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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 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.
- Patentes más recientes en Patentscope sobre vacunas.

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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: 11 de noviembre de 2022.

Fuente de información utilizada: World Health Organization; R&DBlueprint Powering research to prevent epidemics

172 Vacunas en evaluación clínica y 199 en evaluación preclínica

Candidatos vacunales en evaluación clínica por plataforma

Platform		Candidate vaccines (no. and %)	
PS	Protein subunit	55	32%
VVnr	Viral Vector (non-replicating)	23	13%
DNA	DNA	16	9%
IV	Inactivated Virus	22	13%
RNA	RNA	40	23%
VVr	Viral Vector (replicating)	4	2%
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%
		172	

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
CanSino Biological Inc./Beijing Institute of Biotechnology/China	Vector viral no replicativo	Inhalación	4
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 y 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	Intranasal	3
Bharat Biotech International Limited/India	Vector viral no replicativo	Intranasal	3
Meissa Vaccines, Inc./Estados Unidos	Virus vivo atenuado	Intranasal	1
Laboratorio Avi-Mex/México	Virus inactivado	Intranasal	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	Intranasal	2/3
Hannover Medical School/Alemania	Vector viral no replicativo	Inhalación	1
ACM Biolabs/Singapur	Subunidad proteica	Intranasal	1

Candidatos vacunales más avanzados/fabricante/país	Plataforma de la vacuna	Fase
Sinovac/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 (IM e IH)	Vector viral no replicativo	4
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 International Limited/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
Vaxxinity/EE.UU	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/India	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/Irán, India	Subunidad proteica	3
Bharat Biotech International Limited/India	Vector viral no replicativo (IN)	3
Providence Therapeutics/Canadá	ARN	3
Jiangsu Rec-Biotechnology/China	Subunidad proteica	3
Radboud University/Holanda	Partícula similar a virus	3
Arcturus Therapeutics, Inc./Estados Unidos	ARN	3
Livzon Pharmaceutical/China	Subunidad proteica	3
KM Biologics Co., Ltd.	Virus inactivado	3
Bagheiat-allah University of Medical Sciences/AmitisGen/Irán	Subunidad proteica	3
Laboratorios Hipra, S.A.	Subunidad proteica	3
Sinocelltech Ltd./China	Subunidad proteica	3
Chumakov Federal Scientific Center for Research/Rusia	Virus Inactivado	3
Airlangga University/Indonesia	Virus Inactivado	3
PT Bio Farma/Indonesia	Subunidad proteica	3
AIM Vaccine and Liverna Therapeutics/China	ARN	3
China National Biotec Group Company Limited	Virus inactivado	3

Noticias en la Web

Evidencias clínicas actualizadas ratifican efectividad de las vacunas Abdala y Soberana

1 nov. Dos nuevas actualizaciones sobre evidencias clínicas que ratifican la efectividad de las vacunas cubanas anti COVID-19 Abdala y Soberana, fueron presentadas como parte de los sistemáticos encuentros que la dirección del país mantiene con expertos y científicos para temas de salud.

Los resultados de los inmunógenos, que siguen avalándose por la ciencia, continúan confirmando, señaló el Primer Secretario del Comité Central del Partido y Presidente de la República, Miguel Díaz-Canel Bermúdez, que ambas vacunas son "un hito de la medicina cubana, de la industria biofarmacéutica cubana, de nuestro sistema de salud, de la Revolución". Ha sido —añadió— un resultado tremendo en medio de los complejos momentos que ha estado viviendo el mundo y Cuba.

Las evidencias clínicas actualizadas ratifican la efectividad de nuestras vacunas, pero eso también se comprueba diariamente en el control que tenemos de la pandemia, analizó. Desde febrero de este año, ejemplificó el Presidente, hemos estado libres de complicaciones con relación a la COVID-19.

También —agregó— el pico de la variante Ómicron fue un tercio del pico pandémico de la cepa Delta, al contrario de lo que pasó en el mundo; y en los últimos meses se acumulan tres fallecidos por esta enfermedad, los casos positivos diarios por lo general no han pasado de cinco, y en las últimas semanas no sobrepasan los tres.

Ahora que nos acercamos a fin de año, a un nuevo aniversario del triunfo de la Revolución —reflexionó el Presidente de la República—estas son noticias que dan alegría.

En medio de las complejidades de los últimos tiempos —subrayó— haber logrado nuestras propias vacunas, haber controlado la COVID-19, también nos dio la capacidad para enfrentar todas las otras cosas que hemos tenido que asumir en este tiempo.

Una vez más —señaló el Primer Secretario del Comité Central del Partido— el pueblo dará un agradecimiento eterno a todos los que hicieron posible las vacunas y los protocolos de enfrentamiento a la pandemia, y a ese mismo pueblo, que lo entendió, lo comprendió, lo apoyo, confió y puso su hombro para recibir sus propias vacunas.

Evidencia de ciencia y alma

El encuentro de este martes con expertos y científicos para temas de salud también fue encabezado por el miembro del Buró Político Manuel Marrero Cruz, Jefe del Gobierno de la República, y los viceprimeros ministros Inés María Chapman Waugh y Jorge Luis Perdomo Di-Lella.

Moderado por la doctora Tania Margarita Cruz Hernández, viceministra primera de Salud Pública, en el intercambio se hizo una actualización sobre las nuevas evidencias clínicas relativas a la efectividad de la

vacuna Abdala, producida por el Centro de Ingeniería Genética y Biotecnología (CIGB).

A cargo de la Doctora en Ciencias Verena Muzio González, directora de Investigaciones Clínicas del CIGB, la presentación detalló estudios tanto en adultos como en edades pediátricas de tres a 18 años.

Entre otros resultados, informó, Abdala produce una respuesta duradera en el tiempo, con una respuesta inmune de memoria potente, ante la aplicación de dosis de refuerzo, a pesar, incluso, del corto tiempo del esquema de inmunización (tres dosis cada 14 días), el más breve para este tipo de vacuna en todo el mundo.

La doctora Muzio González argumentó sobre la efectividad de Abdala entre niñas, niños y adolescentes de tres a 18 años de edad, así como la capacidad demostrada de la vacuna de inducir elevados títulos de anticuerpo y serorespuesta contra la variante Ómicron del SARS-COV-2, tanto en población pediátrica como adulta.

El Doctor en Ciencias Vicente Verez Bencomo, director general del Instituto Finlay de Vacunas, disertó sobre el estudio que actualiza la efectividad de la vacuna Soberana, un inmunógeno que ha sido todo un regalo para la población infantil cubana y del mundo.

Tras un breve pero prolijo análisis, informó que la efectividad estimada de la Soberana, la primera en el planeta en aplicarse a niños, es de 93,3 por ciento ante la enfermedad sintomática de COVID-19 por la variante Ómicron y sus subvariantes en niños de 2 a 5 años. Esta es probablemente, afirmó, la única vacuna del mundo que logra esa efectividad.

En el encuentro también se ofreció la habitual actualización de los modelos de pronósticos para la COVID-19 en los próximos días, a cargo del Doctor en Ciencias Raúl Guinovart Díaz, decano de la facultad de Matemática y Computación de la Universidad de La Habana.

El especialista explicó que los modelos matemáticos apuntan a que en las próximas semanas se mantendrá el control de la pandemia en todas las provincias y una disminución de casos. En el país, añadió, se mantiene un alto nivel de inmunidad.

En la jornada también sesionó, mediante videoconferencia, el Grupo temporal de trabajo del Gobierno para la prevención y control de la COVID-19, al que asistieron los miembros del Buró Político, Esteban Lazo Hernández, presidente de la Asamblea Nacional del Poder Popular, y Salvador Valdés Mesa, Vicepresidente de la República.

En el intercambio con las autoridades políticas y gubernamentales de las 15 provincias y el municipio especial Isla de la Juventud, participó también el viceprimer ministro Ricardo Cabrisas Ruiz, así como ministras, ministros y otras autoridades.

