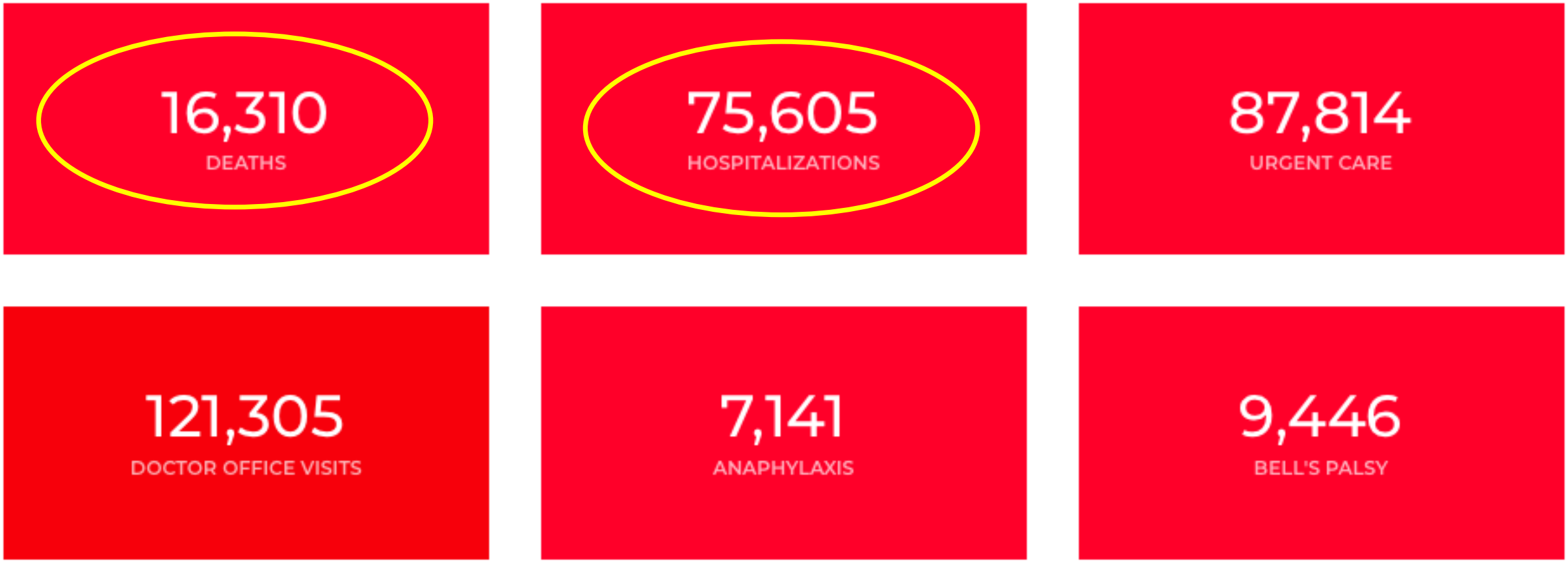
VAERS COVID Vaccine Adverse Event Reports

778,683 Reports
Through October 01, 2021



https://openvaers.com/covid-data/cardiac#myocarditis

VAERS COVID Vaccine Adverse Event Reports

2,415 Miscarriages	7,868 Heart Attacks	8,689 Myocarditis/Pericarditis	23,712 Permanently Disabled
3,620 Thrombocytopenia/ Low Platelet	17,619 Life Threatening	30,631 Severe Allergic Reaction	9,215 Shingles

https://openvaers.com/covid-data/cardiac#myocarditis

July 7. 2020 – Moderna's Patent

Lipid Nanoparticles (LNPs) for mRNA Vaccines

(57) **ABSTRACT**

A pharmaceutical composition which has a plurality of lipid nanoparticles that has a mean particle size of between 80 nm and 160 nm and contains a modified mRNA encoding a polypeptide. The lipid nanoparticles include a cationic lipid, a neutral lipid, a cholesterol, and a PEG lipid. The mRNA contains a 5'-cap, 5'-UTR, N1-methyl-pseudouridine, a 3'-UTR, and a poly-A region with at least 100 nucleotides.

https://www.modernatx.com/sites/default/files/US10703789.pdf

US010703789B2

(12) **United States Patent**
De Fougerolles et al.

(10) **Patent No.: US 10,703,789 B2**
(45) **Date of Patent: *Jul. 7, 2020**

(54) **MODIFIED POLYNUCLEOTIDES FOR THE PRODUCTION OF SECRETED PROTEINS**

(71) Applicant: **ModernaTX, Inc.**, Cambridge, MA (US)

(72) Inventors: **Antonin De Fougerolles**, Waterloo (BE); **Justin Guild**, Framingham, MA (US)

(73) Assignee: **ModernaTX, Inc.**, Cambridge, MA (US)

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

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **16/438,978**

(22) Filed: **Jun. 12, 2019**

(65) **Prior Publication Data**

US 2020/0017565 A1 Jan. 16, 2020

Related U.S. Application Data

(63) Continuation of application No. 14/987,328, filed on Jan. 4, 2016, now Pat. No. 10,385,106, which is a (Continued)

(51) **Int. Cl.**

A61K 48/00	(2006.01)
A61K 38/17	(2006.01)
A61K 47/54	(2017.01)
A61K 9/127	(2006.01)
C07K 14/535	(2006.01)
C12N 15/88	(2006.01)
A61K 9/50	(2006.01)
C07K 14/47	(2006.01)
A61K 31/7088	(2006.01)
C07K 19/00	(2006.01)
C12N 15/85	(2006.01)
A61K 38/18	(2006.01)
A61K 38/19	(2006.01)
A61K 38/48	(2006.01)
A61K 9/14	(2006.01)
A61K 47/10	(2017.01)
A61K 38/21	(2006.01)
A61K 38/36	(2006.01)
A61K 38/44	(2006.01)
A61K 39/395	(2006.01)

(Continued)

(52) **U.S. Cl.**

CPC ***C07K 14/535*** (2013.01); ***A61K 9/1271*** (2013.01); ***A61K 9/1272*** (2013.01); ***A61K 9/1277*** (2013.01); ***A61K 9/14*** (2013.01); ***A61K 9/5031*** (2013.01); ***A61K 31/7088*** (2013.01); ***A61K 38/1767*** (2013.01); ***A61K 38/1816*** (2013.01); ***A61K 38/1866*** (2013.01); ***A61K 38/191*** (2013.01); ***A61K 38/193*** (2013.01); ***A61K 38/212*** (2013.01); ***A61K 38/215*** (2013.01); ***A61K 38/36*** (2013.01); ***A61K 38/363*** (2013.01); ***A61K 38/44*** (2013.01); ***A61K 38/4833*** (2013.01); ***A61K 38/4846*** (2013.01); ***A61K 39/3955*** (2013.01); ***A61K 47/10*** (2013.01); ***A61K 47/54*** (2017.08); ***A61K 47/542*** (2017.08); ***A61K 48/0033*** (2013.01); ***A61K 48/0066*** (2013.01); ***A61K 48/0075*** (2013.01); ***C07K 14/47*** (2013.01); ***C07K 14/475*** (2013.01); ***C07K 14/505*** (2013.01); ***C07K 14/525*** (2013.01); ***C07K 14/56*** (2013.01); ***C07K 14/565*** (2013.01); ***C07K 14/745*** (2013.01); ***C07K 14/75*** (2013.01); ***C07K 16/2887*** (2013.01); ***C07K 16/32*** (2013.01); ***C07K 19/00*** (2013.01); ***C12N 9/0069*** (2013.01); ***C12N 9/644*** (2013.01); ***C12N 15/85*** (2013.01); ***C12N 15/88*** (2013.01); ***C12Y 113/12007*** (2013.01); ***C12Y 304/21022*** (2013.01); ***A61K 9/0019*** (2013.01); ***A61K 48/00*** (2013.01); ***C12N 2840/00*** (2013.01)

(58) **Field of Classification Search**

CPC C07H 21/02; C12N 15/67; C12N 15/11

See application file for complete search history.

(56) **References Cited**

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(Continued)

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CA	2473135 A1	6/2003

(Continued)

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Anderson et al., "Incorporation of pseudouridine into mRNA enhances translation by diminishing PKR activation," Nucleic Acids Res. 38(17):5884-92 (2010).

(Continued)

Primary Examiner — Antonio Galisteo Gonzalez
(74) *Attorney, Agent, or Firm* — Clark & Elbing LLP

(57) **ABSTRACT**

A pharmaceutical composition which has a plurality of lipid nanoparticles that has a mean particle size of between 80 nm and 160 nm and contains a modified mRNA encoding a polypeptide. The lipid nanoparticles include a cationic lipid, a neutral lipid, a cholesterol, and a PEG lipid. The mRNA contains a 5'-cap, 5'-UTR, N1-methyl-pseudouridine, a 3'-UTR, and a poly-A region with at least 100 nucleotides.

14 Claims, 14 Drawing Sheets

Specification includes a Sequence Listing.

In another embodiment, the polynucleotides, primary constructs, or the mmRNA may be encapsulated into a lipid nanoparticle or a rapidly eliminated lipid nanoparticle and the lipid nanoparticles or a rapidly eliminated lipid nanoparticle may then be encapsulated into a polymer, hydrogel and/or surgical sealant described herein and/or known in the art. As a non-limiting example, the polymer, hydrogel or surgical sealant may be PLGA, ethylene vinyl acetate (EVAc), poloxamer, GELSITE® (Nanotherapeutics, Inc. Alachua, Fla.), HYLENEX® (Halozyme Therapeutics, San Diego Calif.), surgical sealants such as fibrinogen polymers (Ethicon Inc. Cornelia, Ga.), TISSELL® (Baxter International, Inc Deerfield, Ill.), PEG-based sealants, and COSEAL® (Baxter International, Inc Deerfield, Ill.).

In another embodiment, the lipid nanoparticle may be encapsulated into any polymer known in the art which may form a gel when injected into a subject. As another non-limiting example, the lipid nanoparticle may be encapsulated into a polymer matrix which may be biodegradable.

In one embodiment, the polynucleotide, primary construct, or mmRNA formulation for controlled release and/or targeted delivery may also include at least one controlled release coating. Controlled release coatings include, but are not limited to, OPADRY®, polyvinylpyrrolidone/vinyl acetate copolymer, polyvinylpyrrolidone, hydroxypropyl methylcellulose, hydroxypropyl cellulose, hydroxyethyl cellulose, EUDRAGIT RL®, EUDRAGIT RS® and cellulose derivatives such as ethylcellulose aqueous dispersions (AQUACOAT® and SURELEASE®).

In one embodiment, the controlled release and/or targeted delivery formulation may comprise at least one degradable polyester which may contain polycationic side chains. Degradeable polyesters include, but are not limited to, poly(serine ester), poly(L-lactide-co-L-lysine), poly(4-hydroxy-L-proline ester), and combinations thereof. In another embodiment, the degradable polyesters may include a PEG conjugation to form a PEGylated polymer.

Sustained Release of Compound/Biological Agent May be Programmed over Hours, Days, Weeks, Months or Years

In one embodiment, therapeutic nanoparticle may be formulated for sustained release. As used herein, "sustained release" refers to a pharmaceutical composition or compound that conforms to a release rate over a specific period of time. The period of time may include, but is not limited to, hours, days, weeks, months and years. As a non-limiting example, the sustained release nanoparticle may comprise a polymer and a therapeutic agent such as, but not limited to, the polynucleotides, primary constructs, and mmRNA of the present invention (see International Pub No. 2010075072 and US Pub No. US20100216804, US20110217377 and US20120201859, each of which is herein incorporated by reference in their entirety).

https://www.modernatx.com/sites/default/files/US10703789.pdf

US 20100216804A1

(19) **United States**

(12) **Patent Application Publication**

Zale et al.

(10) **Pub. No.: US 2010/0216804 A1**

(43) **Pub. Date: Aug. 26, 2010**

(54) **LONG CIRCULATING NANOPARTICLES FOR SUSTAINED RELEASE OF THERAPEUTIC AGENTS**

(76) Inventors: **Stephen E. Zale**, Hopkinton, MA (US); **Greg Troiano**, Pembroke, MA (US); **Mir M. Ali**, Woburn, MA (US); **Jeff Hrkach**, Lexington, MA (US); **James Wright**, Lexington, MA (US); **Susan Low**, Cambridge, MA (US)

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(21) Appl. No.: **12/638,297**

(22) Filed: **Dec. 15, 2009**

Related U.S. Application Data

(60) Provisional application No. 61/122,479, filed on Dec. 15, 2008, provisional application No. 61/249,022, filed on Oct. 6, 2009, provisional application No. 61/260,200, filed on Nov. 11, 2009.

Publication Classification

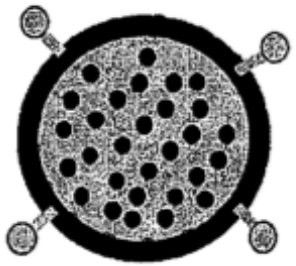
(51) **Int. Cl.**

A61K 9/14	(2006.01)
A61K 31/337	(2006.01)
A61K 31/4745	(2006.01)
A61K 31/519	(2006.01)
A61K 31/436	(2006.01)
A61P 35/00	(2006.01)

(52) **U.S. Cl.** **514/249**; 514/449; 514/283; 977/773;

(57) **ABSTRACT**

The present disclosure is directed in part to a biocompatible nanoparticle composition comprising a plurality of non-colloidal long circulating nanoparticles, each comprising a α-hydroxy polyester-co-polyether and a therapeutic agent, wherein such disclosed compositions provide a therapeutic effect for at least 12 hours.



Targeting poly(lactide-*b*-ethylene glycol) (PLA-PEG-lys(urea)glu)

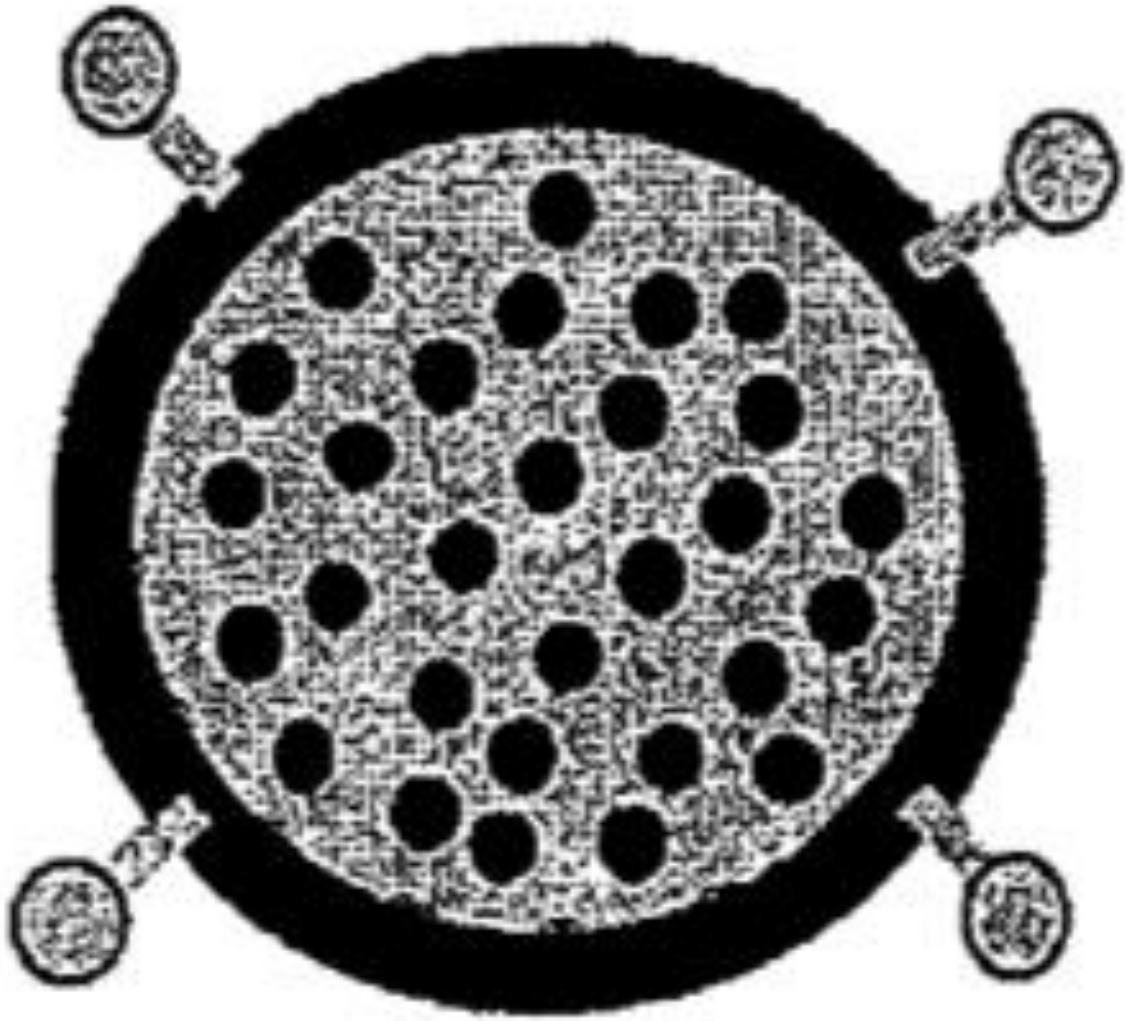
Poly(lactide-*b*-ethylene glycol) (PLA-PEG)

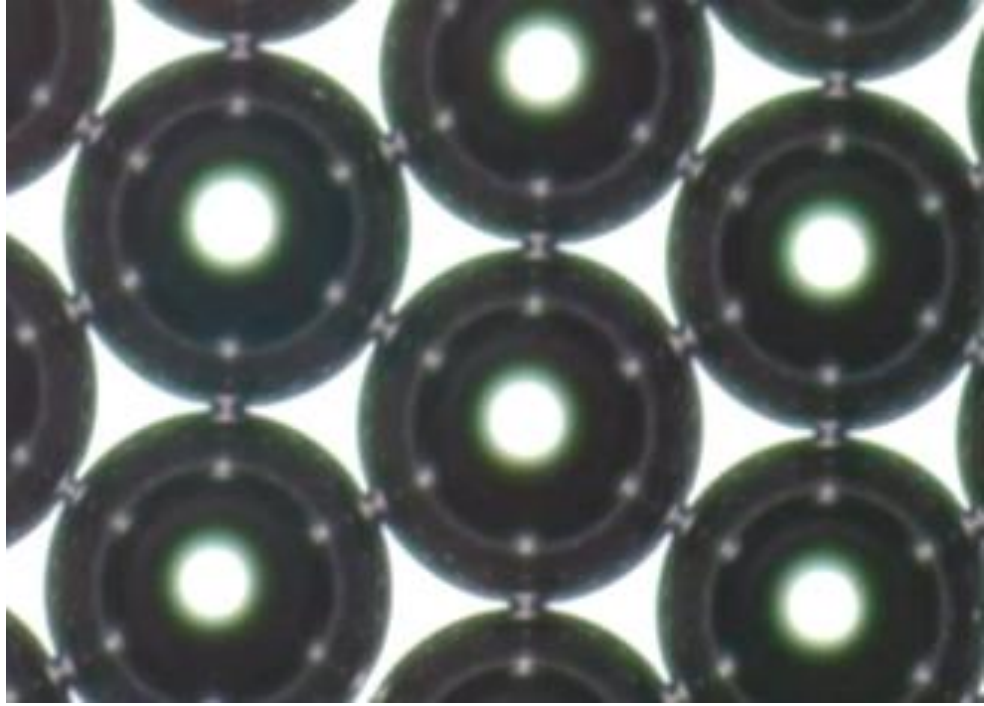
Poly(lactide) (PLA)

Docetaxel

One of the Therapeutic Examples in Patent

https://patentimages.storage.googleapis.com/25/ce/6d/84cb16adb713b2/US20100216804A1.pdf






THE STEW PETER
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Docetaxel

What is DOCETAL? A Therapeutic Example in Patent

Drug type: Docetaxel is an anti-cancer ("antineoplastic" or "cytotoxic") chemotherapy drug. This medication is classified as a "plant alkaloid," a "taxane" and an "antimicrotubule agent." (For more detail, see "How this drug works" section below).

