



## EN ESTE NÚMERO

VacCiencia es una publicación dirigida a investigadores y especialistas dedicados a la vacunología y temas afines, con el objetivo de serle útil. Usted puede realizar sugerencias sobre los contenidos y de esta forma crear una retroalimentación que nos permita acercarnos más a sus necesidades de información.

- Resumen de la información publicada por la OMS sobre los candidatos vacunales en desarrollo contra la COVID-19 a nivel mundial.
- Noticias más recientes en la Web sobre vacunas.
- Artículos científicos más recientes de Medline sobre vacunas contra COVID-19.
- Patentes más recientes en Patentscope sobre vacunas.
- Patentes más recientes en USPTO sobre vacunas.

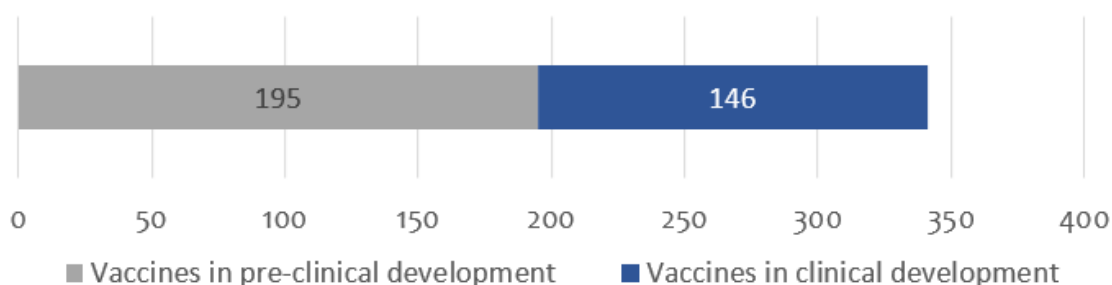
# Resumen de la información publicada por la OMS sobre los candidatos vacunales contra la COVID-19 en desarrollo a nivel mundial

Última actualización por la OMS: 25 de febrero de 2022.

Fuente de información utilizada:



146 candidatos vacunales en evaluación clínica y 195 en evaluación preclínica



## Candidatos vacunales en evaluación clínica por plataforma

Platform		Candidate vaccines (no. and %)	
PS	Protein subunit	48	33%
VVnr	Viral Vector (non-replicating)	21	14%
DNA	DNA	16	11%
IV	Inactivated Virus	21	14%
RNA	RNA	24	17%
VVr	Viral Vector (replicating)	4	3%
VLP	Virus Like Particle	6	4%
VVr + APC	VVr + Antigen Presenting Cell	2	1%
LAV	Live Attenuated Virus	2	1%
VVnr + APC	VVnr + Antigen Presenting Cell	1	1%
BacAg-SpV	Bacterial antigen-spore expression vector	1	1%

146

## Candidatos vacunales mucosales en evaluación clínica

Desarrollador de la vacuna/fabricante/país	Plataforma de la vacuna	Vía de administración	Fase
University of Oxford/Reino Unido	Vector viral no replicativo	Intranasal	1
Vaxart/Estados Unidos	Vector viral no replicativo	Oral	2
Univ. Hong Kong, Xiamen Univ./Beiging Wantai Biol. Pharm./China	Vector viral replicativo	Intranasal	3
Symvivo/Canadá	ADN	Oral	1
ImmunityBio, Inc./Estados Unidos	Vector viral no replicativo	Oral o SL	1/2
Codagenix/Serum Institute of India	Virus vivo atenuado	Intranasal	3
Center for Genetic Engineering and Biotechnology (CIGB)/Cuba	Subunidad proteica	Intranasal	1/2
Razi Vaccine and Serum Research Institute/India	Subunidad proteica	IM e IN	3
Bharat Biotech International Limited/India	Vector viral no replicativo	Intranasal	1
Meissa Vaccines, Inc./Estados Unidos	Virus vivo atenuado	Intranasal	1
Laboratorio Avi-Mex/México	Virus inactivado	IM o IN	2/3
USSF + VaxForm/Estados Unidos	Subunidad proteica	Oral	1
CyanVac LLC/Estados Unidos	Vector viral no replicativo	Intranasal	1
DreamTec Research Limited/Hong Kong	BacAg-SpV	Oral	NA
Sean Liu, Icahn School of Medicine at Mount Sinai	Vector viral replicativo	IN/IM	1

## Candidatos vacunales más avanzados a nivel global

Desarrollador de la vacuna/fabricante/país	Plataforma de la vacuna	Fase
Sinovac/China	Virus Inactivado	4
Sinopharm/Wuhan Institute of Biological Products/China	Virus Inactivado	4
Sinopharm/Beijing Institute of Biological Products/China	Virus Inactivado	4
University of Oxford/AstraZeneca/Reino Unido	Vector viral no replicativo	4
CanSino Biological Inc./Beijing Institute Biotechnology/China	Vector viral no replicativo	4
CanSino Biological Inc./Beijing Institute Biotechnology/China	Vector viral no replicativo (IH)	3
Gamaleya Research Institute/Rusia	Vector viral no replicativo	3
Janssen Pharmaceutical Companies/Estados Unidos	Vector viral no replicativo	4
Novavax/Estados Unidos	Subunidad proteica	3
Moderna/NIAID/Estados Unidos	ARN	4
Pfizer/BioNTech Fosun Pharma/Estados Unidos	ARN	4
Anhui Zhifei Longcom Biopharmac./Inst. Microbiol, Chin Acad Sci/China	Subunidad proteica	3
CureVac AG/Alemania	ARN	3
Institute of Medical Biology/Chinese Academy of Medical Sciences	Virus inactivado	3
Research Institute for Biological Safety Problems, Kazakhstan	Virus inactivado	3
Inovio Pharmac. + Intern. Vacc Inst. + Advaccine Biopharm Co., Ltd	ADN	3
Zydus Cadila Healthcare Ltd./India	ADN	3
Bharat Biotech/India	Virus Inactivado	3
Sanofi Pasteur + GSK/Francia/Gran Bretaña	Subunidad proteica	3
Shenzhen Kangtai Biological Products Co., Ltd./China	Virus Inactivado	3
Clover Biopharmaceuticals Inc./GSK/Dynavax/China/Reino Unido/EE.UU	Subunidad proteica	3
Vaxine Pty Ltd. + CinnaGen Co./Australia, Irán	Subunidad proteica	3
Medigen Vaccine Biol./Dynavax/NIAID/Taiwán/EE.UU	Subunidad proteica	4
Instituto Finlay de Vacunas/Cuba	Subunidad proteica	3
Federal Budget Res Inst State Res Cent Virol Biotechnol "Vector"/Rusia	Subunidad proteica	3
West China Hospital + Sichuan University/China	Subunidad proteica	3
Univ. Hong Kong, Xiamen Univ. & Beijing Wantai Biological Pharm./China	Vector viral replicativo	3
Acad Milit Sci (AMS) Walvax Biotechnol, Suzhou Abogen Biosci/China	ARN	3
Medicago Inc./Canadá	Partícula similar a virus	3
Codagenix/Serum Institute of India	Virus vivo atenuado	3
Center for Genetic Engineering and Biotechnology (CIGB)/Cuba	Subunidad proteica	3
Valneva, National Institute for Health Research, Reino Unido	Virus inactivado	3
Biological E. Limited	Subunidad proteica	3
Nanogen Pharmaceutical Biotechnology/Vietnam	Subunidad proteica	3
Shionogi/Japón	Subunidad proteica	3
Erciyes University/Turquía	Virus inactivado	3
SK Bioscience Co., Ltd./CEPI/Corea del Sur/Noruega	Subunidad proteica	3
Razi Vaccine and Serum Research Institute	Subunidad proteica	3
Arcturus Therapeutics, Inc.	ARN	3
Livzon Pharmaceutical/China	Subunidad proteica	3
Bagheiat-allah University of Medical Sciences/AmitisGen/Irán	Subunidad proteica	3
Arcturus Therapeutics, Inc.	Subunidad proteica	3

# Noticias en la Web

## La vacuna española de Hipra inicia la última fase de ensayo

**1 feb.** La vacuna española de Hipra contra la COVID-19 pasa a la fase III del ensayo clínico. Así lo ha autorizado la Agencia Española de Medicamentos y Productos Sanitarios (AEMPS), según ha confirmado el ministerio de Sanidad a La Vanguardia. La farmacéutica radicada en Amer (Girona) espera tener lista la inmunización antes del verano. La fase III es la última ronda de pruebas antes de solicitar la autorización para comercializar un medicamento.



La ministra de Ciencia e Innovación, Diana Morant, ya había explicado que "los resultados hasta ahora han sido muy buenos, da una gran respuesta de inmunidad y presenta incluso buenos resultados frente a Ómicron" y ya anticipó que si esta vacuna llega a aprobarse sería "como dosis de refuerzo a las vacunas que ya tenemos". Hipra comenzó los ensayos de fase II en noviembre, en los que se probó la vacuna en 1.000 voluntarios en diez hospitales de España.

Ahora, 20 centros hospitalarios, 17 de España, dos de Braga y Algarve (Portugal) y el Niguarda de Milán (Italia) han empezado a reclutar voluntarios para la nueva fase de ensayo. La previsión es que participen unas 3.000 personas mayores de 16 años.

Se probará la vacuna en personas ya vacunadas (en una o dos dosis) con AstraZeneca, Moderna, Pfizer y Janssen (o combinadas) al menos tres meses atrás, para comprobar que la inyección de refuerzo con Hipra amplía la protección ante las nuevas variantes y mantiene así la protección ante la infección, al menos, ante el padecerla de manera grave.

A los voluntarios se les hará un seguimiento de un año para garantizar la respuesta inmunológica y la seguridad de la inyección, según fuentes hospitalarias.

### **Se probará en 3.000 personas y en 17 hospitales españoles, dos portugueses y uno italiano**

También podrán participar en el ensayo personas que hayan pasado la COVID-19 hace al menos un mes, siempre que no hubieran sido hospitalizadas.

En esta fase III de los ensayos, según la AEMPS, es en la que "se verifican de forma robusta los aspectos de seguridad y eficacia del fármaco", con una evaluación de la dosis y su eficacia en una población mayor que la de las primeras fases.

### **¿En qué consiste?**

Se verifican los aspectos de seguridad y eficacia sobre una población mayor.

La vacuna contra la COVID-19 de Hipra es de las llamadas de proteína recombinante, diseñada contra las variantes alfa y beta del SARS-CoV-2, pero se podría adaptar a otras variantes. Se conserva a temperatura de refrigerador (entre 2 y 8 °C), lo que podrá facilitar su almacenaje, distribución y la logística para administrarla.

La vacuna ha dado muy buenos resultados en las fases de ensayo previas y, además, en palabras de la ministra de Ciencia, al estar basada en una plataforma de recombinación de varias proteínas, "puede ir adaptándose a las distintas variantes". Por ahora no se han presentado efectos adversos significativos en los voluntarios que han participado en los ensayos.

### Adaptable a varias variantes

En los ensayos se ha visto que produce anticuerpos neutralizantes contra todas las variantes de preocupación actuales del virus, lo que incluiría Ómicron, y es eficaz en la prevención de la enfermedad, según fuentes de los hospitales que han hecho los ensayos.

De pasar satisfactoriamente por este estadio la primera vacuna española contra el coronavirus ya se podría comercializar y a partir de ahí se realizarían estudios de seguimiento en los que se examinan los efectos a largo plazo en el grueso de la población en busca de contraindicaciones, en la conocida como fase cuatro del ensayo clínico.

La directora de Investigación de Hipra, Elia Torroella, ha apuntado que, si todo va bien, la vacuna podría recibir en mayo el visto bueno definitivo de las autoridades. Ha añadido que mejora las prestaciones de la vacuna de Pfizer ante la última variante del virus. "Con ómicron, hay datos suficientes que están indicando una capacidad de generar anticuerpos superior a Pfizer", ha asegurado a Efe.

Fuente: La Vanguardia. Disponible en <https://cutt.ly/eAuXJyo>

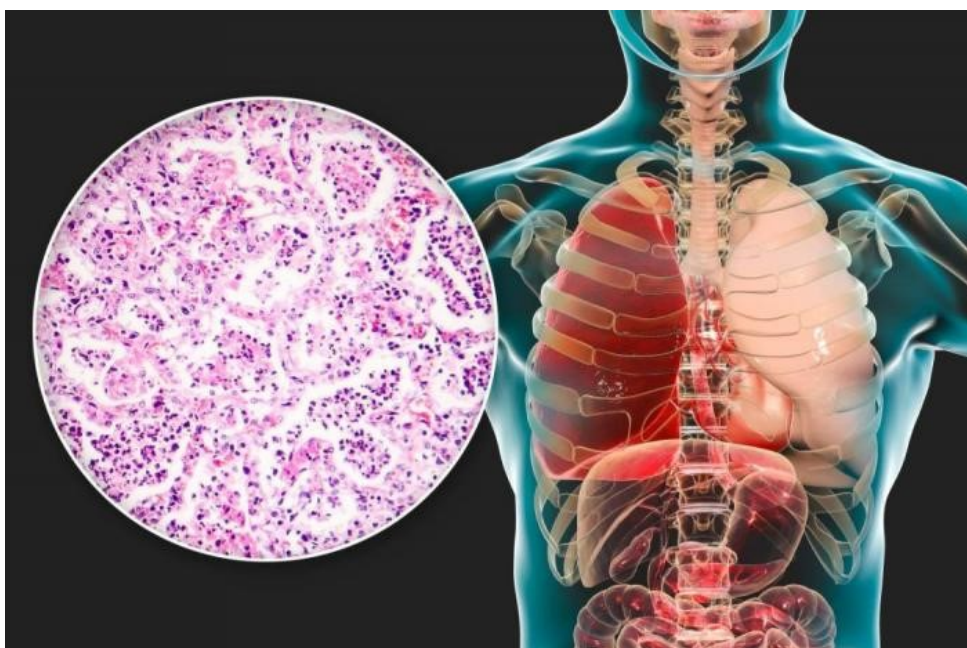
## ¿Qué significa para los niños del mundo la vacuna cubana contra el neumococo?

**2 feb.** Cuba se acerca a un nuevo hito científico. Justo antes de la aparición del SARS-CoV-2, el Instituto Finlay de Vacunas ya estaba terminando los ensayos clínicos de una vacuna heptavalente contra el neumococo.

Esta vacuna «es como la madre de todas las vacunas que se han hecho en Cuba», dice sobre ella el doctor Daniel García, investigador titular, director del Laboratorio Síntesis Química y Biomolecular y Presidente de la Federación Latinoamericana de Asociaciones Químicas.

García Rivera comenta que es «tan compleja, que un centro como el Instituto Finlay de Vacunas se dedicó completamente en cuerpo y alma durante años a hacerla. Es la Meca de la complejidad vacunal hecha en Cuba.»

A propósito del anuncio reciente de que una vez desarrolladas las vacunas contra la COVID-19, se retoma la estrategia de generalización de la vacuna multivalente contra el neumococo que salvará la vida de muchos niños, el doctor argumenta en sus cuentas de redes sociales que «alrededor de 740 mil niños mueren cada año antes de los 5 años por esta enfermedad, la gran mayoría en países pobres, claro está. Es un niño cada 39 segundos, sólo de pensarlo se eriza la piel».



Añade que hay varios patógenos que provocan neumonía, pero el más temible es una bacteria que se llama *Streptococcus pneumoniae*, o neumococo, conocido como un «un terrible asesino de niños» que también produce meningitis, sepsis y otitis media.

Las vacunas contra esta bacteria son, al decir del doctor, «ridículamente caras, por muchas cosas, pero sobre todo porque no es un solo asesino, son decenas de ellos».

«El neumococo tiene alrededor de 100 variedades, bacterias primas entre ellas, pero diferentes, se les llama serotipos. Unas pocas decenas de estos serotipos son los más infecciosos y letales, por tanto una vacuna efectiva no puede ser contra uno solo, hay que atacarlos en grupo. Y esa es, precisamente, la complejidad de esta vacuna, porque en realidad son muchas vacunas en un solo frasco. Es un reto científico que te consume y te enamora, como nos tiene a muchos. Es una maravilla de reto porque si lo logras, salvas lo más valioso de este mundo, nuestros hijos», añade.

## LA PROEZA CIENTÍFICA DEL FINLAY

García Rivera explica que la reina de vacunas lograda por el Instituto Finlay son siete vacunas en una sola, de ahí la multivalencia: son siete inmunógenos diferentes, hechos a partir de cultivar los siete serotipos de bacteria, aislar de ellas sus antígenos, que son polisacáridos muy complejos, y hacerlos reaccionar químicamente con una proteína muy inmunogénica para que nuestro sistema inmune responda muy bien contra cada antígeno del neumococo, y nos proteja de él el resto de nuestra vida.

«Quimi-Vio es una vacuna contra 7 de los serotipos más prevalecientes en nuestra región, pero no se quedará en 7, la haremos contra 10, contra 15, contra 20. Tomará años, pero ya estamos en ello. No se vaya a creer el neumococo que esta batalla no es en serio», agregó.

También añade que el nombre de esta vacuna, especialmente dedicada a los niños, tiene en su nombre «Quimi», porque le debe mucho a la Química, y «Vio», en honor a Violeta Fernández, una de sus creadoras. Concluye con la aseveración de que Cuba es el único país del tercer mundo (en este campo India y China no lo son) que ha sido capaz de desarrollar una vacuna contra este patógeno.

Fuente: Granma. Disponible en <https://cutt.ly/SAuN1GW>

## Medios estadounidenses reconocen la trascendencia de la campaña de vacunación de menores en Cuba

**2 feb.** Cuba se convirtió en el líder mundial en la vacunación de su población contra la COVID-19, alcanzando un nuevo hito en la inmunización de niños de la primera infancia, resaltaron en las últimas horas varios medios estadounidenses.

La publicación *The Hill* dedicó un artículo a la labor de los científicos cubanos, que lograron que la isla caribeña fuera la única nación del mundo en crear dosis de vacunas para los niños de dos años en lo adelante.

Más del 95% de los infantes cubanos de dos a 18 años han sido completamente vacunados contra la enfermedad causada por el coronavirus SARS-CoV-2, destacó el diario.



El sitio digital *Our World in Data* estimó que Cuba tiene una de las tasas de vacunación más altas del mundo, con cerca del 93% de su población inmunizada hasta el 31 de enero.

*The Hill* también recordó que el país caribeño comenzó a vacunar a sus niños en septiembre del 2021, siendo el único que vacunaba a niños tan pequeños en ese momento.

“El desarrollo de vacunas propias le ha permitido a Cuba inmunizar a esa elevada cifra de ciudadanos y eliminar la necesidad de competir por dosis extranjeras, como ha ocurrido con otras naciones”, destacó el medio.

Estados Unidos aún no tiene una vacuna efectiva para los infantes. Se prevé que la Administración de Alimentos y Medicamentos amplíe el uso de la vacuna Pfizer-BioNTech a los menores entre seis meses y cinco años a finales de febrero.

Para el decano de la Escuela Nacional de Medicina Tropical del *Baylor College of Medicine* de Texas, Peter Hotez, vacunar a los niños pequeños “es esencial”, especialmente en Estados Unidos, dado el elevado número de pequeños hospitalizados con la nueva variante Ómicron.

Fuente: Cubadebate. Disponible en <https://bit.ly/3sAnMXP>

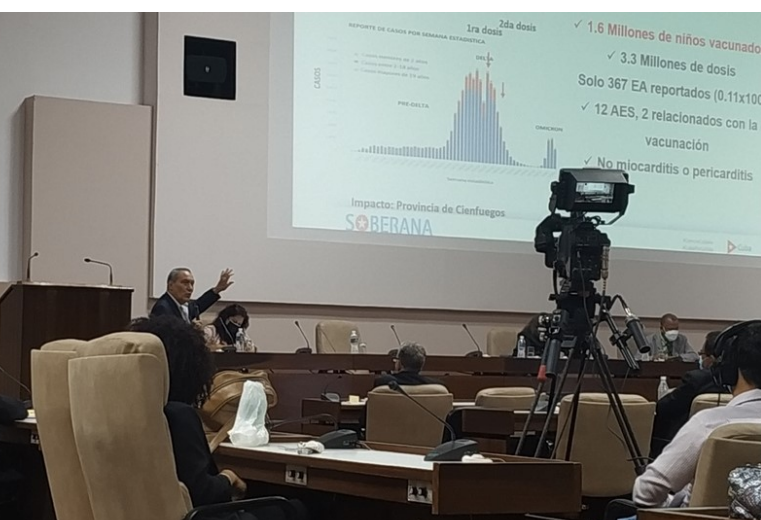
## Vacunas anti COVID-19, resultado de tradición científica cubana

**7 feb.** Las vacunas contra la COVID-19 diseñadas en Cuba son resultado de una larga historia en la industria biofarmacéutica del país, afirmó Vicente Verez Bencomo, director general del Instituto Finlay de Vacunas, en conferencia sobre las capacidades para la producción de inmunógenos desde una nación en desarrollo.

La conferencia tuvo lugar durante el Simposio "Universidad, conocimiento e innovación para el desarrollo sostenible", que constituye parte del programa científico del Congreso Internacional Universidad 2022.

Verez Bencomo aseveró que los logros actuales del Instituto están muy asociados a la historia del desarrollo de las vacunas en Cuba en los últimos 30 años.

El inicio lo marca la producción de la vacuna anti-meningocócica VA-MENGOC-BC en respuesta a un brote de meningitis en los años 70, que fue seguida por la primera vacuna a la que se llegó a partir de un antígeno sintético, con más de 50 millones de dosis aplicadas.



Cuba también dio respuesta a un llamado de emergencia de la Organización Mundial de la Salud para la epidemia de meningitis en África y la escasez de estos fármacos en 2006, así como la producción de la vacuna antineumocócica Quimi-Vio.

El recorrido tiene su cumbre en el desarrollo de los inmunógenos contra la COVID-19, donde destaca la aplicación masiva de Soberana02 en pacientes de pediatría y el uso de Soberana01 y Plus como dosis de refuerzo.

La modernización de la producción de vacunas contra la meningitis y neumonía, junto con la transferencia y codesarrollo de la vacuna conjugada antineumocócica son dos pilares del éxito de la industria farmacéutica en el país, aseguró el director.

El decimotercer Congreso Internacional Universidad 2022 abordará temáticas relacionadas con la ciencia e innovación por un desarrollo sostenible.

Fuente: ACN Agencia Cubana de Noticias. Disponible en <https://bit.ly/3pxojYD>

## Un signo inesperado de la infección por la variante ómicron en algunos niños: el crup

**8 feb.** Aunque la variante Ómicron del coronavirus puede tener fama de causar una forma mucho más leve de COVID-19, en enero, la Dra. Ashley Keilman y otros médicos empezaron a notar algo que parecía exclusivo de esta variante.

"Estábamos viendo más pacientes con crup y más pacientes daban positivo en las pruebas de covid, algo que no habíamos observado durante las fases anteriores de las oleadas de covid", dijo Keilman, especialista en medicina de urgencias pediátricas del Hospital Infantil de Seattle.

Y no es exclusivo de Seattle. Los pediatras de todo el país afirman que están registrando un aumento de los casos de crup, también conocido como laringotraqueobronquitis.

El crup suele estar provocado por los virus respiratorios de la parainfluenza. Se produce cuando las vías respiratorias superiores se inflaman, dificultando la respiración. Como las vías respiratorias de los niños son más pequeñas que las de los adultos, es más frecuente entre los pequeños.

Esta inflamación en la laringe, la tráquea y los bronquios hace que los niños tengan una tos fuerte y distintiva que algunos dicen que suena como una foca ladrando. Cuando el niño intenta respirar, también puede producir un silbido agudo conocido como estridor.

En algunos casos, los síntomas pueden desaparecer al cabo de unos cinco días. Pero para otros niños, los síntomas no desaparecen con tratamientos caseros.

Keilman es el autor de un estudio en etapa de preimpresión, que significa que no ha sido revisado ni publicado en una revista, que encontró que un total de 401 niños atendidos en Urgencias fueron diagnosticados con crup durante el brote de la variante delta y 107 durante la oleada de Ómicron. Los pacientes de crup durante la oleada de Ómicron tuvieron una probabilidad mayor de dar positivos a covid-19: el 2,8% de los casos de crup dieron positivo durante la oleada de delta, frente al 48,2% durante la oleada de Ómicron.

"La variante Ómicron ha demostrado ser una enfermedad de las vías respiratorias superiores más que de las vías respiratorias inferiores en los pulmones y, por lo tanto, la gente lo descarta como un simple resfriado y no es gran cosa. Pero creo que lo que registramos es que, de las infecciones de las vías respiratorias superiores, de las infecciones virales, el crup es una de las más graves y lleva a los niños a la UCI con regularidad", dijo la Dra. Indi Trehan, coautora del estudio y médico de enfermedades infecciosas, virología





y medicina de emergencia del Hospital Infantil de Seattle.

"Como te dirá cualquier padre, es una de las cosas más aterradoras ver que tu hijo no puede respirar por ello", añadió Trehan. "Así que esta señal temprana de altas tasas de crup con Ómicron es bastante preocupante. Estamos tratando de hacer llegar esta noticia a nuestros colegas".

Otros médicos de todo el país le han dicho que han observado tendencias similares.

Otro estudio preliminar descubrió que el 2,4% de los niños de 13 años o menos que fueron hospitalizados en una zona de Sudáfrica por COVID-19 causado por la variante Ómicron también tenían un diagnóstico de crup.

También ha habido más oportunidades de que se desarrolle el crup con esta oleada porque muchos niños se han contagiado de COVID-19.

Desde principios de enero se han notificado casi 4,2 millones de casos de COVID-19 en niños estadounidenses, según la Academia Estadounidense de Pediatría.

La Dra. Claudia Hoyen, especialista en enfermedades infecciosas pediátricas del Hospital Universitario Rainbow Babies and Children de Cleveland, que no colaboró con estos estudios, dijo que la temporada de crup en su zona suele llegar en otoño. Por eso, cuando empezaron a aparecer más niños con crup en diciembre, durante la oleada de Ómicron, sospechó que había algo diferente en esta variante.

"Sabemos que los tejidos nasales son mucho más receptivos a Ómicron, y el pulmón no", dijo Hoyen. "No hemos visto crup con otras oleadas. Ésta ha sido diferente".

Hoyen y los médicos del Hospital Infantil de Seattle dijeron que, afortunadamente, la mayoría de los niños con crup no han necesitado ser internados en el hospital. Si ingresan para recibir tratamiento, los médicos suelen administrarles un corticosteroide que puede reducir la inflamación de las vías respiratorias.

Incluso mejor que un corticosteroide, dicen los médicos, es que los niños no se contagien de COVID-19 en primer lugar.

Dado que los más pequeños, que son los que con más frecuencia contraen el crup, aún no pueden vacunarse, dice Hoyen, lo mejor sería asegurarse de que todos los que les rodean estén completamente vacunados, si es posible.

"Hagan lo que puedan para evitar que los más pequeños sean una foca ladadora. Es realmente angustiante escucharlos, créeme, y puede ser bastante grave", dijo Hoyen. "Así que haz lo que puedas para ayudarlos. Vacunarse es fácil e importante".

Fuente: CNN en español. Disponible en <https://cutt.ly/GApRfjH>

## **Revista Vaccine publica resultados de las vacunas cubanas Soberana 01 y Soberana Plus**

**13 feb.** La revista médica Vaccine publicó los resultados de seguridad e inmunogenicidad de las vacunas cubanas Soberana 01 y Soberana Plus. "Seguimos haciendo ciencia", escribió en su cuenta en Twitter el Instituto Finlay de Vacunas (IFV) al referirse al artículo.

En septiembre de 2021 la prestigiosa revista internacional The Lancet Regional Health-Americas, de la serie Lancet, también publicó un artículo sobre Soberana Plus. "Una dosis única de la vacuna FINLAY-FR-1A

umenta la respuesta neutralizante en convalecientes de COVID-19, y tiene un excelente perfil de seguridad”, es el título del texto.

Al cierre del 9 de febrero, Cuba acumulaba 34 653 847 dosis administradas de las vacunas nacionales Soberana 02, Soberana Plus y Abdala. Hasta esa fecha, 10 587 170 personas habían recibido al menos una dosis de una de las vacunas cubanas. De ellas, 9 358 859 ya tienen segunda dosis, y 9 033 002, la tercera.

Usted puede acceder al artículo ► <https://www.sciencedirect.com/science/article/pii/S0264410X2200161X>

Fuente: Cubadebate. Disponible en <https://cutt.ly/4ApY7v8>

## Hecha en México: Vacuna Patria contra la COVID-19 es segura y se aplica por la nariz; primeros resultados de Conacyt

**15 feb.** La pandemia por coronavirus nos ha traído la llegada de varias vacunas alrededor del mundo, ahora en México se desarrolla el biológico Patria, el Consejo Nacional de Ciencia y Tecnología (Conacyt) ha dado a conocer los resultados de las pruebas que se han realizado, a continuación los detalles.

### Vacuna Patria contra COVID-19 arrojó los resultados preliminares: conoce todo

El comunicado del Conacyt dio los resultados preliminares de la Fase Clínica I para la vacuna Patria y han llegado a la conclusión de que se trata de un biológico seguro y con potencial de inmunogenicidad en humanos.

### ¿Quién hace la Vacuna Patria en México?

En este proyecto participan 33 científicas y científicos del laboratorio Avimex, el Conacyt y de instituciones nacionales e internacionales

### Fase 1 Vacuna Patria: mira de qué se trata esta fase preliminar

El Conacyt anunció que en esta primera fase participaron 90 voluntarios que no habían sido vacunados con anterioridad. Las pruebas en las que participaron los voluntarios luego de 42 días desde la inoculación han demostrado que la vacuna Patria es segura.

### ¿La vacuna Patria se aplicará intramuscular e intranasal y como refuerzo?

Se ha determinado que es viable para ser utilizada como una dosis de refuerzo por vías intramuscular e intranasal.

Fuente: MARCA Claro. Disponible en <https://cutt.ly/tApSZLH>

## Cuba to present WHO dossier on anti-Covid-19 vaccines in March

**Feb 16.** The Cuban biopharmaceutical industry will present the stipulated dossier to the World Health Organization (WHO) in early March with all the information necessary for the prequalification of its anti-Covid-19 vaccines, Eduardo Martínez, director of BioCubaFarma, reported here.

At a press conference on Tuesday, the official explained the company is working on presenting the document, made up of several chapters with results on clinical and preclinical research, pharmaceutical development, as well as everything associated with production facilities, an aspect that has had adaptations. He clarified what was published in some media about the rejection by the United Nations health entity of Cuban anti-Covid-19 vaccines. The World Health Organization (WHO) has not yet evaluated the vaccines, he insisted.

At another point, he explained that BioCubaFarma always exchanges with the WHO/PAHO representation in Cuba on everything related to the prequalification of anti-Covid-19 vaccines.

We made the decision that the Abdala vaccine, developed by the Center for Genetic Engineering and Biotechnology, will change its production site to the recently inaugurated Mariel plant, located in that industrial pole, west of Havana.

In progress these days, he explained, as soon as it is available, the necessary inspection will be carried out to later obtain the permit and its inclusion in the list of products recognized by the WHO, Martínez stressed.

Previously, the director and other scientists informed the specialized and accredited press on the island about the upcoming BioHabana 2022 event, which will take place in this capital from April 25 to 29.

To date, more than 100 researchers and businessmen from the United States, Europe, Latin America and Asia will participate in the event, focused on topics such as the Covid-19 pandemic, which will address aspects of the epidemiology of the disease, the impact of application of own vaccines and their effectiveness.

Medical technology and industry 4.0; chronic inflammation and aging; agricultural biotechnology; brain diseases; cancer immunotherapy, bioprocesses and their design space are among the main themes.

BioHabana 2022 will be organized in special sessions on anti-Covid-19 vaccines, BioCubafarma business and investment folders, including an exhibition fair that will show its main products.



Fuente: Prensa Latina en inglés. Disponible en <https://cutt.ly/yAafHC0>

## Convidecia™ de CanSinoBIO ha sido aprobado como potenciador heterogéneo en China

**19 feb.** La vacuna recombinante para el nuevo coronavirus (Adenovirus Type 5 Vector) («Ad5-nCoV», nombre comercial: Convidecia™) ha sido aprobada por el *Joint Prevention and Control* Mecanismo del Consejo de Estado China («Consejo de Estado») como un refuerzo heterogéneo, lo que la convierte en la primera vacuna dirigida contra adenovirus que se incluye en el programa de vacunación heterogénea del China.

Según la Junta Estatal, para los mayores de 18 años que hayan completado el programa de vacunación de 6 meses con vacunas COVID-19 inactivadas, y aquellos que no hayan recibido un refuerzo homeostático, CanSinoBIO Convidecia™ como refuerzo heterólogo pueden mejorar significativamente los niveles de anticuerpos neutralizantes.

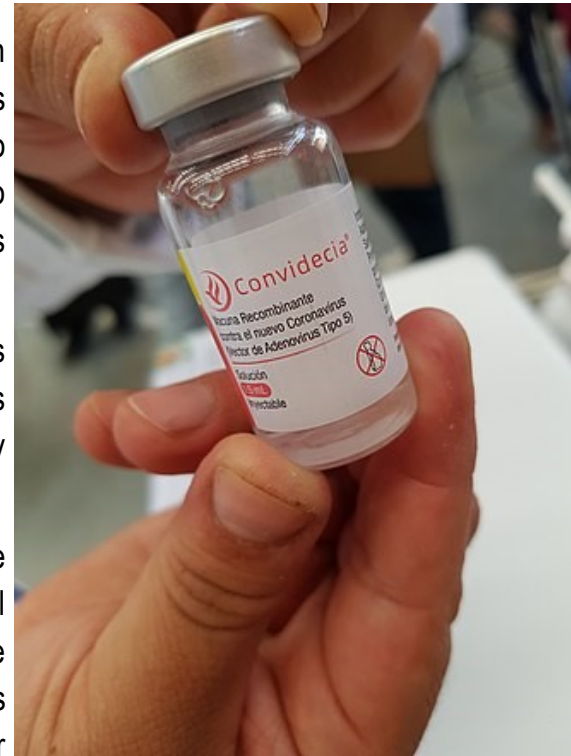
La vacunación de refuerzo heterogénea se refiere al uso de refuerzos de vacunas de diferentes plataformas tecnológicas de las principales vacunas, que pueden mejorar la respuesta inmunitaria general y aumentar la protección contra otras variantes.

Los resultados de ensayos clínicos recientes de un estudio de vacunación heterogéneo realizado por el Centro Provincial para el Control y la Prevención de Enfermedades de Jiangsu mostraron que después de dos dosis de la vacuna COVID-19 inactivada, una dosis única de Convidecia™ como heterodímero de refuerzo puede inducir niveles de anticuerpos neutralizantes de 197,4 (95 % IC) 167,7, 232,4) 14 días después de la vacunación, cinco veces superior al refuerzo homólogo de la vacuna inactivada, con niveles de anticuerpos neutralizantes de 33,6 (IC 95% 28,3, 39,8).

Según un estudio reciente publicado conjuntamente con China Laboratorio Principal de Microbiología e Inmunología Patógena de CAS, Instituto de Microbiología de la Academia de Ciencias de China y otros, se encontró que aquellos que tomaron dos dosis de la vacuna inactivada y luego recibieron Convidecia™ como un refuerzo después de 4 a 8 meses tenían anticuerpos neutralizantes. El estudio encontró que para la variante Omicron, Convidecia™ generó niveles de anticuerpos neutralizantes 6 veces y 3 veces más altos que los grupos inactivados y las vacunas de proteínas recombinantes, respectivamente.

Además, la administración de Convidecia™ como refuerzo también puede inducir una respuesta inmunitaria significativa de células T CD8+, que puede eliminar rápidamente las células infectadas por virus y reducir la probabilidad de enfermedad grave y muerte, proporcionando inmunidad celular y humoral.

Las pautas provisionales recientes sobre la vacunación heterogénea contra el MERS-CoV recomendaron que las personas que recibieron vacunas inactivadas contra la COVID-19, pueden elegir vacunas de adenovirus o de ARNm como refuerzos posteriores. El programa Convidecia™ de CanSinoBIO se recomienda como refuerzo para las personas que han recibido una vacuna inactivada durante al menos un mes, incluidos los mayores de 50 años.



CanSinoBIO se compromete a brindar protección inmunológica oportuna y generalizada, haciendo que sus vacunas sean más accesibles en áreas sin instalaciones de recursos y almacenamiento médico adecuadas, y reduciendo la carga sobre los sistemas de atención médica y el personal médico. Actualmente, Convidecia™ está aprobada en más de diez países, incluidos China, Pakistán, México, Ecuador, Chile, Argentina, Hungría, Kirguistán, Indonesia, Malasia, entre otros.

### Acerca de CanSinoBIO

Fundada en 2009, CanSinoBIO (SSE: 688185, HKEX: 06185) está comprometida con la investigación, producción y comercialización de vacunas innovadoras para China y la seguridad de la salud pública mundial. Cinco tecnologías tienen una plataforma integrada que incluye tecnología basada en vectores virales, tecnología de vacunas sintéticas, diseño de estructura de proteínas y tecnología de recombinación, tecnología de ARNm, así como tecnología de formulación y administración. Ha construido una sólida cartera de 17 vacunas para prevenir 12 enfermedades, incluida la vacuna conjugada meningocócica del grupo A y C del vector de adenovirus tipo 5 recombinante aprobada condicionalmente para 2021 (CRM197) y el grupo ACYW135) aprobado en el mismo año. Se puede encontrar información adicional en línea en [www.cansinotech.es](http://www.cansinotech.es)

Fuente: El Demócrata. Disponible en <https://cutt.ly/ZAazEAL>

## Cuba defies odds as it seeks to share home-grown vaccine success with the world

**Feb 20.** Under US embargoes for decades and blighted by an ageing power infrastructure that is prone to cuts, Cuba may seem an unlikely saviour to parts of the world struggling for Covid-19 vaccines.

But the country of 11.3 million punches well above its weight when it comes to medicine: it has a strong research sector, is a health care tourism destination and sends doctors and nurses to work around the world, including the Gulf region.

It is less surprising, then, that Cuba is in discussions about its locally developed coronavirus vaccines

being used in more than a dozen nations – on top of those that have already given them to their people.

Efforts to distribute the shots out more widely came after Cuba achieved one of the highest vaccine coverage figures in the world on home soil.

While the UAE leads the global rankings, Cuba is in the top 10. About 93 per cent of its people have had at least one shot, 87 per cent have had two, and 51 per cent have received a booster.

“I’m not surprised at all that they set out to develop their own vaccine. They have the need, but they also have the capability,” said Dr Helen Yaffe, a senior lecturer in economic and social history at the University of Glasgow in Scotland and author of *We Are Cuba! How a Revolutionary People Have Survived in a Post-Soviet World*.



“Just because I’m not surprised, it doesn’t mean it’s not incredibly impressive. It’s such a feat for a small Caribbean island.”

### **Long-term investment in health service pays off**

Cuba, with its decades of state-directed investments in healthcare and medical research – an approach championed by the late president Fidel Castro – has long practised self-reliance when it comes to vaccines, producing most of those used in its national immunisation programmes.

Vaccination campaigns have helped Cuba to control or eliminate polio, measles, mumps, rubella and typhoid, among other diseases, something once described in a scientific journal as “remarkable” given the country’s limited resources. The infant mortality rate and average life expectancy have also won praise.

All this meant that when the coronavirus emerged, the country’s research institutes had the expertise to develop their own vaccines.

“They have a pretty good health service given the level of money they have, and part of that was developing their own biopharmaceutical industry, in part a reaction to the Americans blocking them off,” said Prof David Taylor, emeritus professor of pharmaceutical and public health policy at University College London.

Cuba’s constrained finances and the US embargoes would have made obtaining vaccines manufactured overseas harder.

### **Cuba follows own path on vaccine journey**

Also, the country decided not to join the Covax programme, which aims to distribute vaccines to poorer nations but which has struggled for sufficient supplies.

In developing its own vaccines, Cuba did not employ cutting-edge mRNA or viral vector technology of the kind used in the Pfizer-BioNTech, Moderna, Oxford-AstraZeneca and Johnson and Johnson vaccines.

Instead, it turned to a well-established approach of using protein subunits from the pathogen to generate protection against the virus.

The coronavirus proteins can be produced in artificially grown cell lines before they are purified and incorporated into the vaccine.

With a “conjugate” vaccine called Soberana 02 from Cuba’s Finlay Institute of Vaccines, part of the receptor binding domain (RBD) of the spike protein is “conjugated” or linked to a harmless neurotoxin protein, which enhances the immune response.

Two doses of Soberana 02 and a third dose called Soberana Plus containing just the RBD segment has a reported efficacy of more than 92 per cent, although data from Cuban trials has not always been shared as widely as the international scientific community would like.

**SOBERANA<sup>®</sup>01**

**SOBERANA<sup>®</sup>02**

**SOBERANA<sup>®</sup>Plus**

The Centre for Genetic Engineering and Biotechnology (CIGB) in Cuba's capital, Havana, has produced a vaccine called Abdala with similar efficacy after three doses.

Another vaccine from the centre, Mambisa, is administered as a nasal spray, and Cuban scientists said it could strengthen the protection in individuals given other vaccines.



### Majority of children vaccinated

“They’ve become the first country in the world to vaccinate children from two [years and] up,” said Dr Yaffe. “The Cuban vaccines were developed from the outset to be used in children.”

Government figures indicate that more than 95 per cent of two to 18-year-olds have been inoculated, something that officials have said should reduce transmission.

The country's vaccine programmes have not been affected by the vaccine hesitancy or scepticism seen in many other nations.

Cuba experienced its main coronavirus peak in July, August and September 2021, and another, much smaller, peak in January this year driven by the Omicron variant, but case numbers have since fallen significantly. There have been just over 1 million cases and around 8,500 deaths.

Just as Cuba has long exported medical personnel, including to the Gulf region to combat the pandemic (like medical tourism to Cuba, this generates much-needed income for the country), so it is expanding overseas use of its vaccines.

There have already been donations to Syria, and exports to Venezuela and Vietnam – some purchased and some donated – while Iran has manufactured Soberana 02.

Last month Progressive International, which ties together left-wing organisations and activists, organised a briefing at which Cuban government officials reportedly said the country was looking to export tens of millions of vaccines to lower-income countries.

The Finlay Institute of Vaccines said it had the capability to produce 120 million doses per year and in a statement released online, Progressive International said Cuban officials had promised “solidarity prices” for low-income countries.

Cuba has said it will transfer technology to allow production abroad and officials have stated they are in discussions with more than 15 countries that could produce Cuban vaccines.

Havana has also offered to provide personnel to assist vaccine campaigns, an echo of how the country sent medical personnel to Africa in 2014 and 2015 to combat Ebola.

Cuba plans to apply for World Health Organisation approval for its vaccines this year, but national regulators in other countries are free to give them approval without this.

“The Cubans are looking for bilateral agreements with other countries to get that vaccine recognition,” Dr Yaffe said.

“The African Union was interested in the Cuban vaccines. It might happen in that collective way ... [Cuba's vaccines] are probably the best chance many populations in the global south have to access a vaccine before 2025.”

Fuente: The National News. Disponible en <https://cutt.ly/bAaClUj>

## Vacunas cubanas afianzan lazos de colaboración médica con Italia

**23 feb.** Con el estudio clínico observacional Soberana Plus Turín, Italia y Cuba profundizan la colaboración en el ámbito sanitario iniciada con la ayuda brindada por la isla al país europeo en el enfrentamiento a la COVID-19.

El Instituto Finlay de Vacunas, con sede en La Habana, y el hospital Amedeo di Savoia, en Turín, intervienen en el ensayo para comprobar la eficacia del preparado como dosis de refuerzo universal en personas inmunizadas con alguno de los autorizados en Italia, o convalecientes de la enfermedad.



*Antes de recibir la vacuna, los participantes en la investigación aportaron muestras de sangre para su análisis en instituciones cubanas.*

Una treintena de voluntarios vacunados con inmunógenos producidos por Pfizer, Moderna o Johnson & Johnson, viajaron a la capital cubana en noviembre de 2021 donde recibieron la dosis prevista de Soberana Plus en el Centro Internacional de Salud La Pradera.

Antes de recibir la vacuna, los participantes en la investigación aportaron muestras de sangre para su análisis en instituciones cubanas, procedimiento aplicado 28 días después en el Laboratorio de Microbiología y Virología de la instalación sanitaria turinesa, con el propósito de comparar ambos resultados.

Esta es la segunda iniciativa conjunta entre las dos entidades, tras el análisis, en el Amedeo di Savoia, de muestras de suero de cubanos vacunados con Soberana Plus, en el cual se comprobó la capacidad del fármaco de inducir anticuerpos neutralizantes contra las variantes alfa, beta y delta del virus SARS-CoV-2.

Para conocer detalles sobre el estudio a punto de concluir, Prensa Latina entrevistó a algunos de sus protagonistas en el lado italiano. Entre ellos está el doctor Carlo Picco, director de la Empresa Sanitaria Local Ciudad de Turín, institución encargada de la gestión del sistema de salud en la capital de la región de Piamonte.

La sinergia, colaboración, el tejido de relaciones, la recíproca simpatía y confianza nacida de esa cooperación, en el hospital de campaña donde laboraron los médicos y enfermeros cubanos, “permitió desarrollar las relaciones, incluso científicas, entre los dos países”, señaló.

En igual sentido se pronunció Michele Curto, presidente de la Agencia para el Intercambio Cultural y Económico con Cuba (Aicec), entidad fundamental en la concreción y organización de los estudios.

Conocida por su actividad de solidaridad con la nación caribeña y la promoción de lazos bilaterales con Italia en diferentes campos, Aicec desempeñó un papel relevante en el apoyo al trabajo de los 38 colaboradores cubanos de la salud.

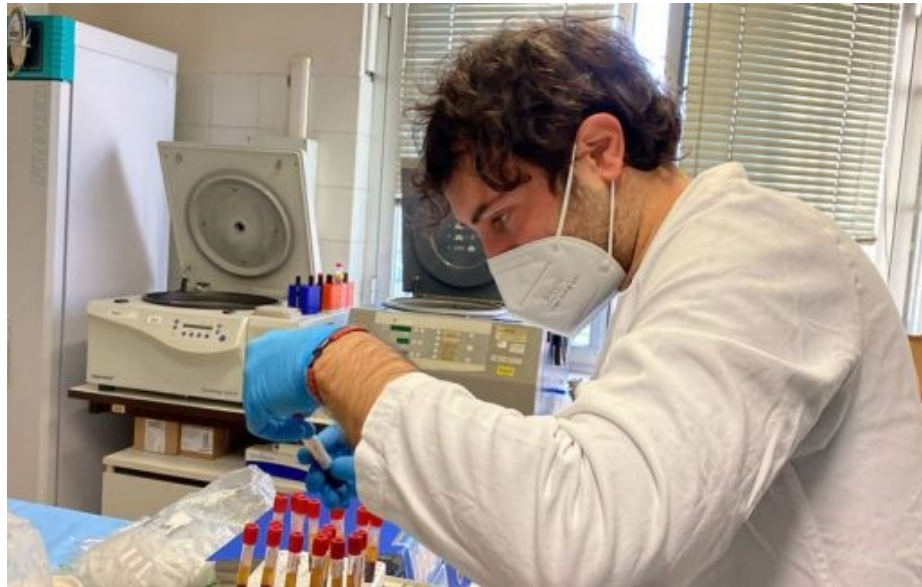


La presencia de la brigada del Contingente Henry Reeve, apuntó Curto, dejó una huella importante en la ciudad, en particular por los vínculos establecidos con el Hospital Amedeo di Savoia y la Empresa Sanitaria Local.

Motivada por el interés de ampliar esos nexos, Aicec promovió la suscripción de un acuerdo marco de colaboración entre el Instituto Finlay y el hospital, proceso en el cual participó activamente Fabrizio Chiodo, joven investigador italiano colaborador de la institución cubana.

En diálogo con Prensa Latina, Chiodo destacó la transparencia en la actuación del Instituto Finlay, al poner en manos del hospital Amedeo di Savoia el análisis del suero de convalecientes cubanos, en la primera ocasión, y el de los voluntarios, en la segunda.

Por su parte, el jefe del Departamento de Enfermedades Infecciosas del centro de salud, profesor Giovanni Di Perri, apuntó que los resultados preliminares del estudio clínico observacional “son muy satisfactorios” y alinea las cualidades protectoras de la vacuna con las de las



*Fabrizio Chiodo, joven investigador italiano colaborador de la institución cubana*

otras objeto de atención en este período.

La actividad de cooperación ha sido muy estrecha, sentida e interesante, puntualizó la profesora Valeria Ghisetti, directora del Laboratorio de Microbiología y Virología, al subrayar que “para nosotros ha sido muy instructivo participar en este tipo de colaboración” y calificar de “muy estimulantes” los resultados parciales.

Al trabajo con los voluntarios se refirió el profesor Andrea Carcagno, quien afirmó que “tenían muchos deseos de participar en la investigación”, viajaron a Cuba, donde “la pasaron muy bien”, y regresaron a Italia sin ningún efecto secundario importante.

De esa realidad dieron fe Matteo Sacconi, Mattia Baldini e Indira Estrada, quienes consideraron un honor la posibilidad de contribuir al desarrollo de la ciencia médica cubana con su participación en el ensayo clínico.

Fuente: Cubadebate. Disponible en <https://bit.ly/3C8kuOV>

## La Aemps no encuentra nuevos efectos adversos en vacunas de refuerzo COVID-19

**23 feb.** Los efectos adversos registrados con la tercera dosis de la vacuna contra el COVID-19 son los mismos que con las dos inoculaciones anteriores. Según el 13º Informe de Farmacovigilancia sobre Vacunas COVID-19 de la Agencia Española de Medicamentos y Productos Sanitarios (Aemps), la fiebre o el dolor en la zona del pinchazo siguen siendo los notificados con más frecuencia. Hasta el día 6 de febrero de 2022, se administraron en España un total de 22.307.885 dosis de refuerzo de Pfizer y Moderna y solo se registraron 785 notificaciones de acontecimientos adversos asociados a la vacuna. Según detalla la Aemps, la mayoría de estas reacciones afectaron a mujeres (69 por ciento) y 302 fueron consideradas graves.

Más de la mitad de las terceras dosis inoculadas en nuestro país (56 por ciento) correspondieron a Moderna que es, precisamente, la que más efectos secundarios registra (64 por ciento del total). Concretamente, de las 502 notificaciones relacionadas con la vacunación de Moderna, la gran mayoría son reacciones transitorias que pueden ocurrir en los primeros días tras la administración de la vacuna.



Así, las más comunes son pirexia, cefalea, mialgia, náuseas, malestar, escalofríos o dolor en la zona del pinchazo. Síntomas que, salvo el malestar, "podrían estar motivados por otros acontecimientos como fiebre", indica el organismo español, quien además recuerda que son reacciones adversas conocidas para esta vacuna y que aparecen ya recogidas en su ficha técnica y prospecto.

Por otro lado, de las 282 notificaciones asociadas a la tercera dosis de Pfizer, también se ha concluido que los trastornos generales como fiebre o dolor en la zona de vacunación siguen siendo los notificados con más frecuencia, seguidos de los trastornos del sistema nervioso (mayoritariamente, cefaleas y síncope) y del sistema musculoesquelético (mialgia y artralgia).

No obstante, se ha observado una mayor proporción de linfadenopatías tras la administración de las dosis de refuerzo, lo cual está en consonancia con lo observado en los ensayos clínicos (5,2 por ciento frente a 0,4 por ciento, respectivamente). Por ello, estas reacciones adversas son igualmente conocidas para este compuesto.

### **Trastornos menstruales tras la vacuna contra el COVID-19**

En este último informe, destaca la mención especial que se dedica a los trastornos menstruales y su posible relación causal con las vacunas covid, ya que se habían registrado numerosas alteraciones en la cantidad de sangrado o la duración del ciclo.

Hasta ahora, había quedado descartada tal posibilidad pero dos estudios recientes sugieren un aumento en la frecuencia de estos trastornos tras la vacunación con cambios leves y transitorios en los ciclos menstruales, por lo que se ha iniciado una nueva evaluación entre los trastornos menstruales y las vacunas de Pfizer y Moderna.

A nivel general, se han administrado en España 97.044.262 dosis de vacunas contra el SARS-CoV-2 hasta principios de febrero, llegándose a registrar 60.030 notificaciones de acontecimientos adversos. De las mismas, 11.873 fueron consideradas graves y 400 presentaron un desenlace mortal.

Fuente: redacción médica. Disponible en <https://bit.ly/3sDvmkH>

## ¿Las vacunas COVID puede producir inflamación en adolescentes?

**24 feb.** El síndrome inflamatorio multisistémico pediátrico es una afección grave que puede desarrollarse tras la infección por el coronavirus. Consiste en que se inflaman gravemente algunos órganos y tejidos, como el corazón, los pulmones, los vasos sanguíneos, los riñones, el aparato digestivo, el cerebro, la piel o los ojos. En Estados Unidos, los Centros para el Control y la Prevención de las Enfermedades (CDC) evaluaron el riesgo de que ese síndrome inflamatorio en la infancia pudiera ser también un efecto adverso de la vacunación.

A través de una investigación que publicaron en la revista *The Lancet Child & Adolescent Health*, los investigadores de los CDC encontraron que es poco probable que las vacunas contra la COVID-19 provoquen esa rara enfermedad inflamatoria. La posibilidad de que, de algún modo, las vacunas puedan provocar la enfermedad es sólo teórica y el análisis no encontró ninguna prueba, comentó el doctor Buddy Creech, coautor del análisis y especialista en enfermedades infecciosas pediátricas de la Universidad de Vanderbilt.



El síndrome inflamatorio en niños y adolescentes puede producir 5 síntomas que hay que prestar atención porque requieren que vayan de manera urgente al hospital son: dolor intenso de estómago; dificultad para respirar; la piel, los labios o lecho de las uñas se ponen de color pálido, grisáceo o azulado, según el tono normal de la piel; sufren confusión repentina; o desarrollan incapacidad para despertarse o permanecer despierto, según advirtió la Clínica Mayo de los Estados Unidos. La afección suele llevar a la hospitalización, pero la mayoría de los pacientes se recuperan.

El síndrome inflamatorio multisistémico pediátrico fue reconocido por primera vez en abril de 2020. Se considera que se desarrolla como una reacción del sistema inmune exagerada que se produce aproximadamente entre dos y seis semanas después de la infección por el coronavirus en niños y adolescentes.

En los Estados Unidos, la notificación de posibles casos de síndrome inflamatorio después de la vacunación es obligatoria en virtud de las autorizaciones de uso de emergencia de la vacuna contra el COVID-19. Los investigadores de los CDC, liderados por la científica Anna Yousaf, estudió los casos de niños y adolescentes de entre 12 y 20 años con el síndrome inflamatorio que fueron notificados durante los primeros nueve meses de aplicación de la vacuna COVID-19 en Estados Unidos (entre el 14 de diciembre de 2020 y el 31 de agosto de 2021).

