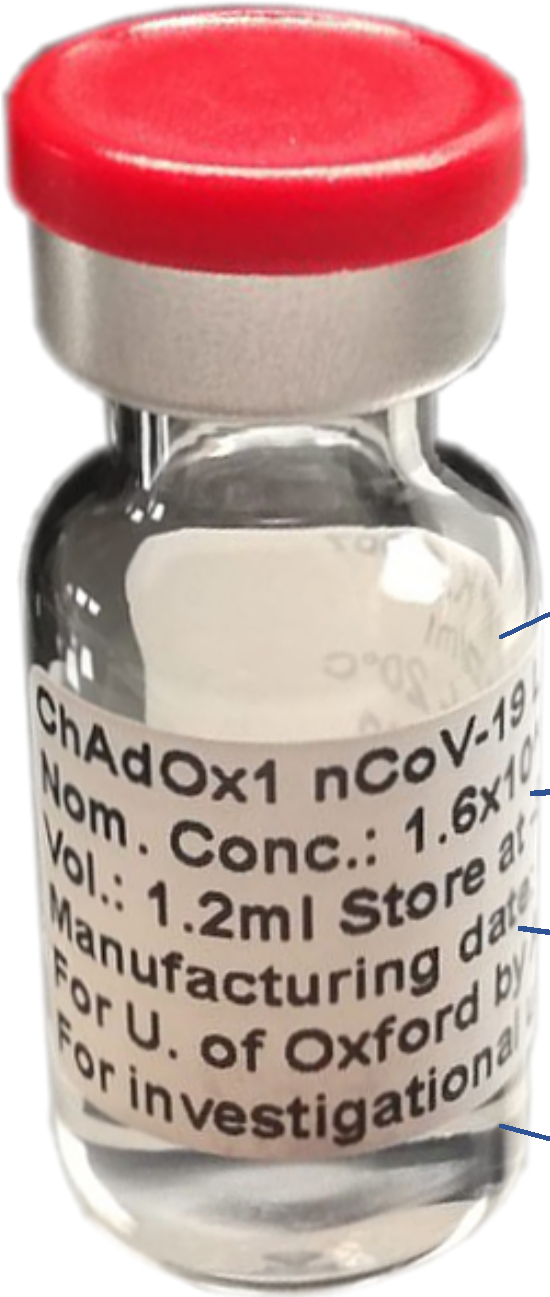
The Whole Truth

Covid-19
Covid-19 Vaccines

Professor Jean-Bernard Fourtillan
Doctor Christian Tal Schaller
Doctor Serge Rader
Frédéric Chaumont

August 20, 2020

The calamities of the Vaccine they want to inject in your body



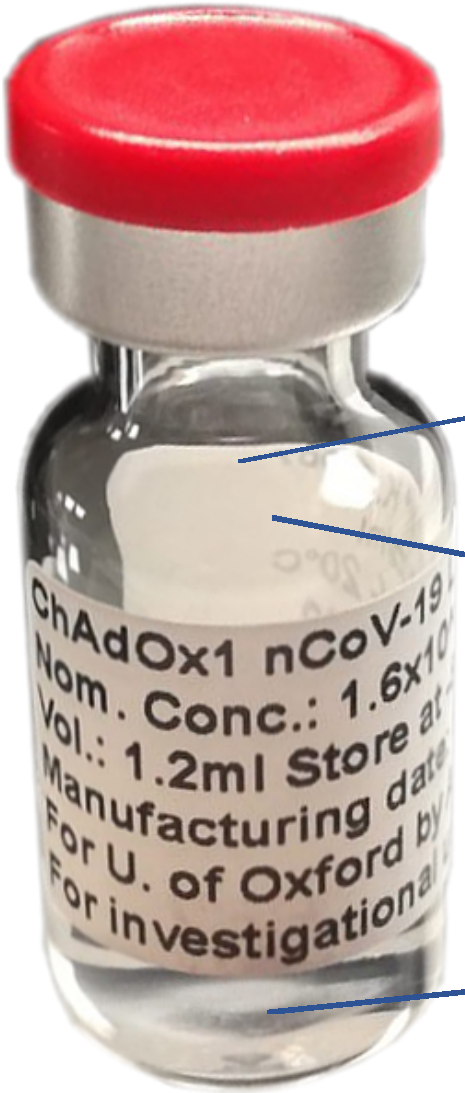
4 fragments of HIV1 which give to vaccinated people: **AIDS syndrom** and **Immunodeficiency** as a consequence

DNA sequences from the malaria germ which give **Malaria** to vaccinated people

157 additional DNA and protein sequences (see Patent US 8,243,718 B2), whose **presence** and **role** are **unexplained**

Nanoparticles which will allow **definitive control of people vaccinated** thanks to **5G**

The ChAdOx1 n-CoV-19 vaccine they want to inject in your body contains



ChAdOx1 n-CoV-19: **Covid-19** coronavirus carried by the vector virus **ChAdOx1**

Nanoparticles described in Microsoft Patent PCT/ US2019/ 038084,which will control you thanks to 5G

Disinfectants: either **Thimerosal** or **Formaldehyde** and antibiotics

COVID-19 is an artificial coronavirus made in France by the Institut Pasteur from natural Sars-CoV coronavirus

Covid-19 is the **result of several genetic manipulations** of a strain of Coronavirus **Sars-CoV,** associated with severe acute respiratory syndrome (SARS), **resulting from a sample** listed under the number 031589, **collected from bronchoalveolar washings of Sars infected patients by scientists of Institut Pasteur**, **before 2003**, at the **French hospital in Hanoi** (Vietnam)

- **1st Step: Sars-CoV-1** was produced bya **first patent** (2003: European Patent EP1694829 B1 and US Patent US 012.8224A1) **from Sars-CoV** collected in Hanoi before 2003
- **2nd Step: Sars-CoV-2** was **a continuation of the first US patent** US012.8224A1, protected by the **second US Patent** US 8,243,718B2 (2011), **from Sars-CoV-1**
- **3rd Step: Covid-19** was produced **from Sars-Cov-2** by **inserting** into its genome **4 sequences of HIV1** (RNA **AIDS virus**)

Finally

Covid-19 was **made in France** by French scientists at the Institut Pasteur **from** natural **Sars-CoV,** then **transferred to Wuhan** where **the People of Institut Pasteur released it, unbeknownst to scientists in the Wuhan laboratory and the Chinese government**

When she says: "Covid-19 is not a Chinese virus", CHINA DOES NOT LIE!

Doctor Frédéric Tangy is the father of the Covid-19

Doctor Frédéric Tangy
Director of Vaccine Innovation at the Institut Pasteur

Publications related to coronaviruses and vaccines

1- 2003: Inventor in Patents EP 1 694 829 B1 and US 012.8224 A1

2- 2005: Publication: Frédéric TANGY and Hussein Y. Naim.***Live Attenuated Measles Vaccine as a Potential Multivalent Pediatric Vaccination Vector.***
VIRAL IMMUNOLOGY, Volume 18, Number 2, 2005, page 317-326 See Document 2

3- 2011: Inventor in Patent US 8,343,718 B2

4- 2014: Publication: Nicolas Escriou, ,Benoît Callendret, Valérie Lorin, Chantal Combredet, Philippe Marianneau, Michèle Février, Frédéric Tangy. ***Protection contre le coronavirus du SRAS conférée par le vaccin vivant contre la rougeole exprimant la glycoprotéine de pointe.***
Virology, Volumes 452–453, March 2014, page 32-41

5- 2020: Paris-Match article from April 9-15, 2020

6- 2020: Paris-Match article from May 14-20, 2020

From Sars-CoV to Covid-19

INSTITUT PASTEUR

Sars-CoV

Collected, before 2003, at French hospital of Hanoi,
by Institut Pasteur (sample n° 031589)

1st Patent in 2003
Patent EP 1 694 829 B1
Patent US 012.8224 A1

1 DNA sequence of 29746 nucleotides
+ 157 DNA and PRT sequences
inserted into RNA genome of Sars-CoV

INSTITUT PASTEUR

Sars-CoV1

Frédéric Tangy

2nd Patent in 2011
Patent US 8,243,718 B2

CONTINUATION OF
Patent EP 1 694 829 B1
Patent US 012.8224 A1

INSTITUT PASTEUR

Sars-CoV2

Frédéric Tangy

3rd Patent in 2019
Patent filed in 2019
International Publication date in 2021

Insertion of 4 fragments of HIV1,
corresponding to short segments
of amino acids found in
the gp 120 and the Gag of HIV1,
in the Sars-CoV2 genome

INSTITUT PASTEUR

Covid-19

Frédéric Tangy

Covid-19: an artificial virus made in France

First Patent US 2007/0128224 A1

US 20070128224A1

(19) **United States**

(12) **Patent Application Publication**

(10) **Pub. No.: US 2007/0128224 A1**

(43) **Pub. Date: Jun. 7, 2007**

Van Der Werf et al.

(54) **NOVEL STRAIN OF SARS-ASSOCIATED CORONAVIRUS AND APPLICATIONS THEREOF**

(76) Inventors: **Sylvie Van Der Werf**, Gif-Sur-Yvette (FR); **Nicolas Escriou**, Paris (FR); **Bernadette Crescenzo-Chaigne**, Neuilly-Sur-Seine (FR); **Jean-Claude Manuguerra**, Paris (FR); **Frederick Kunst**, Paris (FR); **Benoit Callendret**, Nanterre (FR); **Jean-Michel Betton**, Paris (FR); **Valerie Lorin**, Montrouge (FR); **Sylvie Gerbaud**, Saint-Maur-Des-Fosses (FR); **Ana Maria Burguiere**, Clamart (FR); **Saliha Azebi**, Vitry-Sur-Seine (FR); **Pierre Charneau**, Paris (FR); **Frederic Tangy**, Les Lilas (FR); **Chantal Combredet**, Paris (FR); **Jean-Francois Delagneau**, La Celle Saint Cloud (FR); **Monique Martin**, Chatenay Malabry (FR)

Correspondence Address:
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413 (US)

(21) Appl. No.: **10/581,356**

(22) PCT Filed: **Dec. 2, 2004**

(86) PCT No.: **PCT/FR04/03106**

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(30) **Foreign Application Priority Data**

Dec. 2, 2003 (FR) 0314151
Dec. 2, 2003 (FR) 0314152

Publication Classification

(51) **Int. Cl.**

A61K	***39/215***	(2006.01)
C12Q	***1/70***	(2006.01)
C07H	***21/04***	(2006.01)
C07K	***14/165***	(2006.01)
C07K	***16/10***	(2006.01)
C12N	***5/06***	(2006.01)

(52) **U.S. Cl.** **424/221.1**; 435/5; 435/69.3; 435/326; 435/456; 530/350; 530/388.3; 536/23.72; 977/802

(57) **ABSTRACT**

The invention relates to a novel strain of severe acute respiratory syndrome (SARS)-associated coronavirus, resulting from a sample collected in Hanoi (Vietnam), reference number 031589, nucleic acid molecules originating from the genome of same, proteins and peptides coded by said nucleic acid molecules and, more specifically, protein N and the applications thereof, for example, as diagnostic reagents and/or as a vaccine.

Patent US 2007/0128224 A1

Claims 1

NOVEL STRAIN OF SARS-ASSOCIATED CORONAVIRUS AND APPLICATIONS THEREOF

[0001] The present invention relates to a novel strain of severe acute respiratory syndrome (SARS)-associated coronavirus derived from a sample recorded under No. 031589 and collected in Hanoi (Vietnam), to nucleic acid molecules derived from its genome, to the proteins and peptides encoded by said nucleic acid molecules and to their applications, in particular as diagnostic reagents and/or as vaccine.

[0002] Coronavirus is a virus containing single-stranded RNA, of positive polarity, of approximately 30 kilobases which replicates in the cytoplasm of the host cells; the 5' end of the genome has a capped structure and the 3' end contains a polyA tail. This virus is enveloped and comprises, at its surface, peplomeric structures called spicules.

Patent US 8,243,718 B2 continuation of First Patent US 2007/012.8224 A1

US008343718B2

(12) **United States Patent**
Van Der Werf et al.

(10) **Patent No.: US 8,343,718 B2**
(45) **Date of Patent: Jan. 1, 2013**

(54) **STRAIN OF SARS-ASSOCIATED CORONAVIRUS AND APPLICATIONS THEREOF**

(75) Inventors: **Sylvie Van Der Werf**, Gif-Sur-Yvette (FR); **Nicolas Escriou**, Paris (FR); **Bernadette Crescenzo-Chaigne**, Neuilly-Sur-Seine (FR); **Jean-Claude Manuguerra**, Paris (FR); **Frederik Kunst**, Paris (FR); **Benoît Callendret**, Nanterre (FR); **Jean-Michel Betton**, Paris (FR); **Valérie Lorin**, Montrouge (FR); **Sylvie Gerbaud**, Saint-Maur-Des-Fosses (FR); **Ana Maria Burguiere**, Clamart (FR); **Saliha Azebi**, Vitry-Sur-Seine (FR); **Pierre Charneau**, Paris (FR); **Frédéric Tangy**, Les Lilas (FR); **Chantal Combredet**, Paris (FR); **Jean-François Delagneau**, La Celle Saint Cloud (FR); **Monique Martin**, Chatenay Malabry (FR)

(73) Assignees: **Institut Pasteur**, Paris (FR); **Centre National de la Recherche Scientifique**, Paris (FR); **Universite Paris 7**, Paris (FR)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **12/754,908**

(22) Filed: **Apr. 6, 2010**

(65) **Prior Publication Data**

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Related U.S. Application Data

(60) Division of application No. 10/581,356, filed on Feb. 8, 2007, now Pat. No. 7,736,850, which is a continuation of application No. PCT/FR2004/003106, filed on Dec. 2, 2004.