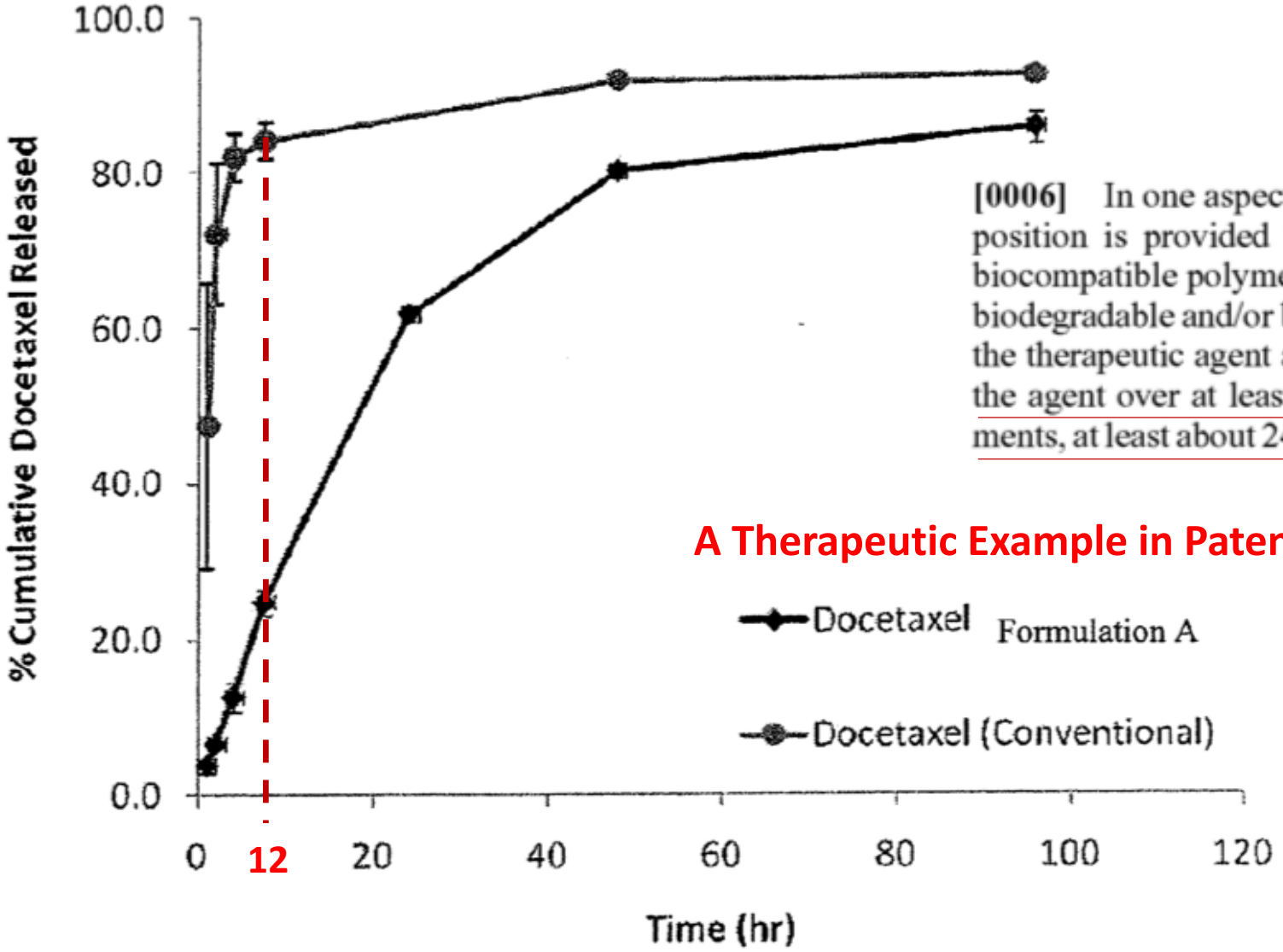
Note: If a drug has been approved for one use, physicians may elect to use this same drug for other problems if they believe it may be helpful.

The following side effects are common (occurring in greater than 30%) for patients taking docetaxel:

- Low white blood cell count. (This can increase your risk for infection)
- Low red blood cell count (anemia)
- Fluid retention with weight gain, swelling of the ankles or abdominal area.
- Peripheral neuropathy (numbness in your fingers and toes) may occur with repeated doses.
- Nausea
- Diarrhea
- Mouth sores
- Hair loss
- Fatigue and weakness
- Infection

https://chemocare.com/chemotherapy/drug-info/docetaxel.aspx

80% of chemotherapy is released in 12 -24hrs, and then a minimal sustained release over next 4 days



[0006] In one aspect of the invention, a nanoparticle composition is provided that includes a biodegradable and/or biocompatible polymer and a therapeutic agent, wherein the biodegradable and/or biocompatible polymer matrix releases the therapeutic agent at a rate allowing controlled release of the agent over at least about 12 hours, or in some embodiments, at least about 24 hours For example, provided herein is

A Therapeutic Example in Patent

https://patentimages.storage.googleapis.com/25/ce/6d/84cb16adb713b2/US20100216804A1.pdf

Circular Nanoparticles Can Deliver Drugs, Gene Therapies, or Toxic Immune Therapies, i.e. Chemotherapy, or be used for Medical Diagnosis

DETAILED DESCRIPTION

[0030] It is to be understood that the invention is not limited to the particular processes, compositions, or methodologies described, as these may vary.

[0046] Disclosed nanoparticles can be used for a variety of applications, such as, without limitation, drug delivery, gene therapy, medical diagnosis, and for medical therapeutics for cancer, pathogen-borne diseases, hormone-related diseases, reaction-by-products associated with organ transplants, and other abnormal cell or tissue growth.

https://chemocare.com/chemotherapy/drug-info/docetaxel.aspx

Circular Nanoparticles Can Have Biomarkers to Target Specific Areas, i.e. Ovaries, Heart, Prostate, et al.

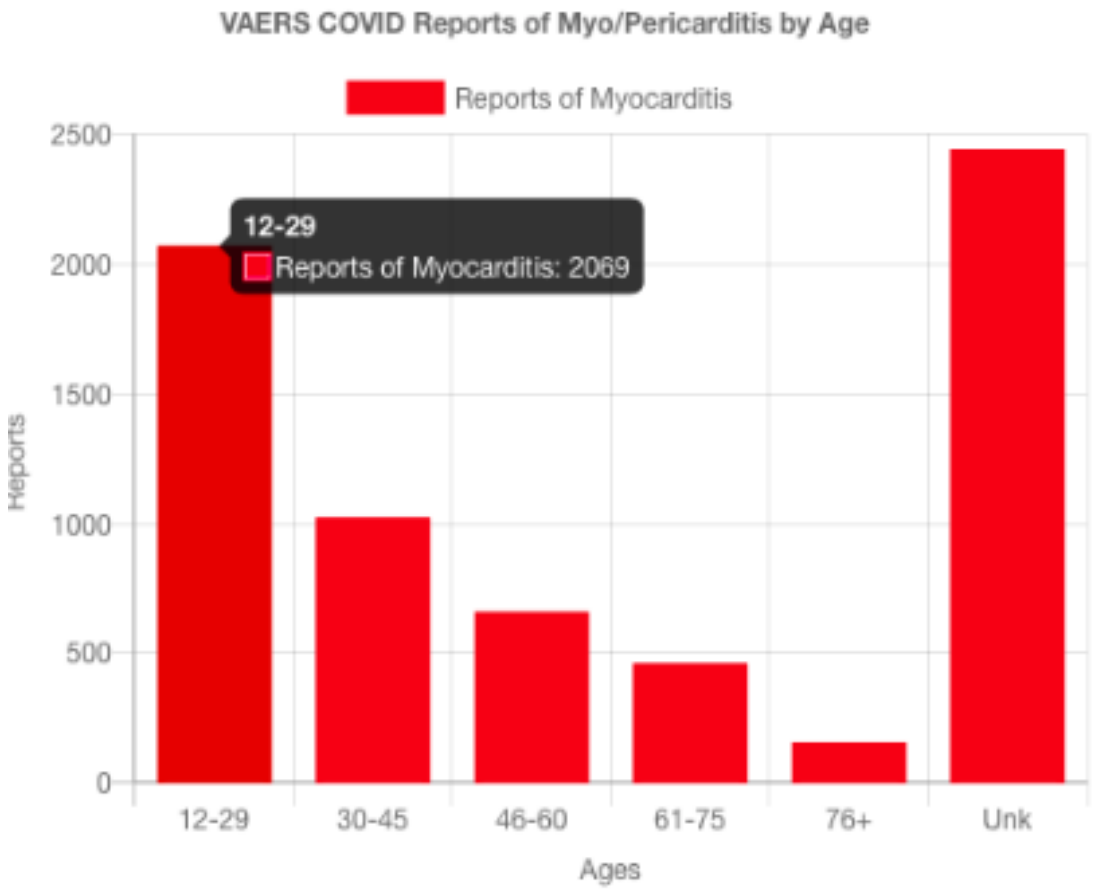
[0074] Disclosed nanoparticles may include optional targeting moieties, which may be selected to ensure that the nanoparticles selectively attach to, or otherwise associate with, a selected marker or target. For example, in some embodiments, disclosed nanoparticles may be functionalized with an amount of targeting moiety effective for the treatment of prostate cancer in a subject (e.g., a low-molecular weight PSMA ligand). Through functionalization of nanoparticle surfaces with such targeting moieties, the nanoparticles are effective only at targeted sites, which minimizes adverse side effects and improves efficacy. Targeted delivery also allows for the administration of a lower dose of therapeutic agent, which may reduce undesirable side effects commonly associated with traditional treatments of disease.

https://chemocare.com/chemotherapy/drug-info/docetaxel.aspx

VAERS COVID Vaccine

September 17, 2021

Myo/Pericarditis



Myo/Pericarditis Reports post COVID 19 Vaccine VS. All Flu Vaccines

AGE	FLU REPORTS 20 YRS.	COVID19 REPORTS
6-18	16	908
19-29	61	1,161
30-39	28	700

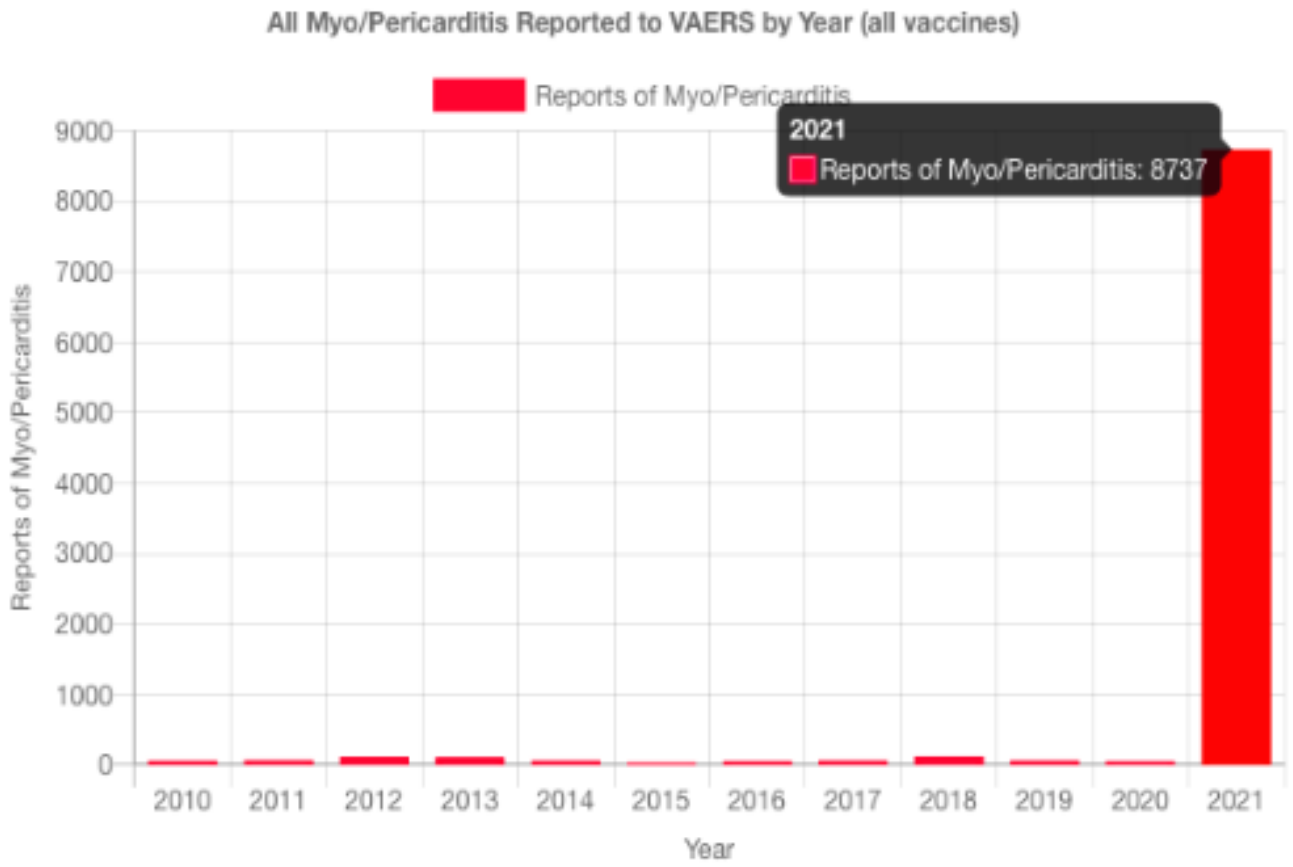
https://openvaers.com/covid-data/cardiac#myocarditis

VAERS COVID Vaccine Myo/Pericarditis Reports

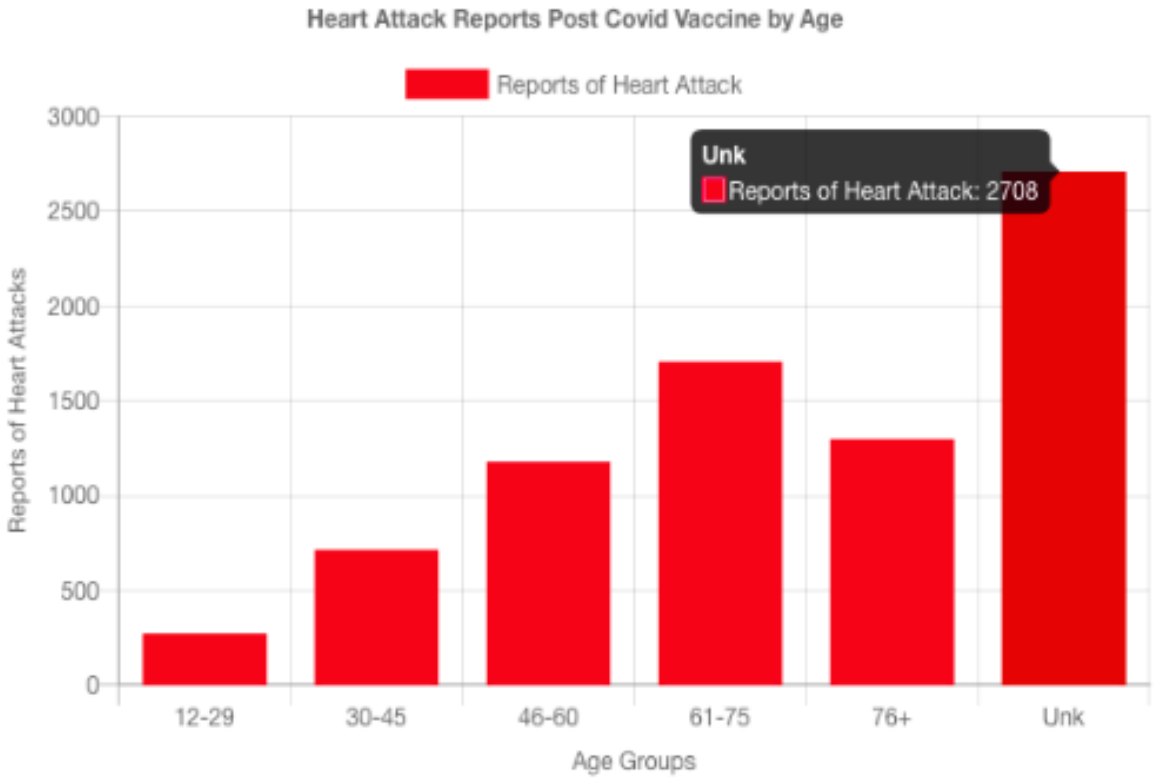
Oct 1. 2021

Through October 01, 2021

8,737 Myo/Pericarditis



7,868 Heart Attacks



https://openvaers.com/covid-data/cardiac#myocarditis

VAERS COVID Vaccine Reproductive Health Related Reports

Through October 01, 2021

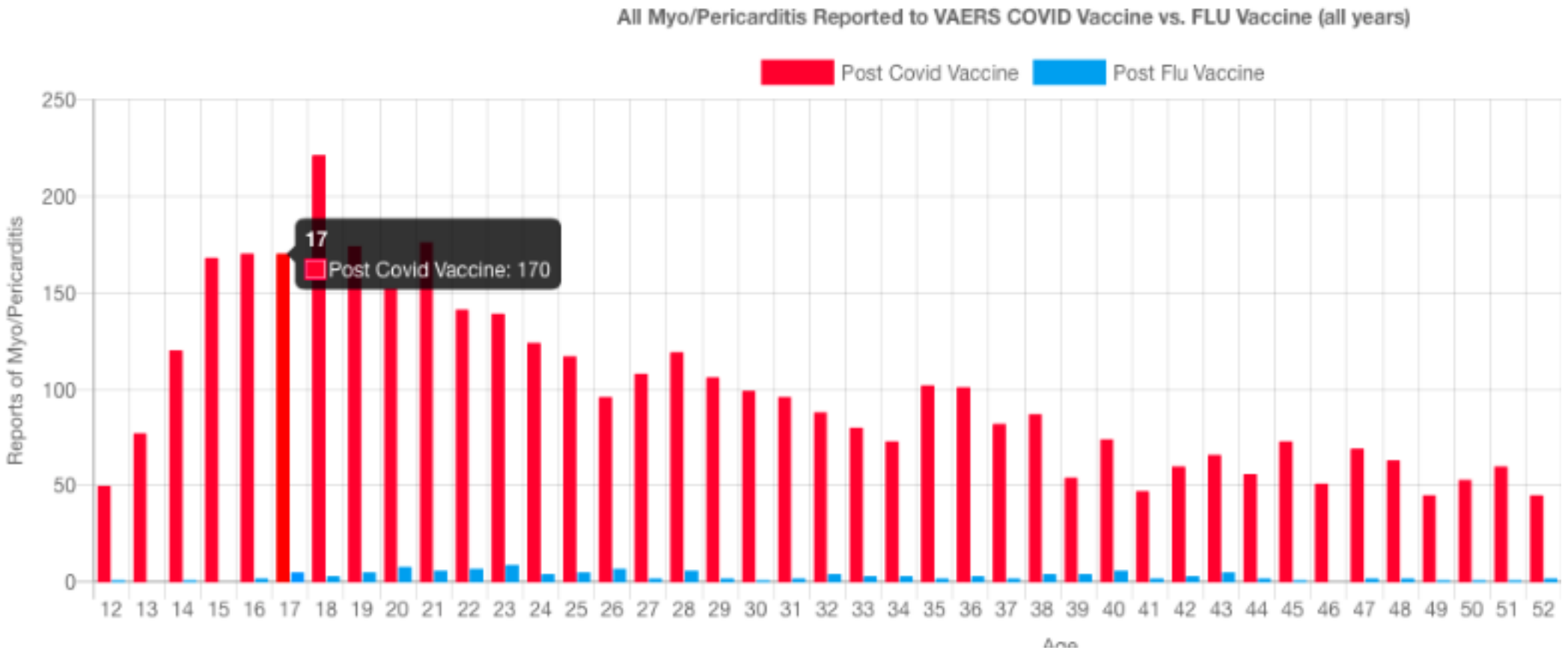
SYMPTOM	CASES
Miscarriage	2,415
Menstrual Disorders	13,480
Vaginal/Uterine Haemorrhage (All Ages)	4,805

SYMPTOM	CASES
Testicular Pain/Swelling	962
Erectile Dysfunction	262

https://openvaers.com/covid-data/cardiac#myocarditis

VAERS COVID Vaccine Myo/Pericarditis Reports

Through October 01, 2021



https://openvaers.com/covid-data/cardiac#myocarditis

diameter particle that can remain stable at high temperatures (150° C.) (Grabow and Jaegar, Nature Materials 2012, 11:269-269; herein incorporated by reference in its entirety). Additionally these microsponges may be able to exhibit an extraordinary degree of protection from degradation by ribonucleases.

