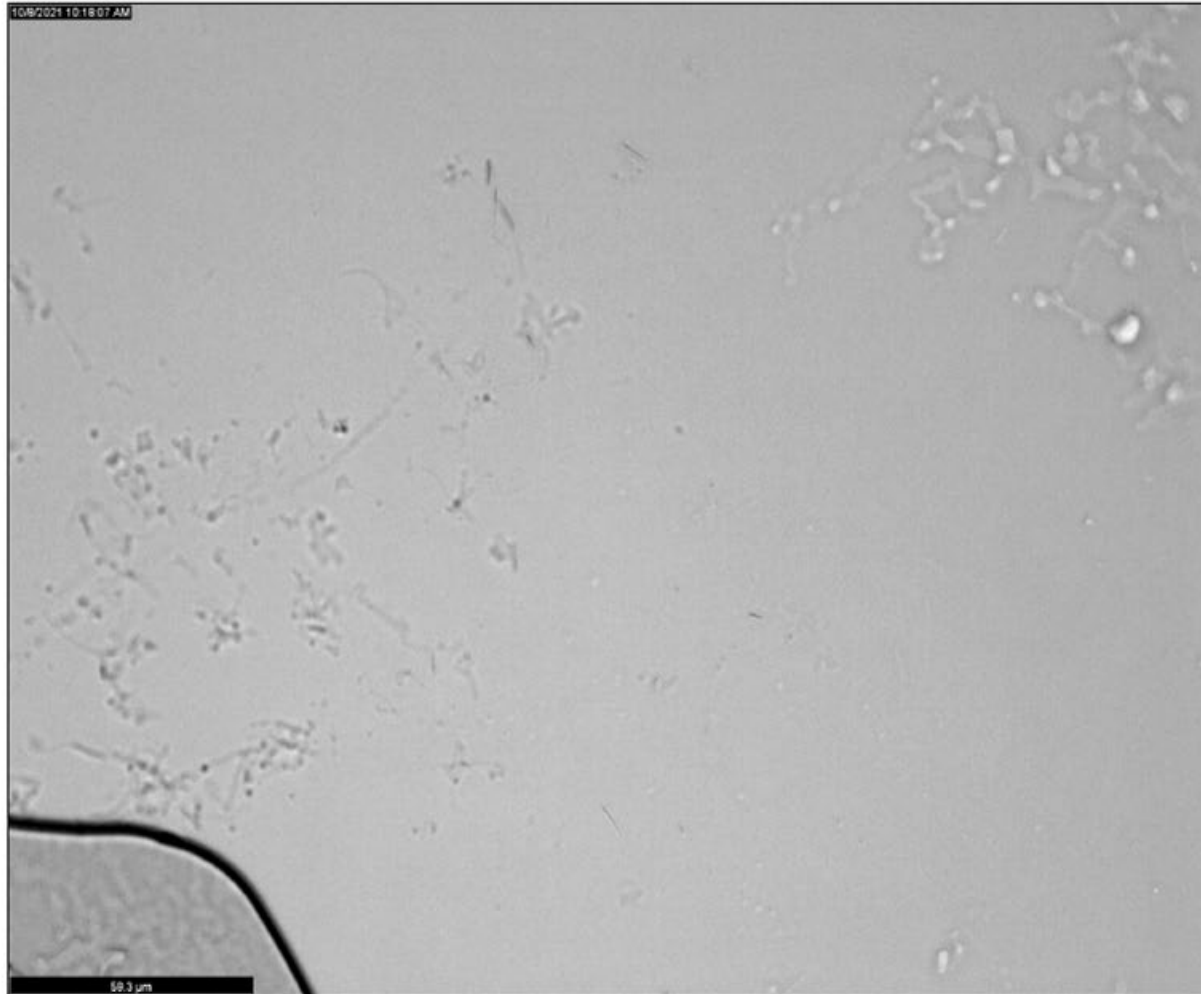


## Microscopy: BioNTech (1F1010A)

the solution is drying  
up right now



**Microscopy: BioNTech (1H048A); another batch; two different vials; no cover glass used**







**kidney Study**  
@kidneyStudy



[#COVID19vaccines](#) Finland, Sweden and Denmark are limiting Moderna mRNA vaccine use in men to those above 30 years. Citing higher myocarditis. Moderna has 100 micrograms mRNA, Pfizer 30. Moderna is hemoglobin alpha 3'UTR while Pfizer uses TLE5 gene sequence.