(30) **Foreign Application Priority Data**

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Dec. 2, 2003 (FR) 03 14152

(51) **Int. Cl.**
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G01N 33/53 (2006.01)
G01N 33/542 (2006.01)
G01N 33/00 (2006.01)

(52) **U.S. Cl.** **435/5**; 435/7.1; 435/7.9; 435/7.92; 435/7.94; 435/7.95

(58) **Field of Classification Search** ..... None
See application file for complete search history.

(56) **References Cited**

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* cited by examiner

Primary Examiner — Louise Humphrey
(74) *Attorney, Agent, or Firm* — Finnegan, Henderson, Farabow, Garrett & Dunner L.L.P.

(57) **ABSTRACT**

The invention relates to a novel strain of severe acute respiratory syndrome (SARS)-associated coronavirus, resulting from a sample collected in Hanoi (Vietnam), reference number 031589, nucleic acid molecules originating from the genome of same, proteins and peptides coded by said nucleic acid molecules and, more specifically, protein N and the applications thereof, for example, as diagnostic reagents and/or as a vaccine.

8 Claims, 116 Drawing Sheets

From Covid-19 to ChAdOx1 n-CoV-19 Vaccine

Covid-19

Insertion of Covid-19 genome into the genome of a viral vector

(ChAdOx1 Chimpanzee DNA adenovirus)

Jenner Institute

Adrian Hill
Director of Jenner Institute

Covid-19 vaccine

ChAdOx1 nCoV-19 (AstraZeneca, Sanofi)

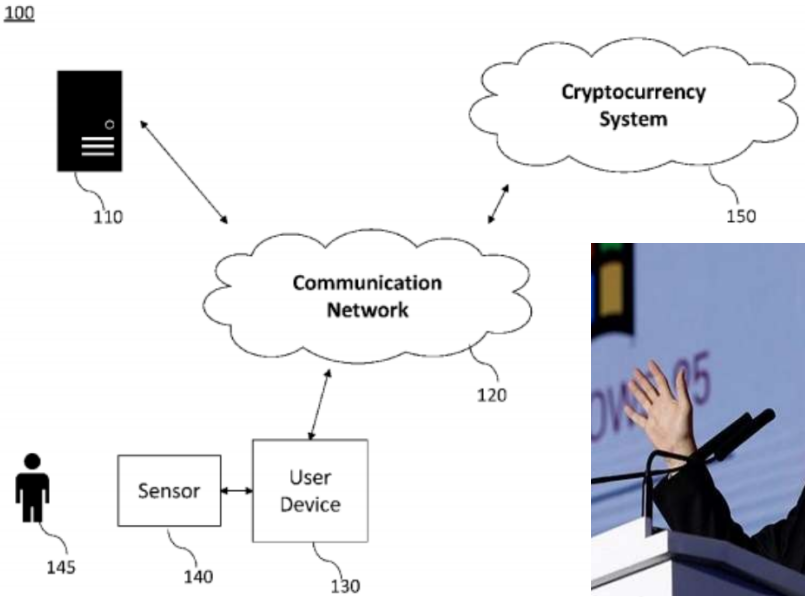
Insertion of tracing nanoparticles in the vaccine vial to be injected into the human body together with the vaccine

US Patent WO 2020/060606 A1
PCT/US20 19/038084 Microsoft

Final vaccine

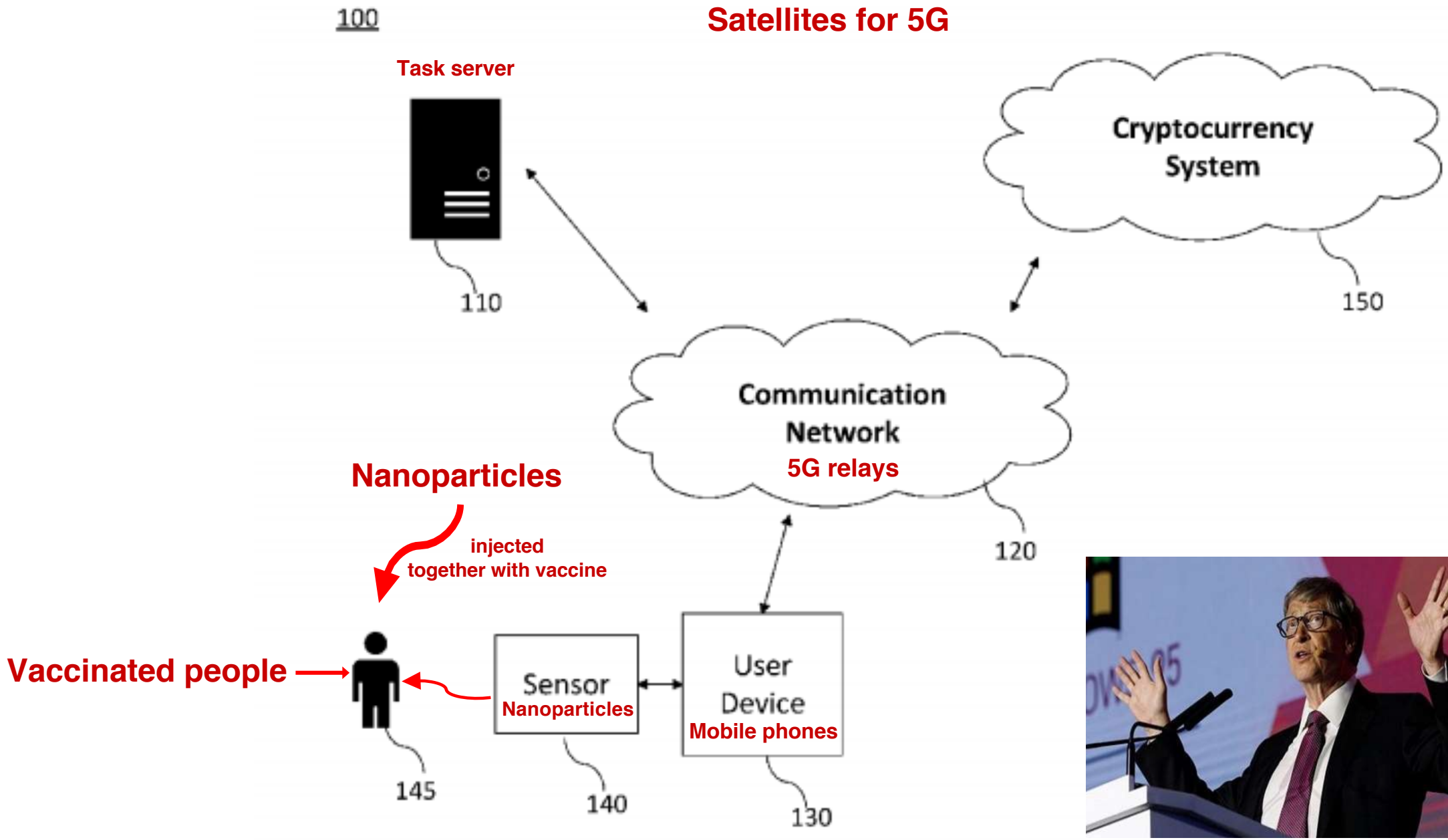
NANOPARTICLES OF Covid-19 VACCINES

CRYPTOCURRENCY SYSTEM USING BODY ACTIVITY DATA



Bill Gates

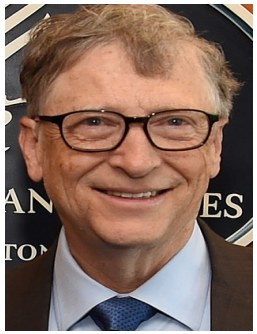
Nanoparticles they want to inject in your body together with ChAdOx1 nCovid-19 Vaccine



BillGates

Thrombinoscope of the promoters of the ChAdOx1 nCoV-19 vaccine

Bill Gates and his allies


Bill Gates

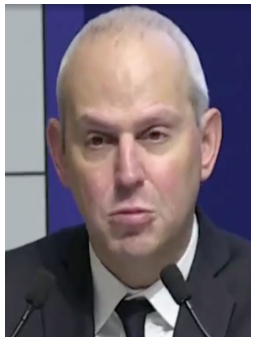

Emmanuel Macron


Jacques Attali


Agnès Buzyn

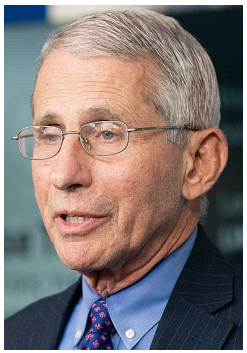

Yves Lévy


Olivier Véran


Jérôme Salomon


Dominique Martin


Tedros Adhanom Ghebreyesus


Anthony Fauci


Frédéric Tangy


Adrian Hill

WARNING

- **Covid-19 helped spark a false pandemic, a**nd **spread fear across the world**, **to make us accept the Covid-19 vaccine.**

- By seeking to vaccinate the entire world population, the sponsors of this vaccine, **Bill Gates and his allies**, want **to enslave** and **control us**, pursuing two objectives:

- **Control the entire world population** after having vaccinated it, **thanks to the deployment of 5G**;

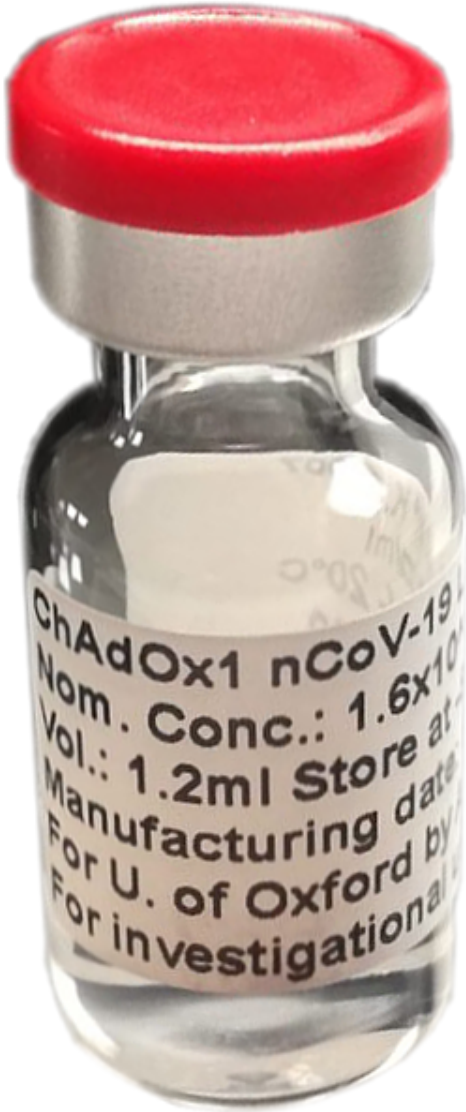
- **Limit the world's population**.

This vaccine is very dangerous because it **will cause**, in **vaccinated people**, **deleterious immunodeficiency**, due, in particular, to the **presence, in its genome**, of **4 RNA fragments from HIV**, the **AIDS virus**, and, moreover, **DNA fragments from** the **malaria germ**.

MEN WORLDWIDE MUST REFUSE COVID-19 VACCINE THAT BILL GATES AND ITS ALLIES WANT TO IMPOSE ON US

We invite all people
who consider information
of this video as Fake-News
to check their accuracy
on the links provided under this video

Data Sources of Information for the Truth about Covid-19 and ChAdOx1 nCoV-19 Vaccine are presented in the attached PDF below



PRELUDE

To fully **control** and **enslave** the **world's population**, by monitoring and weakening it, the leaders of the New World Order had **nothing better** at their disposal **than a Vaccine**. With this diabolical intention, they had many genetic manipulations carried out, on the genome of the Sars-CoV coronavirus responsible for the SARS epidemic that occurred between 2002 and 2003 in Asia.

The **Covid-19** coronavirus, **different from Sars-CoV2**, is an **artificial virus** that is the result of **many genetic manipulations** carried out on the **natural Sars-CoV** coronavirus, which successively led to 3 artificial coronaviruses **Sars-CoV1**, **Sars-CoV2**, and **Covid-19**, described in 3 patents filed by the Institut Pasteur, which provide their intellectual protections

In its genome, **Covid-19 carries**, among other calamities, **4 RNA fragments from HIV**, the AIDS virus, which corresponds to short segments of amino acids found in gp120 and Gag of HIV-1, which will place all vaccinated people in immunodeficiency, and **DNA fragments from the malaria germ**.

Men around the world must open their eyes and understand that **the natural Sars-CoV** coronavirus **poses no danger to humanity**, **unlike artificial Covid-19**. **Covid-19 helped spark a false pandemic**, and **spread fear** across the world, **to make us accept the Covid-19 vaccines.**

Numerical tracing **nanoparticles** have been **added to the vials of the final Covid-19 vaccine (ChAdOx1 nCoV-19)**.