Fuente: Cubadebate. Disponible en https://bit.ly/3TCzVpl

A Primary Dose of ChAdOx1-S Adenovirus-based Vaccine May Increase Thrombosis

Nov 2. A primary dose of adenovirus-based vaccine ChAdOx1-S (Oxford-AstraZeneca) may increase risk of thrombocytopenia 30% more than a first dose of the mRNA-based vaccine, BNT162b2 (Pfizer-BioNTech).

"Although rare, the observed risks after adenovirus-based vaccines should be considered when planning further immunization campaigns and future vaccine development," study authors said in the report which was published in the BMJ.

ChAdOx1-S has proven effective against severe infection and complications. However, some countries in Europe reported cases of thrombosis with thrombocytopenia syndrome following vaccination. Further, few prior studies had compared these risks among the different COVID-19 vaccines available.

Thrombosis is a condition that results in blood clots that may prevent arterial flow. The adenovirus-based vaccine may provoke this condition by stimulating an immune response that causes pathological platelet activating antibodies to develop.

The study, "Comparative risk of thrombosis with thrombocytopenia syndrome or thromboembolic events associated with different covid-19 vaccines: international network cohort study from five European countries and the US" published in BMJ, aimed to quantify and compare the risk of thrombosis with thrombocytopenia syndrome (or thromboembolic events) when receiving an adenovirus-based COVID-19 vaccine versus an mRNA-based COVID-19 vaccine. They compared 2 adenovirus-based vaccines (ChAdOx1-S and Ad26.COV2. S) and 2 mRNA-based vaccines (BNT162b2 and mRNA-1273).

Participants were collected from databases in France, Germany, the Netherlands, Spain, the UK, and the United States. They collected data that included 4.6 million people who had received a single dose of ChAdOx1-S, and 10.6 million people who were vaccinated with a first dose of BNT162b2. Data from the UK showed that 862 patients experienced thrombocytopenia events from the ChAdOx1-S vaccine.

While researchers suggest that the risk of thrombosis and thrombocytopenia is rare and not significantly worse between the 2 vaccines, there is a "potential increased risk of venous thromboembolism with thrombocytopenia syndrome after vaccination with Ad26.COV2," the study authors write.

According to a subgroup analysis, younger people in the United States, aged 20 to 29 years, had a 4-times increased risk of arterial thromboembolism after receiving the adenovirus-based Ad26.COV2 vaccine—but a separate subgroup analysis of men in the UK showed that the first dose of Ad26.COV2 actually lowered risk of arterial thromboembolism.

When stratifying for age, researchers wrote that there was "an increased risk of thrombocytopenia observed in those aged 40-49 years, 70-79 years, and among women in the UK data receiving first dose ChAdOx1-S compared with first dose BNT162b2."

The study includes important limitations, the first being a heterogeneous pool of data. Another limitation includes information bias from potentially incomplete data. Further, the observational nature of the study may include confounding variables that could impact the final analysis. Finally, the database specific incidence rates of outcomes may be crude and not directly comparable.

"While we did not see large heterogeneity of incidence rates after vaccination between databases, relative rates varied," study authors wrote in the report, encouraging more studies are needed to further investigate the issue.

Fuente: Pharmacy Times. Disponible en https://bit.ly/3EIxZI5

Lanzarán una vacuna contra la bronquiolitis en bebés: "Es algo histórico"

2 nov. Así lo dijo Gonzalo Pérez Marc, el médico pediatra responsable de la investigación de los ensayos clínicos de la vacuna contra la bronquiolitis en Argentina. Pfizer la tendrá lista para su comercialización en 2023.

Después de 60 años de búsqueda se logró una vacuna eficaz contra la bronquiolitis. “Esta vacuna para la pediatría es histórica”, dijo Pérez Marc, Jefe de Investigación y Docencia, Departamento Materno-Infantil en Hospital Militar Central Cirujano Mayor Dr. Cosme Argerich.

“Es la primera vacuna eficaz para prevenir la bronquiolitis severa en niños”, dijo.

“La bronquiolitis es una infección viral que puede dar casos graves en los pulmones, sobre todo a los lactantes les puede producir un cuadro respiratorio severo que puede terminar en un fallecimiento”, contó el profesional.

Argentina fue uno de los principales países en donde se realizaron estudios previos “que son muy complejos” durante tres años, junto a Estados Unidos y Sudáfrica.

“Es una vacuna de Pfizer, con proteína recombinante que se les aplica a la embazadas en el tercer trimestre de la gestación para que los bebés nazcan con los anticuerpos” dijo Pérez Marc.

Para el médico seguramente en 2023 Pfizer empezará a comercializarla y asegura que “tiene que estar en el Calendario Nacional de Vacunación”.

En cuanto a los síntomas de la enfermedad Perez Marc dijo que: “son bastantes inespecíficos porque funciona como un catarro normal, pero luego los niños y niñas les cuesta respirar, comer o están muy molesto; acompañado de fiebre y mucho moco”.

Fuente: CADENA 3. Disponible en https://bit.ly/3UK5gbd

Cuba’s COVID-19 vaccine success could serve as global model: report

Nov 3. Cuba’s ability to develop homegrown COVID-19 vaccines and immunize most of its citizens should serve as a model for developing countries around the world dealing with public health emergencies, according to a new report.

The report was issued October 31 by the first U.S.-led scientific delegation to visit Cuba in five years. The delegation was organized by MEDICC (Medical Education Cooperation with Cuba), a U.S.-based non-profit promoting health-related dialogue and collaboration.

David Williams, Florence Sprague Norman and Laura Smart Norman Professor of Public Health at Harvard T.H. Chan School of Public Health, and chair of the Department of Social and Behavioral Sciences, was among the co-authors.

The report called for greater engagement with Cuba’s biotech sector, in spite of political challenges, to bolster the global fight against existing and emerging threats and to support equitable access to medical innovations. The authors also noted that Cuba’s COVID-19 vaccination rate in children and adolescents was much greater

and was achieved much earlier than any other country in the world, and that the emphasis on vaccinating kids—who often serve as significant vectors for spreading infectious diseases to populations more at risk, such as the elderly—should be considered by other countries to blunt transmission rates in the general population. The possibility of using Cuba's SOBERANA Plus vaccine as a universal booster globally should also be explored, the report said.

Read a press release about the delegation's report: US-led panel exploring Cuba's solo development and deployment of COVID-19 vaccines calls for lowering barriers blocking global access to the country's biotech innovations

Fuente: HARVARD TH CHAN. Disponible en https://bit.ly/3Ah8Q4t

Domestic vaccine IdoVac gets marketing permit

Nov 4. PT Bio Farma's protein subunit platform COVID-19 vaccine, IdoVac, has obtained a marketing permit for use as a primary vaccine in the national immunization program, the Health Ministry of Indonesia informed on Thursday.

"So, PT Bio Farma's IndoVac has now received distribution permit or emergency use authorization (EUA) for primary vaccinations of first and second doses," Director General of Pharmaceutical and Medical Equipment at the ministry Lucia Rizka Andalusia informed in Tangerang.

She said that following a shortage of COVID-19 vaccines, her administration worked hard to produce and obtain permits for the domestic vaccine's distribution.

Now that the EUA permission and halal certification have been received from the National Food and Drug Supervisory Agency (BPOM) for the vaccine, public vaccinations can immediately be pursued to help people.

"And now IdoVac, hopefully, in the next one or two weeks, its production can be used immediately," Andalusia informed.

Meanwhile, other domestic vaccines such as InaVac, which uses an inactivated virus platform and has been developed by an Airlangga University team in collaboration with PT Biotis Pharmaceuticals Indonesia, are also set to receive marketing permits from the two entities.

"For InaVac, the distribution permit will soon follow, maybe one to two days; waiting for the announcement from BPOM," she said.

President Director of pharmaceutical state-owned enterprise PT Bio Farma (Persero) Honesti Basyir said that the company is ready to produce 20 million doses of the IndoVac vaccine in the initial stage.

The number could be increased to 40 million doses per year by 2023 with additional production facilities. It could be increased again to 100 million doses per year by 2024, depending on the need and demand.

Fuente: Antara News. Disponible en https://bit.ly/3hJVHdP

Pfizer says Omicron booster generates stronger immune response than original vaccine

Nov 4. Results still don't answer whether the updated Covid shots are better against infection or severe illness, experts say.