[Tweet vertalen](#)

12:10 a.m. · 13 okt. 2021 · Twitter for Android

2 Vind-ik-leuks

## Detailed Dissection and Critical Evaluation of the Pfizer/BioNTech and Moderna mRNA Vaccines

[Xuhua Xia](#)<sup>1,2</sup>

Hatem A. Elshabrawy, Academic Editor

▶ [Author information](#) ▶ [Article notes](#) ▶ [Copyright and License information](#) [Disclaimer](#)

This article has been [cited by](#) other articles in PMC.

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### Associated Data

- ▶ [Supplementary Materials](#)
- ▶ [Data Availability Statement](#)

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### Abstract

[Go to:](#) ▶

The design of Pfizer/BioNTech and Moderna mRNA vaccines involves many different types of optimizations. Proper optimization of vaccine mRNA can reduce dosage required for each injection leading to more efficient immunization programs. The mRNA components of the vaccine need to have a

UTR of a human  $\alpha$ -globin gene (Figure 2A), which makes sense because  $\alpha$ -globin mRNAs are translated very efficiently. The same approach of borrowing from nature has been used for designing 3'-UTR of therapeutic mRNAs, e.g., by incorporating stability regulatory elements from human  $\alpha$ -globin and  $\beta$ -globin genes [13]. These stability regulatory elements often form RNA-protein complexes to stabilize mRNA [93,94,95,96,97]. The 5'-UTR and 3'-UTR of globin genes, when ligated to other mRNAs, can confer stability to these mRNAs [54,98,99]. Moderna's mRNA-1273 "pasted" the 110-nt 3'-UTR of human  $\alpha$ -globin gene (*HBA1*) between the last stop codon and a poly(A) tail. The design of the 3'-UTR of the Pfizer/BioNTech mRNA vaccine is a combination of SELEX and borrowing from nature. The objective is to find naturally occurring RNA segments that perform better than the 3'-UTR of human  $\beta$ -globin mRNA [54]. Two RNA segments outperform other alternatives through the SELEX optimization protocol [54]. One of them is from the human mitochondrial 12S rRNA (*mtRNR1*), and the other segment is from human *AES/TLE5* gene. As these two RNA segments were found to have the lowest number of predicted binding sites for miRNAs and the highest hybridization energies [54], two C→U mutations were introduced in the *AES* segment to further increase the binding energy (from MFE = -37 to -39.3 at 37 °C, my calculation from DAMBE). For Pfizer/BioNTech's mRNA vaccine, the *AES* segment of 136 nt with the two C→ $\Psi$  mutations was pasted right after two trinucleotides following the second stop codon. The *mtRNR1* segment of 139 nt was pasted immediately after. This heuristic and empirical approach of borrowing from nature is perhaps more efficient than alternatives in an emergency.

## Synthetic construct HCV1147 Pfizer-BioNTech (BTN162b2) SARS-CoV-2 vaccine sequence

LOCUS OK120842 3720 bp RNA linear SYN 28-SEP-2021  
DEFINITION Synthetic construct HCV1147 Pfizer-BioNTech (BTN162b2) SARS-CoV-2  
vaccine sequence.  
ACCESSION OK120842  
VERSION OK120842.1