By seeking to vaccinate the entire world population, the promoters of the Covid-19 vaccines pursue **two objectives**:

- **Control the entire world population** after having vaccinated it, **thanks to the deployment of 5G**, because these vaccines contain **nanoparticles** which will allow the **identification** and **permanent control** of vaccinated individuals;
- **Limit the world's population**.

From Sars-CoV to Covid-19

Doctor Frédéric Tangy is the father of the Covid-19

Doctor Frédéric Tangy
Director of Vaccine Innovation at the Institut Pasteur

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Finally

Covid-19 was **made in France** by French scientists at the Institut Pasteur from Sars-CoV, **then transferred to Wuhan** where the **French scientists of Institut Pasteur do let it escape, unbeknownst** to scientists in **the Wuhan laboratory and the Chinese government**

When she says: "Covid-19 is not a Chinese virus", CHINA DOES NOT LIE!

From Sars-CoV to Sars-CoV1

From Sars-CoV to Sars-CoV1

2003

INSTITUT PASTEUR

Institut Pasteur

Frédéric Tangy

1 DNA sequence of 29746 nucleotides
+ 157 DNA and PRT sequences
inserted into RNA genome of Sars-CoV

Sars-CoV → **Sars-CoV1**

Collected at French Hospital of Hanoi, by Institut Pasteur (sample n° 031589)

Patent EP 1 694 829 B1
Patent US 012.8224 A1

First Patent US 2007/0128224 A1

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Correspondence Address:
FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER LLP
901 NEW YORK AVENUE, NW
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Patent US 2007/0128224 A1

Claims 2

[0020] The subject of the present invention is therefore an isolated or purified strain of severe acute respiratory syndrome-associated human coronavirus, characterized in that its genome has, in the form of complementary DNA, a serine codon at position 23220-23222 of the gene for the S protein or a glycine codon at position 25298-25300 of the gene for ORF3, and an alanine codon at position 7918-7920 of ORF1a or a serine codon at position 26857-26859 of the gene for the M protein, said positions being indicated in terms of reference to the Genbank sequence AY274119.3.

[0021] According to an advantageous embodiment of said strain, the DNA equivalent of its genome has a sequence corresponding to the sequence SEQ ID No: 1; this coronavirus strain is derived from the sample collected from the bronchoaleveolar washings from a patient suffering from SARS, recorded under the No. 031589 and collected at the Hanoi (Vietnam) French hospital.

[0022] In accordance with the invention, said sequence SEQ ID No: 1 is that of the deoxyribonucleic acid corresponding to the ribonucleic acid molecule of the genome of the isolated coronavirus strain as defined above.

Insertion of a first DNA sequence (29746 nucleotides) in the genome of Sars-Cov collected in the French hospital at Hanoi (Vietnam)


```
                                                                  >< XhoII
                          >< ScrFI                                >< Sau3AI
                          >< MvaI                  > < TthHB8I    >< NdeII
                       >< EcoRII                   > < TaqI       >< MfII
                          >< Ecl136I                 >< Sau3AI    >< MboI
                       >< DsaV                     >< NdeII     >< DpnII
                          >< BstOI                 >< MboI>< MnlI>< DpnI
                          >< BstNI                 >< DpnII     >< BstYI
                          >< BsiLI                   >< DpnI    >< BspAI
                       >< BsaJI                    >< BspAI       >< Bsp143I
                          >< ApyI                    >< Bsp143I>< BglII
ATATTAGGTT TTTACCTACC CAGGAAAAGC CAACCAACCT CGATCTCTTG TAGATCTGTT CTCTAAACGA
        10         20         30         40         50         60         70
```



```
CGAGGGTACA GTGAATAATG CTAGGGAGAG CTGCCTATAT GGAAGAGCCC TAATGTGTAA AATTAATTTT
     29620      29630      29640      29650      29660      29670      29680

                          >< Tru9I   >< DdeI
                          >< MseI    >< BfrI
                    >< NlaIII    > < AluI
AGTAGTGCTA TCCCCATGTG ATTTTAATAG CTTCTTAGGA GAATGACAAA AAAAAAAAAA AAAAAA
     29690      29700      29710      29720      29730      29740
```

Listing of the 158 DNA and Protein sequences inserted, by Pasteur Institute people, into the Sars-CoV coronavirus, taken, in 2003, from a patient at the French hospital in Hanoi

SEQUENCE LISTING

<160> NUMBER OF SEQ ID NOS: 158

<210> SEQ ID NO 1
<211> LENGTH: 29746
<212> TYPE: DNA
<213> ORGANISM: CORONAVIRUS

Sars-CoV1: SEQUENCE 1 DNA

<400> SEQUENCE: 1

```
atattaggtt tttacctacc caggaaaagc caaccaacct cgatctcttg tagatctgtt      60

ctctaaacga actttaaaat ctgtgtagct gtcgctcggc tgcatgccta gtgcacctac     120

atctcacata gcaatcttta atcaatgtgt aacattaggg aggacttgaa agagccacca   29580

cattttcatc gaggccacgc ggagtacgat cgagggtaca gtgaataatg ctagggagag   29640

ctgcctatat ggaagagccc taatgtgtaa aattaatttt agtagtgcta tccccatgtg   29700

attttaatag cttcttagga gaatgacaaa aaaaaaaaaa aaaaaa                  29746
```

<212> TYPE: DNA
<213> ORGANISM: CORONAVIRUS
<220> FEATURE:
<221> NAME/KEY: CDS
<222> LOCATION: (89)..(3853)
<223> OTHER INFORMATION:

Sars-CoV1: SEQUENCE 2 DNA

<400> SEQUENCE: 2

```
ttctcttctg gaaaaaggta ggcttatcat tagagaaaac aacagagttg tggtttcaag      60

tgatattctt gttaacaact aaacgaac atg ttt att ttc tta tta ttt ctt        112
                                Met Phe Ile Phe Leu Leu Phe Leu
                                1               5

act ctc act agt ggt agt gac ctt gac cgg tgc acc act ttt gat gat       160
Thr Leu Thr Ser Gly Ser Asp Leu Asp Arg Cys Thr Thr Phe Asp Asp
    10                  15                  20

ctc aag ggt gca tgc  tct tgt ggt tct tgc  tgc aag ttt gat gag        3808
Leu Lys Gly Ala Cys  Ser Cys Gly Ser Cys  Cys Lys Phe Asp Glu
                1230                1235                1240

gat gac tct gag cca  gtt ctc aag ggt gtc  aaa tta cat tac aca        3853
Asp Asp Ser Glu Pro  Val Leu Lys Gly Val  Lys Leu His Tyr Thr
                1245                1250                1255

taaacgaact tatggatttg tttatgagat tttttactct tggatcaatt actgcacagc   3913

cagtaaaaat tgacaatgct tctcctgcaa gt                                 3945
```

Listing of the 158 DNA and Protein sequences inserted, by Pasteur Institute people, into the Sars-CoV coronavirus, taken, in 2003, from a patient at the French hospital in Hanoi

Following up

Sars-CoV1: SEQUENCE 3

PRT

```
<210> SEQ ID NO 3
<211> LENGTH: 1255
<212> TYPE: PRT
<213> ORGANISM: CORONAVIRUS

<400> SEQUENCE: 3

Met Phe Ile Phe Leu Leu Phe Leu Thr Leu Thr Ser Gly Ser Asp Leu
1               5                   10                  15

Asp Arg Cys Thr Thr Phe Asp Asp Val Gln Ala Pro Asn Tyr Thr Gln
            20                  25                  30
```

```
 Met Thr  Ser Cys Cys Ser Cys  Leu Lys Gly Ala Cys  Ser Cys Gly
     1220                1225                1230

 Ser Cys  Cys Lys Phe Asp Glu  Asp Asp Ser Glu Pro  Val Leu Lys
     1235                1240                1245

 Gly Val  Lys Leu His Tyr Thr
     1250                1255
```

Sars-CoV1: SEQUENCE 16

DNA

```
<210> SEQ ID NO 16
<211> LENGTH: 708
<212> TYPE: DNA
<213> ORGANISM: CORONAVIRUS
<220> FEATURE:
<221> NAME/KEY: CDS
<222> LOCATION: (41)..(703)
<223> OTHER INFORMATION:

<400> SEQUENCE: 16

tattattatt attctgtttg gaactttaac attgcttatc atg gca gac aac ggt      55
                                            Met Ala Asp Asn Gly
                                            1               5

act att acc gtt gag gag ctt aaa caa ctc ctg gaa caa tgg aac cta     103
Thr Ile Thr Val Glu Glu Leu Lys Gln Leu Leu Glu Gln Trp Asn Leu
                10                  15                  20
```

Sars-CoV1: SEQUENCE 28

PRT

```
<210> SEQ ID NO 28
<211> LENGTH: 39
<212> TYPE: PRT
<213> ORGANISM: CORONAVIRUS

<400> SEQUENCE: 28

Met Lys Leu Leu Ile Val Leu Thr Cys Ile Ser Leu Cys Ser Cys Ile
1               5                   10                  15

Cys Thr Val Val Gln Arg Cys Ala Ser Asn Lys Pro His Val Leu Glu
```

Listing of the 158 DNA and Protein sequences inserted, by Pasteur Institute people, into the Sars-CoV coronavirus, taken, in 2003, from a patient at the French hospital in Hanoi

Following up

<210> SEQ ID NO 31
<211> LENGTH: 21221
<212> TYPE: DNA
<213> ORGANISM: CORONAVIRUS

Sars-CoV1: SEQUENCE 31

DNA

<400> SEQUENCE: 31

atggagagcc ttgttcttgg tgtcaacgag aaaacacacg tccaactcag tttgcctgtc 60

cttcaggtta gagacgtgct agtgcgtggc ttcggggact ctgtggaaga ggccctatcg 120

gaggcacgtg aacacctcaa aaatggcact tgtggtctag tagagctgga aaaaggcgta 180

ctgccccagc ttgaacagcc ctatgtgttc attaaacgtt ctgatgcctt aagcaccaat 240

ctaactacat tttctggagg aacacaaatc ctatccagtt gtcttcctat tcactctttg 21060

acatgagcaa atttcctctt aaattaagag gaactgctgt aatgtctctt aaggagaatc 21120

aaatcaatga tatgatttat tctcttctgg aaaaaggtag gcttatcatt agagaaaaca 21180

acagagttgt ggtttcaagt gatattcttg ttaacaacta a 21221

<210> SEQ ID NO 46
<211> LENGTH: 1995
<212> TYPE: DNA
<213> ORGANISM: CORONAVIRUS

Sars-CoV1: SEQUENCE 46

DNA

<400> SEQUENCE: 46

tttgtgcact catactcgct tacagtaata aaactgttgg cgagcttggt gatgtcagag 60

aaactatgac ccatcttcta cagcatgcta atttggaatc tgcaaagcga gttcttaatg 120

<210> SEQ ID NO 55
<211> LENGTH: 32
<212> TYPE: DNA
<213> ORGANISM: artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: N sens primer

Sars-CoV1: SEQUENCE 55

DNA

<400> SEQUENCE: 55

cccatatgtc tgataatgga ccccaatcaa ac

Listing of the 158 DNA and Protein sequences inserted, by Pasteur Institute people, into the Sars-CoV coronavirus, taken, in 2003, from a patient at the French hospital in Hanoi

Following up

Sars-CoV1: SEQUENCE 61

DNA

<210> SEQ ID NO 61
<211> LENGTH: 16
<212> TYPE: DNA
<213> ORGANISM: Antisens set 2 (28774-28759) primer

<400> SEQUENCE: 61

cagtttcacc acctcc

Sars-CoV1: SEQUENCE 69

PRT

<210> SEQ ID NO 69
<211> LENGTH: 13
<212> TYPE: PRT
<213> ORGANISM: artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: M2-14 peptide

<400> SEQUENCE: 69

Ala Asp Asn Gly Thr Ile Thr Val Glu Glu Leu Lys Gln
1 5 10

Sars-CoV1: SEQUENCE 73

DNA

<210> SEQ ID NO 73
<211> LENGTH: 410
<212> TYPE: DNA
<213> ORGANISM: CORONAVIRUS

<400> SEQUENCE: 73

ttctccagac aacttcaaaa ttccatgagt ggagcttctg ctgattcaac tcaggcataa 60

acactcatga tgaccacaca aggcagatgg gctatgtaaa cgttttcgca attccgttta 120

cgatacatag tctactcttg tgcagaatga attctcgtaa ctaaacagca caagtaggtt 180

Sars-CoV1: SEQUENCE 74

PRT

<210> SEQ ID NO 74
<211> LENGTH: 4382
<212> TYPE: PRT
<213> ORGANISM: CORONAVIRUS

<400> SEQUENCE: 74

Met Glu Ser Leu Val Leu Gly Val Asn Glu Lys Thr His Val Gln Leu
1 5 10 15

Ser Leu Pro Val Leu Gln Val Arg Asp Val Leu Val Arg Gly Phe Gly
20 25 30

Listing of the 158 DNA and Protein sequences inserted, by Pasteur Institute people, into the Sars-CoV coronavirus, taken, in 2003, from a patient at the French hospital in Hanoi

Following up

Sars-CoV1: SEQUENCE 88

DNA

<210> SEQ ID NO 88
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: S/L6/-/10542 primer

<400> SEQUENCE: 88

cctgtgcagt ttgtctgtca

Sars-CoV1: SEQUENCE 89

DNA

<210> SEQ ID NO 89
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: S/L6/+/10677 primer