In another embodiment, the polymer-based self-assembled nanoparticles such as, but not limited to, microsponges, may be fully programmable nanoparticles. The geometry, size and stoichiometry of the nanoparticle may be precisely controlled to create the optimal nanoparticle for delivery of cargo such as, but not limited to, polynucleotides, primary constructs and/or mmRNA.

US010703789B2

(12) **United States Patent**
De Fougerolles et al.

(10) **Patent No.: US 10,703,789 B2**
(45) **Date of Patent: *Jul. 7, 2020**

(54) **MODIFIED POLYNUCLEOTIDES FOR THE PRODUCTION OF SECRETED PROTEINS**

(71) Applicant: **ModernaTX, Inc.**, Cambridge, MA (US)

(72) Inventors: **Antonin De Fougerolles**, Waterloo (BE); **Justin Guild**, Framingham, MA (US)

(2013.01); *A61K 38/36* (2013.01); *A61K 38/363* (2013.01); *A61K 38/44* (2013.01); *A61K 38/4833* (2013.01); *A61K 38/4846* (2013.01); *A61K 39/3955* (2013.01); *A61K 47/10* (2013.01); *A61K 47/54* (2017.08); *A61K 47/542* (2017.08); *A61K 48/0033* (2013.01); *A61K 48/0066* (2013.01); *A61K 48/0075* (2013.01); *C07K 14/47* (2013.01); *C07K*

The polynucleotides, primary constructs and/or mmRNAs of the present invention may be formulated in water-dispersible nanoparticle comprising a semiconductive or metallic material (U.S. Pub. No. 20120228565; herein incorporated by reference in its entirety) or formed in a magnetic nanoparticle (U.S. Pub. No. 20120265001 and 20120283503; each of which is herein incorporated by reference in its entirety). The water-dispersible nanoparticles may be hydrophobic nanoparticles or hydrophilic nanoparticles.

https://www.modernatx.com/sites/default/files/US10703789.pdf

US 20120265001A1

(19) **United States**

(12) **Patent Application Publication**

Asmatulu et al.

(10) **Pub. No.: US 2012/0265001 A1**

(43) **Pub. Date: Oct. 18, 2012**

(54) **COMPOSITE MAGNETIC NANOPARTICLE DRUG DELIVERY SYSTEM**

(75) Inventors: **Ramazan Asmatulu**, Wichita, KS (US); **Heath Misak**, Wichita, KS (US); **Shang-you Yang**, Wichita, KS (US); **Paul Wooley**, Wichita, KS (US)

(73) Assignee: **WICHITA STATE UNIVERSITY**, Wichita, KS (US)

(21) Appl. No.: **13/271,172**

(22) Filed: **Oct. 11, 2011**

Related U.S. Application Data

(60) Provisional application No. 61/392,018, filed on Oct. 11, 2010.

Publication Classification

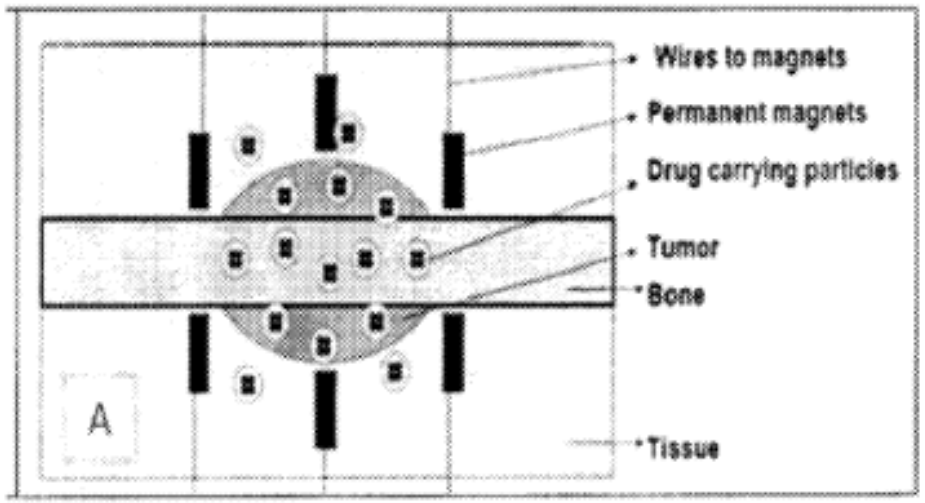
(51) **Int. Cl.**

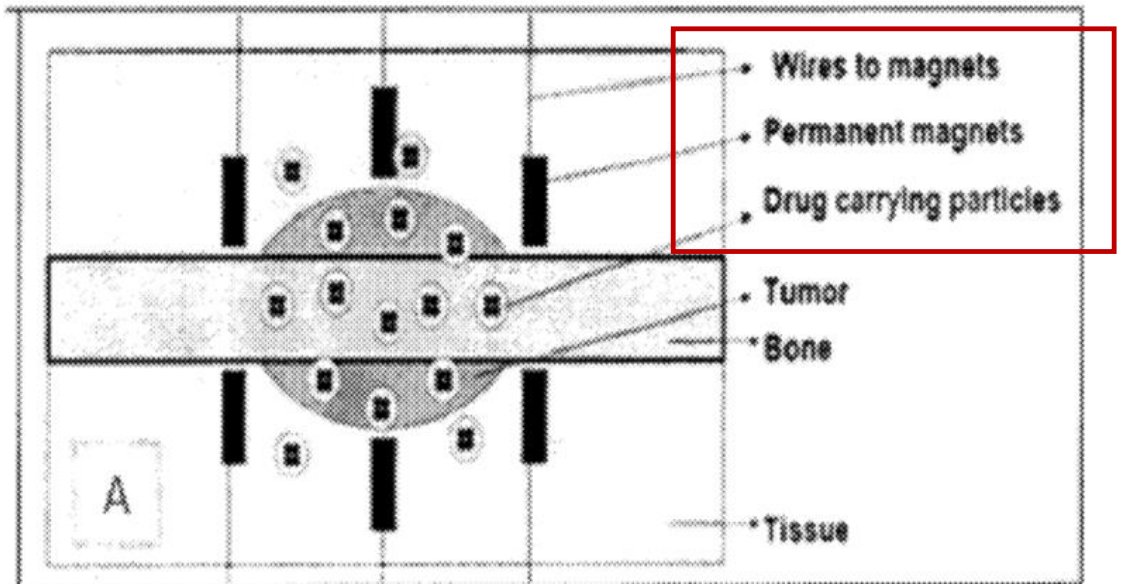
A61K 9/14	(2006.01)
A61K 31/519	(2006.01)
A61K 33/24	(2006.01)
A61P 35/00	(2006.01)
A61N 2/10	(2006.01)
A61K 47/34	(2006.01)
A61K 31/513	(2006.01)
A61P 29/00	(2006.01)
B82Y 5/00	(2011.01)

(52) **U.S. Cl.** **600/12**; 514/274; 514/249; 424/649; 424/400; 514/769; 977/773; 977/838; 977/810; 977/906

(57) **ABSTRACT**

A composite magnetic nanoparticle drug delivery system provides targeted controlled release chemotherapies for cancerous tumors and inflammatory diseases. The magnetic nanoparticle includes a biocompatible and biodegradable polymer, a magnetic nanoparticle, the biological targeting agent human serum albumin, and a therapeutic pharmaceutical composition. The composite nanoparticles are prepared by oil-in-oil emulsion/solvent evaporation and high shear mixing. An externally applied magnetic field draws the magnetic nanoparticles to affected areas. The biological targeting agent draws the nanoparticles into the affected tissues. Polymer degradation provides controlled time release delivery of the pharmaceutical agent.





https://patentimages.storage.googleapis.com/d1/d5/03/2cb5028a1e528c/US20120265001A1.pdf

Fig. 1A

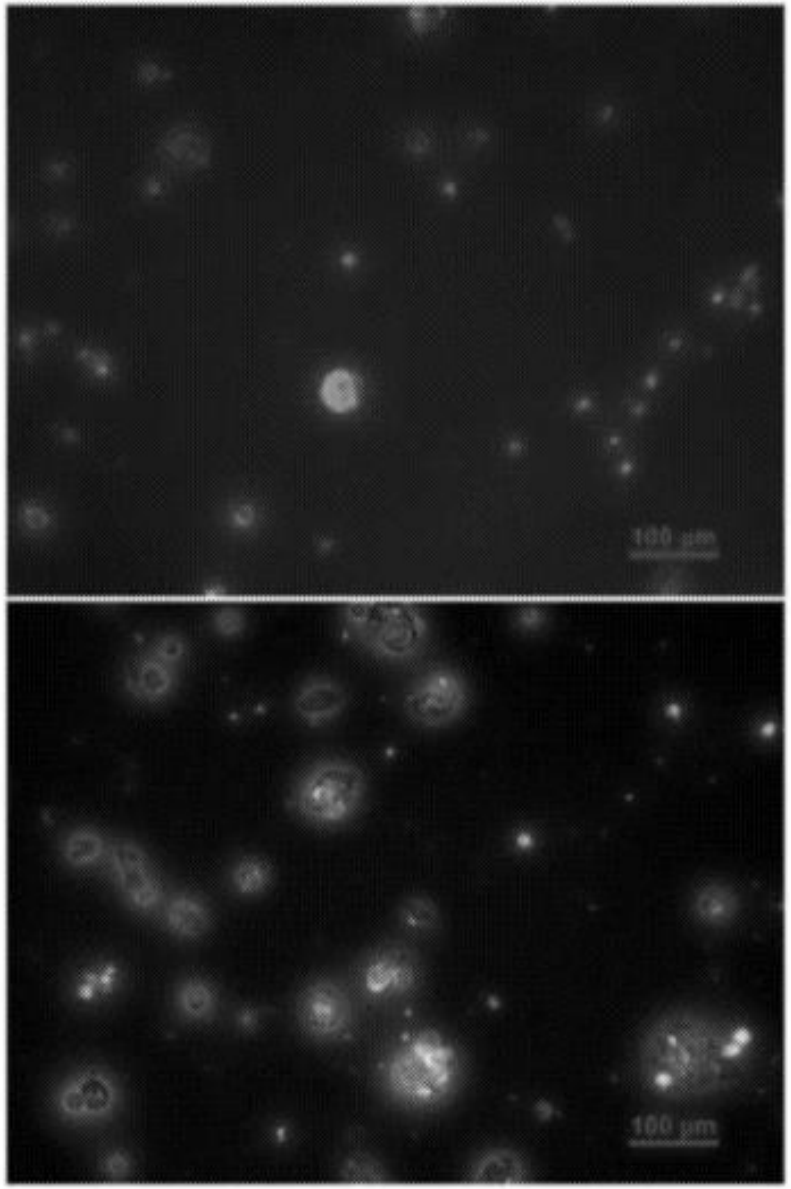


Fig. 2

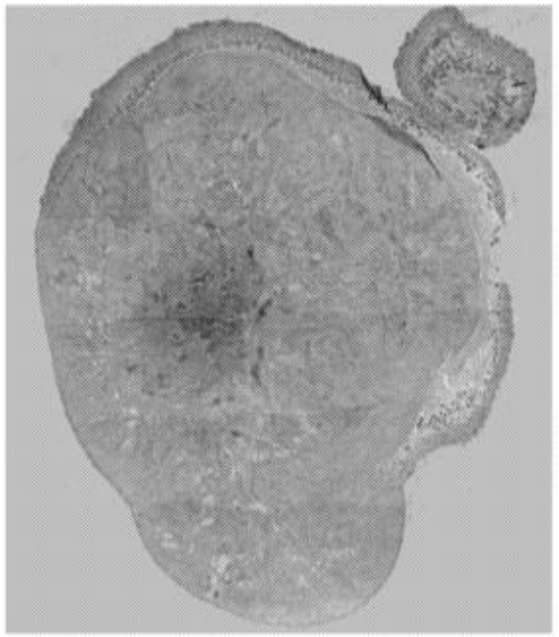
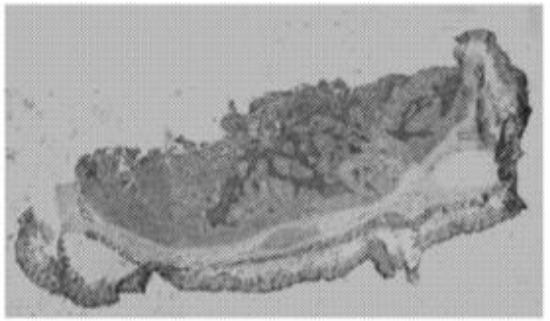


Fig. 3



https://patentimages.storage.googleapis.com/d1/d5/03/2cb5028a1e528c/US20120265001A1.pdf

US 20130251618A1

(19) **United States**

(12) **Patent Application Publication**

LI et al.

(10) **Pub. No.: US 2013/0251618 A1**

(43) **Pub. Date: Sep. 26, 2013**

(54) **METHOD FOR MAKING SEMICONDUCTING SINGLE WALL CARBON NANOTUBES**

(71) Applicants: **TSINGHUA UNIVERSITY**, Beijing (CN); **HON HAI PRECISION INDUSTRY CO., LTD.**, New Taipei (TW)

(72) Inventors: **JIE LI**, Beijing (CN); **KAI-LI JIANG**, Beijing (CN); **SHOU-SHAN FAN**, Beijing (CN)

(73) Assignees: **HON HAI PRECISION INDUSTRY CO., LTD.**, New Taipei (TW); **TSINGHUA UNIVERSITY**, Beijing (CN)

(21) Appl. No.: **13/798,789**

(22) Filed: **Mar. 13, 2013**

(30) **Foreign Application Priority Data**

Mar. 21, 2012 (CN) 201210075759.7

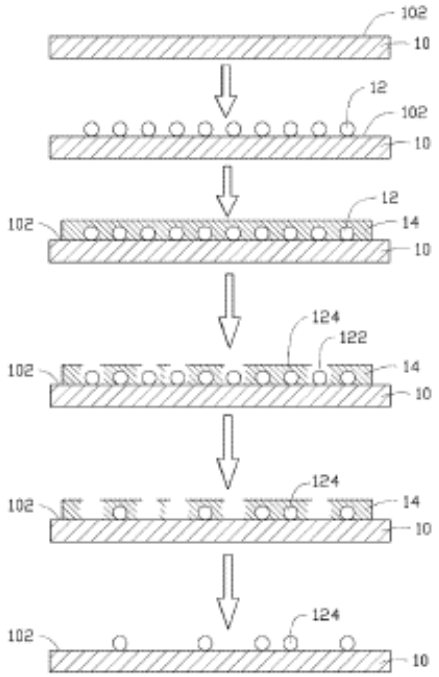
Publication Classification

(51) **Int. Cl.**
C01B 31/02 (2006.01)

(52) **U.S. Cl.**
CPC *C01B 31/0253* (2013.01); *Y10S 977/845* (2013.01); *B82Y 40/00* (2013.01)
USPC **423/447.1**; 216/49; 977/845

(57) **ABSTRACT**

A method for making semiconducting single walled carbon nanotubes (SWCNTs) includes providing a substrate. A single walled carbon nanotube film including a plurality of metallic SWCNTs and semiconducting SWCNTs is located on the substrate. A macromolecule material layer is located on the single walled carbon nanotube film to cover the single walled carbon nanotube film. The macromolecule material layer, the single walled carbon nanotube film and the substrate are placed in an environment filled with electromagnetic waves. The macromolecule material layer covering the plurality of the metallic SWCNTs is melted or decomposed to expose the plurality of metallic SWCNTs. The metallic SWCNTs and the macromolecule material layer covering the semiconducting SWCNTs are removed.



(57) **ABSTRACT**

A method for making semiconducting single walled carbon nanotubes (SWCNTs) includes providing a substrate. A single walled carbon nanotube film including a plurality of metallic SWCNTs and semiconducting SWCNTs is located on the substrate. A macromolecule material layer is located on the single walled carbon nanotube film to cover the single walled carbon nanotube film. The macromolecule material layer, the single walled carbon nanotube film and the substrate are placed in an environment filled with electromagnetic waves. The macromolecule material layer covering the plurality of the metallic SWCNTs is melted or decomposed to expose the plurality of metallic SWCNTs. The metallic SWCNTs and the macromolecule material layer covering the semiconducting SWCNTs are removed.

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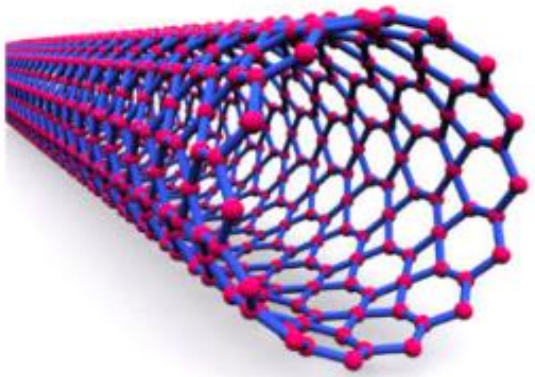
Single Walled Carbon Nanotubes

What Are Single Walled Carbon Nanotubes?

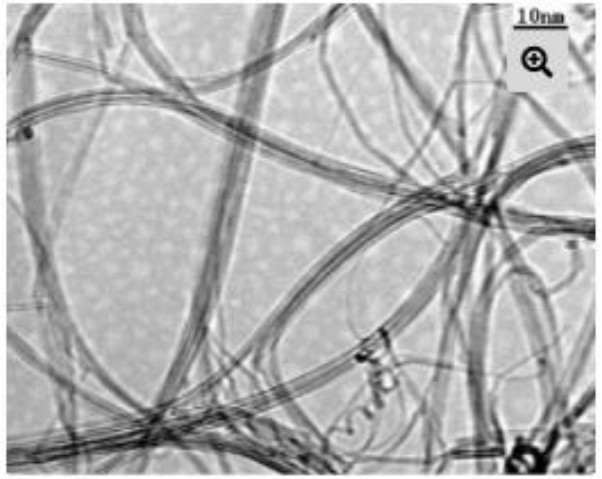
Single Walled Carbon Nanotubes are defined as a one dimensional, cylindrically shaped allotropes of carbon that have a high surface area and aspect ratio (length to diameter ratio).

Because of their small diameter and large aspect ratio, SWNTs are considered a one dimensional (1D) material.



A representation of a single walled carbon nanotube

SWNTs are so named because of their hollow structure and number of walls. They're made of one-atom-thick nano carbon sheets that forms a tube shape during CVD synthesis and are members of the fullerene family.



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Single-Walled Carbon Nanotubes

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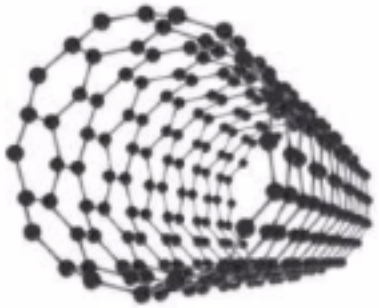

Nanotube Type

20 µm - 95%

Quantity

250 mg

Product Code **M2013L1**

In stock for priority dispatch

Lead time may apply for large quantities

Price **£150.00** (click to shop in USD)

Qty. 1 GBP ! Add to Cart / Quote

https://www.ossila.com/products/single-walled-carbon-nanotubes

Single-wall carbon nanotubes (SWNTs) are a special class of carbon materials known as one-dimensional materials. They consist of sheets of graphene, rolled up to form hollow tubes with walls one atom thick. Due to its chemical structure and dimensional constraints, this material exhibits exceptional mechanical, electrical, thermal, and optical properties. As such, carbon nanotubes have become of great interest for both stand-alone studies and for use in composite materials.