**CTGCTGTTCCCGTGGGGGTGTGGCTAGGCTAAGCGTTTTGAGCTGCATT = menselijk mitochondrion**

CGCTGATATCGCCCAGGTCCACGTCGGGGCTTGTGTGGTTCTTAAAGTAC  
GTACTTTAAGAACCACACAAGCCCCGACGTGGACCTGGGCGATATCAGCG

CTCTGTGGTCACGCTGATGGTGAAGTTGGTGGGGATAGCGATAGAGTTGT  
ACAACTCTATCGCTATCCCCACCAACTTCACCATCAGCGTGACCACAGAG

GTCACGTATGTCTGGAGGCTCTGCAGTCTGCCTGTGATCAGTCTGTTCGAT  
ATCGACAGACTGATCACAGGCAGACTGCAGAGCCTCCAGACATACGTGAC

CTTGTGGTAGTAGACGCCAGGAAGGGGTCGTTGCAGAACTGGAACCTCGC  
GCGAGTTCAGTTCTGCAACGACCCCTCCTGGGCGTCTACTACCACAAG

CTCTTGGTGCCATTGGTGCCGGACACGTTGGATGGCGTGGAACCAGGTCAC  
GTGACCTGGTTCACGCCATCCACGTGTCCGGCACCAATGGCACCAAGAG

CACGTATGTCTGGAGGCTCTGCAGTCTGCCTGTGATCAGTCTGTTCGATCT



CTGCTGTTTCCCGTGGGGGTGTGGCTAGGCTAAGCGTTTTGAGCTGCATT = menselijk mitochondrion, gepatenteerde sequentie allebei 100% match, komt zowel in Wildtype humaan als bewerkte sequenties voor

### Homo sapiens mitochondrion, complete genome

Sequence ID: [MN692242.1](#) Length: 16567 Number of Matches: 1

Range 1: 770 to 819 [GenBank](#) [Graphics](#)

▼ [Next Match](#) ▲

Score	Expect	Identities	Gaps	Strand
93.5 bits(50)	8e-16	50/50(100%)	0/50(0%)	Plus/Minus

Query	1	CTGCTGTTTCCCGTGGGGGTGTGGCTAGGCTAAGCGTTTTGAGCTGCATT	50
Sbjct	819	CTGCTGTTTCCCGTGGGGGTGTGGCTAGGCTAAGCGTTTTGAGCTGCATT	770

### Homo sapiens haplogroup T2b4+152 mitochondrion, complete genome

Sequence ID: [MZ959105.1](#) Length: 16569 Number of Matches: 1

Range 1: 772 to 821 [GenBank](#) [Graphics](#)

▼ [Next Match](#) ▲

Score	Expect	Identities	Gaps	Strand
93.5 bits(50)	8e-16	50/50(100%)	0/50(0%)	Plus/Minus

Query	1	CTGCTGTTTCCCGTGGGGGTGTGGCTAGGCTAAGCGTTTTGAGCTGCATT	50

## Sequence 20 from Patent WO2021155149

Sequence ID: [MQ147139.1](#) Length: 488 Number of Matches: 1

Range 1: 326 to 375 [GenBank](#) [Graphics](#)

▼ [Next Match](#) ▲

Score	Expect	Identities	Gaps	Strand
93.5 bits(50)	4e-17	50/50(100%)	0/50(0%)	Plus/Minus
Query 1	CTGCTGTTCCCGTGGGGGTGTGGCTAGGCTAAGCGTTTTGAGCTGCATT	50		
Sbjct 375	CTGCTGTTCCCGTGGGGGTGTGGCTAGGCTAAGCGTTTTGAGCTGCATT	326		

# Methods of inducing neopeptide-specific t cells with a pd-1 axis binding antagonist and an rna vaccine

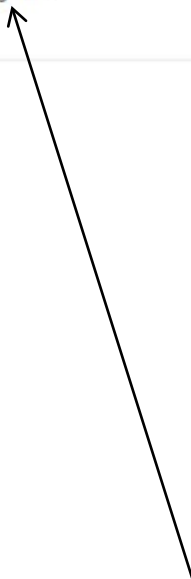
## Abstract

The present disclosure provides methods for inducing neopeptide-specific CD8+ T cells in an individual or for inducing trafficking of neopeptide-specific CD8+ T cells to a tumor in an individual using an RNA vaccine or using an RNA vaccine in combination with a PD-1 axis binding antagonist. Also provided herein are PD-1 axis binding antagonists and RNA vaccines that include one or more polynucleotides encoding one or more neopeptides resulting from cancer-specific somatic mutations present in a tumor specimen obtained from the individual for use in methods of inducing neopeptide-specific CD8+ T cells in an individual or for inducing trafficking of neopeptide-specific CD8+ T cells to a tumor in an individual.