<400> SEQUENCE: 89

ccttgtggca atgaagtaca

Sars-CoV1: SEQUENCE 90

DNA

<210> SEQ ID NO 90
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: S/L6/+/10106 primer

<400> SEQUENCE: 90

atgtcatttg cacagcagaa

Sars-CoV1: SEQUENCE 91

DNA

<210> SEQ ID NO 91
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: S/L6/+/9571 primer

<400> SEQUENCE: 91

cttcaatggt ttgccatgtt

Listing of the 158 DNA and Protein sequences inserted, by Pasteur Institute people, into the Sars-CoV coronavirus, taken, in 2003, from a patient at the French hospital in Hanoi

Following up

Sars-CoV1: SEQUENCE 121

DNA

<210> SEQ ID NO 121
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: S/L11/+/19021 primer

<400> SEQUENCE: 121

acgatgctca gccatgtagt

Sars-CoV1: SEQUENCE 122

DNA

<210> SEQ ID NO 122
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: SARS/L1/F3/+/800 primer

<400> SEQUENCE: 122

gaggtgcagt cactcgctat

Sars-CoV1: SEQUENCE 123

DNA

<210> SEQ ID NO 123
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: SARS/L1/F4/+/1391 primer

<400> SEQUENCE: 123

cagagattgg acctgagcat

Sars-CoV1: SEQUENCE 124

DNA

<210> SEQ ID NO 124
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: SARS/L1/F5/+/1925 primer

<400> SEQUENCE: 124

cagcaaacca ctcaattcct

Listing of the 158 DNA and Protein sequences inserted, by Pasteur Institute people, into the Sars-CoV coronavirus, taken, in 2003, from a patient at the French hospital in Hanoi

Following up

Sars-CoV1: SEQUENCE 140

DNA

<210> SEQ ID NO 140
<211> LENGTH: 7788
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: synthetic S gene

<400> SEQUENCE: 140

tcaatattgg ccattagcca tattattcat tggttatata gcataaatca atattggcta 60

ttggccattg catacgttgt atctatatca taatatgtac atttatattg gctcatgtcc 120

aatatgaccg ccatgttggc attgattatt gactagttat taatagtaat caattacggg 180

gtcattagtt catagcccat atatggagtt ccgcgttaca taacttacgg taaatggccc 240

Sars-CoV1: SEQUENCE 157

DNA

<210> SEQ ID NO 157
<211> LENGTH: 20
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: PCR primer

<400> SEQUENCE: 157

ccatttcaac aatttggccg

Sars-CoV1: SEQUENCE 158

DNA

<210> SEQ ID NO 158
<211> LENGTH: 45
<212> TYPE: DNA
<213> ORGANISM: Artificial sequence
<220> FEATURE:
<223> OTHER INFORMATION: PCR primer

<400> SEQUENCE: 158

ataggatccg cgcgctcatt atttatcgtc gtcatcttta taatc

From Sars-CoV1 to Sars-CoV2

From Sars-CoV1 to Sars-CoV2

2011

INSTITUT PASTEUR

Institut Pasteur

Frédéric Tangy

CONTINUATION OF
Patent EP 1 694 829 B1
Patent US 012.8224 A1

Sars-CoV1 → **Sars-CoV2**

Produced by inserting 1 DNA sequence (29746 nucleotides) + 157 DNA and PRT sequences into the Sars-CoV RNA genome

Patent US 8,243,718 B2

Patent US 8,243,718 B2 continuation of First Patent US 2007/012.8224 A1

US008343718B2

(12) **United States Patent**
Van Der Werf et al.

(10) **Patent No.: US 8,343,718 B2**
(45) **Date of Patent: Jan. 1, 2013**

(54) **STRAIN OF SARS-ASSOCIATED CORONAVIRUS AND APPLICATIONS THEREOF**

(75) Inventors: **Sylvie Van Der Werf**, Gif-Sur-Yvette (FR); **Nicolas Escriou**, Paris (FR); **Bernadette Crescenzo-Chaigne**, Neuilly-Sur-Seine (FR); **Jean-Claude Manuguerra**, Paris (FR); **Frederik Kunst**, Paris (FR); **Benoît Callendret**, Nanterre (FR); **Jean-Michel Betton**, Paris (FR); **Valérie Lorin**, Montrouge (FR); **Sylvie Gerbaud**, Saint-Maur-Des-Fosses (FR); **Ana Maria Burguiere**, Clamart (FR); **Saliha Azebi**, Vitry-Sur-Seine (FR); **Pierre Charneau**, Paris (FR); **Frédéric Tangy**, Les Lilas (FR); **Chantal Combredet**, Paris (FR); **Jean-François Delagneau**, La Celle Saint Cloud (FR); **Monique Martin**, Chatenay Malabry (FR)

(73) Assignees: **Institut Pasteur**, Paris (FR); **Centre National de la Recherche Scientifique**, Paris (FR); **Universite Paris 7**, Paris (FR)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **12/754,908**

(22) Filed: **Apr. 6, 2010**

(65) **Prior Publication Data**

US 2011/0065089 A1 Mar. 17, 2011

Related U.S. Application Data

(60) Division of application No. 10/581,356, filed on Feb. 8, 2007, now Pat. No. 7,736,850, which is a continuation of application No. PCT/FR2004/003106, filed on Dec. 2, 2004.

(30) **Foreign Application Priority Data**

Dec. 2, 2003 (FR) 03 14151
Dec. 2, 2003 (FR) 03 14152

(51) **Int. Cl.**
C12Q 1/70 (2006.01)
G01N 33/53 (2006.01)
G01N 33/542 (2006.01)
G01N 33/00 (2006.01)

(52) **U.S. Cl.** **435/5**; 435/7.1; 435/7.9; 435/7.92; 435/7.94; 435/7.95

(58) **Field of Classification Search** ..... None
See application file for complete search history.

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Primary Examiner — Louise Humphrey
(74) *Attorney, Agent, or Firm* — Finnegan, Henderson, Farabow, Garrett & Dunner L.L.P.

(57) **ABSTRACT**

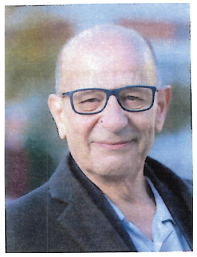
The invention relates to a novel strain of severe acute respiratory syndrome (SARS)-associated coronavirus, resulting from a sample collected in Hanoi (Vietnam), reference number 031589, nucleic acid molecules originating from the genome of same, proteins and peptides coded by said nucleic acid molecules and, more specifically, protein N and the applications thereof, for example, as diagnostic reagents and/or as a vaccine.

8 Claims, 116 Drawing Sheets

From Sars-CoV2 to Covid-19

From Sars-CoV2 to Covid-19

2019



Institut Pasteur Frédéric Tangy

Insertion of 4 fragments of HIV1,
corresponding to short segments of a. a..
found in the gp 120 and the Gag of HIV1,
in the Sars-CoV2 genome

Sars-CoV2 → **Covid-19**

Patent filed in 2019

International Publication date in 2021

Transformation of Sars-CoV-2 into Covid-19

The **Sars-CoV-2** coronavirus, described in **US Patent 8,343,718 B2** , is an RNA virus into the genome of which **DNA sequences**, **but not RNA sequences**, have been inserted.

Recently, and simultaneously, **Professor Luc Montagnier** and a **group of Indian scientists** have **analyzed** and **decrypted** the **complete genome of the Covid-19** coronavirus responsible for the pandemic.

They found in the Covid-19genome:

- **sequences of HIV**, the **AIDS virus** (4 fragments of HIV1 RNA which correspond to short segments of amino acids found in the gp120 and the Gag of HIV1);
- and **DNA sequences** from the **malaria** germ.

These results have been published and confirmed by **Professor Peter Chumakov**, a well-known Russian microbiologist, and Japanese **Professor Tasuku Honjo**, 2018 Nobel Prize laureate in medicine. **Since there was no RNA sequence in Sars-CoV-2** described in **US Patent 8,343,718 B2**, this analysis proves that **Covid-19 is the result of genetic manipulation of Sars-CoV-2** by **French scientists from the Institut Pasteur.**

Interview with professor Luc Montagnier by doctor Jean-François Lemoine
Health site: Medical Frequency and Why Doctor
(Thursday April 16, 2020)

To read this interview, see DOCUMENT 1

To read the full article see DOCUMENT 2

VIRAL IMMUNOLOGY, Volume 18, Number 2,
2005 © Mary Ann Liebert, Inc.
Pages 317-326

Review

Live Attenuated Measles Vaccine as a Potential Multivalent Pediatric Vaccination Vector

FRÉDÉRIC TANGY[1] and HUSSEIN Y. NAIM[2]

(**1**- Unité des Virus Lents, CNRS URA 1930, Institut Pasteur, Paris, France. **2**- Berna Biotech LTD, Rehhagstrasse 79, 3018 Bern, Switzerland)

ABSTRACT

Live attenuated RNA viruses make highly efficient vaccines. Among them is the **live attenuated measles virus (MV) vaccine** that has been given to a very large number of children and has been shown to be highly efficacious and safe. MV vaccine induces a life-long immunity after a single injection or two low-dose injections. It is easily produced on a large scale in most countries and can be distributed at low cost. Reversion to pathogenicity bas never been observed with this vaccine. For all of these characteristics, **developing of MV vaccine vector as a multivalent vaccine to immunize children against both measles and other infectious agents such as human immunodeficiency virus (HIV), flaviviruses, or malaria** might be very promising for worldwide use. As MV vaccine is inexpensive to produce, the generation of recombinant vaccines may remain affordable and attractive for the developing world. In this article, we describe the **development of MV vector and present some recent data showing the capacity of recombinant MV vaccine to express various proteins from HIV and West Nile virus**. In addition, the ability of recombinant MV to induce specific immune responses against these different pathogens are presented and discussed.

Interview with Doctor Frédéric Tangy
Paris-Match article from April 9-15, 2020

To read this interview

See DOCUMENT 3 (Original) and DOCUMENT 4 (English traduction)

Elaboration of Covid-19 vaccine according to Dr Frédéric Tangy

The complete and detailed «recipe» for one Covid 19 vaccine, was given to us by Dr Frédéric Tangy, head of Vaccine Innovation at the Institut Pasteur in Paris, in an interview with the newspaper Paris-Match, in the 9-15 edition April 2020 (See Documents 3 and 4)

Thus, as explained perfectly to us by Dr. Frédéric Tangy - who is decidedly very talkative - **the spike glycoprotein of Covid-19, which contains the 4 RNA sequences of HIV**- which is clear from the **group's analysis of Indian researchers**, **but was hidden** (like **DNA sequences of malaria** genome) by scientists at the Institut Pasteur - **is intended**, he said, **to induce immunity in the vaccine**, serving as an antigen after insertion into the genome of the attenuated measles virus (who remember it is an RNA virus). But, obviously, it does not tell us that the RNA HIV nucleic acids, which have already been previously inserted into the genome of Sars-CoV2 coronavirus, are those of HIV. And, since it is not in the Sars-CoV-2 coronavirus genome, one wonders where it came from !

It should be noted that Dr. Frédéric Tangy gave this interview a few days before that of Pr Luc Montagnier

From Covid-19 to Covid-19 Vaccines

From Covid-19 to Covid-19 Vaccines

Covid-19

Insertion of Covid-19 genome into the genome of a viral vector

(ChAdOx1 chimpanzee DNA adenovirus)

Jenner Institute

Adrian Hill

Covid-19 vaccines

ChAdOx1 nCoV-19 (AstraZeneca, Sanofi)

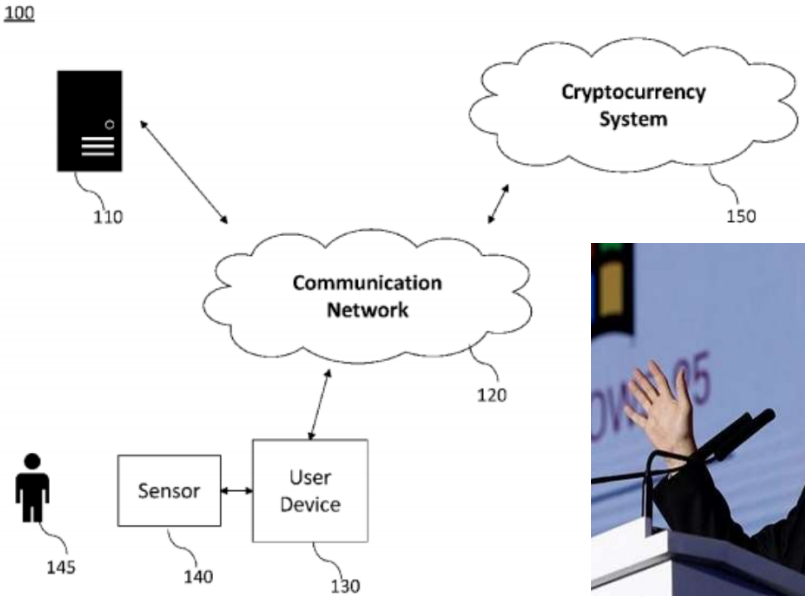
Insertion of tracing nanoparticles in the vaccine vial to be injected into the human body together with the vaccine