Pfizer-BioNTech's updated booster shot generates a stronger immune response against the omicron subvariants BA.4 and BA.5 compared with the original Covid vaccine, the companies said in a release Friday.

The results are based on blood samples taken from adults one month after they received single doses of the updated booster shot or first iterations of the vaccine.

Pfizer's original vaccine formula, which was first administered to older adults in December 2020, was designed to target the original coronavirus strain. The updated booster shot is designed to target the original virus strain, as well as BA.4 and BA.5, in a single shot.

Pfizer said neutralizing antibodies against BA.4 and BA.5 were about four times higher in adults ages 55 and up who received the updated vaccine compared with adults of the same age who received the original vaccine.

The results, which Pfizer announced in a news release, have not been published in a medical journal or reviewed by outside scientists.

Two independent studies posted online late last month suggested that the updated shots do not offer better protection against the new omicron subvariants than the original vaccines do.

The two studies had not yet been peer-reviewed, and experts said they may have been too small to provide any definitive answers about the effectiveness of the vaccines. Still, because the omicron boosters were authorized without human testing, the research offered scientists an early glimpse at how the updated boosters were performing in the real world.

Pfizer's release Friday does not answer the question of whether the updated shots are effective against infection or severe illness, said Dr. Ofer Levy, the director of the Precision Vaccines Program at Boston Children's Hospital.

The "results are better than nothing," Levy said, "but it leaves you thirsting for more."

The new findings may hint that the updated booster is better than the original vaccine, but not by much, said John Moore, a professor of microbiology and immunology at Weill Cornell Medical College.

Pfizer said it has shared the data with the Food and Drug Administration and plans to release it to other health regulators around the world.

Fuente: NBC News. Disponible en https://nbcnews.to/3g6qjpr

Los expertos reconocen que nunca se eliminará la COVID-19 y que habrá que vacunarse cada año

5 nov. Las autoridades de Salud Pública españolas asumen que "no vamos a ser capaces de eliminar" el Sars-CoV-2, por lo que el "escenario más probable" que manejan es que se comporte como un virus respiratorio con picos de incidencia en otoño-invierno y contra el que los grupos de riesgo deberán vacunarse anualmente.

Así lo expresó este jueves la jefa de Área Programas de Vacunación del Ministerio de Sanidad, Aurora

Limia, durante la VI Jornada sobre Vacunaciones de la Sociedad Española de Epidemiología (SEE) en la que expertos del máximo nivel analizaron, entre otras cuestiones, los nuevos sueros y estrategias contra la COVID-19.

¿Dosis de refuerzo cada tres meses?

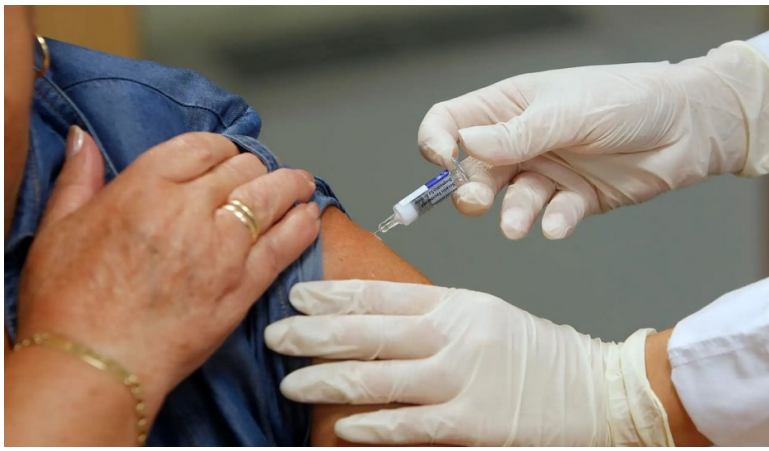
Las autoridades sanitarias españolas están expectantes a lo que pasará esta temporada con la pandemia y también con la gripe; en otros países, explicó, apuntan a la necesidad de dar dosis de recuerdo cada tres meses a los grupos vulnerables, que es cuando empieza a notarse una caída de los anticuerpos neutralizantes.

Sin embargo, Limia, que coordina la estrategia anticovid en el país, ve "poco probable" que sea la que se vaya a aplicar en España, si bien dejó claro que "todo dependerá de cómo evolucione la situación epidemiológica".

"Yo no entendería que eso se hiciera cada tres meses y creo que nadie lo haría, sobre todo si no hay una presión de que haya problemas de personas que se infectan y tienen enfermedad grave", señaló.

Los expertos trabajan con distintos escenarios, aunque hay uno que barajan como el más probable, siempre y cuando las cosas se mantengan más o menos como están ahora. "Está claro que no vamos a ser capaces de acabar con él; (el Sars-CoV-2) probablemente acabe comportándose como un virus respiratorio y sea más prevalente en otoño/invierno", con lo cual "probablemente la vacunación sería junto con la de la gripe", que se pone una vez al año en grupos de riesgo.

¿En quién están indicadas las dosis de refuerzo?



Por ahora, los refuerzos están indicados a mayores de 60 años y personas vulnerables como inmunodeprimidos, y se están haciendo con las cuatro vacunas aprobadas en Europa para ello, las bivalentes de Pfizer y Moderna actualizadas a los sublinajes BA.1 y BA.4/BA.5.

Antes de que acabe el año podrían sumarse otras dos, en este caso de proteínas, la desarrollada por Sanofi y la española Hipra, ha recordado Agustín Portela, jefe de Área de la División de Productos Biológicos, Terapias Avanzadas y Biotecnología de la Agencia Española de Medicamentos y Productos Sanitarios (AEMPS).

Las dos se encuentran en proceso de evaluación por parte de la Agencia Europea de Medicamentos (EMA, por sus siglas en inglés). "Entre este mes y el que viene, la EMA tiene que tomar una decisión que esperemos que en ambos caso sea positiva, y entonces tendríamos seis vacunas y, por tanto, un amplio elenco para que Salud Pública decida en qué momento".

De aprobarse, en ambos casos será como dosis de refuerzo, no como primovacunación; Portela no cree que haya diferencias "muy grandes" en cuanto a su eficacia como "booster" con las de ARNm -Pfizer y Moderna-, pero sí que presentan una ventaja adicional, y es que "se mantienen en nevera y pueden llegar a muchos mas países donde es imposible tener sistemas de congelación" para almacenarlas, concluyó.

Fuente: ONDA CERO. Disponible en https://bit.ly/3Ee0YBJ

Researchers compare the risk of myocarditis between Pfizer and Moderna COVID-19 vaccines

7 nov. Incidence of myocarditis, pericarditis or myopericarditis is two- to threefold higher after a second dose of the Moderna Spikevax COVID-19 vaccine when compared to the Pfizer BioNTech COVID-19 vaccine; however, overall cases of heart inflammation with either vaccine are very rare, according to a study in the Journal of the American College of Cardiology. The study showed males younger than 40 years old who received the Moderna vaccine were shown to have the highest rates of myocarditis, which according to the authors, may have implications for choosing specific vaccines for certain populations.

Two mRNA COVID-19 vaccines have been approved for use, Pfizer BioNTech (BNT162b2) and Moderna Spikevax (mRNA-1273), and as of March 20, 2022, more than 52 million doses of Pfizer and 22 million doses of Moderna have been administered in Canada, where this study was conducted. Clinical trials have demonstrated the vaccines are safe and monitoring of vaccinated people has shown side effects are mild and go away on their own. However, some rare, but serious, side effects have been observed after both vaccines, mainly myocarditis (inflammation of the heart).

While there have been many studies on either vaccine, few studies have been conducted to directly compare the safety of the two mRNA vaccines. Researchers in this study sought to compare the risk of myocarditis, pericarditis and myopericarditis between the Pfizer and Moderna COVID-19 vaccines.

People in the study were 18 years old or older and had received two primary doses of either Pfizer or Moderna vaccine in British Columbia, Canada, with the second dose between Jan. 1, 2021 and Sept. 9, 2021. Individuals whose first or second shot were administered outside of British Columbia or had a history of myocarditis or pericarditis within one year prior to second dose were excluded.