## Classifications

■ [A61K39/0011](#) Cancer antigens

[View 2 more classifications](#)



WO2021155149A1

WIPO (PCT)

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Other languages: [French](#)

Inventor: [Lars Mueller](#), [Rachel Lubong SABADO](#), [Mahesh YADAV](#), [Jingbin ZHANG](#), [Ugur Sahin](#)

## Worldwide applications

2021 - [WO](#)

## Application PCT/US2021/015710 events

2020-01-31 • Priority to US202062968818P

2020-01-31 • Priority to US62/968,818

2020-06-19 • Priority to US202063041707P

2020-06-19 • Priority to US63/041,707

2021-01-29 • Application filed by Genentech, Inc., BioNTech SE, F. Hoffmann-La Roche Ag, Hoffmann-La Roche Inc.

2021-08-05 • Publication of WO2021155149A1



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## Transmission potential of vaccinated and unvaccinated persons infected with the SARS-CoV-2 Delta variant in a federal prison, July—August 2021

Phillip P. Salvatore, Christine C. Lee, Sadia Sleweon, David W. McCormick, Lavinia Nicolae, Kristen Knipe, Thomas Dixon, Robert Banta, Isaac Ogle, Cristen Young, Charles Dusseau, Shawn Salmonson, Charles Ogden, Eric Godwin, TeCorra Ballom, Tara Ross, Nhien Tran Wynn, Ebenezer David, Theresa K. Bessey, Gimin Kim, Suganthi Suppiah, Azaibi Tamin, Jennifer L. Harcourt, Mili Sheth, Luis Lowe, Hannah Browne, Jacqueline E. Tate, Hannah L. Kirking, Liesl M. Hagan

doi: <https://doi.org/10.1101/2021.11.12.21265796>

**This article is a preprint and has not been peer-reviewed [what does this mean?]. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.**

Abstract

Full Text

Info/History

Metrics

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### Abstract

**Background** The extent to which vaccinated persons who become infected with SARS-CoV-2 contribute to transmission is unclear. During a SARS-CoV-2 Delta variant outbreak among incarcerated persons with high vaccination rates in a federal prison, we assessed markers of viral shedding in vaccinated and unvaccinated persons.



**Results** A total of 978 specimens were provided by 95 participants, of whom 78 (82%) were fully vaccinated and 17 (18%) were not fully vaccinated. No significant differences were detected in duration of RT-PCR positivity among fully vaccinated participants (median: 13 days) versus those not fully vaccinated (median: 13 days;  $p=0.50$ ), or in duration of culture positivity (medians: 5 days and 5 days;  $p=0.29$ ). Among fully vaccinated participants, overall duration of culture positivity was shorter among Moderna vaccine recipients versus Pfizer ( $p=0.048$ ) or Janssen ( $p=0.003$ ) vaccine recipients.

**Conclusions** As this field continues to develop, clinicians and public health practitioners should consider vaccinated persons who become infected with SARS-CoV-2 to be no less infectious than unvaccinated persons. These findings are critically important, especially in congregate settings where viral transmission can lead to large outbreaks.

#### **Competing Interest Statement**

The authors have declared no competing interest.

#### **Funding Statement**

This study was funded by the U.S. Centers for Disease Control and Prevention.