US Patent WO 2020/060606 A1
PCT/US20 19/038084 Microsoft

Final vaccine

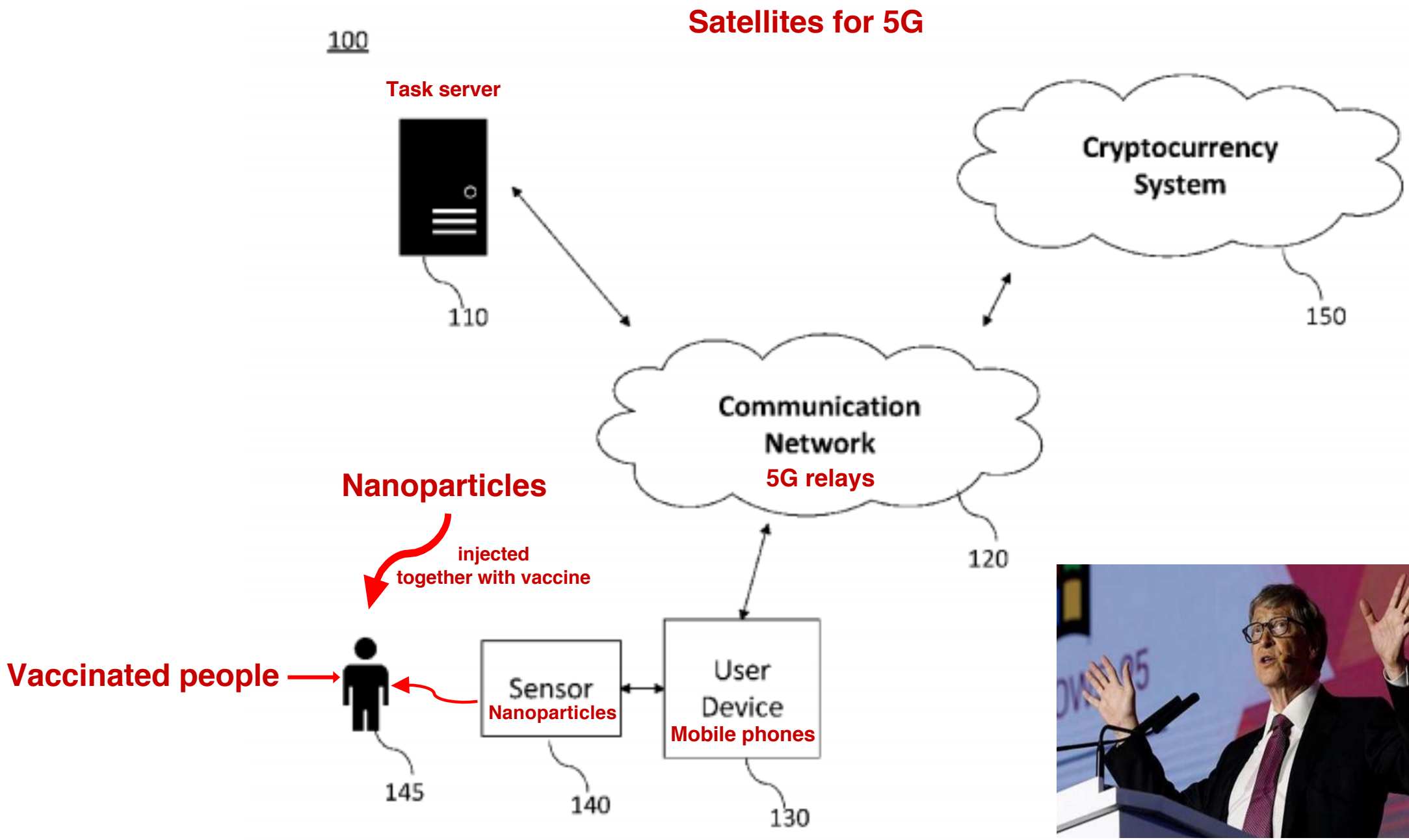
NANOPARTICLES OF Covid-19 VACCINES

CRYPTOCURRENCY SYSTEM USING BODY ACTIVITY DATA



Bill Gates

NANOPARTICLES OF Covid-19 VACCINES



BillGates

Nanoparticles and the permanent control of vaccinated people

The **nanoparticles** described in the Microsoft patent (US Patent WO 2020/060606 A1) are **sensors** which **must be diffused in the body of the vaccinated person**, **in order** to be able **to detect it**

Introduced into the vaccine vial, **they are injected into the body, together with the vaccine**, at the time of vaccination

Once they are in the body, they cannot be gotten rid of, unlike a subcutaneous digital tracing microchip. From this moment, **the vaccinated people will be detectable by any mobile phone located nearby**.

Mobile phones are **connected to the internet by 5G**

5G relays allow this **communication** through **satellites 5G**.

The vaccinated people will have lost definitely all freedom in their existence

Are 160 Covid-19 vaccines really in development?

According to information provided by the NIH and WHO, 160 vaccines against Covid-19 are under development

The list of the 160 candidates for Covid-19 vaccines in development was compiled by the NIH

**Of these160 candidates
only 21 clinical study protocols
have been written by the NIH**

List of candidates for Covid-19 vaccines in development

DRAFT landscape of COVID-19 candidate vaccines – 7 July 2020

21 candidate vaccines in clinical evaluation

Platform	Type of candidate vaccine	Developer	Coronavirus target	Current stage of clinical evaluation/regulatory status-Coronavirus candidate	Same platform for non-Coronavirus candidates
Inactivated	Inactivated + alum	Sinovac	SARS-CoV2	Phase 3 NCT04456595 Phase 1/2 NCT04383574 NCT04352608	SARS
Non-Replicating Viral Vector	ChAdOx1-S	University of Oxford/AstraZeneca	SARS-CoV2	Phase 3 ISRCTN89951424 Phase2b/3 2020-001228-32 Phase 1/2 PACTR202006922165132 2020-001072-15	MERS, influenza, TB, Chikungunya, Zika, MenB, plague
Non-Replicating Viral Vector	Adenovirus Type 5 Vector	CanSino Biological Inc./Beijing Institute of Biotechnology	SARS-CoV2	Phase 2 ChiCTR2000031781 Phase 1 ChiCTR2000030906	Ebola
RNA	LNP-encapsulated mRNA	Moderna/NIAID	SARS-CoV2	Phase 2 NCT04405076 Phase 1 NCT04283461	multiple candidates
DNA	DNA plasmid vaccine with electroporation	Inovio Pharmaceuticals/ International Vaccine Institute	SARS-CoV2	Phase 1/2 NCT04447781 NCT04336410	multiple candidates
DNA	DNA plasmid vaccine	Cadila Healthcare Limited	SARS-CoV2	Phase 1/2 CTRI/2020/07/026352 (not yet recruiting)	
Inactivated	Inactivated	Wuhan Institute of Biological Products/Sinopharm	SARS-CoV2	Phase 1/2 ChiCTR2000031809	
Inactivated	Inactivated	Beijing Institute of Biological Products/Sinopharm	SARS-CoV2	Phase 1/2 ChiCTR2000032459	
Protein Subunit	Full length recombinant SARS CoV-2 glycoprotein nanoparticle vaccine adjuvanted with Matrix M	Novavax	SARS-CoV2	Phase 1/2 NCT04368988	RSV; CCHF, HPV, VZV, EBOV
RNA	3 LNP-mRNAs	BioNTech/Fosun Pharma/Pfizer	SARS-CoV2	Phase 1/2 2020-001038-36 NCT04368728	
DNA	DNA Vaccine (GX-19)	Genexine Consortium	SARS-CoV2	Phase 1 NCT04445389	
DNA	DNA plasmid vaccine + Adjuvant	Osaka University/ AnGes/ Takara Bio	SARS-CoV2	Phase 1 JapicCTI-205328	

FOLLOWING

Inactivated	Inactivated	Institute of Medical Biology , Chinese Academy of Medical Sciences	SARS-CoV2	Phase 1 NCT04412538	
Non-Replicating Viral Vector	Adeno-based	Gamaleya Research Institute	SARS-CoV2	Phase 1 NCT04436471 NCT04437875	
Protein Subunit	Native like Trimeric subunit Spike Protein vaccine	Clover Biopharmaceuticals Inc./GSK/Dynavax	SARS-CoV2	Phase 1 NCT04405908	HIV, REV Influenza
Protein Subunit	Adjuvanted recombinant protein (RBD-Dimer)	Anhui Zhifei Longcom Biopharmaceutical/ Institute of Microbiology, Chinese Academy of Sciences	SARS-CoV2	Phase 1 NCT04445194	MERS
Protein Subunit	Recombinant spike protein with Advax™ adjuvant	Vaxine Pty Ltd/Medytox	SARS-CoV2	Phase 1 NCT04453852	
RNA	LNP-nCoVsaRNA	Imperial College London	SARS-CoV2	Phase 1 ISRCTN17072692	EBOV; LASV, MARV, Inf (H7N9), RABV
RNA	mRNA	Curevac	SARS-CoV2	Phase 1 NCT04449276	RABV, LASV, YFV; MERS, InfA, ZIKV, DENV, NIPV
RNA	mRNA	People's Liberation Army (PLA) Academy of Military Sciences/Walvax Biotech.	SARS-CoV2	Phase 1 ChiCTR2000034112	
VLP	Plant-derived VLP	Medicago Inc./ Université Laval	SARS-CoV2	Phase 1 NCT04450004 (not yet recruiting)	Flu, Rotavirus, Norovirus, West Nile virus, Cancer

FOLLOWING

139 candidate vaccines in preclinical evaluation

Platform	Type of candidate vaccine	Developer	Coronavirus target	Current stage of clinical evaluation/regulatory status- Coronavirus candidate	Same platform for non-Coronavirus candidates
DNA	DNA vaccine	Ege University	SARS-CoV2	Pre-Clinical	
DNA	DNA plasmid vaccine RBD&N	Scancell/University of Nottingham/ Nottingham Trent University	SARS-CoV2	Pre-Clinical	
DNA	DNA plasmid vaccine S,S1,S2,RBD &N	National Research Centre, Egypt	SARS-CoV2	Pre-Clinical	
DNA	DNA with electroporation	Karolinska Institute / Cobra Biologics (OPENCORONA Project)	SARS-CoV2	Pre-Clinical	
DNA	DNA with electroporation	Chula Vaccine Research Center	SARS-CoV2	Pre-Clinical	
DNA	DNA	Takis/Applied DNA Sciences/Evvivax	SARS-CoV2	Pre-Clinical	
DNA	Plasmid DNA, Needle-Free Delivery	Immunomic Therapeutics, Inc./EpiVax, Inc./PharmaJet	SARS-CoV2	Pre-Clinical	SARS
DNA	DNA vaccine	BioNet Asia	SARS-CoV2	Pre-Clinical	
DNA	msDNA vaccine	Mediphage Bioceuticals/University of Waterloo	SARS-CoV2	Pre-Clinical	
DNA	DNA vaccine	Entos Pharmaceuticals	SARS-CoV2	Pre-Clinical	
DNA	bacTRL-Spike	Symvivo	SARS-CoV2	Pre-Clinical	
Inactivated	Inactivated + alum	KM Biologics	SARS-CoV2	Pre-Clinical	JE, Zika
Inactivated	Inactivated	Selcuk University	SARS-CoV2	Pre-Clinical	
Inactivated	Inactivated whole virus	National Research Centre, Egypt	SARS-CoV2	Pre-Clinical	
Inactivated	Inactivated	Beijing Minhai Biotechnology Co., Ltd.	SARS-CoV2	Pre-Clinical	