In all, more than 2.2 million second Pfizer doses were given and more than 870,000 Moderna doses. Within 21 days of the second dose, there were a total of 59 myocarditis cases (21 Pfizer and 31 Moderna) and 41 pericarditis cases (21 Pfizer and 20 Moderna). Researchers also looked at rates per million doses and the rate was 35.6 cases per million for Moderna and 12.6 per million for Pfizer-;an almost threefold increase after Moderna shots vs. Pfizer. Comparatively, rates of myocarditis in the general population in 2018, were 2.01 per million in people under age 40 and 2.2 per million in people over age 40.

Rates of myocarditis and pericarditis were higher with the Moderna vaccine in both males and females between ages 18 and 39, with the highest per million rates in males ages 18-29 after a second dose of Moderna.

According to the authors, the findings support recommending certain populations receive certain vaccines to maximize benefits and minimize adverse events.

Few population-based analyses have been conducted to directly compare the safety of the two mRNA COVID-19 vaccines, which differ in important ways that could impact safety. Our findings have implications for strategizing the rollout of mRNA vaccines, which should also consider the self-limiting and mild nature of most myocarditis events, benefits provided by vaccination, higher effectiveness of the Moderna vaccine against infection and hospitalization [found in prior studies], and the apparent higher risk of myocarditis following COVID-19 infection than with mRNA vaccination."

Naveed Janjua, MBBS, DrPH, lead author of the study and epidemiologist and the executive director of Data

and Analytic Services at the British Columbia Centre for Disease Control.

Limitations of the study include that it was observational, which limits the ability to determine causality between vaccination and myocarditis or pericarditis. However, temporality was ensured in the study design to limit the time studied between vaccine dose and myocarditis/pericarditis diagnosis. Also, the study relied on hospital and emergency department visit data and may have missed some less severe cases.

In a related editorial comment, Guy Witberg, MD, MPH, a cardiologist at Rabin Medical Center in Petah-Tikva, Israel, wrote the study is reassuring for vaccine safety since it provides further data that myocarditis is a very rare adverse event after both vaccines, and it is an important step toward a personalized approach to administering COVID-19 vaccines.

"[The study] should help put to rest 'vaccine hesitancy' due to concerns over cardiac adverse events," Witberg said. "This is one of only a few direct comparisons of the two widely adopted mRNA vaccines, and its results have practical policy implications: for a substantial segment of the population suffering from cardiovascular disease…these data give a strong argument to preferentially use the BNT162b2 [Pfizer] vaccine over mRNA-1273 [Moderna]."

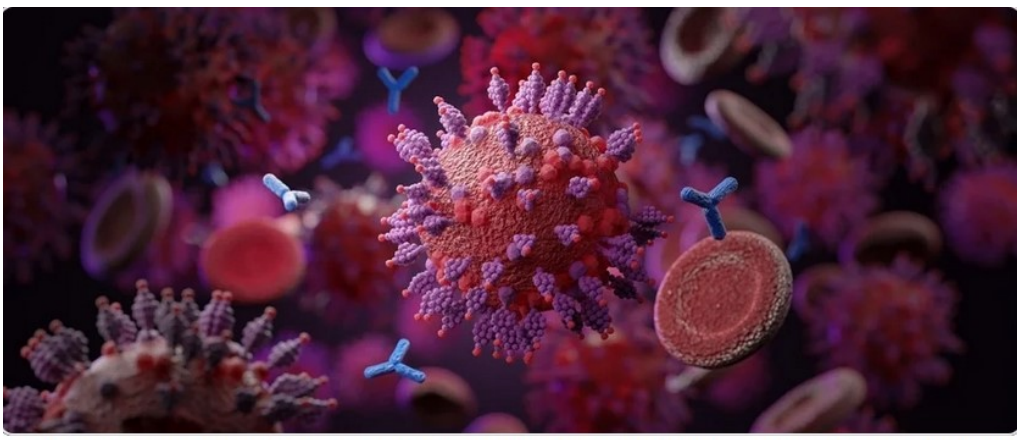
Fuente: News Medical Life Sciences. Disponible en https://bit.ly/3TDo9LB

Hybrid immunity from vaccination and Omicron BA.1 or BA.5 breakthrough infections exhibits cross-reactive efficacy against BA.2.75

Nov 8. In a recent study published in Eurosurveillance, researchers from Israel measured the neutralizing antibody titers against the wild-type strain of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the SARS-CoV-2 Omicron subvariants BA.1, BA.2, BA.2.75 and BA.5 in healthcare workers fully vaccinated with three doses of the Comirnaty vaccine, who experienced breakthrough Omicron infections.

Background

Although the severity and associated mortality of the coronavirus disease 2019 (COVID-19) pandemic have significantly reduced due to the worldwide impetus to develop vaccines against SARS-CoV-2, emergent variants such as Omicron and its subvariants are soon gaining global dominance.



Study: Omicron BA.2.75 variant is efficiently neutralised following BA.1 and BA.5 breakthrough infection in vaccinated individuals, Israel, June to September 2022. Image Credit: Fit Ztudio/Shutterstock

The high mutation rates in the spike proteins of the SARS-CoV-2 Omicron subvariants are resulting in increased transmissibility and immune evasion. Consequently, the number of breakthrough infections or re-infections among fully vaccinated individuals has increased.

The whole genome sequence monitoring of SARS-CoV-2 positive samples in Israel detected the introduction of the BA.2.75 subvariant in the population during the dominance of the BA.5 subvariant. With

emergent variants acquiring the ability to escape neutralizing antibodies, it is important to monitor the efficacy of vaccine-induced immunity against the newly circulating variants.

About the study

The present study used serum samples from a total of 55 healthcare workers from three cohorts to evaluate the levels of neutralizing antibody titers against the wild-type SARS-CoV-2 strain and four Omicron subvariants BA.1, BA.2, BA.2.75, and BA.5. The healthcare workers were being monitored using serological follow-ups from the onset of the pandemic.

The first cohort comprised 14 healthcare workers who were fully vaccinated with three doses of the Pfizer/ BioNTech BNT162b2 messenger ribonucleic acid (mRNA) (Comirnaty) vaccine and had never had SARS-CoV-2 infections. The second cohort consisted of 15 previously uninfected healthcare workers who were fully vaccinated with three doses of the Comirnaty vaccine and had subsequently had an Omicron BA.1 breakthrough infection. The last cohort comprised previously uninfected and fully vaccinated 26 healthcare workers who had a subsequent breakthrough infection with Omicron BA.5.

The study used whole genome sequences from viral cultures of SARS-CoV-2 positive individuals to identify the wild-type strain and Omicron BA.1, BA.2, BA.2.75, and BA.5 variants. It used neutralization assays to detect the titer levels of neutralization antibodies against the wild-type SARS-CoV-2 strain and Omicron sub -variants.

Results

The results indicated higher neutralization titers against all the Omicron subvariants among the cohorts with fully vaccinated individuals with breakthrough BA.1 or BA.5 infections as compared to fully vaccinated individuals with no breakthrough SARS-CoV-2 infections.

Sera of individuals from the second cohort who were fully vaccinated and had breakthrough BA.1 infections exhibited similar neutralization efficiency against all sub-variants except BA.5, against which the neutralizing efficacy was significantly lower. The neutralizing efficacy of the sera from individuals of the third cohort, who had breakthrough BA.5 infections after being fully vaccinated, showed the reverse trend, with similar neutralization efficiency against all sub-variants except BA.1.

The BA.2.75 subvariant, which is the first second-generation SARS-CoV-2 subvariant reported from regions outside its area of origin, has nine additional novel mutations apart from the mutations reported in the Omicron subvariants. Two of the novel mutations are believed to increase the binding of the BA.2.75 spike protein to the angiotensin-converting enzyme-2 (ACE-2) receptor and the immune evasion abilities of the sub-variant. The hybrid immunity granted by complete vaccination status and breakthrough infections of BA.1 or BA.5 exhibit significant protection against BA.2.75.

Furthermore, the authors discussed another study that examined the neutralizing antibody titers against BA.4, BA.5, and BA.2.75 in individuals vaccinated with two doses of the Sinopharm BBIBP-CorV vaccine and a booster dose of the BBIBP-CorV or Anhui Zhifei Longcom Zifivax vaccine. The results from that study reported lower neutralizing efficacy against BA.4 and BA.5 compared to BA.2.75.