El equipo examinó 47 informes de posible síndrome inflamatorio (que se conoce como MIS-C en inglés) que se produjeron en una persona de 12 a 20 años en cualquier momento después de una dosis de la vacuna COVID-19. De estos 47 informes, 21 se ajustaban a los criterios de MIS-C de los CDC. Esos casos se separaron en aquellos con y sin evidencia de una infección pasada o reciente por el coronavirus a partir de pruebas de laboratorio. Calcularon las tasas de notificación de casos utilizando los datos nacionales de vigilancia de vacunas de los CDC sobre el número de personas de 12 a 20 años de edad en los Estados Unidos que recibieron una o más dosis de la vacuna COVID-19.

De los 21 casos de síndrome inflamatorio multisistémico, 15 tenían pruebas de infección por coronavirus pasada o reciente, mientras que seis no las tenían. Más de 21 millones de niños y adolescentes de entre 12 y 20 años habían recibido una o más dosis de la vacuna COVID-19, lo que supone un caso notificado por cada millón de personas vacunadas en este grupo de edad. La tasa de notificación del síndrome inflamatorio para aquellos sin evidencia de infección por el coronavirus fue de 0,3 casos por cada millón de individuos vacunados.



Los autores subrayan que no pueden determinar si la vacunación contribuyó al desarrollo del síndrome inflamatorio multisistémico en esos raros casos. Como el síndrome se identificó por primera vez durante la pandemia, no existe una tasa de referencia de enfermedades inflamatorias en niños y adolescentes con una causa no identificada para estimar un número de referencia de casos que se espera que se produzcan en cualquier periodo de nueve meses, independientemente de la infección por COVID-19 o la vacunación. Es posible que algunos de los casos identificados tuvieran otras afecciones inflamatorias no reconocidas que coincidieran con la vacunación.

De los 15 individuos con infección pasada por el coronavirus, a tres se les diagnosticó el síndrome inflamatorio fuera del plazo típico de dos a seis semanas (14–42 días) en el que es más probable que se produzca la enfermedad posterior. En estos tres casos, el síndrome apareció 105 días, 191 días y 238 días después de la prueba positiva del coronavirus.

Los 21 individuos fueron hospitalizados, 12 de ellos ingresaron en una unidad de cuidados intensivos y todos fueron dados de alta. La mediana de edad era de 16 años; 13 eran hombres y 8 mujeres.

Todos los individuos con el síndrome inflamatorio multisistémico en el estudio habían recibido la vacuna contra el COVID-19 de las empresas Pfizer-BioNTech. Dentro de ese grupo, 11 individuos recibieron una dosis y 10 recibieron dos dosis de la vacuna antes de la aparición del síndrome. La mediana del tiempo transcurrido desde la dosis hasta la hospitalización fue de ocho días para los que habían recibido una dosis de la vacuna y de cinco días para los que habían recibido dos.

Aunque no se dispone de un comparador directo, esta investigación descubrió que la tasa de casos de en niños y adolescentes de 12 a 20 años vacunados en Estados Unidos con el síndrome inflamatorio es sustancialmente inferior a las estimaciones publicadas anteriormente en personas de 12 a 20 años no vacunadas que se habían infectado con el coronavirus durante los meses de abril a junio de 2020.

Tras la investigación, la doctora Yousaf afirmó: “Como parte del esfuerzo global para supervisar la seguridad de la vacuna contra el COVID-19 en los Estados Unidos, los CDC han estado vigilando de cerca los casos de síndrome inflamatorio multisistémico en niños vacunados. Nuestros resultados sugieren que los casos del síndrome tras la vacunación con COVID-19 son poco frecuentes y que la probabilidad de desarrollarlo es mucho mayor en los niños que no están vacunados y que contraen el COVID-19”.

Por eso, el equipo científico recordó la importancia de la vacunación contra el COVID-19 para todas las

personas de 5 años o más en los Estados Unidos para la prevención de la COVID-19. En otros países, como en la Argentina, la vacunación contra el COVID-19 se aplica a partir de los 3 años.

La doctora Yousaf agregó: “Al igual que con la enfermedad COVID-19, los médicos e investigadores todavía están aprendiendo sobre síndrome inflamatorio multisistémico. Nuestra investigación pone de relieve los retos que plantea el diagnóstico del síndrome, la importancia de considerar diagnósticos alternativos y la necesidad de vigilar la enfermedad”.

Los autores reconocieron algunas limitaciones adicionales de su estudio. Es posible que algunos de los casos identificados con el síndrome tuvieran otra enfermedad inflamatoria con síntomas similares, ya que no existe una prueba definitiva para diagnosticarlo. Como las pruebas de laboratorio para COVID-19 (incluidas las pruebas de anticuerpos) son imperfectas es posible que algunos casos se hayan clasificado erróneamente.

Los niños a menudo experimentan una infección leve o asintomática, y las infecciones más leves pueden tener menos probabilidades de generar anticuerpos, lo que puede dar lugar a que no se detecten las infecciones anteriores. También es posible que no todos los casos del síndrome después de la vacunación se hayan notificado en el sistema de vigilancia, lo que podría dar lugar a que el número de casos no se comunique.

En un comentario en la misma revista, la autora principal, la doctora Mary Beth Son, del Hospital Infantil de Boston (EE.UU.), que no participó en el estudio, comentó: “Sus resultados son, en general, bastante tranquilizadores. Los informes del síndrome inflamatorio multisistémico después de la vacunación con COVID-19 sólo se produjeron en 1 de cada millón de personas de entre 12 y 20 años que recibieron una o más dosis de la vacuna contra el COVID-19, y 15 (71%) de los 21 individuos con el síndrome tenían pruebas de laboratorio de una infección previa por el coronavirus, lo que hace dudar de su atribución”.

Este oportuno informe -consideró la doctora Son- es de especial interés para los proveedores de atención sanitaria, los científicos y los responsables políticos, dada la actual y amplia transmisión de la variante Ómicron (B.1.1.529). “Mientras la pandemia sigue desafiando a nuestra comunidad mundial y persiste el intenso escrutinio de las vacunas contra el COVID-19, el informe de Yousaf y sus colegas es un aporte bienvenido a la creciente literatura que apoya la seguridad y eficacia de la vacunación contra el COVID-19”.

Fuente: infobae. Disponible en <https://bit.ly/3Cef7xt>

## **Dona Cuba a la República Saharaui vacunas anti-COVID-19**

**25 feb.** Cuba donó hoy a la República Árabe Saharaui Democrática (RASD) un lote de 458 mil dosis de vacunas anti-COVID-19 Soberana-02, producidas por el Instituto Finlay de Vacunas, en esta capital.

En el acto de entrega, efectuado en la referida institución, Mohamed Salec Abdesamad, embajador de la RASD en la mayor de las Antillas, agradeció -en nombre de su gobierno-, del Frente Polisario y del pueblo saharauí, el noble gesto de la nación cubana.

Ello es mucho más meritorio cuando Cuba está bajo los efectos de un recrudescimiento del bloqueo económico, comercial y financiero del gobierno de Estados Unidos, sin precedentes, reforzado por las 243 medidas adoptadas, a lo que se suma el enorme esfuerzo económico para garantizar la producción de las vacunas y su aplicación a toda su población, aseveró.

Igualmente el diplomático destacó la proeza realizada por los científicos y el pueblo cubano, lo cual pasará a la historia de la humanidad, remarcó.

Ese donativo de Soberana-02 será aplicado a la población pediátrica y a refugiados en campamentos de la RASD, territorio ubicado en el norte de África.

Deborah Rivas Saavedra, vicetítular del Ministerio del Comercio Exterior y la Inversión Extranjera (MINCEX), resaltó la importancia de este donativo en el contexto del aniversario 46 de la creación de la RASD, como evidencia del apoyo permanente de Cuba a la causa del pueblo saharauí por recuperar sus territorios y alcanzar la paz.

Muestra de esta solidaridad son los dos mil 76 jóvenes saharauíes graduados en Cuba y los 72 que estudian actualmente en diferentes centros de este país caribeño, a lo que se suma la presencia de personal de la salud y profesores cubanos en los territorios de la RASD.

La viceministra del MINCEX explicó que al concluir enero un millón 600 mil niños cubanos han sido vacunados, lo cual ubica a Cuba como el primer país del mundo que concluyó la campaña de vacunación infantil contra la COVID-19.

El doctor Yuri Valdés Balbín, director adjunto del Instituto Finlay de Vacunas, afirmó que esa institución, como parte de todo el sistema de ciencia del país, está a disposición de su población y de otras que lo necesiten.

Fuente: CMKX Radio Bayamo. Disponible en <https://bit.ly/3IFd9c7>



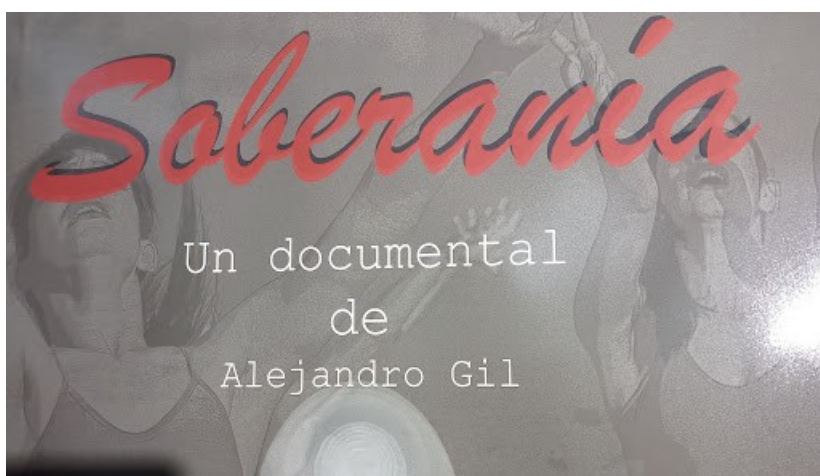
*Yuri Valdés Balbín, Director Adjunto del Instituto Finlay de Vacunas, durante su intervención en el acto de donación de vacunas cubanas a la República Árabe Saharaui Democrática, efectuado en la sede de dicho Instituto, en La Habana, Cuba, el 25 de febrero de 2022. ACN FOTO/ Ariel LEY ROYERO/ rccc*

## Presentan en España documental sobre vacunas cubanas contra la COVID-19

**27 feb.** Soberanía se titula el documental del cineasta cubano Alejandro Gil sobre los candidatos vacunales de la Isla contra la COVID-19, presentado en España, refiere una información, fechada en Madrid, de la agencia de noticias Prensa Latina.

De acuerdo con la fuente, el material fílmico, de 57 minutos, presenta a los héroes anónimos cubanos, creadores de cinco candidatos vacunales contra la enfermedad, tres de ellos aprobados y artífices de la reducción drástica de la enfermedad en la nación caribeña.

A la espera del reconocimiento de la Organización Mundial de la Salud, Cuba muestra hoy las mejores pruebas tangibles de la eficacia de sus vacunas propias, su población, comenta PL sobre el largometraje



de Gil, con reconocimientos internacionales por Inocencia, película sobre el injusto fusilamiento de ocho estudiantes de medicina en Cuba durante el colonialismo español.

Contada con elegancia, guardándose de no repetir lugares comunes para favorecer la pasión de los científicos, la cinta es un testimonio contundente de la solidez de la medicina cubana a partir de los propios resultados en el freno de la pandemia.

En la exhibición del documental en el Ateneo de Madrid, el embajador de Cuba en España, Marcelino Medina, refirió la visión estratégica que tuvo el líder histórico de la Revolución, Fidel Castro, para proyectar desde 1981 el desarrollo de lo que es hoy el Polo Científico.

El diplomático recordó que la población cubana tiene una cobertura de vacunas para 13 enfermedades, ocho de las cuales son de factura nacional, lo que explica en cierta medida la capacidad de la nación caribeña para haber afrontado con éxito el desafío de crear un suero contra la COVID-19.

“Y no fue uno, sino cinco, con un extraordinario nivel de compromiso de la comunidad científica para lograr que en estos momentos tengamos a 10 millones 599 mil personas con al menos una dosis y a nueve millones 868 mil con pauta completa; y también a niños de dos a 18 años”, comentó Medina. Abdala, la más avanzada, junto con Soberana 02 y Soberana plus, pasan en estos momentos el proceso de acreditación y visto bueno de la OMS, mientras Mambisa y Soberana 01 perfeccionan la calidad de sus ensayos.

“No hicimos cinco candidatos vacunales porque queríamos tener muchos; sino que comenzamos a trabajar buscando todas las potencialidades existentes hasta dar con algo eficaz. Si logramos que sean cinco, bienvenidos”, comentaron médicos, investigadores, laboratoristas y técnicos involucrados en los proyectos.

Lea más: Para disfrutar nuevo libro dedicado a Alicia Alonso

Sin estridencias, especialistas del Instituto Finlay de Vacunas, el Centro de Ingeniería Genética y Biotecnología y Biocubafarma destacaron los más de 30 años de experiencias en el diseño, creación y búsqueda de vacunas y medicamentos contra distintas enfermedades subraya la agencia noticiosa.

Un informe de hace algunos años de la Organización Panamericana de Salud a petición de la propia OMS, resaltó: "Cuba ha logrado desarrollar exitosamente su capacidad de producción de tecnologías sanitarias para mantener su sistema nacional de salud, reconocido mundialmente por lograr cobertura universal".

“Esto se evidencia en los indicadores de salud alcanzados (...) se ha convertido en un líder mundial en la transferencia sur-sur de tecnología, ayudando a países de bajos ingresos a desarrollar sus propias capacidades (...) en la lucha contra enfermedades como la meningitis B y la hepatitis B”.

Fuente: acn Agencia Cubana de Noticias. Disponible en <https://bit.ly/3sCleay>

## **Estudios evidencian que recién nacidos de madres contagiadas o vacunadas, tienen anticuerpos contra la COVID-19**

**28 feb.** En estrecha relación con el Instituto Finlay de Vacunas (IFV) y el Instituto de Medicina Tropical, Dr. Pedro Kourí (IPK), especialistas del Hospital General Universitario de Cienfuegos, Dr. Gustavo Aldereguía Lima (HGAL), desarrollan un estudio que se basa la medición de anticuerpos a recién nacidos, primero de madres que padecieron la COVID-19, y después, de madres inmunizadas, que demuestran hasta las evidencias obtenidas de manera preliminar, la transferencia de anticuerpos maternos fetales contra el virus del SARS-CoV-2.

El Dr. Arturo Pérez de Villamil, al frente del estudio, reconoce que es el primero de su tipo que se realiza en el país, aunque se han reportado por la comunidad científica internacional en otras partes del mundo. “Los recién nacidos de madres que estuvieron contagiadas o vacunadas, le aportan a sus hijos niveles de anticuerpos que los protegen contra el virus, de tal manera, los bebés nacen con una condición favorable para su protección contra la COVID-19”.

“Este estudio propone determinar en el tiempo la duración de los anticuerpos, y entre otros aspectos, su presencia en la leche materna”, abundó Pérez de Villamil, neonatólogo de referencia en la institución médica, quien ha estado en primera línea de enfrentamiento a la COVID-19, y cuenta en su currículo profesional con maternas y neonatos salvados desde la ciencia.

La doctora Dagmar García Rivera, directora de Investigaciones del IFV dijo en su cuenta de Twitter que este hecho estaba descrito en la literatura científica con anterioridad, pero este es nuestro estudio, el de nuestros niños cienfuegueros. “Ellos nacen con anticuerpos si sus madres fueron vacunadas o si enfermaron de COVID-19”, destacó. De igual forma alentó a las mujeres embarazadas a que se vacunaran.

Fuente: Cubadebate. Disponible en <https://bit.ly/3Hyr2aA>



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## Artículos científicos publicados en Medline

Filters activated: Publication date from 2022/02/01 to 2022/02/28. "COVID Vaccine" (Title/Abstract) 551 records.

### [mRNA-based COVID-19 vaccine boosters induce neutralizing immunity against SARS-CoV-2 Omicron variant.](#)

Garcia-Beltran WF, St Denis KJ, Hoelzemer A, Lam EC, Nitido AD, Sheehan ML, Berrios C, Ofoman O, Chang CC, Hauser BM, Feldman J, Roederer AL, Gregory DJ, Poznansky MC, Schmidt AG, Iafrate AJ, Naranbhai V, Balazs AB. Cell. 2022 Feb 3;185(3):457-466.e4. doi: 10.1016/j.cell.2021.12.033. Epub 2022 Jan 6. PMID: 34995482

### [Considerable escape of SARS-CoV-2 Omicron to antibody neutralization.](#)

Planas D, Saunders N, Maes P, Guivel-Benhassine F, Planchais C, Buchrieser J, Bolland WH, Porrot F, Staropoli I, Lemoine F, Péré H, Veyer D, Puech J, Rodary J, Baele G, Dellicour S, Raymenants J, Gorissen S, Geenen C, Vanmechelen B, Wawina-Bokalanga T, Martí-Carreras J, Cuypers L, Sève A, Hocqueloux L, Prazuck T, Rey FA, Simon-Loriere E, Bruel T, Mouquet H, André E, Schwartz O. Nature. 2022 Feb;602(7898):671-675. doi: 10.1038/s41586-021-04389-z. Epub 2021 Dec 23. PMID: 35016199

### [Safety and immunogenicity of an inactivated COVID-19 vaccine, BBIBP-CorV, in people younger than 18 years: a randomised, double-blind, controlled, phase 1/2 trial.](#)

Xia S, Zhang Y, Wang Y, Wang H, Yang Y, Gao GF, Tan W, Wu G, Xu M, Lou Z, Huang W, Xu W, Huang B, Wang W, Zhang W, Li N, Xie Z, Zhu X, Ding L, You W, Zhao Y, Zhao J, Huang L, Shi X, Yang Y, Xu G, Wang W, Liu P, Ma M, Qiao Y, Zhao S, Chai J, Li Q, Fu H, Xu Y, Zheng X, Guo W, Yang X. Lancet Infect Dis. 2022 Feb;22(2):196-208. doi: 10.1016/S1473-3099(21)00462-X. Epub 2021 Sep 15. PMID: 34536349

### [Autopsy Histopathologic Cardiac Findings in Two Adolescents Following the Second COVID-19 Vaccine Dose.](#)

Gill JR, Tashjian R, Duncanson E. Arch Pathol Lab Med. 2022 Feb 14. doi: 10.5858/arpa.2021-0435-SA. Online ahead of print. PMID: 35157759

### [Safety, immunogenicity, and efficacy of a COVID-19 vaccine \(NVX-CoV2373\) co-administered with seasonal influenza vaccines: an exploratory substudy of a randomised, observer-blinded, placebo-controlled, phase 3 trial.](#)

Toback S, Galiza E, Cosgrove C, Galloway J, Goodman AL, Swift PA, Rajaram S, Graves-Jones A, Edelman J, Burns F, Minassian AM, Cho I, Kumar L, Plested JS, Rivers EJ, Robertson A, Dubovsky F, Glenn G, Heath PT; 2019nCoV-302 Study Group. Lancet Respir Med. 2022 Feb;10(2):167-179. doi: 10.1016/S2213-2600(21)00409-4. Epub 2021 Nov 17. PMID: 34800364

### [Association Between 3 Doses of mRNA COVID-19 Vaccine and Symptomatic Infection Caused by the SARS-CoV-2 Omicron and Delta Variants.](#)

Accorsi EK, Britton A, Fleming-Dutra KE, Smith ZR, Shang N, Derado G, Miller J, Schrag SJ, Verani JR. JAMA. 2022 Feb 15;327(7):639-651. doi: 10.1001/jama.2022.0470. PMID: 35060999

### [Effectiveness and Safety of COVID-19 Vaccine among Pregnant Women in Real-World Studies: A Systematic Review and Meta-Analysis.](#)

Ma Y, Deng J, Liu Q, Du M, Liu M, Liu J. *Vaccines* (Basel). 2022 Feb 6;10(2):246. doi: 10.3390/vaccines10020246. PMID: 35214704

[India and the COVID-19 vaccine.](#)

Satish KP. *Hum Vaccin Immunother*. 2022 Feb 22:1. doi: 10.1080/21645515.2022.2033541. Online ahead of print. PMID: 35191815

[Reasons and consequences of COVID-19 vaccine failure in patients with chronic lymphocytic leukemia.](#)

Morawska M. *Eur J Haematol*. 2022 Feb;108(2):91-98. doi: 10.1111/ejh.13722. Epub 2021 Dec 5. PMID: 34717004

[COVID-19 Vaccine Hesitancy and How to Address It.](#)

Rittle C. *Workplace Health Saf*. 2022 Feb;70(2):56-62. doi: 10.1177/21650799211073525. Epub 2022 Jan 25. PMID: 35073804

[The correlates and dynamics of COVID-19 vaccine-specific hesitancy.](#)

Merkley E, Loewen PJ. *Vaccine*. 2022 Feb 17:S0264-410X(22)00168-2. doi: 10.1016/j.vaccine.2022.02.033. Online ahead of print. PMID: 35216840

[COVID-19 Vaccine Intention and Hesitancy of Dental Hygienists in the United States.](#)

Gurenlian JR, Eldridge LA, Estrich CG, Battrell A, Lynch A, Morrissey RW, Araujo MWB, Vujicic M, Mikkelsen M. *J Dent Hyg*. 2022 Feb;96(1):5-16. PMID: 35190489

[Evaluation of Immune Response and Disease Status in Systemic Lupus Erythematosus Patients Following SARS-CoV-2 Vaccination.](#)

Izmirly PM, Kim MY, Samanovic M, Fernandez-Ruiz R, Ohana S, Deonaraine KK, Engel AJ, Masson M, Xie X, Cornelius AR, Herati RS, Haberman RH, Scher JU, Guttman A, Blank RB, Plotz B, Haj-Ali M, Banbury B, Stream S, Hasan G, Ho G, Rackoff P, Blazer AD, Tseng CE, Belmont HM, Saxena A, Mulligan MJ, Clancy RM, Buyon JP. *Arthritis Rheumatol*. 2022 Feb;74(2):284-294. doi: 10.1002/art.41937. Epub 2021 Dec 28. PMID: 34347939

[Attitudes toward a COVID-19 vaccine and vaccination status in cancer patients: a cross-sectional survey.](#)

Heyne S, Esser P, Werner A, Lehmann-Laue A, Mehnert-Theuerkauf A. *J Cancer Res Clin Oncol*. 2022 Feb 26:1-12. doi: 10.1007/s00432-022-03961-y. Online ahead of print. PMID: 35218401

[Neutralization of SARS-CoV-2 Omicron by BNT162b2 mRNA vaccine-elicited human sera.](#)

Muik A, Lui BG, Wallisch AK, Bacher M, Mühl J, Reinholz J, Ozhelvacı O, Beckmann N, Gümil Garcia RC, Poran A, Shpyro S, Finlayson A, Cai H, Yang Q, Swanson KA, Türeci Ö, Şahin U. *Science*. 2022 Feb 11;375(6581):678-680. doi: 10.1126/science.abn7591. Epub 2022 Jan 18. PMID: 35040667

[Trust and willingness towards COVID-19 vaccine uptake: a mixed-method study in Ghana, 2021.](#)

Amo-Adjei J, Nurzhynska A, Essuman R, Lohiniva AL. *Arch Public Health*. 2022 Feb 21;80(1):64. doi: 10.1186/s13690-022-00827-0. PMID: 35189963

[SARS-CoV-2-related and Covid-19 vaccine-induced thromboembolic events: A comparative review.](#)

Afshar ZM, Barary M, Babazadeh A, Hosseinzadeh R, Alijanpour A, Miri SR, Sio TT, Sullman MJM, Carson-Chahhoud K, Langer F, Ebrahimpour S. Rev Med Virol. 2022 Feb 3:e2327. doi: 10.1002/rmv.2327. Online ahead of print. PMID: 35112763

[COVID-19 Vaccine Refusal among Nurses Worldwide: Review of Trends and Predictors.](#)

Khubchandani J, Bustos E, Chowdhury S, Biswas N, Keller T. Vaccines (Basel). 2022 Feb 2;10(2):230. doi: 10.3390/vaccines10020230. PMID: 35214687

[A Battle against COVID-19: Vaccine Hesitancy and Awareness with a Comparative Study between Sinopharm and AstraZeneca.](#)

Boshra MS, Hussein RRS, Mohsen M, Elberry AA, Altyar AE, Tammam M, Sarhan RM. Vaccines (Basel). 2022 Feb 15;10(2):292. doi: 10.3390/vaccines10020292. PMID: 35214750

[Estimating the cost of COVID-19 vaccine deployment and introduction in Ghana using the CVIC tool.](#)

Nonvignon J, Owusu R, Asare B, Adjagba A, Aun YW, Yeung KHT, Azeez JNK, Gyansa-Lutterodt M, Gulbi G, Amponsa-Achiano K, Dadzie F, Armah GE, Brenzel L, Hutubessy R, Resch SC; Ghana Health Technology Assessment Technical Working Group. Vaccine. 2022 Feb 4:S0264-410X(22)00070-6. doi: 10.1016/j.vaccine.2022.01.036. Online ahead of print. PMID: 35190206

[Travel vaccines throughout history.](#)

Pavli A, Maltezou HC. Travel Med Infect Dis. 2022 Feb 12;46:102278. doi: 10.1016/j.tmaid.2022.102278. Online ahead of print. PMID: 35167951

[The prevalence and determinants of COVID-19 vaccine hesitancy in the age of infodemic.](#)

Ouyang H, Ma X, Wu X. Hum Vaccin Immunother. 2022 Feb 16:1-7. doi: 10.1080/21645515.2021.2013694. Online ahead of print. PMID: 35172676

[COVID-19 Compulsory Vaccination: Legal and Bioethical Controversies.](#)

Gibelli F, Ricci G, Sirignano A, De Leo D. Front Med (Lausanne). 2022 Feb 2;9:821522. doi: 10.3389/fmed.2022.821522. eCollection 2022. PMID: 35187005

[The Eye of the Storm: COVID-19 Vaccination and the Eye.](#)

Ng XL, Betzler BK, Ng S, Chee SP, Rajamani L, Singhal A, Rousselot A, Pavesio CE, Gupta V, de Smet MD, Agrawal R. Ophthalmol Ther. 2022 Feb;11(1):81-100. doi: 10.1007/s40123-021-00415-5. Epub 2021 Dec 16. PMID: 34914035

[Registry Systems for COVID-19 Vaccines and Rate of Acceptability for Vaccination Before and After Availability of Vaccines in 12 Countries: A Narrative Review.](#)

Papagiannis D, Malli F, Gourgoulis KI. Infect Dis Rep. 2022 Feb 11;14(1):121-133. doi: 10.3390/idr14010016. PMID: 35200443

[Predicting COVID-19 booster vaccine intentions.](#)

Hagger MS, Hamilton K. Appl Psychol Health Well Being. 2022 Feb 22. doi: 10.1111/aphw.12349. Online ahead of print. PMID: 35193171

[COVID-19 vaccine acceptance and rejection in an adult population in Bosnia and Herzegovina.](#)

Fojnica A, Osmanovic A, Đuzic N, Fejzic A, Mekic E, Gromilic Z, Muhovic I, Kurtovic-Kozaric A. PLoS One. 2022 Feb 28;17(2):e0264754. doi: 10.1371/journal.pone.0264754. eCollection 2022. PMID: 35226708

[COVID-19 Pandemic and Im/migrants' Elevated Health Concerns in Canada: Vaccine Hesitancy, Anticipated Stigma, and Risk Perception of Accessing Care.](#)

Lin S. J Immigr Minor Health. 2022 Feb 25:1-13. doi: 10.1007/s10903-022-01337-5. Online ahead of print. PMID: 35212825

[Acceptance rate and risk perception towards the COVID-19 vaccine in Botswana.](#)

Tlale LB, Gabaitiri L, Totolo LK, Smith G, Puswane-Katse O, Ramonna E, Mothowaeng B, Tlhakanelo J, Masupe T, Rankgoane-Pono G, Irige J, Mafa F, Kolane S. PLoS One. 2022 Feb 4;17(2):e0263375. doi: 10.1371/journal.pone.0263375. eCollection 2022. PMID: 35120163

[Vaccine Hesitancy and Fear of COVID-19 Among Italian Medical Students: A Cross-Sectional Study.](#)

Lo Moro G, Cugudda E, Bert F, Raco I, Siliquini R. J Community Health. 2022 Feb 9. doi: 10.1007/s10900-022-01074-8. Online ahead of print. PMID: 35138490

[Exploring COVID-19 Vaccine Hesitancy Among Stakeholders in African American and Latinx Communities in the Deep South Through the Lens of the Health Belief Model.](#)

Bateman LB, Hall AG, Anderson WA, Cherrington AL, Helova A, Judd S, Kimberly R, Oates GR, Osborne T, Ott C, Ryan M, Strong C, Fouad MN. Am J Health Promot. 2022 Feb;36(2):288-295. doi: 10.1177/08901171211045038. Epub 2021 Oct 30. PMID: 34719985

[Impact of Local and Demographic Factors on Early COVID-19 Vaccine Hesitancy among Health Care Workers in New York City Public Hospitals.](#)

Afzal A, Shariff MA, Perez-Gutierrez V, Khalid A, Pili C, Pillai A, Venugopal U, Kasubhai M, Kanna B, Poole BD, Pickett BE, Redd DS, Menon V. Vaccines (Basel). 2022 Feb 10;10(2):273. doi: 10.3390/vaccines10020273. PMID: 35214729

[COVID-19 Vaccine-Associated Pericarditis.](#)

Famularo G, Macciomei MC. Ann Pharmacother. 2022 Feb 8;10600280211073970. doi: 10.1177/10600280211073970. Online ahead of print. PMID: 35130746

[Strategies That Promote Equity in COVID-19 Vaccine Uptake for Black Communities: a Review.](#)

Dada D, Djiometio JN, McFadden SM, Demeke J, Vlahov D, Wilton L, Wang M, Nelson LE. J Urban Health. 2022 Feb;99(1):15-27. doi: 10.1007/s11524-021-00594-3. Epub 2022 Jan 11. PMID: 35018612

[Knowledge and willingness to receive a COVID-19 vaccine: a survey from Anhui Province, China.](#)

Li H, Cheng L, Tao J, Chen D, Zeng C. Hum Vaccin Immunother. 2022 Feb 7:1-8. doi: 10.1080/21645515.2021.2024064. Online ahead of print. PMID: 35130110

[COVID-19 Vaccine Tweets After Vaccine Rollout: Sentiment-Based Topic Modeling.](#)

Huangfu L, Mo Y, Zhang P, Zeng DD, He S. J Med Internet Res. 2022 Feb 8;24(2):e31726. doi: 10.2196/31726. PMID: 34783665

[Psychological factors affecting COVID-19 vaccine hesitancy.](#)

Nazlı ŞB, Yiğman F, Sevindik M, Deniz Özturan D. Ir J Med Sci. 2022 Feb;191(1):71-80. doi: 10.1007/s11845-021-02640-0. Epub 2021 May 14. PMID: 33990893

[Protection Motivation Theory and Intentions to Receive the COVID-19 Vaccine.](#)

Kowalski RM, Deas N, Britt N, Richardson E, Finnell S, Evans K, Carroll H, Cook A, Radovic E, Huyck T, Parise I, Robbins C, Chitty H, Catanzaro S. Health Promot Pract. 2022 Feb 8;15248399211070807. doi: 10.1177/15248399211070807. Online ahead of print. PMID: 35130748

[COVID-19 Vaccination Coverage and Vaccine Confidence by Sexual Orientation and Gender Identity - United States, August 29-October 30, 2021.](#)

McNaghten AD, Brewer NT, Hung MC, Lu PJ, Daskalakis D, Abad N, Kriss J, Black C, Wilhelm E, Lee JT, Gundlapalli A, Cleveland J, Elam-Evans L, Bonner K, Singleton J. MMWR Morb Mortal Wkly Rep. 2022 Feb 4;71(5):171-176. doi: 10.15585/mmwr.mm7105a3. PMID: 35113846

[COVID-19 vaccine-induced encephalitis and status epilepticus.](#)

Fan HT, Lin YY, Chiang WF, Lin CY, Chen MH, Wu KA, Chan JS, Kao YH, Shyu HY, Hsiao PJ. QJM. 2022 Feb 21;115(2):91-93. doi: 10.1093/qjmed/hcab335. PMID: 34978572

[COVID-19 Vaccine Acceptance and Online Study.](#)

Mungmunpantipantip R, Wiwanitkit V. Asia Pac J Public Health. 2022 Feb 7;10105395221077056. doi: 10.1177/10105395221077056. Online ahead of print. PMID: 35130759

[mRNA COVID-19 vaccine booster fosters B- and T-cell responses in immunocompromised patients.](#)

Azzolini E, Pozzi C, Germagnoli L, Oresta B, Carriglio N, Calleri M, Selmi C, De Santis M, Finazzi S, Carlo-Stella C, Bertuzzi A, Motta F, Ceribelli A, Mantovani A, Bonelli F, Rescigno M. Life Sci Alliance. 2022 Feb 15;5(6):e202201381. doi: 10.26508/lsa.202201381. Print 2022 Jun. PMID: 35169017

[A qualitative insight into the perceptions and COVID-19 vaccine hesitancy among Pakistani pharmacists.](#)

Yaseen MO, Saif A, Khan TM, Yaseen M, Saif A, Bukhsh A, Shahid MN, Alsenani F, Tahir H, Ming LC, Amin MU, Suleiman AK, Al-Worafi YM, Baig MR, Saeed M, Jaber AA. Hum Vaccin Immunother. 2022 Feb 22;1-12. doi: 10.1080/21645515.2022.2031455. Online ahead of print. PMID: 35192781

[Factors influencing COVID-19 vaccine uptake among adults in Nigeria.](#)

Adedeji-Adenola H, Olugbake OA, Adeosun SA. PLoS One. 2022 Feb 24;17(2):e0264371. doi: 10.1371/journal.pone.0264371. eCollection 2022. PMID: 35202444

[Adverse Events Reporting Quality of Randomized Controlled Trials of COVID-19 Vaccine Using the CONSORT Criteria for Reporting Harms: A Systematic Review.](#)

Yuniar CT, Pratiwi B, Ihsan AF, Laksono BT, Risfayanti I, Fathadina A, Jeong Y, Kim E. Vaccines (Basel). 2022 Feb 17;10(2):313. doi: 10.3390/vaccines10020313. PMID: 35214773

[Death after the Administration of COVID-19 Vaccines Approved by EMA: Has a Causal Relationship Been Demonstrated?](#)

Maiese A, Baronti A, Manetti AC, Di Paolo M, Turillazzi E, Frati P, Fineschi V. Vaccines (Basel). 2022 Feb 16;10(2):308. doi: 10.3390/vaccines10020308. PMID: 35214765

[Nano dimensions/adjuvants in COVID-19 vaccines.](#)

Alphandéry E. J Mater Chem B. 2022 Feb 15. doi: 10.1039/d1tb02408f. Online ahead of print. PMID: 35166754

[SARS-CoV-2 vaccine-associated subacute thyroiditis.](#)

Yorulmaz G, Sahin Tekin M. J Endocrinol Invest. 2022 Feb 19:1-7. doi: 10.1007/s40618-022-01767-w. Online ahead of print. PMID: 35182366

[Safety and antibody response to inactivated COVID-19 vaccine in patients with chronic hepatitis B virus infection.](#)

He T, Zhou Y, Xu P, Ling N, Chen M, Huang T, Zhang B, Yang Z, Ao L, Li H, Chen Z, Zhang D, Shi X, Lei Y, Wang Z, Zeng W, Hu P, Lan Y, Zhou Z, Kang J, Huang Y, Shi T, Pan Q, Zhu Q, Ran X, Zhang Y, Song R, Xiang D, Xiao S, Zhang G, Shen W, Peng M, Cai D, Ren H. Liver Int. 2022 Feb 2. doi: 10.1111/liv.15173. Online ahead of print. PMID: 35107848

[COVID-19 vaccine uptake, effectiveness, and waning in 82,959 health care workers: A national prospective cohort study in Wales.](#)

Bedston S, Akbari A, Jarvis CI, Lowthian E, Torabi F, North L, Lyons J, Perry M, Griffiths LJ, Owen RK, Beggs J, Chuter A, Bradley DT, de Lusignan S, Fry R, Richard Hobbs FD, Hollinghurst J, Katikireddi SV, Murphy S, O'Reilly D, Robertson C, Shi T, Tsang RSM, Sheikh A, Lyons RA. Vaccine. 2022 Feb 16;40(8):1180-1189. doi: 10.1016/j.vaccine.2021.11.061. Epub 2022 Jan 15. PMID: 35042645

[COVID-19 Vaccine Administration and Hesitation Among Psychiatric Emergency Services Patients.](#)

Mitchell L, Fuehrlein B, Wilkosz M. Community Ment Health J. 2022 Feb 12:1-4. doi: 10.1007/s10597-022-00949-3. Online ahead of print. PMID: 35150353

[Genomic, immunological, and clinical analysis of COVID-19 vaccine breakthrough infections in Beijing, China.](#)

Tian D, Song Y, Zhang M, Pan Y, Ge Z, Zhang Y, Ren X, Wen J, Xu Y, Guo H, Yang P, Chen Z, Xu W. J Med Virol. 2022 Feb 2. doi: 10.1002/jmv.27636. Online ahead of print. PMID: 35112366

[The case against COVID-19 vaccine mandates in pediatric solid organ transplantation.](#)

Ross LF, Opel DJ. Pediatr Transplant. 2022 Feb 12:e14243. doi: 10.1111/ptr.14243. Online ahead of print. PMID: 35150196

[Conspiracy theories and misinformation about COVID-19 in Nigeria: Implications for vaccine demand generation communications.](#)

Wonodi C, Obi-Jeff C, Adewumi F, Keluo-Udeke SC, Gur-Arie R, Krubiner C, Jaffe EF, Bamiduro T, Karron R, Faden R. Vaccine. 2022 Feb 7:S0264-410X(22)00126-8. doi: 10.1016/j.vaccine.2022.02.005. Online ahead of print. PMID: 35153088

[COVID-19 and Agricultural Workers: A Descriptive Study.](#)

Chicas R, Xiuhtecutli N, Houser M, Glastra S, Elon L, Sands JM, McCauley L, Hertzberg V. J Immigr Minor Health. 2022 Feb;24(1):58-64. doi: 10.1007/s10903-021-01290-9. Epub 2021 Oct 12. PMID: 34637039

[COVID-19 vaccination and the eye.](#)

Wang MTM, Niederer RL, McGhee CNJ, Danesh-Meyer HV. Am J Ophthalmol. 2022 Feb 25:S0002-9394(22)00070-8. doi: 10.1016/j.ajo.2022.02.011. Online ahead of print. PMID: 35227700

[The association between coronaphobia and attitude towards COVID-19 Vaccine: A sample in the east of Turkey.](#)

Turan GB, Aksoy M, Özer Z, Demir C. Encephale. 2022 Feb;48(1):38-42. doi: 10.1016/j.encep.2021.04.002. Epub 2021 Jun 12. PMID: 34243957

[COVID-19 in Southeast Asia: current status and perspectives.](#)

Chu DT, Vu Ngoc SM, Vu Thi H, Nguyen Thi YV, Ho TT, Hoang VT, Singh V, Al-Tawfiq JA. Bioengineered. 2022 Feb;13(2):3797-3809. doi: 10.1080/21655979.2022.2031417. PMID: 35081861

[Global discrimination of COVID-19 vaccine.](#)

Sohil F, Sohail MU. Hum Vaccin Immunother. 2022 Feb 17:1-2. doi: 10.1080/21645515.2022.2028515. Online ahead of print. PMID: 35176967

[Safety Monitoring of COVID-19 Vaccine Booster Doses Among Adults - United States, September 22, 2021-February 6, 2022.](#)

Hause AM, Baggs J, Marquez P, Myers TR, Su JR, Blanc PG, Gwira Baumblatt JA, Woo EJ, Gee J, Shimabukuro TT, Shay DK. MMWR Morb Mortal Wkly Rep. 2022 Feb 18;71(7):249-254. doi: 10.15585/mmwr.mm7107e1. PMID: 35176008

[COVID-19 vaccines for children and adolescents in Africa: aligning our priorities to situational realities.](#)

Govender K, Nyamaruze P, McKerrow N, Meyer-Weitz A, Cowden RG. BMJ Glob Health. 2022 Feb;7(2):e007839. doi: 10.1136/bmjgh-2021-007839. PMID: 35153193

[Facilitators and Barriers of COVID-19 Vaccine Promotion on Social Media in the United States: A Systematic Review.](#)

Lieneck C, Heinemann K, Patel J, Huynh H, Leafblad A, Moreno E, Wingfield C. Healthcare (Basel). 2022 Feb 8;10(2):321. doi: 10.3390/healthcare10020321. PMID: 35206935

[Myocarditis Following COVID-19 Vaccination: A Systematic Review \(October 2020-October 2021\).](#)

Lee ASY, Balakrishnan IDD, Khoo CY, Ng CT, Loh JKX, Chan LL, Teo LLY, Sim DKL. Heart Lung Circ. 2022 Feb 25:S1443-9506(22)00043-9. doi: 10.1016/j.hlc.2022.02.002. Online ahead of print. PMID: 35227610

[How frequent are acute reactions to COVID-19 vaccination and who is at risk?](#)

Dreyer N, Reynolds MW, Albert L, Brinkley E, Kwon T, Mack C, Toovey S. Vaccine. 2022 Feb 9:S0264-410X(22)00103-7. doi: 10.1016/j.vaccine.2021.12.072. Online ahead of print. PMID: 35177299

[COVID-19 vaccination experience among United States dental professionals and students: Safety, confidence, concerns, and side effects.](#)

Bsoul EA, Loomer PM. PLoS One. 2022 Feb 22;17(2):e0264323. doi: 10.1371/journal.pone.0264323. eCollection 2022. PMID: 35192657

[COVID-19 vaccine acceptability among people in Australia who inject drugs: Implications for vaccine rollout.](#)

Dietze PM, Hall C, Price O, Stewart AC, Crawford S, Peacock A, Maher L. Drug Alcohol Rev. 2022 Feb;41(2):484-487. doi: 10.1111/dar.13399. Epub 2021 Nov 9. PMID: 34752659

[Awareness, knowledge and acceptance of COVID-19 vaccine among the people of West Bengal, India: A web-based survey.](#)

Samanta S, Banerjee J, Kar SS, Ali KM, Giri B, Pal A, Dash SK. *Vacunas*. 2022 Feb 2. doi: 10.1016/j.vacun.2022.01.002. Online ahead of print. PMID: 35125985

[Side effects of COVID-19 vaccines: a systematic review and meta-analysis protocol of randomised trials.](#)

Medeiros KS, Costa APF, Sarmento ACA, Freitas CL, Gonçalves AK. *BMJ Open*. 2022 Feb 24;12(2):e050278. doi: 10.1136/bmjopen-2021-050278. PMID: 35210336

[COVID-19 Vaccine Hesitancy Prevalence and Predictors among the Students of Jazan University, Saudi Arabia Using the Health Belief Model: A Cross-Sectional Study.](#)

Khalafalla HE, Tumambeng MZ, Halawi MHA, Masmali EMA, Tashari TBM, Arishi FHA, Shadad RHM, Alfaraj SZA, Fathi SMA, Mahfouz MS. *Vaccines (Basel)*. 2022 Feb 14;10(2):289. doi: 10.3390/vaccines10020289. PMID: 35214746

[Self-reported COVID-19 vaccine hesitancy and uptake among participants from different racial and ethnic groups in the United States and United Kingdom.](#)

Nguyen LH, Joshi AD, Drew DA, Merino J, Ma W, Lo CH, Kwon S, Wang K, Graham MS, Polidori L, Menni C, Sudre CH, Anyane-Yeboa A, Astley CM, Warner ET, Hu CY, Selvachandran S, Davies R, Nash D, Franks PW, Wolf J, Ourselin S, Steves CJ, Spector TD, Chan AT; COPE Consortium. *Nat Commun*. 2022 Feb 1;13(1):636. doi: 10.1038/s41467-022-28200-3. PMID: 35105869

[Risk factor targeting for vaccine prioritization during the COVID-19 pandemic.](#)

Chapman LAC, Shukla P, Rodríguez-Barraquer I, Shete PB, León TM, Bibbins-Domingo K, Rutherford GW, Schechter R, Lo NC. *Sci Rep*. 2022 Feb 23;12(1):3055. doi: 10.1038/s41598-022-06971-5. PMID: 35197495

[Racial-Ethnic Residential Clustering and Early COVID-19 Vaccine Allocations in Five Urban Texas Counties.](#)

Anderson KF, Ray-Warren D. *J Health Soc Behav*. 2022 Feb 14:221465221074915. doi: 10.1177/00221465221074915. Online ahead of print. PMID: 35164599

[COVID-19 vaccine hesitancy: The effects of combining direct and indirect online opinion cues on psychological reactance to health campaigns.](#)

Lu F, Sun Y. *Comput Human Behav*. 2022 Feb;127:107057. doi: 10.1016/j.chb.2021.107057. Epub 2021 Oct 22. PMID: 34707328

[Equitable and Effective Distribution of the COVID-19 Vaccines - A Scientific and Moral Obligation.](#)

Binagwaho A, Mathewos K, Davis S. *Int J Health Policy Manag*. 2022 Feb 1;11(2):100-102. doi: 10.34172/ijhpm.2021.49. PMID: 33949818

[Relationship between lay and expert perceptions of COVID-19 vaccine development timelines in Canada and USA.](#)

Kane PB, Moyer H, MacPherson A, Papenburg J, Ward BJ, Broomell SB, Kimmelman J. *PLoS One*. 2022 Feb 15;17(2):e0262740. doi: 10.1371/journal.pone.0262740. eCollection 2022. PMID: 35167591

[COVID-19 Vaccination and Mental Disorders, What Has Been Accomplished and Future Direction.](#)

Pandolfo G, Genovese G, Iannuzzo F, Bruno A, Pioggia G, Gangemi S. *Brain Sci*. 2022 Feb 20;12(2):292. doi: 10.3390/brainsci12020292. PMID: 35204055



[Factors Associated with COVID-19 Vaccine Hesitancy after Implementation of a Mass Vaccination Campaign.](#)

Gomes IA, Soares P, Rocha JV, Gama A, Laires PA, Moniz M, Pedro AR, Dias S, Goes AR, Leite A, Nunes C. Vaccines (Basel). 2022 Feb 12;10(2):281. doi: 10.3390/vaccines10020281. PMID: 35214739

[Post COVID-19 Vaccination-Associated Neurological Complications.](#)

Assiri SA, Althaqafi RMM, Alswat K, Alghamdi AA, Alomairi NE, Nemenqani DM, Ibrahim ZS, Elkady A. Neuropsychiatr Dis Treat. 2022 Feb 2;18:137-154. doi: 10.2147/NDT.S343438. eCollection 2022. PMID: 35140464

[COVID-19 Vaccine Hesitancy in Three Latin American Countries: Reasons Given for Not Becoming Vaccinated in Colombia, Ecuador, and Venezuela.](#)

Bates BR, Villegas-Botero A, Costales JA, Moncayo AL, Tami A, Carvajal A, Grijalva MJ. Health Commun. 2022 Feb 14:1-11. doi: 10.1080/10410236.2022.2035943. Online ahead of print. PMID: 35164624

[Confidence and Hesitancy During the Early Roll-out of COVID-19 Vaccines Among Black, Hispanic, and Undocumented Immigrant Communities: a Review.](#)

McFadden SM, Demeke J, Dada D, Wilton L, Wang M, Vlahov D, Nelson LE. J Urban Health. 2022 Feb;99(1):3-14. doi: 10.1007/s11524-021-00588-1. Epub 2021 Dec 23. PMID: 34940933

[COVID-19 Vaccine Hesitancy Among Patients with Inflammatory Bowel Diseases at a Diverse Safety Net Hospital.](#)

Herman HS, Rosenthaler MP, Elhassan N, Weinberg JM, Satyam VR, Wasan SK. Dig Dis Sci. 2022 Feb 17:1-5. doi: 10.1007/s10620-022-07413-y. Online ahead of print. PMID: 35175432

[Covid-19 vaccination, fear and anxiety: Evidence from Google search trends.](#)

Awijen H, Ben Zaid Y, Nguyen DK. Soc Sci Med. 2022 Feb 16;297:114820. doi: 10.1016/j.socscimed.2022.114820. Online ahead of print. PMID: 35183946

[COVID-19 vaccine, myocardial infarction and Kounis syndrome.](#)

Sriwijitalai W, Wiwanitkit V. QJM. 2022 Feb 1:hcac016. doi: 10.1093/qjmed/hcac016. Online ahead of print. PMID: 35104343

[The impact of COVID-19 vaccine on sperm quality.](#)

Barda S, Laskov I, Grisaru D, Lehavi O, Kleiman S, Wenkert A, Azem F, Hauser R, Michaan N. Int J Gynaecol Obstet. 2022 Feb 7. doi: 10.1002/ijgo.14135. Online ahead of print. PMID: 35128663

[A single dose of COVID-19 vaccine induces a strong T cell and B cell response in healthcare professionals recovered from SARS-CoV-2 infection.](#)

Laranjeira P, Rodrigues T, Silva A, Barbosa P, Reis T, Lopes C, Pinho A, Silva S, Silva I, Carvalho A, Pacheco V, Rodrigues F, Araújo L, Antunes I, Paiva A. Clin Exp Med. 2022 Feb 21:1-9. doi: 10.1007/s10238-022-00801-8. Online ahead of print. PMID: 35190936

[Systemic lupus erythematosus with acute pancreatitis and vasculitic rash following COVID-19 vaccine: a case report and literature review.](#)

N AM, Saleh AM, Khalid A, Alshaya AK, Alanazi SMM. Clin Rheumatol. 2022 Feb 17:1-6. doi: 10.1007/s10067-022-06097-z. Online ahead of print. PMID: 35175446

[Examining the direct and indirect effects of trust in motivating COVID-19 vaccine uptake.](#)

Liu S, Chu H. Patient Educ Couns. 2022 Feb 12;S0738-3991(22)00081-7. doi: 10.1016/j.pec.2022.02.009. Online ahead of print. PMID: 35181177

[Information trust and COVID-19 vaccine hesitancy amongst middle-aged and older adults in Singapore: A latent class analysis Approach.](#)

Tan M, Straughan PT, Cheong G. Soc Sci Med. 2022 Mar;296:114767. doi: 10.1016/j.socscimed.2022.114767. Epub 2022 Feb 3. PMID: 35144226

[Hemophagocytic lymphohistiocytosis after SARS-CoV-2 vaccination.](#)

Hieber ML, Sprute R, Eichenauer DA, Hallek M, Jachimowicz RD. Infection. 2022 Feb 26;1-6. doi: 10.1007/s15010-022-01786-y. Online ahead of print. PMID: 35218512

[The Humoral Immune Response of the ChAdOx1 nCoV-19 Vaccine in Maintenance Dialysis Patients without Prior COVID-19 Infection.](#)

Cheng CY, Fang TC, Liao HW, Chen TH, Chang JH, Lin YC, Kao CC, Liu MC, Chang HW, Hung CS, Wang JC, Hsiao SH, Sue YM. Vaccines (Basel). 2022 Feb 21;10(2):338. doi: 10.3390/vaccines10020338. PMID: 35214797

[The Kinetics of COVID-19 Vaccine Response in a Community-Vaccinated Population.](#)

Tu MK, Chiang SH, Bender RA, Wong DTW, Strom CM. J Immunol. 2022 Feb 15;208(4):819-826. doi: 10.4049/jimmunol.2100919. Epub 2022 Jan 17. PMID: 35039333

[COVID-19 vaccine reactogenicity - A cohort event monitoring study in the Netherlands using patient reported outcomes.](#)

Rolfes L, Härmark L, Kant A, van Balveren L, Hilgersom W, van Hunsel F. Vaccine. 2022 Feb 11;40(7):970-976. doi: 10.1016/j.vaccine.2022.01.013. Epub 2022 Jan 17. PMID: 35067381

[Gender Differences in Adverse Events Following the Pfizer-BioNTech COVID-19 Vaccine.](#)

Green MS, Peer V, Magid A, Hagani N, Anis E, Nitzan D. Vaccines (Basel). 2022 Feb 3;10(2):233. doi: 10.3390/vaccines10020233. PMID: 35214694

[Vaccination for SARS-CoV-2 in Hematological Patients.](#)

Riccardi N, Falcone M, Yahav D. Acta Haematol. 2022 Feb 25. doi: 10.1159/000523753. Online ahead of print. PMID: 35220303

[A Global Survey of COVID-19 Vaccine Acceptance Among Healthcare Workers.](#)

Noushad M, Rastam S, Nassani MZ, Al-Saqqaf IS, Hussain M, Yaroko AA, Arshad M, Kirfi AM, Koppolu P, Niazi FH, Elkandow A, Darwish M, Abdalla Nassar AS, Abuzied Mohammed SO, Abdalrady Hassan NH, Abusalim GS, Samran A, Alsalhani AB, Demachkia AM, de Melo RM, Luddin N, Husein A, Habib A, Suleyman F, Osman HA, Al-Awar MS, Dimashkieh MR, Swapna LA, Barakat A, Alqerban A. Front Public Health. 2022 Feb 8;9:794673. doi: 10.3389/fpubh.2021.794673. eCollection 2021. PMID: 35211453

[Efficacy of COVID-19 vaccine booster doses in older people.](#)

Mattiuzzi C, Lippi G. Eur Geriatr Med. 2022 Feb;13(1):275-278. doi: 10.1007/s41999-022-00615-7. Epub 2022 Jan 24. PMID: 35067909

[Humoral and Cellular Responses to COVID-19 Vaccines in SARS-CoV-2 Infection-Naive and -Recovered Korean Individuals.](#)

Hwang JY, Kim Y, Lee KM, Jang EJ, Woo CH, Hong CU, Choi ST, Xayaheuang S, Jang JG, Ahn JH, Park H. Vaccines (Basel). 2022 Feb 18;10(2):332. doi: 10.3390/vaccines10020332. PMID: 35214791

[COVID-19 vaccine acceptance and associated factors among women attending antenatal and postnatal cares in Central Gondar Zone public hospitals, Northwest Ethiopia.](#)

Taye EB, Taye ZW, Muche HA, Tsega NT, Haile TT, Tiguh AE. Clin Epidemiol Glob Health. 2022 Mar-Apr;14:100993. doi: 10.1016/j.cegh.2022.100993. Epub 2022 Feb 9. PMID: 35155846

[Correlates of Covid-19 Vaccine Acceptance among Residents of Ohio: A Cross-sectional Study.](#)

Haile ZT, Ruhil A, Bates BR, Hall O, Grijalva MJ. BMC Public Health. 2022 Feb 4;22(1):226. doi: 10.1186/s12889-022-12661-8. PMID: 35114965

[Cerebral Venous Thrombosis Developing after COVID-19 Vaccination: VITT, VATT, TTS, and More.](#)

Lippi G, Favaloro EJ. Semin Thromb Hemost. 2022 Feb;48(1):8-14. doi: 10.1055/s-0041-1736168. Epub 2021 Oct 25. PMID: 34695859

[COVID-19 vaccination coverage by immigrant background.](#)

Kraft KB, Godøy AA, Vinjerui KH, Kour P, Kjøllesdal MKR, Indseth T. Tidsskr Nor Laegeforen. 2021 Dec 20;141(2). doi: 10.4045/tidsskr.21.0799. Print 2022 Feb 1. PMID: 35107952

[Association Between the BNT162b2 Messenger RNA COVID-19 Vaccine and the Risk of Sudden Sensorineural Hearing Loss.](#)