#### **Author Declarations**

# Antibody neutralizing all Covid variants found, Chinese scientists claim

1 Dec, 2021 14:49

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## Incidence rates and symptomatology of community infections with SARS-CoV-2 in children and parents: The CoKids longitudinal household study

Marieke de Hoog, Judith Post-Sluis, Ilse Westerhof, Elandri Fouri, Valerie Heuvelman, Trisja Boom, Sjoerd M Euser, Paul Badoux, Chantal Reusken, Louis Bont, Elisabeth Sanders, Vincent Jaddoe, Bjorn Herpers, Dirk Eggink, Joanne Wildenbeest, Liesbeth Duijts, Marlies van Houten

doi: <https://doi.org/10.1101/2021.12.10.21267600>

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Abstract

Info/History

Metrics

Preview PDF

### Abstract

**AIM:** The CoKids study aimed to estimate the community incidence of symptomatic and asymptomatic SARS-CoV-2 in children and parents and to assess the symptomatology of SARS-CoV-2 infections relative to SARS-CoV-2 negative respiratory episodes. **METHODS:** In this prospective study, households with at least one child <18 years were recruited from three existing Dutch cohorts. Participation included SARS-CoV-2 screening at 4-6 weeks intervals for

this age-group was 0.21/PY for confirmed only, and 0.41/PY if probable cases were included. SARS-CoV-2 incidence did not differ by age group ( $p>0.27$ ). Nasal congestion/runny nose, with or without cough and fatigue were the three most prevalent symptom clusters for both SARS-CoV-2 positive and negative respiratory episodes. Among children, no differences were observed in the symptomatology and severity of SARS-CoV-2 positive versus negative respiratory episodes, whereas among adults, SARS-CoV-2 positive episodes had a higher number and severity of symptoms and with a longer duration ( $p<0.001$ ). **CONCLUSION:** Using active, longitudinal household follow up, we detected a high incidence rate of SARS-CoV-2 infections in children that was similar to adults. The findings suggest that after 20 months of COVID-19 pandemic, up to 2/3 of Dutch children < 12 years have been infected with SARS-CoV-2. Symptomatology and disease severity of SARS-CoV-2 in children is similar to respiratory illness from other causes. In adults, SARS-COV-2 positive episodes are characterized by more and prolonged symptoms, and higher severity. These findings may assist decisions on COVID-19 policies targeting children.

### **Competing Interest Statement**

The authors have declared no competing interest.

### **Funding Statement**

The CoKids study is part of the COVID program funded by ZonMw (grant number: 10150062010006) and the National Institute for Public Health and the Environment (RIVM).





Francis Boulle 

@FrancisBoulle



FDA in their virtual meeting yesterday: "we were falsely misled by (Pfizer) about the safety of the vaccine...Heart attacks are 71x higher than other vaccines...the vaccines are killing two people for every one life saved" listen from the 4 hr 20 mark.



youtube.com

Vaccines and Related Biological Products Advisory Committee –...

# aspireren

## **Desinfectie**

Het is niet nodig om huid te desinfecteren (Hutin 2003).

De rubberen dop op de vaccinflacon is steriel of in een steriele omgeving geproduceerd. Dit is bij de fabrikanten nagevraagd. Voor de rubberen dop hanteren we het volgende beleid:

- Voor eenmalig doorprikken als meteen alle doses klaar gemaakt worden, hoeft de dop niet gedesinfecteerd te worden.
- Als het rubberdopje vaker doorgeprikt wordt, dan moet de dop vanaf de 2e keer iedere keer gedesinfecteerd worden.

## **Ontluchten van de injectiespuit**

De injectiespuit moet voor de injectie worden ontlucht tot de naaldopzet. Verder ontluchten kan gepaard gaan met vaccinverlies. Zie de instructies voor het klaarmaken van de vaccins (onder Downloads bij deze richtlijn).

## **Aspireren**

Controle op het aanprikken van een bloedvat voorafgaand aan het inspuiten van het vaccin is niet noodzakelijk.

## **Toediening van vrijwel volledige dosis**

Toediening van een (vrijwel) volledige dosis (>90%) van het vaccin is nodig. Als dat niet is toegediend, moet de vaccinatie direct worden herhaald. Dit mag in hetzelfde ledemaat. Een eventueel dubbele dosis is niet schadelijk en geeft ook niet meer bijwerkingen.