Conclusions

To summarize, the study examined the neutralizing antibody titers against the wild-type SARS-CoV-2 strain and the Omicron sub-variants BA.1, BA.2, BA.2.75, and BA.5 among healthcare workers in Israel who were

fully vaccinated with three doses of the Comirnaty vaccine and had breakthrough infections with the Omicron BA.1 or BA.5 variant.

Compared to the vaccinated individuals with no breakthrough infections, individuals with BA.1 and BA.5 breakthrough infections exhibited similar neutralizing titers against BA.2.75. Interestingly the neutralizing titers against BA.5 in individuals with BA.1 breakthrough infections were significantly lower, and vice versa.

However, the results indicate hybrid immunity from complete vaccinations with the Comirnaty vaccine and breakthrough infections exhibit cross-reactive protection against emergent second-generation sub-variants with increased ACE-2 receptor binding and immune evasion abilities.

Fuente: News Medical Life Sciences. Disponible en https://bit.ly/3GkGeLA

Informe de la OMS: Acceso mundial a vacunas desigualmente distribuido

9 nov. Según la Organización Mundial de la Salud (OMS), los países ricos y pobres tienen un acceso muy desigual a las vacunas no solo en el caso de la COVID-19, sino también para otras enfermedades. La vacuna contra el virus del papiloma humano (VPH), que puede causar cáncer de cuello uterino, solo se ha introducido en el 41 por ciento de los países de bajos ingresos, en comparación con el 83 por ciento de los países ricos, según el informe de vacunación de la OMS publicado el miércoles.

La falta de asequibilidad de los productos también es un obstáculo. A veces, los países de medianos ingresos pagaron incluso más que los más ricos debido a las diferencias de precios. “El derecho a la salud incluye el derecho a las vacunas”, dijo el jefe de la OMS, Tedros Adhanom Ghebreyesus. El informe muestra que la dinámica del libre mercado niega este derecho a algunas de las personas más pobres y vulnerables del mundo.

Debido a la pandemia del coronavirus, en 2021 se entregaron un total de alrededor de 16 000 millones de dosis de vacunas por un valor de 141 000 millones de dólares estadounidenses, casi tres veces el volumen de mercado de 2019. Las cifras muestran el potencial para expandir la producción de vacunas, según la OMS. Sin embargo, la producción está en manos de unos pocos fabricantes. Diez empresas suministraron el 70 por ciento de las dosis de vacunas, sin incluir Corona. Algunas de las 20 principales vacunas utilizadas, como la rubéola y el sarampión, provenían de solo dos proveedores.

Los monopolios de propiedad intelectual y la transferencia de tecnología limitada limitan la capacidad de construir y utilizar la capacidad de fabricación local, según la OMS. Otro peligro es la inversión limitada en tales vacunas, que solo tienen una gran demanda durante los brotes, como es el caso del cólera, la fiebre tifoidea, la viruela del mono y el ébola. Esto podría ser “devastador para la vida de las personas”, según el informe.

La respuesta a la pandemia de corona ha demostrado que las vacunas se pueden desarrollar en una fracción del tiempo requerido anteriormente, dijo. También ha consolidado el estatus de las vacunas como un bien público. Para promover el acceso equitativo a las vacunas, el informe pide a los gobiernos que desarrollen planes claros de vacunación, fortalezcan la supervisión del desarrollo, la producción y la distribución de vacunas, y se ocupen de los centros regionales de investigación y producción./mrd/DP/ngu

Fuente: News Es Euro. Disponible en https://bit.ly/3tAIirg

COVID 19: vacunas inhalables, la alternativa a las inyecciones que están utilizando algunos países

9 nov. A medida que la pandemia continúa, muchos países están lanzando sus vacunas de refuerzo. En Reino Unido, la campaña de refuerzo de otoño ofrece una cuarta dosis para aquellas personas de mayor riesgo de contraer covid, incluyendo las que tienen condiciones preexistentes y los mayores de 50 años.

Las inyecciones de refuerzo de otoño son vacunas bivalentes, lo que significa que se enfocan en la cepa original de SARS-CoV-2 (el virus que causa la covid-19) y la variante Ómicron.

Estas vacunas son efectivas recargando y ampliando nuestra inmunidad. Pero se anticipa que, como se vio con las vacunas originales de covid, la protección que proveen, especialmente contra la infección, se reduce meses después.

De manera que hay que considerar una estrategia de vacunas que provea una inmunización de largo plazo. Un nuevo tipo -las vacunas de mucosa- pueden ser prometedoras en este frente.

Las vacunas de mucosa se aplican en la nariz o garganta, por vía de fórmulas inhalables. Puede sonar como algo nuevo, pero realmente venimos usándolas durante años para vacunar contra enfremedades como la influenza.

Mientras que las vacunas tradicionales de inyección hipodérmica producen una respuesta inmune más sistémica, las vacunas de mucosa hacen algo diferente. Los virus como el SARS-CoV-2 penetran nuestro sistema por la nariz o boca cuando inhalamos pequeñas gotículas que contienen el virus. Eso significa que la inmunidad en la nariz, boca o garganta es muy importante para frenar las infecciones.

Las vacunas de mucosa están diseñadas para actuar sobre este "sistema inmune mucoso". El sistema inmune mucoso tiene el potencial de frenar en seco el virus cuando entra en el cuerpo, de manera que los científicos pronostican que las vacunas de mucosa podrían prevenir la infección.

La inmunidad de la mucosa también podría ser mejor para que nuestro sistema inmune recuerde el SARS-CoV-2. Los linfocitos de memoria son células inmunes de larga vida que recuerdan el virus y portan las instrucciones para que estas puedan ser rápidamente desplegadas frente a un ataque. Las vacunas sistémicas no son tan buenas para activar los linfocitos de memoria en la nariz o garganta, pero las vacunas de mucosa sí lo son.

Por otra parte, el hecho que las vacunas de mucosa actúan localmente implica que se necesitaría una dosis más pequeña. Eso, combinado con las medidas menos estrictas para su almacenamiento comparadas a las de las vacunas tradicionales, podría permitir que se puedan implementar mucho más eficientemente en países de bajos recursos y volverse en una herramienta importante en la equidad de las vacunas.

Las vacunas de mucosa podrían ser además más atractivas para aquellos que le tienen fobia a las agujas. Aproximadamente 26% de la población en Reino Unido reconoce tener miedo a las agujas, con las tasas más altas de fobia entre grupos de jóvenes negros y asiáticos -la demografía que sabemos que vacila ante la posibilidad de vacunarse y se vacuna menos.

Ventajas claras, pero ¿qué dice la evidencia?

Se están explorando varias candidatas para las vacunas de mucosa en pruebas clínicas y preclínicas. Los resultados recientemente publicados de una vacuna de refuerzo nasal probada en ratones mostró que hubo repuestas robustas de inmunidad de mucosa en los tractos nasales y respiratorios superiores.

Hay resultados igualmente optimistas que se reportaron en macacos y hámsteres. Se están realizando varias pruebas para ver si estos resultados pueden ser repetidos en humanos.

Irán, Rusia, India y China ya han introducido vacunas de mucosa a pesar de que los datos publicados de sus vacunas candidatas siguen siendo escasos. Aunque algunos datos sí se han publicado.

Los resultados de la fase II en pruebas humanas de una vacuna inhalable, que se está aplicando ahora en China, fueron revelados en un estudio que todavía no ha sido revisado por pares. Aunque el estudio no evaluó las respuestas de mucosa, sí mostró que los niveles de anticuerpos sistémicos eran más altos y permanecieron más altos a lo largo de los seis meses de evaluación cuando se compararon con un refuerzo tradicional.

Pero es un panorama ambiguo. Una fase I de una fórmula nasal de la vacuna Oxford-AstraZeneca mostró poca o ninguna iniciación en la respuesta de la inmunidad de mucosa ni de anticuerpos sistémicos más débiles comparada a la vacuna tradicional.