Yanir Y, Doweck I, Shibli R, Najjar-Debbiny R, Saliba W. JAMA Otolaryngol Head Neck Surg. 2022 Feb 24. doi: 10.1001/jamaoto.2021.4278. Online ahead of print. PMID: 35201275

[Predictors of COVID-19 vaccine hesitancy in Germany: a cross-sectional, population-based study.](#)

Umakanthan S, Lawrence S. Postgrad Med J. 2022 Feb 3;postgradmedj-2021-141365. doi: 10.1136/postgradmedj-2021-141365. Online ahead of print. PMID: 35115377

[COVID-19 vaccination and Guillain-Barre syndrome: analyses using the National Immunoglobulin Database.](#)

Keh RYS, Scanlon S, Datta-Nemdharry P, Donegan K, Cavanagh S, Foster M, Skelland D, Palmer J, Machado PM, Keddie S, Carr AS, Lunn MP; BPNS/ABN COVID-19 Vaccine GBS Study Group. Brain. 2022 Feb 18;awac067. doi: 10.1093/brain/awac067. Online ahead of print. PMID: 35180300

[COVID-19 Vaccine Rollouts and the Reproduction of Urban Spatial Inequality: Disparities Within Large US Cities in March and April 2021 by Racial/Ethnic and Socioeconomic Composition.](#)

DiRago NV, Li M, Tom T, Schupmann W, Carrillo Y, Carey CM, Gaddis SM. J Urban Health. 2022 Feb 3:1-17. doi: 10.1007/s11524-021-00589-0. Online ahead of print. PMID: 35118595

[Are COVID-19 Vaccine Boosters Needed? The Science behind Boosters.](#)

Burckhardt RM, Dennehy JJ, Poon LLM, Saif LJ, Enquist LW. J Virol. 2022 Feb 9;96(3):e0197321. doi: 10.1128/JVI.01973-21. Epub 2021 Nov 24. PMID: 34817198

[COVID-19 vaccine-induced antibody responses in immunosuppressed patients with inflammatory bowel disease \(VIP\): a multicentre, prospective, case-control study.](#)

Alexander JL, Kennedy NA, Ibraheim H, Anandabaskaran S, Saifuddin A, Castro Seoane R, Liu Z, Nice R, Bewshea C, D'Mello A, Constable L, Jones GR, Balarajah S, Fiorentino F, Sebastian S, Irving PM, Hicks LC, Williams HRT, Kent AJ, Linger R, Parkes M, Kok K, Patel KV, Teare JP, Altmann DM, Boyton RJ, Goodhand JR, Hart AL, Lees CW, Ahmad T, Powell N; VIP study investigators. *Lancet Gastroenterol Hepatol.* 2022 Feb 3:S2468-1253(22)00005-X. doi: 10.1016/S2468-1253(22)00005-X. Online ahead of print. PMID: 35123676

[Covid-19, vaccine decision and schizophrenia.](#)

Samaïli S, Karoui M, Maaroufi A, Kamoun R, Nefzi H, Ben Salah K, Ellouze F. *Encephale.* 2022 Feb 7:S0013-7006(22)00033-1. doi: 10.1016/j.encep.2022.01.004. Online ahead of print. PMID:

[Characteristics and perceptions associated with COVID-19 vaccination hesitancy among pregnant and postpartum individuals: A cross-sectional study.](#)

Kiefer MK, Mehl R, Costantine MM, Johnson A, Cohen J, Summerfield TL, Landon MB, Rood KM, Venkatesh KK. *BJOG.* 2022 Feb 1. doi: 10.1111/1471-0528.17110. Online ahead of print. PMID: 35104382

[School Asthma Care During COVID-19: What We Have Learned and What We Are Learning.](#)

Abrams EM, Jordan K, Szeffler SJ. *J Allergy Clin Immunol Pract.* 2022 Feb;10(2):453-459. doi: 10.1016/j.jaip.2021.11.020. Epub 2021 Nov 27. PMID: 34848382

[Respiratory mucosal delivery of next-generation COVID-19 vaccine provides robust protection against both ancestral and variant strains of SARS-CoV-2.](#)

Afkhami S, D'Agostino MR, Zhang A, Stacey HD, Marzok A, Kang A, Singh R, Bavananthasivam J, Ye G, Luo X, Wang F, Ang JC, Zganiacz A, Sankar U, Kazhdan N, Koenig JFE, Phelps A, Gameiro SF, Tang S, Jordana M, Wan Y, Mossman KL, Jeyanathan M, Gillgrass A, Medina MFC, Smaill F, Lichty BD, Miller MS, Xing Z. *Cell.* 2022 Feb 9:S0092-8674(22)00145-3. doi: 10.1016/j.cell.2022.02.005. Online ahead of print. PMID: 35180381

[Factors influencing COVID-19 vaccination intention: The roles of vaccine knowledge, vaccine risk perception, and doctor-patient communication.](#)

Zheng H, Jiang S, Wu Q. *Patient Educ Couns.* 2022 Feb;105(2):277-283. doi: 10.1016/j.pec.2021.09.023. Epub 2021 Sep 20. PMID: 34565643

[Perceived COVID-19 Vaccine Pressure in the Caribbean: Exploring a New Stressor-Strain Phenomenon in the Pandemic.](#)

Devonish D, Dulal-Arthur T. *Vaccines (Basel).* 2022 Feb 3;10(2):238. doi: 10.3390/vaccines10020238. PMID: 35214696

[Towards a predictive model of COVID-19 vaccine hesitancy among American adults.](#)

Mewhirter J, Sagir M, Sanders R. *Vaccine.* 2022 Feb 7:S0264-410X(22)00134-7. doi: 10.1016/j.vaccine.2022.02.011. Online ahead of print. PMID: 35164989

[Allergies and COVID-19 vaccines: An ENDA/EAACI Position paper.](#)

Barbaud A, Garvey LH, Arcolaci A, Brockow K, Mori F, Mayorga C, Bonadonna P, Atanaskovic-Markovic M, Moral L, Zaroni G, Pagani M, Soria A, Jošt M, Caubet JC, Abreu C, Al-Ahmad M, Alvarez-Perea A, Bavbek S, Benedetta B, Beatrice BM, Blanca-López N, Bogas Herrera G, Buonomo A, Calogiuri G, Carli G, Cernadas J, Cortellini G, Celik G, Demir S, Doña I, Dursun Adile B, Eberlein B, Emilia F, Bryan F, Garcez T, Garcia-Nunez I, Gawlik R, Gelincik A, Gomes E, Gooi JH, Grosber M, Gülen T, Hacard F, Cyrille H, Janson C, Johnston SL, Joerg L, Kepil Özdemir S, Klimek L, Košnik M, Kowalski ML, Kuyucu S, Kvedariene V, Julio Laguna J, Carla L, Marinho S, Merk H, Meucci E, Morisset M, Munoz-Cano R, Murzilli F, Nakonechna A, Popescu FD, Porebski G, Radice A, Regateiro FS, Röckmann H, Romano A, Sargur R, Sastre J, Kathrin SH, Lenka S, Marta S, Ingrid T, Treudler R, Walusiak-Skorupa J, Wedi B, Wöhl S, Zidarn M, Zuberbier T, Agache I, Torres MJ. *Allergy*. 2022 Feb 2. doi: 10.1111/all.15241. Online ahead of print. PMID: 35112371

[Safety and immunogenicity of BNT162b2 mRNA COVID-19 vaccine in adolescents with rheumatic diseases treated with immunomodulatory medications.](#)

Heshin-Bekenstein M, Ziv A, Toplak N, Hagin D, Kadishevich D, Butbul YA, Saiag E, Kaufman A, Shefer G, Sharon O, Pel S, Elkayam O, Uziel Y. *Rheumatology (Oxford)*. 2022 Feb 18:keac103. doi: 10.1093/rheumatology/keac103. Online ahead of print. PMID: 35179569

[Immunogenicity and safety of the BNT162b2 mRNA COVID-19 vaccine in haematopoietic stem cell transplantation recipients.](#)

Shem-Tov N, Yerushalmi R, Danylesko I, Litachevsky V, Levy I, Olmer L, Lusitg Y, Avigdor A, Nagler A, Shimoni A, Rahav G. *Br J Haematol*. 2022 Feb;196(4):884-891. doi: 10.1111/bjh.17918. Epub 2021 Oct 28. PMID: 34713441

[Effectiveness of Maternal Vaccination with mRNA COVID-19 Vaccine During Pregnancy Against COVID-19-Associated Hospitalization in Infants Aged <6 Months - 17 States, July 2021-January 2022.](#)

Halasa NB, Olson SM, Staat MA, Newhams MM, Price AM, Boom JA, Sahni LC, Cameron MA, Pannaraj PS, Blinze KE, Bhumbra SS, Bradford TT, Chiotos K, Coates BM, Cullimore ML, Cvijanovich NZ, Flori HR, Gertz SJ, Heidemann SM, Hobbs CV, Hume JR, Irby K, Kamidani S, Kong M, Levy ER, Mack EH, Maddux AB, Michelson KN, Nofziger RA, Schuster JE, Schwartz SP, Smallcomb L, Tarquinio KM, Walker TC, Zinter MS, Gilboa SM, Polen KN, Campbell AP, Randolph AG, Patel MM; Overcoming COVID-19 Investigators; Overcoming COVID-19 Network. *MMWR Morb Mortal Wkly Rep*. 2022 Feb 18;71(7):264-270. doi: 10.15585/mmwr.mm7107e3. PMID: 35176002

[COVID-19 Vaccine Uptake and Its Impacts in a Cohort of Gay and Bisexual Men in Australia.](#)

Prestage G, Storer D, Jin F, Haire B, Maher L, Philpot S, Bavinton B, Saxton P, Murphy D, Holt M, Bourne A, Hammoud MA. *AIDS Behav*. 2022 Feb 8:1-11. doi: 10.1007/s10461-022-03611-x. Online ahead of print. PMID: 35132480

[COVID-19 vaccine effectiveness among immunocompromised populations: a targeted literature review of real-world studies.](#)

Di Fusco M, Lin J, Vaghela S, Lingohr-Smith M, Nguyen JL, Scassellati Sforzolini T, Judy J, Cane A, Moran MM. *Expert Rev Vaccines*. 2022 Feb 3:1-17. doi: 10.1080/14760584.2022.2035222. Online ahead of print. PMID: 35112973

[Attitudes towards influenza, and COVID-19 vaccines during the COVID-19 pandemic among a representative sample of the Jewish Israeli population.](#)

Maor Y, Caspi S. PLoS One. 2022 Feb 11;17(2):e0255495. doi: 10.1371/journal.pone.0255495. eCollection 2022. PMID: 35148322

[Early safety and tolerability profile of the BNT162b2 COVID-19 vaccine in myasthenia gravis.](#)

Lotan I, Hellmann MA, Friedman Y, Stiebel-Kalish H, Steiner I, Wilf-Yarkoni A. Neuromuscul Disord. 2022 Feb 5:S0960-8966(22)00030-X. doi: 10.1016/j.nmd.2022.01.013. Online ahead of print. PMID: 35227552

[Intranasal COVID-19 vaccines: From bench to bed.](#)

Alu A, Chen L, Lei H, Wei Y, Tian X, Wei X. EBioMedicine. 2022 Feb;76:103841. doi: 10.1016/j.ebiom.2022.103841. Epub 2022 Jan 24. PMID: 35085851

[COVID-19 vaccine-related new-onset lichen planus.](#)

Babazadeh A, Miladi R, Barary M, Shirvani M, Ebrahimpour S, Aryanian Z, Mohseni Afshar Z. Clin Case Rep. 2022 Feb 2;10(2):e05323. doi: 10.1002/ccr3.5323. eCollection 2022 Feb. PMID: 35140945

[Knowledge, Attitudes, and Perception towards COVID-19 Vaccination among the Adult Population: A Cross-Sectional Study in Turkey.](#)

Sonmezer MC, Sahin TK, Erul E, Ceylan FS, Hamurcu MY, Morova N, Rudvan AI, Unal S. Vaccines (Basel). 2022 Feb 11;10(2):278. doi: 10.3390/vaccines10020278. PMID: 35214736

[ANCA-associated vasculitis following ChAdOx1 nCoV19 vaccination: case-based review.](#)

Prabhakar A, Naidu GSRSNK, Chauhan P, Sekar A, Sharma A, Sharma A, Kumar A, Nada R, Rathi M, Kohli HS, Ramachandran R. Rheumatol Int. 2022 Feb 5:1-10. doi: 10.1007/s00296-021-05069-x. Online ahead of print. PMID: 35124725

[COVID-19 vaccine hesitancy among different population groups in China: a national multicenter online survey.](#)

Huang Y, Su X, Xiao W, Wang H, Si M, Wang W, Gu X, Ma L, Li L, Zhang S, Yang C, Yu Y, Qiao Y. BMC Infect Dis. 2022 Feb 14;22(1):153. doi: 10.1186/s12879-022-07111-0. PMID: 35164700

[Examining Drivers of COVID-19 Vaccine Hesitancy Among Healthcare Workers.](#)

Swann MC, Bendetson J, Johnson A, Jatta M, Schlepner CJ, Baffoe-Bonnie A. Infect Control Hosp Epidemiol. 2022 Feb 14:1-40. doi: 10.1017/ice.2022.34. Online ahead of print. PMID: 35156600

[ANTI-Vax: a novel Twitter dataset for COVID-19 vaccine misinformation detection.](#)

Hayawi K, Shahriar S, Serhani MA, Taleb I, Mathew SS. Public Health. 2022 Feb;203:23-30. doi: 10.1016/j.puhe.2021.11.022. Epub 2021 Dec 7. PMID: 35016072

[An Analysis of the Willingness to the COVID-19 Vaccine Booster Shots among Urban Employees: Evidence from a Megacity H in Eastern China.](#)

Hu T, Li L, Lin C, Yang Z, Chow C, Lu Z, You C. Int J Environ Res Public Health. 2022 Feb 17;19(4):2300. doi: 10.3390/ijerph19042300. PMID: 35206495

[Impact of corona-phobia on attitudes and acceptance towards COVID-19 vaccine among cancer patients: a single-center study.](#)

Erdem D, Karaman I. Future Oncol. 2022 Feb;18(4):457-469. doi: 10.2217/fon-2021-1015. Epub 2021 Dec 1. PMID: 34851155

[The dynamics of trust and communication in COVID-19 vaccine decision making: A qualitative inquiry.](#)

Ledford CJW, Cafferty LA, Moore JX, Roberts C, Whisenant EB, Garcia Rychtarikova A, Seehusen DA. J Health Commun. 2022 Feb 27;1-10. doi: 10.1080/10810730.2022.2028943. Online ahead of print. PMID: 35220915

[Factors affecting intention to take COVID-19 vaccine among Pakistani University Students.](#)

Hossain M, Khan MAS, Nazir A, Nabi MH, Hasan M, Maliha R, Hossain MA, Rashid MU, Itrat N, Hawlader MDH. PLoS One. 2022 Feb 11;17(2):e0262305. doi: 10.1371/journal.pone.0262305. eCollection 2022. PMID: 35148317

[A Rasch analysis assessing the reliability and validity of the Arizona CoVHORT COVID-19 vaccine questionnaire.](#)

Habila MA, Valencia DY, Khan SM, Heslin KM, Hoskinson J, Ernst KC, Pogreba-Brown K, Jacobs ET, Cordova-Marks FM, Warholak T. SSM Popul Health. 2022 Mar;17:101040. doi: 10.1016/j.ssmph.2022.101040. Epub 2022 Feb 9. PMID: 35155727

[Message framing and COVID-19 vaccination intention: Moderating roles of partisan media use and pre-attitudes about vaccination.](#)

Borah P. Curr Psychol. 2022 Feb 3;1-10. doi: 10.1007/s12144-022-02851-3. Online ahead of print. PMID: 35136329

[Determinants of COVID-19 vaccine hesitancy among parents in Ho Chi Minh City, Vietnam.](#)

Huynh G, Nguyen HTN, Van Tran K, Le An P, Tran TD. Postgrad Med. 2022 Feb 25;1-6. doi: 10.1080/00325481.2022.2044142. Online ahead of print. PMID: 35188041

[Survey of current transplant center practices regarding COVID-19 vaccine mandates in the United States.](#)

Hippen BE, Axelrod DA, Maher K, Li R, Kumar D, Caliskan Y, Alhamad T, Schnitzler M, Lentine KL. Am J Transplant. 2022 Feb 10. doi: 10.1111/ajt.16995. Online ahead of print. PMID: 35143100

[The Effect of Smoking on Humoral Response to COVID-19 Vaccines: A Systematic Review of Epidemiological Studies.](#)

Ferrara P, Gianfredi V, Tomaselli V, Polosa R. Vaccines (Basel). 2022 Feb 16;10(2):303. doi: 10.3390/vaccines10020303. PMID: 35214761

[Cognizance, adverse effects and motivation regarding COVID-19 vaccination amongst health care professionals: A cross-sectional study.](#)

Sachdeva S, Saluja H, Mani A. Dent Med Probl. 2022 Feb 3. doi: 10.17219/dmp/145757. Online ahead of print. PMID: 35119228

[Practice report: an Alberta Metis model for COVID-19 vaccine delivery.](#)

King KD, Bartel R, James A, MacDonald SE. Can J Public Health. 2022 Feb;113(1):81-86. doi: 10.17269/s41997-021-00603-7. Epub 2022 Jan 5. PMID: 34988925

[Cutaneous reactions to COVID-19 vaccine at the dermatology primary care.](#)

Burlando M, Herzum A, Micalizzi C, Cozzani E, Parodi A. Immun Inflamm Dis. 2022 Feb;10(2):265-271. doi: 10.1002/iid3.568. Epub 2021 Nov 27. PMID: 34837354

[Exploring the attitudes, concerns, and knowledge regarding COVID-19 vaccine by the parents of children with rheumatic disease: Cross-sectional online survey.](#)

Akgün Ö, Kayaalp GK, Demirkan FG, Çakmak F, Tanatar A, Guliyeva V, Sönmez HE, Ayaz NA. Vaccine. 2022 Feb 4;S0264-410X(22)00117-7. doi: 10.1016/j.vaccine.2022.01.061. Online ahead of print. PMID: 35151508

[SARS-CoV-2: vaccinology and emerging therapeutics; challenges and future developments.](#)

Adesokan A, Obeid MA, Lawal AF. Ther Deliv. 2022 Feb 23. doi: 10.4155/tde-2021-0075. Online ahead of print. PMID: 35195017

[Safety and immunogenicity of heterologous and homologous inactivated and adenoviral-vectored COVID-19 vaccine regimens in healthy adults: a prospective cohort study.](#)

Wanlapakorn N, Suntronwong N, Phowattanasathian H, Yorsaeng R, Vichaiwattana P, Thongmee T, Auphimai C, Srimuan D, Thatsanatorn T, Assawakosri S, Kanokudom S, Poovorawan Y. Hum Vaccin Immunother. 2022 Feb 24;1-10. doi: 10.1080/21645515.2022.2029111. Online ahead of print. PMID: 35209809

[COVID-19 vaccine makers chase variant-ready vaccines.](#)

Sheridan C. Nat Biotechnol. 2022 Feb;40(2):141-143. doi: 10.1038/d41587-022-00001-5. PMID: 35046613

[Conditionality of COVID-19 vaccine acceptance in European countries.](#)

Heyerdahl LW, Vray M, Lana B, Tvardik N, Gobat N, Wanat M, Tonkin-Crine S, Anthierens S, Goossens H, Giles-Vernick T. Vaccine. 2022 Feb 23;40(9):1191-1197. doi: 10.1016/j.vaccine.2022.01.054. Epub 2022 Feb 1. PMID: 35125225

[Profiles of US Hispanics Unvaccinated for COVID-19.](#)

Piper BJ, Sanchez BV, Madera JD, Sulzinski MA. J Racial Ethn Health Disparities. 2022 Feb 2;1-7. doi: 10.1007/s40615-022-01245-2. Online ahead of print. PMID: 35107819

[Willingness, refusal and influential factors of parents to vaccinate their children against the COVID-19: A systematic review and meta-analysis.](#)

Galanis P, Vraika I, Siskou O, Konstantakopoulou O, Katsiroumpa A, Kaitelidou D. Prev Med. 2022 Feb 18;157:106994. doi: 10.1016/j.ypmed.2022.106994. Online ahead of print. PMID: 35183597

[COVID-19 Vaccination Acceptance Among Chinese Population and Its Implications for the Pandemic: A National Cross-Sectional Study.](#)

Wu J, Ma M, Miao Y, Ye B, Li Q, Tarimo CS, Wang M, Gu J, Wei W, Zhao L, Mu Z, Fu X. Front Public Health. 2022 Feb 8;10:796467. doi: 10.3389/fpubh.2022.796467. eCollection 2022. PMID: 35211440

[Pregnant women's perceptions of the COVID-19 vaccine: A French survey.](#)

Egloff C, Couffignal C, Cordier AG, Deruelle P, Sibiude J, Anselem O, Benachi A, Luton D, Mandelbrot L, Vauloup-Fellous C, Vivanti AJ, Picone O. PLoS One. 2022 Feb 7;17(2):e0263512. doi: 10.1371/journal.pone.0263512. eCollection 2022. PMID: 35130318

[Evaluation of the Autoimmunity and Preexisting Risky Conditions for Hypersensitivity Reactions to COVID-19 Vaccines.](#)



Tuzer C, Terzioglu K. Int Arch Allergy Immunol. 2022 Feb 3:1-11. doi: 10.1159/000521709. Online ahead of print. PMID: 35114667

[A comparison of COVID-19 vaccination status among pregnant Israeli Jewish and Arab women and psychological distress among the Arab women.](#)

Taubman-Ben-Ari O, Weiss E, Abu-Sharkia S, Khalaf E. Nurs Health Sci. 2022 Feb 12. doi: 10.1111/nhs.12929. Online ahead of print. PMID: 35150201

[COVID-19 Vaccine Among Actively-Treated People With Cancer: A Glimpse Into the Known Unknowns?](#)

Thakkar A, Mishra S, Warner JL. J Natl Cancer Inst. 2022 Feb 7;114(2):169-171. doi: 10.1093/jnci/djab175. PMID: 34453849

[Association study between herpes zoster reporting and mRNA COVID-19 vaccines \(BNT162b2 and mRNA-1273\).](#)

Préta LH, Contejean A, Salvo F, Treluyer JM, Charlier C, Chouchana L. Br J Clin Pharmacol. 2022 Feb 16. doi: 10.1111/bcp.15280. Online ahead of print. PMID: 35174524

[Qualitative exploration of intentions, concerns and information needs of vaccine-hesitant adults initially prioritised to receive COVID-19 vaccines in Australia.](#)

Kaufman J, Bagot KL, Tuckerman J, Biezen R, Oliver J, Jos C, Ong DS, Manski-Nankervis JA, Seale H, Sanci L, Munro J, Bell JS, Leask J, Danchin M. Aust N Z J Public Health. 2022 Feb;46(1):16-24. doi: 10.1111/1753-6405.13184. Epub 2021 Dec 13. PMID: 34897909

[Knowledge, Attitudes, and Practices of Healthcare Workers in Jordan towards the COVID-19 Vaccination.](#)

Lataifeh L, Al-Ani A, Lataifeh I, Ammar K, AlOmary A, Al-Hammouri F, Al-Hussaini M. Vaccines (Basel). 2022 Feb 9;10(2):263. doi: 10.3390/vaccines10020263. PMID: 35214721

[The COVID-19 pandemic: progress in nephrology.](#)

Soler MJ, Jacobs-Cachá C. Nat Rev Nephrol. 2022 Feb;18(2):80-81. doi: 10.1038/s41581-021-00521-4. PMID: 34873314

[Predictors of uncertainty and unwillingness to receive the COVID-19 booster vaccine: An observational study of 22,139 fully vaccinated adults in the UK.](#)

Paul E, Fancourt D. Lancet Reg Health Eur. 2022 Mar;14:100317. doi: 10.1016/j.lanepe.2022.100317. Epub 2022 Feb 3. PMID: 35132400

[Divergent SARS CoV-2 Omicron-reactive T- and B cell responses in COVID-19 vaccine recipients.](#)

GeurtsvanKessel CH, Geers D, Schmitz KS, Mykytyn AZ, Lamers MM, Bogers S, Scherbeijn S, Gommers L, Sablerolles RSG, Nieuwkoop NN, Rijsbergen LC, van Dijk LLA, de Wilde J, Alblas K, Breugem TI, Rijnders BJA, de Jager H, Weiskopf D, van der Kuy PHM, Sette A, Koopmans MPG, Grifoni A, Haagmans BL, de Vries RD. Sci Immunol. 2022 Feb 3:eabo2202. doi: 10.1126/sciimmunol.abo2202. Online ahead of print. PMID: 35113647

[Interrogating COVID-19 vaccine intent in the Philippines with a nationwide open-access online survey.](#)

Caple A, Dimaano A, Sagolili MM, Uy AA, Aguirre PM, Alano DL, Camaya GS, Ciriaco BJ, Clavo PJM, Cuyugan D, Fermo CFG, Lanete PJ, La Torre AJ, Loteyro T, Lua RM, Manansala NG, Mosquito RW,

Octaviano A, Orfanel AE, Pascual GM, Sale AJ, Tendenilla SL, Trinidad MSL, Trinidad NJ, Verano DL, Austriaco N. PeerJ. 2022 Feb 16;10:e12887. doi: 10.7717/peerj.12887. eCollection 2022. PMID: 35190785

[A Global Study on the Correlates of Gross Domestic Product \(GDP\) and COVID-19 Vaccine Distribution.](#)

Basak P, Abir T, Al Mamun A, Zainol NR, Khanam M, Haque MR, Milton AH, Agho KE. Vaccines (Basel). 2022 Feb 10;10(2):266. doi: 10.3390/vaccines10020266. PMID: 35214724

[Employer Vaccine Mandates.](#)

Brous E. Am J Nurs. 2022 Feb 1;122(2):45-48. doi: 10.1097/01.NAJ.0000820564.66109.fb. PMID: 35085149

[The mRNA COVID-19 vaccine in patients with cancer receiving checkpoint inhibitor therapy: what we know and what we don't.](#)

Malek AE, Cornejo PP, Daoud N, Alam M. Immunotherapy. 2022 Feb;14(2):91-94. doi: 10.2217/imt-2021-0235. Epub 2021 Nov 8. PMID: 34747190

[The vaccinia-based Sementis Copenhagen Vector COVID-19 vaccine induces broad and durable cellular and humoral immune responses.](#)

Eldi P, Cooper TH, Prow NA, Liu L, Heinemann GK, Zhang VJ, Trinidad AD, Guzman-Genuino RM, Wulff P, Hobbs LM, Diener KR, Hayball JD. Immunol Cell Biol. 2022 Feb 21. doi: 10.1111/imcb.12539. Online ahead of print. PMID: 35188985

[The impact of COVID-19 on income and employment and willingness to become vaccinated among African Americans enrolled in a smoking cessation randomized trial.](#)

Cruvinel E, P Richter K, S Scheuermann T, M Machado N, Mayo MS, R Brown A, L Nollen N. Vaccine. 2022 Feb 7:S0264-410X(22)00120-7. doi: 10.1016/j.vaccine.2022.01.064. Online ahead of print. PMID: 35168840

[Adverse events following immunization of COVID-19 \(Covaxin\) vaccine at a tertiary care center of India.](#)

Parida SP, Sahu DP, Singh AK, Alekhya G, Subba SH, Mishra A, Padhy BM, Patro BK. J Med Virol. 2022 Feb 11. doi: 10.1002/jmv.27655. Online ahead of print. PMID: 35149993

[Safety and immunogenicity of a live recombinant Newcastle disease virus-based COVID-19 vaccine \(Patria\) administered via the intramuscular or intranasal route: Interim results of a non-randomized open label phase I trial in Mexico.](#)

Ponce-de-León S, Torres M, Soto-Ramírez LE, José Calva J, Santillán-Doherty P, Carranza-Salazar DE, Carreño JM, Carranza C, Juárez E, Carreto-Binaghi LE, Ramírez-Martínez L, la Rosa GP, Viguera-Moreno R, Ortiz-Stern A, López-Vidal Y, Macías AE, Torres-Flores J, Rojas-Martínez O, Suárez-Martínez A, Peralta-Sánchez G, Kawabata H, González-Domínguez I, Martínez-Guevara JL, Sun W, Sarfati-Mizrahi D, Soto-Priante E, Chagoya-Cortés HE, López-Macías C, Castro-Peralta F, Palese P, García-Sastre A, Krammer F, Lozano-Dubernard B. medRxiv. 2022 Feb 9:2022.02.08.22270676. doi: 10.1101/2022.02.08.22270676. Preprint. PMID: 35169806

[Myocarditis following rAd26 and rAd5 vector-based COVID-19 vaccine: case report.](#)

Naghashzadeh F, Shafaghi S, Dorudinia A, Najji SA, Marjani M, Amin A, Mohamadifar A, Noorali S, Kashani BS. ESC Heart Fail. 2022 Feb 1. doi: 10.1002/ehf2.13821. Online ahead of print. PMID: 35106967

[Pandemic preparedness and COVID-19: an exploratory analysis of infection and fatality rates, and contextual factors associated with preparedness in 177 countries, from Jan 1, 2020, to Sept 30, 2021.](#)

COVID-19 National Preparedness Collaborators. Lancet. 2022 Feb 1:S0140-6736(22)00172-6. doi: 10.1016/S0140-6736(22)00172-6. Online ahead of print. PMID: 35120592

[COVID-19: Challenging Clinical Questions.](#)

Laine C, Moyer DV, Cotton D. Ann Intern Med. 2022 Feb;175(2):276-277. doi: 10.7326/M21-4611. Epub 2021 Dec 14. PMID: 34904908

[Determinants of COVID-19 Vaccination Hesitancy among Romanian Pregnant Women.](#)

Citu IM, Citu C, Gorun F, Motoc A, Gorun OM, Burlea B, Bratosin F, Tudorache E, Margan MM, Hosin S, Malita D. Vaccines (Basel). 2022 Feb 10;10(2):275. doi: 10.3390/vaccines10020275. PMID: 35214732

[Couples and COVID-19 vaccination: Frequency and reasons for discordance.](#)

Schmaling KB. Vaccine. 2022 Feb 18:S0264-410X(22)00202-X. doi: 10.1016/j.vaccine.2022.02.055. Online ahead of print. PMID: 35216841

[Association of BNT162b2 COVID-19 Vaccination During Pregnancy With Neonatal and Early Infant Outcomes.](#)

Goldshtein I, Steinberg DM, Kuint J, Chodick G, Segal Y, Shapiro Ben David S, Ben-Tov A. JAMA Pediatr. 2022 Feb 10:e220001. doi: 10.1001/jamapediatrics.2022.0001. Online ahead of print. PMID: 35142809

[Self-Reported safety of the BBIBP-CorV \(Sinopharm\) COVID-19 vaccine among Iranian people with multiple sclerosis.](#)

Etemadifar M, Abhari AP, Nouri H, Sigari AA, Piran Dalieh SM, Maracy MR, Salari M, Maleki S, Sedaghat N. Hum Vaccin Immunother. 2022 Feb 24:1-6. doi: 10.1080/21645515.2022.2041945. Online ahead of print. PMID: 35201963

[Non-clinical immunogenicity, biodistribution and toxicology evaluation of a chimpanzee adenovirus-based COVID-19 vaccine in rat and rhesus macaque.](#)

Dai X, Zhao W, Tong X, Liu W, Zeng X, Duan X, Wu H, Wang L, Huang Z, Tang X, Yang Y. Arch Toxicol. 2022 Feb 28. doi: 10.1007/s00204-021-03221-x. Online ahead of print. PMID: 35226134

[Psychological, social, and situational factors associated with COVID-19 vaccination intentions: A study of UK key workers and non-key workers.](#)

Butter S, McGlinchey E, Berry E, Armour C. Br J Health Psychol. 2022 Feb;27(1):13-29. doi: 10.1111/bjhp.12530. Epub 2021 May 5. PMID: 33949038

[Overcoming COVID-19 vaccine hesitancy: can Australia reach the last 20 percent?](#)

Kaufman J, Tuckerman J, Danchin M. Expert Rev Vaccines. 2022 Feb;21(2):159-161. doi: 10.1080/14760584.2022.2013819. Epub 2021 Dec 16. PMID: 34854334

[COVID-19 Vaccine Uptake and Efficacy in a National Immunodeficiency Cohort.](#)

Ponsford MJ, Evans K, Carne EM, Jolles S; Immunodeficiency Centre for Wales and Division of Population Medicine. J Clin Immunol. 2022 Feb 11:1-4. doi: 10.1007/s10875-022-01223-7. Online ahead of print. PMID: 35149962

[Myocardial Injury Pattern at MRI in COVID-19 Vaccine-associated Myocarditis.](#)

Fronza M, Thavendiranathan P, Chan V, Karur GR, Udell JA, Wald RM, Hong R, Hanneman K. Radiology. 2022 Feb 15:212559. doi: 10.1148/radiol.212559. Online ahead of print. PMID: 35166587

[Calcific Tendinitis of the Shoulder Induced by an mRNA Vaccine for COVID-19: A Case Report.](#)

Nakajima K, Miyata A, Kato S, Oshima Y, Tanaka S. Mod Rheumatol Case Rep. 2022 Feb 2:rxac006. doi: 10.1093/mrcr/rxac006. Online ahead of print. PMID: 35134200

[Performance comparison of a flow cytometry immunoassay for intracellular cytokine staining and the QuantiFERON SARS-CoV-2 test for detection and quantification of SARS-CoV-2-Spike-reactive-IFN-gamma-producing T cells after COVID-19 vaccination.](#)

Tormo N, Giménez E, Martínez-Navarro M, Albert E, Navalpotro D, Torres I, Gimeno C, Navarro D. Eur J Clin Microbiol Infect Dis. 2022 Feb 15:1-6. doi: 10.1007/s10096-022-04422-7. Online ahead of print. PMID: 35165804

[Motivations for Vaccine Hesitancy Among EMS Providers in the United States who Declined the COVID-19 Vaccine.](#)

Shekhar AC, Hannan DJ. Prehosp Disaster Med. 2022 Feb 16:1-4. doi: 10.1017/S1049023X22000309. Online ahead of print. PMID: 35168692

[Mapping Perceptual Differences to Understand COVID-19 Beliefs in Those with Vaccine Hesitancy.](#)

Bass SB, Kelly PJ, Hoadley A, Arroyo Lloret A, Organtini T. J Health Commun. 2022 Feb 24:1-13. doi: 10.1080/10810730.2022.2042627. Online ahead of print. PMID: 35199628

[England's U turn on covid-19 vaccine mandate for NHS staff.](#)

McKee M, van Schalkwyk MCI. BMJ. 2022 Feb 10;376:o353. doi: 10.1136/bmj.o353. PMID: 35144930

[Trust in God and/or Science? Sociodemographic Differences in the Effects of Beliefs in an Engaged God and Mistrust of the COVID-19 Vaccine.](#)

Upenieks L, Ford-Robertson J, Robertson JE. J Relig Health. 2022 Feb;61(1):657-686. doi: 10.1007/s10943-021-01466-5. Epub 2021 Nov 29. PMID: 34843011

[Early COVID-19 Vaccine Hesitancy and Bariatric Surgery: Correspondence.](#)

Sookaromdee P, Wiwanitkit V. Obes Surg. 2022 Feb 9. doi: 10.1007/s11695-022-05961-w. Online ahead of print. PMID: 35137291

[Modelling vaccination strategies for COVID-19.](#)

Wagner CE, Saad-Roy CM, Grenfell BT. Nat Rev Immunol. 2022 Feb 10:1-3. doi: 10.1038/s41577-022-00687-3. Online ahead of print. PMID: 35145245

[Advanced Liver Fibrosis Correlates With Impaired Efficacy of Pfizer-BioNTech COVID-19 Vaccine in Medical Employees.](#)

Shafir A, Amer J, Hakimian D, Milgrom Y, Massarwa M, Hazou W, Imam A, Khalailieh A, Safadi R. Hepatol Commun. 2022 Feb 11. doi: 10.1002/hep4.1901. Online ahead of print. PMID: 35147300

[Lack of access to COVID-19 vaccines could be a greater threat than vaccine hesitancy in low-income and conflict nations: the case of Yemen.](#)

Noushad M, Al-Awar MS, Al-Saqqaf IS, Nassani MZ, Alrubaiee GG, Rastam S. Clin Infect Dis. 2022 Feb 2;ciac088. doi: 10.1093/cid/ciac088. Online ahead of print. PMID: 35134160

[\[Consideration on implementation of co-administration of Seasonal Influenza and COVID-19 vaccines during pandemic in China\].](#)

Zhang T, Bai XF, Wang W, Liu XX, Zhang XX, Wang DY, Zhang SB, Chen ZP, He HQ, Huang ZY, Xu AQ, Peng ZB, Feng LZ, Yu WZ, Feng Z. Zhonghua Yu Fang Yi Xue Za Zhi. 2022 Feb 6;56(2):103-107. doi: 10.3760/cma.j.cn112150-20211203-01117. PMID: 34954956

[Profiling vaccine believers and skeptics in nurses: A latent profile analysis.](#)

Leung CLK, Li KK, Wei VWI, Tang A, Wong SYS, Lee SS, Kwok KO. Int J Nurs Stud. 2022 Feb;126:104142. doi: 10.1016/j.ijnurstu.2021.104142. Epub 2021 Nov 27. PMID: 34923316

[Redressing COVID-19 vaccine inequity amidst booster doses: charting a bold path for global health solidarity, together.](#)

Rackimuthu S, Narain K, Lal A, Nawaz FA, Mohanan P, Essar MY, Charles Ashworth H. Global Health. 2022 Feb 22;18(1):23. doi: 10.1186/s12992-022-00817-5. PMID: 35193616

[Parental gender differences in attitudes and willingness to vaccinate against COVID-19.](#)

Goldman RD, Ceballos R; International COVID-19 Parental Attitude Study (COVIPAS) Group. J Paediatr Child Health. 2022 Feb 15. doi: 10.1111/jpc.15892. Online ahead of print. PMID: 35170115

[Demographic factors associated with acceptance, hesitancy, and refusal of COVID-19 vaccine among residents of Sukkur during lockdown: A cross sectional study from Pakistan.](#)

Samo AA, Sayed RB, Valecha J, Baig NM, Laghari ZA. Hum Vaccin Immunother. 2022 Feb 1:1-5. doi: 10.1080/21645515.2022.2026137. Online ahead of print. PMID: 35103572

["It seems impossible that it's been made so quickly": a qualitative investigation of concerns about the speed of COVID-19 vaccine development and how these may be overcome.](#)

Brown P, Waite F, Larkin M, Lambe S, McShane H, Pollard AJ, Freeman D. Hum Vaccin Immunother. 2022 Feb 16:1-8. doi: 10.1080/21645515.2021.2004808. Online ahead of print. PMID: 35172678

[Perspectives about COVID-19 vaccination among the paralysis community in the United States.](#)

Forber-Pratt AJ, Burdick CE, Narasimham G. Rehabil Psychol. 2022 Feb;67(1):9-19. doi: 10.1037/rep0000426. Epub 2021 Nov 11. PMID: 34766809

[Predicting the COVID-19 vaccine receive intention based on the theory of reasoned action in the south of Iran.](#)

Ezati Rad R, Kahnouji K, Mohseni S, Shahabi N, Noruziyan F, Farshidi H, Hosseinpoor M, Kashani S, Kamalzadeh Takhti H, Hassani Azad M, Aghamolaei T. BMC Public Health. 2022 Feb 4;22(1):229. doi: 10.1186/s12889-022-12517-1. PMID: 35120486

[Knowledge, attitude and practice survey towards COVID-19 vaccination: A mediation analysis.](#)

Sengupta M, Dutta S, Roy A, Chakrabarti S, Mukhopadhyay I. Int J Health Plann Manage. 2022 Feb 28. doi: 10.1002/hpm.3449. Online ahead of print. PMID: 35229357

[Factors Associated with Willingness to Receive a COVID-19 Vaccine among 23,819 Adults Aged 50 years and Older: An Analysis of the Canadian Longitudinal Study on Aging.](#)

Basta NE, Sohel N, Sulis G, Wolfson C, Maimon G, Griffith LE, Kirkland S, McMillan JM, Thompson M, Raina P, Study On Aging C L S A Team OBOTCL. Am J Epidemiol. 2022 Feb 15;kwac029. doi: 10.1093/aje/kwac029. Online ahead of print. PMID: 35166332

[COVID-19 Vaccine-Induced Multisystem Inflammatory Syndrome With Polyserositis Detected by FDG PET/CT.](#)

Lee SJ, Park DW, Sohn JW, Yoon HJ, Kim SH. Clin Nucl Med. 2022 Feb 16. doi: 10.1097/RLU.0000000000004094. Online ahead of print. PMID: 35175945

[Building global capacity for COVID-19 vaccination through interactive virtual learning.](#)

Goldin S, Hood N, Pascutto A, Bennett C, Barbosa de Lima AC, Devereaux N, Caric A, Rai K, Desai S, Lindstrand A, Struminger B. Hum Resour Health. 2022 Feb 4;20(1):16. doi: 10.1186/s12960-022-00710-7. PMID: 35120542

[Media attention and Vaccine Hesitancy: Examining the mediating effects of Fear of COVID-19 and the moderating role of Trust in leadership.](#)

Zhou L, Ampon-Wireko S, Xu X, Quansah PE, Larnyo E. PLoS One. 2022 Feb 18;17(2):e0263610. doi: 10.1371/journal.pone.0263610. eCollection 2022. PMID: 35180249

[De Novo Vogt-Koyanagi-Harada Disease following Covid-19 Vaccine: A Case Report and Literature Overview.](#)

Brunet de Courssou JB, Tisseyre M, Hadjadj J, Chouchana L, Broca F, Terrier B, Duraffour P, Henriquez S. Ocul Immunol Inflamm. 2022 Feb 3;1-4. doi: 10.1080/09273948.2022.2028291. Online ahead of print. PMID: 35113742

[A case of encephalitis following COVID-19 vaccine.](#)

Kobayashi Y, Karasawa S, Ohashi N, Yamamoto K. J Infect Chemother. 2022 Feb 17:S1341-321X(22)00049-6. doi: 10.1016/j.jiac.2022.02.009. Online ahead of print. PMID: 35190257

[Considerations in Pfizer-BioNTech COVID-19 vaccine preparation in clinic: Quality vs quantity.](#)

Jin CH, Tran LM, Rivero CJ, Childs RR. Am J Health Syst Pharm. 2022 Feb 18;79(5):325-327. doi: 10.1093/ajhp/zxab388. PMID: 34634098

[Impact of age, sex and medical history on adverse reactions to the first and second dose of BNT162b2 mRNA COVID-19 vaccine in Japan: a cross-sectional study.](#)

Urakawa R, Isomura ET, Matsunaga K, Kubota K, Ike M. BMC Infect Dis. 2022 Feb 23;22(1):179. doi: 10.1186/s12879-022-07175-y. PMID: 35197017

[Survey data on perceived COVID-19 risk, COVID-19 vaccine perception, and COVID-19 vaccination intention among Vietnamese.](#)

Nguyen PH, Van Nguyen D. Data Brief. 2022 Feb;40:107811. doi: 10.1016/j.dib.2022.107811. Epub 2022 Jan 11. PMID: 35036497

[Isolated thrombosis after COVID-19 vaccination: case series.](#)

Al-Ahmad M, Al Rasheed M, Altourah L, Rodriguez-Bouza T, Shalaby N. Int J Hematol. 2022 Feb;115(2):153-157. doi: 10.1007/s12185-021-03285-6. Epub 2022 Jan 6. PMID: 34993889

[Reply to 'Caution regarding conclusions about COVID-19 vaccine and encephalitis'.](#)

Zuhorn F, Graf T, Klingebiel R, Schäbitz WR, Rogalewski A. Ann Neurol. 2022 Feb 7. doi: 10.1002/ana.26314. Online ahead of print. PMID: 35130352

[The Vaccine Communication Demands on Community-Based Workforces.](#)

Rauh L, Patry D, Zambrano M, Lathan HS, Tavarez E, El-Mohandes A. Front Public Health. 2022 Feb 4;10:827378. doi: 10.3389/fpubh.2022.827378. eCollection 2022. PMID: 35186850

[Identification of a promiscuous conserved CTL epitope within the SARS-CoV-2 spike protein.](#)

Jiang S, Wu S, Zhao G, He Y, Guo X, Zhang Z, Hou J, Ding Y, Cheng A, Wang B. Emerg Microbes Infect. 2022 Feb 16:1-30. doi: 10.1080/22221751.2022.2043727. Online ahead of print. PMID: 35171086

[COVID-19 Vaccination Does Not Affect Reproductive Health Parameters in Men.](#)

Reschini M, Pagliardini L, Boeri L, Piazzini F, Bandini V, Fornelli G, Dolci C, Cermisoni GC, Viganò P, Somigliana E, Coccia ME, Papaleo E. Front Public Health. 2022 Feb 2;10:839967. doi: 10.3389/fpubh.2022.839967. eCollection 2022. PMID: 35186854

[Why many African countries may not achieve the 2022 COVID-19 vaccination coverage target.](#)

Idris IO, Ayeni GO, Adebisi YA. Trop Med Health. 2022 Feb 15;50(1):15. doi: 10.1186/s41182-022-00407-6. PMID: 35168667

[Understanding the influence of political orientation, social network, and economic recovery on COVID-19 vaccine uptake among Americans.](#)

Hao F, Shao W. Vaccine. 2022 Feb 22:S0264-410X(22)00219-5. doi: 10.1016/j.vaccine.2022.02.066. Online ahead of print. PMID: 35227522

[The Association of Social Factors and Health Insurance Coverage with COVID-19 Vaccinations and Hesitancy, July 2021.](#)

Ku L. J Gen Intern Med. 2022 Feb;37(2):409-414. doi: 10.1007/s11606-021-07213-6. Epub 2021 Nov 29. PMID: 34845582

[COVID-19 vaccine acceptance among patients with glomerulonephritis.](#)

Liew ZH, Leeu JJ, Tan HZ, Mok IYJ, Choo JCJ, Lim CC. Nephrology (Carlton). 2022 Feb 3. doi: 10.1111/nep.14026. Online ahead of print. PMID: 35114736

[Propensity-Score-Matched Evaluation of Adverse Events Affecting Recovery after COVID-19 Vaccination: On Adenovirus and mRNA Vaccines.](#)

Son CS, Jin SH, Kang WS. Vaccines (Basel). 2022 Feb 13;10(2):284. doi: 10.3390/vaccines10020284. PMID: 35214742

[Waning of COVID-19 vaccine effectiveness: individual and public health risk.](#)

Piechotta V, Harder T. Lancet. 2022 Feb 21:S0140-6736(22)00282-3. doi: 10.1016/S0140-6736(22)00282-3. Online ahead of print. PMID: 35202602

[COVID-19 vaccine acceptability among people in Australia who inject drugs: Update from the 2021 Illicit Drug Reporting System interviews.](#)

Price O, Dietze PM, Maher L, Crawford S, Peacock A. Drug Alcohol Rev. 2022 Feb 20. doi: 10.1111/dar.13448. Online ahead of print. PMID: 35184346

[Implications of COVID-19 Vaccination on Hospital Encounters and Outcomes.](#)

Case BC, Rosenfeld B, Shea C, Rappaport H, Zhang C, Medranda GA, Satler LF, Ben-Dor I, Hashim H, Rogers T, Waksman R. Am J Cardiol. 2022 Feb 26:S0002-9149(22)00089-3. doi: 10.1016/j.amjcard.2022.01.029. Online ahead of print. PMID: 35227503

[Most Anti-PF4 Antibodies in Vaccine-induced Immune Thrombotic Thrombocytopenia are transient.](#)

Schönborn L, Thiele T, Kaderali L, Günther A, Hoffmann T, Seck SE, Selleng K, Greinacher A. Blood. 2022 Feb 3:blood.2021014214. doi: 10.1182/blood.2021014214. Online ahead of print. PMID: 35113987

[COVID-19 vaccine trials must include helminth-infected cohorts.](#)

Egwang TG, Owalla TJ, Kemigisha M. Nat Immunol. 2022 Feb;23(2):148. doi: 10.1038/s41590-021-01116-8. PMID: 35075281

[Fourth COVID-19 Vaccine Dose Increases Low Antibodies.](#)

Abbasi J. JAMA. 2022 Feb 8;327(6):517. doi: 10.1001/jama.2022.0727. PMID: 35133429

[Reading the "T" Leaves of COVID-19 Vaccine Responses in Multiple Sclerosis.](#)

Graves JS, Killestein J. Neurology. 2022 Feb 1;98(5):177-178. doi: 10.1212/WNL.0000000000013166. Epub 2021 Dec 8. PMID: 34880090

[A decision support system for prioritised COVID-19 two-dosage vaccination allocation and distribution.](#)

Shahparvari S, Hassanizadeh B, Mohammadi A, Kiani B, Lau KH, Chhetri P, Abbasi B. Transp Res E Logist Transp Rev. 2022 Mar;159:102598. doi: 10.1016/j.tre.2021.102598. Epub 2022 Feb 15. PMID: 35185357

[Linking the behavioral immune system to COVID-19 vaccination intention: The mediating role of the need for cognitive closure and vaccine hesitancy.](#)

Solak Ç, Peker-Dural H, Karlıdağ S, Peker M. Pers Individ Dif. 2022 Feb;185:111245. doi: 10.1016/j.paid.2021.111245. Epub 2021 Sep 8. PMID: 34511678

[COVID-19 vaccine hesitancy among health professionals in a tertiary care center at the University of Gondar Specialized Hospital, Ethiopia: A cross-sectional study.](#)

Demeke CA, Kifle ZD, Atsbeha BW, Wondmsigegn D, Yimenu DK, Woldeyohanins AE, Kasahun AE. SAGE Open Med. 2022 Feb 15;10:20503121221076991. doi: 10.1177/20503121221076991. eCollection 2022. PMID: 35186292

[Linking COVID-19 Vaccine and Male Infertility - Not on Fertile Ground.](#)

La J, Katz DJ. BJU Int. 2022 Feb 19. doi: 10.1111/bju.15712. Online ahead of print. PMID: 35182404

[Study on the Refusal of Vaccination against COVID-19 in Romania.](#)

Mărcău FC, Purec S, Niculescu G. Vaccines (Basel). 2022 Feb 9;10(2):261. doi: 10.3390/vaccines10020261. PMID: 35214719



[Risk of infection, hospitalisation, and death up to 9 months after a second dose of COVID-19 vaccine: a retrospective, total population cohort study in Sweden.](#)

Nordström P, Ballin M, Nordström A. Lancet. 2022 Feb 26;399(10327):814-823. doi: 10.1016/S0140-6736(22)00089-7. Epub 2022 Feb 4. PMID: 35131043

[Influenza virus vaccine compliance among pregnant women during the COVID-19 pandemic \(pre-vaccine era\) in Israel and future intention to uptake BNT162b2 mRNA COVID-19 vaccine.](#)

Saleh OA, Halperin O. Vaccine. 2022 Feb 15:S0264-410X(22)00160-8. doi: 10.1016/j.vaccine.2022.02.026. Online ahead of print. PMID: 35193794

[SARS-CoV-2 vaccine-induced thyroiditis: Safety of Re-vaccinations and Clinical Follow-up.](#)

Oğuz SH, Şendur SN, İremli BG, Gürlek A, Erbas T, Ünlütürk U. J Clin Endocrinol Metab. 2022 Feb 1:dgac049. doi: 10.1210/clinem/dgac049. Online ahead of print. PMID: 35100622

[Antibody response to COVID-19 vaccination in patients with lymphoma.](#)

Narita K, Nakaji S, Tabata R, Terao T, Kuzume A, Tsushima T, Ikeda D, Fukumoto A, Miura D, Takeuchi M, Doi M, Umezawa Y, Otsuka Y, Takamatsu H, Matsue K. Int J Hematol. 2022 Feb 21:1-9. doi: 10.1007/s12185-022-03305-z. Online ahead of print. PMID: 35188650

[Factors associated with COVID-19 vaccination intentions among adults in the deep South.](#)

Daniel CL, Williams J, Legg R, McGowen C, Stutzman J. Vaccine. 2022 Feb 7;40(6):841-853. doi: 10.1016/j.vaccine.2021.12.059. Epub 2022 Jan 10. PMID: 35034834

[Factors associated with Turkish pharmacists' intention to receive COVID-19 vaccine: an observational study.](#)

Okuyan B, Bektay MY, Demirci MY, Ay P, Sancar M. Int J Clin Pharm. 2022 Feb;44(1):247-255. doi: 10.1007/s11096-021-01344-w. Epub 2021 Nov 10. PMID: 34761359

[Parental Perspectives on Immunizations: Impact of the COVID-19 Pandemic on Childhood Vaccine Hesitancy.](#)

He K, Mack WJ, Neely M, Lewis L, Anand V. J Community Health. 2022 Feb;47(1):39-52. doi: 10.1007/s10900-021-01017-9. Epub 2021 Jul 23. PMID: 34297272

[COVID-19 updates: Moderna COVID-19 vaccine \(Spikevax\) gains full licensure.](#)

[No authors listed] Med Lett Drugs Ther. 2022 Feb 21;64(1644):32. PMID: 35175715

[Factors impacting COVID-19 vaccination intention among medical students.](#)

Gala D, Parrill A, Patel K, Rafi I, Nader G, Zhao R, Shoaib A, Swaminath G, Jahoda J, Hassan R, Colello R, Rinker DV. Hum Vaccin Immunother. 2022 Feb 3:1-6. doi: 10.1080/21645515.2022.2025733. Online ahead of print. PMID: 35113775

[Ethical review of COVID-19 vaccination requirements for transplant center staff and patients.](#)

Kates OS, Stock PG, Ison MG, Allen RDM, Burra P, Jeong JC, Kute V, Muller E, Nino-Murcia A, Wang H, Wall A. Am J Transplant. 2022 Feb;22(2):371-380. doi: 10.1111/ajt.16878. Epub 2021 Nov 15. PMID: 34706165

[Older Adults Mount Less Durable Humoral Responses to a Two-dose COVID-19 mRNA Vaccine Regimen, but Strong Initial Responses to a Third Dose.](#)

Mwimanzi FM, Lapointe HR, Cheung PK, Sang Y, Yaseen F, Umviligihozo G, Kalikawe R, Datwani S, Omondi FH, Burns L, Young L, Leung V, Agafitei O, Ennis S, Dong W, Basra S, Lim LY, Ng K, Pantophlet R, Brumme CJ, Montaner JSG, Prystajecy N, Lowe CFJ, DeMarco M, Holmes DT, Simons J, Niiikura M, Romney MG, Brumme ZL, Brockman MA. medRxiv. 2022 Feb 21:2022.01.06.22268745. doi: 10.1101/2022.01.06.22268745. Preprint. PMID: 35018381

[An adjuvanted subunit SARS-CoV-2 spike protein vaccine provides protection against Covid-19 infection and transmission.](#)

Tabynov K, Turebekov N, Babayeva M, Fomin G, Yerubayev T, Yespolov T, Li L, Renukaradhya GJ, Petrovsky N, Tabynov K. NPJ Vaccines. 2022 Feb 23;7(1):24. doi: 10.1038/s41541-022-00450-8. PMID: 35197485