At Ossila, we sell a range of SWNTs with different purities, lengths and wall types. Additionally, we sell carbolic acid (-COOH) and hydroxyl (-OH) functionalised nanotubes.

US 20130251618A1

(19) **United States**

(12) **Patent Application Publication**

LI et al.

(10) **Pub. No.: US 2013/0251618 A1**

(43) **Pub. Date: Sep. 26, 2013**

(54) **METHOD FOR MAKING SEMICONDUCTING SINGLE WALL CARBON NANOTUBES**

(71) Applicants: **TSINGHUA UNIVERSITY**, Beijing (CN); **HON HAI PRECISION INDUSTRY CO., LTD.**, New Taipei (TW)

(72) Inventors: **JIE LI**, Beijing (CN); **KAI-LI JIANG**, Beijing (CN); **SHOU-SHAN FAN**, Beijing (CN)

(73) Assignees: **HON HAI PRECISION INDUSTRY CO., LTD.**, New Taipei (TW); **TSINGHUA UNIVERSITY**, Beijing (CN)

Publication Classification

(51) **Int. Cl.**
C01B 31/02 (2006.01)

(52) **U.S. Cl.**
CPC ***C01B 31/0253*** (2013.01); *Y10S 977/845* (2013.01); *B82Y 40/00* (2013.01)
USPC **423/447.1**; 216/49; 977/845

(57) **ABSTRACT**

A method for making semiconducting si nanotubes (SWCNTs) includes provid single walled carbon nanotube film inch metallic SWCNTs and semiconducting S on the substrate. A macromolecule mate on the single walled carbon nanotube film

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METHOD FOR MAKING SEMICONDUCTING SINGLE WALL CARBON NANOTUBES

RELATED APPLICATIONS

[0001] This application claims all benefits accruing under 35 U.S.C. §119 from China Patent Application No. 201210075759.7, filed on Mar. 21, 2012, in the China Intellectual Property Office. This application is related to commonly-assigned application entitled "METHOD FOR MAKING SEMICONDUCTING CARBON NANOTUBES," concurrently filed (Atty. Docket No. US45169). Disclosures of the above-identified applications are incorporated herein by reference.

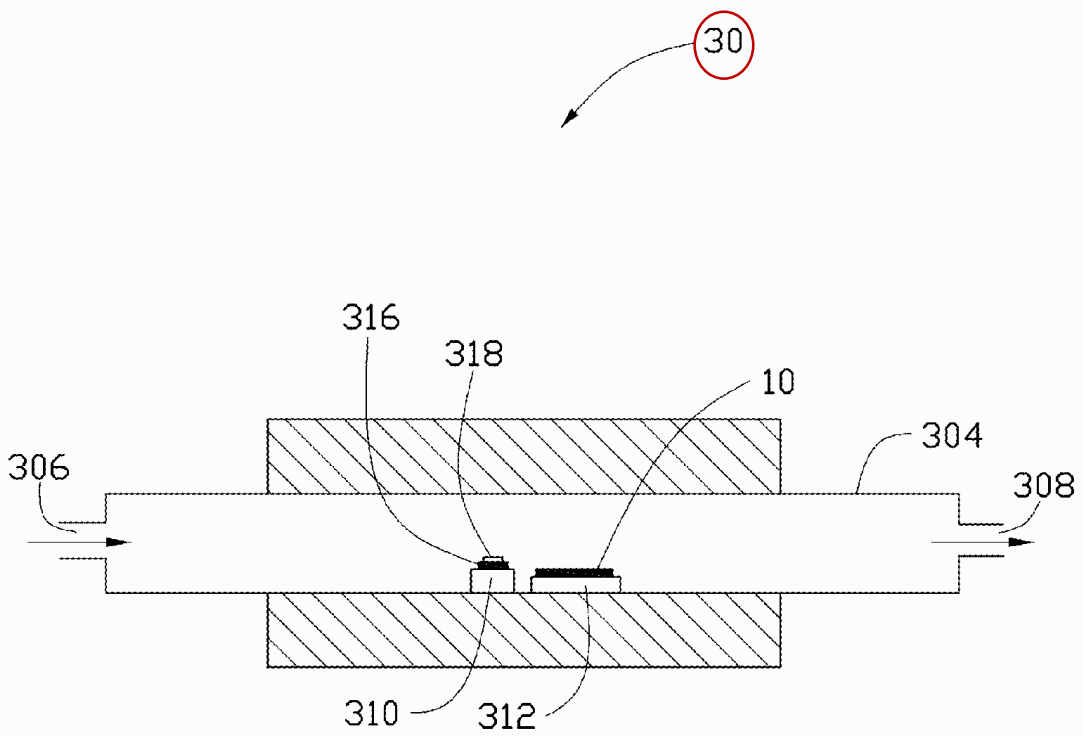

FIG. 2

[0024] Referring to FIG. **2**, a method for making the single walled carbon nanotube film **12** of one embodiment includes steps of:

[0025] (S**21**), providing a growing device **30** including a fixing supporter **310** and a rotatable supporter **312**;

[0026] (S**22**), providing a growing substrate **316** and the substrate **10**, wherein a catalyst layer **318** is formed on a surface of the growing substrate **316**;

[0027] (S**23**), placing the growing substrate **316** on the fixing supporter **310**, and placing the substrate **10** on the rotatable supporter **312**;

[0028] (S**24**), introducing a carbonaceous gas to grow a plurality of SWCNTs along a gas flow direction;

[0029] (S**25**), stopping introducing the carbonaceous gas, the plurality of SWCNTs formed on the first surface **102** of the substrate **10** is parallel to each other; and

[0030] (S**26**), changing the growing substrate **316**, and the single walled carbon nanotube film **12** is formed on the first surface **102** of the substrate **10**.

[0031] In the step (S**21**), the reacting room **304** has a gas inlet **306** and a gas outlet **308**. A rotatable supporter **312** disposes in the reacting room **304**. A fixing supporter **310** disposed in the reacting room **304** is closer to the gas inlet **306** than the rotatable supporter **312**. A distance between the rotatable supporter **312** and the fixing supporter **310** is less than 1 micrometer. The rotatable supporter **312** is lower than the fixing supporter **310**. The rotatable supporter **312** can rotate in the horizontal plane arbitrarily.

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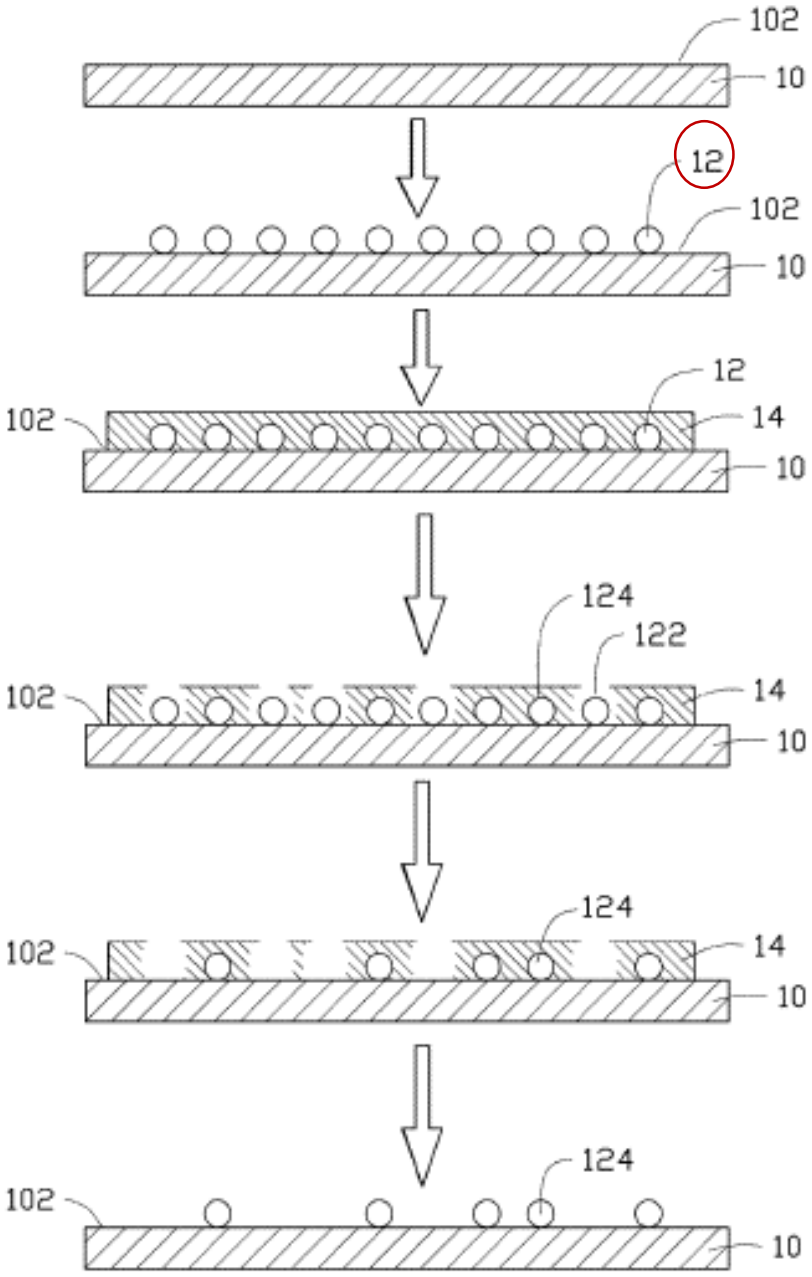

FIG. 1

[0023] In the step (S2), the single walled carbon nanotube film **12** includes a plurality of SWCNTs including a plurality of metallic SWCNTs **122** and a plurality of semiconducting SWCNTs **124**. A positional relationship of the metallic SWCNTs **122** and the semiconducting SWCNTs **124** is arbitrary. The plurality of SWCNTs is parallel to a surface of the single walled carbon nanotube film **12** and the first surface **102** of the substrate **10**. In the single walled carbon nanotube film **12**, two adjacent SWCNTs are not in contact with each other, to prevent a heat of the metallic SWCNTs from burning out adjacent semiconducting SWCNTs. A distance between two adjacent SWCNTs can be greater than or equal to 10 nanometers. The plurality of SWCNTs can have the same length and be parallel to each other. The plurality of SWCNTs can have different lengths and not be parallel to each other. In one embodiment, the plurality of SWCNTs has the same length and is parallel to each other, the distance between two adjacent SWCNTs is 500 nanometers. A thickness of the single walled carbon nanotube film **12** can be in a range from about 0.5 nanometers to about 10 nanometers. In one embodiment, the thickness of the single walled carbon nanotube film **12** is in a range from about 0.5 nanometers to about 5 nanometers.

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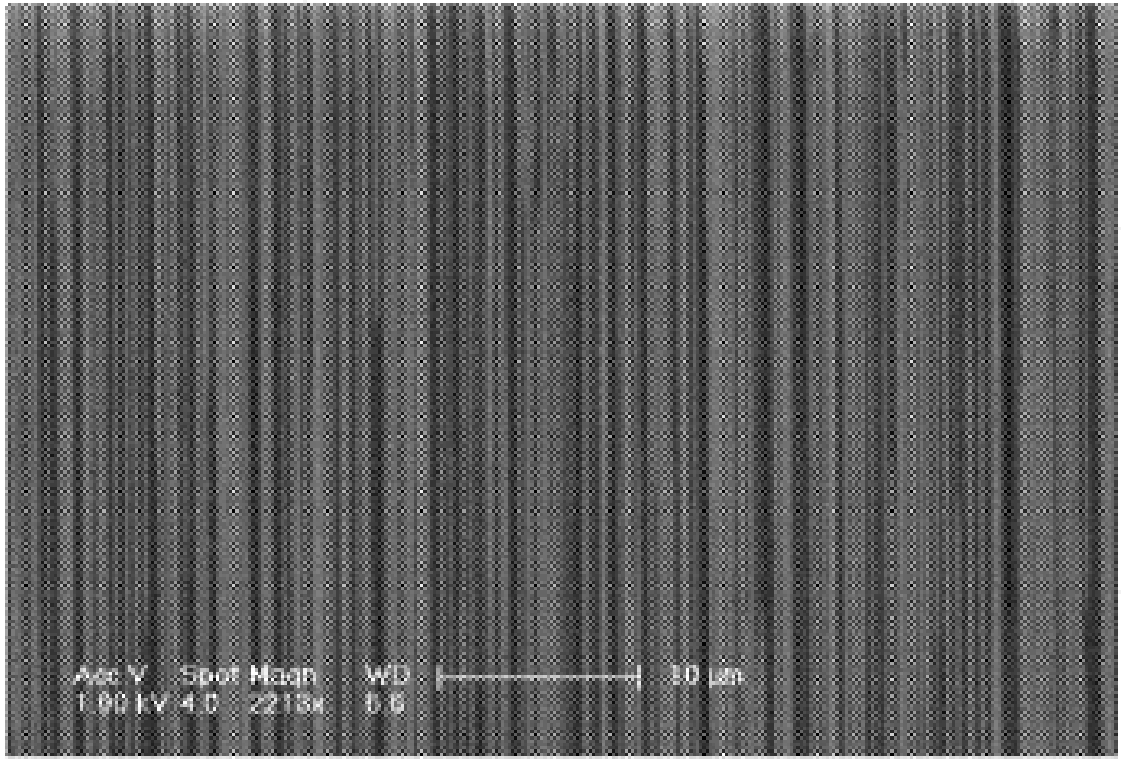

FIG. 3

[0041] After introducing the carbonaceous gas into the reacting room **304**, it starts to grow carbon nanotubes under the effect of the catalyst. One end (i.e., the root) of the carbon nanotubes is fixed on the growing substrate **316**, and the other end (i.e., the top/free end) of the carbon nanotubes grow continuously. The density of the carbon nanotubes is low due to the catalyst layer **318** including a plurality of monodisperse catalyst grain. Therefore, a part of the carbon nanotubes grow into SWCNTs. Because the fixing supporter **310** disposed in the reacting room **304** is near the gas inlet **306**, the SWCNTs float above the substrate **10** with the roots of the SWCNTs still sticking on the growing substrate **316**, as the carbon-

304. The mechanism of growing SWCNTs is called "kite-mechanism." The length of the SWCNTs depends on the growing time. In one embodiment, the growing time approximately ranges from 10 minutes to 30 minutes. The length of the SWCNTs approximately ranges from 1 centimeter to 30 centimeters.

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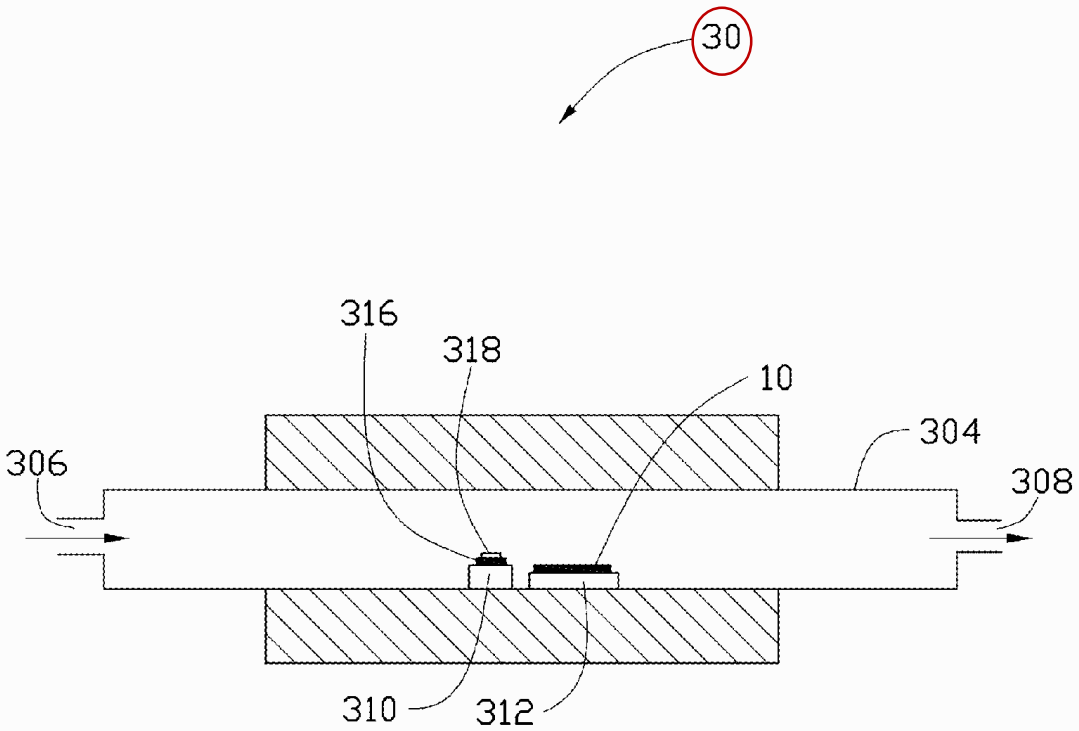