La razón de estas disparidades no está clara, pero podría deberse al método de aplicación. La aplicación de las vacunas de mucosa requiere una ingeniería y ciencia del aerosol precisas para garantizar que las gotículas que contienen la vacuna sean inhaladas fácilmente.

Se han usado varias estrategias en la aplicación de vacunas de mucosa, incluyendo nebulizadores (una máquina que transforma los líquidos en un vapor fino que puede ser inhalado), aerosoles nasales y dispositivos como los inhaladores que comúnmente usan los asmáticos.

El tamaño de las partículas, la fórmula (los ingredientes y cómo se combinan), además de la habilidad de la vacuna de adherirse a y penetrar nuestras células tendrán un efecto en qué tan efectivamente las partículas de la vacuna pueden ser absorbidas por el cuerpo. Esto se llama "bioviabiliad" de la vacuna.

Todavía nos falta saber qué estrategia de aplicación es la óptima para qué vacuna.

Entonces, ¿dónde estamos con esto?

Esta pandemia todavía está muy vigente. Y estamos aprendiendo cada día más sobre las implicaciones a largo plazo de las infecciones de covid sobre nuestra salud, incluyendo las complicaciones cardíacas y la covid de larga duración.

Esto, combinado con el surgimiento de variantes aún más persistentes, indica lo importante que es que continuemos protegiéndonos a nosotros mismos y nuestros seres queridos de los peores efectos de esta enfermedad. Las vacunas son algunas de las mejores armas que tenemos.

Será importante observar y aprender de los programas de vacunas de mucosa en otros países y escudriñar sus datos cuando los lancen.

Entretanto, dada la urgente necesidad de vacunas de larga duración, sería prudente invertir en nuevas estrategias, no solo para el desarrollo sino también para la producción de este tipo de vacunas. Serían una herramienta invaluable contra esta pandemia y muchas otras infecciones, incluyendo con las que todavía no nos hemos topado.

Fuente: BBC News. Disponible en https://bbc.in/3EbDGwD

MSD's Vaxneuvance approved by MHRA for prevention of pneumococcal diseases in children

Nov 10. MSD's – known as Merck & Co in the US and Canada – Vaxneuvance (PCV15) has been approved in the UK for the prevention of invasive disease, pneumonia and acute otitis media caused by Streptococcus pneumoniae (S pneumoniae) in children aged six weeks to less than 18 years old.

The decision from the Medicines and Healthcare products Regulatory Agency (MHRA) marks the regulatory body's first approval of a new vaccine for this indication in a decade.

The vaccine is already indicated for the prevention of invasive disease and pneumonia caused by S pneumoniae in adults aged 18 years and older.

Pneumococcal disease is an infection caused by the bacterium S pneumoniae, or pneumococcus. While there are more than 100 different types of S pneumoniae, called serotypes, a selected number of serotypes are responsible for the majority of pneumococcal infections.

Invasive pneumococcal disease can cause serious and potentially life-threatening infections, including pneumonia and meningitis, and has been on the rise among infants and children.

"Infants less than one year of age typically experience the highest rates of disease, therefore this approval provides an important new option to protect and reassure families across the UK," said Dr Dilruwan Herath, executive medical affairs director, MSD UK & Ireland.

"As the first new pneumococcal conjugate vaccine (PCV) in over a decade, we hope to see the new generation of pneumococcal vaccines assessed holistically by the UK health system," Herath added.

The approvals were supported by eight randomised, double-blind clinical studies evaluating the use of Vaxneuvance in various paediatric populations at risk for pneumococcal disease, including healthy infants, children and adolescents, pre-term infants and children living with HIV infection or sickle cell disease.

Vaxneuvance was also evaluated across a variety of clinical circumstances, such as interchangeable use following initiation of an infant vaccination schedule with the currently licensed 13-valent PCV (PCV13) or in a catch-up setting for older children who are either pneumococcal vaccine-naïve or who previously received an incomplete series of another PCV.

Moreover, findings from the pivotal PNEU-PED-EU-1 study, which evaluated the safety, tolerability and immunogenicity of a two-dose infant series followed by a toddler dose in healthy infants, showed that immune responses were non-inferior to PCV13 for the 13 serotypes shared between the two vaccines and superior for the two additional serotypes in PCV15, 22F and 33F at 30 days post-toddler dose.

Fuente: PM LiVE. Disponible en https://bit.ly/3EARMck

Artículos científicos publicados en Medline

Filters activated: Publication date from 2022/11/01 to 2022/11/12. "COVID-19 vaccine" (Title/Abstract) 262 records.

COVID-19 and liver disease.
Dufour JF, Marjot T, Becchetti C, Tilg H. Gut. 2022 Nov;71(11):2350-2362. doi: 10.1136/gutjnl-2021-326792. Epub 2022 Jun 14. PMID: 35701093

The heart and SARS-CoV-2.
González-Calle D, Eiros R, Sánchez PL. Med Clin (Engl Ed). 2022 Nov 11;159(9):440-446. doi: 10.1016/j.medcle.2022.10.001. Epub 2022 Oct 14. PMID: 36268184

The heart and SARS-CoV-2.
González-Calle D, Eiros R, Sánchez PL. Med Clin (Barc). 2022 Nov 11;159(9):440-446. doi: 10.1016/j.medcli.2022.07.002. Epub 2022 Jul 20. PMID: 35945062

COVID-19 vaccine acceptance and hesitancy among patients with cancer: a systematic review and meta-analysis.
Prabani KIP, Weerasekara I, Damayanthi HDWT. Public Health. 2022 Nov;212:66-75. doi: 10.1016/j.puhe.2022.09.001. Epub 2022 Sep 8. PMID: 36244261

COVID-19 anti-**vaccine** attitude and hesitancy.
Hasanzad M, Namazi H, Larijani B. J Diabetes Metab Disord. 2022 Nov 5:1-4. doi: 10.1007/s40200-022-01018-y. Online ahead of print. PMID: 36373157

Remembering and forgetting information about the **COVID-19 vaccine** on Twitter.
Bilgin E, Wang Q. Memory. 2022 Nov 11:1-12. doi: 10.1080/09658211.2022.2144892. Online ahead of print. PMID: 36369800

Myocarditis following **COVID-19** vaccination in adolescents and adults: a cumulative experience of 2021.
Ilonze OJ, Guglin ME. Heart Fail Rev. 2022 Nov;27(6):2033-2043. doi: 10.1007/s10741-022-10243-9. Epub 2022 Apr 22. PMID: 35449353

Exploring **COVID-19 Vaccine** Hesitancy Amongst Black Americans: Contributing Factors and Motivators.
Sekimitsu S, Simon J, Lindsley MM, Jones M, Jalloh U, Mabogunje T, Kerr J, Willingham M, Ndousse-Fetter SB, White-Hammond G, Altman W. Am J Health Promot. 2022 Nov;36(8):1304-1315. doi: 10.1177/08901171221099270. Epub 2022 May 3. PMID: 35506153

COVID-19 Vaccine Uptake and Factors Affecting Hesitancy Among US Nurses, March-June 2021.
Rich-Edwards JW, Rocheleau CM, Ding M, Hankins JA, Katuska LM, Kumph X, Steege AL, Boiano JM, Lawson CC. Am J Public Health. 2022 Nov;112(11):1620-1629. doi: 10.2105/AJPH.2022.307050. PMID: 36223573

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 Nov 2;61(11):4263-4272. doi: 10.1093/rheumatology/keac103. PMID: 35179569

The Peruvian **COVID-19 vaccine** scandal and re-thinking the path to public trust.
Perez-Brumer A, Silva-Santisteban A. Glob Public Health. 2022 Nov;17(11):3119-3125. doi: 10.1080/17441692.2021.2001670. Epub 2021 Nov 23. PMID: 34813717

COVID-19 perceptions and **vaccine** hesitancy: Acceptance, attitude, and barriers among Cameroonians.
Ajonina-Ekoti IU, Ware KB, Nfor CK, Akomoneh EA, Djam A, Chia-Garba M, Wepnyu GN, Awambeng D, Abendong K, Manjong FT, Nwongo O, Ajonina MU. J Am Pharm Assoc (2003). 2022 Nov-Dec;62(6):1823-1829. doi: 10.1016/j.japh.2022.07.002. Epub 2022 Jul 12. PMID: 35970727