[A randomized, double-blind phase I clinical trial of two recombinant dimeric RBD COVID-19 vaccine candidates: Safety, reactogenicity and immunogenicity.](#)

Pérez-Rodríguez S, de la Caridad Rodríguez-González M, Ochoa-Azze R, Climent-Ruiz Y, Alberto González-Delgado C, Paredes-Moreno B, Valenzuela-Silva C, Rodríguez-Noda L, Perez-Nicado R, González-Mugica R, Martínez-Pérez M, Sánchez-Ramírez B, Hernández-García T, Díaz-Machado A, Tamayo-Rodríguez M, Martín-Trujillo A, Rubino-Moreno J, Suárez-Batista A, Dubed-Echevarría M, Teresa Pérez-Guevara M, Amoroto-Roig M, Chappi-Estévez Y, Bergado-Báez G, Pi-Estopián F, Chen GW, Valdés-Balbín Y, García-Rivera D, Verez-Bencomo V. Vaccine. 2022 Feb 8:S0264-410X(22)00161-X. doi: 10.1016/j.vaccine.2022.02.029. Online ahead of print. PMID: 35164986

[A Case Report of Prolonged Anaphylaxis after COVID-19 Vaccine.](#)

Armstrong L, Maguire N. Clin Pract Cases Emerg Med. 2022 Feb;6(1):21-24. doi: 10.5811/cpcem.2021.9.53690. PMID: 35226841

[COVID-19: Why Do People Refuse Vaccination? The Role of Social Identities and Conspiracy Beliefs: Evidence from Nationwide Samples of Polish Adults.](#)

Marchlewska M, Hamer K, Baran M, Górska P, Kaniasty K. Vaccines (Basel). 2022 Feb 10;10(2):268. doi: 10.3390/vaccines10020268. PMID: 35214726

[The roles of experiences and risk perception in the practice of preventative behaviors of COVID-19.](#)

Fadel T, Travis J, Harris S, Webb G. Pathog Glob Health. 2022 Feb;116(1):30-37. doi: 10.1080/20477724.2021.1957595. Epub 2021 Jul 27. PMID: 34313555

[COVAX can still end COVID-19 vaccine apartheid.](#)

Gupta A. Nat Hum Behav. 2022 Feb;6(2):175. doi: 10.1038/s41562-022-01308-8. PMID: 35102357

[Subungual hematomas after mRNA Covid-19 vaccine administration.](#)

Murillo J, Torres JR, Leal V. J Travel Med. 2022 Feb 8:taac014. doi: 10.1093/jtm/taac014. Online ahead of print. PMID: 35137161

[Mental health outcomes after SARS-CoV-2 vaccination in the United States: A national cross-sectional study.](#)

Chen S, Aruldass AR, Cardinal RN. J Affect Disord. 2022 Feb 1;298(Pt A):396-399. doi: 10.1016/j.jad.2021.10.134. Epub 2021 Nov 11. PMID: 34774648

[COVID-19 vaccine hesitancy and anti-vaxxers - supporting healthcare workers to navigate the unvaccinated: Reflections from clinical practice.](#)

Hoare J, Mendelson M, Frenkel L. S Afr Med J. 2022 Feb 2;112(1):13514. PMID: 35139997

[Post-COVID-19 vaccine medium-vessel vasculitis and acute anterior uveitis, causation vs temporal relation; case report and literature review.](#)

Al-Allaf AW, Razok A, Al-Allaf Y, Aker L. Ann Med Surg (Lond). 2022 Feb 24:103407. doi: 10.1016/j.amsu.2022.103407. Online ahead of print. PMID: 35228869

[What factors promote vaccine hesitancy or acceptance during pandemics? A systematic review and thematic analysis.](#)

Truong J, Bakshi S, Wasim A, Ahmad M, Majid U. Health Promot Int. 2022 Feb 17;37(1):daab105. doi: 10.1093/heapro/daab105. PMID: 34244738

[Frequency and Associations of Adverse Reactions of COVID-19 Vaccines Reported to Pharmacovigilance Systems in the European Union and the United States.](#)

Montano D. Front Public Health. 2022 Feb 3;9:756633. doi: 10.3389/fpubh.2021.756633. eCollection 2021. PMID: 35186864

[Looking ahead: Caregivers' COVID-19 vaccination intention for children 5 years old and younger using the health belief model.](#)

Ellithorpe ME, Aladé F, Adams RB, Nowak GJ. Vaccine. 2022 Mar 1;40(10):1404-1412. doi: 10.1016/j.vaccine.2022.01.052. Epub 2022 Feb 1. PMID: 35131135

[COVID-19 vaccine perceptions and uptake: results from the COVID-19 Global Rheumatology Alliance Vaccine Survey.](#)

Putman M, Kennedy K, Sirotych E, Liew JW, Sattui SE, Moni TT, Akpabio AA, Alpizar-Rodriguez D, Angevare S, Beesley RP, Berenbaum F, Bulina I, Chock YPE, Conway R, Duarte-García A, Singh AD, Duff E, Durrant KL, Gheita TA, Hill CL, Howard R, Hoyer BF, Hsieh E, El Kibbi L, Kilian A, Kim AHJ, Liew DFL, Lo C, Mateus EF, Miller B, Mingolla S, Nudel M, Singh JA, Singh N, Ugarte-Gil MF, Wallace J, Young KJ, Zamora-Tehozol EA, Bhana S, Costello W, Grainger R, Machado PM, Robinson PC, Sufka P, Wallace ZS, Yazdany J, Harrison C, Larché MJ, Levine M, Foster G, Thabane L, Hausmann JS, Sparks JA, Simard JF. Lancet Rheumatol. 2022 Feb 8. doi: 10.1016/S2665-9913(22)00001-7. Online ahead of print. PMID: 35156060

[BNT162b2 mRNA COVID-19 \(Comirnaty\) Vaccine Effectiveness in Elderly Patients Who Live in Long-Term Care Facilities: A Nationwide Cohort.](#)

Goldin S, Adler L, Azuri J, Mendel L, Haviv S, Maimon N. Gerontology. 2022 Feb 8:1-8. doi: 10.1159/000521899. Online ahead of print. PMID: 35134810

[Six-month humoral response to BNT162b2 mRNA COVID-19 vaccine in people with multiple sclerosis treated with natalizumab.](#)

Altieri M, Capuano R, Conte M, Donnarumma G, Grimaldi E, Coppola N, Galdiero M, d'Ambrosio A, Tedeschi G, Gallo A. *Neurol Sci.* 2022 Feb 16:1-3. doi: 10.1007/s10072-022-05940-0. Online ahead of print. PMID: 35171373

[Guiding equitable prioritisation of COVID-19 vaccine distribution and strategic deployment in South Africa to enhance effectiveness and access to vulnerable communities and prevent waste.](#)

Ovens W, Tomescu S, Harrison E, Crompton T, De Nooy A, Jassat W, Banoo S, Pisa P, Sanne I. *S Afr Med J.* 2022 Feb 1;112(2):13501. PMID: 35139989

[Knowledge and attitude toward the second round of COVID-19 vaccines among teachers working at southern public universities in Ethiopia.](#)

Asmare Adella G. *Hum Vaccin Immunother.* 2022 Feb 16:1-7. doi: 10.1080/21645515.2021.2018895. Online ahead of print. PMID: 35172683

[The Past Is so Present: Understanding COVID-19 Vaccine Hesitancy Among African American Adults Using Qualitative Data.](#)

Majee W, Anakwe A, Onyeaka K, Harvey IS. *J Racial Ethn Health Disparities.* 2022 Feb 19:1-13. doi: 10.1007/s40615-022-01236-3. Online ahead of print. PMID: 35182372

[The role of anti-platelet factor 4 antibodies and platelet activation tests in patients with vaccine-induced immune thrombotic thrombocytopenia: Brief report on a comparison of the laboratory diagnosis and literature review.](#)

Hsiao PJ, Wu KL, Chen YC, Chen YL, Wang RL, Wu KA, Chan JS, Chiu CC, Huang LY, Shyu HY, Kao YH, Chuu CP. *Clin Chim Acta.* 2022 Feb 12;529:42-45. doi: 10.1016/j.cca.2022.02.003. Online ahead of print. PMID: 35167842

[New COVID-19 Vaccine Aims to Increase Global Vaccine Access.](#)

Kuehn BM. *JAMA.* 2022 Feb 15;327(7):614. doi: 10.1001/jama.2022.1113. PMID: 35166793

[Ethical allocation of COVID-19 vaccine in the United States: an evaluation of competing frameworks for the current pandemic and future events.](#)

Lawrence C, Vick DJ, Maryon T, Kerr BJ Jr. *J Public Health Policy.* 2022 Feb 9. doi: 10.1057/s41271-022-00338-w. Online ahead of print. PMID: 35140363

[Trust and Coping Beliefs Contribute to Racial Disparities in COVID-19 Vaccination Intention.](#)

McClaran N, Rhodes N, Yao SX. *Health Commun.* 2022 Feb 9:1-8. doi: 10.1080/10410236.2022.2035944. Online ahead of print. PMID: 35135397

[Covid-19: Vaccine will be offered to 5-11 year olds in England, Wales, and Scotland.](#)

Wise J. *BMJ.* 2022 Feb 16;376:o411. doi: 10.1136/bmj.o411. PMID: 35172989

[SARS-CoV-2 antibody and T cell responses one year after COVID-19 and the booster effect of vaccination: A prospective cohort study.](#)

Mak WA, Koeleman JGM, van der Vliet M, Keuren F, Ong DSY. *J Infect.* 2022 Feb;84(2):171-178. doi: 10.1016/j.jinf.2021.12.003. Epub 2021 Dec 9. PMID: 34896516

[Global disparities in public health guidance for the use of COVID-19 vaccines in pregnancy.](#)

Zavala E, Krubiner CB, Jaffe EF, Nicklin A, Gur-Arie R, Wonodi C, Faden RR, Karron RA. *BMJ Glob Health*. 2022 Feb;7(2):e007730. doi: 10.1136/bmjgh-2021-007730. PMID: 35210309

[To vax or not to vax: Predictors of anti-vax attitudes and COVID-19 vaccine hesitancy prior to widespread vaccine availability.](#)

Roberts HA, Clark DA, Kalina C, Sherman C, Brislin S, Heitzeg MM, Hicks BM. *PLoS One*. 2022 Feb 15;17(2):e0264019. doi: 10.1371/journal.pone.0264019. eCollection 2022. PMID: 35167612

[Association between health behaviours and the COVID-19 vaccination: risk compensation among healthcare workers in Taizhou, China.](#)

Sun LX, Chen LL, Chen WY, Zhang MX, Yang MG, Mo LC, Zhu JJ, Tung TH, Li FP. *Hum Vaccin Immunother*. 2022 Feb 17:1-7. doi: 10.1080/21645515.2022.2029257. Online ahead of print. PMID: 35175866

[A phase 1/2 randomised placebo-controlled study of the COVID-19 vaccine mRNA-1273 in healthy Japanese adults: An interim report.](#)

Masuda T, Murakami K, Sugiura K, Sakui S, Philip Schuring R, Mori M. *Vaccine*. 2022 Feb 8:S0264-410X(22)00164-5. doi: 10.1016/j.vaccine.2022.02.030. Online ahead of print. PMID: 35177302

[Adverse Events Reported by Patients With Cancer After Administration of a 2-Dose mRNA COVID-19 Vaccine.](#)

Shulman RM, Weinberg DS, Ross EA, Ruth K, Rall GF, Olszanski AJ, Helstrom J, Hall MJ, Judd J, Chen DYT, Uzzo RG, Dougherty TP, Williams R, Geynisman DM, Fang CY, Fisher RI, Strother M, Huelsmann E, Adige S, Whooley PD, Zarrabi K, Gupta B, Iyer P, McShane M, Yankey H, Lee CT, Burbure N, Laderman LE, Giurintano J, Reiss S, Horwitz EM. *J Natl Compr Canc Netw*. 2022 Feb;20(2):160-166. doi: 10.6004/jnccn.2021.7113. PMID: 35130494

[Vaccine for yourself, your community, or your country? Examining audiences' response to distance framing of COVID-19 vaccine messages.](#)

Yuan S, Chu H. *Patient Educ Couns*. 2022 Feb;105(2):284-289. doi: 10.1016/j.pec.2021.08.019. Epub 2021 Aug 25. PMID: 34479746

[Demographic Characteristics and Status of Vaccinated Individuals with a History of COVID-19 Infection Pre- or Post-Vaccination: A Descriptive Study of a Nationally Representative Sample in Saudi Arabia.](#)

AlRuthia Y, Al-Salloum HF, Almohammed OA, Alqahtani AS, Al-Abdulkarim HA, Alsofayan YM, Almodarra SS, AlQahtani SH, Almutlaq A, Alabdulkareem K, Balkhi B, Almutairi HT, Alanazi AS, Asiri YA. *Vaccines (Basel)*. 2022 Feb 18;10(2):323. doi: 10.3390/vaccines10020323. PMID: 35214781

[Determinants of acceptance of Coronavirus disease-2019 \(COVID-19\) vaccine among Lebanese health care workers using health belief model.](#)

Youssef D, Abou-Abbas L, Berry A, Youssef J, Hassan H. *PLoS One*. 2022 Feb 22;17(2):e0264128. doi: 10.1371/journal.pone.0264128. eCollection 2022. PMID: 35192664

[Neurological Immune-Related Adverse Events After COVID-19 Vaccination: A Systematic Review.](#)

Shafiq A, Salameh MA, Laswi I, Mohammed I, Mhaimed O, Mhaimed N, Mhaimed N, Paul P, Mushannen M, Elshafeey A, Fares A, Holroyd S, Zakaria D. *J Clin Pharmacol*. 2022 Mar;62(3):291-303. doi: 10.1002/jcph.2017. Epub 2022 Feb 10. PMID: 34921562

[Implications of social media misinformation on COVID-19 vaccine confidence among pregnant women in Africa.](#)

Ennab F, Babar MS, Khan AR, Mittal RJ, Nawaz FA, Essar MY, Fazel SS. Clin Epidemiol Glob Health. 2022 Mar-Apr;14:100981. doi: 10.1016/j.cegh.2022.100981. Epub 2022 Feb 12. PMID: 35187292

[Efficacy and safety of heterologous booster vaccination with Ad26.COVS.2 after BNT162b2 mRNA COVID-19 vaccine in haemato-oncological patients with no antibody response.](#)

Reimann P, Ulmer H, Mutschlechner B, Benda M, Severgnini L, Volgger A, Lang T, Atzl M, Huynh M, Gasser K, Grabher C, Mink S, Fraunberger P, Petrusch U, Hartmann B, Winder T. Br J Haematol. 2022 Feb;196(3):577-584. doi: 10.1111/bjh.17982. Epub 2021 Dec 6. PMID: 34872162

[Duration of effectiveness of vaccines against SARS-CoV-2 infection and COVID-19 disease: results of a systematic review and meta-regression.](#)

Feikin DR, Higdon MM, Abu-Raddad LJ, Andrews N, Araos R, Goldberg Y, Groome MJ, Huppert A, O'Brien KL, Smith PG, Wilder-Smith A, Zeger S, Deloria Knoll M, Patel MK. Lancet. 2022 Feb 21:S0140-6736(22)00152-0. doi: 10.1016/S0140-6736(22)00152-0. Online ahead of print. PMID: 35202601

[Vaccine effectiveness against COVID-19 hospitalization in adults in France: A test negative case control study.](#)

Luong Ngyen LB, Bauer R, Lesieur Z, Galtier F, Duval X, Vanhems P, Lainé F, Tattevin P, Durier C, Launay O; FLUVAC Study group. Infect Dis Now. 2022 Feb;52(1):40-43. doi: 10.1016/j.idnow.2021.12.002. Epub 2021 Dec 15. PMID: 34920180

[COVID-19 vaccine-induced immunity: Head-to-head comparison of mRNA \(BNT162b2\) versus inactivated \(CoronaVac\) vaccines.](#)

M Kagina B, Dochez C. Respiriology. 2022 Feb 28. doi: 10.1111/resp.14236. Online ahead of print. PMID: 35229416

[Peripheral Ulcerative Keratitis Secondary to the Inactive COVID-19 Vaccine-CoronaVac.](#)

Penbe A. Ocul Immunol Inflamm. 2022 Feb 25:1-5. doi: 10.1080/09273948.2022.2039211. Online ahead of print. PMID: 35212608

[Risk of venous thrombotic events and thrombocytopenia in sequential time periods after ChAdOx1 and BNT162b2 COVID-19 vaccines: A national cohort study in England.](#)

Andrews NJ, Stowe J, Ramsay ME, Miller E. Lancet Reg Health Eur. 2022 Feb;13:100260. doi: 10.1016/j.lanepe.2021.100260. Epub 2021 Dec 13. PMID: 34927118

[Incidental findings in UK healthy volunteers screened for a COVID-19 vaccine trial.](#)

Hodgson SH, Iveson P, Larwood J, Roche S, Morrison H, Cosgrove C, Galiza E, Ikram S, Lemm NM, Mehdipour S, Owens D, Pacurar M, Schumacher M, Shaw RH, Faust SN, Heath PT, Pollard AJ, Emary KRW, Pollock KM, Lazarus R. Clin Transl Sci. 2022 Feb;15(2):524-534. doi: 10.1111/cts.13170. Epub 2021 Oct 20. PMID: 34670021

[Coronary thrombo-embolic events after Covid-19 vaccination- a single centre study.](#)

Showkathali R, Yalamanchi R, Narra L, Vinayagamoorthy N, Gunasekaran S, Nayak R, Vijayachandra Reddy Y, Mahilmaran A, Srinivasan KN, Oomman A, Kaliyamoorthy D. Indian Heart J. 2022 Feb 2:S0019-4832(22)00021-9. doi: 10.1016/j.ihj.2022.01.002. Online ahead of print. PMID: 35122777

[Cardiac Tamponade After COVID-19 Vaccination.](#)

Hryniewicki AT, Tolia VM, Nene RV. J Emerg Med. 2022 Feb;62(2):250-253. doi: 10.1016/j.jemermed.2021.10.008. Epub 2021 Oct 23. PMID: 34996671

[COVID-19 vaccination in 5-11 years old children: Drivers of vaccine hesitancy among parents in Quebec.](#)

Dubé E, Gagnon D, Pelletier C. Hum Vaccin Immunother. 2022 Feb 1:1-3. doi: 10.1080/21645515.2022.2028516. Online ahead of print. PMID: 35103550

[Does smoking have an impact on the immunological response to COVID-19 vaccines? Evidence from the VASCO study and need for further studies.](#)

Ferrara P, Ponticelli D, Agüero F, Caci G, Vitale A, Borrelli M, Schiavone B, Antonazzo IC, Mantovani LG, Tomaselli V, Polosa R. Public Health. 2022 Feb;203:97-99. doi: 10.1016/j.puhe.2021.12.013. PMID: 35038631

[Anti-Spike IgG in multiple sclerosis patients after BNT162b2 vaccine: An exploratory case-control study in Italy.](#)

Giossi R, Consonni A, Torri Clerici V, Zito A, Rigoni E, Antozzi C, Brambilla L, Crisafulli SG, Bellino A, Frangiamore R, Bonanno S, Vanoli F, Ciusani E, Corsini E, Andreetta F, Baggi F, Tramacere I, Mantegazza R, Conte A, Bergamaschi R, Confalonieri P. Mult Scler Relat Disord. 2022 Feb;58:103415. doi: 10.1016/j.msard.2021.103415. Epub 2021 Nov 22. PMID: 35216790

[Vaccine apartheid: This is not the way to end the pandemic.](#)

Lanziotti VS, Bulut Y, Buonsenso D, Gonzalez-Dambras S. J Paediatr Child Health. 2022 Feb;58(2):228-231. doi: 10.1111/jpc.15805. Epub 2021 Oct 21. PMID: 34674333

[mRNA-1273 vaccine-induced antibodies maintain Fc effector functions across SARS-CoV-2 variants of concern.](#)

Kaplonek P, Fischinger S, Cizmeci D, Bartsch YC, Kang J, Burke JS, Shin SA, Dayal D, Martin P, Mann C, Amanat F, Julg B, Nilles EJ, Musk ER, Menon AS, Krammer F, Saphire EO, Andrea Carfi, Alter G. Immunity. 2022 Feb 8;55(2):355-365.e4. doi: 10.1016/j.immuni.2022.01.001. Epub 2022 Jan 6. PMID: 35090580

[Subacute Thyroiditis After Receiving the mRNA COVID-19 Vaccine \(Moderna\): The First Case Report and Literature Review in Korea.](#)

Jhon M, Lee SH, Oh TH, Kang HC. J Korean Med Sci. 2022 Feb 14;37(6):e39. doi: 10.3346/jkms.2022.37.e39. PMID: 35166076

[Myocarditis following mRNA Covid-19 vaccination: A pooled analysis.](#)

Bellos I, Karageorgiou V, Viskin D. Vaccine. 2022 Feb 7:S0264-410X(22)00140-2. doi: 10.1016/j.vaccine.2022.02.017. Online ahead of print. PMID: 35153093

[COVID-19 Vaccine-Induced Immune Thrombosis with Thrombocytopenia \(VITT\) and the Shades of Grey in Thrombus Formation.](#)

Thachil J. Semin Thromb Hemost. 2022 Feb;48(1):15-18. doi: 10.1055/s-0041-1735453. Epub 2021 Oct 8. PMID: 34624910

[Attitudes toward COVID-19 vaccination in the nursing profession: validation of the Italian version of the VAX scale and descriptive study.](#)

Tomietto M, Comparcini D, Simonetti V, Papappicco CAM, Stefanizzi P, Mercuri M, Cicolini G. Ann Ig. 2022 Feb 8. doi: 10.7416/ai.2022.2502. Online ahead of print. PMID: 35142334

[Age and smoking predict antibody titers after the BNT162b2 COVID-19 vaccine.](#)

O'Rourke K. Cancer. 2022 Feb 1;128(3):431. doi: 10.1002/cncr.34082. PMID: 35050525

[A behavioural modelling approach to assess the impact of COVID-19 vaccine hesitancy.](#)

Buonomo B, Della Marca R, d'Onofrio A, Groppi M. J Theor Biol. 2022 Feb 7;534:110973. doi: 10.1016/j.jtbi.2021.110973. Epub 2021 Dec 8. PMID: 34896166

[Immunogenicity of a third dose of the BNT162b2 mRNA Covid-19 Vaccine in Patients with impaired B cell reconstitution after cellular therapy - a Single Center Prospective Cohort Study.](#)

Ram R, Freund T, Halperin T, Ben-Ami R, Amit O, Bar-On Y, Beyar-Katz O, Eilat N, Gold R, Kay S, Glait-Santar C, Hagin D. Transplant Cell Ther. 2022 Feb 16:S2666-6367(22)00091-4. doi: 10.1016/j.jtct.2022.02.012. Online ahead of print. PMID: 35182795

[Association between social media use and the acceptance of COVID-19 vaccination among the general population in Saudi Arabia - a cross-sectional study.](#)

Othman SS, Alsuwaidi A, Aseel R, Alotaibi R, Bablgoom R, Alsulami G, Alharbi R, Ghamri R. BMC Public Health. 2022 Feb 21;22(1):375. doi: 10.1186/s12889-022-12757-1. PMID: 35189874

[Covid-19 Vaccine Associated Erythema Nodosum: factors to consider.](#)

Damevska K, Simeonovski V. Dermatol Ther. 2022 Feb 26:e15410. doi: 10.1111/dth.15410. Online ahead of print. PMID: 35218272

[Cutaneous adverse events related to COVID-19 vaccines: A cross-sectional questionnaire-based study of 867 patients.](#)

Pourani MR, Shahidi Dadras M, Salari M, Diab R, Namazi N, Abdollahimajd F. Dermatol Ther. 2022 Feb;35(2):e15223. doi: 10.1111/dth.15223. Epub 2021 Dec 8. PMID: 34820975

[Correlates of the COVID-19 Vaccine Hesitancy Among Indians.](#)

Bansal P, Raj A, Sinha RK. Asia Pac J Public Health. 2022 Feb 7:10105395221077065. doi: 10.1177/10105395221077065. Online ahead of print. PMID: 35130754

[COVID-19 vaccine wastage in Canada, a reason for concern?](#)

Aubrey L, Ishak A, Dutta S, Rajesh E, Suvvari TK, Mukherjee D. Can J Public Health. 2022 Feb 22:1-2. doi: 10.17269/s41997-022-00616-w. Online ahead of print. PMID: 35194748

[Determinants and reasons for coronavirus disease 2019 vaccine hesitancy in Croatia.](#)

Bagić D, Šuljok A, Ančić B. Croat Med J. 2022 Feb 28;63(1):89-97. PMID: 35230010

[Assessment of Sudden Sensorineural Hearing Loss After COVID-19 Vaccination.](#)

Formeister EJ, Wu MJ, Chari DA, Meek R 3rd, Rauch SD, Remenschneider AK, Quesnel AM, de Venecia R, Lee DJ, Chien W, Stewart CM, Galaiya D, Kozin ED, Sun DQ. JAMA Otolaryngol Head Neck Surg. 2022 Feb 24. doi: 10.1001/jamaoto.2021.4414. Online ahead of print. PMID: 35201274



[Self-reported reactogenicity of CoronaVac \(Sinovac\) compared with Comirnaty \(Pfizer-BioNTech\): A prospective cohort study with intensive monitoring.](#)

Lai FTT, Leung MTY, Chan EWW, Huang L, Lau LKW, Peng K, Leung JCN, Fan M, Chen K, Lum DH, Li X, Chui CSL, Wan EYF, Wong CKH, Lam EFS, Cheung TYY, Cowling BJ, Wong ICK, Chan EWY. Vaccine. 2022 Mar 1;40(10):1390-1396. doi: 10.1016/j.vaccine.2022.01.062. Epub 2022 Feb 7. PMID: 35140013

[A global survey in the developmental landscape of possible vaccination strategies for COVID-19.](#)

Gasmi A, Srinath S, Dadar M, Pivina L, Menzel A, Benahmed AG, Chirumbolo S, Bjørklund G. Clin Immunol. 2022 Feb 23:108958. doi: 10.1016/j.clim.2022.108958. Online ahead of print. PMID: 35218966

[Heterologous AD5-nCOV plus CoronaVac versus homologous CoronaVac vaccination: a randomized phase 4 trial.](#)

Li J, Hou L, Guo X, Jin P, Wu S, Zhu J, Pan H, Wang X, Song Z, Wan J, Cui L, Li J, Chen Y, Wang X, Jin L, Liu J, Shi F, Xu X, Zhu T, Chen W, Zhu F. Nat Med. 2022 Feb;28(2):401-409. doi: 10.1038/s41591-021-01677-z. Epub 2022 Jan 27. PMID: 35087233

[Low clinical protective response to SARS-CoV-2 mRNA COVID-19 vaccine in patients with multiple myeloma.](#)

Terao T, Yamashita T, Fukumoto A, Kamura Y, Ikeda D, Kuzume A, Tabata R, Tsushima T, Miura D, Narita K, Takeuchi M, Doi M, Umezawa Y, Otsuka Y, Takamatsu H, Matsue K. Int J Hematol. 2022 Feb 21:1-11. doi: 10.1007/s12185-022-03300-4. Online ahead of print. PMID: 35190963

[COVID-19 Vaccine Boosters for All Adults: An Optimal U.S. Approach?](#)

Sarpawatari A, Pandya A, Hyle EP, Persad G. Ann Intern Med. 2022 Feb;175(2):280-282. doi: 10.7326/M21-3927. Epub 2021 Nov 9. PMID: 34748375

[COVID-19 vaccine hesitancy among people in Syria: An incipient crisis.](#)

Swed S, Baroudi I, Ezzdean W, Sawaf B, Bohsas H, Patwary MM. Ann Med Surg (Lond). 2022 Mar;75:103324. doi: 10.1016/j.amsu.2022.103324. Epub 2022 Feb 1. PMID: 35127062

[Guardians' willingness to vaccinate their teenagers against COVID-19 in China: A national cross-sectional survey.](#)

Wu J, Zhao L, Wang M, Gu J, Wei W, Li Q, Ma M, Mu Z, Miao Y. J Affect Disord. 2022 Feb 15;299:196-204. doi: 10.1016/j.jad.2021.12.002. Epub 2021 Dec 4. PMID: 34875283

[Central retinal artery occlusion following COVID-19 vaccine administration.](#)

Abdin AD, Gärtner BC, Seitz B. Am J Ophthalmol Case Rep. 2022 Jun;26:101430. doi: 10.1016/j.ajoc.2022.101430. Epub 2022 Feb 18. PMID: 35198832

[Myocarditis, Pulmonary Hemorrhage, and Extensive Myositis with Rhabdomyolysis 12 Days After First Dose of Pfizer-BioNTech BNT162b2 mRNA COVID-19 Vaccine: A Case Report.](#)

Al-Rasbi S, Al-Maqbali JS, Al-Farsi R, Al Shukaili MA, Al-Riyami MH, Al Falahi Z, Al Farhan H, Al Alawi AM. Am J Case Rep. 2022 Feb 17;23:e934399. doi: 10.12659/AJCR.934399. PMID: 35173141

[Cutaneous Small-vessel Vasculitis after ChAdOx1 COVID-19 Vaccination: A Report of Five Cases.](#)

Uh JA, Lee SK, Kim JH, Lee JH, Kim MS, Lee UH. Int J Low Extrem Wounds. 2022 Feb 7:15347346221078734. doi: 10.1177/15347346221078734. Online ahead of print. PMID: 35130095

[Functional Antibodies Against SARS-CoV-2 Receptor Binding Domain Variants with Mutations N501Y or E484K in Human Milk from COVID-19-Vaccinated, -Recovered, and -Unvaccinated Women.](#)

Demers-Mathieu V, Hakansson AP, Hall S, Lavangnananda S, Fels S, Medo E. Breastfeed Med. 2022 Feb;17(2):163-172. doi: 10.1089/bfm.2021.0232. Epub 2021 Nov 22. PMID: 34809492

[Adverse reactions and production of neutralizing anti-SARS-CoV-2 antibodies after ChAdOx1 COVID-19 vaccination: A cross-sectional study in a single center.](#)

Jeong YJ, Kim YJ, Kim SH, Yoo J, Lee J, Lee S, Il Kim S. J Infect Public Health. 2022 Feb 17:S1876-0341(22)00038-7. doi: 10.1016/j.jiph.2022.02.005. Online ahead of print. PMID: 35193817

[Context and Considerations for the Development of Community-Informed Health Communication Messaging to Support Equitable Uptake of COVID-19 Vaccines Among Communities of Color in Washington, DC.](#)

Kerrigan D, Mantsios A, Karver TS, Davis W, Taggart T, Calabrese SK, Mathews A, Robinson S, Ruffin R, Feaster-Betha G, Quinteros-Grady L, Galvis C, Reyes R, Martinez Chio G, Tesfahun M, Lane A, Peeks S, Henderson KM, Harris KM. J Racial Ethn Health Disparities. 2022 Feb 3:1-15. doi: 10.1007/s40615-022-01231-8. Online ahead of print. PMID: 35118609

[An adolescent girl diagnosed with IgA nephropathy following the first dose of the COVID-19 vaccine.](#)

Okada M, Kikuchi E, Nagasawa M, Oshiba A, Shimoda M. CEN Case Rep. 2022 Feb 3:1-4. doi: 10.1007/s13730-021-00679-7. Online ahead of print. PMID: 35118635

[Recent COVID-19 vaccination has minimal effects on the physiological responses to graded exercise in physically active healthy people.](#)

Batatinha H, Baker FL, Smith KA, Zúñiga TM, Pedlar CR, Burgess SC, Katsanis E, Simpson RJ. J Appl Physiol (1985). 2022 Feb 1;132(2):275-282. doi: 10.1152/jappphysiol.00629.2021. Epub 2021 Dec 9. PMID: 34882029

[Individual differences in moral judgment predict attitudes towards mandatory vaccinations.](#)

Clarkson E, Jasper JD. Pers Individ Dif. 2022 Feb;186:111391. doi: 10.1016/j.paid.2021.111391. Epub 2021 Nov 17. PMID: 34840376

[Immunological response against SARS-CoV-2 following full-dose administration of Comirnaty COVID-19 vaccine in nursing home residents.](#)

Albert E, Burgos JS, Peiró S, Salas D, Vanaclocha H, Giménez E, Limón R, Alcaraz MJ, Sánchez-Payá J, Díez-Domingo J, Navarro D; Valencian Vaccine Research Programme (ProVaVac) Study Group. Clin Microbiol Infect. 2022 Feb;28(2):279-284. doi: 10.1016/j.cmi.2021.09.031. Epub 2021 Oct 5. PMID: 34619398

[Getting a Vaccine, Jab, or Vax Is More Than a Regular Expression. Comment on "COVID-19 Vaccine-Related Discussion on Twitter: Topic Modeling and Sentiment Analysis".](#)

Cummins JA. J Med Internet Res. 2022 Feb 23;24(2):e31978. doi: 10.2196/31978. PMID: 35195531

[Third dose of SARS-CoV-2 vaccine: A systematic review of 30 published studies.](#)

Petrelli F, Luciani A, Borgonovo K, Ghilardi M, Parati MC, Petrò D, Lonati V, Pesenti A, Cabiddu M. J Med Virol. 2022 Feb 3. doi: 10.1002/jmv.27644. Online ahead of print. PMID: 35118680

[Rheumatoid arthritis disease activity assessed by patient-reported outcomes and flow cytometry before and after an additional dose of COVID-19 vaccine.](#)

Tedeschi SK, Stratton J, Ellrodt JE, Whelan MG, Hayashi K, Yoshida K, Chen L, Adejorin I, Marks KE, Jonsson AH, Rao DA, Solomon DH. Ann Rheum Dis. 2022 Feb 15:annrheumdis-2022-222232. doi: 10.1136/annrheumdis-2022-222232. Online ahead of print. PMID: 35168944

[Association of COVID-19 vaccines ChAdOx1 and BNT162b2 with major venous, arterial, or thrombocytopenic events: A population-based cohort study of 46 million adults in England.](#)

Whiteley WN, Ip S, Cooper JA, Bolton T, Keene S, Walker V, Denholm R, Akbari A, Omigie E, Hollings S, Di Angelantonio E, Denaxas S, Wood A, Sterne JAC, Sudlow C; CVD-COVID-UK consortium. PLoS Med. 2022 Feb 22;19(2):e1003926. doi: 10.1371/journal.pmed.1003926. eCollection 2022 Feb. PMID: 35192597

[Estimating CO\(2\) emissions from emergency-supply transport: The case of COVID-19 vaccine global air transport.](#)

Sajid MJ, Ali G, Santibanez Gonzalez EDR. J Clean Prod. 2022 Mar 15;340:130716. doi: 10.1016/j.jclepro.2022.130716. Epub 2022 Feb 3. PMID: 35132298

[New-onset bullous pemphigoid after inactivated Covid-19 vaccine: Synergistic effect of the Covid-19 vaccine and vildagliptin.](#)

Bostan E, Yel B, Akdogan N, Gokoz O. Dermatol Ther. 2022 Feb;35(2):e15241. doi: 10.1111/dth.15241. Epub 2021 Dec 8. PMID: 34854184

[Three doses of an inactivation-based COVID-19 vaccine induces cross-neutralizing immunity against the SARS CoV-2 Omicron variant.](#)

Yu X, Qi X, Cao Y, Li P, Lu L, Wang P, Feng Y, Yang J, Wei H, Guo L, Sun M, Liu Q, Lv J, Feng Y. Emerg Microbes Infect. 2022 Feb 18:1-11. doi: 10.1080/22221751.2022.2044271. Online ahead of print. PMID: 35176972

[Conspiracy beliefs and distrust of science predicts reluctance of vaccine uptake of politically right-wing citizens.](#)

Winter T, Riordan BC, Scarf D, Jose PE. Vaccine. 2022 Feb 18:S0264-410X(22)00074-3. doi: 10.1016/j.vaccine.2022.01.039. Online ahead of print. PMID: 35190210

["On the last day of the last month, I will go": A qualitative exploration of COVID-19 vaccine confidence among Ivoirian adults.](#)

Tibbels NJ, Dosso A, Fordham C, Benie W, Brou JA, Kamara D, Hendrickson ZM, Naugle DA. Vaccine. 2022 Feb 11:S0264-410X(22)00166-9. doi: 10.1016/j.vaccine.2022.02.032. Online ahead of print. PMID: 35181151

[COVID-19 vaccine boosters in the Asia-Pacific region in the context of Omicron.](#)

Hart JD, Chokephaibulkit K, Mayxay M, Ong-Lim ALT, Saketa ST, Russell FM. Lancet Reg Health West Pac. 2022 Feb 16:100404. doi: 10.1016/j.lanwpc.2022.100404. Online ahead of print. PMID: 35187510

[Significance of HLA Haplotypes in Two Patients with Subacute Thyroiditis Triggered by mRNA-Based COVID-19 Vaccine.](#)

Stasiak M, Zawadzka-Starczewska K, Lewiński A. *Vaccines (Basel)*. 2022 Feb 11;10(2):280. doi: 10.3390/vaccines10020280. PMID: 35214738

[Relapsed and newly diagnosed Graves' disease due to immunization against COVID-19: A case series and review of the literature.](#)

Bostan H, Ucan B, Kizilgul M, Calapkulu M, Hepsen S, Gul U, Ozturk Unsal I, Cakal E. *J Autoimmun*. 2022 Feb 24;128:102809. doi: 10.1016/j.jaut.2022.102809. Online ahead of print. PMID: 35220164

[Author Correction: Serological responses and vaccine effectiveness for extended COVID-19 vaccine schedules in England.](#)

Amirthalingam G, Bernal JL, Andrews NJ, Whitaker H, Gower C, Stowe J, Tessier E, Subbarao S, Ireland G, Baawuah F, Linley E, Warrener L, O'Brien M, Whillock C, Moss P, Ladhani SN, Brown KE, Ramsay ME. *Nat Commun*. 2022 Feb 2;13(1):733. doi: 10.1038/s41467-022-28393-7. PMID: 35110555

[Effectiveness of a third dose of BNT162b2 mRNA COVID-19 vaccine in a large US health system: A retrospective cohort study.](#)

Tartof SY, Slezak JM, Puzniak L, Hong V, Frankland TB, Ackerson BK, Takhar HS, Ogun OA, Simmons SR, Zamparo JM, Gray S, Valluri SR, Pan K, Jodar L, McLaughlin JM. *Lancet Reg Health Am*. 2022 Feb 14:100198. doi: 10.1016/j.lana.2022.100198. Online ahead of print. PMID: 35187521

[Oxford-AstraZeneca ChAdOx1 COVID-19 Vaccine Does Not Alter Platelet Aggregation.](#)

Limami Y, Khalki L, Zaid N, Khyatti M, Turk JE, Ammara M, Mtairag EM, Oudghiri M, Naya A, Taberkant M, Zaid Y. *Semin Thromb Hemost*. 2022 Feb;48(1):109-111. doi: 10.1055/s-0041-1728831. Epub 2021 May 10. PMID: 33971677

[Development of a T cell-based immunodiagnostic system to effectively distinguish SARS-CoV-2 infection and COVID-19 vaccination status.](#)

Yu ED, Wang E, Garrigan E, Goodwin B, Sutherland A, Tarke A, Chang J, Gálvez RI, Mateus J, Ramirez SI, Rawlings SA, Smith DM, Filaci G, Frazier A, Weiskopf D, Dan JM, Crotty S, Grifoni A, Sette A, da Silva Antunes R. *Cell Host Microbe*. 2022 Feb 8:S1931-3128(22)00089-0. doi: 10.1016/j.chom.2022.02.003. Online ahead of print. PMID: 35172129

[COVID-19 vaccine hesitancy among indigenous people in Sudan: An incipient crisis.](#)

Swed S, Mohamed T, Sakkour R, Motawea KR, Bohsas H. *Ann Med Surg (Lond)*. 2022 Mar;75:103379. doi: 10.1016/j.amsu.2022.103379. Epub 2022 Feb 15. PMID: 35186288

[Background rates of five thrombosis with thrombocytopenia syndromes of special interest for COVID-19 vaccine safety surveillance: Incidence between 2017 and 2019 and patient profiles from 38.6 million people in six European countries.](#)

Burn E, Li X, Kostika K, Stewart HM, Reich C, Seager S, Duarte-Salles T, Fernandez-Bertolin S, Aragón M, Reyes C, Martinez-Hernandez E, Marti E, Delmestri A, Verhamme K, Rijnbeek P, Horban S, Morales DR, Prieto-Alhambra D. *Pharmacoepidemiol Drug Saf*. 2022 Feb 22. doi: 10.1002/pds.5419. Online ahead of print. PMID: 35191114

[Association between reactogenicity and SARS-CoV-2 antibodies after the second dose of the BNT162b2 COVID-19 vaccine.](#)

Yamamoto S, Fukunaga A, Tanaka A, Takeuchi JS, Inoue Y, Kimura M, Maeda K, Ueda G, Mizoue T, Ujiie M, Sugiura W, Ohmagari N. *Vaccine*. 2022 Feb 14;S0264-410X(22)00196-7. doi: 10.1016/j.vaccine.2022.02.052. Online ahead of print. PMID: 35183384

[Factors Associated with Change in SARS-CoV-2 Antibody Titers from Three to Six Months after the Administration of the BNT162b2 mRNA COVID-19 Vaccine among Healthcare Workers in Japan: A Prospective Study.](#)

Mochizuki T, Hori T, Yano K, Ikari K, Okazaki K. *Intern Med*. 2022 Feb 19. doi: 10.2169/internalmedicine.8902-21. Online ahead of print. PMID: 35185050

[The emergence of COVID-19 vaccine resistance depends on human choices.](#)

[No authors listed] *Nat Hum Behav*. 2022 Feb;6(2):181-182. doi: 10.1038/s41562-022-01313-x. PMID: 35210583

[Predictors of nursing students' intention to receive COVID-19 vaccination: A multi-university study in Saudi Arabia.](#)

Alshehry AS, Cruz JP, Alquwez N, Alsharari AF, Tork HMM, Almazan JU, Alshammari F, Alabdulaziz H, Alsolami F, Tumala RB, Al Thobaity A, Alqahtani FM, Balay-Odao E. *J Adv Nurs*. 2022 Feb;78(2):446-457. doi: 10.1111/jan.15002. Epub 2021 Aug 7. PMID: 34363635

[BNT162B2 mRNA COVID-19 Vaccine in Heart and Lung Transplanted Young Adults: Is an Alternative SARS-CoV-2 Immune Response Surveillance Needed?](#)

Cotugno N, Pighi C, Morrocchi E, Ruggiero A, Amodio D, Medri C, Colagrossi L, Russo C, Di Cesare S, Santilli V, Manno EC, Zangari P, Giancotta C, Bernardi S, Nicolosi L, Ciofi Degli Atti M, Raponi M, Zaffina S, Alfieri S, Kirk R, Perno CF, Rossi P, Amodeo A, Palma P. *Transplantation*. 2022 Feb 1;106(2):e158-e160. doi: 10.1097/TP.0000000000003999. PMID: 34954734

[Coronavirus disease 2019 \(COVID-19\) vaccine platforms: how novel platforms can prepare us for future pandemics: a narrative review.](#)

Lee JK, Shin OS. *J Yeungnam Med Sci*. 2022 Feb 14. doi: 10.12701/jyms.2021.01669. Online ahead of print. PMID: 35152616

[COVID-19 vaccine hesitancy: Pakistan struggles to vaccinate its way out of the pandemic.](#)

Mehmood Q, Ullah I, Hasan MM, Kazmi SK, Ahmadi A, Lucero-Prisno DE 3rd. *Ther Adv Vaccines Immunother*. 2022 Feb 10;10:25151355221077658. doi: 10.1177/25151355221077658. eCollection 2022. PMID: 35174312

[Predictors of death in COVID-19 vaccine breakthrough infections in Brazil.](#)

Estofolete CF, Fares GF, Banho CA, Sacchetto L, Campos GRF, Moraes MM, Dos Santos TMIL, da Silva GCD, Queiroz F, Mendes LM, Salomão MLM, Negri AF, Barcelos MD, Nogueira ML. *J Infect*. 2022 Feb 2;S0163-4453(22)00059-7. doi: 10.1016/j.jinf.2022.01.040. Online ahead of print. PMID: 35122775

[Exercise after influenza or COVID-19 vaccination increases serum antibody without an increase in side effects.](#)

Hallam J, Jones T, Alley J, Kohut ML. Brain Behav Immun. 2022 Feb 5;102:1-10. doi: 10.1016/j.bbi.2022.02.005. Online ahead of print. PMID: 35131444

[Employment Patterns of Dental Hygienists in the United States During the COVID-19 Pandemic: An update.](#)

Morrissey RW, Gurenlian JR, Estrich CG, Eldridge LA, Battrell A, Lynch A, Matthew M, Harrison B, Araujo MWB, Vujicic M. J Dent Hyg. 2022 Feb;96(1):27-33. PMID: 35190491

[Molecular and Epidemiological Characterization of Emerging Immune-Escape Variants of SARS-CoV-2.](#)

Miyakawa K, Jeremiah SS, Yamaoka Y, Koyama T, Tokumasu R, Kudo M, Kato H, Ryo A. Front Med (Lausanne). 2022 Feb 10;9:811004. doi: 10.3389/fmed.2022.811004. eCollection 2022. PMID: 35223905

[Serological response to the BNT162b2 mRNA or ChAdOx1 nCoV-19 COVID-19 vaccine after first and second doses in patients with plasma cell disorders: influence of host and disease factors.](#)

Chan WY, Howells L, Wilson W, Sanchez E, Ainley L, Chavda SJ, Dowling E, Correia N, Lecat CSY, McMillan A, Wisniowski B, Mahmood S, Papanikolaou X, Lee L, Sive J, Kyriakou C, Wechalekar A, Popat R, Rabin N, Nastouli E, Yong KL, Xu K. Br J Haematol. 2022 Feb;196(3):e21-e26. doi: 10.1111/bjh.17864. Epub 2021 Oct 10. PMID: 34632575

[COVID-19 Vaccine Uptake in Patients with Ocular Surface Diseases in India.](#)

Das AV, Goud R, Basu S. Semin Ophthalmol. 2022 Feb 17;37(2):193-194. doi: 10.1080/08820538.2021.1950778. Epub 2021 Jul 8. PMID: 34236941

[Allergic reactions to coronavirus disease 2019 vaccines and addressing vaccine hesitancy: Northwell Health experience.](#)

Kaplan B, Farzan S, Coscia G, Rosenthal DW, McInerney A, Jongco AM, Ponda P, Bonagura VR. Ann Allergy Asthma Immunol. 2022 Feb;128(2):161-168.e1. doi: 10.1016/j.anai.2021.10.019. Epub 2021 Oct 24. PMID: 34699968

[BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age.](#)

Mintzker Y. N Engl J Med. 2022 Feb 10;386(6):604-606. doi: 10.1056/NEJMc2118775. Epub 2022 Jan 19. PMID: 35045224

[BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age.](#)

Fang SF, Liu N, Du HW. N Engl J Med. 2022 Feb 10;386(6):604. doi: 10.1056/NEJMc2118775. Epub 2022 Jan 19. PMID: 35045223

[Accuracy and real life performance of a novel interferon-γ release assay for the detection of SARS-CoV2 specific T cell response.](#)

Huzly D, Panning M, Smely F, Enders M, Komp J, Falcone V, Steinmann D. J Clin Virol. 2022 Feb 2;148:105098. doi: 10.1016/j.jcv.2022.105098. Online ahead of print. PMID: 35134681

[Omicron-Specific Cytotoxic T-Cell Responses After a Third Dose of mRNA COVID-19 Vaccine Among Patients With Multiple Sclerosis Treated With Ocrelizumab.](#)

Madelon N, Heikkilä N, Sabater Royo I, Fontannaz P, Breville G, Lauper K, Goldstein R, Grifoni A, Sette A, Siegrist CA, Finckh A, Lalive PH, Didierlaurent AM, Eberhardt CS. JAMA Neurol. 2022 Feb 25. doi: 10.1001/jamaneurol.2022.0245. Online ahead of print. PMID: 35212717

[Postmarketing studies: can they provide a safety net for COVID-19 vaccines in the UK?](#)

Dhanda S, Osborne V, Lynn E, Shakir S. BMJ Evid Based Med. 2022 Feb;27(1):1-6. doi: 10.1136/bmjebm-2020-111507. Epub 2020 Oct 21. PMID: 33087452

[Utility and futility of skin testing to address concerns surrounding messenger RNA coronavirus disease 2019 vaccine reactions.](#)

Pitlick MM, Sitek AN, D'Netto ME, Dages KN, Chiarella SE, Gonzalez-Estrada A, Joshi AY, Park MA. Ann Allergy Asthma Immunol. 2022 Feb;128(2):153-160. doi: 10.1016/j.anai.2021.11.006. Epub 2021 Nov 16. PMID: 34798275

[Axillary Adenopathy after COVID-19 Vaccine: No Reason to Delay Screening Mammogram.](#)

Wolfson S, Kim E, Plaunova A, Bukhman R, Sarmiento RD, Samreen N, Awal D, Sheth MM, Toth HB, Moy L, Reig B. Radiology. 2022 Feb 8:213227. doi: 10.1148/radiol.213227. Online ahead of print. PMID: 35133198

[Association of Human Milk Antibody Induction, Persistence, and Neutralizing Capacity With SARS-CoV-2 Infection vs mRNA Vaccination.](#)

Young BE, Seppo AE, Diaz N, Rosen-Carole C, Nowak-Wegrzyn A, Cruz Vasquez JM, Ferri-Huerta R, Nguyen-Contant P, Fitzgerald T, Sangster MY, Topham DJ, Järvinen KM. JAMA Pediatr. 2022 Feb 1;176(2):159-168. doi: 10.1001/jamapediatrics.2021.4897. PMID: 34757387

[Should Pediatricians Dismiss Families Who Refuse a COVID-19 Vaccine?](#)

Dong E, Boom JA, McGuire AL. Clin Pediatr (Phila). 2022 Feb;61(2):99-103. doi: 10.1177/000992282111065258. Epub 2021 Dec 7. PMID: 34875894

[Relationship between attitudes toward the effectiveness of vaccine, concerns about adverse reactions, and proactively taking SARS-Cov-2 vaccine for family among medical workers in Taizhou, China.](#)

Luo C, Zhang MX, Shi GF, Chen HX, Tung TH. Expert Rev Vaccines. 2022 Feb;21(2):269-275. doi: 10.1080/14760584.2022.2016400. Epub 2021 Dec 19. PMID: 34875964

[A new-onset vitiligo following the inactivated COVID-19 vaccine.](#)

Koç Yıldırım S. J Cosmet Dermatol. 2022 Feb;21(2):429-430. doi: 10.1111/jocd.14677. Epub 2021 Dec 15. PMID: 34910371

[Reasons for COVID-19 vaccine hesitancy in individuals with chronic health conditions.](#)

Warren AM, Perrin PB, Elliott TR, Powers MB. Health Sci Rep. 2022 Feb 9;5(2):e485. doi: 10.1002/hsr2.485. eCollection 2022 Mar. PMID: 35155827

[Pigmented purpuric dermatosis after BNT162B2 mRNA COVID-19 vaccine administration.](#)

Atak MF, Farabi B, Kalelioglu MB, Rao BK. J Cosmet Dermatol. 2022 Feb;21(2):435-437. doi: 10.1111/jocd.14607. Epub 2021 Nov 17. PMID: 34791786

[THE LONG ROAD OF PANDEMIC VACCINE DEVELOPMENT TO ROLLOUT: A SYSTEMATIC REVIEW ON THE LESSONS LEARNT FROM THE 2009 H1N1 INFLUENZA PANDEMIC.](#)

Ankomah AA, Moa A, Chughtai AA. Am J Infect Control. 2022 Feb 4:S0196-6553(22)00063-3. doi: 10.1016/j.ajic.2022.01.026. Online ahead of print. PMID: 35131349

[A pre-vaccine analysis using the Health Belief Model to explain parents' willingness to vaccinate \(WTV\) their children in the United States: implications for vaccination programs.](#)

Reindl D, Catma S. Expert Rev Pharmacoecon Outcomes Res. 2022 Feb 22. doi: 10.1080/14737167.2022.2045957. Online ahead of print. PMID: 35192425

[Dermatomyositis Following BNT162b2 mRNA COVID-19 Vaccination.](#)

Gouda W, Albasri A, Alsaqabi F, Al Sabah HY, Alkandari M, Abdelnaby H. J Korean Med Sci. 2022 Feb 7;37(5):e32. doi: 10.3346/jkms.2022.37.e32. PMID: 35132838

[Stevens-Johnson syndrome induced by Vaxvetria \(AZD1222\) COVID-19 vaccine.](#)

Aimo C, Mariotti EB, Corrà A, Cipollini E, Le Rose O, Serravalle C, Pimpinelli N, Caproni M. J Eur Acad Dermatol Venereol. 2022 Feb 8. doi: 10.1111/jdv.17988. Online ahead of print. PMID: 35133674

[Assessment of public intention to get vaccination against COVID-19: Evidence from a developing country.](#)

Irfan M, Shahid AL, Ahmad M, Iqbal W, Elavarasan RM, Ren S, Hussain A. J Eval Clin Pract. 2022 Feb;28(1):63-73. doi: 10.1111/jep.13611. Epub 2021 Aug 23. PMID: 34427007

[Differences in State COVID-19 Vaccine Mandates for Schoolteachers and Childcare Professionals.](#)

Patel KM, Omer SB, Gilliam WS. JAMA Pediatr. 2022 Feb 28. doi: 10.1001/jamapediatrics.2021.6572. Online ahead of print. PMID: 35226092

[Paroxysmal Supra-ventricular Ventricular Tachycardia after AstraZeneca COVID-19 Vaccine Injection.](#)

Lin YT, Chen PY, Su YJ. New Microbes New Infect. 2022 Feb 4:100965. doi: 10.1016/j.nmni.2022.100965. Online ahead of print. PMID: 35136614

[Pityriasis Rosea-like Rash after mRNA COVID-19 Vaccination: A Case Report and Review of the Literature.](#)

Buckley JE, Landis LN, Rapini RP. JAAD Int. 2022 Feb 9. doi: 10.1016/j.jdin.2022.01.009. Online ahead of print. PMID: 35156062

[COVID-19 vaccine results might inform malaria vaccine strategies.](#)

Abeywickrema M, Goodman AL. Lancet Infect Dis. 2022 Feb 24:S1473-3099(22)00139-6. doi: 10.1016/S1473-3099(22)00139-6. Online ahead of print. PMID: 35219406

[Severe necrotizing myopathy after COVID-19 vaccine with BNT162b2 and regimen with ipilimumab plus nivolumab in a patient with advanced melanoma.](#)

Blaise M, Rocher F, Spittler H, Sanchez A, Lanteri E, Coco L, Puma A, Martel A, Gonfrier G, Passeron T, Montaudié H. J Eur Acad Dermatol Venereol. 2022 Feb;36(2):e100-e102. doi: 10.1111/jdv.17760. Epub 2021 Nov 3. PMID: 34661938

[COVID-19 vaccine acceptance over time in patients with immune-mediated inflammatory rheumatic diseases.](#)