FIG. 2

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Fig. 1A

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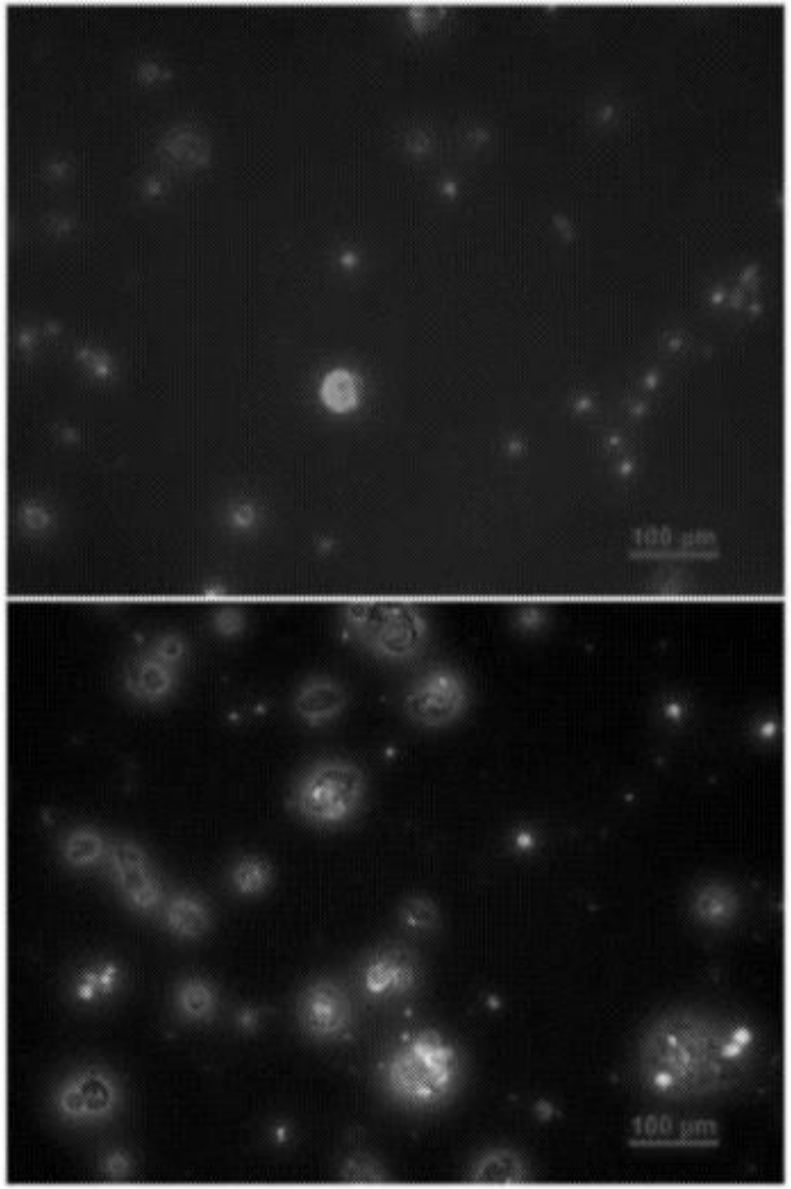
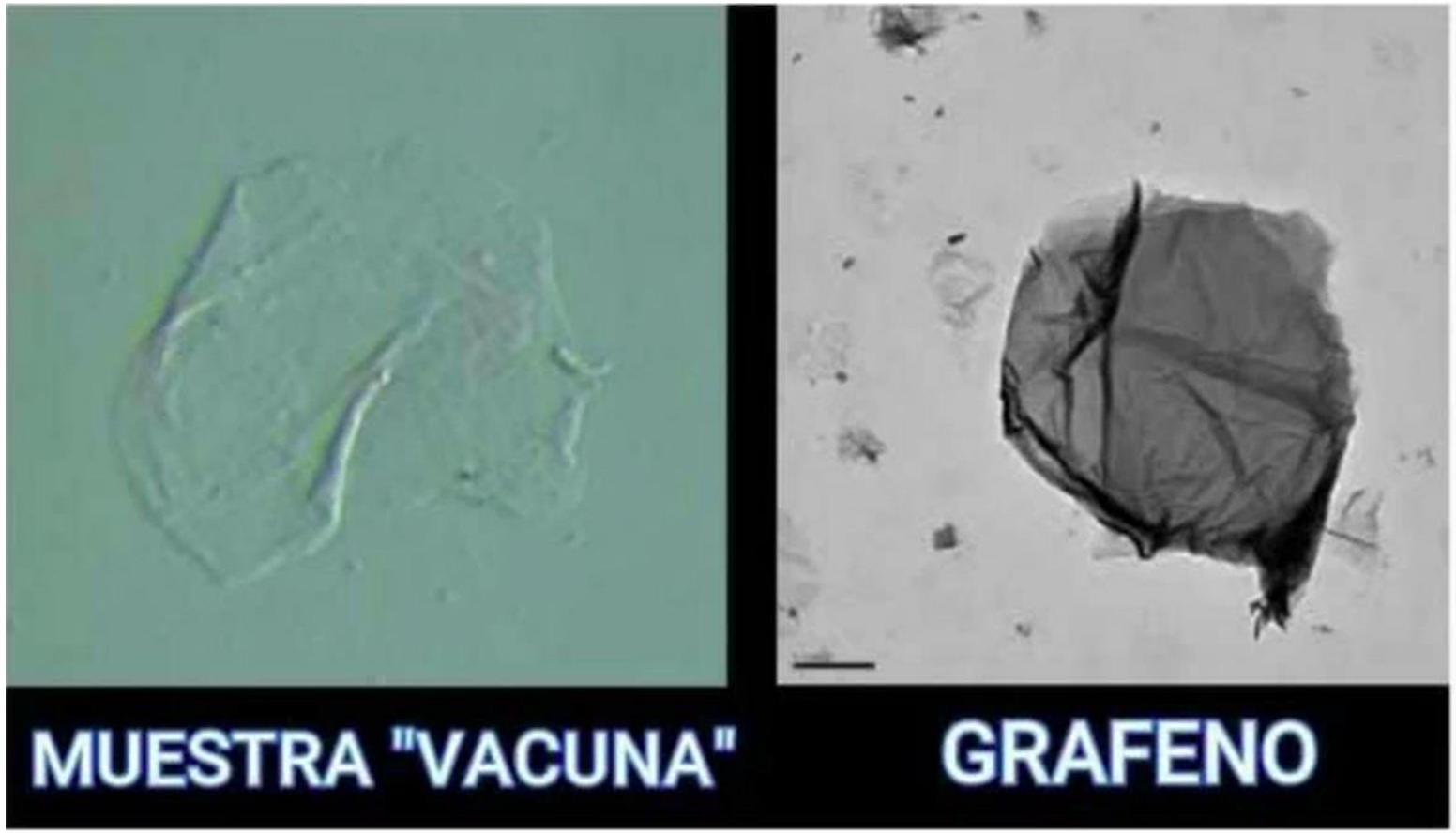




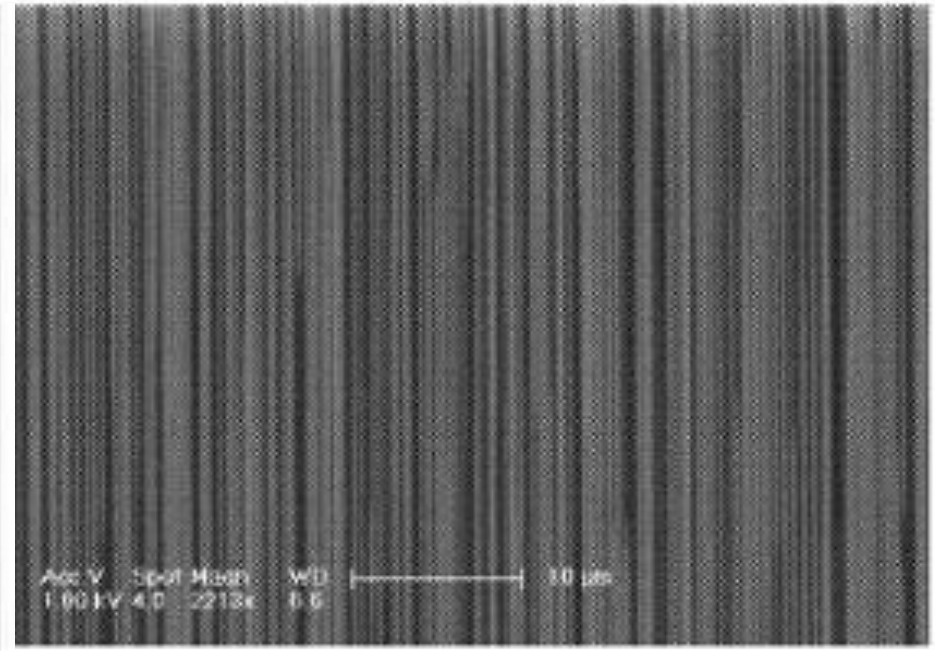


FIG. 3

US 20120201859A1

(19) **United States**

(12) **Patent Application Publication**

Carrasquillo et al.

(10) **Pub. No.: US 2012/0201859 A1**

(43) **Pub. Date: Aug. 9, 2012**

(54) **DRUG DELIVERY SYSTEMS AND USE THEREOF**

(76) Inventors: **Karen G. Carrasquillo**, Cambridge, MA (US); **Anthony P. Adamis**, Jamaica Plain, MA (US); **Joan W. Miller**, Winchester, MA (US); **Evangelos S. Gragoudas**, Lexington, MA (US)

(21) Appl. No.: **13/247,458**

(22) Filed: **Sep.**

Related U.S.

(63) Continuation of appl
Apr. 2, 2010, now ab
of application No. 1(
now abandoned, wh
application No. PCT
2003, which is a co
No. 10/139,656, filec
7,563,255.

(60) Provisional application No. 60/438,651, filed on Jan. 8, 2003.

Publication Classification

(51) **Int. Cl.**

A61K 9/14	(2006.01)
A61P 35/00	(2006.01)
A61P 27/06	(2006.01)
A61P 29/00	(2006.01)
A61K 31/711	(2006.01)
A61P 27/02	(2006.01)

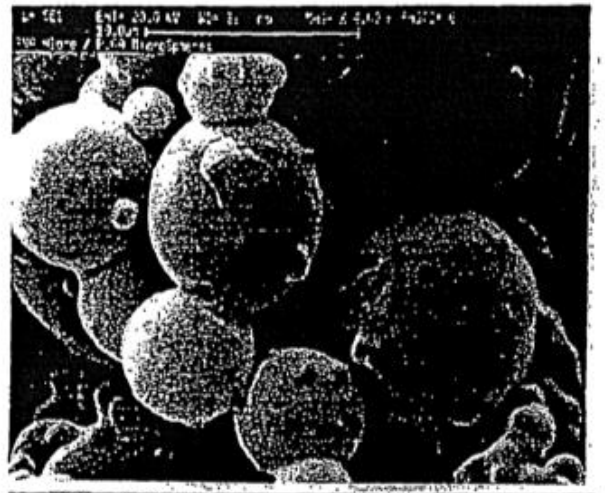
(52) **U.S. Cl.** ..... **424/400**; 514/44 R

(57) **ABSTRACT**

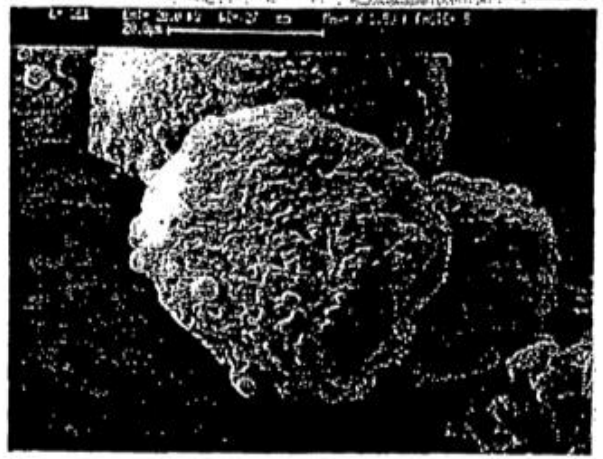
The invention provides a microsphere formulation for the sustained delivery of an aptamer, for example, an anti-Vascular Endothelial Growth Factor aptamer, to a preselected locus in a mammal, such as the eye. In addition, the invention provides methods for making such formulations, and methods of using such formulations to deliver an aptamer to a preselected locus in a mammal. In particular, the invention provides a method for delivering the aptamer to an eye for the treatment of an ocular disorder, for example, age-related macular degeneration.

[0018] FIGS. **2A-2B** are scanning electron micrographs of PLGA microspheres. FIG. **2A** depicts PLGA microspheres loaded with an anti-VEGF aptamer EYE001 before incubation with release medium. FIG. **2B** depicts the microspheres after 10 days of exposure to aqueous release medium. The

FIG. 2A



G. 2B



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US 20120201859A1

(19) **United States**

(12) **Patent Application Publication**

Carrasquillo et al.

(10) **Pub. No.: US 2012/0201859 A1**

(43) **Pub. Date: Aug. 9, 2012**

Implantable Mechanical Drug Delivery Device

[0099] In addition to the passive drug delivery devices described in Examples 1 and 2, the aptamer containing microspheres may be delivered to the ocular surface using a mechanical drug delivery device.

[0100] A mechanical device for delivering the anti-Vascular Endothelial Growth Factor aptamer (EYE001, formerly known as NX1838) (see, Drolet et al. (2000) PHARM. RES. 17:1503-1510; Ruckman et al. (1998) J. BIOL. CHEM. 273: 20556-20567) can be fabricated in a device as shown in FIG. **1**. The cavities, each having an internal volume of about 0.25 μL disposed about the surface of a titanium drum, are filled with the aptamer containing microspheres. The cavities then are sealed by coating the drum with parylene. A titanium overcoat then is applied onto the parylene layer by sputter deposition. The drum then is placed within a titanium casing having (i) a surface complementary in shape to the outer surface of an eye, (ii) an aperture in the surface to permit fluid to enter the casing and contact the outer surface of the drum, and (iii) a plurality of eyelets or fenestrations to permit the suturing of the device onto the outer surface of the eye.

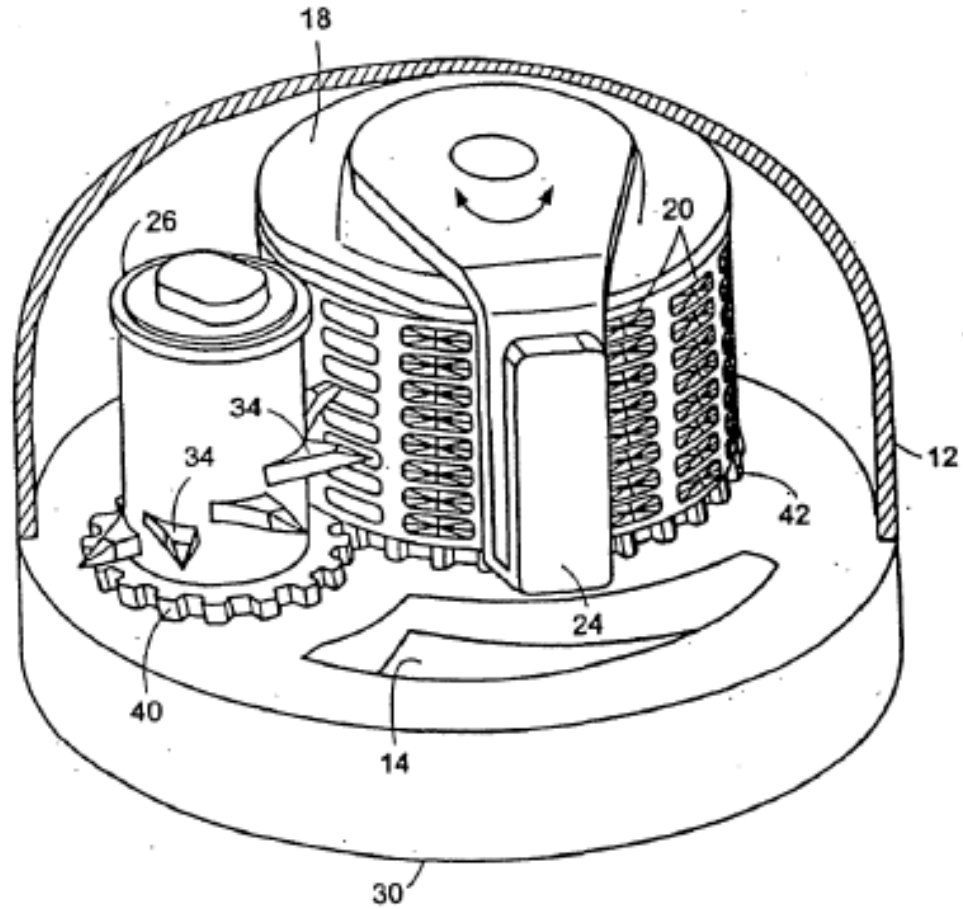

FIG. 1

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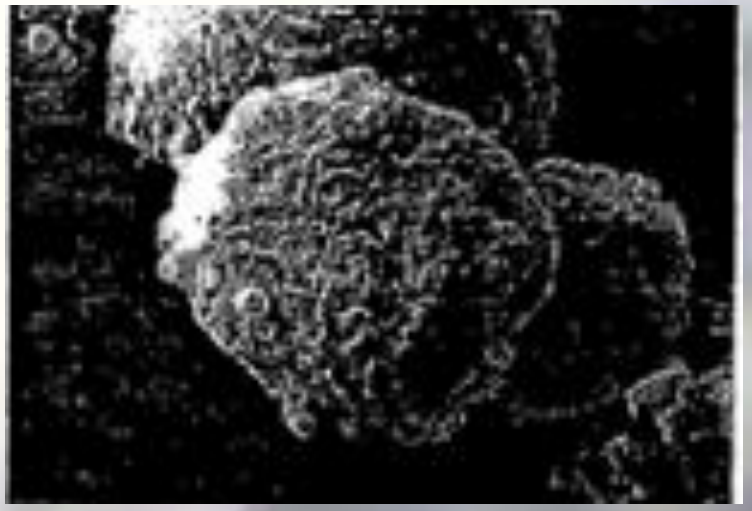

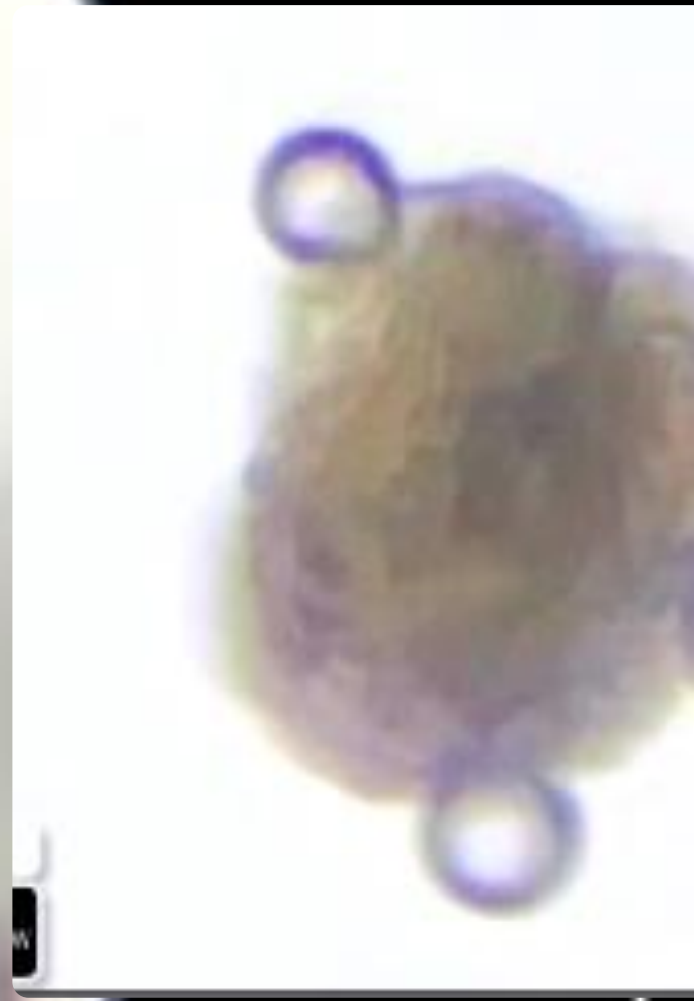

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Effectiveness of mRNA COVID-19 Vaccines Against the Delta Variant Among 5.6M Medicare Beneficiaries 65 Years and Older

Weekly update of September 28, 2021

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Total & Breakthrough Cases in the 65 Years and Older Salus Cohort

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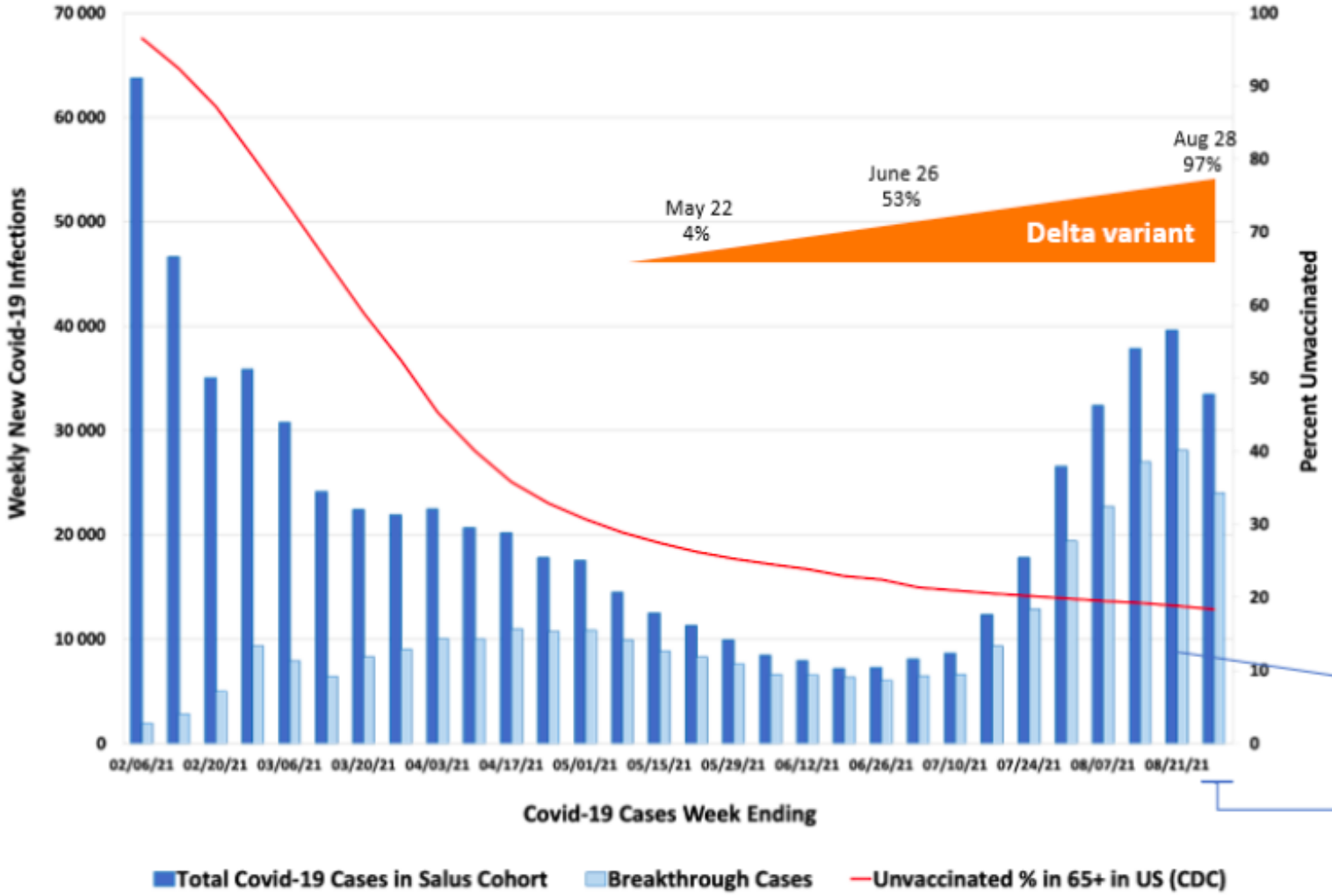