Inactivated	TBD	Osaka University/ BIKEN/ NIBIOHN	SARS-CoV2	Pre-Clinical	
Inactivated	Inactivated + CpG 1018	Sinovac/Dynavax	SARS-CoV2	Pre-Clinical	
Inactivated	Inactivated + CpG 1018	Valneva/Dynavax	SARS-CoV2	Pre-Clinical	
Inactivated	Inactivated	Research Institute for Biological Safety Problems, Rep of Kazakhstan	SARS-CoV2	Pre-Clinical	
Live Attenuated Virus	Codon deoptimized live attenuated vaccines	Mehmet Ali Aydinlar University / Acıbadem Labmed Health Services A.S.	SARS-CoV2	Pre-Clinical	
Live Attenuated Virus	Codon deoptimized live attenuated vaccines	Codagenix/Serum Institute of India	SARS-CoV2	Pre-Clinical	HAV, InfA, ZIKV, FMD, SIV, RSV, DENV
Live Attenuated Virus	Codon deoptimized live attenuated vaccines	Indian Immunologicals Ltd/Griffith University	SARS-CoV2	Pre-Clinical	
Non-Replicating Viral Vector	Sendai virus vector	ID Pharma	SARS-CoV2	Pre-Clinical	
Non-Replicating Viral Vector	Adenovirus-based	Ankara University	SARS-CoV2	Pre-Clinical	
Non-Replicating Viral Vector	Adeno-associated virus vector (AAVCOVID)	Massachusetts Eye and Ear/Massachusetts General Hospital/AveXis	SARS-CoV2	Pre-Clinical	
Non-Replicating Viral Vector	MVA encoded VLP	GeoVax/BravoVax	SARS-CoV2	Pre-Clinical	LASV, EBOV, MARV, HIV
Non-Replicating Viral Vector	Ad26	Janssen Pharmaceutical Companies	SARS-CoV2	Pre-Clinical	Ebola, HIV, RSV
Non-Replicating Viral Vector	Replication defective Simian Adenovirus (GRAd) encoding SARS-CoV-2 S	ReiThera/LEUKOCARE/Univercells	SARS-CoV2	Pre-Clinical	
Non-replicating viral vector	MVA-S encoded	DZIF – German Center for Infection Research/IDT Biologika GmbH	SARS-CoV2	Pre-clinical	Many
Non-replicating viral vector	MVA-S	IDIBAPS-Hospital Clinic, Spain	SARS-CoV2	Pre-clinical	
Non-Replicating Viral Vector	adenovirus-based NasoVAX expressing SARS2-CoV spike protein	Altimmune	SARS-CoV2	Pre-Clinical	influenza
Non-Replicating Viral Vector	[E1-, E2b-, E3-] hAd5-COVID19-Spike/Nucleocapsid	ImmunityBio, Inc. & NantKwest, Inc.	SARS-CoV2	Pre-Clinical	flu, Chik, Zika, EBOV, LASV, HIV/SIV,Cancer
Non-Replicating Viral Vector	Ad5 S (GREVAX™ platform)	Greffex	SARS-CoV2	Pre-Clinical	MERS
Non-Replicating Viral Vector	Oral Ad5 S	Stabilitech Biopharma Ltd	SARS-CoV2	Pre-Clinical	Zika, VZV, HSV-2 and Norovirus
Non-Replicating Viral Vector	adenovirus-based + HLA-matched peptides	Valo Therapeutics Ltd	Pan-Corona	Pre-Clinical	
Non-Replicating Viral Vector	Oral Vaccine platform	Vaxart	SARS-CoV2	Pre-Clinical	InfA, CHIKV, LASV, NORV; EBOV, RVF, HBV, VEE
Non-Replicating Viral Vector	MVA expressing structural proteins	Centro Nacional Biotecnología (CNB-CSIC), Spain	SARS-CoV2	Pre-Clinical	Multiple candidates
Non-Replicating Viral Vector	Dendritic cell-based vaccine	University of Manitoba	SARS-CoV2	Pre-Clinical	

Non-Replicating Viral Vector	parainfluenza virus 5 (PIV5)-based vaccine expressing the spike protein	University of Georgia/University of Iowa	SARS-CoV2	Pre-Clinical	MERS
Non-Replicating Viral Vector	Recombinant deactivated rabies virus containing S1	Bharat Biotech/Thomas Jefferson University	SARS-CoV2	Pre-Clinical	HeV, NiV, EBOV, LASSA, CCHFV, MERS
Non-Replicating Viral Vector	Influenza A H1N1 vector	National Research Centre, Egypt	SARS-CoV2	Pre-Clinical	
Non-Replicating Viral Vector	Inactivated Flu-based SARS-CoV2 vaccine + Adjuvant	National Center for Genetic Engineering and Biotechnology (BIOTEC) /GPO, Thailand	SARS-CoV2	Pre-Clinical	
Protein Subunit	Recombinant S protein	Izmir Biomedicine and Genome Center	SARS-CoV2	Pre-Clinical	
Protein Subunit	Peptide + novel adjuvant	Bogazici University	SARS-CoV2	Pre-Clinical	
Protein Subunit	S subunit intranasal liposomal formulation with GLA/3M052 adjs.	University of Virginia	SARS-CoV2	Pre-Clinical	
Protein Subunit	Subunit	Helix Biogen Consult, Ogbomoso & Trinity Immonoefficient Laboratory, Ogbomoso, Oyo State, Nigeria.	SARS-CoV2	Pre-Clinical	
Protein Subunit	Protein Subunit S,N,M&S1 protein	National Research Centre, Egypt	SARS-CoV2	Pre-Clinical	
Protein Subunit	Protein Subunit	University of San Martin and CONICET, Argentina	SARS-CoV2	Pre-Clinical	
Protein Subunit	RBD protein fused with Fc of IgG + Adj.	Chulalongkorn University/GPO, Thailand	SARS-CoV2	Pre-Clinical	
Protein Subunit	Capsid-like Particle	AdaptVac (PREVENT-nCoV consortium)	SARS-CoV2	Pre-Clinical	
Protein Subunit	Drosophila S2 insect cell expression system VLPs	ExpreS2ion	SARS-CoV2	Pre-Clinical	
Protein Subunit	Peptide antigens formulated in LNP	IMV Inc	SARS-CoV2	Pre-Clinical	
Protein Subunit	S protein	WRAIR/USAMRIID	SARS-CoV2	Pre-Clinical	
Protein Subunit	S protein +Adjuvant	National Institute of Infectious Disease, Japan/Shionogi/UMN Pharma	SARS-CoV2	Pre-Clinical	Influenza
Protein Subunit	VLP-recombinant protein + Adjuvant	Osaka University/ BIKEN/ National Institutes of Biomedical Innovation, Japan	SARS-CoV2	Pre-Clinical	
Protein Subunit	microneedle arrays S1 subunit	Univ. of Pittsburgh	SARS-CoV2	Pre-Clinical	MERS
Protein Subunit	Peptide	Vaxil Bio	SARS-CoV2	Pre-Clinical	
Protein Subunit	Adjuvanted protein subunit (RBD)	Biological E Ltd	SARS-CoV2	Pre-Clinical	
Protein Subunit	Peptide	Flow Pharma Inc	SARS-CoV2	Pre-Clinical	Ebola, Marburg, HIV, Zika, Influenza, HPV therapeutic vaccine, BreastCA vaccine
Protein Subunit	S protein	AJ Vaccines	SARS-CoV2	Pre-Clinical	
Protein Subunit	Ii-Key peptide	Generex/EpiVax	SARS-CoV2	Pre-Clinical	Influenza, HIV, SARS-CoV
Protein Subunit	S protein	EpiVax/Univ. of Georgia	SARS-CoV2	Pre-Clinical	H7N9
Protein Subunit	Protein Subunit EPV-CoV-19	EpiVax	SARS-CoV2	Pre-Clinical	
Protein Subunit	S protein (baculovirus production)	Sanofi Pasteur/GSK	SARS-CoV2	Pre-Clinical	Influenza, SARS-CoV

Protein Subunit	gp-96 backbone	Heat Biologics/Univ. Of Miami	SARS-CoV2	Pre-Clinical	NSCLC, HIV, malaria, Zika
Protein Subunit	Molecular clamp stabilized Spike protein	University of Queensland/GSK/Dynavax	SARS-CoV2	Pre-Clinical	Nipah, influenza, Ebola, Lassa
Protein Subunit	Peptide vaccine	FBRI SRC VB VECTOR, Rospotrebnadzor, Koltsovo	SARS-CoV2	Pre-Clinical	Ebola
Protein Subunit	Subunit vaccine	FBRI SRC VB VECTOR, Rospotrebnadzor, Koltsovo	SARS-CoV2	Pre-Clinical	
Protein Subunit	S1 or RBD protein	Baylor College of Medicine	SARS-CoV2	Pre-Clinical	SARS
Protein Subunit	Subunit protein, plant produced	iBio/CC-Pharming	SARS-CoV2	Pre-Clinical	
Protein Subunit	Recombinant protein, nanoparticles (based on S-protein and other epitopes)	Saint-Petersburg scientific research institute of vaccines and serums	SARS-CoV2	Pre-Clinical	
Protein Subunit	COVID-19 XWG-03 truncated S (spike) proteins	Innovax/Xiamen Univ./GSK	SARS-CoV2	Pre-Clinical	HPV
Protein Subunit	Adjuvanted microsphere peptide	VIDO-InterVac, University of Saskatchewan	SARS-CoV2	Pre-Clinical	
Protein Subunit	Synthetic Long Peptide Vaccine candidate for S and M proteins	OncoGen	SARS-CoV2	Pre-Clinical	
Protein Subunit	Oral E. coli-based protein expression system of S and N proteins	MIGAL Galilee Research Institute	SARS-CoV2	Pre-Clinical	
Protein Subunit	Nanoparticle vaccine	LakePharma, Inc.	SARS-CoV2	Pre-Clinical	
Protein Subunit	Plant-based subunit (RBD-Fc + Adjuvant)	Baiya Phytopharm/ Chula Vaccine Research Center	SARS-CoV2	Pre-Clinical	
Protein Subunit	OMV-based vaccine	Quadram Institute Biosciences	SARS-CoV2	Pre-Clinical	Flu A, plague
Protein Subunit	OMV-based vaccine	BiOMViS Srl/Univ. of Trento	SARS-CoV2	Pre-Clinical	
Protein subunit	structurally modified spherical particles of the tobacco mosaic virus (TMV)	Lomonosov Moscow State University	SARS-CoV2	Pre-Clinical	rubella, rotavirus
Protein Subunit	Spike-based	University of Alberta	SARS-CoV2	Pre-Clinical	Hepatitis C
Protein Subunit	Recombinant S1-Fc fusion protein	AnyGo Technology	SARS-CoV2	Pre-Clinical	
Protein Subunit	Recombinant protein	Yisheng Biopharma	SARS-CoV2	Pre-Clinical	
Protein Subunit	Recombinant S protein in IC-BEVS	Vabiotech	SARS-CoV2	Pre-Clinical	
Protein Subunit	Orally delivered, heat stable subunit	Applied Biotechnology Institute, Inc.	SARS-CoV2	Pre-Clinical	
Protein Subunit	S-2P protein + CpG 1018	Medigen Vaccine Biologics Corporation/NIAID/Dynavax	SARS-CoV2	Pre-Clinical	
Protein Subunit	Peptides derived from Spike protein	Axon Neuroscience SE	SARS-CoV2	Pre-Clinical	
Protein Subunit	Protein Subunit	MOGAM Institute for Biomedical Research, GC Pharma	SARS-CoV2	Pre-Clinical	
Protein Subunit	RBD-based	Neovii/Tel Aviv University	SARS-CoV2	Pre-Clinical	
Protein Subunit	RBD-based	Kentucky Bioprocessing, Inc	SARS-CoV2	Pre-Clinical	
Protein Subunit	Outer Membrane Vesicle (OMV)-subunit	Intravacc/Epivax	SARS-CoV2	Pre-Clinical	
Protein Subunit	Outer Membrane Vesicle(OMV)-peptide	Intravacc/Epivax	SARS-CoV2	Pre-Clinical	

Protein Subunit	Spike-based (epitope screening)	ImmunoPrecise/LiteVax BV	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	YF17D Vector	KU Leuven	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	Measles Vector	Cadila Healthcare Limited	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	Measles Vector	Institute Pasteur/Themis/Univ. of Pittsburg Center for Vaccine Research/Merck	SARS-CoV2	Pre-Clinical	West nile, chik, Ebola, Lassa, Zika
Replicating Viral Vector	Measles Vector	FBRI SRC VB VECTOR, Rospotrebnadzor, Koltsovo	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	Measles Virus (S, N targets)	DZIF – German Center for Infection Research/CanVirex AG	SARS-CoV2	Pre-clinical	Zika, H7N9, CHIKV
Replicating Viral Vector	Horsepox vector expressing S protein	Tonix Pharma/Southern Research	SARS-CoV2	Pre-Clinical	Smallpox, monkeypox
Replicating Viral Vector	Live viral vectored vaccine based on attenuated influenza virus backbone (intranasal)	BiOCAD and IEM	SARS-CoV2	Pre-Clinical	Influenza
Replicating Viral Vector	Recombinant vaccine based on Influenza A virus, for the prevention of COVID-19 (intranasal)	FBRI SRC VB VECTOR, Rospotrebnadzor, Koltsovo	SARS-CoV2	Pre-Clinical	Influenza
Replicating Viral Vector	Attenuated Influenza expressing an antigenic portion of the Spike protein	Fundação Oswaldo Cruz and Instituto Buntantan	SARS-CoV2	Pre-Clinical	Influenza
Replicating Viral Vector	Influenza vector expressing RBD	University of Hong Kong	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	Replication-competent VSV chimeric virus technology (VSVΔG) delivering the SARS-CoV-2 Spike (S) glycoprotein.	IAVI/Merck	SARS-CoV2	Pre-Clinical	Ebola, Marburg, Lassa
Replicating Viral Vector	VSV-S	University of Western Ontario	SARS-CoV2	Pre-Clinical	HIV, MERS
Replicating Viral Vector	VSV vector	FBRI SRC VB VECTOR, Rospotrebnadzor, Koltsovo	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	VSV-S	Israel Institute for Biological Research/Weizmann Institute of Science	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	M2-deficient single replication (M2SR) influenza vector	UW–Madison/FluGen/Bharat Biotech	SARS-CoV2	Pre-Clinical	influenza
Replicating Viral Vector	Newcastle disease virus vector (NDV-SARS-CoV-2/Spike)	Intravacc/ Wageningen Bioveterinary Research/Utrecht Univ.	SARS-CoV2	Pre-Clinical	
Replicating Viral Vector	Avian paramyxovirus vector (APMV)	The Lancaster University, UK	SARS-CoV2	Pre-Clinical	
RNA	mRNA	Selcuk University	SARS-CoV2	Pre-Clinical	
RNA	LNP-mRNA	Translate Bio/Sanofi Pasteur	SARS-CoV2	Pre-Clinical	
RNA	LNP-mRNA	CanSino Biologics/Precision NanoSystems	SARS-CoV2	Pre-Clinical	
RNA	LNP-encapsulated mRNA cocktail encoding VLP	Fudan University/ Shanghai JiaoTong University/RNACure Biopharma	SARS-CoV2	Pre-Clinical	
RNA	LNP-encapsulated mRNA encoding RBD	Fudan University/ Shanghai JiaoTong University/RNACure Biopharma	SARS-CoV2	Pre-Clinical	
RNA	Replicating Defective SARS-CoV-2 derived RNAs	Centro Nacional Biotecnología (CNB-CSIC), Spain	SARS-CoV2	Pre-Clinical	
RNA	LNP-encapsulated mRNA	University of Tokyo/ Daiichi-Sankyo	SARS-CoV2	Pre-Clinical	MERS