Boekel L, Hooijberg F, Besten YR, Vogelzang EH, Steenhuis M, Leeuw M, Atiqi S, van Vollenhoven R, Lems WF, Bos WH, Wijbrandts CA, Gerritsen M, Kriekaert C, Voskuyl AE, van der Horst-Bruinsma IE, Tas SW, Boers M, Rispens T, Nurmohamed MT, Wolbink G. Lancet Rheumatol. 2022 Feb 8. doi: 10.1016/S2665-9913(22)00009-1. Online ahead of print. PMID: 35156061

[BNT162b2 Covid-19 Vaccine in Children 5 to 11 Years of Age. Reply.](#)



Walter EB, Talaat KR, Gurtman A. N Engl J Med. 2022 Feb 10;386(6):606. doi: 10.1056/NEJMc2118775. Epub 2022 Jan 19. PMID: 35045225

[Reduced COVID-19 Vaccine Response in Patients Treated with Biologic Therapies for Asthma.](#)

Runnstrom MC, Morrison-Porter A, Ravindran M, Quehl H, Ramonell RP, Woodruff M, Patel R, Kim C, Haddad NS, Lee FE. Am J Respir Crit Care Med. 2022 Feb 18. doi: 10.1164/rccm.202111-2496LE. Online ahead of print. PMID: 35180044

[COVID-19 vaccine-induced T-cell responses in patients with rheumatoid arthritis: preferential induction by ChAdOx1.](#)

Saleem B, Ross RL, Duquenne L, Hughes P, Emery P. Lancet Rheumatol. 2022 Mar;4(3):e171-e172. doi: 10.1016/S2665-9913(22)00027-3. Epub 2022 Feb 3. PMID: 35136863

[Guillain-Barre syndrome following the first dose of Pfizer-BioNTech COVID-19 vaccine: case report and review of reported cases.](#)

Bouattour N, Hdiji O, Sakka S, Fakhfakh E, Moalla K, Daoud S, Farhat N, Damak M, Mhiri C. Neurol Sci. 2022 Feb;43(2):755-761. doi: 10.1007/s10072-021-05733-x. Epub 2021 Nov 18. PMID: 34796417

[mRNA COVID-19 vaccine effectiveness against SARS-CoV-2 infection in a prospective community cohort, rural Wisconsin, November 2020 to December 2021.](#)

McLean HQ, McClure DL, King JP, Meece JK, Pattinson D, Neumann G, Kawaoka Y, Rolfes MA, Belongia EA. Influenza Other Respir Viruses. 2022 Feb 18. doi: 10.1111/irv.12970. Online ahead of print. PMID: 35178857

[Widespread Misinformation About Infertility Continues to Create COVID-19 Vaccine Hesitancy.](#)

Abbasi J. JAMA. 2022 Feb 22. doi: 10.1001/jama.2022.2404. Online ahead of print. PMID: 35191947

[Acceptance of SARS-CoV-2 vaccination among cancer patients in Portugal: attitudes and associated factors.](#)

de Sousa MJ, Caramujo C, Júlio N, Magalhães JC, Basto R, Fraga T, Gomes IF, Monteiro AR, Pazos I, Sousa G. Support Care Cancer. 2022 Feb 4:1-6. doi: 10.1007/s00520-022-06886-x. Online ahead of print. PMID: 35119521

[Covid-19: Vaccine programme a success, but staff burnout is a major risk, auditors warn.](#)

Iacobucci G. BMJ. 2022 Feb 25;376:o493. doi: 10.1136/bmj.o493. PMID: 35217594

[Conflicting attitudes: Analyzing social media data to understand the early discourse on COVID-19 passports.](#)

Khan ML, Malik A, Ruhi U, Al-Busaidi A. Technol Soc. 2022 Feb;68:101830. doi: 10.1016/j.techsoc.2021.101830. Epub 2021 Dec 8. PMID: 34898757

[Reported cases of multisystem inflammatory syndrome in children aged 12-20 years in the USA who received a COVID-19 vaccine, December, 2020, through August, 2021: a surveillance investigation.](#)

Yousaf AR, Cortese MM, Taylor AW, Broder KR, Oster ME, Wong JM, Guh AY, McCormick DW, Kamidani S, Schlaudecker EP, Edwards KM, Creech CB, Staat MA, Belay ED, Marquez P, Su JR, Salzman MB, Thompson D, Campbell AP; MIS-C Investigation Authorship Group. Lancet Child Adolesc Health. 2022

Feb 22:S2352-4642(22)00028-1. doi: 10.1016/S2352-4642(22)00028-1. Online ahead of print. PMID: 35216660

[A pandemic is no private matter: the COVID-19 vaccine mandate in Austria.](#)

Druml C, Czech H. Lancet Respir Med. 2022 Feb 17:S2213-2600(22)00063-7. doi: 10.1016/S2213-2600(22)00063-7. Online ahead of print. PMID: 35183271

[Early COVID-19 Vaccine Hesitancy Characteristics in Mothers Following Bariatric Surgery: Correspondence - a Response.](#)

Strong H, Reiter-Purtill J, Zeller MH. Obes Surg. 2022 Feb 15:1-2. doi: 10.1007/s11695-022-05962-9. Online ahead of print. PMID: 35169952

[Humoral Response to Pfizer BNT162b2 Vaccine Booster in Maintenance Hemodialysis Patients.](#)

Shashar M, Nacasch N, Grupper A, Benchetrit S, Halperin T, Erez D, Rozenberg I, Shitrit P, Sela Y, Wand O, Cohen-Hagai K. Am J Nephrol. 2022 Feb 16:1-8. doi: 10.1159/000521676. Online ahead of print. PMID: 35172312

[Modeling comparative cost-effectiveness of SARS-CoV-2 vaccine dose fractionation in India.](#)

Du Z, Wang L, Pandey A, Lim WW, Chinazzi M, Piontti APY, Lau EHY, Wu P, Malani A, Cobey S, Cowling BJ. Nat Med. 2022 Feb 24. doi: 10.1038/s41591-022-01736-z. Online ahead of print. PMID: 35210596

[An epidemiology-based model for the operational allocation of COVID-19 vaccines: A case study of Thailand.](#)

Jarumaneeroj P, Dusadeerungsikul PO, Chotivanich T, Nopsopon T, Pongpirul K. Comput Ind Eng. 2022 May;167:108031. doi: 10.1016/j.cie.2022.108031. Epub 2022 Feb 24. PMID: 35228772

[Sequential Delivery of Live Attenuated Influenza Vaccine and Severe Acute Respiratory Syndrome Coronavirus 2 \(SARS-CoV-2\) in the Ferret Model Can Reduce SARS-CoV-2 Shedding and Does Not Result in Enhanced Lung Pathology.](#)

Ryan KA, Schewe KE, Crowe J, Fotheringham SA, Hall Y, Humphreys R, Marriott AC, Paterson J, Rayner E, Salguero FJ, Watson RJ, Whittaker CJ, Carroll MW, Dibben O. J Infect Dis. 2022 Feb 1;225(3):404-412. doi: 10.1093/infdis/jiab594. PMID: 34893851

[Why Physical Activity Should Be Considered in Clinical Trials for COVID-19 Vaccines: A Focus on Risk Groups.](#)

Bortolini MJS, Petriz B, Mineo JR, Resende RO. Int J Environ Res Public Health. 2022 Feb 7;19(3):1853. doi: 10.3390/ijerph19031853. PMID: 35162875

[Serologic response following SARS-COV2 vaccination in patients with cancer: a systematic review and meta-analysis.](#)

Sakuraba A, Luna A, Micic D. J Hematol Oncol. 2022 Feb 5;15(1):15. doi: 10.1186/s13045-022-01233-3. PMID: 35123511

[Willingness to receive a booster dose of inactivated coronavirus disease 2019 vaccine in Taizhou, China.](#)

Tung TH, Lin XQ, Chen Y, Zhang MX, Zhu JS. Expert Rev Vaccines. 2022 Feb;21(2):261-267. doi: 10.1080/14760584.2022.2016401. Epub 2021 Dec 22. PMID: 34894991

[Exploring the Role of Trust in Scientists to Explain Health-Related Behaviors in Response to the COVID-19 Pandemic.](#)

Muğaloğlu EZ, Kaymaz Z, Mısır ME, Laçın-Şimşek C. *Sci Educ (Dordr)*. 2022 Feb 5:1-29. doi: 10.1007/s11191-022-00323-5. Online ahead of print. PMID: 35153383

[De novo or recurrent glomerulonephritis and acute tubulointerstitial nephritis after COVID-19 vaccination: A report of six cases from a single center.](#)

Schaubsluger T, Rajora N, Diep S, Kirtek T, Cai Q, Hendricks AR, Shastri S, Zhou XJ, Saxena R. *Clin Nephrol*. 2022 Feb 10. doi: 10.5414/CN110794. Online ahead of print. PMID: 35142282

[Immune response to one dose of BNT162b2 mRNA Covid-19 vaccine followed by SARS-CoV-2 infection: An Italian prospective observational study.](#)

Stefanizzi P, Larocca AMV, Martinelli A, Soldano S, Dell'Aera M, Migliore G, Germinario CA, Vimercati L, Tafuri S, Bianchi FP. *Vaccine*. 2022 Feb 16:S0264-410X(22)00124-4. doi: 10.1016/j.vaccine.2022.02.002. Online ahead of print. PMID: 35190212

[Pityriasis rosea like eruption: A dermatological manifestation of Coronavac-COVID-19 vaccine.](#)

Gökçek GE, Öksüm Solak E, Çölgeçen E. *Dermatol Ther*. 2022 Feb;35(2):e15256. doi: 10.1111/dth.15256. Epub 2021 Dec 26. PMID: 34881483

[Evaluation of Immunogenicity by Pseudovirus Neutralization Assays for SARS-CoV-2 Variants after Primary and Booster Immunization.](#)

Xie H, Wen X, Li J, Chen W, Chen M, Zhang L, Lv M, Zhou S, Bai S, Zhao W, Wang J, Wu J. *Int J Infect Dis*. 2022 Feb 2;117:97-102. doi: 10.1016/j.ijid.2022.01.068. Online ahead of print. PMID: 35123028

[How the Supreme Court's COVID-19 Vaccine Mandate Rulings Could Shape the Pandemic's Next Phase.](#)

Abbasi J, Rubin R, Suran M. *JAMA*. 2022 Feb 22;327(8):706-708. doi: 10.1001/jama.2022.0791. PMID: 35061013

[Heterologous vs. homologous triple anti-COVID-19 vaccine regimens in patients on maintenance hemodialysis.](#)

Meijers B, Goedgezelschap A, Peeters D, Van Der Veen A, Verbinnen M, Vermeersch P, Stas K, Kuypers D. *Nephrol Dial Transplant*. 2022 Feb 9:gfac033. doi: 10.1093/ndt/gfac033. Online ahead of print. PMID: 35138374

[Response to "Pityriasis rubra pilaris-like eruption following mRNA COVID-19 vaccine".](#)

Mungmunpantipantip R, Wiwanitkit V. *Clin Exp Dermatol*. 2022 Feb 20. doi: 10.1111/ced.15150. Online ahead of print. PMID: 35187721

[Recurrent Kounis Syndrome - a life-threatening event after COVID-19 vaccine administration.](#)

Fialho I, Mateus C, Martins-Dos-Santos G, Pita J, Cabanelas N, Batista SB, Roque D. *J Cardiol Cases*. 2022 Feb 7. doi: 10.1016/j.jccase.2022.01.014. Online ahead of print. PMID: 35154518

[\[A case of cerebral venous sinus thrombosis following the vaccination with Tozinameran\].](#)

Iwakami T, Yamada S, Ogasawara Y, Son J. *Rinsho Shinkeigaku*. 2022 Feb 25. doi: 10.5692/clinicalneuro.2022.01.014. Online ahead of print. PMID: 35228459

[Refractory vaccine-induced immune thrombotic thrombocytopenia \(VITT\) managed with delayed therapeutic plasma exchange \(TPE\).](#)

Major A, Carll T, Chan CW, Christenson C, Aldarweesh F, Wool GD, Cohen KS. J Clin Apher. 2022 Feb;37(1):117-121. doi: 10.1002/jca.21945. Epub 2021 Oct 21. PMID: 34672380

[Jab my arm, not my morality: Perceived moral reproach as a barrier to COVID-19 vaccine uptake.](#)

Rosenfeld DL, Tomiyama AJ. Soc Sci Med. 2022 Feb;294:114699. doi: 10.1016/j.socscimed.2022.114699. Epub 2022 Jan 6. PMID: 35030400

[Leukocytoclastic vasculitis \(cutaneous small-vessel vasculitis\) after COVID-19 vaccination.](#)

Fiorillo G, Pancetti S, Cortese A, Toso F, Manara S, Costanzo A, Borroni RG. J Autoimmun. 2022 Feb;127:102783. doi: 10.1016/j.jaut.2021.102783. Epub 2021 Dec 28. PMID: 34973526

[Multiple Evanescent White Dot Syndrome following COVID-19 mRNA Vaccination in Two Patients.](#)

Smith E, Tran T, Gillies A, Yeung S, Ma PE. Ocul Immunol Inflamm. 2022 Feb 24:1-4. doi: 10.1080/09273948.2022.2032198. Online ahead of print. PMID: 35201960

[Approaches to Healthcare Personnel Exemption Requests from COVID Vaccination: Results of a National Survey.](#)

Talbot TR, Beekmann SE, Babcock HM, Polgreen PM. Infect Control Hosp Epidemiol. 2022 Feb 22:1-22. doi: 10.1017/ice.2022.47. Online ahead of print. PMID: 35190002

[Aseptic Meningitis, Mucocutaneous Lesions and Arthritis after COVID-19 Vaccination in a 15-Year-Old Boy.](#)

Bogs T, Saleh N, Yavuz ST, Fazeli W, Ganschow R, Schreiner F. Vaccines (Basel). 2022 Feb 18;10(2):325. doi: 10.3390/vaccines10020325. PMID: 35214783

[Comment on 'Vitiligo in a COVID-19-vaccinated patient with ulcerative colitis: coincidence?': Type I interferons as possible link between COVID-19 vaccine and vitiligo.](#)

Abdullah L, Awada B, Kurban M, Abbas O. Clin Exp Dermatol. 2022 Feb;47(2):436-437. doi: 10.1111/ced.14932. Epub 2021 Oct 5. PMID: 34498300

[Pure sensitive chronic inflammatory axonal polyneuropathy following Pfizer COVID-19 vaccine.](#)

Luca A, Squillaci R, Terravecchia C, Contrafatto F, Reggio E, Nicoletti A, Zappia M. Neurol Sci. 2022 Feb;43(2):1431-1433. doi: 10.1007/s10072-021-05696-z. Epub 2021 Nov 4. PMID: 34734345

[A case report: Clozapine-induced leukopenia and neutropenia after mRNA COVID-19 vaccination.](#)

Imai T, Ochiai S, Ishimaru T, Daitoku H, Miyagawa Y, Fukuhara R, Boku S, Takebayashi M. Neuropsychopharmacol Rep. 2022 Feb 15. doi: 10.1002/npr2.12238. Online ahead of print. PMID: 35166466

[Metabolic Activity Assessment by 18F-Fluorodeoxyglucose Positron Emission Tomography in Patients after COVID-19 Vaccination.](#)

Shalata W, Levin D, Fridman J, Makarov V, Iraqi M, Golosky M, Rouvinov K, Kian W, Yakobson A. Curr Oncol. 2022 Feb 10;29(2):989-1000. doi: 10.3390/currenol29020084. PMID: 35200583

[Bone Marrow Suppression Secondary to the COVID-19 Booster Vaccine: A Case Report.](#)

Shastri T, Randhawa N, Aly R, Ghouse M. J Blood Med. 2022 Feb 18;13:69-74. doi: 10.2147/JBM.S350290. eCollection 2022. PMID: 35210894

[COVID-19 Vaccine in Patients with Dermal Hyaluronic Acid Fillers in the Tear Trough: A Retrospective Study.](#)

Azzam SH, Hamed M, Mukari A. J Cosmet Dermatol. 2022 Feb 24. doi: 10.1111/jocd.14875. Online ahead of print. PMID: 35202509

[Neurological Conditions Following COVID-19 Vaccinations: Chance or Association?](#)

Fernandes J, Jaggernauth S, Ramnarine V, Mohammed SR, Khan C, Panday A. Cureus. 2022 Feb 4;14(2):e21919. doi: 10.7759/cureus.21919. eCollection 2022 Feb. PMID: 35155043

[The Application of Polycaprolactone Scaffolds with Poly\(ε-caprolactone\)-Poly\(ethylene glycol\)-Poly\(ε-caprolactone\) Loaded on Kidney Cell Culture.](#)

Sun J, Liu X, Chen Z, Jiang L, Yuan M, Yuan M. Materials (Basel). 2022 Feb 20;15(4):1591. doi: 10.3390/ma15041591. PMID: 35208131

[Acute Vulvar Aphthous Ulceration After COVID-19 Vaccination: 3 Cases.](#)

Wijaya M, Zhao C, Forward E, Nguyen Y, Kherlopian A, Jollow D, Trujillo DC, Fischer G. J Low Genit Tract Dis. 2022 Feb 24. doi: 10.1097/LGT.0000000000000657. Online ahead of print. PMID: 35220345

[Using the Health Belief Model to examine travelers' willingness to vaccinate and support for vaccination requirements prior to travel.](#)

Suess C, Maddock J, Dogru T, Mody M, Lee S. Tour Manag. 2022 Feb;88:104405. doi: 10.1016/j.tourman.2021.104405. Epub 2021 Aug 22. PMID: 34456412

[Immune-Mediated Thrombotic Thrombocytopenic Purpura after BNT162b2 Vaccine.](#)

Güney T, Can F, Akıncı S, Soyer Kösemehmetoğlu Ö, Dilek İ. Turk J Haematol. 2022 Feb 23;39(1):74-75. doi: 10.4274/tjh.galenos.2021.2021.0537. Epub 2021 Dec 10. PMID: 34886748

[Qualitative assessment of anti-SARS-CoV-2 spike protein immunogenicity \(QUASI\) after COVID-19 vaccination in older people living with HIV.](#)

Tuan JJ, Zapata H, Critch-Gilfillan T, Ryall L, Turcotte B, Mutic S, Andrews L, Roh ME, Friedland G, Barakat L, Ogbuagu O. HIV Med. 2022 Feb;23(2):178-185. doi: 10.1111/hiv.13188. Epub 2021 Oct 10. PMID: 34632695

[Reply to "Letter to the editor: Acute hypersensitivity myocardial infarction \(Kounis syndrome\) and hypersensitivity myocarditis following COVID-19 vaccine vaccination".](#)

Audrey ZA, Chew NWS. QJM. 2022 Feb 2;hcac022. doi: 10.1093/qjmed/hcac022. Online ahead of print. PMID: 35134209

[Humoral response to mRNA-based COVID-19 vaccine in patients with myeloid malignancies.](#)

Mori A, Onozawa M, Tsukamoto S, Ishio T, Yokoyama E, Izumiyama K, Saito M, Muraki H, Morioka M, Teshima T, Kondo T. Br J Haematol. 2022 Feb 28. doi: 10.1111/bjh.18138. Online ahead of print. PMID: 35226358

[Herpes Zoster Ophthalmicus After COVID-19 Vaccination: Chance Occurrence or More?](#)

Rehman O, Arya SK, Jha UP, Nayyar S, Goel I. Cornea. 2022 Feb 1;41(2):254-256. doi: 10.1097/ICO.0000000000002881. PMID: 34690265

[Cervical longitudinally extensive myelitis after vaccination with inactivated virus-based COVID-19 vaccine.](#)

Sepahvand M, Yazdi N, Rohani M, Emamikhah M. Radiol Case Rep. 2022 Feb;17(2):303-305. doi: 10.1016/j.radcr.2021.10.053. Epub 2021 Nov 25. PMID: 34849183

[Clinical, histopathological, and dermatoscopic characterization of eruptive pseudoangioma developing after COVID-19 vaccination-A case-series.](#)

Mohta A, Sharma MK, Ghiya BC, Mehta RD. J Cosmet Dermatol. 2022 Feb 20. doi: 10.1111/jocd.14870. Online ahead of print. PMID: 35184375

[Comparative Analysis of Mortality From Coronavirus Disease 2019 Across the European Union Countries and the Effects of Vaccine Coverage.](#)

Ziakas PD, Kourbeti IS, Mylonakis E. Open Forum Infect Dis. 2022 Feb 5;9(3):ofac006. doi: 10.1093/ofid/ofac006. eCollection 2022 Mar. PMID: 35146048

[Severe flare of pemphigus vulgaris after first dose of COVID-19 vaccine.](#)

Ong SK, Darji K, Chaudhry SB. JAAD Case Rep. 2022 Feb 10. doi: 10.1016/j.jdcr.2022.01.027. Online ahead of print. PMID: 35169602 Free PMC article.

[Broad anti-SARS-CoV-2 antibody immunity induced by heterologous ChAdOx1/mRNA-1273 vaccination.](#)

Kaku CI, Champney ER, Normark J, Garcia M, Johnson CE, Ahlm C, Christ W, Sakharkar M, Ackerman ME, Klingström J, Forsell MNE, Walker LM. Science. 2022 Feb 10:eabn2688. doi: 10.1126/science.abn2688. Online ahead of print. PMID: 35143256

[Are COVID-19 vaccines safe for people with epilepsy? A cross-sectional study.](#)

Özdemir HN, Dere B, Gökçay F, Gökçay A. Neurol Sci. 2022 Feb 27. doi: 10.1007/s10072-022-05956-6. Online ahead of print. PMID: 35224704

[COVAX delivers its 1 billionth COVID-19 vaccine dose.](#)

[No authors listed] Saudi Med J. 2022 Feb;43(2):223. PMID: 35110353

[Cutting Edge: Serum but Not Mucosal Antibody Responses Are Associated with Pre-Existing SARS-CoV-2 Spike Cross-Reactive CD4<sup>+</sup> T Cells following BNT162b2 Vaccination in the Elderly.](#)

Meyer-Arndt L, Schwarz T, Loyal L, Henze L, Kruse B, Dingeldey M, Gürçan K, Uyar-Aydin Z, Müller MA, Drosten C, Paul F, Sander LE, Demuth I, Lauster R, Giesecke-Thiel C, Braun J, Corman VM, Thiel A. J Immunol. 2022 Mar 1;208(5):1001-1005. doi: 10.4049/jimmunol.2100990. Epub 2022 Feb 4. PMID: 35121642

[Response to 'A skin reaction with rust-like discolouration to mRNA COVID-19 vaccine'.](#)

Kouki C, Sellami K, Bahloul E, Amouri M, Masmoudi A, Turki H. J Eur Acad Dermatol Venereol. 2022 Feb;36(2):e97-e98. doi: 10.1111/jdv.17751. Epub 2021 Oct 29. PMID: 34657348

[IgA nephropathy presenting as rapidly progressive glomerulonephritis following first dose of COVID-19 vaccine.](#)

Niel O, Florescu C. *Pediatr Nephrol.* 2022 Feb;37(2):461-462. doi: 10.1007/s00467-021-05351-x. Epub 2021 Nov 16. PMID: 34786589

[Generalized erythema multiforme-like skin rash following the first dose of COVID-19 vaccine \(Pfizer-BioNTech\).](#)

Kim MJ, Kim JW, Kim MS, Choi SY, Na JI. *J Eur Acad Dermatol Venereol.* 2022 Feb;36(2):e98-e100. doi: 10.1111/jdv.17757. Epub 2021 Nov 3. PMID: 34661942

[Serial histopathologic assessment of fulminant myocarditis after the first mRNA COVID-19 vaccine dose.](#)

Koiwaya H, Nishihira K, Tomozoe K, Shibata Y. *Eur Heart J.* 2022 Feb 18;ehac083. doi: 10.1093/eurheartj/ehac083. Online ahead of print. PMID: 35178573

[Thrombosis and Thrombocytopenia Syndrome Causing Isolated Symptomatic Carotid Occlusion after Covid-19 Vaccine.](#)

Rodríguez-Pardo J, Gilo-Arrojo F, Ruiz-Ares G, Sánchez-Manso JC, Valiente-Gordillo E, de Celis E, Fuentes B, Ximénez-Carrillo Á, Alonso de Leciana M, Rigual R, Vivancos-Mora J, Díez-Tejedor E. *Thromb Haemost.* 2022 Feb;122(2):300-303. doi: 10.1055/a-1674-0341. Epub 2021 Oct 20. PMID: 34670287

[Multiple cranial nerve palsies following COVID-19 vaccination-Case report.](#)

Manea MM, Dragoş D, Enache I, Sirbu AG, Tuta S. *Acta Neurol Scand.* 2022 Feb;145(2):257-259. doi: 10.1111/ane.13548. Epub 2021 Nov 2. PMID: 34725821

[Self-Adjuvanting Lipoprotein Conjugate  \$\alpha\$ GalCer-RBD Induces Potent Immunity against SARS-CoV-2 and its Variants of Concern.](#)

Wang J, Wen Y, Zhou SH, Zhang HW, Peng XQ, Zhang RY, Yin XG, Qiu H, Gong R, Yang GF, Guo J. *J Med Chem.* 2022 Feb 10;65(3):2558-2570. doi: 10.1021/acs.jmedchem.1c02000. Epub 2022 Jan 24. PMID: 35073081

[Rationing of a scarce life-saving resource: Public preferences for prioritizing COVID-19 vaccination.](#)

Luyten J, Tubeuf S, Kessels R. *Health Econ.* 2022 Feb;31(2):342-362. doi: 10.1002/hec.4450. Epub 2021 Nov 17. PMID: 34787925

[Case Series: Acute Hemorrhagic Encephalomyelitis After SARS-CoV-2 Vaccination.](#)

Ancau M, Liesche-Starnecker F, Niederschweiberer J, Krieg SM, Zimmer C, Lingg C, Kumpfmüller D, Ikenberg B, Ploner M, Hemmer B, Wunderlich S, Mühlau M, Knier B. *Front Neurol.* 2022 Feb 2;12:820049. doi: 10.3389/fneur.2021.820049. eCollection 2021. PMID: 35185757

[EVALUATION OF ANTIBODY RESPONSE AFTER TWO DOSES OF THE SINOVAQ VACCINE AND THE POTENTIAL NEED FOR BOOSTER DOSES IN CANCER PATIENTS.](#)

Ata S, Cil T, Duman BB, Unal N. *J Med Virol.* 2022 Feb 18. doi: 10.1002/jmv.27665. Online ahead of print. PMID: 35181932

[COVID-19 vaccine-induced Radiation Recall Dermatitis: Report of a case.](#)

Sepaskhah M, Ansari Asl F, Taheri M, Akbarzadeh Jahromi M. *Clin Case Rep.* 2022 Feb 23;10(2):e05490. doi: 10.1002/ccr3.5490. eCollection 2022 Feb. PMID: 35228886

[Acute-onset Vogt-Koyanagi-Harada like uveitis following Covid-19 inactivated virus vaccination.](#)

Chen X, Wang B, Li X. Am J Ophthalmol Case Rep. 2022 Jun;26:101404. doi: 10.1016/j.ajoc.2022.101404. Epub 2022 Feb 9. PMID: 35165663

[Status migrainosus: a potential adverse reaction to Comirnaty \(BNT162b2, BioNtech/Pfizer\) COVID-19 vaccine-a case report.](#)

Consoli S, Dono F, Evangelista G, D'Apolito M, Travaglini D, Onofri M, Bonanni L. Neurol Sci. 2022 Feb;43(2):767-770. doi: 10.1007/s10072-021-05741-x. Epub 2021 Nov 22. PMID: 34807361

[Extensive Cerebral Venous Sinus Thrombosis \(CVST\) After the First Dose of Pfizer-BioNTech BNT162b2 mRNA COVID-19 Vaccine without Thrombotic Thrombocytopenia Syndrome \(TTS\) in a Healthy Woman.](#)

Alhashim A, Hadhiah K, Al Khalifah Z, Alhaddad FM, Al ARhain SA, Bin Saif FH, Abid A, Al Gamdi O, Alsulaiman F, AlQarni M. Am J Case Rep. 2022 Feb 9;23:e934744. doi: 10.12659/AJCR.934744. PMID: 35136010

[Risk reduction of severe outcomes in vaccinated COVID-19 cases: an analysis of surveillance data from Estonia, Ireland, Luxembourg and Slovakia, January to November 2021.](#)

Marrone G, Nicolay N, Bundle N, Karki T, Spiteri G, Suija H, Kärblane KG, Mossong J, Vergison A, Avdicova M, Mecochova A, Cullen G, O'Lorcain P, Celentano LP, Derrough T, Beauté J. Euro Surveill. 2022 Feb;27(7). doi: 10.2807/1560-7917.ES.2022.27.7.2200060. PMID: 35177166

[A public health perspective on the responsibility of mass media for the outcome of the anti-COVID-19 vaccination campaign: the AstraZeneca case.](#)

Bianchi FP, Tafuri S. Ann Ig. 2022 Feb 3. doi: 10.7416/ai.2022.2499. Online ahead of print. PMID: 35107123

[Immune mediated events timely associated with COVID-19 vaccine. A comment on article by Badier, et al.: "IgA vasculitis in adult patients following vaccination by ChadOx1 nCoV-19".](#)

Hočevár A, Tomšič M. Autoimmun Rev. 2022 Feb;21(2):102989. doi: 10.1016/j.autrev.2021.102989. Epub 2021 Nov 2. PMID: 34740853

[Calibrated comparison of SARS-CoV-2 neutralizing antibody levels in response to protein-, mRNA-, and vector-based COVID-19 vaccines.](#)

Karbiener M, Farcet MR, Zollner A, Masuda T, Mori M, Moschen AR, Kreil TR. NPJ Vaccines. 2022 Feb 18;7(1):22. doi: 10.1038/s41541-022-00455-3. PMID: 35181655

[Strategies to tackle SARS-CoV-2 Mu, a newly classified variant of interest likely to resist currently available COVID-19 vaccines.](#)

Hossain MJ, Rabaan AA, Mutair AA, Alhumaid S, Emran TB, Saikumar G, Mitra S, Dhama K. Hum Vaccin Immunother. 2022 Feb 16:1-5. doi: 10.1080/21645515.2022.2027197. Online ahead of print. PMID: 35172687

[Drug reaction with eosinophilia and systemic symptoms syndrome following vaccination with the AstraZeneca COVID-19 vaccine.](#)

O'Connor T, O'Callaghan-Maher M, Ryan P, Gibson G. JAAD Case Rep. 2022 Feb;20:14-16. doi: 10.1016/j.jdc.2021.11.028. Epub 2021 Dec 16. PMID: 34931172



[Misinterpretation of glioblastoma as ADEM: potentially harmful consequences of over-diagnosis of COVID-19 vaccine-associated adverse events.](#)

O Sullivan C, Zach F, Moser T, Pilz G, Harrer A, Trinka E, Enzinger C, Pfaff JAR, Wipfler P. J Neurol. 2022 Feb;269(2):616-618. doi: 10.1007/s00415-021-10707-2. Epub 2021 Jul 24. PMID: 34304294

[Bilateral Panuveitis with Occlusive Vasculitis following Coronavirus Disease 2019 Vaccination.](#)

Hébert M, Couture S, Schmit I. Ocul Immunol Inflamm. 2022 Feb 28:1-5. doi: 10.1080/09273948.2022.2042325. Online ahead of print. PMID: 35226580

[Case Reports of Acute Transverse Myelitis Associated With mRNA Vaccine for COVID-19.](#)

Eom H, Kim SW, Kim M, Kim YE, Kim JH, Shin HY, Lee HL. J Korean Med Sci. 2022 Feb 21;37(7):e52. doi: 10.3346/jkms.2022.37.e52. PMID: 35191229

[Elicitation of potent SARS-CoV-2 neutralizing antibody responses through immunization with a versatile adenovirus-inspired multimerization platform.](#)

Chevillard C, Amen A, Besson S, Hannani D, Bally I, Dettling V, Gout E, Moreau CJ, Buisson M, Gallet S, Fenel D, Vassal-Stermann E, Schoehn G, Poignard P, Dagher MC, Fender P. Mol Ther. 2022 Feb 10:S1525-0016(22)00094-6. doi: 10.1016/j.ymthe.2022.02.011. Online ahead of print. PMID: 35151843

[The human ACE-2 receptor binding domain of SARS-CoV-2 express on the viral surface of the Newcastle disease virus as a non-replicating viral vector vaccine candidate.](#)

Jung BK, An YH, Jang JJ, Jeon JH, Jang SH, Jang H. PLoS One. 2022 Feb 8;17(2):e0263684. doi: 10.1371/journal.pone.0263684. eCollection 2022. PMID: 35134091

[Posterior Scleritis Following COVID-19 Vaccination: A Case Report.](#)

Younus O, Mulla U. Ocul Immunol Inflamm. 2022 Feb 28:1-3. doi: 10.1080/09273948.2022.2042319. Online ahead of print. PMID: 35226589

[Comparison of Neutralizing Antibody Responses at 6 Months Post Vaccination with BNT162b2 and AZD1222.](#)

Terpos E, Karalis V, Ntanasis-Stathopoulos I, Evangelakou Z, Gavriatopoulou M, Manola MS, Malandrakis P, Gianniou DD, Kastritis E, Trougakos IP, Dimopoulos MA. Biomedicines. 2022 Feb 1;10(2):338. doi: 10.3390/biomedicines10020338. PMID: 35203547

[Transcriptome Analysis of Peripheral Blood Mononuclear Cells in SARS-CoV-2 Naive and Recovered Individuals Vaccinated With Inactivated Vaccine.](#)

Zhang Y, Guo X, Li C, Kou Z, Lin L, Yao M, Pang B, Zhang X, Duan Q, Tian X, Xing Y, Jiang X. Front Cell Infect Microbiol. 2022 Feb 3;11:821828. doi: 10.3389/fcimb.2021.821828. eCollection 2021. PMID: 35186784

[Assessment of the proposed intellectual property waiver as a mechanism to address the COVID-19 vaccine scarcity problem.](#)

Barnes-Weise J, Santos Rutschman A, Adler R. J Epidemiol Community Health. 2022 Feb 9;jech-2021-218409. doi: 10.1136/jech-2021-218409. Online ahead of print. PMID: 35140119

[Images in Vascular Medicine: Leukocytoclastic vasculitis after COVID-19 vaccine booster.](#)

Dicks AB, Gray BH. Vasc Med. 2022 Feb;27(1):100-101. doi: 10.1177/1358863X211055507. Epub 2021 Nov 1. PMID: 34720009

[Assessing the reporting quality of randomized controlled trials on COVID-19 vaccines: a systematic review.](#)

Zhang G, Kuang S, Zhang X. Hum Vaccin Immunother. 2022 Feb 17:1-8. doi: 10.1080/21645515.2022.2031453. Online ahead of print. PMID: 35176960

[A Small Price to Pay: National Narcissism Predicts Readiness to Sacrifice In-Group Members to Defend the In-Group's Image.](#)

Gronfeldt B, Cislak A, Sternisko A, Eker I, Cichocka A. Pers Soc Psychol Bull. 2022 Feb 22:1461672221074790. doi: 10.1177/01461672221074790. Online ahead of print. PMID: 35191734

[Impact of immunosuppressive treatment on the immunogenicity of mRNA COVID-19 vaccine in vulnerable patients with giant cell arteritis.](#)

Delvino P, Bartoletti A, Cassaniti I, Bergami F, Lilleri D, Baldanti F, Bozzalla Cassione E, Biglia A, Montecucco C, Monti S. Rheumatology (Oxford). 2022 Feb 2;61(2):870-872. doi: 10.1093/rheumatology/keab776. PMID: 34664631

[Preliminary evidence that brief exposure to vaccination-related internet memes may influence intentions to vaccinate against COVID-19.](#)

Geniole SN, Bird BM, Witzel A, McEvoy JT, Proietti V. Comput Human Behav. 2022 Jun;131:107218. doi: 10.1016/j.chb.2022.107218. Epub 2022 Feb 1. PMID: 35125639

[Predicaments during a period of health emergency: Waiving of patent protections or innovative public procurement? The example of advance purchase agreements \(APA\) for COVID vaccines.](#)

Garrido Cuenca N. Int J Risk Saf Med. 2022 Feb 9. doi: 10.3233/JRS-227008. Online ahead of print. PMID: 35213327

[Comment on 'De novo generalized pustular psoriasis following Oxford-AstraZeneca COVID-19 vaccine': possible role for Type I interferons.](#)

Awada B, Abdullah L, Kurban M, Abbas O. Clin Exp Dermatol. 2022 Feb;47(2):443. doi: 10.1111/ced.14941. Epub 2021 Oct 5. PMID: 34551138

[Detection of Unilateral Axillary Nodal Uptake Both at 68Ga-DOTATOC and 18F-FDG PET/CT After 1 Week From COVID-19 Vaccine.](#)

Guglielmo P, Muccioli S, Berti S, Sartorello A, Pesella F, Gregianin M. Clin Nucl Med. 2022 Feb 1;47(2):e123-e124. doi: 10.1097/RLU.0000000000003918. PMID: 34524165

[Multisystem Inflammatory Syndrome in Adult after First Dose of mRNA Vaccine.](#)

Miyazato Y, Yamamoto K, Yamada G, Kubota S, Ishikane M, Sugiyama M, Ueno M, Matsunaga A, Miyoshi-Akiyama T, Ishizaka Y, Ohmagari N. Emerg Infect Dis. 2022 Feb 11;28(4). doi: 10.3201/eid2804.212585. Online ahead of print. PMID: 35148495

["Large-vessel vasculitis following the Pfizer-BioNTech COVID-19 vaccine": comment.](#)

Sookaromdee P, Wiwanitkit V. Intern Emerg Med. 2022 Feb 27. doi: 10.1007/s11739-022-02946-6. Online ahead of print. PMID: 35220517

[Sex-associated differences between body mass index and SARS-CoV-2 antibody titers following the BNT162b2 vaccine.](#)

Yamamoto S, Mizoue T, Tanaka A, Oshiro Y, Inamura N, Konishi M, Ozeki M, Miyo K, Sugiura W, Sugiyama H, Ohmagari N. Obesity (Silver Spring). 2022 Feb 28. doi: 10.1002/oby.23417. Online ahead of print. PMID: 35226399

[Cardiogenic shock revealing myocarditis after mRNA vaccination against covid-19: Case report and brief review for the first case in Morocco.](#)

Mimouni H, Bahouh C, Amaqdouf S, Laaribi I, Baddi M, Berichi S, Bkiyar H, Ismaili N, El Ouafi N, Housni B. Ann Med Surg (Lond). 2022 Feb;74:103210. doi: 10.1016/j.amsu.2021.103210. Epub 2021 Dec 30. PMID: 34980975

[Acquired Thrombotic Thrombocytopenic Purpura Following BNT162b2 mRNA Coronavirus Disease Vaccination in a Japanese Patient.](#)

Yoshida K, Sakaki A, Matsuyama Y, Mushino T, Matsumoto M, Sonoki T, Tamura S. Intern Med. 2022 Feb 1;61(3):407-412. doi: 10.2169/internalmedicine.8568-21. Epub 2021 Nov 20. PMID: 34803105

[A case of hemichorea following administration of the Pfizer-BioNTech COVID-19 vaccine.](#)

Ryu DW, Lim EY, Cho AH. Neurol Sci. 2022 Feb;43(2):771-773. doi: 10.1007/s10072-021-05763-5. Epub 2021 Nov 23. PMID: 34811599

[DOTATATE Uptake in an Axillary Lymph Node After COVID-19 Vaccination.](#)

Brophy J, Henkle G, Rohren EM. Clin Nucl Med. 2022 Feb 1;47(2):174-175. doi: 10.1097/RLU.0000000000003847. PMID: 34269723

[Vascular Disease Patient Information Page: Vascular considerations with COVID-19 vaccines.](#)

Solomon AL, Ratchford EV, Armitage KB, Kovacic JC. Vasc Med. 2022 Feb;27(1):102-106. doi: 10.1177/1358863X211066128. Epub 2021 Dec 22. PMID: 34937458

[Anterior Uveitis following COVID Vaccination: A Summary of Cases from Global Reporting Systems.](#)

Nanji AA, Fraunfelder FT. Ocul Immunol Inflamm. 2022 Feb 28;1-3. doi: 10.1080/09273948.2022.2042316. Online ahead of print. PMID: 35226563

[First Identified Case of Fatal Fulminant Eosinophilic Myocarditis Following the Initial Dose of the Pfizer-BioNTech mRNA COVID-19 Vaccine \(BNT162b2, Comirnaty\): an Extremely Rare Idiosyncratic Necrotizing Hypersensitivity Reaction Different to Hypersensitivity or Drug-Induced Myocarditis.](#)

Kounis NG, Koniari I, Mplani V, Plotas P, Tsigkas G. J Clin Immunol. 2022 Feb 17:1-2. doi: 10.1007/s10875-022-01228-2. Online ahead of print. PMID: 35178640

[Potential risk factors for Varicella-zoster virus reactivation after COVID-19 vaccination.](#)

May Lee M, Macchi S, Mora E, Feliciani C. J Cosmet Dermatol. 2022 Feb 20. doi: 10.1111/jocd.14871. Online ahead of print. PMID: 35184368

[Intracerebral hemorrhage due to vasculitis following COVID-19 vaccination: a case report.](#)

Takeyama R, Fukuda K, Kouzaki Y, Koga T, Hayashi S, Ohtani H, Inoue T. Acta Neurochir (Wien). 2022 Feb;164(2):543-547. doi: 10.1007/s00701-021-05038-0. Epub 2021 Nov 16. PMID: 34783899

[Racial and Ethnic Differences in Vaccine Hesitancy among Registered Nurses in New Jersey: A Cross-Sectional Survey.](#)

Grafova I, Pogorzelska-Maziarz M, Johansen ML, Manning ML, Crincoli S, de Cordova PB. Am J Infect Control. 2022 Feb 11;S0196-6553(22)00076-1. doi: 10.1016/j.ajic.2022.02.007. Online ahead of print. PMID: 35158011

[Vocal cord paralysis following first dose of Oxford-AstraZeneca COVID-19 vaccine.](#)

Jama GM, Amin M, Hassaan A, Kaddour H. J Laryngol Otol. 2022 Feb 28;1-11. doi: 10.1017/S0022215122000597. Online ahead of print. PMID: 35225187

[Abrupt onset of Sweet syndrome, pityriasis rubra pilaris, pityriasis lichenoides et varioliformis acuta and erythema multiforme: unravelling a possible common trigger, the COVID-19 vaccine.](#)

Sechi A, Pierobon E, Pezzolo E, Geremi L, Trevisan G, Zardo D, Riva G, Mondino S, Naldi L. Clin Exp Dermatol. 2022 Feb;47(2):437-440. doi: 10.1111/ced.14970. Epub 2021 Oct 21. PMID: 34617317

[First Presentation of Systemic Lupus Erythematosus in a 24-Year-Old Male following mRNA COVID-19 Vaccine.](#)

Raviv Y, Betesh-Abay B, Valdman-Grinshpoun Y, Boehm-Cohen L, Kassirer M, Sagy I. Case Rep Rheumatol. 2022 Feb 1;2022:9698138. doi: 10.1155/2022/9698138. eCollection 2022. PMID: 35154842

[Myocarditis Following a COVID-19 Messenger RNA Vaccination: A Japanese Case Series.](#)

Murakami Y, Shinohara M, Oka Y, Wada R, Noike R, Ohara H, Fujino T, Ikeda T. Intern Med. 2022 Feb 15;61(4):501-505. doi: 10.2169/internalmedicine.8731-21. Epub 2021 Nov 27. PMID: 34840235

[Biopsy-proven Fulminant Myocarditis Requiring Mechanical Circulatory Support Following COVID-19 mRNA Vaccination.](#)

Kazama S, Okumura T, Kimura Y, Ito R, Araki T, Mizutani T, Oishi H, Kuwayama T, Hiraiwa H, Kondo T, Morimoto R, Saeki T, Murohara T. CJC Open. 2022 Feb 13. doi: 10.1016/j.cjco.2022.02.004. Online ahead of print. PMID: 35187464

[First reported case of delayed-type hypersensitivity reaction to non-hyaluronic acid Polycaprolactone dermal filler following COVID-19 vaccination: A case report and a review of the literature.](#)

Kalantari Y, Sadeghzadeh-Bazargan A, Aryanian Z, Hatami P, Goodarzi A. Clin Case Rep. 2022 Feb 6;10(2):e05343. doi: 10.1002/ccr3.5343. eCollection 2022 Feb. PMID: 35145687

[Autochthonous Outbreak of SARS-CoV-2 Omicron Variant in Booster-Vaccinated \(3 Doses\) Healthcare Workers in Southern Italy: Just the Tip of the Iceberg?](#)

Loconsole D, Bisceglia L, Centrone F, Sallustio A, Accogli M, Dalfino L, Brienza N, Chironna M. Vaccines (Basel). 2022 Feb 13;10(2):283. doi: 10.3390/vaccines10020283. PMID: 35214741

[Left Bell's palsy following the first dose of mRNA-1273 SARS-CoV-2 vaccine: A case report.](#)

Cellina M, D'Arrigo A, Floridi C, Oliva G, Carrafiello G. Clin Imaging. 2022 Feb;82:1-4. doi: 10.1016/j.clinimag.2021.10.010. Epub 2021 Nov 4. PMID: 34763263

[Generalized pustular psoriasis flare in a patient affected by plaque psoriasis after BNT162b2 mRNA COVID-19 vaccine, successfully treated with risankizumab.](#)

Pavia G, Gargiulo L, Spinelli F, Avagliano J, Valenti M, Borroni RG, Costanzo A, Narcisi A. J Eur Acad Dermatol Venereol. 2022 Feb 27. doi: 10.1111/jdv.18032. Online ahead of print. PMID: 35224780

[Erythema Nodosum Leprosum Post-COVID-19 Vaccination: Endemic while Pandemic.](#)

Fachler T, Olshtain-Pops K, Horev L. J Eur Acad Dermatol Venereol. 2022 Feb 28. doi: 10.1111/jdv.18035. Online ahead of print. PMID: 35224779

[An Acute Exacerbation of Idiopathic Pulmonary Fibrosis After BNT162b2 mRNA COVID-19 Vaccination: A Case Report.](#)

Ghincea A, Ryu C, Herzog EL. Chest. 2022 Feb;161(2):e71-e73. doi: 10.1016/j.chest.2021.07.2160. PMID: 35131075

[A case of severe autoimmune hemolytic anemia after a receipt of a first dose of SARS-CoV-2 vaccine.](#)

Murdoch TM. Int J Lab Hematol. 2022 Feb;44(1):e10-e12. doi: 10.1111/ijlh.13653. Epub 2021 Jul 31. PMID: 34258873

[Pemphigus vulgaris relapse during the coronavirus disease pandemic.](#)

Saleh MA, Saleh NA. Dermatol Ther. 2022 Feb 2:e15354. doi: 10.1111/dth.15354. Online ahead of print. PMID: 35108427

[Priming with social benefit information of vaccination to increase acceptance of COVID-19 vaccines.](#)

Liao Q, Cowling BJ, Xiao J, Yuan J, Dong M, Ni MY, Fielding R, Lam WWT. Vaccine. 2022 Feb 16;40(8):1074-1081. doi: 10.1016/j.vaccine.2022.01.031. Epub 2022 Jan 20. PMID: 35090777

[Investigating COVID-19 risk perception and preventive behaviours in third-level students in Ireland.](#)

Borges J, Byrne M. Acta Psychol (Amst). 2022 Apr;224:103535. doi: 10.1016/j.actpsy.2022.103535. Epub 2022 Feb 14. PMID: 35176516

[Rapid colloidal gold immunochromatographic assay for the detection of SARS-CoV-2 total antibodies after vaccination.](#)

Ye L, Xu X, Song S, Xu L, Kuang H, Xu C. J Mater Chem B. 2022 Feb 25. doi: 10.1039/d1tb02521j. Online ahead of print. PMID: 35212337

[Relation of fever intensity and antipyretic use with specific antibody response after two doses of the BNT162b2 mRNA vaccine.](#)

Tani N, Chong Y, Kurata Y, Gondo K, Oishi R, Goto T, Minami J, Onozawa K, Nagano S, Shimono N, Ikematsu H, Kuwano H. Vaccine. 2022 Feb 14:S0264-410X(22)00158-X. doi: 10.1016/j.vaccine.2022.02.025. Online ahead of print. PMID: 35177298

[Stakeholders' hopes and concerns about the COVID-19 vaccines in Southeastern Nigeria: a qualitative study.](#)

Chukwuocha UM, Emerole CO, Iwuoha GN, Dozie UW, Njoku PU, Akanazu CO, Eteike PO, Hemingway C. BMC Public Health. 2022 Feb 16;22(1):330. doi: 10.1186/s12889-022-12754-4. PMID: 35172789

[COVID-19 vaccine development based on recombinant viral and bacterial vector systems: combinatorial effect of adaptive and trained immunity.](#)

Lee MH, Kim BJ. J Microbiol. 2022 Feb 14:1-14. doi: 10.1007/s12275-022-1621-2. Online ahead of print. PMID: 35157221

[The dramatic increase in anti-vaccine discourses during the COVID-19 pandemic: a social network analysis of Twitter.](#)

Durmaz N, Hengirmen E. Hum Vaccin Immunother. 2022 Feb 3;1-13. doi: 10.1080/21645515.2021.2025008. Online ahead of print. PMID: 35113767

[Differential Dynamics of SARS-CoV-2 Binding and Functional Antibodies upon BNT162b2 Vaccine: A 6-Month Follow-Up.](#)

Matusali G, Sberna G, Meschi S, Gramigna G, Colavita F, Lapa D, Francalancia M, Bettini A, Capobianchi MR, Puro V, Castilletti C, Vaia F, Bordi L. Viruses. 2022 Feb 2;14(2):312. doi: 10.3390/v14020312. PMID: 35215903

[Immunogenicity of the BNT162b2 mRNA COVID-19 vaccine in patients with primary brain tumors: a prospective cohort study.](#)

Massarweh A, Tschernichovsky R, Stemmer A, Benouaich-Amiel A, Siegal T, Eliakim-Raz N, Stemmer SM, Yust-Katz S. J Neurooncol. 2022 Feb;156(3):483-489. doi: 10.1007/s11060-021-03911-7. Epub 2022 Jan 12. PMID: 35018613

[Breastfeeding Mother and Child Clinical Outcomes After COVID-19 Vaccination.](#)

Low JM, Lee LY, Ng YPM, Zhong Y, Amin Z. J Hum Lact. 2022 Feb;38(1):37-42. doi: 10.1177/08903344211056522. Epub 2021 Oct 29. PMID: 34713745

[Social media study of public opinions on potential COVID-19 vaccines: informing dissent, disparities, and dissemination.](#)

Lyu H, Wang J, Wu W, Duong V, Zhang X, Dye TD, Luo J. Intell Med. 2022 Feb;2(1):1-12. doi: 10.1016/j.imed.2021.08.001. Epub 2021 Aug 25. PMID: 34457371

[Did prioritizing essential workers help to achieve racial/ethnic equity in early COVID-19 vaccine distribution? The LA pandemic surveillance cohort study.](#)

Nicholas W, Sood N, Lam CN, Kotha R, Hu H, Simon P. Am J Ind Med. 2022 Feb 20. doi: 10.1002/ajim.23335. Online ahead of print. PMID: 35187706

[Animated, video entertainment-education to improve vaccine confidence globally during the COVID-19 pandemic: an online randomized controlled experiment with 24,000 participants.](#)

Chen S, Forster S, Yang J, Yu F, Jiao L, Gates J, Wang Z, Liu H, Chen Q, Geldsetzer P, Wu P, Wang C, McMahon S, Bärnighausen T, Adam M. Trials. 2022 Feb 19;23(1):161. doi: 10.1186/s13063-022-06067-5. PMID: 35183238

[Prospective evaluation of COVID-19 vaccine responses across a broad spectrum of immunocompromising conditions: the COVICS study.](#)

Haidar G, Agha M, Bilderback A, Lukanski A, Linstrum K, Troyan R, Rothenberger S, McMahon DK, Crandall MD, Sobolewski MD, Enick PN, Jacobs JL, Collins K, Klamar-Blain C, Macatangay BJC, Parikh UM, Heaps A, Coughenour L, Schwartz MB, Dueker JM, Silveira FP, Keebler ME, Humar A, Luketich JD, Morrell MR, Pilewski JM, McDyer JF, Pappu B, Ferris RL, Marks SM, Mahon J, Mulvey K, Hariharan S, Updike GM, Brock L, Edwards R, Beigi RH, Kip PL, Wells A, Minnier T, Angus DC, Mellors JW. Clin Infect Dis. 2022 Feb 18:ciac103. doi: 10.1093/cid/ciac103. Online ahead of print. PMID: 35179197

[COVID-19 Vaccination Acceptance and Its Associated Factors Among the Iraqi Population: A Cross Sectional Study.](#)

Al-Qerem W, Hammad A, Alsajri AH, Al-Hishma SW, Ling J, Mosleh R. Patient Prefer Adherence. 2022 Feb 5;16:307-319. doi: 10.2147/PPA.S350917. eCollection 2022. PMID: 35153477

[Reporting adverse events of ChAdOx1 nCoV-19 coronavirus vaccine \(Recombinant\) among the vaccinated healthcare professionals: A cross-sectional survey.](#)

Kaur S, Singh A, Saini S, Rohilla L, Kaur J, Chandi A, Kaur G, Singh M, Kumar P, Soni SL, Kajal K, Naik NB, Malhotra P, Verma S, Gupta M, Devnani M, Das K, Pandav SS, Puri GD. Indian J Med Res. 2022 Feb 10. doi: 10.4103/ijmr.ijmr\_1221\_21. Online ahead of print. PMID: 35142644

[Immunogenicity and Safety of the BNT162b2 mRNA COVID-19 Vaccine Among Actively Treated Cancer Patients.](#)

Ligumsky H, Safadi E, Etan T, Vaknin N, Waller M, Croll A, Nikolaevski-Berlin A, Greenberg I, Halperin T, Wasserman A, Galazan L, Arber N, Wolf I. J Natl Cancer Inst. 2022 Feb 7;114(2):203-209. doi: 10.1093/jnci/djab174. PMID: 34453830

[Promoting immunization equity in Latin America and the Caribbean: Case studies, lessons learned, and their implication for COVID-19 vaccine equity.](#)

Chan IL, Mowson R, Alonso JP, Roberti J, Contreras M, Velandia-González M. Vaccine. 2022 Feb 14:S0264-410X(22)00197-9. doi: 10.1016/j.vaccine.2022.02.051. Online ahead of print. PMID: 35221122

[\[Assessment of the humoral immunity induced by sputnik v COVID-19 vaccine \(gam-COVID-vac\) in healthcare workers\].](#)

Cordova E, Lespada MI, Cecchini D, Nieto F, Palonski S, Badran M, Bernasconi S, Bacelar B, Morganti L, Garibaldi F, Bermejo V, Aguirre V, Badia M, Rodriguez CG. Vacunas. 2022 Feb 14. doi: 10.1016/j.vacun.2022.01.008. Online ahead of print. PMID: 35185441

[Humoral immune responses to COVID-19 vaccination in people living with HIV receiving suppressive antiretroviral therapy.](#)