COVID-19 and Inborn Errors of Immunity.
Delmonte OM, Castagnoli R, Notarangelo LD. Physiology (Bethesda). 2022 Nov 1;37(6):0. doi: 10.1152/physiol.00016.2022. Epub 2022 Aug 9. PMID: 35944006

A Community-Based **COVID-19 Vaccine** Education Initiative.
Edwards JG, Cheston CC, Kelly CA, Brewster RCL, Williams AR, Mell AJ. Pediatrics. 2022 Nov 9:e2022057374. doi: 10.1542/peds.2022-057374. Online ahead of print. PMID: 36349517

Urological Safety and **COVID-19** Vaccinations.
Foschi N, Santoro PE, Borrelli I, Gavi F, Amantea C, Russo P, Moscato U. Vaccines (Basel). 2022 Nov 8;10(11):1887. doi: 10.3390/vaccines10111887. PMID: 36366395

COVID-19 Vaccine-Related Beliefs and Behaviors Among Patients With and Survivors of Hematologic Malignancies.
Akesson J, Weiss ES, Sae-Hau M, Gracia G, Lee M, Culp L, Connell B, Butterfield S, Conti RM. JCO Oncol Pract. 2022 Nov 9:OP2200338. doi: 10.1200/OP.22.00338. Online ahead of print. PMID: 36351207

Covid-19 Vaccine Protection among Children and Adolescents in Qatar.
Chemaitelly H, AlMukdad S, Ayoub HH, Altarawneh HN, Coyle P, Tang P, Yassine HM, Al-Khatib HA, Smatti MK, Hasan MR, Al-Kanaani Z, Al-Kuwari E, Jeremijenko A, Kaleeckal AH, Latif AN, Shaik RM, Abdul-Rahim HF, Nasrallah GK, Al-Kuwari MG, Al-Romaihi HE, Butt AA, Al-Thani MH, Al-Khal A, Bertollini R, Abu-Raddad LJ. N Engl J Med. 2022 Nov 2. doi: 10.1056/NEJMoa2210058. Online ahead of print. PMID: 36322837

COVID-19 Vaccine-Associated Ocular Adverse Effects: An Overview.
Ichhpujani P, Parmar UPS, Duggal S, Kumar S. Vaccines (Basel). 2022 Nov 7;10(11):1879. doi: 10.3390/vaccines10111879. PMID: 36366386

A global epidemiological analysis of **COVID-19 vaccine** types and clinical outcomes.
Alhinai Z, Park S, Choe YJ, Michelow IC. Int J Infect Dis. 2022 Nov;124:206-211. doi: 10.1016/j.ijid.2022.09.014. Epub 2022 Sep 23. PMID: 36155824

Health information and **COVID-19** vaccination: Beliefs and attitudes among Japanese university students.
Sakamoto M, Ishizuka R, Ozawa C, Fukuda Y. PLoS One. 2022 Nov 9;17(11):e0277435. doi: 10.1371/journal.pone.0277435. eCollection 2022. PMID: 36350924

COVID-19 Vaccine Uptake in Southeastern Ontario, Canada: Monitoring and Addressing Health Inequities.
Carter MA, Biro S, Maier A, Shingler C, Guan TH. J Public Health Manag Pract. 2022 Nov-Dec 01;28(6):615-623. doi: 10.1097/PHH.0000000000001565. Epub 2022 Aug 24. PMID: 36027607

Considering a **COVID-19 vaccine** mandate for pediatric kidney transplant candidates.
Wightman A, Goldberg A, Diekema D. Pediatr Nephrol. 2022 Nov;37(11):2559-2569. doi: 10.1007/s00467-022-05511-7. Epub 2022 Mar 25. PMID: 35333972

Single-cell transcriptomic atlas reveals distinct immunological responses between **COVID-19 vaccine** and natural SARS-CoV-2 infection.
Wang Y, Wang X, Luu LDW, Li J, Cui X, Yao H, Chen S, Fu J, Wang L, Wang C, Yuan R, Cai Q, Huang X, Huang J, Li Z, Li S, Zhu X, Tai J. J Med Virol. 2022 Nov;94(11):5304-5324. doi: 10.1002/jmv.28012. Epub 2022 Jul 30. PMID: 35859327

Prevalence and Determinants of **COVID-19 Vaccine** Acceptance in South East Asia: A Systematic Review and Meta-Analysis of 1,166,275 Respondents.
Yanto TA, Lugito NPH, Hwei LRY, Virliani C, Octavius GS. Trop Med Infect Dis. 2022 Nov 9;7(11):361. doi: 10.3390/tropicalmed7110361. PMID: 36355903

COVID-19 vaccine and oral lesions: Putative pathogenic mechanisms.
Di Spirito F, Contaldo M, Amato A, Di Palo MP, Pantaleo G, Amato M. Oral Dis. 2022 Nov;28 Suppl 2:2639-2640. doi: 10.1111/odi.14361. Epub 2022 Sep 12. PMID: 36039517

Exploring enablers and barriers toward **COVID-19 vaccine** acceptance among Arabs: A qualitative study.
Elbarazi I, Yacoub M, Reyad OA, Abdou MS, Elhadi YAM, Kheirallah KA, Ababneh BF, Hamada BA, El Saeh HM, Ali N, Rahma AT, Tahoun MM, Ghazy RM. Int J Disaster Risk Reduct. 2022 Nov;82:103304. doi: 10.1016/j.ijdrr.2022.103304. Epub 2022 Sep 29. PMID: 36193257

COVID-19 vaccine hesitancy in periconceptional and lactating women: a systematic review and meta-analysis protocol.
Su X, Lu H, Li X, Luo M, Li F, Zhang Q. BMJ Open. 2022 Nov 7;12(11):e059514. doi: 10.1136/bmjopen-2021-059514. PMID: 36343993

COVID-19 Vaccine Knowledge, Attitudes, and Practices in Alabama: The Case for Primary Health Care Providers.
Bassler JR, Redden DT, Hall AG, Ford ET, Chrapah S, Erwin PC. J Public Health Manag Pract. 2022 Nov-Dec 01;28(6):631-638. doi: 10.1097/PHH.0000000000001556. Epub 2022 Aug 27. PMID: 36037510

COVID-19 Vaccine Acceptability Among People Experiencing Homelessness in Central Florida and Southern Nevada, March-June 2021.
Meehan AA, Aarvig K, Kashani M, Whitton A, Mosites E. J Public Health Manag Pract. 2022 Nov-Dec 01;28(6):693-701. doi: 10.1097/PHH.0000000000001619. Epub 2022 Sep 8. PMID: 36194815

Parental **COVID-19 Vaccine** Hesitancy in the United States.
Ruiz JB, Bell RA. Public Health Rep. 2022 Nov-Dec;137(6):1162-1169. doi: 10.1177/00333549221114346. Epub 2022 Aug 2. PMID: 35915993

Communication is Crucial: Lessons from **COVID-19** vaccination and pregnancy.
Cole C, Tsakiroglou M, Waitt C. Br J Clin Pharmacol. 2022 Nov 2. doi: 10.1111/bcp.15578. Online ahead of print. PMID: 36321589

COVID-19 vaccine hesitancy and short-term and long-term intentions among unvaccinated young adults: a mixed-method approach.
Kim S, Willis E, Wehlage S, Scheffer-Wentz H, Dulitz M. BMC Public Health. 2022 Nov 7;22(1):2030. doi: 10.1186/s12889-022-14448-3. PMID: 36344938

The **vaccine** hesitancy continuum among hesitant adopters of the **COVID-19 vaccine**.
Moore R, Purvis RS, Willis DE, Worley KC, Hervey D, Reece S, Yeates A, McElfish PA. Clin Transl Sci. 2022 Nov 3. doi: 10.1111/cts.13385. Online ahead of print. PMID: 36330587

No apparent association between mRNA **COVID-19** vaccination and venous thromboembolism.
Nicholson M, Goubran H, Chan N, Siegal D. Blood Rev. 2022 Nov;56:100970. doi: 10.1016/j.blre.2022.100970. Epub 2022 May 11. PMID: 35577626