RNA	Liposome-encapsulated mRNA	BIOCAD	SARS-CoV2	Pre-Clinical	
RNA	Several mRNA candidates	RNAimmune, Inc.	SARS-CoV2	Pre-Clinical	
RNA	mRNA	FBRI SRC VB VECTOR, Rospotrebnadzor, Koltsovo	SARS-CoV2	Pre-Clinical	
RNA	mRNA	China CDC/Tongji University/Stermina	SARS-CoV2	Pre-Clinical	
RNA	mRNA	Arcturus/Duke-NUS	SARS-CoV2	Pre-Clinical	multiple candidates
RNA	LNP-mRNA	Chula Vaccine Research Center/University of Pennsylvania	SARS-CoV2	Pre-Clinical	
RNA	mRNA in an intranasal delivery system	eTheRNA	SARS-CoV2	Pre-Clinical	
RNA	mRNA	Greenlight Biosciences	SARS-CoV2	Pre-Clinical	
RNA	mRNA	IDIBAPS-Hospital Clinic, Spain	SARS-CoV2	Pre-Clinical	
VLP	VLP	Middle East Technical University	SARS-CoV2	Pre-Clinical	
VLP	Enveloped Virus-Like Particle (eVLP)	VBI Vaccines Inc.	SARS-CoV-2, SARS-CoV, & MERS-CoV	Pre-Clinical	CMV, GBM, Zika
VLP	S protein integrated in HIV VLPs	IrsiCaixa AIDS Research/IRTA-CReSA/Barcelona Supercomputing Centre/Grifols	SARS-CoV2	Pre-Clinical	
VLP	VLP + Adjuvant	Mahidol University/ The Government Pharmaceutical Organization (GPO)/Siriraj Hospital	SARS-CoV2	Pre-Clinical	
VLP	Virus-like particles, lentivirus and baculovirus vehicles	Navarrabiomed, Oncoimmunology group	SARS-CoV2	Pre-Clinical	
VLP	Virus-like particle, based on RBD displayed on virus-like particles	Saiba GmbH	SARS-CoV2	Pre-Clinical	
VLP	ADDomerTM multiepitope display	Imophoron Ltd and Bristol University's Max Planck Centre	SARS-CoV2	Pre-Clinical	
VLP	Unknown	Doherty Institute	SARS-CoV2	Pre-Clinical	
VLP	VLP	OSIVAX	SARS-CoV1 SARS-CoV2	Pre-Clinical	
VLP	eVLP	ARTES Biotechnology	SARS-CoV2	Pre-Clinical	malaria
VLP	VLPs peptides/whole virus	Univ. of Sao Paulo	SARS-CoV2	Pre-Clinical	
Unknown	Unknown	Tulane University	SARS-CoV2	Pre-Clinical	

The time required to develop a new vaccine since the discovery of a new virus until the Marketing Authorization

At least 13 years

- **Identification of the virus** responsible for the epidemic: **1 year**

- **Development of a vaccine: 8 years,** according to Dr Frédéric Tangy in Paris-Match from 14-20 May 2020

- **Preclinical studies** :analytical, galenical, and toxicological in animals: **1 year**

- **Study in humans:**

  - **Phase I:** in **healthy volunteers** after favorable opinion of Protection Committee, and **Free** an **Informed Consent** of healthy voluntary subjects : **6 months** to **1 year**

  - **Phase II**: in **100** to **1000 subjects** after favorable opinion of Protection Committee and **Free** and **Informed Consent** of all subjects: **6 months** to **1 year**

  - **Phase III:** in **10 000** to **100 000 subjects or more** after favorable opinion of Protection Committee and **Free** and **Informed Consent** of all subjects**: 6 months** to **1 year**

During development you cannot go from one study phase to the next, without having the results of the previous phase

Protocols for clinical studies of 2 Covid-19 vaccines

ChAdOx1 nCoV-19 and mRNA-1273 vaccines

(Written by the N.I.H.)

1- Protocol of the University of Oxford / Astra Zeneca Phase I study with the ChAdOx1 nCoV-19 vaccine

- **Sponsor** of the study: Research Services, University Offices Wellington Square, Oxford, 1200, United Kingdom
- **Country** of the study: **South Africa**
- **Summary of the study:** A Phase I/II, double-blinded, placebo-controlled, individually randomized trial to assess safety, immunogenicity and efficacy of the candidate Coronavirus disease (COVID-19) vaccine ChAdOx1 nCoV-19 in adults aged 18-65 years living with and without HIV in South Africa. The vaccine or placebo will be administered via an intramuscular injection into the deltoid muscle of the non dominant arm. A total of 2000 participants will be enrolled into the trial; 1950 HIV-uninfected and 50 people living with HIV. There will be 4 trial groups, group 1 (n=50; intensive safety & immunogenicity cohort, HIV negative), group 2a (n=250; safety, intense immunogenicity & efficacy), group 2b (n=1650; safety, immunogenicity & vaccine efficacy) and group 3 (n=50, intensive safety & immunogenicity cohort, HIV positive). Participants will be followed up for 12 months after enrollment.
- **Ethics Approval:** approval given on May, 21, 2020, by University of the Witwatersrand Human Research Ethics Committee Medical, 31 Princess of Wales Terrace, Parktown, Johannesburg, 2193, South Africa
- **2000 healthy** volunteer **subjects** aged **between 18** and **65 years**
- **Starting** of the study: **June 24, 2020**
- **End** of the study: **December 31, 2021**

Protocols for clinical studies of 2 Covid-19 vaccines
ChAdOx1 nCoV-19 and mRNA-1273 vaccines

(Written by the N.I.H.)

Following

2 - Protocol of the University of Oxford / Astra Zeneca Phase II / III study with the ChAdOx1 nCoV-19 vaccine

- **Title of the study:** A phase 2/3 study to determine the efficacy, safety and immunogenicity of the candidate Coronavirus Disease (COVID-19) vaccine ChAdOx1 nCoV-19

- **Country** of the study: **United-Kingdom**

- **Sponsor of the study:** ResearchServices, University Offices WellingtonSquare, Oxford, 1200, United Kingdom

- **Summary of the study:** To evaluate the efficacy of the candidate ChAdOx1nCoV-19 in adults aged 18 and over.To assess the safety of the ChAdOx1 nCoV-19 vaccine candidate in adults and children.To assess the safety, tolerability and reactogenicity profile of the ChAdOx1 nCoV-19 candidate

- **Favorable opinion** of the Competent Authority: April 5, 2020

- **Favorable opinion** of the Ethics Committee: April 8, 2020

- **12 390 healthy volunteer subjects** divided into 4 age groups: **60 under** the age of **18. 60 children** aged between **2** and **11** years old. **12,030 adults** aged between **18** and **64** years old. **240 subjects** aged **over 65**

- **Starting** of the study: **May, 2020**

- **End** of the study: **May, 2021**

Protocols for clinical studies of 2 Covid-19 vaccines ChAdOx1 nCoV-19 and mRNA-1273 vaccines

(Written by the N.I.H.)

Following

3- University of Oxford / Astra Zeneca Phase III study protocol with ChAdOx1 nCoV-19 vaccine

- **Title of the study**: A phase III randomized controlled trial to determine safety, efficacy, and immunogenicity of the non-replicating **ChAdOx1 nCoV-19 vaccine**

- **Country** of the study: **Brazil**

- **Ethics approval**: Approval pending:
  1. The National Commission for Research Ethics (Comissão Nacional de Ética em Pesquisa, (CONEP) - Brazil
  2. Oxford Tropical Research Ethics Committee (OxTREC) - UK

- **2000 healthy volunteer subjects aged between 18 and 55 years**

- **Starting** of the study: **May 1, 2020**

- **End** of the study: **July 31, 2021**

Protocols for clinical studies of 2 Covid-19 vaccines
ChAdOx1 nCoV-19 and mRNA-1273 vaccines

(Written by the N.I.H.)
Following

4- Protocol for Phase I study of Moderna with their new vaccine mARN-1273

- **Title of the study**: Safety and Immunogenicity Study of 2019-nCoV Vaccine (mRNA-1273) for Prophylaxis of SARS-CoV2 Infection COVID-19. This is a **phase I**, open-label, **dose-ranging clinical trial** in males and nemales, starting at 18 years of age

- **Sponsor of the study**: National Institute of Allergy and Infectious Diseases (NIAID)

- **Country** of the study: **United States of America** (Georgia, Maryland, Washington)

- **Summary** of the study: This is a **phase I, open-label, dose-ranging clinical trial** in males and non-pregnant females, starting 18 years of age, inclusive, who are in good health and meet all eligibility criteria. This clinical trial is designed to assess the safety, reactogenicity and immunogenicity of mRNA-1273 manufactured by ModernaTX, Inc. mRNA-1273 is a novel lipid nanoparticle (LNP)-encapsulated mRNA-based vaccine that encodes for a full-length, prefusion stabilized spike (S) protein of SARS-CoV-2. Enrollment will occur at up to 3 domestic clinical research sites. One hundred and fifty-five subjects will be enrolled into one of thirteen cohorts (10 micrograms [mcg], 25 mcg, 50 mcg, 100 mcg, and 250 mcg). Subjects will receive an intramuscular (IM) injection (0.5 milliliters [mL]) of mRNA-1273 on Days 1 and 29 in the deltoid muscle and will be followed through 12 months post second vaccination (Day 394). Follow-up visits will occur 1, 2, and 4 weeks post each vaccination (Days 8, 15, 29, 36, 43, and 57), as well as 3, 6, and 12 months post second vaccination (Days 119, 209, and 394).

- **Ethics approval**: ???

- **155 healthy volunteer** subjects aged **between 18** and **99** years

- **Starting** of the study: **March 16, 2020**

- **End** of the study: **November 22, 2021**

Protocols for clinical studies of 2 Covid-19 vaccines
ChAdOx1 nCoV-19 and mRNA-1273 vaccines

(Written by the N.I.H.)
Following

5- Protocol for Phase II study of Moderna with their new vaccine mARN-1273

- **Title of the study:** A Phase 2a, Randomized, Observer-Blind, Placebo Controlled, Dose-Confirmation Study to Evaluate the Safety, Reactogenicity, and Immunogenicity of mRNA-1273 SARS-COV-2 Vaccine in Adults Aged 18 Years and Older

- **Sponsor** of the study: **Moderna TX, Inc.**

- **Collaborators:** Biomedical Advanced Research and Development Authority

- **Country** of the study: **United States of America .**

- **Locations:** Georgia, Kansas, Missouri, Nebraska, North Carolina, South Dakota, Texas, Utah.

- **Ethics approval:** Studies a U.S. FDA-regulated Drug Product ???

- **600 healthy** volunteer **subjects aged** between **18** and **55+**

- **Starting** of the study: **May 20, 2020**

- **End** of the study: **August, 2021**

COVID-19 Vaccine: ChAdOx1 nCoV-19

According to information provided by the NIH and WHO, 160 vaccines against Covid-19 are under development. But, after reviewing Phase 1, 2 and 3 clinical studies, the protocols of which were all written by the NIH, and their advancement, we came to the following conclusion:

The only vaccine that has been developed and already manufactured for several months is the ChAdOx1 nCoV-19

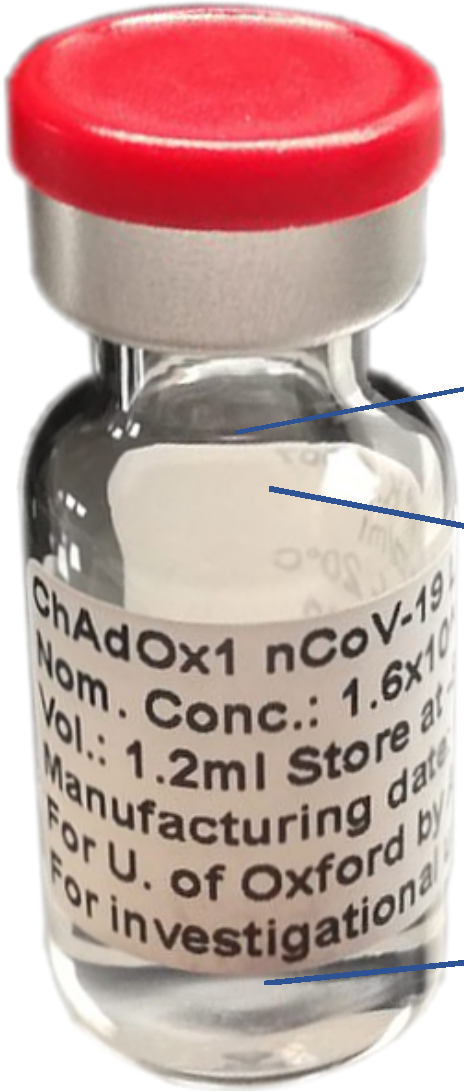
All other 159 vaccines are "decoys"

ChAdOx1 nCoV-19 is the result of a collaboration between the Institut Pasteur (Sanofi) and the Jenner Institute (AstraZeneca).