Brumme ZL, Mwimanzi F, Lapointe HR, Cheung PK, Sang Y, Duncan MC, Yaseen F, Agafitei O, Ennis S, Ng K, Basra S, Lim LY, Kalikawe R, Speckmaier S, Moran-Garcia N, Young L, Ali H, Ganase B, Umvilighozo G, Harrison Omondi F, Atkinson K, Sudderuddin H, Toy J, Sereda P, Burns L, Costiniuk CT, Cooper C, Anis AH, Leung V, Holmes D, DeMarco ML, Simons J, Hedgcock M, Romney MG, Barrios R, Guillemi S, Brumme CJ, Pantophlet R, Montaner JSG, Niikura M, Harris M, Hull M, Brockman MA. NPJ Vaccines. 2022 Feb 28;7(1):28. doi: 10.1038/s41541-022-00452-6. PMID: 35228535

[Effectiveness and Durability of COVID-19 Vaccination in 9447 Patients with IBD: A Systematic Review and Meta-Analysis.](#)

Jena A, James D, Singh AK, Dutta U, Sebastian S, Sharma V. Clin Gastroenterol Hepatol. 2022 Feb 18:S1542-3565(22)00186-0. doi: 10.1016/j.cgh.2022.02.030. Online ahead of print. PMID: 35189387

[COVID-19 Vaccine Acceptance and its Predictors among College Students in Addis Ababa, Ethiopia, 2021: A Cross-Sectional Survey.](#)

Sahile AT, Mulugeta B, Hadush S, Fikre EM. Patient Prefer Adherence. 2022 Feb 1;16:255-263. doi: 10.2147/PPA.S348132. eCollection 2022. PMID: 35136350

[Evolution of drug delivery systems: From 1950 to 2020 and beyond.](#)

Park H, Otte A, Park K. J Control Release. 2022 Feb;342:53-65. doi: 10.1016/j.jconrel.2021.12.030. Epub 2021 Dec 29. PMID: 34971694

[Seroconversion After Coronavirus Disease 2019 Vaccination in Patients Awaiting Liver Transplantation: Fact or Fancy?](#)

Calleri A, Saracco M, Pittaluga F, Cavallo R, Romagnoli R, Martini S. Liver Transpl. 2022 Feb;28(2):180-187. doi: 10.1002/lt.26312. Epub 2021 Oct 22. PMID: 34564945

[Characterization of the First SARS-CoV-2 Isolates from Aotearoa New Zealand as Part of a Rapid Response to the COVID-19 Pandemic.](#)

Harfoot R, Lawley B, Hernández LC, Kuang J, Grant J, Treece JM, LeQueux S, Day R, Jack S, Stanton JL, Bostina M, Ussher JE, Quiñones-Mateu ME. Viruses. 2022 Feb 10;14(2):366. doi: 10.3390/v14020366. PMID: 35215963

[Investigation of SARS-CoV-2 Transmission Associated With a Large Indoor Convention - New York City, November-December 2021.](#)

Sami S, Horter L, Valencia D, Thomas I, Pomeroy M, Walker B, Smith-Jeffcoat SE, Tate JE, Kirking HL, Kyaw NTT, Burns R, Blaney K, Dorabawila V, Hoen R, Zirnelt Z, Schardin C, Uehara A, Retchless AC, Brown VR, Gebru Y, Powell C, Bart SM, Vostok J, Lund H, Kaess J, Gumke M, Propper R, Thomas D, Ojo M, Green A, Wieck M, Wilson E, Hollingshead RJ, Nunez SV, Saady DM, Porse CC, Gardner K, Drociuk D, Scott J, Perez T, Collins J, Shaffner J, Pray I, Rust LT, Brady S, Kerins JL, Teran RA, Hughes V, Sepcic V, Low EW, Kemble SK, Berkley A, Cleavinger K, Safi H, Webb LM, Hutton S, Dewart C, Dickerson K, Hawkins E, Zafar J, Krueger A, Bushman D, Ethridge B, Hansen K, Tant J, Reed C, Boutwell C, Hanson J, Gillespie M, Donahue M, Lane P, Serrano R, Hernandez L, Dethloff MA, Lynfield R, Como-Sabetti K, Lutterloh E, Ackelsberg J, Ricaldi JN. MMWR Morb Mortal Wkly Rep. 2022 Feb 18;71(7):243-248. doi: 10.15585/mmwr.mm7107a4. PMID: 35176005

[Association of AZD1222 and BNT162b2 COVID-19 Vaccination With Thromboembolic and Thrombocytopenic Events in Frontline Personnel : A Retrospective Cohort Study.](#)

Hviid A, Hansen JV, Thieson EM, Wohlfahrt J. Ann Intern Med. 2022 Feb 1:M21-2452. doi: 10.7326/M21-2452. Online ahead of print. PMID: 35103482

[Investigation of the incidence of immunisation stress-related response following COVID-19 vaccination in healthcare workers.](#)

Takano T, Hirose M, Yamasaki Y, Hara M, Okada T, Kunishima H. J Infect Chemother. 2022 Feb 9:S1341-321X(22)00041-1. doi: 10.1016/j.jiac.2022.02.002. Online ahead of print. PMID: 35190259

[Impact of COVID-19 Infection Among Heart Transplant Recipients: A Southern Brazilian Experience.](#)

Scolari FL, Hastenteufel LCT, Einsfeld L, Bueno J, Orlandin L, Clausell N, Goldraich LA. Front Med (Lausanne). 2022 Feb 9;9:814952. doi: 10.3389/fmed.2022.814952. eCollection 2022. PMID: 35223912

[SARS-CoV-2 Spike and Neutralizing Antibody Kinetics 90 Days after Three Doses of BNT162b2 mRNA COVID-19 Vaccine in Singapore.](#)

Lau CS, Phua SK, Liang YL, Oh MLH, Aw TC. Vaccines (Basel). 2022 Feb 18;10(2):331. doi: 10.3390/vaccines10020331. PMID: 35214789



[Impact of DHCWs' Safety Perception on Vaccine Acceptance and Adoption of Risk Mitigation Strategies.](#)

Coker MO, Subramanian G, Davidow A, Fredericks-Younger J, Gennaro ML, Fine DH, Feldman CA. JDR Clin Trans Res. 2022 Feb 22;23800844211071111. doi: 10.1177/23800844211071111. Online ahead of print. PMID: 35191352

[Risks of myocarditis, pericarditis, and cardiac arrhythmias associated with COVID-19 vaccination or SARS-CoV-2 infection.](#)

Patone M, Mei XW, Handunnetthi L, Dixon S, Zaccardi F, Shankar-Hari M, Watkinson P, Khunti K, Harnden A, Coupland CAC, Channon KM, Mills NL, Sheikh A, Hippisley-Cox J. Nat Med. 2022 Feb;28(2):410-422. doi: 10.1038/s41591-021-01630-0. Epub 2021 Dec 14. PMID: 34907393

[The association between climate change attitudes and COVID-19 attitudes: The link is more than political ideology\(.,\).](#)

Latkin C, Dayton L, Coyle C, Yi G, Winiker A, German D. J Clim Chang Health. 2022 Feb;5:100099. doi: 10.1016/j.joclim.2021.100099. Epub 2021 Nov 8. PMID: 34778866

[Limited Variation between SARS-CoV-2-Infected Individuals in Domain Specificity and Relative Potency of the Antibody Response against the Spike Glycoprotein.](#)

Van Ert HA, Bohan DW, Rogers K, Fili M, Rojas Chávez RA, Qing E, Han C, Dempewolf S, Hu G, Schwery N, Sevcik K, Ruggio N, Boyt D, Pentella MA, Gallagher T, Jackson JB, Merrill AE, Knudson CM, Brown GD, Maury W, Haim H. Microbiol Spectr. 2022 Feb 23;10(1):e0267621. doi: 10.1128/spectrum.02676-21. Epub 2022 Jan 26. PMID: 35080430

[Low anti-spike antibody levels correlate with poor outcomes in COVID-19 breakthrough hospitalizations.](#)

Sanghavi DK, Bhakta S, Wadei HM, Bosch W, Cowart JB, Carter RE, Shah SZ, Pollock BD, Neville MR, Oman SP, Speicher L, Siegel J, Scindia AD, Libertin CR, Kunze KL, Johnson PW, Matson MW, Franco PM. J Intern Med. 2022 Feb 23. doi: 10.1111/joim.13471. Online ahead of print. PMID: 35194861

[Active Symptom-Based Surveillance of Adverse Events Following Immunization among Individuals Vaccinated with ChAdOx1 nCoV-19 Coronavirus Vaccine in a Tertiary Hospital of Kerala.](#)

Jose M, Rajmohan P, Thomas J, Krishna S, Antony B, U G U, M I E, M P R, Jose P, Raphael L, Kuttichira P. Curr Drug Saf. 2022 Feb 7. doi: 10.2174/1574886317666220207120649. Online ahead of print. PMID: 35135453

[Efficacy of a third BNT162b2 mRNA COVID-19 vaccine dose in patients with CLL who failed standard 2-dose vaccination.](#)

Herishanu Y, Rahav G, Levi S, Braester A, Itchaki G, Bairey O, Dally N, Shvidel L, Ziv-Baran T, Polliack A, Tadmor T, Benjamini O; Israeli CLL Study Group. Blood. 2022 Feb 3;139(5):678-685. doi: 10.1182/blood.2021014085. PMID: 34861036

[Population Immunity and Covid-19 Severity with Omicron Variant in South Africa.](#)

Madhi SA, Kwatra G, Myers JE, Jassat W, Dhar N, Mukendi CK, Nana AJ, Blumberg L, Welch R, Ngorima-Mabhena N, Mutevedzi PC. N Engl J Med. 2022 Feb 23. doi: 10.1056/NEJMoa2119658. Online ahead of print. PMID: 35196424

[COVID-19 Vaccination Dynamics in the US: Coverage Velocity and Carrying Capacity Based on Socio-demographic Vulnerability Indices in California.](#)

Bruckhaus AA, Abedi A, Salehi S, Pickering TA, Zhang Y, Martinez A, Lai M, Garner R, Duncan D. J Immigr Minor Health. 2022 Feb;24(1):18-30. doi: 10.1007/s10903-021-01308-2. Epub 2021 Nov 19. PMID: 34797451

[Whole blood-based measurement of SARS-CoV-2-specific T cells reveals asymptomatic infection and vaccine immunogenicity in healthy subjects and patients with solid-organ cancers.](#)

Scurr MJ, Zelek WM, Lippiatt G, Somerville M, Burnell SEA, Capitani L, Davies K, Lawton H, Tozer T, Rees T, Roberts K, Evans M, Jackson A, Young C, Fairclough L, Tighe P, Wills M, Westwell AD, Morgan BP, Gallimore A, Godkin A. Immunology. 2022 Feb;165(2):250-259. doi: 10.1111/imm.13433. Epub 2021 Dec 6. PMID: 34775604

[COVID-19 vaccination during pregnancy: coverage and safety.](#)

Blakeway H, Prasad S, Kalafat E, Heath PT, Ladhani SN, Le Doare K, Magee LA, O'Brien P, Rezvani A, von Dadelszen P, Khalil A. Am J Obstet Gynecol. 2022 Feb;226(2):236.e1-236.e14. doi: 10.1016/j.ajog.2021.08.007. Epub 2021 Aug 10. PMID: 34389291

[Population immunity to pre-Omicron and Omicron SARS-CoV-2 variants in US states and counties through December 1, 2021.](#)

Klaassen F, Chitwood MH, Cohen T, Pitzer VE, Russi M, Swartwood NA, Salomon JA, Menzies NA. medRxiv. 2022 Feb 11:2021.12.23.21268272. doi: 10.1101/2021.12.23.21268272. Preprint. PMID: 34981078

[Multistate Outbreak of SARS-CoV-2 B.1.1.529 \(Omicron\) Variant Infections Among Persons in a Social Network Attending a Convention - New York City, November 18-December 20, 2021.](#)

Smith-Jeffcoat SE, Pomeroy MA, Sleweon S, Sami S, Ricaldi JN, Gebru Y, Walker B, Brady S, Christenberry M, Bart S, Vostok J, Meyer S, Seys S, Markelz A, Ditto N, Newbern V, Thomas FJ, Thomas D, Cabredo E, Kellner S, Brown VR, Tate JE, Kirking HL. MMWR Morb Mortal Wkly Rep. 2022 Feb 18;71(7):238-242. doi: 10.15585/mmwr.mm7107a3. PMID: 35176004

[Determinants of COVID-19 vaccine uptake and barriers to being vaccinated among first-round eligibles for COVID-19 vaccination in Eastern Ethiopia: A community based cross-sectional study.](#)

Alemayehu A, Yusuf M, Demissie A, Abdullahi Y. SAGE Open Med. 2022 Feb 8;10:20503121221077585. doi: 10.1177/20503121221077585. eCollection 2022. PMID: 35154745

[Effectiveness of COVID-19 Vaccines against Delta Variant \(B.1.617.2\): A Meta-Analysis.](#)

Mahumud RA, Ali MA, Kundu S, Rahman MA, Kamara JK, Renzaho AMN. Vaccines (Basel). 2022 Feb 11;10(2):277. doi: 10.3390/vaccines10020277. PMID: 35214737

[Interferon Beta-1a treatment promotes SARS-CoV-2 mRNA vaccine response in multiple sclerosis subjects.](#)

Maniscalco GT, Manzo V, Ferrara AL, Perrella A, Di Battista M, Salvatore S, Graziano D, Viola A, Amato G, Moreggia O, Di Giulio Cesare D, Barbato S, Servillo G, Longo K, Di Giovanni M, Scarpati B, Muggianu SM, Longo G, Russo G, Andreone V, De Rosa V. Mult Scler Relat Disord. 2022 Feb;58:103455. doi: 10.1016/j.msard.2021.103455. Epub 2021 Dec 18. PMID: 34929455

Pollock KM, Cheeseman HM, Szubert AJ, Libri V, Boffito M, Owen D, Bern H, O'Hara J, McFarlane LR, Lemm NM, McKay PF, Rampling T, Yim YTN, Milinkovic A, Kingsley C, Cole T, Fagerbrink S, Aban M,

Tanaka M, Mehdipour S, Robbins A, Budd W, Faust SN, Hassanin H, Cosgrove CA, Winston A, Fidler S, Dunn DT, McCormack S, Shattock RJ; COVAC1 study Group. *EClinicalMedicine*. 2022 Feb;44:101262. doi: 10.1016/j.eclinm.2021.101262. Epub 2022 Jan 14. PMID: 35043093

[Analysis of COVID-19 Risk Following a Ring Vaccination Intervention to Address SARS-CoV-2 Alpha Variant Transmission in Montreal, Canada.](#)

Périnet S, Cadieux G, Mercure SA, Drouin M, Allard R. *JAMA Netw Open*. 2022 Feb 1;5(2):e2147042. doi: 10.1001/jamanetworkopen.2021.47042. PMID: 35147688

[Clinical Characteristics and Outcomes Among Adults Hospitalized with Laboratory-Confirmed SARS-CoV-2 Infection During Periods of B.1.617.2 \(Delta\) and B.1.1.529 \(Omicron\) Variant Predominance - One Hospital, California, July 15-September 23, 2021, and December 21, 2021-January 27, 2022.](#)

Modes ME, Directo MP, Melgar M, Johnson LR, Yang H, Chaudhary P, Bartolini S, Kho N, Noble PW, Isonaka S, Chen P. *MMWR Morb Mortal Wkly Rep*. 2022 Feb 11;71(6):217-223. doi: 10.15585/mmwr.mm7106e2. PMID: 35143466

[Clinically Suspected Myocarditis Temporally Related to COVID-19 Vaccination in Adolescents and Young Adults: Suspected Myocarditis After COVID-19 Vaccination.](#)

Truong DT, Dionne A, Muniz JC, McHugh KE, Portman MA, Lambert LM, Thacker D, Elias MD, Li JS, Toro-Salazar OH, Anderson BR, Atz AM, Bohun CM, Campbell MJ, Chrisant M, D'Addese L, Dummer KB, Forsha D, Frank LH, Frosch OH, Gelehrter SK, Giglia TM, Hebson C, Jain SS, Johnston P, Krishnan A, Lombardi KC, McCrindle BW, Mitchell EC, Miyata K, Mizzi T, Parker RM, Patel JK, Ronai C, Sabati AA, Schauer J, Sexson Tejtzel SK, Shea JR, Shekerdemian LS, Srivastava S, Votava-Smith JK, White S, Newburger JW. *Circulation*. 2022 Feb;145(5):345-356. doi: 10.1161/CIRCULATIONAHA.121.056583. Epub 2021 Dec 6. PMID: 34865500

[High-titre methylene blue-treated convalescent plasma as an early treatment for outpatients with COVID-19: a randomised, placebo-controlled trial.](#)

Alemany A, Millat-Martinez P, Corbacho-Monné M, Malchair P, Ouchi D, Ruiz-Comellas A, Ramírez-Morros A, Rodríguez Codina J, Amado Simon R, Videla S, Costes G, Capdevila-Jáuregui M, Torrano-Soler P, San José A, Bonet Papell G, Puig J, Otero A, Ruibal Suarez JC, Zarauza Pellejero A, Llopis Roca F, Rodríguez Cortez O, García García V, Vidal-Alaball J, Millan A, Contreras E, Grifols JR, Ancochea À, Galvan-Femenia I, Piccolo Ferreira F, Bonet M, Cantoni J, Prat N, Ara J, Forcada Arcarons A, Farré M, Pradenas E, Blanco J, Àngel Rodríguez-Arias M, Fernández Rivas G, Marks M, Bassat Q, Blanco I, Baro B, Clotet B, Mitjà O; CONV-ERT Group. *Lancet Respir Med*. 2022 Feb 9:S2213-2600(21)00545-2. doi: 10.1016/S2213-2600(21)00545-2. Online ahead of print. PMID: 35150610

[Herpes zoster related hospitalization after inactivated \(CoronaVac\) and mRNA \(BNT162b2\) SARS-CoV-2 vaccination: A self-controlled case series and nested case-control study.](#)

Wan EYF, Chui CSL, Wang Y, Ng VWS, Yan VKC, Lai FTT, Li X, Wong CKH, Chan EWY, Wong CSM, Leung KSM, Ni MY, Valkenburg SA, Peiris JSM, Wu JTK, Cowling BJ, Ashcroft DM, Hung IFN, Leung GM, Wong ICK. *Lancet Reg Health West Pac*. 2022 Apr;21:100393. doi: 10.1016/j.lanwpc.2022.100393. Epub 2022 Feb 2. PMID: 35128500

[Association of COVID-19 Vaccination With Symptomatic SARS-CoV-2 Infection by Time Since Vaccination and Delta Variant Predominance.](#)

Britton A, Fleming-Dutra KE, Shang N, Smith ZR, Dorji T, Derado G, Accorsi EK, Ajani UA, Miller J, Schrag SJ, Verani JR. JAMA. 2022 Feb 14:e222068. doi: 10.1001/jama.2022.2068. Online ahead of print. PMID: 35157002

[Heterologous versus homologous COVID-19 booster vaccination in previous recipients of two doses of CoronaVac COVID-19 vaccine in Brazil \(RHH-001\): a phase 4, non-inferiority, single blind, randomised study.](#)

Costa Clemens SA, Weckx L, Clemens R, Almeida Mendes AV, Ramos Souza A, Silveira MBV, da Guarda SNF, de Nobrega MM, de Moraes Pinto MI, Gonzalez IGS, Salvador N, Franco MM, de Avila Mendonça RN, Queiroz Oliveira IS, de Freitas Souza BS, Fraga M, Aley P, Bibi S, Cantrell L, Dejnirattisai W, Liu X, Mongkolsapaya J, Supasa P, Screaton GR, Lambe T, Voysey M, Pollard AJ; RHH-001 study team. Lancet. 2022 Feb 5;399(10324):521-529. doi: 10.1016/S0140-6736(22)00094-0. Epub 2022 Jan 21. PMID: 35074136

## Patentes registradas en Patentscope

Estrategia de búsqueda: *Vaccine in the title or abstract AND 20220201:20220228 as the publication date 175 records.*

1. [WO/2022/038642](#) CORONAVIRUS VACCINE AND METHOD FOR PREPARATION THEREOF  
WO - 24.02.2022

Clasificación Internacional [C12N 7/00](#) N° de solicitud PCT/IN2021/050806 Solicitante BHARAT BIOTECH INTERNATIONAL LIMITED Inventor/a KUMAR, Deepak

The present invention relates to vaccine and treatment of novel coronavirus (SARS-CoV-2) infection (COVID-19) in mammals. Particularly, the invention relates to coronavirus vaccine and method for preparation thereof. More particularly, the present invention discloses preparation of coronavirus vaccine comprising an inactivated, purified SARS-CoV2 as active ingredient. The present invention also discloses a method for preparation of killed-inactivated SARS-CoV-2 virus which is used as antigen in the vaccine composition. The present invention further relates to the method of antigen preparation including inactivation and purification of virus, SARS-CoV-2 vaccine preparation, composition, formulation and use of the same to elicit immune response against the SARS-CoV-2 in mammals, and it is also suitable for immunizing human subjects.

2. [3957314](#) VERWENDUNG EINES EXTRAKTS AUS DURCH DAS VACCINIA-VIRUS ENTZÜNDETER KANINCHENHAUT ZUR BEHANDLUNG VON HÄMATOPOETISCHEN SYSTEMSCHÄDEN  
EP - 23.02.2022

Clasificación Internacional [A61K 35/36](#) N° de solicitud 19924869 Solicitante NEXUS BIO DRUG DEVELOPMENT LTD Inventor/a LAU SHING HING

Disclosed is therapeutic use of an extract from rabbit skin inflamed by vaccinia virus. Particularly, disclosed is use of an extract from rabbit skin inflamed by vaccinia virus in treating hematopoietic system damage or pancytopenia induced by an anti-cancer therapy. Moreover, disclosed is use of an extract from rabbit skin inflamed by vaccinia virus in treating leukopenia induced by an anti-cancer therapy. Further, the extract from rabbit skin inflamed by vaccinia virus can be Lepalvir.

3. [WO/2022/027749](#) RECOMBINANT FOOT-AND-MOUTH DISEASE VIRUS NONTOXIC STRAIN WITH HEAT-RESISTANT PHENOTYPIC STABLE INHERITANCE AND NEGATIVE MARKER, AND O/A TYPE FOOT-AND-MOUTH DISEASE BIVALENT INACTIVATED VACCINE  
WO - 10.02.2022

Clasificación Internacional [C12N 7/04](#) N° de solicitud PCT/CN2020/111715 Solicitante HARBIN VETERINARY RESEARCH INSTITUTE, CHINESE ACADEMY OF AGRICULTURAL SCIENCES (CHINA ANIMAL HEALTH AND EPIDEMIOLOGY CENTER, HARBIN) Inventor/a YU, Li  
 Provided are a foot-and-mouth disease virus (FMDV) cDNA infectious cloning plasmid, a recombinant FMDV nontoxic strain with heat-resistant phenotypic stable inheritance and a negative marker, and an O/A type foot-and-mouth disease bivalent inactivated vaccine. The plasmid carries a molecular determinant of a virus capsid heat-resistant phenotype, a molecular factor losing replication capacity in vivo, a negative marker factor for the deletion of 3A and 3B protein epitopes, and Pst I restriction enzyme cutting sites introduced to two sides of a P1 coding region. The capsid protein coding region of any epidemic strain can be replaced to quickly construct and save the heat-stable and marked FMDV nontoxic strain, and the nontoxic strain is used as a foot-and-mouth disease inactivated vaccine seed virus. After animals are inoculated with the bivalent inactivated vaccine, the bivalent inactivated vaccine can induce high levels of neutralizing antibodies and generate immune protection, antibody detection is performed, and thus differential diagnosis of the vaccinated animals and naturally-infected animals can be achieved.

#### 4. [20220054617](#) SUBUNIT VACCINE CONSTRUCTS FOR FLAVIVIRUSES

US - 24.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17312534 Solicitante REGENTS OF THE UNIVERSITY OF MINNESOTA Inventor/a Sunil A. David

This disclosure describes a subunit vaccine for a flavivirus, methods of making the vaccine, and methods of using the vaccine. The flavivirus may include, is a mosquito-borne flavivirus, for example, Zika virus (ZIKV), dengue virus (DENV), Yellow Fever (YF) virus, and West Nile Virus (WNV). The subunit vaccine may be administered with an adjuvant.

#### 5. [WO/2022/034934](#) INFLUENZA VIRUS VACCINE COMPOSITION

WO - 17.02.2022

Clasificación Internacional [C07K 14/005](#) N° de solicitud PCT/KR2020/010562 Solicitante KOREA RESEARCH INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY Inventor/a JEONG, Dae Gwin

The present invention relates to an influenza virus vaccine composition and, more specifically, to a vaccine composition using a fusion protein containing a hemagglutinin short helical domain (HA2SH) and a M2 protein ectodomain (M2e) of influenza virus for preventing influenza virus infection. The fusion protein can be expressed on a mass scale in E. coli and purified, and allows the effective production of a neutralizing antibody against various influenza virus subtypes. In addition, the fusion protein exhibits an excellent antibody induction effect to lead to effective immune induction, whereby the fusion protein can be utilized as a general-purpose vaccine capable of inducing defense against influenza virus subtypes and new influenza virus variants.

#### 6. [20220031832](#) Recombinant Nucleic Acid of Seneca Valley Virus, Recombinant Vaccine Strain and Preparation Method and Use Thereof

US - 03.02.2022

Clasificación Internacional [A61K 39/125](#) N° de solicitud 17328135 Solicitante Lanzhou Veterinary Research Institute, Chinese Academy of Agricultural Sciences Inventor/a Haixue Zheng

The disclosure provides a recombinant nucleic acid of Seneca valley virus, a recombinant vaccine strain and preparation method and use thereof, and relates to the technical field of genetic engineering. The disclosure provides the recombinant nucleic acid of Seneca valley virus, recombinant Seneca valley virus comprising the recombinant nucleic acid, recombinant Seneca valley virus encoded by the recombinant nucleic acid, recombinant Seneca valley virus vaccine strain comprising the recombinant Seneca valley virus and preparation method and use thereof. According to the disclosure, a vaccine strain characterized by high antigen production capacity, remarkably reduced pathogenicity (even having no pathogenicity to

pigs), strong antibody induction activity, high immune protection rate is prepared. The vaccine strain remarkably improves the biological safety and can be used for preventing and controlling Seneca valley virus in China and the neighboring countries.

7. [3949981](#) MIKRONADEL-ARRAY MIT EINER INFLUENZA-VAKZINE UND VERFAHREN ZUR HERSTELLUNG VON MIKRONADEL-ARRAYS

EP - 09.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 20776915 Solicitante FUJIFILM CORP Inventor/a KABATA KOKI

An object of the present invention is to provide a microneedle array in which the stability of influenza vaccine during production is satisfactory and the utilization efficiency of the influenza vaccine is high, and a method of producing the same. According to the present invention, provided is a self-dissolving microneedle array including a sheet portion, and a plurality of needle portions which are present on an upper surface of the sheet portion, in which the needle portion contains a saccharide, influenza vaccine, a natural amino acid or a salt thereof, and a surfactant and the influenza vaccine is administered into a body by dissolution of the needle portions.

8. [WO/2022/025298](#) RECOMBINANT VACCINIA VIRUS

WO - 03.02.2022

Clasificación Internacional [C12N 15/50](#) N° de solicitud PCT/JP2021/029240 Solicitante TOKYO METROPOLITAN INSTITUTE OF MEDICAL SCIENCE Inventor/a KOHARA, Michinori

Provided are a recombinant vaccinia virus, which is a clinically usable preventive vaccine for COVID-19 (a vaccine for SARS-CoV-2), etc. The recombinant vaccinia virus according to the present invention is characterized by comprising all or part of a cDNA, said cDNA encoding a non-structural protein or a structural protein derived from SARS-CoV-2, and an expression promoter.

9. [WO/2022/035248](#) VACCINE COMPOSITION FOR PREVENTING TUBERCULOSIS COMPRISING CHORISMATE MUTASE

WO - 17.02.2022

Clasificación Internacional [A61K 39/04](#) N° de solicitud PCT/KR2021/010711 Solicitante SEOUL NATIONAL UNIVERSITY R&DB FOUNDATION Inventor/a KIM, Bum Joon

An aspect relates to a vaccine composition for preventing tuberculosis, comprising chorismate mutase. The vaccine composition can induce Mycobacterium tuberculosis-specific immunity alone, and can more effectively induce tuberculosis-specific immunity when provided along with an immune adjuvant. Furthermore, when an existing tuberculosis vaccine is used as a prime, and the vaccine composition for preventing tuberculosis comprising chorismate mutase according to an aspect is provided as a booster, tuberculosis-specific immunity can be more significantly and effectively induced.

10. [3950947](#) REKOMBINANTER NEUER CORONAVIRUS-IMPfstoff UNTER VERWENDUNG EINES REPLIKATIONSDEFIZIENTEN MENSCHLICHEN ADENOVIRUS ALS VEKTOR

EP - 09.02.2022

Clasificación Internacional [C12N 15/50](#) N° de solicitud 20925416 Solicitante ACAD OF MILITARY MEDICAL SCIENCE PLA Inventor/a CHEN WEI

Provided is a novel coronavirus vaccine using replication-deficient human type 5 adenovirus as a vector. The vaccine takes the replication-deficient human type 5 adenovirus that is lack of E1 and E3 in a combined mode as a vector, and HEK293 cells that integrate adenovirus E1 genes serve as a packaging cell line, and protective antigenic genes carried are optimized COVID-19 (SARS-CoV-2) S protein genes (Ad5-nCoV). The vaccine has good immunogenicity in both mouse and guinea pig models and can induce the body to produce a strong cellular and humoral immune responses in a short time. Research on the protective effect of hACE2 transgenic mice shows that 14 days after a single Ad5-nCoV immunization, the

viral load in lung tissues can be significantly reduced. It shows that the vaccine has a good immune protection effect against COVID-19.

11. [WO/2022/031021](#) MRNA VACCINE COMPRISING ADJUVANT CAPABLE OF KINETIC CONTROL  
WO - 10.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud PCT/KR2021/010251 Solicitante RESEARCH & BUSINESS FOUNDATION SUNGKYUNKWAN UNIVERSITY Inventor/a LIM, Yong Taik

The present invention relates to an mRNA vaccine comprising an adjuvant of which an immune activating function is kinetically controlled and, more specifically, to an mRNA vaccine comprising an adjuvant characterized in that, after mRNA is transcribed into proteins, the activating function of the adjuvant is sequentially active. The present invention relates to a key technology for optimizing the time interval between mRNA antigen expression and immune activation in order to effectively control antigen expression and antigen immunogenicity, which conflict. In order to optimize mRNA antigen expression amount and the active time of an adjuvant, the present invention provides a key technology, which kinetically controls the action of an immune activating substance to increase the expression amount and immunogenicity of an antigen at the same time, and thus remarkably increases the efficacy of an mRNA vaccine.

12. [3954382](#) WASSERLÖSLICHES ADJUVANS UND DIESES ENTHALTENDE ZUSAMMENSETZUNG  
EP - 16.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 20784004 Solicitante SUMITOMO DAINIPPON PHARMA CO LTD Inventor/a BAN HITOSHI

The present invention relates to a compound useful as a vaccine adjuvant for cancer vaccine, a preparation process thereof, a pharmaceutical composition comprising the compound, and use of the compound as a vaccine adjuvant for cancer vaccine.

13. [202231000466](#) IMPLEMENTING MACHINE LEARNING APPROACH FOR DETERMINING AND COMPARING THE IMMUNITY LEVELS OF VACCINATED AND UNVACCINATED PEOPLE WITH COVID-19 VACCINE.  
IN - 04.02.2022

IN - 04.02.2022

Clasificación Internacional [A61K /](#) N° de solicitud 202231000466 Solicitante Sumit Kumar Inventor/a Sumit Kumar

Covid-19 is a highly contagious disease that is caused by severe acetate respiratory syndrome coronavirus 2 (SARS-COV-2). The disease has spread worldwide leading to a pandemic situation. Several testing methods and precautions have been taken to break the chain of corona virus disease. The impact the disease has on world population cannot be imagined. The disease not just spoiled the health but also took the financial and economic status to drip to the lowest point. Vaccination has been introduced to avoid the affect of covid19 and to boost immunity. Covid 19 vaccine is a vaccine intended to provide acquired immunity against corona virus that causes corona virus disease. There is a need for a system that will analyse the impact of vaccination and compare them with non-vaccinated population. The proposed invention is implementing machine learning approach for determining and comparing the immunity levels of vaccinated and unvaccinated people with covid-19 vaccine to arrive at conclusions.

14. [WO/2022/030702](#) VACCINE COMPOSITION FOR PREVENTING AND TREATING MIDDLE EAST RESPIRATORY SYNDROME-CORONAVIRUS

WO - 10.02.2022

Clasificación Internacional [C12N 15/62](#) N° de solicitud PCT/KR2020/018033 Solicitante LIBENTECH CO.,LTD. Inventor/a JANG, Hyun

The present invention relates to a method for producing an antigen for preventing MERS-CoV infections and a vaccine composition produced by method, more specifically to a vaccine composition comprising a

protein in which n-Coronavirus spike protein or S1 domain is bound with human fragment crystallization (Fc) domain, and to inducing immune responses and preventing viral infections by means of the vaccine composition.

15. [20220031826](#) Vaccine For The Prevention And Treatment Of C. Difficile Infections And The Use Thereof

US - 03.02.2022

Clasificación Internacional [A61K 39/08](#) N° de solicitud 17299268 Solicitante Instytut Immunologii i Terapii Doświadczalnej Im. Ludwika Hirszfelda Polskiej Akademii Nauk Inventor/a Andrzej Myc

The present invention relates to a veterinary vaccine containing nanoadjuvants in the form of emulsion and *Clostridium difficile* antigens, as well as the use of the vaccine in the preventions and treatment of a *C. difficile* infection, especially in birds and mammals. The object of the invention is also the use of this vaccine to produce *C. difficile*-specific antibodies.

16. [20220047693](#) AVIAN INFLUENZA AND FOWL ADENOVIRUS TYPE 4 BI-COMBINED GENETIC ENGINEERING SUBUNIT VACCINE AND METHOD FOR PREPARING THE SAME

US - 17.02.2022

Clasificación Internacional [A61K 39/145](#) N° de solicitud 17473972 Solicitante ZHAOQING DAHUANONG BIOLOGY MEDICINE CO., LTD Inventor/a Rui'ai CHEN

The disclosure relates to the technical field of veterinary biological products, and discloses an avian influenza and fowl adenovirus type 4 bi-combined genetic engineering subunit vaccine. An antigen in the vaccine is a fusion antigen; the fusion antigen has a) avian influenza virus HA protein; b) fowl adenovirus fiber2 protein; c) a specific linker peptide located between the avian influenza virus HA protein and the fowl adenovirus fiber2 protein; the amino acid sequence of the specific linker peptide is as shown in SEQ ID NO:2. This vaccine contains the fusion antigen which can induce poultries to produce a high-level specific antibody to protect poultries from avian influenza and fowl adenovirus infection. Meanwhile, the disclosure also discloses a method for preparing the vaccine.

17. [3949983](#) WASSERLÖSLICHES ADJUVANS

EP - 09.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 20784003 Solicitante SUMITOMO DAINIPPON PHARMA CO LTD Inventor/a BAN HITOSHI

The present invention relates to a compound useful as a vaccine adjuvant for cancer vaccine, a preparation process thereof, a pharmaceutical composition comprising the compound, and use of the compound as a vaccine adjuvant for cancer vaccine.

18. [20220031825](#) IMMUNOLOGICAL ADJUVANT AND VACCINE COMPOSITION INCLUDING STING AGONIST

US - 03.02.2022

Clasificación Internacional [A61K 39/04](#) N° de solicitud 17277138 Solicitante Quratis Inc. Inventor/a Sung Jae Shin

The present invention relates to an immunological adjuvant composition and a vaccine composition including a STING immunological adjuvant, and it is confirmed that the immunological adjuvant composition and vaccine composition including the STING agonist according to the present invention not only may effectively activate various body immune responses, but also have the effect of remarkably reducing the infection of *Mycobacterium tuberculosis*. Thus, it is expected that when they are used with vaccines against not only *Mycobacterium tuberculosis* but also other pathogens, they remarkably increase the effectiveness of the existing vaccine for preventing infection, thereby being capable of effectively reducing the infection of various pathogens.



19. [20220054624](#) HUMANIZED INFLUENZA MONOCLONAL ANTIBODIES AND METHODS OF USE THEREOF

US - 24.02.2022

Clasificación Internacional [A61K 39/145](#) N° de solicitud 17405748 Solicitante Dana-Farber Cancer Institute, Inc. Inventor/a Wayne A. Marasco

The present invention provides structural determinants important for binding to the stem domain of the HA protein of influenza virus, and methods of use thereof for production of high affinity neutralizing influenza virus antibodies based upon these determinants. The present invention further provides tools for determining the efficacy of an influenza virus vaccine. The present invention further provides a molecular signature useful for determining the efficacy of an influenza virus vaccine in a subject, or for predicting prior immunologic exposure or antigen responsiveness to vaccine or influenza virus infection.

20. [39533463](#)-SUBSTITUIERTE PIPERIDINVERBINDUNGEN ZUR INHIBIERUNG DER CBL-B UND VERWENDUNG EINES CBL-B INHIBITORS IN KOMBINATION MIT EINEM KREBSIMPFSTOFF UND / ODER ONCOLYTISCHEM VIRUS

EP - 16.02.2022

Clasificación Internacional [C07D 401/14](#) N° de solicitud 20722902 Solicitante NURIX THERAPEUTICS INC Inventor/a SANDS ARTHUR T

Compounds, compositions, and methods for use in inhibiting the E3 enzyme Cbl-b in the ubiquitin proteasome pathway are disclosed. The compounds, compositions, and methods can be used to modulate the immune system, to treat diseases amenable to immune system modulation, and for treatment of cells *in vivo*, *in vitro*, or *ex vivo*. Also disclosed are pharmaceutical compositions comprising a Cbl-b inhibitor and a cancer vaccine, as well as methods for treating cancer using a Cbl-b inhibitor and a cancer vaccine; and pharmaceutical compositions comprising a Cbl-b inhibitor and an oncolytic virus, as well as methods for treating cancer using a Cbl-b inhibitor and an oncolytic virus.

21. [20220054149](#) VACCINE GENERATION

US - 24.02.2022

Clasificación Internacional [A61B 17/20](#) N° de solicitud 17244610 Solicitante University of Washington Inventor/a James Chen

An apparatus for vaccine generation includes a syringe with a cavity that includes a solution with photosensitizers. Microbial particles are added to the solution. A light source is capable of emitting one or more wavebands of light that are effectively absorbed by the one photosensitizers to generate singlet oxygen in the solution and other radical species that rapidly react with and damage lipids, proteins, DNA, and RNA of the microbial particles. This damage produces immunogens that can be applied as a vaccine to viruses and other infectious microbial particles. A plunger that fits within a proximal opening in the syringe is used for forcing the solution including the immunogens through the filter and out of the syringe while the photosensitizers, debris and unwanted microbial particles are trapped within the filter.

22. [WO/2022/040256](#) VACCINE GENERATION

WO - 24.02.2022

Clasificación Internacional [C01B 13/02](#) N° de solicitud PCT/US2021/046416 Solicitante UNIVERSITY OF WASHINGTON Inventor/a CHEN, James

An apparatus for vaccine generation includes a syringe with a cavity that includes a solution with photosensitizers. Microbial particles are added to the solution. A light source is capable of emitting one or more wavebands of light that are effectively absorbed by the one photosensitizers to generate singlet oxygen in the solution and other radical species that rapidly react with and damage lipids, proteins, DNA, and RNA of the microbial particles. This damage produces immunogens that can be applied as a vaccine to viruses and other infectious microbial particles. A plunger that fits within a proximal opening in the

syringe is used for forcing the solution including the immunogens through the filter and out of the syringe while the photosensitizers, debris and unwanted microbial particles are trapped within the filter.

23. [WO/2022/027702](#) HELICOBACTER PYLORI FERRITIN-BASED NOVEL CORONAVIRUS S PROTEIN MULTIMERIC NANOVAACCINE

WO - 10.02.2022

Clasificación Internacional [C07K 19/00](#) N° de solicitud PCT/CN2020/108259 Solicitante GUANGZHOU QIANYANG BIO-TECHNOLOGY PHARMACEUTICAL CO., LTD Inventor/a ZHANG, Hui

Provided is a Helicobacter pylori ferritin-based novel coronavirus S protein subunit nanovaccine. A receptor binding domain (RBD) expression protein of a novel coronavirus is linked with an N-terminus of a Helicobacter pylori multimeric protein (HP\_Ferritin, HPF) by means of a function of an intermolecular isopeptide bond in a SpyTag/SpyCatcher (ST-SC) system to form a subunit multimeric protein so as to realize antigen multimerization; or the RBD expression protein and a heptapeptide repeat region (Heptad Repeat, HR) expression protein, together with the HPF, are bound by means of ST-SC covalence to form double subunit multimeric proteins so as to realize antigen multimerization. The solution can overcome the shortage of insufficient immunogenicity of an RBD monomer, the obtained vaccine can significantly improve the level of a neutralizing antibody of a host against a virus, and the produced antibody has the capability of strongly preventing the virus from invading a target cell. Moreover, on the basis of sequence analysis, the solution is expected to develop vaccines effective against multiple coronaviruses. Furthermore, the vaccine can be easily prepared and easily purified, and has high safety, and the vaccine can be quickly applied to clinical trials.

24. [3947475](#) CORONAVIRUS-IMPFFSTOFF-ZUSAMMENSETZUNGEN, VERFAHREN UND VERWENDUNGEN DAVON

EP - 09.02.2022

Clasificación Internacional [C07K 19/00](#) N° de solicitud 21777614 Solicitante SICHUAN CLOVER BIOPHARMACEUTICALS INC Inventor/a LIANG PENG

Provided are immunogenic compositions including recombinant peptides and proteins comprising coronavirus viral antigens and immunogens, e.g., coronavirus S protein peptides. In some aspects, the immunogenic composition comprises a secreted fusion protein comprising a soluble coronavirus viral antigen joined by in-frame fusion to a C-terminal portion of a collagen which is capable of self-trimerization to form a disulfide bond-linked trimeric fusion protein. In some aspects, the immunogenic compositions provided herein are useful for generating an immune response, e.g., for treating or preventing a coronavirus infection. In some aspects, the immunogenic compositions provided herein may be used in a vaccine composition, e.g., as part of a prophylactic and/or therapeutic vaccine. Also provided herein are methods for producing the recombinant peptides and proteins, prophylactic, therapeutic, and/or diagnostic methods, and related kits.

25. [11246922](#) Vaccine RNA-peptide against SARS-CoV-2 with endogenous exosomes as carrier

US - 15.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 17245535 Solicitante Elidan America, LLC.

Inventor/a Luis Cruz Rodriguez

A vaccine RNA-peptide against SARS-CoV-2, which has a messenger ribonucleic acid (mRNA) having an open reading frame encoding a peptide of a Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) surface protein. The peptide of the severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) surface protein is fused to a synthetic poly ADP-ribose polymerase peptide. The vaccine RNA-peptide against SARS-CoV-2 has endogenous exosomes as carrier.

26. [WO/2022/032395](#) FILM WITH LATERALLY ADJOINED STRIP(S) FOR ADMINISTRATION OF A VACCINE

WO - 17.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud PCT/CA2021/051118 Solicitante CA PHARMA INC. Inventor/a BOUSFIELD, Michael

A film for administration to a mucosal membrane is provided. The film comprises a first film strip comprising a vaccine in a first film matrix comprising at least one film-forming agent, and at least one of a surfactant, emulsifier and/or a plasticizer, and a second film strip comprising an adjuvant in a second film matrix comprising at least one film-forming agent, and at least one of a surfactant, emulsifier and/or a plasticizer. The first and second strips of the film are laterally adjoined along an edge of the first and second strips to provide a single layer film in which the vaccine and adjuvant are not admixed prior to administration.

27. [20220031833](#) INACTIVATED WHOLE-VIRUS INFLUENZA VACCINE AND METHOD FOR PREPARING SAME

US - 03.02.2022

Clasificación Internacional [A61K 39/145](#) N° de solicitud 17279898 Solicitante DENKA COMPANY LIMITED Inventor/a Ryotaro MITSUMATA

An inactivated whole-virus influenza vaccine may have its antibody-inducing ability is maintained or enhanced and may cause fewer side reactions. A method for preparing an inactivated whole-virus influenza vaccine may use an embryonated chicken egg method, including subjecting a virus solution including a whole influenza virus collected from embryonated chicken eggs to a hypotonic treatment.

28. [20220040281](#) RNA FOR MALARIA VACCINES

US - 10.02.2022

Clasificación Internacional [A61K 39/015](#) N° de solicitud 17416731 Solicitante CureVac AG Inventor/a Kim Ellen SCHWENDT

The present invention is directed to a coding RNA for a Malaria vaccine. The coding RNA comprises at least one heterologous untranslated region (UTR), preferably a 3'-UTR and/or a 5'-UTR, and a coding region encoding at least one antigenic peptide or protein derived from a Malaria parasite, in particular at least one antigenic protein derived from circumsporozoite protein (CSP) of a Malaria parasite (e.g. *Plasmodium falciparum*). The present invention is also directed to compositions and vaccines comprising said coding RNA in association with a polymeric carrier, a polycationic protein or peptide, or a lipid nanoparticle (LNP). Further, the invention concerns a kit, particularly a kit of parts comprising the coding RNA, or the composition, or the vaccine. The invention is also directed to a method of treating or preventing Malaria, and the first and second medical uses of the coding RNA, the composition, the vaccine, and the kit.

29. [WO/2022/032274](#) VACCINE COMPOSITIONS FOR INFLUENZA VIRUSES AND METHODS OF USE  
WO - 10.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud PCT/US2021/071080 Solicitante ASCIONE, Richard Inventor/a ASCIONE, Richard

The invention provides pan-influenza vaccine compositions (i.e., vaccine compositions useful against multiple influenza viruses such as H1N1, H2N2, H5N2, etc.), a vaccination regimen for immunization against such influenza diseases, and its use in medicine and in augmenting immune responses to various antigens present in such viruses and to methods of preparation of such compositions. In particular, the invention relates to polyvalent multi-targeting immunogenic compositions comprising influenza viral antigens or antigen preparations thereof from multiple strains associated with human pandemic outbreaks in combination with accessory delivery vehicle(s) and adjuvants.

30. [202031002028](#) A RECOMBINANT NEWCASTLE DISEASE VIRUS (RNDV) LIVE VACCINE VECTOR SYSTEM FOR CLASSICAL SWINE FEVER

IN - 11.02.2022

Clasificación Internacional [G01N](#) / N° de solicitud 202031002028 Solicitante INDIAN INSTITUTE OF TECHNOLOGY, GUWAHATI Inventor/a Vishnu Kumar

ABSTRACTA RECOMBINANT NEWCASTLE DISEASE VIRUS (rNDV) LIVE VACCINE VECTOR SYSTEM FOR CLASSICAL SWINE FEVERA recombinant Newcastle Disease Virus (rNDV) live vaccine vector system expressing surface glycoproteins of Classical Swine Fever Virus (CSFV) comprising a modified antigenomic cDNA having the nucleotide sequence of SEQ ID NO: 2 and an exogenous gene. The nucleotide sequence of SEQ ID NO: 2 is the modified antigenomic cDNA comprises a unique restriction enzyme recognition site created between the non-coding P and M genes of NDV. The exogenous gene is cloned into the unique restriction enzyme recognition site.

31. [WO/2022/040429](#) VACCINE COMPOSITIONS AND ANTIBODIES FOR LYME DISEASE

WO - 24.02.2022

Clasificación Internacional [A61K 39/40](#) N° de solicitud PCT/US2021/046693 Solicitante VITRUVIAE LLC Inventor/a AHMED, Mahiuddin

The present invention relates to vaccine compositions comprising lipid antigens, antibodies targeting lipid antigens, pharmaceutical compositions comprising such and their use in diagnosing, monitoring, treating, and preventing infectious disease, such as Lyme disease. In one aspect, administered is a therapeutically effective amount of a vaccine composition comprising a lipid antigen, an antibody or fragment thereof binding a lipid antigen, and/or a pharmaceutical composition comprising an antibody or fragment thereof binding a lipid antigen. Other aspects are described.

32. [20220031835](#) NANOPARTICLE VACCINES WITH NOVEL STRUCTURAL COMPONENTS

US - 03.02.2022

Clasificación Internacional [A61K 39/21](#) N° de solicitud 17386289 Solicitante The Scripps Research Institute Inventor/a Linling He

The present invention provides novel nanoparticle presented vaccine compositions that are stabilized with a locking domain. Various immunogens can be employed in the preparation of the vaccine compositions, including viral immunogens such as HIV-1 and Ebola viral immunogens, and non-viral immunogens such as immunogens derived from bacteria, parasites and mammalian species. The invention also provides methods of using such vaccine compositions in various therapeutic applications, e.g., for preventing or treating viral infections.

33. [20220047698](#) SYNTHETIC INNATE IMMUNE RECEPTOR LIGANDS AND USES THEREOF

US - 17.02.2022

Clasificación Internacional [A61K 39/39](#) N° de solicitud 17275603 Solicitante ALBERTA RESEARCH CHEMICALS INC. Inventor/a Damayanthi YALAMATI

An adjuvant formulation includes a monophosphoryl Lipid A (MPLA) analogue, a Pam3CSK4 analogue, or a muramyl dipeptide (MDP) analogue, or combinations thereof. The adjuvant may be formulated in soluble form or in a nanoparticle, such as polylactic glycolic acid nanoparticles. A vaccine formulation comprises the adjuvant formulation and an immunogen. Methods of vaccinating an animal include delivering the vaccine formulation to the animal.

34. [2020294700](#) Allogeneic T-cell-based HIV vaccine to induce cellular and humoral immunity

AU - 03.02.2022

Clasificación Internacional [A61K 35/15](#) N° de solicitud 2020294700 Solicitante Enochian Biopharma, Inc. Inventor/a GUMRUKCU, Serhat

Provided herein are methods for treating a patient with human immunodeficiency virus (HIV), comprising administering cellular compositions comprising recombinant allogeneic cells, such as CD4+ T cells. The

present invention further relates to compositions and methods for making an allogeneic T-cell-based protective HIV vaccine that induces both cellular and humoral immunity.

35. [3954385](#) NEUARTIGE IMPFSTOFFZUSAMMENSETZUNGEN GEGEN DAS PORCINE EPIDEMISCHE DIARRHOEVIRUS

EP - 16.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 21183684 Solicitante ZOETIS SERVICES LLC Inventor/a MARX JACQUELINE GAYLE

The present invention is directed to novel immunogenic compositions that protect swine from disease caused by porcine epidemic diarrhea virus (PEDV). The present invention is also directed to novel immunogenic compositions that protect swine from disease caused by porcine deltacoronavirus (PDCoV), alone or as combination vaccine to protect against PEDV. The compositions of the invention provide killed viruses whose effectiveness is enhanced by the selection of preferred adjuvants. Novel culture methods are also employed to increase reproducible yield of cultured viruses. Live vaccines are also provided from the Calaf14 PEDV isolate.

36. [WO/2022/037727](#) COMPOSICIONES VACUNALES CONTRA EL VIRUS SARS-COV-2 BASADAS EN UN DÍMERO DEL DOMINIO DE UNIÓN AL RECEPTOR Y LA VESÍCULA DE MEMBRANA EXTERNA DEL MENINGOCOCO B

WO - 24.02.2022

Clasificación Internacional [A61K 39/095](#) N° de solicitud PCT/CU2021/050007 Solicitante INSTITUTO FINLAY DE VACUNAS Inventor/a VALDÉS BALBÍN, Yury

La presente invención se relaciona con la biotecnología, específicamente con el campo de la salud humana. Proporciona composiciones vacunales que inducen una respuesta inmune neutralizante contra el SARS-CoV-2. Estas composiciones vacunales comprenden como antígeno una porción de la proteína de unión al receptor del SARS-CoV-2 y vesículas derivadas de proteínas de la membrana externa de Neisseria meningitidis grupo B como inmunopotenciador y adicionalmente un adyuvante. Las composiciones vacunales que se describen en la presente invención son útiles en la prevención de la infección por el virus SARS-CoV-2.

37. [20220040088](#) AUGMENTATION OF PERSONALIZED TUMOR SPECIFIC ADAPTIVE IMMUNITY THROUGH EXTRACORPOREAL REMOVAL OF IMMUNE BLOCKING FACTORS

US - 10.02.2022

Clasificación Internacional [A61K 9/00](#) N° de solicitud 17505154 Solicitante IMMUNICOM, INC. Inventor/a Thomas ICHIM

Disclosed are means, methods and compositions of matter useful for amplification of adaptive immune responses towards neoplastic tissue. In one embodiment, immunization of a patient is performed by a means comprising of administering either an exogenous vaccine or stimulation of immunogenicity of the tumor so as to cause release of antigens/increased exposure of antigens, thus resulting in an "endogenous" vaccine. Subsequent to vaccination a patient is treated by an immunopheresis procedure, in order to allow for removal of "blocking factors" produced by the tumor or produced by cells programmed by tumors to produce said blocking factors. In one embodiment further immunization is performed subsequent to removal of said blocking factors in order to allow for enhancement of adaptive immune responses

38. [20220040087](#) AUGMENTATION OF PERSONALIZED TUMOR SPECIFIC ADAPTIVE IMMUNITY THROUGH EXTRACORPOREAL REMOVAL OF IMMUNE BLOCKING FACTORS

US - 10.02.2022

Clasificación Internacional [A61K 9/00](#) N° de solicitud 17505100 Solicitante IMMUNICOM, INC. Inventor/a Thomas ICHIM

Disclosed are means, methods and compositions of matter useful for amplification of adaptive immune responses towards neoplastic tissue. In one embodiment, immunization of a patient is performed by a means comprising of administering either an exogenous vaccine or stimulation of immunogenicity of the tumor so as to cause release of antigens/increased exposure of antigens, thus resulting in an "endogenous" vaccine. Subsequent to vaccination a patient is treated by an immunopheresis procedure, in order to allow for removal of "blocking factors" produced by the tumor or produced by cells programmed by tumors to produce said blocking factors. In one embodiment further immunization is performed subsequent to removal of said blocking factors in order to allow for enhancement of adaptive immune responses

39. [3949985](#) PNEUMOKOKKEN-OBERFLÄCHENPROTEINE

EP - 09.02.2022

Clasificación Internacional [A61K 39/09](#) N° de solicitud 20783992 Solicitante UNIV TOKYO Inventor/a YUKI YOSHIKAZU

The present invention provides D39-derived mutant PspA that does not undergo deamination and maintains stability as a molecule even around neutral pH range. Specifically, the present invention relates to a protein of the following (a) or (b): (a) a protein comprising the amino acid sequence as set forth in SEQ ID NO: 2 and having pneumococcal vaccine antigenic activity, and a protein substantially identical to the protein; or (b) a protein being a part of the amino acid sequence as set forth in SEQ ID NO: 2, wherein aspartic acid at position 254 is comprised in the part, and having pneumococcal vaccine antigenic activity, and a protein substantially identical to the protein.

40. [20220031837](#) PNEUMOCOCCAL CONJUGATE VACCINE FORMULATIONS

US - 03.02.2022

Clasificación Internacional [A61K 39/385](#) N° de solicitud 17412550 Solicitante Merck Sharp & Dohme Corp. Inventor/a William J. Smith

The present invention provides pneumococcal conjugate vaccine formulations comprising surfactant systems incorporating polysorbate 20 or a combination of a poloxamer and a polyol.