## 6.2 Plaats voor injectie en toedieningstechnieken

### Plaats voor injectie

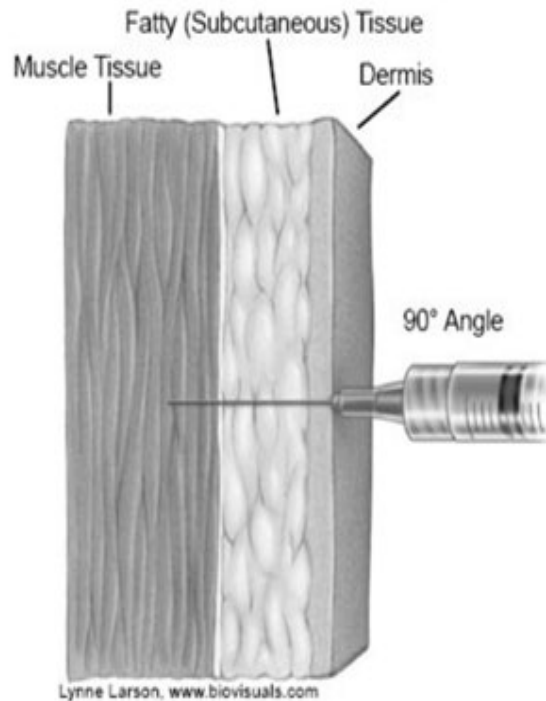
Het vaccin wordt intramusculair (i.m.) toegediend in de bovenarm (m. deltoïdeus). Als er niet in de bovenarm gevaccineerd kan worden, is het anterolaterale deel van het bovenbeen een alternatief (m. vastus lateralis).



In de bijsluiters van de vaccins en in [hoofdstuk 5](#) staan ook de aanbevolen injectieplaatsen per vaccin vermeld.

(afhankelijk van de afspraken binnen de organisatie).

9. Vaccinflacon en spuit kunnen na gebruik in het Wiva-vat of alternatief, zie [paragraaf 7.7](#).



NB. Bij mensen met meer subcutaan vet lukt het meestal om met de juiste vaccinatietechniek ook i.m. te vaccineren met een 25 mm lange naald. Dan is het belangrijk om de huid strak te trekken en vervolgens voldoende door te duwen bij het prikken om de spier goed te bereiken. Bij ernstige obesitas, in het geval van een te dikke subcutane vetlaag, kan het nodig zijn om een langere naald te gebruiken (38 mm). Bij het gebruik van een langere naald moet een normale hoeveelheid vaccin (0,3 ml of 0,5 ml, afhankelijk van het vaccin) in de toedieningsspuit opgetrokken worden. Bij twijfel over de juiste naaldlengte kan dit op de volgende manier gecontroleerd worden: pak de huidplooi tussen duim en wijsvinger en beoordeel de dikte: als de naald korter is dan de helft van de huidplooi, dan moet je een langere naald nemen. Op basis van gewicht of BMI wordt daarnaast bij de volgende waarden geadviseerd om met een langere naald (38 mm) te vaccineren:



# Is aspireren nodig?

213

votes

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Bij het vaccineren in de dorsogluteale streek, bestond de mogelijkheid om de arteria gluteae aan te prikken. Aspiratie (het optrekken van de zuiger alvorens de vloeistof in te spuiten om te controleren of een groot bloedvat is aangeprikt) is **niet noodzakelijk** omdat er geen grote bloedvaten aanwezig zijn **ter hoogte van** de aanbevolen injectieplaats, met name **de deltoideusspier en de anterolaterale zijde van de dij**, en omdat een vaccinatietechniek met aspiratie pijnlijker zou zijn.

Mocht er zonder aspiratie toch bloed in de spuit verschijnen, dan moet men het vaccin niet inspuiten, maar de spuit en naald terugtrekken, de naald vervangen door een nieuwe en de vaccinatie opnieuw uitvoeren met hetzelfde vaccin. Deze aanbeveling berust op de aanname dat bij het aanprikken van een groot bloedvat vanzelf bloed in de spuit verschijnt (ook zonder aspireren), en dat een kleiner bloedvat door de naald wordt kapot geprikt waardoor geen bloed in de spuit komt.