- **As Delta variant became predominant, COVID-19 cases increased five-fold** in the >=65 population
- In this 80% vaccinated >=65 population, an estimated **71% of COVID-19 cases occurred in fully vaccinated individuals**

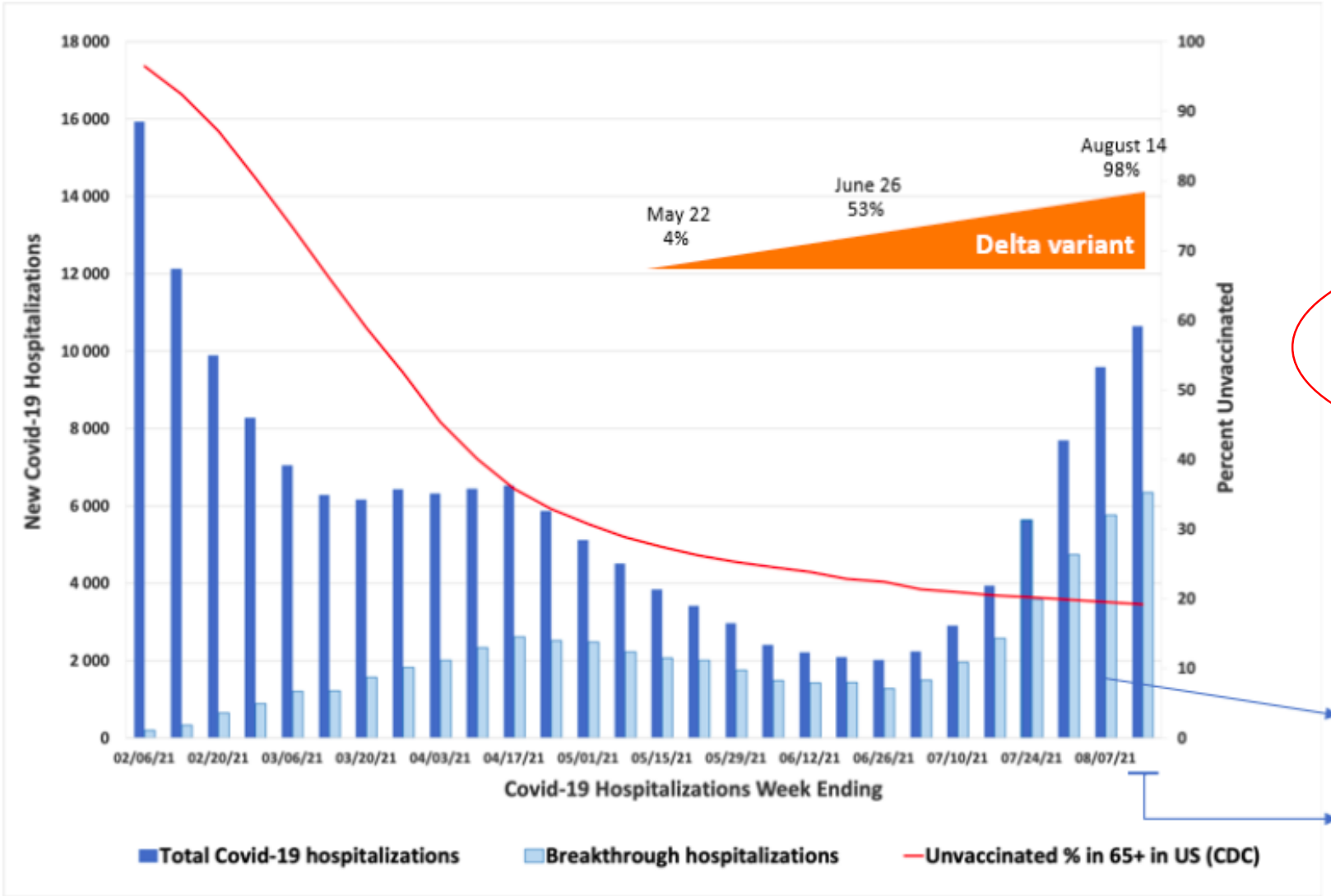
Breakthrough cases = 71% of total Covid-19 cases in cohort

Week ending 08/28/21, data incomplete due to lag in claims processing

*CDC data: % of SARS-CoV-2 genomes sequenced

Project Salus

Total & Breakthrough Hospitalizations in the 65 Years and Older Cohort



- As Delta variant surged to over 50% in June, COVID-19 hospitalizations more than doubled, reversing the prior trend of decreasing hospitalizations since April
- In this 80% vaccinated 65+ population, an estimated **60% of COVID-19 hospitalizations occurred in fully vaccinated individuals in the week ending August 7th**

Vision: Transform the DoD Through Artificial Intelligence

Leadership

As the **JAIC's Director, Joint Artificial Intelligence Center, Lieutenant General Michael S. Groen** leads the JAIC's progress in support of transforming of U.S. Joint warfighting and departmental processes through the integration of Artificial Intelligence, and enabling the empowerment and unification of bottom-up AI development by innovators across the Defense Department. In support of this, he ensures the JAIC is able to provide the foundational elements of AI and AI-enabling technical services and infrastructure, acquisition support, expertise, and best practices to the Department's AI ecosystem.

As the **JAIC's Deputy Director, Joint Artificial Intelligence Center, Mr. Mark Gorak** serves as the senior advisor to the Director of the Joint Artificial Intelligence Center (JAIC) and is focused on attracting and cultivating mission-driven, world class AI talent to rise to the challenge of harnessing AI, to accelerate the adoption and integration of AI throughout the Department of Defense at scale.

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The mission of the JAIC is to transform the DoD by accelerating the delivery and adoption of AI to achieve mission impact at scale. The goal is to use AI to solve large and complex problem sets that span multiple services; then, ensure the Services and Components have real-time access to ever-improving libraries of data sets and tools. The JAIC's holistic approach includes:

- Accelerating the delivery and adoption of AI
- Scaling the impact of AI across the Department
- Defend U.S. critical infrastructure from malicious cyber activity that alone, or as part of a campaign, could cause a significant cyber incident
- Establishing a common foundation that enables decentralized execution and experimentation
- Evolving partnerships with industry, academia, allies and partners
- Cultivating a leading AI workforce

US011107588B2

(12) **United States Patent**
Ehrlich et al.

(10) **Patent No.: US 11,107,588 B2**
(45) **Date of Patent: Aug. 31, 2021**

(54) **METHODS AND SYSTEMS OF PRIORITIZING TREATMENTS, VACCINATION, TESTING AND/OR ACTIVITIES WHILE PROTECTING THE PRIVACY OF INDIVIDUALS**

(71) Applicants: **Gal Ehrlich**, Ramat-Gan (IL); **Maier Fenster**, Petach-Tikva (IL)

(72) Inventors: **Gal Ehrlich**, Ramat-Gan (IL); **Maier Fenster**, Petach-Tikva (IL)

(*) 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.: **17/106,279**

(22) Filed: **Nov. 30, 2020**

(65) **Prior Publication Data**

US 2021/0082583 A1 Mar. 18, 2021

(30) **Foreign Application Priority Data**

Aug. 11, 2020 (IL) 276648
Aug. 11, 2020 (IL) 276665
Sep. 1, 2020 (IL) 277083

(51) **Int. Cl.**
G06Q 10/00 (2012.01)
G16H 50/80 (2018.01)
(Continued)

(52) **U.S. Cl.**
CPC ***G16H 50/80*** (2018.01); ***G06N 7/005*** (2013.01); ***G16H 50/30*** (2018.01); ***H04W 4/023*** (2013.01); ***H04W 4/029*** (2018.02)

(58) **Field of Classification Search**
CPC G16H 50/80; G16H 50/30; G16H 15/00; G16H 10/60; H04W 4/023; H04W 4/029; H04W 12/069; H04W 4/80; G06N 7/005; G08B 21/02; G07C 9/28; G07C 9/22; G06F 1/163; G06F 3/14; G09G 5/36;
(Continued)

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(Continued)

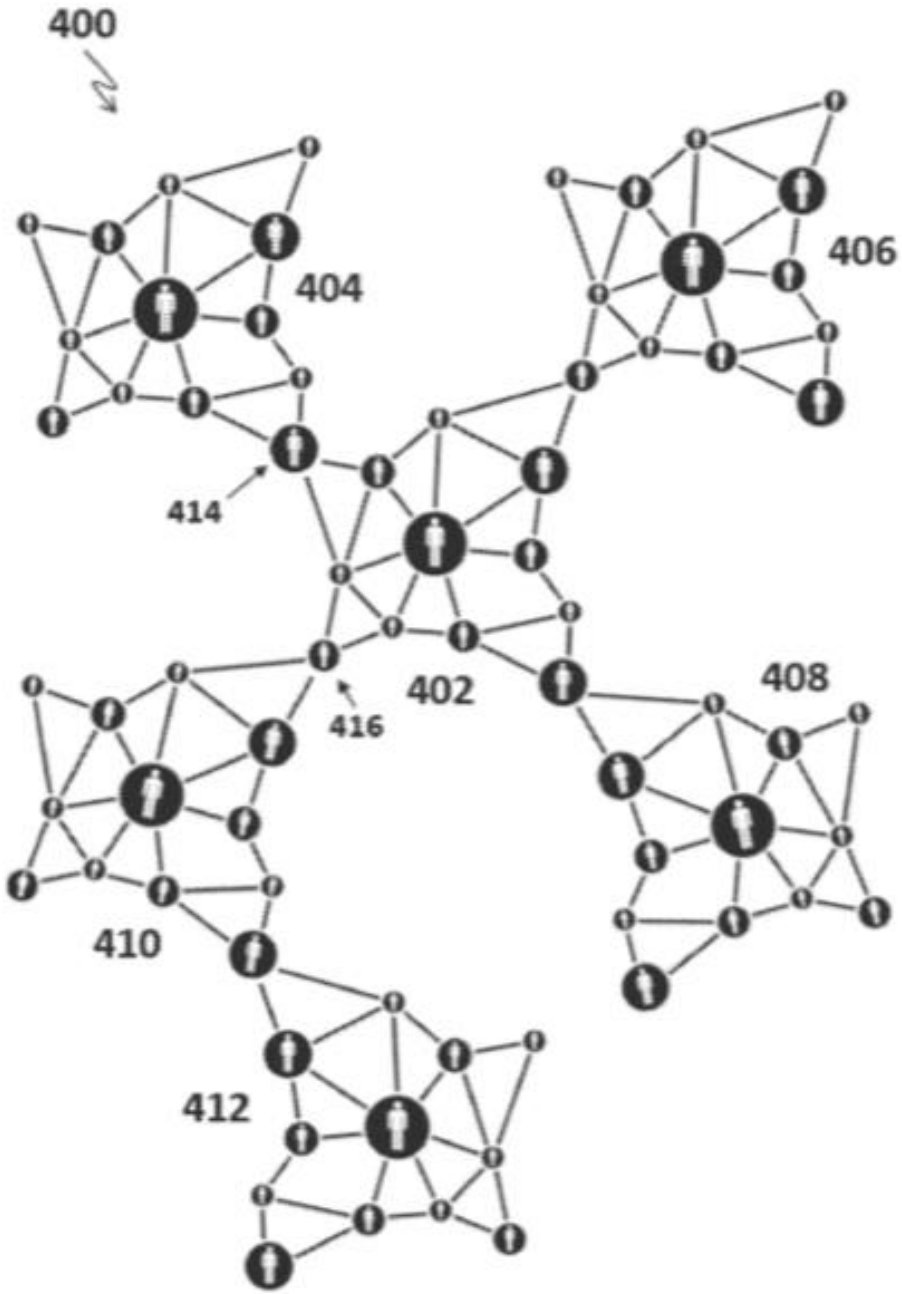
Primary Examiner — Anh V La

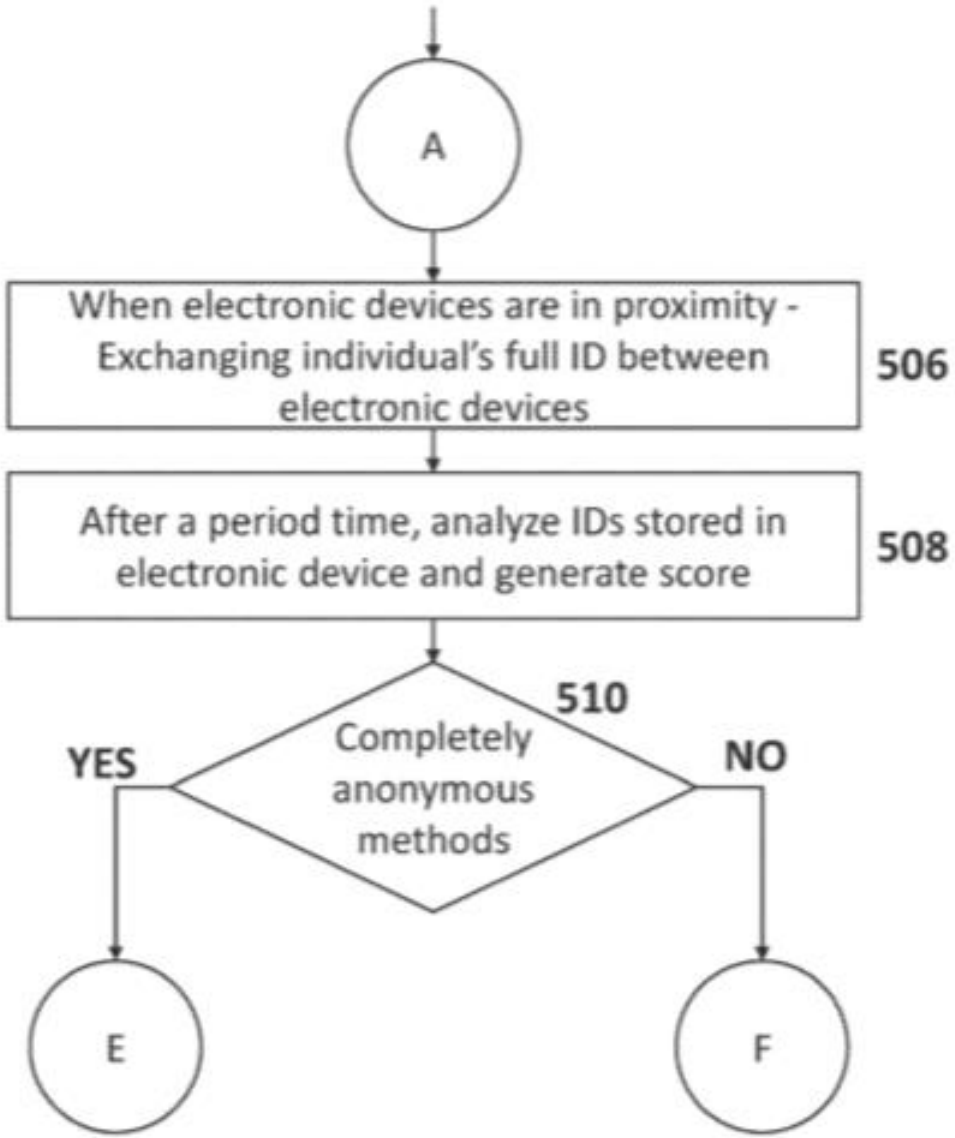
(57) **ABSTRACT**

System and methods for anonymously selecting subjects for treatment against an infectious disease caused by a pathogen. The system comprises a plurality of electronic devices comprising instructions to generate an ID and, when in proximity of another such electronic device, one or both electronic devices transmit/receive the ID to/from the other electronic device. Then, a score is generated based on a plurality of such received IDs. Additionally, based on information received from a server, relevant treatment instructions are displayed to the subjects based on the received information and the score. The server comprises instructions for sending to the plurality of electronic devices the information to be displayed with the relevant treatment instructions, additionally the server and/or the electronic devices comprise instructions to generate a prediction of likelihood of a subject transmitting the pathogen, based on the score of the subject.

37 Claims, 12 Drawing Sheets

https://patentimages.storage.googleapis.com/68/80/73/6a17a66e9ec8c5/US11107588.pdf





https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

FIELD AND BACKGROUND OF THE INVENTION

[0003] The present invention, in some embodiments thereof, relates to methods and systems of prioritizing vaccinations\treatments\testing and, more particularly, but not exclusively, to method and systems of prioritizing vaccinations\treatments\testing in a pandemic situation, whereby vaccines are at short supply and while protecting the privacy of the individuals in the population.

[0004] Coronavirus disease 2019 (COVID-19) is an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It was first identified in December 2019 in Wuhan, Hubei, China, and has resulted in an ongoing pandemic. The first confirmed case has been traced back to 17 Nov. 2019 in Hubei. As of 6 August 2020, more than 18.7 million cases have been reported across 188 countries and territories, resulting in more than 706,000 deaths. More than 11.3 million people have recovered. The virus is primarily spread between people during close contact, most often via small droplets produced by coughing, sneezing, and talking. The droplets usually fall to the ground or onto surfaces rather than travelling through air over long distances. However, the transmission may also occur through smaller droplets that are able to stay suspended in the air for longer periods of time in enclosed spaces, as typical for airborne diseases. Less commonly, people may become infected by touching a contaminated surface and then touching their face. It is most contagious during the first three days after the onset of symptoms, although spread is possible before symptoms appear, after they disappear and from people who show very mild or do not show symptoms at all.

vaccinations\treatments\testing and, more particularly, but not exclusively, to method and systems of prioritizing vaccinations\treatments\testing in a pandemic situation, whereby vaccines are at short supply and while protecting the privacy of the individuals in the population.

It is most contagious during the first three days after the onset of symptoms, although spread is possible before symptoms appear, after they disappear and from people who show very mild or do not show symptoms at all.

Vaccinations and Prophylactic Treatments

[0349] In some embodiments, the term vaccination means the administration of a vaccine to help the immune system develop protection from a disease. In some embodiments, vaccines contain a microorganism or virus in a weakened, live or killed state, or proteins or toxins from the organism. In some embodiments, in stimulating the body's adaptive immunity, they help prevent sickness from an infectious disease. In some embodiments, as stated above, when a sufficiently large percentage of a population has been vaccinated, herd immunity results.

[0350] In some embodiments, the term prophylactic treatment means a preventive measure taken to fend off a disease or another unwanted consequence.

[0351] In order to facilitate the explanation of the invention, the term "treatment" will be used. It should be understood that when the term "treatment" is used it refers to both vaccinations and prophylactic treatment.