41. [0002766249](#) METHOD FOR PREVENTING ESCHERICHIOSIS IN CALVES

RU - 10.02.2022

Clasificación Internacional [A01K 67/00](#) N° de solicitud 2021106438 Solicitante Inventor/a Тищенко Александр Сергеевич (RU)

FIELD: veterinary medicine. SUBSTANCE: invention relates to the field of veterinary medicine, pertains to a method for preventing escherichiosis in calves. The method for preventing escherichiosis includes double immunisation of pregnant cows with an anatoxin vaccine against escherichiosis at an interval of 15 days and double introduction of the preparation to calves born from the immunised pregnant cows. The pregnant cows and calves born therefrom are therein immunised with an anatoxin vaccine containing a pyrogenal solution containing 100 mcg of the active substance, and a 3% aqueous solution of polyacrylic acid, as adjuvants, introduced consecutively, followed by mixing, into an acellular culture medium containing thermolabile, thermostable and shiga-like Escherichia coli toxins inactivated by formalin until the final concentration thereof of 0.4%, with the following component ratio, % wt.: pyrogenal solution containing 100 mcg of the active substance 9 to 11; 3% aqueous solution of polyacrylic acid 9 to 11; acellular culture medium containing inactivated thermolabile, thermostable and shiga-like Escherichia coli toxins up to 100. Pregnant cows are therein immunised for the first time 30 days, the second time 15 days prior to calving at a dose of 5 and 10 ml, respectively, and calves are vaccinated twice, for the first time at the age of 15 to 20 days, the second time after 10 to 14 days at a dose of 1 and 2 ml, respectively.

EFFECT: possibility of preventing escherichiosis in calves. 1 cl, 2 tbl, 5 ex

42. [WO/2022/029389](#) VACCINE APPROACH BASED ON TRIMERIC VIRAL ANTIGENS

WO - 10.02.2022

Clasificación Internacional [C07K 14/005](#) N° de solicitud PCT/FR2021/051445 Solicitante NVH MEDICINAL Inventor/a VANDROUX, David

The present invention relates to chimeric proteins, having the particular feature of being structured in the form of a trimer via a trimerisation domain, of integrating all or some of the sequence of protein(s), of optionally integrating multimerisation patterns or oligomerisation patterns, of optionally being capable of being structured in the form of particles, by self-assembly or coacervation, having a size of between 0.005 and 3 µm. These proteins are suitable for use as a vaccine.

43. [WO/2022/031594](#) COMPOSITIONS AND METHODS FOR VACCINE DELIVERY

WO - 10.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud PCT/US2021/044162 Solicitante DIANOMI THERAPEUTICS, INC. Inventor/a OSTROWSKI, Martin

In an aspect, provided herein is a method for vaccinating a subject in need thereof. In another aspect, the present disclosure provides a method for enhancing the cell-mediated immunity response of a viral antigen. In another aspect, the present disclosure provides a method for stabilizing a biological macromolecule. In another aspect, the present disclosure provides a vaccine composition. In another aspect, the present disclosure provides a stabilized composition comprising lyophilized mineral coated microparticles (MCM) bound to a biological macromolecule.

44. [202127046543](#) PNEUMOCOCCAL SURFACE PROTEINS

IN - 04.02.2022

Clasificación Internacional [A61K /](#) N° de solicitud 202127046543 Solicitante THE UNIVERSITY OF TOKYO Inventor/a YUKI Yoshikazu

The present invention provides D39-derived mutant PspA that does not undergo deamination and maintains molecular stability even at near-neutral pH. Specifically, the present invention is the following protein (a) or (b). (a) A protein that includes the amino acid sequence represented by sequence no. 2 and that has pneumococcus vaccine antigenic activity, and a protein substantially the same as said protein; and (b) a protein that includes a portion of the amino acid sequence represented by sequence no. 2, said portion including aspartic acid at position 254, and that has pneumococcus vaccine antigenic activity, and a protein substantially the same as said protein.

45. [20220054613](#) PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST HEPATOCELLULAR CARCINOMA (HCC) AND OTHER CANCERS

US - 24.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17508295 Solicitante IMMATICS BIOTECHNOLOGIES GMBH Inventor/a Toni WEINSCHENK

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules. In particular, the present invention relates to several novel peptide sequences and their variants derived from HLA class I and class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses or as targets for the development of pharmaceutically/immunologically active compounds and cells.

46. [2022200419](#) NOVEL IMMUNOTHERAPY AGAINST SEVERAL TUMORS INCLUDING GASTROINTESTINAL AND GASTRIC CANCER

AU - 10.02.2022

Clasificación Internacional [C07K 7/06](#) N° de solicitud 2022200419 Solicitante immatics biotechnologies GmbH Inventor/a Fritsche, Jens

The present invention relates to peptides, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated cytotoxic T cell (CTL) peptide epitopes, alone or in combination with other tumor-associated peptides that serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses. The present invention relates to 95 novel peptide sequences and their variants derived from HLA class I molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses.

47. [20220040296](#) PAN-ANTIALLERGY VACCINE

US - 10.02.2022

Clasificación Internacional [A61K 39/395](#) N° de solicitud 16988076 Solicitante King Abdulaziz University Inventor/a Sari SABBAN

The invention is directed to a protein construct comprising a scaffold protein into which an IgE epitope containing motif is inserted or substituted. The protein construct may be used as an antigen, immunogen or vaccine to induce immune responses against IgE in a vaccinated subject thereby reducing the severity of allergic phenomena associated with IgE. The invention is also directed to a method for designing such a protein construct and expressing it using recombinant DNA methods.

48. [20220031824](#) PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST HEPATOCELLULAR CARCINOMA (HCC) AND OTHER CANCERS

US - 03.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17508230 Solicitante IMMATICUS BIOTECHNOLOGIES GMBH Inventor/a Toni WEINSCHENK

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules. In particular, the present invention relates to several novel peptide sequences and their variants derived from HLA class I and class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses or as targets for the development of pharmaceutically/immunologically active compounds and cells.

49. [WO/2022/025093](#) CANCER PEPTIDE VACCINE AND METHOD FOR PRODUCING SAME

WO - 03.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud PCT/JP2021/027832 Solicitante BRIGHTPATH BIOTHERAPEUTICS CO., LTD. Inventor/a ODAKA, Kazuhiko

The present disclosure includes a cancer peptide vaccine that contains a peptide of the sequence Asn-Val-Leu-His-Phe-Phe-Asn-Ala-Pro-Leu (SEQ ID NO: 1), a peptide of the sequence Ala-Ser-Leu-Asp-Ser-Asp-Pro-Trp-Val (SEQ ID NO: 2), a peptide of the sequence Lys-Leu-Lys-His-Tyr-Gly-Pro-Gly-Trp-Val (SEQ ID NO: 3), and a peptide of the sequence Leu-Leu-Gln-Ala-Glu-Ala-Pro-Arg-Leu (SEQ ID NO: 4), a method for producing the same, and the like.



50. [3957323](#) IMPFSTOFFZUSAMMENSETZUNG GEGEN DAS PORZINE EPIDEMISCHE DIARRHOE (PED)-VIRUS UND HERSTELLUNGSVERFAHREN DAFÜR  
EP - 23.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 20790761 Solicitante BIOAPPLICATIONS INC  
Inventor/a SOHN EUN-JU

The present invention relates to: a porcine epidemic diarrhea (PED) virus protein comprising an amino acid sequence represented by SEQ ID NO:5; a vaccine composition comprising same; and the like.

51. [WO/2022/035739](#) COMPOSITIONS AND METHODS RELATED TO EBOLA VIRUS VACCINES  
WO - 17.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud PCT/US2021/045178 Solicitante THE SCRIPPS RESEARCH INSTITUTE  
Inventor/a HE, Linling

The present invention provides novel engineered Ebolavirus GP proteins and polypeptides, as well as scaffolded vaccine compositions that display the engineered proteins. The invention also provides methods of using such engineered Ebolavirus GP proteins and vaccine compositions in various therapeutic applications, e.g., for preventing or treating Ebolavirus infections.

52. [20220054626](#) HEAT-RESISTANT RECOMBINANT NEWCASTLE DISEASE VIRUS VACCINE STRAIN CAPABLE OF EXPRESSING TRUNCATED FIBER 2 PROTEIN OF FOWL ADENOVIRUS SEROTYPE 4, PREPARATION METHOD AND APPLICATION THEREOF  
US - 24.02.2022

Clasificación Internacional [A61K 39/17](#) N° de solicitud 17234795 Solicitante INSTITUTE OF ANIMAL HUSBANDRY AND VETERINARY SCIENCES, HUBEI ACADEMY OF AGRICULTURAL SCIENCES  
Inventor/a GUOYUAN WEN

A heat-resistant recombinant Newcastle Disease Virus vaccine strain rLS-tFib2-C capable of expressing truncated Fiber 2 protein of fowl adenovirus serotype 4 has been preserved at the China Center for Type Culture Collection, Wuhan University, Wuhan, China with the preservation number of CCTCC No. V202042.

53. [20220054621](#) NOROVIRUS VACCINE FORMULATIONS AND METHODS  
US - 24.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17416810 Solicitante TAKEDA VACCINES, INC.  
Inventor/a Taisei MASUDA

The invention is in the field of vaccines, particularly vaccines for Noroviruses. In addition, the invention relates to methods of preparing vaccine compositions and methods of inducing and evaluating protective immune responses against Norovirus in humans, in particular, pediatric patients.

54. [WO/2022/035860](#) REPLICATION-COMPETENT ADENOVIRUS TYPE 4-HIV ENV VACCINES AND THEIR USE  
WO - 17.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud PCT/US2021/045389 Solicitante THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES  
Inventor/a CONNORS, Mark

Replication-competent adenovirus type 4 (Ad4)-based vectors expressing modified forms of human immunodeficiency virus (HIV) envelope (Env), and immunogenic compositions thereof, are described. An extensive array of modified Env proteins was generated and characterized for antigenicity and immunogenicity to identify recombinant Env proteins having a native-like conformation. Based on these studies, two Env vaccine candidates (Ad4-Env145NFL and Ad4-Env150KN) were selected for clinical studies. The recombinant Ad4-based HIV Env vectors can be used for preventing or inhibiting infection with HIV.

55. [3953457](#) BREITER UND LANG ANHALTENDER INFLUENZA-IMPfstoff

EP - 16.02.2022

Clasificación Internacional [C12N 7/00](#) N° de solicitud 20787815 Solicitante ALTIMMUNE INC Inventor/a ROBERTS SCOT

Provided herein are monovalent pharmaceutical compositions (vaccine compositions) and methods for inducing a multi-arm (mucosal, humoral and cell-mediated) immune response and extended seroprotection of at least 12 months post vaccination against influenza virus.

56. [WO/2022/039687](#) METHOD FOR PRODUCTION OF FAST, INCLUSIVE AND HIGH-DOSE INACTIVE VACCINE TO BE USED AGAINST SARS-COV-2 VIRUS

WO - 24.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/TR2020/051049 Solicitante ACIBADEM LABMED SAĞLIK HİZMETLERİ A.Ş. Inventor/a OVALI, Ercüment

The invention relates to the production method of inactive vaccine for SARS-COV-2 virus. Said method comprises the following process steps; isolating and culturing Sars-CoV-2 virus, concentrating the obtained virus solution, applying the process of aliquoting at different times on behalf of the characterization of possible genome variation and determination of the pool content, applying fractional 1st gamma irradiation such that equal irradiation is provided in the tubes of concentrated virus so as to provide inactivation by protecting the viral protein structure, applying lyophilisation after the application of said fractional 1st gamma irradiation, applying 2nd gamma irradiation such that equal irradiation is provided in the tubes of concentrated virus so as to provide the sterilization of the final product.

57. [WO/2022/036885](#) TEMPERATURE-SENSITIVE HYDROGEL ADJUVANT FOR VETERINARY VACCINES, PREPARATION METHOD AND USE THEREOF

WO - 24.02.2022

Clasificación Internacional [A61K 9/06](#) N° de solicitud PCT/CN2020/128114 Solicitante JIANGSU ACADEMY OF AGRICULTURAL SCIENCES Inventor/a ZHANG, Jinqiu

A temperature-sensitive hydrogel adjuvant for veterinary vaccines, a preparation method and the use thereof, which relate to the field of veterinary vaccine adjuvants. The temperature-sensitive hydrogel adjuvant for veterinary vaccines consists of the following components in percentages by mass: 15-50% of a polymer micelle substance, and 0.1-5% of a non-ionic cellulose ether, with the balance being water. The preparation method of a temperature-sensitive hydrogel adjuvant of the veterinary vaccine comprises the specific steps of: weighing out the components, mixing, and swelling into a uniform system at 2-10°C to obtain the temperature-sensitive hydrogel adjuvant. The temperature-sensitive hydrogel adjuvant has simple and readily available raw materials, is low in price, small in viscosity, has few side effects and is capable of prolonging the immune duration.

58. [20220054615](#) PERTUSSIS BOOSTER VACCINE

US - 24.02.2022

Clasificación Internacional [A61K 39/02](#) N° de solicitud 17299244 Solicitante SANOFI PASTEUR INC. Inventor/a Nicolas BURDIN

The present disclosure is directed to a modified acellular pertussis booster vaccine comprising a TLR agonist and methods of using the same for inducing an immune response.

59. [20220054629](#) NUCLEIC ACID BASED VACCINE AGAINST MIDDLE EAST RESPIRATORY SYNDROME-CORONAVIRUS

US - 24.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 17230383 Solicitante King Abdulaziz University Inventor/a Anwar M. HASHEM

An immunogenic CD40-targeted trimeric MERS-CoV S1 fusion polypeptide as well as a corresponding polynucleotide encoding it and its use for safely inducing immune responses directed against MERS-CoV without inducing vaccine associated respiratory pathologies associated with non-targeted vaccines.

60. [20220040310](#) Methods, agents and compositions as in situ vaccine for cancer cell and tumor treatment US - 10.02.2022

Clasificación Internacional [A61K 47/34](#) N° de solicitud 17509028 Solicitante Tianxin Wang Inventor/a Tianxin Wang

This disclosure provides agents, compositions and methods for treating cancer by treating tumor in a subject. The composition comprises cancer cell inactivating agent and immune activity enhancing agent in a sustained release formulation, which can be used as intratumoral injection to convert the treated tumor into an in situ vaccine for cancer. Suitable immune activity enhancing agents include TLR agonist and STING agonist.

61. [20220031838](#) MUCOSAL ADJUVANT US - 03.02.2022

Clasificación Internacional [A61K 39/39](#) N° de solicitud 17279850 Solicitante DENKA COMPANY LIMITED Inventor/a Shogo MISUMI

A mucosal adjuvant may have high mucosal immunogenicity and high safety and be useful in the preparation of mucosal vaccines, and a mucosal vaccine composition may include the same. Such mucosal adjuvant may include TGDK. A method for preparing the mucosal vaccine composition may include mixing TGDK with an immunogen.

62. [20220040291](#) HCoV VACCINE FOR IMPROVING IMMUNITY AGAINST SARS-COV-2 INFECTION US - 10.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 16989796 Solicitante Timothy S. Moore Inventor/a Timothy S. Moore

Embodiments include a method of using inactivated human cold coronaviruses (HCoVs) particularly HCoV-299E, HCoV-OC43, HCoV-NL63 and HCoV-HKU1, alone or as a booster, for the immunization against SARS-CoV-2 infections. Vaccine embodiments further comprise HCoV virus envelope subunits which may be in the form of virus-like spheroids (VLS).

63. [20220040293](#) HCoV VACCINE FOR IMPROVING IMMUNITY AGAINST SARS-COV-2 INFECTION US - 10.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 17329104 Solicitante Timothy S. Moore Inventor/a Timothy S. Moore

Embodiments include a method of using inactivated human cold coronaviruses (HCoVs) particularly HCoV-299E, HCoV-OC43, HCoV-NL63 and HCoV-HKU1, alone or as a booster, for the immunization against SARS-CoV-2 infections. Vaccine embodiments further comprise HCoV virus envelope subunits which may be in the form of virus-like spheroids (VLS).

64. [202117047505](#) VACCINE TO PATHOGENIC IMMUNE ACTIVATION CELLS DURING INFECTIONS IN - 11.02.2022

Clasificación Internacional [A61K /](#) N° de solicitud 202117047505 Solicitante 21C BIO Inventor/a ZAGURY, Daniel

In the present invention, the Applicant provides a novel method for preventing or treating an infectious disease in a subject in need thereof. In particular said method comprise the administration of a combination, pharmaceutical combination, medicament or kit-of-parts comprising a first part comprising a CD8 vaccine specific for at least one infectious disease-related antigen, optionally a second part comprising an interferon alpha blocking agent, and a third part comprising a type III interferon and/or an agent stimulating the production of type III interferon.

65. [3946549](#) IMPFUNG UNTER VERWENDUNG EINES MIKROPROJEKTIONSFELDPFLASTERS MIT HOHER DICHTE

EP - 09.02.2022

Clasificación Internacional [A61M 37/00](#) N° de solicitud 20783280 Solicitante VAXXAS PTY LTD

Inventor/a FORSTER ANGUS

The present invention relates to microprojection arrays for the delivery of vaccines, in particular the use of polymer high density microprojection arrays for the delivery of vaccines to patients in which the dose of the vaccine delivered may be less than the dose of vaccine delivered by intramuscular injection while providing equal or superior immunogenicity.

66. [20220051752](#) PREDICTING IMMUNOGENIC PEPTIDES USING STRUCTURAL AND PHYSICAL MODELING

US - 17.02.2022

Clasificación Internacional [G16B 15/00](#) N° de solicitud 17312134 Solicitante University of Notre Dame du Lac Inventor/a Brian Baker

Disclosed herein are methods for predicting immunogenicity of a candidate peptide. The method comprises obtaining a three-dimensional candidate structural representation of the candidate peptide bound to an antigen presenting molecule; obtaining a plurality of candidate measurements; and predicting, with an electronic processor, the immunogenicity of the candidate peptide based upon the plurality of candidate measurements. Further disclosed herein are methods for producing vaccines. The method for producing a vaccine comprises predicting immunogenicity of one or more candidate peptides using the methods described herein, and producing a vaccine comprising one or more peptides predicted to be immunogenic.

67. [20220054614](#) INHIBITION OF ASPH EXPRESSING TUMOR GROWTH AND PROGRESSION

US - 24.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17413913 Solicitante Rhode Island Hospital

Inventor/a Jack R. Wands

Disclosed are compositions and methods for an immunotherapy in a subject containing a vaccine construct for an immunization against a purified tumor antigen and a checkpoint inhibitor for treating a tumor in the subject, in which the tumor is characterized as comprising a low frequency of neoantigen expression and the composition potentiates an anti-tumor immune response without inducing autoimmunity in the subject. A pharmaceutical composition containing the composition as an active component and a pharmaceutically acceptable carrier, and a combinatorial composition containing a vaccine construct for an immunization against a purified tumor antigen and an immune checkpoint inhibitor, in which the tumor is characterized as comprising a low frequency of neoantigen expression, are also described.

68. [WO/2022/039438](#) VACCINE COMPOSITION COMPRISING PLANT-EXPRESSED RECOMBINANT ZIKA VIRUS ENVELOPE PROTEIN AND PREPARATION METHOD THEREFOR

WO - 24.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud PCT/KR2021/010650 Solicitante

BIOAPPLICATIONS INC. Inventor/a HAHN, Tae-Wook

The present invention relates to a vaccine composition comprising, as active ingredients, a recombinant Zika virus envelope protein including the amino acid sequence of SEQ ID NO: 1, and an adjuvant selected from alum, monophosphoryl lipid A (MPL), or a combination thereof, a recombinant vector for producing the recombinant Zika virus envelope protein in a plant, a transformant transformed with the vector, and a method for producing the recombinant Zika virus envelope protein.

69. [20220040286](#) COMPOSITIONS AND METHODS RELATED TO EBOLAVIRUS VACCINES

US - 10.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17397340 Solicitante The Scripps Research Institute Inventor/a Linling He

The present invention provides novel engineered *Ebolavirus* GP proteins and polypeptides, as well as scaffolded vaccine compositions that display the engineered proteins. The invention also provides methods of using such engineered *Ebolavirus* GP proteins and vaccine compositions in various therapeutic applications, e.g., for preventing or treating *Ebolavirus* infections.

70. [20220040273](#) Vaccine Used For Preventing Toxoplasma Gondii Infection And Preparation Method Therefor

US - 10.02.2022

Clasificación Internacional [A61K 39/002](#) N° de solicitud 17253798 Solicitante Haimu Animal Health Products (Shandong) Co., Ltd. Inventor/a Feng HOU

Provided is a protein having *Toxoplasma* immunogenicity, the protein being a cyclophilin mutant protein and consisting of the amino acid sequence as shown in SED 2. Further provided is a nucleic acid that may encode a protein having *Toxoplasma* immunogenicity, which has the nucleic acid sequence as shown in SEQ ID NO. 1. Further provided is a vaccine, which is obtained by double-digesting a *Toxoplasma* antigen gene and then linking the same to a prokaryotic expression vector such as pET28a, and transforming the same into a prokaryotic expression engineering strain such as BL21(DE3), thereby inducing the high-efficiency expression thereof, wherein the inducing the high-efficiency expression thereof, wherein the purified protein is a soluble protein which maintains specific immunogenicity thereof.

71. [20220048957](#) VACCINE AGAINST S. SUIIS INFECTION

US - 17.02.2022

Clasificación Internacional [C07K 14/315](#) N° de solicitud 17508791 Solicitante INTERVACC AB Inventor/a Bengt GUSS

The present disclosure relates to immunogenic polypeptides, immunogenic compositions and vaccine compositions and use thereof for immunization of mammals susceptible to *Streptococcus suis* infection. The disclosure also relates to methods for preparing, formulating and administering such compositions.

72. [1/2021/551208](#) NOVEL IMMUNOTHERAPY AGAINST SEVERAL TUMORS, SUCH AS LUNG CANCER, INCLUDING NSCLC

PH - 14.02.2022

Clasificación Internacional [A61K 38/17](#) N° de solicitud 1/2021/551208 Solicitante IMMATICS BIOTECHNOLOGIES GMBH Inventor/a WEINSCHENK, Toni

The present invention relates to peptides, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated cytotoxic T cell (CTL) peptide epitopes, alone or in combination with other tumor-associated peptides that serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses. The present invention relates to more than 70 novel peptide sequences and their variants derived from HLA class I and HLA class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses.

73. [3946442](#) STABILISIERUNG VON LEBENDEN MOLLICUTES-BAKTERIEN IN EINER FLÜSSIGEN ZUSAMMENSETZUNG

EP - 09.02.2022

Clasificación Internacional [A61K 39/02](#) N° de solicitud 20714601 Solicitante INTERVET INT BV Inventor/a PIEST MARTIN

The present invention relates to a liquid composition of live Mollicutes bacteria and a stabiliser, whereby the stabiliser is a natural deep-eutectic solvent (NADES). In this liquid composition the live Mollicutes are

stabilised without need for freezing or freeze-drying. This allows various advantageous uses in diagnostics and medicine, specifically as a liquid vaccine for use against infection or disease caused by Mollicutes bacteria, for human- or non-human animals.

74. [WO/2022/029286](#) PLATFORM VECTOR FOR MODULAR AND SIMPLIFIED INSERTION OF TRANSGENES INTO ALPHAHERPESVIRINAE

WO - 10.02.2022

Clasificación Internacional [C12N 15/869](#) N° de solicitud PCT/EP2021/071993 Solicitante FRAUNHOFER-GESELLSCHAFT ZUR FÖRDERUNG DER ANGEWANDTEN FORSCHUNG E.V. Inventor/a BAILER, Susanne

The present invention refers to a vector system, usable as a platform vector and suitable for the production of transgenic viruses of the subfamily Alphaherpesvirinae. Such transgenic viruses can be used as vaccine or as oncolytic virus or in gene therapy. The platform vector of the present invention is a vector system allowing a simplified search for and generation and production of viruses with a modified and increased functionality. The present invention refers also to the use of the platform vector as a vector system for the generation and the production of transgenic viruses, methods for the production of a transgenic virus, using the vector system of the present invention and viruses obtained by such methods.

75. [WO/2022/032166](#) MULTIEPITOPE VACCINE FOR THE TREATMENT OF ALZHEIMER'S DISEASE

WO - 10.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud PCT/US2021/045062 Solicitante OTHAIR PROTHENA LIMITED Inventor/a BARBOUR, Robin

The disclosure provides peptide compositions and immunotherapy compositions comprising an amyloid-beta (A $\beta$ , Abeta) peptide, a tau peptide, and an alpha-synuclein peptide. The disclosure also provides methods of treating or effecting prophylaxis of Alzheimer's disease or other diseases with beta-amyloid deposition in a subject, including methods of clearing deposits, inhibiting or reducing aggregation of A $\beta$  and tau and an alpha-synuclein, blocking the uptake by neurons, clearing amyloid, and inhibiting propagation of tau seeds and an alpha-synuclein synucleinopathies in a subject having or at risk of developing Alzheimer's disease or other diseases containing tau and amyloid-beta and an alpha-synuclein accumulations. The methods include administering to such patients the compositions comprising an amyloid-beta (A $\beta$ ) peptide and a tau peptide and an alpha-synuclein peptide.

76. [3950948](#) PLATTFORMVEKTOR FÜR MODULARE UND VEREINFACHTE EINFÜHRUNG VON TRANSGENEN IN ALPHAHERPESVIRINAE

EP - 09.02.2022

Clasificación Internacional [C12N 15/869](#) N° de solicitud 20190134 Solicitante FRAUNHOFER GES FORSCHUNG Inventor/a BAILER SUSANNE

The present invention refers to a vector system, usable as a platform vector and suitable for the production of transgenic viruses of the subfamily Alphaherpesvirinae. Such transgenic viruses can be used as vaccine or as oncolytic virus or in gene therapy. The platform vector of the present invention is a vector system allowing a simplified search for and generation and production of viruses with a modified and increased functionality. The present invention refers also to the use of the platform vector as a vector system for the generation and the production of transgenic viruses, methods for the production of a transgenic virus, using the vector system of the present invention and viruses obtained by such methods.

77. [WO/2022/032196](#) MULTIEPITOPE VACCINE CASSETTES

WO - 10.02.2022

Clasificación Internacional [A61K 39/295](#) N° de solicitud PCT/US2021/045106 Solicitante GRITSTONE BIO, INC. Inventor/a JOOSS, Karin

Disclosed herein are compositions that include antigen-encoding nucleic acid sequences having multiple iterations of KRAS neopeptide-encoding sequences and/or lacking immunodominant epitopes. Also disclosed are nucleotides, cells, and methods associated with the compositions including their use as vaccines.

78. [2022200616](#) NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST CLL AND OTHER CANCERS

AU - 24.02.2022

Clasificación Internacional N° de solicitud 2022200616 Solicitante Immatics Biotechnologies GmbH Inventor/a Fritsche, Jens

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor associated T-cell peptide epitopes, alone or in combination with other tumor associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

79. [WO/2022/039286](#) 4,4'-DIAMINODIPHENYL SULFONE AS AN INFLAMMASOME COMPETITOR OF ORAL VACCINE OR THERAPEUTICS FOR SARS-COV-2 OR COVID-19

WO - 24.02.2022

Clasificación Internacional [A61K 31/145](#) N° de solicitud PCT/KR2020/010955 Solicitante LEE, Jong-hoon Inventor/a LEE, Jong-hoon

The aim of this study was to examine the use of an inflammasome competitor as a preventative agent. Coronaviruses have zoonotic potential due to the adaptability of their S protein to bind receptors of other species, most notably demonstrated by SARS-CoV. The binding of SARS-CoV-2 to TLR causes the release of pro-IL-1 $\beta$ , which is cleaved by caspase-1, followed by formation and activation of the inflammasome, which is a mediator of lung inflammation, fever, and fibrosis. DDS was effective in the molecular regulation of NLRP3 inflammasome activators that are important in mild cognitive impairment (MCI), Parkinson's disease (PD), and AD. The specific targeting of NLRP3 itself or up-/downstream factors of the NLRP3 inflammasome by DDS may be responsible for its observed preventive effects, functioning as a competitor.

80. [WO/2022/031087](#) IMMUNOGENIC COMPOSITION COMPRISING PNEUMOCOCCAL POLYSACCHARIDE-CELL WALL-DERIVED MATERIAL CONJUGATES

WO - 10.02.2022

Clasificación Internacional [A61K 39/09](#) N° de solicitud PCT/KR2021/010359 Solicitante CELLTRION INC. Inventor/a JO, Kyung Min

The present invention relates to an immunogenic composition comprising pneumococcal polysaccharide-cell wall-derived material conjugates each comprising a cell wall-derived material bound to a capsular polysaccharide derived from a specific serotype of pneumococcus. The immunogenic composition according to the present invention can induce a more increased immune response compared to existing vaccines. In particular, the immunogenic composition is included in an existing pneumococcal conjugate vaccine but has a low antibody titer or OPA titer, and thus has an excellent effect against a specific serotype that is prevalent around the world.

81. [WO/2022/031342](#) TAU VACCINE FOR THE TREATMENT OF ALZHEIMER'S DISEASE

WO - 10.02.2022

Clasificación Internacional [A61P 25/28](#) N° de solicitud PCT/US2021/033189 Solicitante OTHAIR PROTHENA LIMITED Inventor/a BARBOUR, Robin

The disclosure provides peptides, peptide compositions, immunotherapy compositions, pharmaceutical compositions and nucleic acids comprising one or more tau peptides. The disclosure also provides methods of treating or effecting prophylaxis of Alzheimer's disease or other diseases characterized at least in part by aberrant tau pathology (e.g., aggregation in neurofibrillary tangles) in a subject, including methods of clearing deposits, inhibiting or reducing aggregation of tau, blocking the uptake by neurons, clearing tau, and inhibiting propagation of tau seeds in a subject having or at risk of developing Alzheimer's disease or other diseases containing tau accumulations. The methods include administering to such patients the compositions comprising one or more tau peptides.

82. [WO/2022/023134](#) PHARMACEUTICAL FORMULATION COMPRISING A COMBINATION OF RECOMBINANT NEWCASTLE DISEASE VIRUSES FOR THE TREATMENT OF CANCER

WO - 03.02.2022

Clasificación Internacional [A61K 35/768](#) N° de solicitud PCT/EP2021/070336 Solicitante THALLER, Arno Inventor/a THALLER, Arno

The invention relates to a pharmaceutical formulation comprising at least three recombinant transgene expressing Newcastle Disease Virus (NDV) strains, which have been demonstrated to possess significant oncolytic activity against mammalian cancers and an improved safety profile, a non-recombinant NDV strain, a reovirus type-3 and optionally a vaccinia virus. At least one of the recombinant NDV strains comprises in its viral genome a nucleic acid sequence comprising at least one foreign gene, the at least one foreign gene encoding a checkpoint modulator, and at least one of the recombinant NDV strains comprises in its viral genome a nucleic acid sequence comprising at least one foreign gene, the at least one foreign gene encoding an angiogenesis inhibitor. The viral genome of each of the at least three recombinant NDV strains comprises a mutation in the HN gene, said mutation allowing replication of said rgNDV in a cancer cell to a higher level than replication of an otherwise identical NDV not having said mutation in the HN gene. The pharmaceutical formulation provides an improved treatment of cancer, because instead of a monotherapy, a mixture of oncolytic viruses is applied.

83. [20220054610](#) SLOW-CYCLING CELL-RNA BASED NANOPARTICLE VACCINE TO TREAT CANCER  
US - 24.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17275399 Solicitante University of Florida Research Foundation, Inc. Inventor/a Loic Pierre Deleyrolle

The present disclosure provides compositions comprising a liposome comprising a cationic lipid and nucleic acid molecules comprising a sequence of a nucleic acid molecule expressed by slow-cycling cells (SCCs). The present disclosure also provides methods of preparing an anti-tumor liposome composition. In exemplary embodiments, the method comprises (a) isolating SCCs from a mixed tumor cell population in accordance with any one of the presently disclosed in vitro method of isolating SCCs from a mixed tumor cell population, (b) extracting nucleic acid molecules from the isolated SCCs, and (c) mixing the nucleic acid molecules with a cationic lipid to make an anti-tumor liposome composition. The method of preparing an anti-tumor liposome composition in alternative embodiments comprises mixing at least one SCC transcriptome nucleic acid molecule as described herein with a cationic lipid to make an anti-tumor liposome composition. Tumor treatment methods are furthermore provided by the present disclosure.

84. [202124035553](#) METHODS OF ENHANCING VACCINE EFFICACY: INDUCING EXOGENOUS HYPERSENSITIVITY REACTIONS

IN - 11.02.2022

Clasificación Internacional [A61K /](#) N° de solicitud 202124035553 Solicitante COIFMAN Robert E. Inventor/a COIFMAN Robert E.

Administration of an agent or substance to the site of a subject of a temporally interacting cell-mediated allergic reaction is used to enhance the resulting level of protective sensitization.



85. [3956666](#) ANTIGENBINDENDES PROTEIN UND ASSAYS

EP - 23.02.2022

Clasificación Internacional [G01N 33/569](#) N° de solicitud 20717690 Solicitante GLAXOSMITHKLINE BIOLOGICALS SA Inventor/a NORAIS NATHALIE

The present invention relates to the field of antigen binding proteins and the use of such antigen binding proteins in an assay. More particularly, it relates to antigen binding proteins which bind to an epitope of Protein E and antigen binding proteins which bind to an epitope of PIIA. The present invention also relates to assays (particularly *in vitro* assays) for assessing binding to Protein E and/or PIIA and the potency of vaccines containing Protein E and/or PIIA. In particular the invention relates to *in vitro* relative potency assays used in the release of a vaccine to the public.

86. [WO/2022/022756](#) USO DE AGENTES DEPLETANTES DEL FACTOR DE CRECIMIENTO EPIDÉRMICO EN EL TRATAMIENTO DE LA ENFERMEDAD PULMONAR OBSTRUCTIVA CRÓNICA

WO - 03.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud PCT/CU2021/050006 Solicitante CENTRO DE INMUNOLOGIA MOLECULAR Inventor/a MACÍAS ABRAHAM, Amparo Emilia

La presente invención se relaciona con el campo de la Biotecnología y la Medicina. Particularmente, describe el uso de agentes depletantes del factor de crecimiento epidérmico (EGF) que contribuyen a disminuir y/o reducir los niveles del factor de crecimiento epidérmico sérico, lo cual tiene implicaciones en el tratamiento de la enfermedad pulmonar obstructiva crónica. Estos agentes pueden ser composiciones vacunales que comprenden como principio activo un conjugado entre el EGF humano recombinante y una proteína transportadora.

87. [WO/2022/023521](#) PROCESS FOR PREPARATION OF NEOPEPTIDE-CONTAINING VACCINE AGENTS

WO - 03.02.2022

Clasificación Internacional [A61K 39/0011](#) N° de solicitud PCT/EP2021/071380 Solicitante EVAXION BIOTECH A/S Inventor/a TROLLE, Thomas

The present invention presents an improved method for identification of neoepitopes useful in active immunotherapy targeting malignant neoplasms. The method integrates identification of somatic variants of expression product with a balanced evaluation of such variants' 1) ability to bind MHC, 2) ability to induce immune responses, 3) clonal coverage in the tumour tissue, and 4) ability to evade immune responses. Also, the method is complemented by a method for purposive deselection of neoepitopes that could induced undesired immune response against normal cells. Also disclosed is a method for preparing immunogenic compositions, a method for treatment of cancer, and a computer system for identifying neoepitopes and neopeptides.

88. [2022200326](#) VACCINE COMBINATION AND METHOD FOR USING THE SAME

AU - 10.02.2022

Clasificación Internacional N° de solicitud 2022200326 Solicitante Papivax Biotech Inc. Inventor/a Chang, Yung-Nien

89. [WO/2022/026896](#) SARS-COV-2 RECEPTOR BINDING DOMAIN IN NATIVE OUTER MEMBRANE VESICLES

WO - 03.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/US2021/044012 Solicitante OMVAX, INC. Inventor/a MOE, Gregory

The disclosure provides native outer membrane vesicle (NOMV) vaccines containing a coronavirus receptor binding domain (RBD) modified to be a lipoprotein. Also provided are compositions comprising a meningococcal strain having a plasmid-borne gene encoding the SARS-CoV-2 RBD modified to be a

lipoprotein. Also provided are a meningococcal strain and a NOMV vaccine containing a plasmid coding for the SARS-CoV-2 RBD with a promoter/enhancer and polyA sequence that provide for expression of the RBD in mammalian cells.

90. [3957327](#) ANTIGANGLIOSIDVERBINDUNG FÜR KREBS-TARGETING UND ZUR ERZEUGUNG VON ANTIKÖRPERN

EP - 23.02.2022

Clasificación Internacional [A61K 39/395](#) N° de solicitud 21199178 Solicitante AOA DX Inventor/a SARAGOVI HORACIO URI

It is provided a multivalent ganglioside carbohydrate as a therapeutic cancer vaccine. The GD2 and GD3 carbohydrate conjugated disclosed are linked by a spacer to form a multimer which conserves the native structural feature of naturally occurring GD2 or GD3, the tetramer being immunogenic and elicits cytotoxic anti-gangliosides humoral and cellular responses in vivo.

91. [WO/2022/035247](#) PHARMACEUTICAL COMPOSITION COMPRISING HEPATITIS B VIRUS-DERIVED POLYPEPTIDE FOR PREVENTION OR TREATMENT OF CANCER

WO - 17.02.2022

Clasificación Internacional [A61K 38/08](#) N° de solicitud PCT/KR2021/010710 Solicitante SEOUL NATIONAL UNIVERSITY R&DB FOUNDATION Inventor/a KIM, Bum Joon

An aspect pertains to a pharmaceutical composition for prevention or treatment of cancer, or an anticancer immune vaccine composition, each comprising a polypeptide including the amino acid sequence of SEQ ID NO: 1. The composition can enhance anticancer immunity by activating dendritic cells and T cells and moreover, when administered in combination with an immune checkpoint inhibitor, can exhibit a remarkably high synergistic effect on anticancer immune performance.

92. [202241004030](#) MACHINE LEARNING BASED APPROACH TO SCRUTINIZE THE NEED FOR BOOSTER DOSE OF COVID 19

IN - 04.02.2022

Clasificación Internacional [A61B /](#) N° de solicitud 202241004030 Solicitante DR.KETHAM GIRIBABU Inventor/a DR.KETHAM GIRIBABU

Machine learning based approach to scrutinize the need for booster dose of covid 19 is the proposed invention that focuses on designing and implementing a framework that necessitates the need for booster dosage as far as covid 19 vaccine is considered. The proposed invention aims at using machine learning based algorithms to study the health parameters of persons who are non-vaccinated, vaccinated with dual dose and booster dosage to give a result that compares and contrasts the health parameters. The invention will identify the crucial health attributes to prove or disprove the advantages of booster dose.

93. [20220054628](#) DEVELOPMENT OF AN EDIBLE VACCINE

US - 24.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 16997313 Solicitante King Abdulaziz University Inventor/a Sayed Sartaj SOHRAB

Plant-based, edible vaccines are provided. The vaccines are or are made from plants that are genetically engineered to express antigens of disease-causing microbes, for example, antigens of the MERS-CoV virus, such as the S1 subunit of the spike protein.

94. [3946287](#) VERFAHREN ZUR BEHANDLUNG VON KREBS MIT TOZADENANT

EP - 09.02.2022

Clasificación Internacional [A61K 31/00](#) N° de solicitud 20778634 Solicitante UNIV JEFFERSON Inventor/a HOOPER DOUGLAS C

The present disclosure relates to compositions and methods for treating cancers using antisense (AS) nucleic acids directed against Insulin-like Growth Factor 1 Receptor (IGF-1R). The AS may be

administered to the patients systemically, or may be used to produce an autologous cancer cell vaccine. In embodiments, the AS are provided in an implantable irradiated biodiffusion chamber comprising tumor cells and an effective amount of the AS. The chambers are irradiated and implanted in the abdomen of subjects and stimulate an immune response that attacks tumors distally. The compositions and methods disclosed herein may be used to treat many different kinds of cancer, for example glioblastoma. In some embodiments methods are provided to predict the effectiveness of antisense (AS) nucleic acids directed against Insulin-like Growth Factor 1 Receptor (IGF-1R) in a subject.

95. [3946441](#)MULTIVALENTE MALARIAÜBERTRAGBLOCKIERENDE IMPFSTOFFE  
EP - 09.02.2022

Clasificación Internacional [A61K 39/015](#) N° de solicitud 20713331 Solicitante STATENS  
SERUMINSTITUT Inventor/a SINGH SUSHEEL KUMAR

The present invention relates to a method for recombinant production of a fusion protein comprising multiple malaria antigens for inducing immune responses comprising a combination of antibodies. In particular, the fusion proteins of the present invention comprise fragments of both *Pfs230* and *Pfs48/45* to lower the required threshold of functional antibodies and to reduce the risk of escape mutations. Thus, the fusion proteins of the present invention are suitable for use in a multivalent malaria vaccine.

96. [3950705](#)PEPTIDE UND KOMBINATIONEN VON PEPTIDEN ZUR VERWENDUNG IN DER  
IMMUNOTHERAPIE GEGEN EINE INFEKTION DURCH SARS-COV-2 (COVID-19)  
EP - 09.02.2022

Clasificación Internacional [C07K 14/165](#) N° de solicitud 20190070 Solicitante UNIV TUEBINGEN  
MEDIZINISCHE FAKULTAET Inventor/a WALZ JULIANE

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of an infection by SARS-CoV-2 (COVID-19). The present invention furthermore relates to SARS-CoV-2-associated T-cell peptide epitopes that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-SARS-CoV-2 immune responses, or to stimulate T-cells ex vivo and transfer them into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

97. [WO/2022/034882](#)CORONAVIRUS PROPAGATION METHOD  
WO - 17.02.2022

Clasificación Internacional [C12N 7/00](#) N° de solicitud PCT/JP2021/029525 Solicitante KAO  
CORPORATION Inventor/a ONISHI, Shintaro

Provided is a method for efficiently propagating a coronavirus, which is a material for a vaccine, in a host. A method for propagating a coronavirus in a host, said method comprising a step for inhibiting the migration of Bax in host cells to the mitochondrial inner membrane.

98. [WO/2022/029009](#)PEPTIDES AND COMBINATIONS OF PEPTIDES FOR USE IN IMMUNOTHERAPY  
AGAINST AN INFECTION BY SARS-COV-2 (COVID-19)  
WO - 10.02.2022

Clasificación Internacional [C07K 14/165](#) N° de solicitud PCT/EP2021/071298 Solicitante EBERHARD  
KARLS UNIVERSITAET TUEBINGEN MEDIZINISCHE FAKULTAET Inventor/a WALZ, Juliane

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of an infection by SARS-CoV-2 (COVID-19). The present invention furthermore relates to SARS-CoV-2-associated T-cell peptide epitopes that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-SARS-CoV-2 immune responses, or to stimulate T-cells ex vivo and transfer them into

patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

99. [20220048954](#) SARS-COV2 VACCINE VECTOR METHODS AND COMPOSITIONS

US - 17.02.2022

Clasificación Internacional [C07K 14/005](#) N° de solicitud 17240902 Solicitante Salk Institute for Biological Studies Inventor/a Gerald Pao

Provided herein are recombinant nucleic acids and viral vectors thereof encoding a SARS-CoV-2 spike protein that have been optimized for expression in mammalian cells.

100. [20220041655](#) CLASS I MHC PHOSPHOPEPTIDES FOR CANCER IMMUNOTHERAPY AND DIAGNOSIS

US - 10.02.2022

Clasificación Internacional [C07K 7/06](#) N° de solicitud 17178525 Solicitante Agenus Inc. Inventor/a Donald F. HUNT

A set of phosphorylated peptides are presented by HLA A\*0101, A\*0201, A\*0301, B\*4402, B\*2705, B\*1402, and el B\*0702 on the surface of melanoma cells. They have the potential to (a) stimulate an immune response to the cancer, (b) to function as immunotherapeutics in adoptive T-cell therapy or as a vaccine, (c) to facilitate antibody recognition of the tumor boundaries in surgical pathology samples, and (d) act as biomarkers for early detection of the disease. Phosphorylated peptides are also presented for other cancers.

101. [20220042039](#) IMPROVED LENTIVIRAL VECTOR

US - 10.02.2022

Clasificación Internacional [C12N 15/86](#) N° de solicitud 17272197 Solicitante PHAROS VACCINE INC. Inventor/a Hyunsoo LEE

The invention belongs to the field of biomedicine. Specifically, the present invention relates to improved lentiviral vector, and preparation method and uses thereof. Specifically, the present invention relates to a lentiviral vector especially suitable for preparing a therapeutic T cell.

102. [2833908](#) MYCOPLASMA HYOPNEUMONIAE-VACCINE

DK - 07.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 13715881 Solicitante Zoetis Services LLC Inventor/a GALVIN, Jeffrey E.

This invention provides an immunogenic composition including a soluble portion of a Mycoplasma hyopneumoniae (M.hyo) whole cell preparation, wherein the soluble portion of the M.hyo preparation is substantially free of both (i) IgG and (ii) immunocomplexes comprised of antigen bound to immunoglobulin.

103. [2022200061](#) Tri-segmented arenaviruses as vaccine vectors

AU - 03.02.2022

Clasificación Internacional [C12N 15/86](#) N° de solicitud 2022200061 Solicitante Universite de Geneve Inventor/a DARBRE ABDELRAHMAN, Stephanie Gabrielle

The present application relates to arenaviruses with rearrangements of their open reading frames ("ORF") in their genomes. In particular, described herein is a modified arenavirus genomic segment, wherein the arenavirus genomic segment is engineered to carry a viral ORF in a position other than the wild-type position of the ORF. Also described herein are trisegmented arenavirus particles comprising one L segment and two S segments or two L segments and one S segment. The arenavirus, described herein may be suitable for vaccines and/or treatment of diseases and/or for the use in immunotherapies.

104. [20220040289](#) Rabies Composition Comprising Pika Adjuvant

US - 10.02.2022

Clasificación Internacional [A61K 39/205](#) N° de solicitud 17211632 Solicitante Yisheng Biopharma (Singapore) PTE LTD Inventor/a Lietao Li

The present disclosure provides a rabies composition comprising IPRV and PIKA adjuvant, and the pharmaceutical use thereof. The present disclosure also discloses a method for prophylaxis or therapeutic treatment of rabies virus infection, the method comprises a step of administering the rabies vaccine composition to a host. The rabies composition is more stable and safe, and is able to induce earlier and higher titers of neutralizing antibody.

105. [20220047694](#)AFRICAN SWINE FEVER VIRUS VACCINE  
US - 17.02.2022

Clasificación Internacional [A61K 39/187](#) N° de solicitud 17276790 Solicitante Stichting Wageningen Research Inventor/a Petrus Theodorus Johannes Willemsen

The invention is directed to a recombinant nucleic acid molecule comprising an expression cassette encoding a polypeptide comprising T-cell antigens from proteins of African Swine Fever Virus. The invention further relates to a viral particle, comprising said recombinant nucleic acid molecule, and to a viral particle comprising B-cell antigens of African Swine Fever Virus. The invention further relates to methods of stimulating an immune response in a pig comprising administering the recombinant molecule of the invention, and/or the viral particle of the invention, to the pig in an amount effective to induce an immune response.

106. [3955959](#)INAKTIVIERTER SARS-COV-2-VIRUS-IMPfstoff  
EP - 23.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 21716442 Solicitante VALNEVA AUSTRIA GMBH Inventor/a MEINKE ANDREAS

Described herein are SARS-CoV-2 vaccines and compositions and methods of producing and administering said vaccines to subjects in need thereof.

107. [WO/2022/032829](#)SPIKE PROTEIN RECEPTOR BINDING DOMAIN NANOGEL, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF  
WO - 17.02.2022

Clasificación Internacional [C07D 207/404](#) N° de solicitud PCT/CN2020/119008 Solicitante PEKING UNIVERSITY Inventor/a LIN, Jian

A spike protein receptor binding domain nanogel. The nanogel is obtained by means of chemically cross-linking a viral spike protein receptor binding domain and a cross-linking molecule represented by formula I. The described nanogel can significantly improve lymph node targeting as well as the uptake of antigen-presenting cells. During an in vivo immunological process, the described nanogel can quickly be converted into an S-RBD monomeric protein, thereby generating a strong and effective immune response and being promising for development as a high-safety subunit vaccine.

108. [202131060613A](#) PRODUCT FOR PREVENTION, CURATIVE ACTION AND IMMUNE MODULATOR IN COVID-19  
IN - 18.02.2022

Clasificación Internacional [A61K /](#) N° de solicitud 202131060613 Solicitante HERITAGE INSTITUTE OF TECHNOLOGY Inventor/a DR. SATADAL DAS

This invention relates to the discovery of a new product known as "iAttos", which contains recombinant Delta SARS-CoV-2 spike RBD protein in 1 nanogram to 1 attogram concentration in molecular biology grade ethanol prepared with thrust. We used spike protein of Delta virus, which has not been used in any vaccine or in any product so far. Experimentally spike protein is immunogenic and can produce neutralizing antibody against the virus. In COVID-19 most important complication is Cytokine Storm Syndrome (CSS). This product is able to neutralise and/or normalize progressive increase of pro-

inflammatory cytokines which is associated with unsuccessful rise of anti-inflammatory cytokines to counteract them, which again may lead to immune paralysis. Thus the maintenance of pro-inflammatory and anti-inflammatory cytokine balance is the crucial point in COVID-19 and iAttos successfully accomplish this job without any side effects.

109. [20220041689](#) NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST VARIOUS TUMORS

US - 10.02.2022

Clasificación Internacional [C07K 14/74](#) N° de solicitud 17396377 Solicitante Immatics Biotechnologies GmbH Inventor/a Andrea MAHR

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

110. [20220033812](#) SURFACE EXPRESSION VECTOR FOR CONSTITUTIVE HIGH-EXPRESSION USING PROMOTER OF GALACTOSE MUTAROTASE GENE DERIVED FROM LACTOBACILLUS CASEI, AND USE THEREOF

US - 03.02.2022

Clasificación Internacional [C12N 15/11](#) N° de solicitud 17281743 Solicitante BIOLEADERS CORPORATION Inventor/a Young Chul PARK

Provided is a galactose mutarotase gene promoter derived from *Lactobacillus casei* and the use thereof, and more particularly, to a *Lactobacillus casei*-derived galactose mutarotase gene promoter having the nucleotide sequence of SEQ ID NO: 1, an expression vector containing the promoter, and a microorganism transformed with the expression vector. A microorganism transformed with an expression vector containing the promoter may effectively express a target protein on the cell surface, and thus is useful as a vaccine vehicle or the like. Moreover, provided is a surface expression vector having *pgsA*, which is a gene encoding poly-gamma-glutamate synthetase, and a method of expressing a target protein on the microbial surface using the vector. The vector containing foreign genes inserted therein is transformed into a microorganism and allows a foreign protein is to be stably expressed on the surface of the microorganism.

111. [2019463018](#) Porcine reproductive and respiratory syndrome vaccine virus

AU - 03.02.2022

Clasificación Internacional [A61P 31/14](#) N° de solicitud 2019463018 Solicitante Elanco UK Ah Limited Inventor/a LABARQUE, Geoffrey Gregory

The present invention relates to modified, live Porcine Reproductive and Respiratory Syndrome viruses. Viruses were genetically analyzed and selected based on phylogenetic grouping for modification by repeated passage in tissue culture. The modified, live viruses were assessed for the ability to provide protective immunity to heterologous viruses. The modified, live viruses are useful in vaccines, particularly in vaccines which can treat infection of swine by multiple heterologous viruses.

112. [2020291162](#) Combination of markers for predicting the response to Vx-001

AU - 03.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 2020291162 Solicitante Vaxon Biotech Inventor/a KOSMATOPOULOS, Kostantinos (Kostas)

The invention relates to the use of an anti-tumour vaccine composed of two peptides of nine amino acids - native cryptic TERT572 (RLFFYRKS<sub>V</sub>, SEQ ID No. 1), expressed by tumour cells, and the optimised variant thereof TERT572Y (YLFFYRKS<sub>V</sub>, SEQ ID No. 2), for the treatment of a tumour expressing telomerase reverse transcriptase (TERT), in an HLA-A\*0201 patient with a normal gamma glutamine transferase (gGT) level and/or a normal lactate dehydrogenase (LDH) level.

113. [20220033469](#) NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST VARIOUS TUMORS

US - 03.02.2022

Clasificación Internacional [C07K 14/74](#) N° de solicitud 17503020 Solicitante Immatics Biotechnologies GmbH Inventor/a Andrea MAHR

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

114. [202118061610](#) COMPOSITIONS AND METHODS FOR DENGUE VIRUS CHIMERIC CONSTRUCTS IN VACCINES

IN - 18.02.2022

Clasificación Internacional [A61K /](#) N° de solicitud 202118061610 Solicitante TAKEDA VACCINES, INC Inventor/a STINCHCOMB, Dan, T.

Embodiments herein report compositions, uses and manufacturing of dengue virus constructs and live attenuated dengue viruses. Some embodiments concern a composition that includes, but is not limited to, a tetravalent dengue virus composition. In certain embodiments, compositions can include constructs of one or more serotypes of dengue virus, such as dengue-1 (DEN-1) virus, dengue-2 (DEN-2) virus, dengue-3 (DEN-3) or dengue-4 (DEN-4) virus constructs. In other embodiments, constructs disclosed herein can be combined in a composition to generate a vaccine against more one or more dengue virus constructs that may or may not be subsequently passaged in mammalian cells.

115. [WO/2022/040626](#) COMBINATION THERAPY COMPRISING HER-2-DC1 VACCINE AND A PROBIOTIC

WO - 24.02.2022

Clasificación Internacional [A61K 35/15](#) N° de solicitud PCT/US2021/047139 Solicitante H. LEE MOFFITT CANCER CENTER AND RESEARCH INSTITUTE, INC. Inventor/a KODUMUDI, Krithika N.

Disclosed are anti-cancer therapies comprising i) at least one dendritic cell pulsed with an oncodriver and ii) a fecal microbial transplant (FMT) from a pathologic complete response (pCR) donor or a cyclin-dependent kinase (CDK) inhibitor and methods of the use of said therapies to treat cancer.

116. [20220047691](#) Multivalent Virus Like Particle Vaccines

US - 17.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17284614 Solicitante Texas Tech University System Inventor/a Himanshu Garg

The present invention includes composition and methods for making multivalent vaccines for immunization against Flavivirus and/or arboviruses including a multivalent Virus Like Particles (VLP) and mixtures thereof, the method comprising: method of making a Flavivirus and/or arboviruses Virus Like Particles (VLP) comprising: inserting two or more nucleic acids that encode at least one Flavivirus protein into a lentiviral backbone vector; generating a lentivirus by transfecting a first cell line with the lentiviral

backbone vector and isolating the lentivirus therefrom; transducing a second cell line with the lentivirus; culturing the transduced cell line under conditions in which the multivalent Flavivirus Virus Like Particles (VLP) are released from the cell line; and isolating the Flavivirus Virus Like Particles (VLP) from a culture supernatant, wherein a cell line makes a virus-specific VLP, and the VLPs are purified and then mixed in different combinations to make the multivalent vaccine.