*Bron:*

1. Burgmeijer R, Hoppenbrouwers K. *Handboek vaccinaties, deel A (Theorie en uitvoering)*. Van Gorcum, 2011
2. CDC. *General recommendations on Immunization, Recommendations of the Advisory Committee on Immunization Practices (ACIP), 2011. MMWR 2011;60(2):1-64*

VWVJ Standaard Vaccinaties 2013 – deel 4.6.7

213 personen vinden deze informatie nuttig

Vaccinaties

<https://www.vwvj.be/faq/aspireren-nodig>

## Terugtrekken zuiger injectiespuit (aspireren)

Het terugtrekken van de zuiger van de injectiespuit na injecteren (aspireren) wordt gedaan om te controleren of de injectienaald per ongeluk in een bloedvat zit. Echter, er is geen bewijs dat dit fouten bij injecteren voorkomt. Aspiratie bevestigt niet een goede plaatsbepaling van de injectie<sup>2</sup>. Keuze van de juiste injectieplaats, de juiste lengte en dikte van de naald spelen daarbij een belangrijkere rol.

Aspiratie kan zinvol zijn wanneer de bil (musculus gluteus 'bovenste buitenste bilkwadrant', de rugzijde) als intramusculaire injectieplaats is gekozen. Wanneer de injectieplaats onjuist wordt bepaald bestaat het risico op het aanprikken van het bloedvat wat daar loopt<sup>1</sup>.

Gebruik in dat geval de juiste aspiratietechniek. Trek de zuiger van de injectiespuit langzaam (5-10 sec.) terug. Wanneer er bloed in de spuit verschijnt, verwijder en vervang de naald en kies een nieuwe injectieplaats. Vervang de injectievloeistof in de spuit wanneer er veel bloed in de spuit zit. Bij een beetje bloed is dat niet nodig.

---

<sup>1</sup> Intramusculaire inspuiten: een evidence-based procedure, Bernadette Geeraert et al., 2010 en Are techniques used for intramuscular injection based on research evidence?, Bridget Malkin et al., 2008.

<sup>2</sup> PPT Intramusculaire inspuiting: verder kijken dan de rituelen, Bernadette Geeraert, Lesius Mechelen (Ingezien augustus 2014).

## Injecteren griepvaccin intramusculair (Vaxigrip of Influvac)

### Omschrijving

Inspuiten Vaxigrip of Influvac loodrecht in een spier.

Opdracht tot voorbehouden of risicovolle handeling:	arts				
Mag zelfstandig verricht worden door:			3 IG	4	5

### Aandachtspunten

- Dien het medicijn toe volgens voorschrift.
- Neem kennis van de informatie op de bijsluiter.
- Deze werkinstructie beschrijft een kant-en-klaarspuit met injectienaald, gevuld met 0,5 ml vloeistof.
- Vaxigrip of Influvac mogen (volgens de bijsluiter van de fabrikant) intramusculair of diep subcutaan worden toegediend. In dit protocol wordt intramusculaire toediening beschreven. Vaxigrip en Influvac zijn de vaccins die het seizoen 2015 – 2016 zijn voorgeschreven.
- Dien het griepvaccin éénmaal per jaar toe. Kinderen die niet eerder griep hadden, krijgen na ten minste 4 weken een revaccinatie.
- Gebruik veilige naalden, indien beschikbaar.
- Vaxigrip en Influvac moeten in de koelkast bewaard worden in de verpakking ter bescherming tegen licht. Breng het vaccin vóór toediening op kamertemperatuur.
- Geschikt injectiegebied is het bovenste deel van de bovenarm (musculus deltoïdeus) bij volwassenen en oudere kinderen. Bij jonge kinderen is de boven- en buitenkant van het middelste deel van het bovenbeen (musculus lateralis) het meest geschikt. Vaccineer personen die geopereerd zijn aan mammacarcinoom niet in de arm aan de geopereerde zijde. Vaccineer bij een dubbelzijdige operatie in bil of been.
- Ontlucht een kant-en-klaarspuit niet, tenzij de fabrikant anders adviseert. De luchtbel in de spuit zorgt ervoor dat de vloeistof volledig wordt ingespoten. De luchtbel dient bij de zuiger te zitten. De fabrikant van Influvac adviseert de injectiespuit te ontluchten.
- Drukna injecteren, bij cliënten die bloedverdunders gebruiken (met een stabiele INR) de injectieplaats tenminste twee minuten af.
- Maak van een verkeerd toegediend en/of een niet gegeven injectie melding volgens de procedure van de organisatie.