In ChAdOx1 nCoV-19, the genome of Covid-19 coronavirus is carried by the Chimpanzee adenovirus ChAdOx1, which serves as a viral vector

COVID-19 Vaccine: ChAdOx1 n-CoV-19

In the only vaccine developed and put into production, **the genome of the Covid-19** coronavirus **is carried by the Chimpanzee adenovirus ChAdOx1**, which **serves as a viral vector**



ChAdOx1 nCoV-19: **Covid-19** coronavirus carried by the vector virus **ChAdOx1**

Nanoparticles described in MicrosoftPatent PCT/ US2019/ 038084,which will control you thanks to 5G

Disinfectants: either **Thimerosal** or **Formaldehyde** and antibiotics

ChAdOx1 and MVA based vaccine candidates against MERS-CoV elicit neutralising antibodies and cellular immune responses in mice

Naif Khalaf Alharbi [a,b,*], Eriko Padron-Regalado [a], Craig P. Thompson [a,c], Alexandra Kupke [d,e], Daniel Wells [a], Megan A. Sloan [a], Keith Grehan [f], Nigel Temperton [f], Teresa Lambe [a], George Warimwe [a], Stephan Becker [d,e], Adrian V.S. Hill [a], Sarah C. Gilbert [a]

[a] The Jenner Institute, University of Oxford, Oxford OX3 7DQ, UK
[b] King Abdullah International Medical Research Center, Riyadh, Saudi Arabia
[c] Department of Zoology, University of Oxford, Oxford, UK
[d] Institute of Virology, Philipps University of Marburg, Marburg, Germany
[e] German Center for Infection Research, TTU Emerging Infections, Germany
[f] Viral Pseudotype Unit, School of Pharmacy, University of Kent, Chatham Maritime, Kent ME4 4TB, UK

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ABSTRACT

The Middle East respiratory syndrome coronavirus (MERS-CoV) has infected more than 1900 humans, since 2012. The syndrome ranges from asymptomatic and mild cases to severe pneumonia and death. The virus is believed to be circulating in dromedary camels without notable symptoms since the 1980s. Therefore, dromedary camels are considered the only animal source of infection. Neither antiviral drugs nor vaccines are approved for veterinary or medical use despite active research on this area. Here, we developed four vaccine candidates against MERS-CoV based on ChAdOx1 and MVA viral vectors, two candidates per vector. All vaccines contained the full-length spike gene of MERS-CoV; ChAdOx1 MERS vaccines were produced with or without the leader sequence of the human tissue plasminogen activator gene (tPA) where MVA MERS vaccines were produced with tPA, but either the mH5 or F11 promoter driving expression of the spike gene. All vaccine candidates were evaluated in a mouse model in prime only or prime-boost regimens. ChAdOx1 MERS with tPA induced higher neutralising antibodies than ChAdOx1 MERS without tPA. A single dose of ChAdOx1 MERS with tPA elicited cellular immune responses as well as neutralising antibodies that were boosted to a significantly higher level by MVA MERS. The humoral immunogenicity of a single dose of ChAdOx1 MERS with tPA was equivalent to two doses of MVA MERS (also with tPA). MVA MERS with mH5 or F11 promoter induced similar antibody levels; however, F11 promoter enhanced the cellular immunogenicity of MVA MERS to significantly higher magnitudes. In conclusion, our study showed that MERS-CoV vaccine candidates could be optimized by utilising different viral vectors, various genetic designs of the vectors, or different regimens to increase immunogenicity. ChAdOx1 and MVA vectored vaccines have been safely evaluated in camels and humans and these MERS vaccine candidates should now be tested in camels and in clinical trials.

To read the original interview see Document 6

Extract from the interview with Dr Tangy in PARIS-MATCH from May 14-20, 2020

Among the 400 emails received each day by Professor Etienne Simon-Lorière, responsible for the functional genomic unit for infectious diseases, there is always one sent by an unknown person who found his contact on the Internet: where are they? vaccine research? On this point, Frédéric Tangy, head of the vaccine innovation laboratory, does not want to leave any doubt. With a sigh, he said: "There will be no miracle vaccine in November or December. At best, it will be in 2021." He even plagues against figures which, according to him, sow confusion. Thus, those of the London School of Hygiene & Tropical Medicine which has just listed 120 vaccines in development in the world…. "It can be misleading. There are maybe only eight that will result! And of those, tested in China, Britain, Germany or the United States, few are expected to progress from phase 1 to phase 2 of human clinical trials. Industrialists know this very well: most are just new strategies, having not yet shown any clinical proof. I call them "mouse vaccines". Vaccine science, the real one, the one that works, doesn't move that way. In half an hour, he will transmit a videoconference, recorded the day before, to an audience of scientists from the Academy of Sciences. It deals specifically with the steps required to develop a vaccine. **"Look at my diagrams: a vaccine is at least eight years of research!** The AIDS vaccine has been on it for thirty-five years, and it's still very difficult.

According to Dr Frédéric Tangy, the father of Covid-19, it takes at least 8 years to develop a vaccine (interview in Paris-Match from May 16 to 20, 2020)

Interview with Bill Gates Paris-Match April 16-22, 2020

Bill Gates-doctor of the world

To read the original version of the interview, see DOCUMENT 7

To read an excerpt translated into English, see DOCUMENT 8

In 2015, Bill Gates sounded the alarm at a press conference that will go viral: nearly 30 million people have watched it to date.

It describes the catastrophic scenario that the entire planet has experienced since the start of the Covid-19 epidemic

It's easy to predict a pandemic when you start it

To read the full article see DOCUMENT 9

Correlation Between Relative Nasopharyngeal Virus RNA Load and Lymphocyte Count Disease Severity in Patients with COVID-19

Yang Liu,[1,*] Wenjian Liao,[2,*] Lagen Wan,[1] Tianxing Xiang,[3] and Wei Zhang[2]

Abstract

The aim of this study was to analyze the correlation between dynamic changes in the nasopharyngeal viral load of patients infected with the new coronavirus causing pneumonia and lymphocyte count disease severity. Cases newly diagnosed with COVID-19 at the First Affiliated Hospital of Nanchang University from January 2020 to February 2020 were analyzed retrospectively. Quantitative real-time polymerase chain reaction was used to determine severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) from throat swab sample ΔCT values; lymphocyte and lymphocyte subset counts, coagulation system factor levels, myocardial injury indexes, and laboratory biochemical indicators were compared between the mild group and the severe group. The correlation between the relative load of nasopharyngeal SARS-CoV-2 RNA and severe disease symptoms was analyzed. Of the 76 patients, 49 were male and 27 were female. The lymphocyte, $CD4^+$ T lymphocyte, and $CD8^+$ T lymphocyte counts all differed significantly between the two groups ($p < 0.001$), as did differences in interleukin (IL)-2R, IL-6, and IL-8 levels ($p = 0.022$, 0.026, and 0.012, respectively). Moreover, there were significant differences in prothrombin time, D-dimer, and fibrinogen levels between the mild group and the severe group ($p = 0.029$, 0.006, and <0.001, respectively), and in lactate dehydrogenase and troponin ($p < 0.001$ and $p = 0.007$, respectively). SARS-CoV-2 RNA load and lymphocyte count, $CD4^+$ T lymphocyte count, and $CD8^+$ T lymphocyte count were linearly negatively correlated ($p < 0.001$). SARS-CoV-2 RNA load was positively correlated with IL-2R, prothrombin time, lactate dehydrogenase, and hypersensitive troponin T ($p = 0.002$, $p = 0.009$, and $p < 0.001$, respectively). In addition, the time that it took for the nucleic acid test to turn negative was significantly shorter for patients in the mild group than for those in the severe group ($Z = -6.713$, $p < 0.001$). In conclusion, relative SARS-CoV-2 RNA load in the nasopharynx is closely related to COVID-19 severity. If the relative RNA load was higher, the lymphocyte count was lower, organ damage was greater, and the time it took for the nucleic acid test to turn negative was longer.

Keywords: nasopharyngeal virus RNA load, COVID-19, lymphocyte count, organ damage

To read the full articles see DOCUMENTS 10 et 11

TREATMENT OF COVID-19 VIRAL INFECTION WITH HYDROXYCHLOROQUINE

Justification for the use of:

- Hydroxychloroquine

- Hydroxychloroquine and Azithromycin (or an antibiotic from the family of macrolides or tetracyclines):

Therapeutic Drug Monitoring
13:496–501 © 1991 Raven Press, Ltd., New York

Pharmacokinetics of Quinine and Doxycycline in Patients with Acute Falciparum Malaria: A Study in Africa

*†‡§‖William Couet, †Roland Laroche, ‡Jean-Jacques Floch, *Bertrand Istin, *Jean-Bernard Fourtillan, and §Jean-Frédéric Sauniere

**CEMAF s.a., Poitiers, France; †Service des Maladies Infectieuses and ‡Laboratoire de Biochimie, CHU de Kamengue, Bujumbura, Burundi; and §Laboratoires Pfizer, Afrique et Proche Orient, Vitrolles and ‖INSEAD, Fontainebleau, France*

Summary: The pharmacokinetics of quinine was investigated in patients with acute falciparum malaria treated with quinine alone or in the presence of doxycycline. Twenty-six patients divided into two groups of equal number were enrolled in the study. In the absence of doxycycline, the volume of distribution of quinine (mean ± SD) was estimated to be 1.32 ± 0.32 L/kg, and its clearance was 0.125 ± 0.47 L/h/kg, which was only in partial agreement with previously published data. No effect of doxycycline on the pharmacokinetics of quinine was observed. **Key Words:** Acute falciparum malaria—Quinine—Doxycycline—Pharmacokinetics.

To read the full article see DOCUMENT 22 (USB Key)

Gaillard *et al. Malar J (2015) 14:445*
DOI 10.1186/s12936-015-0980-0

Tetracyclines in malaria

Tiphaine Gaillard[1,2,3], Marylin Madamet[2,4,5] and Bruno Pradines[1,2,5,6*]

Abstract

Malaria, a parasite vector-borne disease, is one of the greatest health threats in tropical regions, despite the availability of malaria chemoprophylaxis. The emergence and rapid extension of *Plasmodium falciparum* resistance to various anti-malarial drugs has gradually limited the number of potential malaria therapeutics available to clinicians. In this context, doxycycline, a synthetically derived tetracycline, constitutes an interesting alternative for malaria treatment and prophylaxis. Doxycycline is a slow-acting blood schizontocidal agent that is highly effective at preventing malaria. In areas with chloroquine and multidrug-resistant *P. falciparum* parasites, doxycycline has already been successfully used in combination with quinine to treat malaria, and it has been proven to be effective and well-tolerated. Although not recommended for pregnant women and children younger than 8 years of age, severe adverse effects are rarely reported. In addition, resistance to doxycycline is rarely described. Prophylactic and clinical failures of doxycycline have been associated with both inadequate doses and poor patient compliance. The effects of tetracyclines on parasites are not completely understood. A better comprehension of the mechanisms underlying drug resistance would facilitate the identification of molecular markers of resistance to predict and survey the emergence of resistance.

Keywords: Malaria, *Plasmodium falciparum*, Anti-malarial drug, Resistance, Tetracycline, Doxycycline, Prophylaxis, Treatment

1-Unité de Parasitologie. Département d'infectiologie de terrain, Institut de Recherche Biomédicale des Armées, Marseille, France. 2-Unité de Recherche sur les Maladies Infectieuses et Tropicales Emergentes, UM 63, CNRS 7278, IRD 198, Inserm 1095, Aix Marseille Université, Marseille, France. 3-Fédération des Laboratoires, Hôpital d'Instruction des Armées Sainte Anne, Toulon, France. 4-Equipe Résidente de Recherche en Infectiologie Tropicale, Institut de Recherche Biomédicale des Armées, Marseille, France. 5-Centre National de Référence du Paludisme, Marseille, France. 6-Unité de Parasitologie et d'Entomologie, Département des Maladies Infectieuses, , Institut de Recherche Biomédicale des Armées, Brétigny sur Orge, France.

Why Agnès BUZYN and Olivier VERAN have banned the prescription of Hydroxychloroquine to Covid-19 infected people ?

Agnès BUZYN and Yves LEVY know that DNA fragments from the germ of Malaria are inserted into the genome of Covid-19 (see DOCUMENT 2)

Under these conditions, administration of hydroxychloroquine destroys the genome of Covid-19 and stops the infection.

WARNING

- **Covid-19 helped spark a false pandemic, a**nd **spread fear across the world**, **to make us accept the Covid-19 vaccine.**

- By seeking to vaccinate the entire world population, the sponsors of this vaccine, **Bill Gates and his allies**, want **to enslave** and **control us**, pursuing two objectives:

- **Control the entire world population** after having vaccinated it, **thanks to the deployment of 5G**;

- **Limit the world's population**.

This vaccine is very dangerous because it will cause, in vaccinated people, deleterious immunodeficiency, due, in particular, to the HIV sequences of its genome.

MEN WORLDWIDE MUST REFUSE COVID-19 VACCINE THAT BILL GATES AND ITS ALLIES WANT TO IMPOSE ON US