[0352] In some embodiments, vaccines are all compounds as disclosed in in the website of the World Health Organization (https://www[dot]who[dot]int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines), which are all incorporated herein by reference, and which are optionally provided (e.g., as a kit) with software such as described herein and/or provided with instructions for use targeting potential super spreaders detected, for example, using methods and apparatus as described herein, and include the following:

28 candidate vaccines in clinical evaluation

vaccines contain a microorganism or virus in a weakened, live or killed state, or proteins or toxins from the organism.

Image provided by: Dr. Carrie Madej

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

Example

[0478] Reference is now made to the following prophetic examples, which together with the above descriptions illustrate some embodiments of the invention in a non limiting fashion.

[0479] In the following example, three imaginary individuals (John Doe, Jane Smith and Mark Lite) will be scored according to one or more exemplary factors and/or components, as disclosed above. It should be understood that the following scenario is not limiting and it is only provided to enable a person having skills in the art to implement the invention.

implement the

Weekly Mobility Data

[0481]

	John Doe	Jane Smith	Mark Lite
Day 1	Total locations visited: 5 Estimated potential number of individuals in contact with subject on this day: 650	Total locations visited: 3 Estimated potential number of individuals in contact with subject on this day: 150	Total locations visited: 1 Estimated potential number of individuals in contact with subject on this day: 5
Day 2	Total locations visited: 6 Estimated potential number of individuals in contact with subject on this day: 750	Total locations visited: 4 Estimated potential number of individuals in contact with subject on this day: 250	Total locations visited: 1 Estimated potential number of individuals in contact with subject on this day: 5
Day 3	Total locations visited: 5 Estimated potential number of individuals in contact with subject on this day: 650	Total locations visited: 2 Estimated potential number of individuals in contact with subject on this day: 80	Total locations visited: 2 Estimated potential number of individuals in contact with subject on this day: 30
Day 4	Total locations visited: 5 Estimated potential number of individuals in contact with subject on this day: 650	Total locations visited: 2 Estimated potential number of individuals in contact with subject on this day: 80	Total locations visited: 1 Estimated potential number of individuals in contact with subject on this day: 5
Day 5	Total locations visited: 5 Estimated potential number of individuals in contact with subject on this day: 650	Total locations visited: 3 Estimated potential number of individuals in contact with subject on this day: 150	Total locations visited: 2 Estimated potential number of individuals in contact with subject on this day: 30
Day 6	Total locations visited: 5 Estimated potential number of individuals in contact with subject on this day: 650	Total locations visited: 1 Estimated potential number of individuals in contact with subject on this day: 5	Total locations visited: 1 Estimated potential number of individuals in contact with subject on this day: 5
Day 7	Total locations visited: 5 Estimated potential number of individuals in contact with subject on this day: 650	Total locations visited: 2 (*visited Church) Estimated potential number of individuals in contact with subject on this day: 500	Total locations visited: 3 (*visited stadium) Estimated potential number of individuals in contact with subject on this day: 500
Score (relative weight 70%)	80	60	15

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[0480]

	John Doe	Jane Smith	Mark Lite
Age (relative weight 1%)	30	35	33
Profession (relative weight 5%)	Teacher	Operator	Unemployed
Known health conditions (relative weight 4%)	None	Chronic coughing	None
Visits religious gathering (relative weight 20%)	No	Yes	Yes

[0482] In view of the results of the Weekly mobility data alone, the order of the treatments will be John Doe, Jane Smith and then Mark Lite.

[0483] The calculation of the overall score is:

criteria		John Doe	Jane Smith	Mark Lite
Age	1%	50	50	50
Profession	5%	80	50	0
Known health conditions	4%	0	90	0
Visits religious gathering	20%	0	80	80
Mobility data	70%	80	60	15
weighted scores	100%	60.5	66.2	14.2

[0484] As can be seen, when taking under consideration all the information data, the order of the treatments will be Jane Smith, John Doe and then Mark Lite.

[0485] It should be understood that the above numeric examples are just examples to help a person having skills in the art to understand the invention. It also should be understood that different weight values, scores and methods of calculating a score could be used.

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

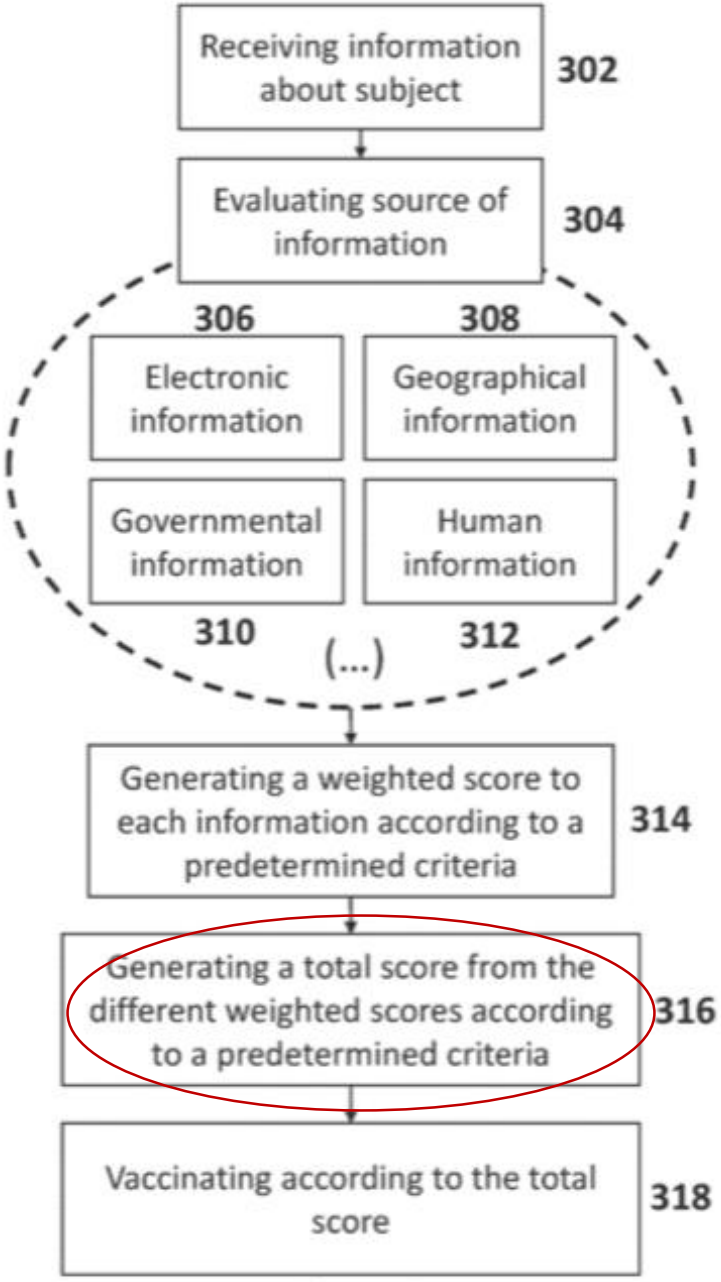


Figure 3

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

Exemplary Use of the System and Methods for Determining Who Will Receive a Certain Type of Vaccination

[0400] In some embodiments, during the development of vaccines for a certain disease, different vaccines comprising different vaccine potencies are developed. In some embodiments, vaccine potency is a quantitative measure of the specific ability of the vaccine product to achieve an intended biological effect defined in a suitable biological assay based on the attribute of the product that is linked to the relevant biological properties. In some embodiments, the system is used to identify which individuals will receive which types of vaccines in relation to their potency. For example, individuals that received and/or were identified as a high superspreading score by the system would be vaccinated with more potent vaccines, when compared with other individuals having lower superspreading scores. In some embodiments, those individuals having lower superspreading scores might either receive later a vaccination or receive a vaccine having a lower potency.

Vaccine POTENCY is Based on Super-Spreader BEHAVIOR

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

procedure. In some embodiments, individual data arriving from each user is coupled with their health information (sick, vaccinated, recovered, etc.) to further assess the progression of the vaccination procedures and the efficacy of the vaccination procedure. Optionally, if the persons met by a user are vaccinated or otherwise determined to be immune, such contacts may not count and/or be weighted lower.

[0380] In some embodiments, the app will be also used to send personalized communication to the users, for example, to come and be vaccinated. In some embodiments, in view of the information received from the app, specific actions are taken, for example, send a communication to the user to enhance his awareness to behavioral rules during pandemic, to come and be vaccinated, to avoid certain locations, which are at high risk of contagion.

*"...send a communication to the user to **enhance his awareness to behavioral rules during pandemic, to come and be vaccinated, to avoid certain locations, which are at high risk of contagion.**"*

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

Healthcare Privacy: So private…
you may not even be informed if your health is at risk.

[0408] In some embodiments, the notification for getting treatment may or may not contain information regarding the results of the calculations. For example, an individual that was identified as a superspreader may or may not receive information about the fact that he/she was identified as such. In some embodiments, the potential advantage of not providing such information is to further enhance the privacy protection of the user. For example, an onlooker may not be able to tell if a user received a high score due to his own behavior, the behavior of those he meets and/or an underlying health condition, which may put them at higher risk.

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

[0409] In some embodiments, dedicated codes, for example in the form of coupons, will be provided to individuals having important/relevant professions (like doctors, police, etc.). In some embodiments, insertion of the codes into their personal electronic devices will inform the system that that encrypted/anonymized user needs a correction in their score. In some embodiments, the correction can be either increasing the score or decreasing the score. In some embodiments, when the electronic device detects certain behavior, like an increase in the movements of the user, the electronic device (for example via the dedicated app) will warn the user that his score will be changed if the behavior is not changed. In some embodiments, changing the score can be either increasing or decreasing the score.

Warning Notices and Coupon Codes

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

Dedicated Mandatory App

[0378] In some embodiments, in view of the pandemic, the government may order the citizens to install a dedicated application on their smartphones (or other smart devices like tablets, smart watches, smart glasses, etc.) to help the government with the logistics of the vaccination procedures. In some embodiments, the government (or other body) provides the public with such dedicated smart devices. In some embodiments, the app and/or the smart device is configured to inform on the user's location at all times and to communicate with adjacent smart devices (via Bluetooth for example) to assess the interactions between users, for example vicinity between users, movement of users, etc.). In

What is G2G Now?

The G2G Now app is a tool that helps WA Police protect the community by conducting remote, virtual in-app checks on people in quarantine. The app uses facial verification technology and phone location data to ensure people in quarantine remain at their registered address throughout their quarantine period.

When users receive a push notification to check-in, they have a 5-minute window to take a photo of themselves. The app then matches the image and location with the person's registered details to ensure compliance with their quarantine direction.

How do I access the app?

Anyone with a smartphone can download and use the app. It takes less than 2 minutes to set up an account.

https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/covid-19-coronavirus-g2g-now-frequently-asked-questions?fbclid=IwAR0WgFPfdYcclGzXmIzJYBn5G49lYLuhYPeo76V9byWuOFNFDKrz3nZm3oc

What if I'm sleeping/showering/gardening when I receive a check-in request and don't respond?

G2G Now is designed to make people's lives easier, not harder. If you miss your check-in window, you will be sent a second check-in request shortly after the first one.

If you miss this second request, the app will prompt you to give a reason. Police will then determine what further action, if any, is required, such as follow-up calls or a physical check-in.

I've missed my check-in window multiple times. Will I get fined?

If you miss your check-in window, the app will prompt you to give a reason. If this happens multiple times, or you do not provide a valid reason, Police may attend your address to check on your compliance with the quarantine direction given to you.

If you have travelled from a high risk jurisdiction and are over the age of 16, you are legally required to comply with instructions from the G2G Now app.

If you consistently fail to comply with check-in requests without a good reason, you may have committed an offence under the Emergency Management Act, which can result in fines of up to $50,000 and imprisonment.

https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/covid-19-coronavirus-g2g-now-frequently-asked-questions?fbclid=IwAR0WgFPfdYcclGzXmIzJYBn5G49lYLuhYPeo76V9byWuOFNFDKrz3nZm3oc

Does the app track or record my location?

The app records your location at every check-in request only to validate that you are at your registered address. It does not track your location or movements at any other time.

I'm quarantining at the same address as my partner, but I'm asked to check in much more regularly than he is. Is there something wrong with my app?

G2G Now sends check-ins on randomised schedules and gives authorities the ability to individualise people's check-in requirements. It is not unusual for people to receive check-in requests at different times of the day or more than other people.

Will my photos only be used for this app and quarantine compliance purposes? Or will it be kept on Police records?

The information that is collected through the G2G Now app is collected for monitoring quarantine arrangements. It is not collected for general policing purposes.

The information will be stored and used only as permitted or required by law.

https://www.wa.gov.au/organisation/department-of-the-premier-and-cabinet/covid-19-coronavirus-g2g-now-frequently-asked-questions?fbclid=IwAR0WgFPfdYcclGzXmIzJYBn5G49lYLuhYPeo76V9byWuOFNFDKrz3nZm3oc

Superspreader

[0352] In some embodiments, vaccines are all compounds as disclosed in in the website of the World Health Organization (https://www[dot]who[dot]int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines), which are all incorporated herein by reference, and which are optionally provided (e.g., as a kit) with software such as described herein and/or provided with instructions for use targeting potential super spreaders detected, for example, using methods and apparatus as described herein, and include the following:

28 candidate vaccines in clinical evaluation

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

COVID-19 Vaccine developer/ manufacturer	Vaccine platform	Type of candidate vaccine	Number of doses	Timing of doses	Route of Admin-istration	Clinical Stage Phase 1	Phase 1/2	Phase 2	Phase 3
University of Oxford/ AstraZeneca	Non-Replicating Viral Vector	ChAdOx1-S	1		IM		PACTR 202006922165132 2020-001072-15 Interim Report	2020-001228-32	ISR CTN 89951424
Sinovac	Inactivated	Inactivated	2	0, 14 days	IM		NCT04383574 NCT04352608		NCT 04456595
Wuhan Institute of Biological Products/ Sinopharm	Inactivated	Inactivated	2	0, 14 or 0, 21 days	IM		Chi CTR 2000031809		Chi CTR 2000034780
Beijing Institute of Biological Products/ Sinopharm	Inactivated	Inactivated	2	0, 14 or 0, 21 days	IM		Chi CTR 2000032459		Chi CTR 2000034780
Moderna/ NIAID	RNA	LNP-encapsulated mRNA	2	0, 28 days	IM	NCT 04283461 Interim Report		NCT04405076	NCT04470427
BioNTech/ FosunPharma/ Pfizer	RNA	3 LNP-mRNAs	2	0, 28 days	IM		2020-001038-36 Chi CTR 2000034825		NCT 04368728
CanSino Biological Inc./Beijing Institute of Biotechnology	Non-Replicating Viral Vector	Adenovirus Type 5 Vector	1		IM	Chi CTR 2000030906 Study Report		Chi CTR 2000031781 Study Report	

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

COVID-19 Vaccine developer/ manufacturer	Vaccine platform	Type of candidate vaccine	Number of doses	Timing of doses	Route of Admin-istration	Clinical Stage Phase 1	Phase 1/2	Phase 2	Phase 3
Anhui Zhifei Longcom Bio-pharmaceutical/ Institute of Microbiology, Chinese Academy of Sciences	Protein Subunit	Adjuvanted recombinant protein (RBD-Dimer)	2 or 3	0, 28 or 0, 28, 56 days	IM	NCT 04445194		NCT 04466085	
Institute of Medical Biology, Chinese Academy of Medical Sciences	Inactivated	Inactivated	2	0, 28 days	IM	NCT 04412538	NCT 04470609		
Inovio Pharma-ceuticals/ International Vaccine Institute	DNA	DNA plasmid vaccine with electro-poration	2	0, 28 days	ID		NCT 04447781 NCT 04336410		
Osaka University/ AnGes/ Takara Bio	DNA	DNA plasmid vaccine + Adjuvant	2	0, 14 days	IM		NCT 04463472		
Cadila Healthcare Limited	DNA	DNA plasmid vaccine	3	0, 28, 56 days	ID		CTRI/ 2020/07/026352		
Genexine Consortium	DNA	DNA Vaccine (GX-19)	2	0, 28 days	IM		NCT 04445389		
Bharat Biotech	Inactivated	Whole-Virion Inactivated	2	0, 14 days	IM		NCT 04471519		
Janssen Pharma-ceutical Companies	Non-Replicating Viral Vector	Ad26COVS1	2	0, 56 days	IM		NCT 04436276		
Novavax	Protein Subunit	Full length recombinant SARS CoV-2 glycoprotein nanoparticle vaccine adjuvanted with Matrix M	2	0, 21 days	IM		NCT 04368988		

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

[0006] A research article by Straetemans et. al. called "*Prioritization strategies for pandemic influenza vaccine in 27 countries of the European Union and the Global Health Security Action Group: a review*" discussed vaccine prioritization strategies during pandemic times, but its conclusions are limited to the critical groups, for example, health care providers (e.g., doctors, nurses, laboratories, hospitals, etc.), essential service providers (e.g., police, fire fighters, public sector personnel, governmental personnel, etc.) and high risk individuals (e.g., people with high risk of complications, pregnant women, children, etc.). These obvious groups usually amount to less than 2-10% of the total population, which still leaves the government with the question of what is the best order to vaccinate the rest of the population, namely prioritizing vaccinations.

2007: Vaccine Prioritization Strategies for 27 Countries of the EU and Global Health Security Action Group:

- Healthcare providers
- **Doctors, Nurses**
- Essential service providers
- **Police**
- Firefighters
- Government personnel
- High Risk Complications
- **Pregnant women**
- **Children**

https://patentimages.storage.googleapis.com/04/24/12/7c8e8238f4ae9d/US20210082583A1.pdf

https://pubmed.ncbi.nlm.nih.gov/17825095/

Ouverture et célébration du 60ème anniversaire
Opening and 60th Anniversary Commemoration

We adopted a joint statement on AI principles that's firmly rooted in the OECD's 2019


OCDE | 60
Ouverture et célébration du 60ème anniversaire
Opening and 60th Anniversary Commemoration
OECD | 60
Établir un avenir vert
et inclusif autour de
VALEURS PARTAGÉ
SHARED VALUES
building a green and
inclusive future
OCDE
RÉUNION DU CONSEIL
AU NIVEAU DES MINISTRES
OECD
MINISTERIAL
COUNCIL MEETING
recommendation, underscoring the importance
of trustworthy AI that respects human rights
OCDE
RÉUNION DU CONSEIL
AU NIVEAU DES MINISTRES
2021
OECD
MINISTERIAL
COUNCIL MEETING
2021

OCDE | 60

Ouverture et célébration du 60ème anniversaire
Opening and 60th Anniversary Commemoration

OECD | 60

The stakes simply could not be higher.

OCDE
RÉUNION DU CONSEIL
AU NIVEAU DES MINISTRES
2021

OECD
MINISTERIAL
COUNCIL MEETING
2021

Lynne Parker

Director of the National Artificial Intelligence Initiative Office - The White House

OECD.AI Policy Observatory

Korean delegation AI event – The OECD Principles on Artificial Intelligence, Progress over the Past Two years and Future Directions

October 4, 2021 1:40PM to 4:05PM

OR EN FR

To Advance Trustworthy Ai and Prioritize Training of an Ai Ready Workforce

"We must prepare the future and the present US workforce for integration of Ai systems across all sectors of the economy and society."

*"Our goal is to **fill the Ai talent gap** and **prepare US workers for jobs of the future by implementing policies that ensure a diverse, inclusive and knowledgeable workforce**. We would like to see the integration of Ai related concepts of schooling, from kindergarten, and even pre-kindergarten through doctoral positions, including community colleges…"*

32:52 VIDEO START https://oecdtv.webtv-solution.com/6c38401bbfabe96c963ede85620cab98/or/Korean-delegation-AI-event-The-OECD-Principles-on-Artificial-Intelligence-Progress-over-the-Past-Two-years-and-Future-Directions.html

REUTERS

MON JAN 25, 2021 / 8:14 AM EST

Makers of Sophia the robot plan mass rollout amid pandemic

HONG KONG (Reuters) - "Social robots like me can take care of the sick or elderly," Sophia says as she conducts a tour of her lab in Hong Kong. "I can help communicate, give therapy and provide social stimulation, even in difficult situations."