Complicaties tijdens de handeling	Handelwijze
Er verschijnt (zonder aspiratie) bloed in de spuit na het inbrengen van de injectienaald.	Spuit het vaccin niet in. Trek de spuit terug, neem een nieuwe spuit en voer de gehele injectie opnieuw uit.
De injectie wordt halverwege onderbroken door bijvoorbeeld onverwachte beweging van de cliënt.	Voer de gehele injectie opnieuw uit.



LETTERS TO THE EDITOR | VOLUME 78, ISSUE 11, P1431-1433, NOVEMBER 01, 2003



PDF [72 KB] FI

## Acute Myocarditis Associated With Tetanus Vaccination

Embiya Dilber, MD • Tevfik Karagöz, MD • Kudret Aytemir, MD • ... Dursun Alehan, MD • Ali Oto, MD •

Alpay Çeliker, MD • [Show all authors](#)DOI: <https://doi.org/10.4065/78.11.1431-a>

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*To the Editor:* Millions of people undergo vaccination each year; thus, it is perhaps not surprising that a fraction develop adverse effects because of immunologic responses to the target antigen and to other nonspecific antigens contained within the vaccine. These immunologic reactions can result in aberrations in systemic physiology or direct injury to tissues and organs. Hypersensitivity myocarditis is an inflammatory disease of the myocardium, usually related to drug allergy. Many drugs have been reported as possible etiologic agents.<sup>1, 2</sup> We report a case of hypersensitivity myocarditis apparently related to a tetanus vaccination.



› Clin Infect Dis. 2021 Aug 18;ciab707. doi: 10.1093/cid/ciab707. Online ahead of print.

## Intravenous injection of COVID-19 mRNA vaccine can induce acute myopericarditis in mouse model

Can Li <sup>1</sup>, Yanxia Chen <sup>1</sup>, Yan Zhao <sup>1</sup>, David Christopher Lung <sup>2</sup>, Zhanhong Ye <sup>1</sup>, Wenchen Song <sup>1</sup>, Fei-Fei Liu <sup>1</sup>, Jian-Piao Cai <sup>1</sup>, Wan-Man Wong <sup>1</sup>, Cyril Chik-Yan Yip <sup>1</sup>, Jasper Fuk-Woo Chan <sup>1 3 4</sup>, Kelvin Kai-Wang To <sup>1 3</sup>, Siddharth Sridhar <sup>1 3</sup>, Ivan Fan-Ngai Hung <sup>3 5</sup>, Hin Chu <sup>1</sup>, Kin-Hang Kok <sup>1</sup>, Dong-Yan Jin <sup>6</sup>, Anna Jinxia Zhang <sup>1</sup>, Kwok-Yung Yuen <sup>1 3 4</sup>

Affiliations + expand

PMID: 34406358 PMID: PMC8436386 DOI: 10.1093/cid/ciab707

[Free PMC article](#)

### Erratum in

Corrigendum to: Intravenous Injection of Coronavirus Disease 2019 (COVID-19) mRNA Vaccine Can Induce Acute Myopericarditis in Mouse Model.

Li C, Chen Y, Zhao Y, Christopher Lung D, Ye Z, Song W, Liu FF, Cai JP, Wong WM, Chik-YanYip C, Fuk-Woo Chan J, Kai-Wang To K, Sridhar S, Fan-Ngai Hung I, Chu H, Kok KH, Jin DY, JinxiaZhang A, Yuen KY.

Clin Infect Dis. 2021 Nov 25;ciab941. doi: 10.1093/cid/ciab941. Online ahead of print.

PMID: 34849654 No abstract available.