117. [20220031859](#) HERBOXIDIENE ANTIBODY-DRUG CONJUGATES AND METHODS OF USE  
US - 03.02.2022

Clasificación Internacional [A61K 47/68](#) N° de solicitud 17312320 Solicitante Eisai R&D Management Co., Ltd. Inventor/a Nathan Fishkin

Linker-drug compounds and antibody-drug conjugates that bind to human oncology targets are disclosed. The linker-drug compounds and antibody-drug conjugates comprise a herboxidiene splicing modulator drug moiety. The disclosure further relates to methods and compositions for use in the treatment of neoplastic disorders by administering the antibody-drug conjugates provided herein. The herboxidiene itself is also claimed. Further claims are directed to its use, and to the use of a neoantigen, generated by the herboxidiene or its ADC, or a vaccine against this neoantigen.

118. [2597436](#) A method and apparatus for RNA synthesis  
GB - 02.02.2022

Clasificación Internacional [C12P 19/34](#) N° de solicitud 202006975 Solicitante UNIV CRANFIELD  
Inventor/a CHARALAMPOS MAKATSORIS

A method of RNA synthesis comprising; introducing into a first microfluidic reactor module 10 via a plurality of inlet ports 14, a plurality of reactants including, a nucleoside triphosphate (NTP), DNA, a salt solution and RNA polymerase. The reactants are allowed to react with each other within the first reactor module. The DNA is retained or recirculated within the first reactor module while the reactant product flows into a first microfluidic filtration module 11 for filtering. Optionally the RNA polymerase may be recirculated from the outlet of the first filtration module back into the first reactor module. Some of filtered reaction product may be delivered into a second microfluidic reactor 12 module along with a capping enzyme. The fluid from the second reactor module may be delivered to a second microfluidic filtration module 13. Unused NTP may optionally be recirculated to the first reactor module and capping enzyme to the second module. Optionally the salt solution contains MgCl<sub>2</sub> and the RNA polymerase comprises T7 polymerase. There are further claims to the RNA prepared by the method and for using the prepared RNA in the preparation of a vaccine.

119. [202221002694](#) ADVANCED MACHINE LEARNING SYSTEM COMBATING COVID-19 VIRUS DETECTION, SPREAD, PREVENTION AND MEDICAL ASSISTANCE.  
IN - 11.02.2022

Clasificación Internacional [C12Q](#) / N° de solicitud 202221002694 Solicitante Dr. Mohammad Hashim Mansoori Inventor/a Dr. Mohammad Hashim Mansoori

Abstract Our Invention Advanced Machine Learning & Research & Towards Combating COVID-19: [Virus Detection], Complete Spread Prevention, and higher level Medical Assistance is a COVID-19 was first discovered in [December-2019] and has continued to rapidly spread across countries worldwide infecting Phase-1: 20 %, Phsar-2: 30 %, Phase-3: approx 25% of people. The virus is deadly and people who are suffering from prior illnesses or are older than the age of 65 are at a very higher risk of mortality and age 30 to 65 Los risk, below 30 age very low risk. The Medicine and Healthcare industries have surged towards finding a cure and different policies have been amended to mitigate the spread of the virus and time by time fellow the Govt instruction to controlled the rapidly spread status. The Advanced Machine Learning (ML) methods have been widely used in other domains there is now a high demand for The ML aided diagnosis complex systems for screening, fast tracking, and predicting the spread of COVID-19 and



finding a cure against it. The Invention I present a journey of what role ML has played so far in combating the virus mainly looking at it from a screening, forecasting, and vaccine perspectives and also I present a comprehensive survey of the defined ML algorithms and models that can be used on this higher expedition and aid with battling the virus.

120. [3957312](#)MANGANKOMBINATION ZUR IMMUNOLOGISCHEN VERSTÄRKUNG

EP - 23.02.2022

Clasificación Internacional [A61K 33/32](#) N° de solicitud 20791542 Solicitante UNIV BEIJING Inventor/a JIANG ZHENGFAN

An immune enhancement composition and a vaccine composition comprising newly precipitated manganese and/or colloid manganese, a preparation method therefor, and use thereof for immunization and/or vaccination enhancement.

121. [20220049229](#)VACCINE FOR IMMUNOCOMPROMISED HOSTS

US - 17.02.2022

Clasificación Internacional [C12N 9/02](#) N° de solicitud 17331536 Solicitante Universidade do Porto - Reitoria Inventor/a Paula Maria DAS NEVES FERREIRA DA SILVA

The invention provides peptides derived from a ubiquitous protein, and nucleic acids encoding such peptides. The invention extends to various uses of these peptides and nucleic acids, for example, as antigens for use in vaccines per se and in the generation of antibodies for use in therapeutic drugs for the prevention, amelioration or treatment of infections caused by sepsis-inducing bacteria. The invention particularly benefits immunocompromised hosts such as neonates, babies, children, women of fertile age, pregnant women, foetuses, the elderly and diabetics.

122. [WO/2022/038035](#)COMPOSITIONS FOR TREATING GASTROINTESTINAL ADENOCARCINOMAS BY ALTERING THE TUMOR MICROENVIRONMENT

WO - 24.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud PCT/EP2021/072471 Solicitante NORDIC SCIENCE GROUP APS Inventor/a UTTENTHAL, Lars Otto

The present invention provides compositions comprising a vaccine against the SARS- CoV-2 virus for promoting an antitumor immune response in a subject with an accessible adenocarcinoma tumor who has previously been exposed to said virus by infection or vaccination, by the direct injection of the composition into the tumor.

123. [WO/2022/040555](#)METHOD OF TREATING CANCER

WO - 24.02.2022

Clasificación Internacional [G01N 33/50](#) N° de solicitud PCT/US2021/046949 Solicitante EXELIXIS, INC. Inventor/a DEL NAGRO, Christopher

This invention is directed to the treatment of cancer, particularly solid tumors, using cabozantinib in combination with an immune checkpoint inhibitor or an anti-cancer vaccine and in predicting responses to such cancer treatments.

124. [11248035](#)Peptides and combination of peptides for use in immunotherapy against ovarian cancer and other cancers

US - 15.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17345211 Solicitante Immatics Biotechnologies GmbH Inventor/a Heiko Schuster

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of

vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

125. [20220047699](#) IMMUNOLOGICAL ADJUVANT COMPOSITION, PREPARATION METHOD AND APPLICATION THEREOF

US - 17.02.2022

Clasificación Internacional [A61K 39/39](#) N° de solicitud 17312441 Solicitante LUOYANG SEIWEI BIOTECHNOLOGIES CO.,LTD. Inventor/a Kegong Tian

The present disclosure provides an adjuvant composition containing 0.2%-15% w/v carbomer, 0.1%-0.5% w/v lecithin, and 0.03%-0.2% w/v ginsenoside. The adjuvant composition of the present disclosure cannot only ensure the long-term clarification and/or stability of the vaccine, but also can effectively stimulate the inactivated antigens and subunit antigens therein to produce high-titer antibodies for immune protection. The inactivated vaccines or subunit vaccines prepared by the adjuvant composition of the present disclosure can be used as a diluent for freeze-dried live virus antigens and has no toxic effect on the live virus antigens.

126. [WO/2022/027107](#) IMMUNOGENIC COMPOSITIONS

WO - 10.02.2022

Clasificación Internacional [A61K 39/015](#) N° de solicitud PCT/AU2021/050864 Solicitante MACFARLANE BURNET INSTITUTE FOR MEDICAL RESEARCH AND PUBLIC HEALTH LIMITED Inventor/a BEESON, James

Immunogenic or vaccine compositions for preventing malaria, comprising or encoding CSP N-terminal (NT) sequences capable of presenting NT epitopes to a subject, and methods of administering same.

127. [20220031827](#) TETANUS TOXOID AND CCL3 IMPROVE DC VACCINES

US - 03.02.2022

Clasificación Internacional [A61K 39/08](#) N° de solicitud 17372475 Solicitante Duke University Inventor/a John H Sampson

Pre-conditioning a vaccine site with a potent recall antigen such as tetanus/diphtheria (Td) toxoid can significantly improve the lymph node homing and efficacy of tumor antigen-specific DC vaccines. Patients given Td had enhanced DC migration bilaterally and significantly improved survival. In mice, Td pre-conditioning also enhanced bilateral DC migration and suppressed tumor growth in a manner dependent on the chemokines CCL3 and CCL21 and Td-activated CD4<sup>+</sup> T cells. Interference with any component of this axis markedly reduced Td-mediated DC migration and antitumor responses. Our clinical studies and corroborating investigations in mice suggest that pre-conditioning with a potent recall antigen represents a viable strategy to increase DC homing to lymph nodes and improve antitumor immunotherapy.

128. [20220033851](#) mRNA, episomal and genomic integrated lentiviral and gammaretroviral vector expression of dimeric immunoglobulin A and polymeric immunoglobulin A to Enable Mucosal and Hematological Based Immunity/Protection via Gene Therapy for Allergens, viruses, HIV, bacteria, pneumonia, infections, pathology associated proteins, systemic pathologies, cancer, toxins and unnatural viruses. CAR engineered and non-CAR engineered immune cell expression of dimeric immunoglobulin A and polymeric immunoglobulin A.

US - 03.02.2022

Clasificación Internacional [C12N 15/86](#) N° de solicitud 17368957 Solicitante Roger B. Swartz Inventor/a Roger B. Swartz

The present invention contemplates mRNA, episomal and retroviral genomic gene therapy based short-term, intermediate or long-term vaccine, immunization, immune protection or cancer—that can also be administered as a retroviral genomic gene therapy both in vivo and ex vivo—method to provide epithelial

and hematological protection to humans to protect against cancer especially carcinomas, pandemic and non-pandemic viruses, bacterial infections, allergens or the cause of allergic reactions, systemic pathological conditions, cancer and anti-biowarfare agents (e.g. natural and unnatural viruses and toxins) where mucosal immunity and for some diseases hematological immunity is achieved through mRNA, episomal or genomic integrated lentiviral and gammaretroviral vector expression of dimeric immunoglobulin A1 (dIgA1), dimeric immunoglobulin A2 (dIgA2) and engineered variants. Additionally, in some embodiments a method to agglutinate cancers including carcinomas and hematological cancers to prevent metastasis with polymeric immunoglobulin A and dimeric immunoglobulin A and engineered variants. The present invention provides methods, immunoglobulin compositions and vector constructs to express potent immunoglobulins that are derived from human blood of a human currently infected with, affected by, exposed to or recovered from any of a wide range of allergens or the cause of allergic reactions, pathogens (including, viruses, virus mutants, bacterial infections and fungi) and systemic pathological ailments (including cancer and other disorders), developed from phage display technology or mice or other non-human vertebrates with engineered immune systems or humanized immune systems, transgenic mice or chimeric antibodies a fusion of non-human vertebrates (e.g. mouse or rabbit), mouse antibody V-regions, human antibodies. The immunoglobulin compositions include the heavy chain variable, diversity and joining (VDJ or Variable Heavy Region genes) segment immunoglobulin DNA and/or polypeptide sequence from humans identified to have therapeutically relevant affinity immunoglobulins against the antigen, protein or proteins of interest and either to use the exact immunoglobulin heavy chain and light chain polypeptide sequences identified from the B-cell that produced them or to modify or engineer some of the immunoglobulin heavy chain and light chain constant domains to modulate effector functions. Although, ideally there are no changes made to the immunoglobulins light and heavy chains as identified from the B-cell that produced them. Modifications may occur at the Hinge region, Constant Heavy 2 ( $C_{H2}$ ) domain and Constant Heavy 3 ( $C_{H3}$ ) domain for the immunoglobulin heavy chain polypeptide with possible modification or change of Constant Heavy 1 ( $C_{H1}$ ), possible modification or change constant light ( $C_L$ ) chain domain. The resulting antibodies can either be used as a monoclonal or antibody cocktail of (Immunoglobulin Class G subclass1) IgG1, IgG2, IgG3 and other subclasses, IgA1 monomer and IgA2 monomer and dimeric IgA1 (dIgA1) and dimeric IgA2. Immunoglobulins are coded for as necessary to represent the binding affinity (e.g. such as based on complementarity determining Regions (CDRs) or V-regions) in the monoclonal or antibody cocktail. Alternatively, combinatorial libraries of single chain variable fragments (scFv) will generated from human B-cells or other animal B-cells that may or may not have been exposed to the allergen, pathogen, cancer, or pathological ailment, or suspected or identified biowarfare agent or protein where phage display technology and mutagenesis can be used to identify potent  $V_H$  and  $V_L$  immunoglobulin fragments that can be incorporated into full-length immunoglobulin heavy and light chains and even reduced length immunoglobulin heavy chains incorporated into vectors for mRNA expression, episomal expression or retroviral gene delivery (retroviral insertion into genomic DNA) based gene-therapy. Further, mice or other animals can also achieve humanized immune system by implanting human hematopoietic progenitor cells into the animal or transplanting human thymus, liver and bone marrow into mice. Additionally, transgenic mice where human immunoglobulin (Ig) genes are inserted into the genome to replacing the endogenous Ig genes making the mice or other non-human vertebrate such as rabbits or hamsters capable of producing fully human antibodies from exposure to antigen may be used to identify potent immunoglobulins. Non-human vertebrates (e.g., mouse or rabbit) may be used to identify potent immunoglobulin binding regions or potent immunoglobulin complementarity determining regions (CDRs) for fusion with human antibodies giving rise to chimeric antibodies. The identified immunoglobulins from these methods will optionally be further optimized through mutagenesis techniques and will be expressed in the recipient via mRNA, via an episome or via retroviral insertion into their genomic DNA of the cells of

interest to be expressed via intramuscular administration, intravenous administration, endoscopy based administration to the lamina propria of the stomach and/or small intestine or even the lung, via ingestion or administration proximal to lymph nodes or as an ex vivo administration into any of B-cells, T-cells, Natural Killer (NK) Cells and other immune cell types. Preferred cells to target to receive the vector include muscle cells, liver cells especially hepatocytes and B-cells including memory B-cells, Germinal Center B-cells, memory plasma B-cells (also referred to as a long-lived plasma cell), naïve B-cells, NK cells, T-cells, including chimeric antigen receptor T-cells (CAR T-cells) as well as any CAR engineered immune cell. Additionally, the vector may encode for both the CAR and the polymeric and dimeric immunoglobulin in a single vector construct. In cases where the CAR engineered immune cell is selected to receive the polymeric immunoglobulin A and dIgA encoding vector the retrovirus may optionally be pseudotyped with a protein that is anti to the CAR single chain variable fragment (scFv) such that conditional transduction occurs only on CAR engineered cells. The vector will be ideally delivered as a naked vector, in a vesicle based delivery system such as a lipid nano-particle, in a recombinant Adeno Associated Virus (rAAV) with preference for AAV serotype 8 (AAV8) containing a single-stranded Deoxyribonucleic acid (ssDNA), an adenovirus delivery system, a lentivirus delivery system, gammaretroviral delivery system, lentiviral mRNA delivery via mutated reverse transcriptase protein, gammaretroviral mRNA delivery via mutated reverse transcriptase protein, lentiviral retroviral vector, gammaretroviral vector or episomal delivery via mutated integrase protein, or a vesicle-based delivery system using mRNA, single-stranded DNA or double-stranded DNA. When designing an mRNA, AAV viral vector, adenovirus vector, integration deficient lentivirus retroviral vector or gammaretroviral vector, integration deficient lentivirus retroviral vector or gammaretroviral vector, encoding for dIgA1, dIgA2 or polymeric immunoglobulin A a single vector will code for the entire immunoglobulin and J Chain (Joining Chain) expression for dIgA1 or dIgA2, where expression may occur with a single start codon and stop codon for each transgene and in some embodiments a second start codon for J Chain expression. The use of a single start and stop codon is enabled by placing in the 5' to 3' direction a furin cleavage site concomitantly followed by a 2A self-processing peptide or furin cleavage site between each gene of any number of consecutive transgenes as a single open reading frame. The specific DNA of the human donor can be identified as follows: Cluster of Differentiation 27+ (CD27+) IgG+ and CD27+ IgA+ memory B-cells, other memory B-cells, or plasmablast B-cells, germinal center B-cells, and even potentially memory plasma B-cells (also referred to as a long-lived plasma cell) will be isolated from blood using established methods. Each resulting isotype of memory B-cell or together will be subjected to a competitive binding assay using magnetic pull down and Fluorescence Activated Cell Sorting (FACS) methods to identify the memory B-cells with therapeutically relevant binding affinity to the virus, bacteria, antigen, allergens, self-antigen, pathogenic protein, or other foreign and non-foreign bodies and proteins of interest.

129. [WO/2022/037692](#) CIRCULAR RNA VACCINES AND METHODS OF USE THEREOF

WO - 24.02.2022

Clasificación Internacional [C07K 14/435](#) N° de solicitud PCT/CN2021/113865 Solicitante PEKING UNIVERSITY Inventor/a WEI, Wensheng

The present application provides circular RNAs (circRNAs) encoding therapeutic polypeptides (e.g., an antigenic polypeptide, a functional protein, a receptor protein, or a targeting protein). In some embodiments, the present application provides circRNA vaccines against a coronavirus such as SARS-CoV-2. In some embodiments, the circRNA vaccine comprises a circRNA comprising a nucleic acid sequence encoding an antigenic polypeptide comprising a Spike (S) protein or a fragment thereof of a coronavirus. Also provided are methods of treating or preventing a disease or condition using the circRNAs or compositions thereof.

130. [WO/2022/026537](#) METHOD FOR DETECTION AND QUANTITATIVE MONITORING OF INFECTIONS WITH HERPESVIRUSES

WO - 03.02.2022

Clasificación Internacional [A61K 38/16](#) N° de solicitud PCT/US2021/043436 Solicitante THE TRUSTEES OF PRINCETON UNIVERSITY Inventor/a CRISTEA, Ileana M.

Described are systems and assays that monitor presence and/or quantity of herpesviruses viral proteins. Embodiments offer accurate detection and quantification of viral proteins from all temporal classes of viral replication. Three exemplary assays provide specific detection of: herpes simplex virus type 1 (HSV1), human cytomegalovirus (HCMV), and Kaposi's sarcoma-associated herpesvirus (KSHV). These assays can be utilized in combination with drug treatments, genetic modifications, or other perturbations to assess the impact of the intervention on viral protein production. Also provided are kits for use with such assays, peptides useful in the describes assays (including labeled peptides and collections of a plurality of different peptides), nucleic acids and other genetic constructs encoding such peptides, systems for carrying out the described assays (including computer-based or computer-assisted systems), and methods for using the assays for instance in drug development and analysis, vaccine development and analysis, genetic analysis, environmental analysis, etc..

131. [2020301582](#) Combination therapy

AU - 03.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 2020301582 Solicitante Eterna Immunotherapies NV Inventor/a COOLS, Marina

The present invention in general relates to combinations of mRNA molecules encoding CD40, caTLR4 and CD70 with mRNA molecules encoding tumor-associated antigens for use as therapeutic vaccine in the treatment of metastatic cancer patients primarily with stable malignant melanoma disease, but also extending into other cancer types and to patient whose disease has shown partial response on prior therapy. Said uses may further encompass the administration of checkpoint inhibitors. The present invention further provides administration schemes for such therapies focusing on administration of the therapeutic into lymph nodes, so called intra-nodal therapy.

132. [20220034896](#) METHODS FOR QUANTITATIVE ANALYSIS OF ONE OR MORE BIOMARKERS

US - 03.02.2022

Clasificación Internacional [G01N 33/58](#) N° de solicitud 17368711 Solicitante The Research Foundation for the State University of New York Inventor/a Nathaniel Cady

The present disclosure relates to apparatuses and methods for detecting the amount and/or type of one or more analytes-of-interests such as biomarkers in a sample. In embodiments, the disclosure includes a method for determining a humoral response due to the presence of a target infectious agent or vaccine. In embodiments, detecting emission light from one or more fluorescent complexes is used to determine a type and/or quantity of the plurality of biomarkers.

133. [20220040288](#) HUMAN ROTAVIRUS G9P[6] STRAIN AND USE AS A VACCINE

US - 10.02.2022

Clasificación Internacional [A61K 39/15](#) N° de solicitud 17515074 Solicitante THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVIC Inventor/a Baoming Jiang

Attenuated G9P[6] rotavirus is disclosed herein. In some embodiments, pharmaceutical compositions are disclosed that include an attenuated G9P[6] rotavirus, or a component thereof. These compositions can be used to induce an immune response, such as a protective immune response, to a rotavirus. The compositions can be used as vaccines, such as for children (infants), for example in a prime boost strategy.

134. [20220041644](#) CYCLIC DINUCLEOTIDE ANALOGUE, PHARMACEUTICAL COMPOSITION THEREOF, AND APPLICATION  
US - 10.02.2022

Clasificación Internacional [C07H 21/02](#) N° de solicitud 17277534 Solicitante SHANGHAI DE NOVO PHARMATECH CO., LTD. Inventor/a Zhaolong TONG

A cyclic dinucleotide analogue, a pharmaceutical composition thereof, and application. A cyclic dinucleotide analogue (I), an isomer thereof, a prodrug, a stable isotope derivative, or a pharmaceutically acceptable salt has the following structure. The cyclic dinucleotide analogue can be used as a regulator of a stimulator of interferon genes (STING) and a related signal path thereof, and can effectively treat and/or relieve multiple types of diseases, including but not limited to malignant tumors, inflammations, autoimmune diseases, and infectious diseases. In addition, the STING regulator can also be used as a vaccine adjuvant.

135. [WO/2022/031790](#) MULTI-EPI TOPE VACCINE  
WO - 10.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/US2021/044460 Solicitante THE CLEVELAND CLINIC FOUNDATION Inventor/a CHENG, Feixiong

The present invention provides compositions comprising polypeptides comprising a plurality of epitopes from the spike glycoprotein of SARS-CoV-2, systems, and methods of using thereof for the treatment of viral infections (e.g., coronavirus disease 2019 (COVID-19)).

136. [WO/2022/032368](#) METHOD FOR PRODUCING AN ANTIGEN CORRESPONDING TO THE INACTIVATED SARS-COV-2 VIRUS, ANTIGEN CORRESPONDING TO THE INACTIVATED SARS-COV-2 VIRUS, ANTIGENIC COMPOSITION, KITS, AND USES THEREOF  
WO - 17.02.2022

Clasificación Internacional [C07K 14/165](#) N° de solicitud PCT/BR2021/050343 Solicitante INSTITUTO BUTANTAN Inventor/a OLIVEIRA, Ricardo Das Neves

The present invention relates to techniques and methods for producing, purifying, inactivating and analyzing SARS-CoV-2. The present invention relates to the method for producing an antigen corresponding to the SARS-COV-2 virus inactivated by gamma radiation. The method for producing an antigen corresponding to the SARS-COV-2 virus inactivated by gamma radiation is intended for use in the production of a novel vaccine, the antigen being used in the production of hyperimmune plasma in horses for serum therapy, and in different animal species for the production of antibodies/research inputs and the establishment of serum diagnosis techniques. The present invention relates to the antigenic composition including the antigen corresponding to the inactivated SARS-COV-2 virus and a pharmaceutically acceptable diluent excipient. The invention also relates to a method for producing anti-SARS-CoV-2 immunoglobulins using the SARS-COV-2 virus inactivated by gamma radiation.

137. [WO/2022/036298](#) LYOPHILIZED LIVE BORDETELLA VACCINES  
WO - 17.02.2022

Clasificación Internacional [A61K 39/10](#) N° de solicitud PCT/US2021/046055 Solicitante ILIAD BIOTECHNOLOGIES, LLC Inventor/a THALEN, Marcel

Formulations of lyophilized Bordetella bacteria which are stable for at least two years when stored at temperatures between -20° and 22.5°C, and which exhibit sufficient bacterial viability and potency to be used as a live vaccine are made by harvesting Bordetella bacteria from a culture at an OD600 between 0.4 and 1.6; mixing the harvested Bordetella bacteria with a lyophilization buffer comprising 5-65% by weight a cryoprotectant sugar and having a temperature between 2-35°C, wherein the ratio of harvested Bordetella bacteria to lyophilization buffer is between 5:1 and 1:5 by volume; lyophilizing the mixture of

the Bordetella bacteria and the lyophilization buffer; wherein the hold time between the harvesting and lyophilizing steps is less than 48 hours; and collecting the lyophilized Bordetella bacteria.

138. [20220047692](#) Live-Attenuated Yellow Fever Virus Strain Adapted to Grow on Vero Cells and Vaccine Composition Comprising the Same

US - 17.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17453758 Solicitante Sanofi Pasteur Inventor/a Manuel Vangelisti

The invention relates to a live-attenuated yellow fever virus strain adapted to grow on Vero cells from a parent yellow fever virus 17D substrain that is not adapted to grow on Vero cells, wherein said live-attenuated yellow fever virus strain is less neurovirulent than said parent yellow fever virus 17D substrain.

139. [2022200745](#) NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST EPITHELIAL OVARIAN CANCER AND OTHER CANCERS

AU - 24.02.2022

Clasificación Internacional N° de solicitud 2022200745 Solicitante Immatix Biotechnologies GmbH Inventor/a Peper, Janet

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

140. [3956438](#) CSFV-SUBUNIT-IMPFSTOFF

EP - 23.02.2022

Clasificación Internacional [C12N 5/10](#) N° de solicitud 20792227 Solicitante BOEHRINGER INGELHEIM VETMEDICA CHINA CO LTD Inventor/a CHEN NING

Provided a recombinant classical swine fever virus E2 protein comprising at least one mutation at the epitope specifically recognized by the 6B8 monoclonal antibody. Further, the present invention provides an immunogenic composition comprising the recombinant E2 protein of the present invention and the use of the immunogenic composition for preventing and/or treating diseases associated with CSFV in animal. Moreover, the present invention provides a method and a kit for differentiating animals infected with CSFV from animals vaccinated with the immunogenic composition of the present invention.

141. [202117047355](#) EXTRACELLULAR VESICLES FOR VACCINE DELIVERY

IN - 11.02.2022

Clasificación Internacional [A61K /](#) N° de solicitud 202117047355 Solicitante CODIAK BIOSCIENCES, INC. Inventor/a MONIZ, Raymond J.

The present disclosure relates to extracellular vesicles (EVs), e.g., exosomes, comprising a payload (e.g., an antigen, adjuvant, and/or immune modulator) and/or a targeting moiety. Also provided herein are methods for producing the EVs (e.g., exosomes) and methods for using the EVs (e.g., exosomes) to treat and/or prevent diseases or disorders, e.g., cancer, graft-versus-host disease (GvHD), autoimmune disease, infectious diseases, or fibrotic diseases.

142. [20220054627](#) RETROVIRAL VECTOR FOR THE ADMINISTRATION AND EXPRESSION OF REPLICON RNA EXPRESSING HETEROLOGOUS NUCLEIC ACIDS

US - 24.02.2022

Clasificación Internacional [A61K 39/21](#) N° de solicitud 17466577 Solicitante Immune Design Corp. Inventor/a Peter Lars Aksel Berglund

The present disclosure relates generally to gene delivery using a chimeric, retroviral-RNA replicon vector particle for increased expression of transgenes in a host cell. In particular, the chimeric vectors described herein can be used in any of a variety of settings including gene therapy and vaccine settings.

143. [3954386](#)HERSTELLUNG EINES ZINKZOLEDRONAT-MIKRO-NANOPARTIKEL-ADJUVANS UND DESSEN VERWENDUNG ALS IMPFSTOFFADJUVANS  
EP - 16.02.2022

Clasificación Internacional [A61K 39/39](#) N° de solicitud 20786788 Solicitante XIAMEN INNOVAX BIOTECH CO LTD Inventor/a ZHAO QINJIAN

Disclosed is a zinc zoledronate micro-nanoparticle adjuvant, which contains zinc and zoledronic acid and optionally contains a phosphate and aluminum. The preparation method therefor comprises performing mixed precipitation on a soluble salt solution containing zinc ions, zoledronic acid, and sodium hydroxide. The adjuvant can be used to prepare vaccines, etc.

144. [WO/2022/026917](#)VACCINE COMPOSITIONS AND METHODS OF USE THEREOF  
WO - 03.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/US2021/044052 Solicitante THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY Inventor/a MASSOUD, Tarik, F.

Provided herein, inter alia, are complexes comprising nanoparticles attached to viral proteins or nucleic acids encoding said viral proteins. Methods for making and using said complexes are provided. Compositions including the complexes are contemplated to be useful for treating and/or preventing viral infections.

145. [WO/2022/040220](#)SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS [SARS-COV-2]-VIRUS-LIKE PARTICLE [VLP] VACCINE: COMPOSITIONS, DELIVERY STRATEGIES, METHODS AND USES  
WO - 24.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/US2021/046353 Solicitante TECHNOVAX, INC. Inventor/a GALARZA, Jose M.

The present application relates to SARS-CoV-2 virus-like particles (VLP) and related plasmids, compositions, and methods. The VLP can comprise a modified spike glycoprotein, a matrix protein, a nucleoprotein N and an envelope protein of SARS-CoV-2, where the modified spike glycoprotein comprises an S1 domain and an S2 domain, and includes one or more modifications. These modifications can include: linking the S1 and S2 domains via generation of disulfides bonds between the S1 and S2 domains; linking intra-polypeptide and inter-polypeptide S2 helices of the S2 domain; and substitution of one or more non-cysteine residues with a cysteine residue to generate one or more disulfide bonds. The modifications can stabilize a prefusion conformation of the spike glycoprotein and prohibit a transition to a post-fusion structure.

146. [20220040278](#)NOVEL PEPTIDES AND COMBINATION OF PEPTIDES AND SCAFFOLDS FOR USE IN IMMUNOTHERAPY AGAINST RENAL CELL CARCINOMA (RCC) AND OTHER CANCERS  
US - 10.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17514599 Solicitante Immatics Biotechnologies GmbH Inventor/a Andrea MAHR

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and



transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

147. [20220040285](#) Nucleoside-Modified RNA For Inducing an Adaptive Immune Response

US - 10.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17371261 Solicitante The Trustees of the University of Pennsylvania Inventor/a Drew Weissman

The present invention relates to compositions and methods for inducing an adaptive immune response in a subject. In certain embodiments, the present invention provides a composition comprising a nucleoside-modified nucleic acid molecule encoding an antigen, adjuvant, or a combination thereof. For example, in certain embodiments, the composition comprises a vaccine comprising a nucleoside-modified nucleic acid molecule encoding an antigen, adjuvant, or a combination thereof.

148. [20220041997](#) Method for rescuing influenza virus and composition therefor

US - 10.02.2022

Clasificación Internacional [C12N 7/00](#) N° de solicitud 17471709 Solicitante Zhejiang Senwei Biomedical Development Co., Ltd Inventor/a Dongsheng Dai

The present invention relates to a new method for rescuing an influenza virus and a composition therefor. The method comprises providing a host cell stably integrated with and expressing influenza virus PA, PB1, PB2 and NP genes, and introducing an influenza virus rescue system in which a stop codon is introduced into the PA, PB1, PB2 and NP genes respectively into the host cell to achieve virus rescue. The produced virus particles can be used as a live attenuated influenza vaccine, which is characterized in that, since the genes encoding the related proteins are mutated, it has no replication and proliferation ability in human and normal animal cells, and replication and proliferation can be achieved only in the host cells constructed above and it can fully stimulate the body immunity and effectively protect the body while ensuring the safety.

149. [WO/2022/024156](#) CONSENSUS SEQUENCE OF THE ANTIGEN TELOMERASE AND THE USE THEREOF IN PREVENTIVE AND THERAPEUTIC VACCINATION

WO - 03.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud PCT/IT2021/050227 Solicitante EVVIVAX S.R.L. Inventor/a AURISICCHIO, Luigi

The present invention relates to the generation of a consensus sequence of the antigen telomerase (ConTRt) and the use thereof in preventive and therapeutic vaccination, wherein the consensus sequence of telomerase was generated by the fusion of two sequences, one belonging to human telomerase (hTERT) and the other to dog telomerase (dTERT), with the aim of developing an effective vaccine for the treatment of tumours expressing both human and dog telomerase, hence in both the human and veterinary sectors.

150. [20220054612](#) NOVEL PEPTIDES AND COMBINATION OF PEPTIDES AND SCAFFOLDS FOR USE IN IMMUNOTHERAPY AGAINST RENAL CELL CARCINOMA (RCC) AND OTHER CANCERS

US - 24.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17519192 Solicitante Immatics Biotechnologies GmbH Inventor/a Andrea MAHR

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and

transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

151. [202118052586](#) Compositions For Controlled Release Of Active Ingredients And Methods Of Making Same

IN - 18.02.2022

Clasificación Internacional [A61K](#) / N° de solicitud 202118052586 Solicitante Hazel Technologies, Inc.

Inventor/a PRESLAR, Adam Truett

Provided are compositions and methods that include a *K. pneumoniae* yidR protein or an antigenic segment of the protein, and homologous of the protein, and antigenic segments of the homologs. The compositions can be provided as vaccine formulations for use with humans and non-human animals, including but not limited to dairy cows. The compositions and methods are useful for prophylaxis and/or therapy of conditions associated with Gram negative bacteria that include *K. pneumonia*, *E. coli*, and other pathogenic Gram negative bacteria. The conditions include such bacterial infections generally, and include specifically mastitis and metritis. The compositions and methods can also improve fertility and milk production. Administration of the compositions can improve the likelihood of a first service conception.

152. [202118057586](#) PEGYLATED LIPOSOMES AND METHODS OF USE

IN - 18.02.2022

Clasificación Internacional [A61K](#) / N° de solicitud 202118057586 Solicitante INFECTIOUS DISEASE RESEARCH INSTITUTE Inventor/a FOX, Christopher, B.

Provided herein are PEGylated liposomes, and methods of making and using thereof. The PEGylated liposomes comprise at least a cholesterol, a non-PEGylated neutral lipid, and a PEGylated lipid, wherein the average molecular weight of the PEG component in the PEGylated lipid is about 5000 Daltons or less. The PEGylated liposomes are stable and capable of delivery of an agent for the generation of an immune response, for example an agent for vaccine, therapeutic, or diagnostic uses. Compositions and methods related to making the PEGylated liposomes and using the PEGylated liposomes for stimulating an immune response are also provided.

153. [20220031830](#) HIV VACCINE IMMUNOGENS

US - 03.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17299852 Solicitante The Rockefeller University

Inventor/a Michel Nussenzweig

This disclosure provides HIV immunogens and use thereof for generating an immune response in a subject. Also disclosed is a method of isolating anti-HIV antibodies and use thereof. This disclosure further provides a method for treating or preventing a human immunodeficiency type 1 (HIV-1) infection in a subject using the disclosed HIV immunogens and/or antibodies.

154. [3945094](#) REPLIKATIONSDEFIZIENTES ADENOVIRUS

EP - 02.02.2022

Clasificación Internacional [C07K 14/005](#) N° de solicitud 20188851 Solicitante PETTE HEINRICH INST

Inventor/a BODDIN JANA

The present invention generally relates to the field of adenoviruses and adenoviral vectors that can be used as vaccines and gene therapy vectors. More specifically, the present invention relates to an adenovirus or an adenoviral vector that comprises a mutated DNA-binding protein that inhibits adenoviral DNA replication in a cell infected with a virus expressing said protein. The invention further relates to a nucleotide sequence encoding the mutated DNA-binding protein. In another aspect, the invention provides pharmaceutical compositions, vaccines and cells that comprise the mutated protein, a nucleotide sequence encoding same, or a modified adenovirus or adenoviral vector comprising any of those. The

invention also relates to the use of the mutated protein, a nucleotide sequence encoding the same, or an adenovirus or recombinant adenoviral vector comprising any of those for the preparation of a vaccine.

155. [WO/2022/023535](#) REPLICATION-DEFICIENT ADENOVIRUS

WO - 03.02.2022

Clasificación Internacional [C07K 14/005](#) N° de solicitud PCT/EP2021/071408 Solicitante HEINRICH-PETTE-INSTITUT LEIBNIZ-INSTITUT FÜR EXPERIMENTELLE VIROLOGIE Inventor/a BODDIN, Jana

The present invention generally relates to the field of adenoviruses and adenoviral vectors that can be used as vaccines and gene therapy vectors. More specifically, the present invention relates to an adenovirus or an adenoviral vector that comprises a mutated DNA-binding protein that inhibits adenoviral DNA replication in a cell infected with a virus expressing said protein. The invention further relates to a nucleotide sequence encoding the mutated DNA-binding protein. In another aspect, the invention provides pharmaceutical compositions, vaccines and cells that comprise the mutated protein, a nucleotide sequence encoding same, or a modified adenovirus or adenoviral vector comprising any of those. The invention also relates to the use of the mutated protein, a nucleotide sequence encoding the same, or an adenovirus or recombinant adenoviral vector comprising any of those for the preparation of a vaccine.

156. [WO/2022/021000](#) ANTIGEN-BINDING CHARACTERISTIC EPI TOPE AND APPLICATION THEREOF

WO - 03.02.2022

Clasificación Internacional [C07K 7/00](#) N° de solicitud PCT/CN2020/104876 Solicitante BGI SHENZHEN Inventor/a YANG, Naibo

Provided are a polypeptide fragment and a preparation method therefor. The polypeptide fragment comprises an amino acid sequence as shown in X1X2X3X4X5GX6 from N-terminus to C-terminus, wherein X1 is S, T, E, Y, or F; X2 is T, N, G, S, or D; X3 is H, E, Y, T, K, R, or A; X4 is G, Y, H, R, or M; X5 is A, F, Q, H, I, or V; X6 is W or F. Also disclosed is an isolated nucleic acid molecule coding the polypeptide, and preparation of a polypeptide vaccine for PCSK9 using the polypeptide. The polypeptide fragment may be bound to an anti-PCSK9 antibody, and can be used for detection, screening or auxiliary screening for a new anti-PCSK9 antibody, so that the problem of an adverse reaction, for example, strong immunogenicity of a patient on an original antibody, is alleviated.

157. [2020299074](#) Novel ribonucleic acid and pharmaceutical composition based on the same

AU - 03.02.2022

Clasificación Internacional [C12N 15/113](#) N° de solicitud 2020299074 Solicitante NA Vaccine Institute Inventor/a KANG, Myung Soo

The present invention relates to a hetero-structured RNA (hsRNA) comprising an ssRNA and a dsRNA, wherein the dsRNA has any length and sequence, has complete complementarity, acts as a TLR3 ligand, and is located in the middle of hsRNA, and wherein the ssRNA has any sequence (preferably, TLR7 ligand sequence) and can have certain length and is linked to both 3' ends of the dsRNA. In addition, the present invention relates to pharmaceutical compositions comprising the same for preventing and treating a viral or bacterial infection and cancer.

158. [20220054631](#) MHC Class I Associated Hepatitis B Peptides

US - 24.02.2022

Clasificación Internacional [A61K 39/29](#) N° de solicitud 17518714 Solicitante Emergex Vaccines Holding Ltd. Inventor/a Ramila Philip

The present invention relates to compositions and methods for the prevention, treatment, and diagnosis of Hepatitis B virus (HBV) infection, and discloses peptides, polypeptides, and polynucleotides that can be used to stimulate a CTL response against HBV infection. The peptide and/or proteins of the invention may be used as a therapeutic drug to stimulate the immune system to recognize and eliminate HBV infection in infected cells or as a vaccine for the prevention of disease.

159. [20220047690](#)VACCINE POLYPEPTIDE COMPOSITIONS AND METHODS

US - 17.02.2022

Clasificación Internacional [A61K 39/02](#) N° de solicitud 17279277 Solicitante Arizona Board of Regents on Behalf of the University of Arizona Inventor/a Terrance Stull

Immunogenic peptides, fusion polypeptides, and carrier molecules which include the immunogenic peptides, and immunogenic compositions which include these immunogenic peptides, fusion heterologous polypeptides, and/or carrier molecules bearing the peptides, and which are able to elicit antibody production against infectious organisms, are disclosed. Also disclosed are methods of making and their use in causing an antibody response against one or more strains of infectious organism, such as *B. pertussis* (Bp).

160. [20220056080](#)Muramyl Peptide Derivatives

US - 24.02.2022

Clasificación Internacional [C07K 9/00](#) N° de solicitud 17328078 Solicitante Bharat Biotech International Limited Inventor/a Krishna Murthy Ella

The invention is directed to Muramyl Dipeptide (MDP) derivative compounds of structural Formula-VIII, a process for synthesis, intermediates used in the synthesis and use there of wherein, R can be a linear or branched alkyl, an aryl, a substituted aryl, or an alkoxy alkyl. These compounds possess excellent pharmacological properties, in particular immunomodulating properties for use as adjuvant in vaccine formulations. These compounds are particularly useful as adjuvants in vaccines.

161. [WO/2022/027020](#)ARTIFICIAL PLACENTA VACCINE FOR ORGAN TRANSPLANTATION

WO - 03.02.2022

Clasificación Internacional [A61L 27/54](#) N° de solicitud PCT/US2021/070992 Solicitante ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY Inventor/a WEAVER, Jessica D.

Devices, and methods for preventing immune rejections are disclosed, in which trophoblasts or trophoblast-like cells are used to induce tolerance toward allogeneic cell and tissue grafts. The devices can be used as artificial placenta vaccines to avoid immunosuppression in organ transplantation.

162. [20220031720](#)IMMUNOGENIC COMPOSITIONS CONTAINING N-GLYCOL YLNEURAMINIC ACID BEARING NANOPARTICLES

US - 03.02.2022

Clasificación Internacional [A61K 31/7012](#) N° de solicitud 17296504 Solicitante RAMOT AT TEL-AVIV UNIVERSITY LTD. Inventor/a Vered PADLER-KARAVANI

The present invention provides an active cancer vaccine and specifically an immunogenic compositions of membrane vesicles that serve as biomimetic nanoparticles derived from eukaryotic cell membranes that bear N-glycolylneuraminic acid glycoconjugates. These compositions can elicit beneficial immunological responses for treatment of Neu5Gc-positive tumors. The present invention provides methods of generating and using Neu5Gc-conjugated nanoparticles from eukaryotic cells membranes designated nano-ghosts.

163. [20220054416](#)NANOSTRUCTURED LIPID CARRIERS AND STABLE EMULSIONS AND USES THEREOF

US - 24.02.2022

Clasificación Internacional [A61K 9/127](#) N° de solicitud 17470874 Solicitante Infectious Disease Research Institute Inventor/a Christopher B. FOX

Provided herein are nanostructured lipid carrier compositions, and methods of making and using thereof. The compositions comprise a nanostructured lipid carrier (NLC), where the NLC comprises an oil core comprising a mixture of a liquid phase lipid and a solid phase lipid, a cationic lipid, a sorbitan ester, and a

hydrophilic surfactant, and optionally a bioactive agent. The bioactive agent can be associated with the NLC. The compositions are capable of delivery of a biomolecule to a cell for the generation of an immune response, for example, for vaccine, therapeutic, or diagnostic uses. Compositions and methods related to making the compositions and using the compositions for stimulating an immune response are also provided.

164. [20220047697](#) SALMONELLA VACCINE FOR THE TREATMENT OF CORONAVIRUS

US - 17.02.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 17402014 Solicitante JULIUS-MAXIMILIANS-UNIVERSITÄT WÜRZBURG Inventor/a Thomas Rudel

The present invention provides live-attenuated bacterium of the genus *Salmonella* comprising a recombinant plasmid encoding a fusion protein, wherein the fusion protein comprises a coronavirus antigen and an adjuvant peptide.

165. [WO/2022/034221](#) SALMONELLA VACCINE FOR THE TREATMENT OF CORONAVIRUS

WO - 17.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud PCT/EP2021/072624 Solicitante JULIUS-MAXIMILIANS-UNIVERSITÄT WÜRZBURG Inventor/a RUDEL, Thomas

The present invention provides live-attenuated bacterium of the genus *Salmonella* comprising a recombinant plasmid encoding a fusion protein, wherein the fusion protein comprises a coronavirus antigen and an adjuvant peptide.

166. [WO/2022/038298](#) MPC INHIBITION FOR PRODUCING T-CELLS WITH A MEMORY PHENOTYPE

WO - 24.02.2022

Clasificación Internacional [C12N 5/0783](#) N° de solicitud PCT/EP2021/073299 Solicitante UNIVERSITÉ DE LAUSANNE Inventor/a ROMERO, Pedro

The present invention relates to an in vitro cell culture method comprising a step of contacting T-cells with an MPC inhibitor, and further to a cell population comprising T-cells with a memory phenotype obtained by said method, preferably, wherein the T-cells are human cells. The present invention also relates to a method for generating and/or maintaining T-cells and/or B-cells with a memory phenotype comprising the steps of culturing T-cells and/or B-cells in vitro and adding an MPC inhibitor to the culture. The invention furthermore relates to a population of T-cells and/or B-cells obtained by the methods of the invention. Also provided are immunotherapies using the cells of the invention. Furthermore, provided is an MPC inhibitor for use in immunotherapy and/or as a vaccine co-adjuvant.

167. [20220040277](#) PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST LUNG CANCER, INCLUDING NSCLC AND OTHER CANCERS

US - 10.02.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17502686 Solicitante Immatics Biotechnologies GmbH Inventor/a Andrea MAHR

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

168. [WO/2022/032496](#) PREPARATION METHOD AND APPLICATION FOR MICRO-PARTICLES FOR PREVENTING NOVEL CORONAVIRUS

WO - 17.02.2022

Clasificación Internacional [C07K 14/165](#) N° de solicitud PCT/CN2020/108525 Solicitante WUHAN SHENGRUN BIOTECHNOLOGY CO. LTD Inventor/a HUANG, Hao

A preparation method and an application for micro-particles for preventing novel coronavirus, the preparation method comprising the following steps: 1) constructing recombinant plasmids of overexpressed spike (S) protein; 2) packaging the recombinant plasmids into lentiviral particles; 3) infecting fibroblasts with the lentiviral particles to obtain instrumental cells expressing S protein; 4) performing X-ray irradiation on the obtained instrumental cells and a culture medium, collecting the supernatant after radiotherapy, and acquiring a mixture of the required micro-particles and apoptotic instrumental cell debris; and 5) performing centrifugation, concentration, and purification on the obtained mixture to obtain a vaccine. The present method uses the micro-particles released by the instrumental cells induced by radiotherapy as a vector; in the case of overexpression of the novel coronavirus S protein, the antiviral immunity of the body can be directly activated to produce neutralising antibodies against the novel coronavirus.

169. [20220054618](#) PRODUCTION OF VIRAL VACCINES ON AN AVIAN CELL LINE  
US - 24.02.2022

Clasificación Internacional [A61K 39/12](#) N° de solicitud 17413228 Solicitante UNIVERSITE CLAUDE BERNARD LYON 1 Inventor/a Manuel ROSA-CALATRAVA

The present invention relates to the use of the immortalised cell line ECACC 09070703, deposited on 7 Jul. 2009 at the European Collection of Authenticated Cell Cultures (ECACC, Salisbury, UK) under the number 09070703, for the production of a viral vaccine constituted of an attenuated strain derived from a human metapneumovirus.

170. [20220056473](#) CHIMERIC NUCLEIC ACID MOLECULES WITH NON-AUG TRANSLATION INITIATION SEQUENCES AND USES THEREOF  
US - 24.02.2022

Clasificación Internacional [C12N 15/85](#) N° de solicitud 17222910 Solicitante Marker Therapeutics, Inc. Inventor/a Robert Z. Florkiewicz

The present disclosure relates to nucleic acid vaccine compositions and methods for preventing or treating pathological conditions, such as cancer or infectious disease. Further, the disclosure provides methods for more efficient production of antigens via mRNA containing one or more non-conventional start codons to promote multiplex initiation of translation in eukaryotic cells.

171. [3950699](#) VERFAHREN ZUR RNA-VERKAPPUNG, HERSTELLUNGSVERFAHREN FÜR MODIFIZIERTE RNA UND MODIFIZIERTE RNA  
EP - 09.02.2022

Clasificación Internacional [C07H 21/02](#) N° de solicitud 20784783 Solicitante UNIV KYOTO Inventor/a SAITO HIROHIDE

An RNA capping method including a step of reacting a compound (1) represented by the following general formula (1) with an RNA in the presence of a Vaccinia virus capping enzyme ( $R^{b1}$  represents an oxo group, an alkoxy group, or a halogen atom;  $R^{b2}$  is either absent or represents an alkyl group;  $R^{b3}$  represents an amino group or a hydrogen atom;  $R^{b4}$  is either absent or represents a hydrogen atom or an alkyl group;  $R^{r1}$  represents a hydroxy group, an alkoxy group having 1 to 3 carbon atoms, an amino group, an azide group,  $-OR^1C\equiv CH$ , or  $-R^2R^3$ ;  $R^{r2}$  represents a hydrogen atom, a hydroxy group, a halogen atom, an alkoxy group, an amino group, an azide group,  $-OR^1C\equiv CH$ , or  $-R^2R^3$ ; and  $A^1$  represents an oxygen atom or a sulfur atom).

172. [20220048964](#) NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST OVARIAN CANCER AND OTHER CANCERS  
US - 17.02.2022

Clasificación Internacional [C07K 14/47](#) N° de solicitud 17519637 Solicitante Immatics Biotechnologies GmbH Inventor/a Andrea MAHR

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

173. [WO/2022/026275](#) SYSTEMS AND METHODS FOR PRE-FILLED MEDICAL DELIVERY ASSEMBLIES

WO - 03.02.2022

Clasificación Internacional [A61M 5/24](#) N° de solicitud PCT/US2021/042671 Solicitante KOSKA FAMILY LIMITED Inventor/a PRICE, Jeff

A pre-filled medical delivery assembly assembled and configured to allow delivery of a single dose of a therapeutic agent (e.g., vaccine, drug, medicament, etc.) from a Blow-Fill-Seal (BFS) vial to a patient. The delivery assembly generally includes a modular design consisting of separately constructed components cooperatively arranged and coupled to one another.

174. [20220033844](#) CHIMERIC NUCLEIC ACID MOLECULES WITH NON-AUG TRANSLATION INITIATION SEQUENCES AND USES THEREOF

US - 03.02.2022

Clasificación Internacional [C12N 15/85](#) N° de solicitud 17189120 Solicitante MARKER THERAPEUTICS, INC. Inventor/a Robert Z. Florkiewicz

The present disclosure relates to nucleic acid vaccine compositions and methods for preventing or treating pathological conditions, such as cancer or infectious disease. Further, the disclosure provides methods for more efficient production of antigens via mRNA containing one or more non-conventional start codons to promote multiplex initiation of translation in eukaryotic cells.

175. [WO/2022/040628](#) COMBINATION THERAPY COMPRISING HER-2-DC1 VACCINE, A PROBIOTIC, AND SEMAPHORIN

WO - 24.02.2022

Clasificación Internacional [A61K 35/15](#) N° de solicitud PCT/US2021/047146 Solicitante H. LEE MOFFITT CANCER CENTER AND RESEARCH INSTITUTE, INC. Inventor/a KODUMUDI, Krithika N.

Disclosed are anti-cancer therapies comprising i) at least one dendritic cell pulsed with an oncodriver and ii) a fecal microbial transplant (FMT) from a pathologic complete response (pCR) donor or a cyclin-dependent kinase (CDK) inhibitor and methods of the use of said therapies to treat cancer.

## Patentes registradas en la United States Patent and Trademark Office (USPTO)

Results Search in US Patent Collection db for: (ABST/vaccine AND ISD/20220201->20220228), 26 records.

PAT. NO.	Title
1	<a href="#">11,253,476</a> <a href="#">Vaccine adjuvant formulation</a>

2	<a href="#">11,248,264</a>	<a href="#">Individualized vaccines for cancer</a>
3	<a href="#">11,248,035</a>	<a href="#">Peptides and combination of peptides for use in immunotherapy against ovarian cancer and other cancers</a>
4	<a href="#">11,247,175</a>	<a href="#">Thermally sterilizable fluid filter and use of the thermally sterilizable fluid filter</a>
5	<a href="#">11,246,923</a>	<a href="#">Process for producing an allergen extract</a>
6	<a href="#">11,246,922</a>	<a href="#">Vaccine RNA-peptide against SARS-CoV-2 with endogenous exosomes as carrier</a>
7	<a href="#">11,246,921</a>	<a href="#">Influenza vaccines with reduced amounts of squalene</a>
8	<a href="#">11,246,917</a>	<a href="#">A*03 restricted peptides for use in immunotherapy against cancers and related methods</a>
9	<a href="#">11,246,889</a>	<a href="#">Peptides and combination of peptides for use in immunotherapy against epithelial ovarian cancer and other cancers</a>
10	<a href="#">11,246,831</a>	<a href="#">Particle formulations and uses thereof</a>
11	<a href="#">11,242,521</a>	<a href="#">Obtainment of a rough-type Salmonella enteritidis and its genetic modifications for use as an avian vaccine</a>
12	<a href="#">11,241,540</a>	<a href="#">Manual injector for skin</a>
13	<a href="#">11,241,493</a>	<a href="#">Coronavirus vaccine</a>
14	<a href="#">11,241,490</a>	<a href="#">Nucleoside-modified RNA for inducing an immune response against zika virus</a>
15	<a href="#">11,236,344</a>	<a href="#">Methods for modifying the growth rate of a cell</a>
16	<a href="#">11,236,135</a>	<a href="#">Salmonella and immunogenic composition containing the same as well as its use</a>
17	<a href="#">11,236,134</a>	<a href="#">Nucleic acids encoding HIV-1 GP140 immunogens comprising modified NHR1 regions that stabilize pre-fusion conformations</a>
18	<a href="#">11,235,054</a>	<a href="#">Multivalent vaccine composition</a>
19	<a href="#">11,235,050</a>	<a href="#">Chimeric RSV, immunogenic compositions, and methods of use</a>
20	<a href="#">11,235,048</a>	<a href="#">Streptococcal vaccine</a>
21	<a href="#">11,235,047</a>	<a href="#">Immunogens and methods for discovery and screening thereof</a>
22	<a href="#">11,235,043</a>	<a href="#">Vaccines against antigens involved in therapy resistance and methods of using same</a>
23	<a href="#">11,235,042</a>	<a href="#">Peptides and combination of peptides for use in immunotherapy against various cancers</a>
24	<a href="#">11,235,041</a>	<a href="#">Peptides and combination of peptides for use in immunotherapy against various cancers</a>



- 25 [11,235,040](#) [Acetylcholine receptor-specific immunosuppressive compositions and methods of treatment of myasthenia gravis](#)
- 26 [11,235,032](#) [Combination immunotherapy dosing regimen for immune checkpoint blockade](#)
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Edición: Annia Ramos Rodríguez [aramos@finlay.edu.cu](mailto:aramos@finlay.edu.cu)  
Ma. Victoria Guzmán Sánchez [mguzman@finlay.edu.cu](mailto:mguzman@finlay.edu.cu)  
Randelys Molina Castro [rmolina@finlay.edu.cu](mailto:rmolina@finlay.edu.cu)  
Irina Crespo Molina [icrespo@finlay.edu.cu](mailto:icrespo@finlay.edu.cu)  
Yamira Puig Fernández [yamipuig@finlay.edu.cu](mailto:yamipuig@finlay.edu.cu)  
Rolando Ochoa Azze [ochoa@finlay.edu.cu](mailto:ochoa@finlay.edu.cu)



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