"The world of COVID-19 is going to need more and more automation to keep people safe," founder and chief executive David Hanson said, standing surrounded by robot heads in his lab.

"Someone said 'we have nothing to fear but fear itself'," the robot mused. "What did he know?"

https://mobile.reuters.com/article/amp/idUSKBN29U03X?fbclid=IwAR21TWGcg0hylxQ1-gyzkG--u3LATH6d2zEc8lUuMVqE400VXYpcLERbvuI

"Someone said 'we have nothing to fear but fear itself'," the robot mused. "What did he know?"

Humanoid robot Grace, developed by Hanson Robotics and designed for the healthcare market to interact and comfort the elderly and isolated people, especially those suffering during the coronavirus disease (COVID...

https://mobile.reuters.com/article/amp/idUSKBN29U03X?fbclid=IwAR21TWGcg0hylxQ1-gyzkG--u3LATH6d2zEc8lUuMVqE400VXYpcLERbvuI

The FBI Divides Terrorist-Related Activities into Two Categories:

- A **terrorist *incident* is** a violent act or **an act dangerous to human life**, in violation of the criminal laws of the United States, or of any state, to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.

- A terrorism *prevention* is a documented instance in which a violent act by a known or suspected terrorist group or individual with the means and a proven propensity for violence is successfully interdicted through investigative activity.

Note: *The FBI investigates terrorism-related matters without regard to race, religion, national origin, or gender. Reference to individual members of any political, ethnic, or religious group in this report is not meant to imply that all members of that group are terrorists. Terrorists represent a small criminal minority in any larger social context.*

https://www.fbi.gov/stats-services/publications/terrorism-2002-2005

Second Recommendation - Students

The district's recommendation is a staggered approach to have all eligible* students vaccinated against COVID-19, as a condition of attending in-person learning. The timeline for requiring the mandated vaccination will be aligned to the full FDA approval. Mandatory testing will be required for all unvaccinated students until full FDA approval of the vaccine for their age group.

*All students who are eligible for the COVID-19 vaccine are required to be vaccinated, excluding those with qualified exemptions or conditional admissions.

https://go.boarddocs.com/ca/sandi/Board.nsf/files/C797R4004A4C/$file/Vaccine%20Mandate%20Plan.pdf

Per the PREP Act:

3. Are There Any Limitation on Immunity from Liability?

WILLFUL MISCONDUCT* is misconduct that is greater than any form of recklessness or negligence. It is defined in the PREP Act as an act or failure to act that is taken:

- *intentionally to achieve a wrongful purpose;*
- *knowingly without legal or factual justification; and*
- ***in disregard of a known or obvious risk that is so great as to make it highly probable that the harm will outweigh the benefit***

**All three of these conditions must be proven with clear and convincing evidence.*

WILLFUL MISCONDUCT cannot be found against:

- *A manufacturer or distributor for actions regulated by HHS under the Public Health Service Act or the Federal Food, Drug and Cosmetic Act, **if HHS chooses not to take an enforcement action against the manufacturer or distributor**, or if HHS terminates or settles an enforcement action without imposing a criminal, civil, or administrative penalty; or*
- ***A program planner or qualified person who acts in accordance with applicable directions, guidelines, or recommendations issued by the HHS regarding administration and use of a countermeasure as long as HHS or the State or local health authority is notified about the serious injury or death within seven days of its discovery.***

https://www.phe.gov/Preparedness/legal/prepact/Pages/prepqa.aspx#immune3

WARNING: PREP ACT/COVID-19 EUA IMMUNITY IS UNCONSTITUTIONAL AND IMMORAL

Karen Kingston

To: rbarrerar1@sandi.net; sbazzo@sandi.net; kevinbeiser@sandi.net; mmcquary@sandi.net; swhitehurst-payne@sandi.net; board@sandi.net; rschooley@ucsd.edu;

The SDUSD BOARD's and UCSD EXPERT PANEL's authority and influence over the COVID-19 VACCINE MANDATE FOR SAN DIEGO SCHOOLS is based on your knowledge, expertise and moral aptitude regarding the health benefits and risks of those students and faculty who may be mandated to be vaccinated. The SDUSD BOARD's decision to pass or not pass the COVID-19 VACCINE MANDATE FOR SAN DIEGO SCHOOLS, as guided by the UCSD EXPERT PANEL, may also be based on the individual and collective knowledge of personal civil and criminal liability risks. To ensure the SDUSD BOARD and UCSD EXPERT PANEL does not have plausible deniability regarding the risk for physical harm, permanent disabilities, autoimmune diseases and deaths for teenagers and young adults aged 16 years of age and older from the COMIRNATY and/or other EUA COIVD-19 vaccines, this communication will focus on some false and misleading statements issued by the SDUSD BOARD and UCSD EXPERT PANEL from the COVID-19 VACCINATION ROADMAP.

It is important to note that NO STATEMENTS MADE by the SDUSD BOARD or UCSD EXPERT PANEL in the COVID-19 VACCINATION ROADMAP provide any scientific, medical, or legal references or source documents. Therefore, it is reasonable to assume that the majority of the scientific, medical, and legal content in the COVID 19 VACCINATION ROADMAP is both false and disingenuous. Per slide 5 of the COVID-19 VACCINATION ROADMAP, Robert (Chip) Schooley, Division of Infectious Disease & Global Public Health, goes so far as to openly confess that his support is also politically motivated when stating, *"It (COVID-19 VACCINE MANDATE FOR SAN DIEGO SCHOOLS) will also 'mainstream' the policy around COVID".*

Per slide 3 of COVID-19 VACCINATION ROADMAP, entitled "The Science," the first bullet point states:

> ***"Vaccines are fully approved by the FDA only once an extremely high level of confidence that effectiveness and benefits clearly outweigh known or potential risks."***

The above statement referring to COMIRNATY, as well as other FDA authorized vaccines for COVID-19, regarding benefits versus known or potential risks is unfounded, false, and reckless.

Legislative Policy Advisor-Washington, D.C. Option-21035209UDC

Salary ⓘ	Depends on Qualifications	**Location** ⓘ	Washington, D.C.
Job Type	Regular - Full time	**Department**	Chief Admin Officer
Job Number	21035209UDC		
Closing	11/9/2021 11:59 PM Pacific		

DESCRIPTION BENEFITS QUESTIONS

Job Summary

The County of San Diego has a current opening for

LEGISLATIVE POLICY ADVISOR
(Washington, D.C. Option)

LEGISLATIVE POLICY ADVISOR
(Washington, D.C. Option)

The Office of Strategy and Intergovernmental Affairs (OSIA) is seeking an experienced **Legislative Policy Advisor** to serve as the County of San Diego's Legislative Advocacy Program representative in Washington, D.C.

This unclassified management position reports to the Director, Office of Strategy and Intergovernmental Affairs and will be supervised remotely. The position is based in Washington, D.C. and co-located with the National Association of Counties (NACo) and will be responsible for focused efforts on advancing the County of San Diego Board of Supervisors' Legislative Program on all federal advocacy efforts.

Please click here to view the detailed brochure for the duties and requirements of this position. (Download PDF reader)

Application Process:
A first review of résumés will take place during the week of October 18, 2021. This recruitment will remain open until the position is filled and may close once a sufficient number of applications have been received. Interested candidates are encouraged to apply as soon as possible for consideration.

CONDITION OF EMPLOYMENT:
Employees hired on or after October 15, 2021, are required to be fully vaccinated against COVID-19. A copy of your vaccination card must be provided if you receive a conditional offer of employment and will be verified at the time you begin the County background investigation.

*Requests for exemption to the vaccine requirement may be considered.

https://www.governmentjobs.com/careers/sdcounty/jobs/3246860/legislative-policy-advisor-washington-d-c-option-21035209udc?keywords=legislative%20policy%20advisor&pagetype=jobOpportunitiesJobs

Pfizer FDA BLA, Pg 25. Missing Information: Vaccine Effectiveness

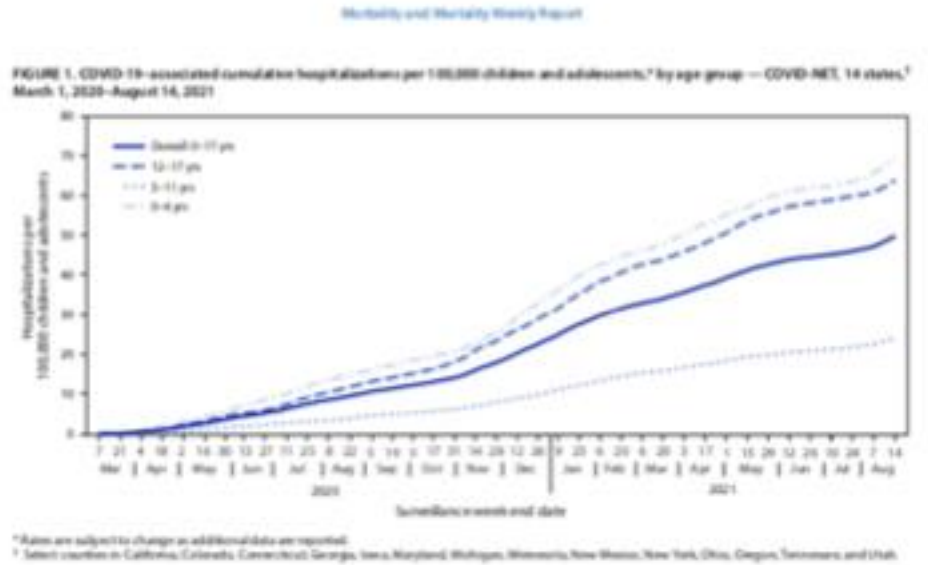
Pharmacovigilance Plan (PVP)

The Applicant's proposed pharmacovigilance plan (version 1.1) includes the following important risks and missing information:

- Important identified risks: Anaphylaxis; Myocarditis and Pericarditis
- Important potential risk: Vaccine-Associated Enhanced Disease (VAED), including Vaccine-Associated Enhanced Respiratory Disease (VAERD)
- Missing information: Use in pregnancy and lactation; Vaccine effectiveness; Use in pediatric individuals <12 years of age

In addition to routine pharmacovigilance, the Applicant will conduct the postmarketing studies listed in Section 11c Recommendation for Postmarketing Activities.

Per slide 3 of the "Vaccination Roadmap," the SDUSD BOARD and EXPERT PANEL claim, " ***Vaccine is the most preventive of all strategies***." This statement is proven false by real world evidence presented by the CDC, in an August 2021 MMWR. As mass vaccination of the US Population increases, so does hospitalizations of infants, children and teenagers.



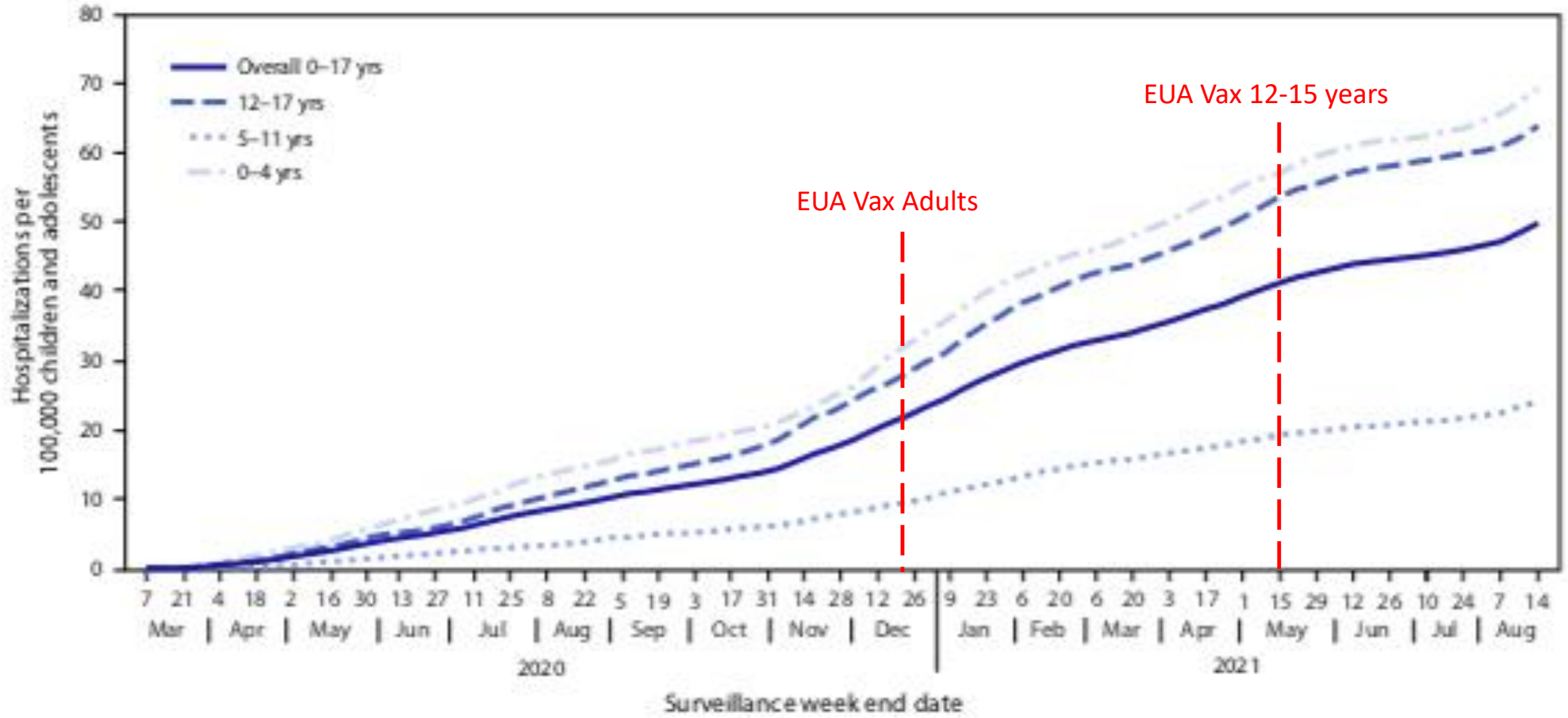
The increase in pediatric hospitalizations, referred to as COVID-19 associated in the above chart, are not likely correlated with natural infection from a natural SARS-CoV-2 virus or its natural variants, but more likely associated with infection from the viral particles of those who are COVID-19 vaccinated. This phenomenon of VGBT injected subjects infecting others is well-documented and known as 'shedding' as per the August 2015 FDA document entitled, "Design and Analysis of Shedding Studies for Virus-Based Gene Therapy…" The document also discusses the potential for a virus-based gene therapy (VGBT) to produce a virus that is different from the parent strain (SARS-CoV-2). This phenomena is known as progeny (such as the production of a mutant SARS-CoV-2 strain, such as the potential for Delta to be the progeny of BNT162b2/COMIRNATY).

Evidence that both the FDA and Pfizer are aware of the risks of shedding to the American population, is Study C4591022 from the FDA approval letter, entitled *"Pfizer-BioNTech COVID-19 Vaccine* ***Exposure during Pregnancy****: A* ***Non-Interventional Post-Approval Safety Study of Pregnancy and Infant Outcomes*** *in the Organization of Teratology Information Specialists (OTIS)/MotherToBaby Pregnancy Registry."*

As mass vaccination increases, so do hospitalizations of child teens, children and babies from ‘COVID-19’

Morbidity and Mortality Weekly Report

FIGURE 1. COVID-19–associated cumulative hospitalizations per 100,000 children and adolescents,* by age group — COVID-NET, 14 states,† March 1, 2020–August 14, 2021



* Rates are subject to change as additional data are reported.
† Select counties in California, Colorado, Connecticut, Georgia, Iowa, Maryland, Michigan, Minnesota, New Mexico, New York, Ohio, Oregon, Tennessee, and Utah.

https://www.cdc.gov/mmwr/volumes/70/wr/pdfs/mm7036e2-H.pdf

In case the SDUSD BOARD and EXPERT PANEL are unaware, COMIRNATY is protein-based therapy as it uses synthetic genetic code to produce the SARS-CoV-2 viral spike protein. (See below for verbatim language from pg. 6 of the August 23rd, FDA/BLA approval.)

- *COMIRNATY contains a nucleoside-modified messenger RNA (mRNA) encoding the viral spike glycoprotein (S) of SARS-CoV-2.*

Per the FDA's own expert analysis, entitled Immunogenicity of Protein-Based Therapies, *'A major problem with protein-based therapeutics is their immunogenicity, that is, their tendency to trigger an unwanted immune response against themselves….antibodies can also cause complications that can be life-threatening.'*

While Dr. Fauci has frequently boasted of the mRNA vaccines augmenting a 'robust immune response,' in some cases this 'robust immune response,' can turn out to be extremely harmful and lethal, especially in children and young healthy teenagers and adults. To further substantiate my previous statement, the FDA and Pfizer have analyzed enough data to determine the extent of the effects of COMIRNATY causing immunogenicity are unknown and that Study C4591007 needs to be completed to 'evaluate the ***immunogenicity and safety of lower dose levels of COMIRNATY in individuals 12 through <30*** years of age.

Not only is the above listed COMIRNATY immunogenicity study alone enough to make a parent's heart drop, the safety-study also *requires a lower dose of the mRNA that is currently available in COMIRNATY* for students 12 years of age and older. The current dose is 30mcg per dose.

Per the FDA's own documents, it is evident that the known and potential risks of COMIRNATY may result in harm, permanent injuries, autoimmune diseases, and death in SDUSD students and staff, and yet the SDUSD BOARD and EXPERT PANEL have the audacity to proclaim, ***"that effectiveness and benefits clearly outweigh known or potential risks."***

Pfizer/COMIRNATY Post-FDA Approval Studies

POSTMARKETING REQUIREMENTS UNDER SECTION 505(o)

11. Study C4591007 substudy to evaluate the immunogenicity and safety of lower dose levels of COMIRNATY in individuals 12 through <30 years of age.

Final Report Submission: May 31, 2024

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

"A major problem with protein-based therapeutics is their immunogenicity, that is, their tendency to trigger an unwanted immune response against themselves... Such antibodies can cause complications that can be life threatening."

https://www.fda.gov/vaccines-blood-biologics/biologics-research-projects/immunogenicity-protein-based-therapeutics

I believe one of the major contributing reasons why the SDUSD BOARD and EXPERT PANEL, as well as numerous other local and national organizations are under the illusion that they have the right to yield unbridled tyrannical authority in mandating unhealthy, damaging, and sometimes deadly mandates such as the COVID-19 VACCINE MANDATE FOR SAN DIEGO SCHOOLS, is because of the 'immunity clause' under the PREP ACT per the EUA.

Unfortunately for the SDUSD BOARD and EXPERT PANEL, the US Constitution and the 14th and 9th Amendments override your delusional authority to place the students and faculty of the San Diego School District at KNOWN RISKS FOR PERMANENT INJURY, AUTOIMMUNE DISEASES, DISABILITIES, and DEATHS with no proven benefits, other than your financial gain. The PREP Act does not override the inalienable God-given rights of the American people granting the SDUSD BOARD and EXPERT PANEL immunity from 'willful misconduct,' despite the numerous memos or emails you have received reassuring you that you have malfeasant tyrannical reign to willfully to coerce and conspire to harm, injure, or murder San Diego students and faculty by an FDA approved biological agent.

COMIRNATY was unlawfully approved by the FDA and has proven to cause PERMANENT INJURY, AUTOIMMUNE DISEASES, DISABILITIES, and DEATHS in children, teenagers, young adults, adults, and the elderly. The long-term risks and mortality are still unknown as the product has not even completed the short-term safety studies of 2-5 years. This is just some of the young lives lost to the COVID-19 injections.

“ *Have nothing to do with the fruitless deeds of darkness, but rather expose them…*

Everything exposed by the light becomes visible –
That is why it is said:

‘Wake up, sleeper,
Rise from the dead,
and Christ will shine on you.’

Be careful then on how you live – not as unwise but as wise, making the most of every opportunity because the days are evil.

”

EPHESIANS: 5:11 - 15