Immunogenicity and efficacy of **COVID-19** vaccines in people living with HIV: a systematic review and meta-analysis.
Yin J, Chen Y, Li Y, Wang C, Zhang X. Int J Infect Dis. 2022 Nov;124:212-223. doi: 10.1016/j.ijid.2022.10.005. Epub 2022 Oct 12. PMID: 36241168

COVID-19 vaccine literacy and **vaccine** hesitancy among pregnant women and mothers of young children in Japan.
Takahashi Y, Ishitsuka K, Sampei M, Okawa S, Hosokawa Y, Ishiguro A, Tabuchi T, Morisaki N. Vaccine. 2022 Nov 8;40(47):6849-6856. doi: 10.1016/j.vaccine.2022.09.094. Epub 2022 Oct 17. PMID: 36266127

COVID-19 vaccine perceptions and hesitancy amongst parents of school-aged children during the pediatric **vaccine** rollout.
Byrne A, Thompson LA, Filipp SL, Ryan K. Vaccine. 2022 Nov 2;40(46):6680-6687. doi: 10.1016/j.vaccine.2022.09.090. Epub 2022 Oct 5. PMID: 36220714

Recovery from mRNA **COVID-19 vaccine**-related myocarditis.
Ammirati E, Cooper LT Jr. Lancet Child Adolesc Health. 2022 Nov;6(11):749-751. doi: 10.1016/S2352-4642(22)00272-3. Epub 2022 Sep 22. PMID: 36152649

Evaluating real-world **COVID-19 vaccine** effectiveness using a test-negative case-control design.
Reynolds MW, Secora A, Joules A, Albert L, Brinkley E, Kwon T, Mack C, Toovey S, Dreyer NA. J Comp Eff Res. 2022 Nov;11(16):1161-1172. doi: 10.2217/cer-2022-0069. Epub 2022 Sep 23. PMID: 36148919

Influence of **COVID-19** vaccines on endocrine system.
Zhao Y, Wu X. Endocrine. 2022 Nov;78(2):241-246. doi: 10.1007/s12020-022-03119-3. Epub 2022 Jun 25. PMID: 35751776

mRNA **COVID-19 vaccine** and oral lichen planus: A case report.
Caggiano M, Amato M, Di Spirito F, Galdi M, Sisalli L. Oral Dis. 2022 Nov;28 Suppl 2:2624-2626. doi: 10.1111/odi.14184. Epub 2022 Sep 21. PMID: 35262981

Models of determinants of **COVID-19 vaccine** hesitancy in non-pregnant and pregnant population: Review of current literature".
Tostrud L, Thelen J, Palatnik A. Hum Vaccin Immunother. 2022 Nov 7:2138047. doi: 10.1080/21645515.2022.2138047. Online ahead of print. PMID: 36345571

COVID-19 infection and vaccination in patients with skeletal muscle channelopathies.
Vivekanandam V, Jayaseelan D, Hanna MG. Muscle Nerve. 2022 Nov;66(5):617-620. doi: 10.1002/mus.27704. Epub 2022 Sep 2. PMID: 36053900

Parental **COVID-19 Vaccine** Hesitancy in Diverse Communities: A National Survey.
de St Maurice A, Block R Jr, Sanchez G, Szilagyi PG; African American Research Collaborative 2021 COVID Group. Acad Pediatr. 2022 Nov-Dec;22(8):1399-1406. doi: 10.1016/j.acap.2022.06.016. Epub 2022 Jul 5. PMID: 35803490

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 Nov;37(12):1465-1475. doi: 10.1080/10410236.2022.2035943. Epub 2022 Feb 14. PMID: 35164624

The case against **COVID-19 vaccine** mandates in pediatric solid organ transplantation.
Ross LF, Opel DJ. Pediatr Transplant. 2022 Nov;26(7):e14243. doi: 10.1111/petr.14243. Epub 2022 Feb 12. PMID: 35150196

Perceived threat of **COVID-19**, attitudes towards vaccination, and **vaccine** hesitancy: A prospective longitudinal study in the UK.
Phillips R, Gillespie D, Hallingberg B, Evans J, Taiyari K, Torrens-Burton A, Cannings-John R, Williams D, Sheils E, Ashfield-Watt P, Akbari A, Hughes K, Thomas-Jones E, James D, Wood F. Br J Health Psychol. 2022 Nov;27(4):1354-1381. doi: 10.1111/bjhp.12606. Epub 2022 Jun 1. PMID: 35642867

Anaphylaxis and Related Events Following **COVID-19** Vaccination: A Systematic Review.
Paul P, Janjua E, AlSubaie M, Ramadorai V, Mushannen B, Vattoth AL, Khan W, Bshesh K, Nauman A, Mohammed I, Bouhali I, Khalid M, Zakaria D. J Clin Pharmacol. 2022 Nov;62(11):1335-1349. doi: 10.1002/jcph.2120. Epub 2022 Aug 31. PMID: 35794852

COVID-19 Vaccination and Intent for Vaccination of Adults With Reported Medical Conditions.
Lu PJ, Hung MC, Jackson HL, Kriss JL, Srivastav A, Yankey D, Santibanez TA, Lee JT, Meng L, Razzaghi H, Black CL, Elam-Evans LD, Singleton JA. Am J Prev Med. 2022 Nov;63(5):760-771. doi: 10.1016/j.amepre.2022.05.013. Epub 2022 Jun 27. PMID: 35864015

Safety of **COVID-19** Pfizer-BioNtech (BNT162b2) mRNA vaccination in adolescents aged 12-17 years: A systematic review and meta-analysis.
Katoto PDMC, Brand AS, Byamungu LN, Tamuzi JL, Mahwire TC, Kitenge MK, Wiysonge CS, Gray G. Hum Vaccin Immunother. 2022 Nov 11:2144039. doi: 10.1080/21645515.2022.2144039. Online ahead of print. PMID: 36367429

Original Research: **COVID-19 Vaccine** Hesitancy Among Southern California Nurses.
Roberts LR, Dubov A, Distelberg B, Peteet B, Abdul-Mutakabbir JC, Montgomery S, Patel P, Chrissian AA. Am J Nurs. 2022 Nov 1;122(11):22-31. doi: 10.1097/01.NAJ.0000892492.43587.5f. PMID: 36201394

Effectiveness of Second mRNA **COVID-19** Booster **Vaccine** in Immunocompromised Persons and Long-Term Care Facility Residents.
Kim YY, Choe YJ, Kim J, Kim RK, Jang EJ, Park SK, Lim DS, Yi S, Lee S, Kwon GY, Shin JY, Choi SY, Jeong MJ, Park YJ. Emerg Infect Dis. 2022 Nov;28(11):2165-2170. doi: 10.3201/eid2811.220918. Epub 2022 Oct 3. PMID: 36191615

COVID-19 Vaccination Concerns and Reasons for Acceptance Among US Health Care Personnel.
Oberleitner LMS, Lucia VC, Navin MC, Ozdych M, M Afonso N, Kennedy RH, Keil H, Wu L, Mathew TA. Public Health Rep. 2022 Nov-Dec;137(6):1227-1234. doi: 10.1177/00333549221120590. Epub 2022 Sep 8. PMID: 36073241

Socioeconomic Inequalities in **COVID-19** Vaccination and Infection in Adults, Catalonia, Spain.
Roel E, Raventós B, Burn E, Pistillo A, Prieto-Alhambra D, Duarte-Salles T. Emerg Infect Dis. 2022 Nov;28(11):2243-2252. doi: 10.3201/eid2811.220614. Epub 2022 Oct 11. PMID: 36220130

Myocarditis After **COVID-19** Vaccination in Pediatrics: A Proposed Pathway for Triage and Treatment.
Sandeep N, Fairchok MP, Hasbani K. J Am Heart Assoc. 2022 Nov;11(21):e026097. doi: 10.1161/JAHA.122.026097. Epub 2022 Oct 26. PMID: 36285797

Coronavirus disease 2019 (**COVID-19**) vaccines: A concise review.
Samaranayake LP, Seneviratne CJ, Fakhruddin KS. Oral Dis. 2022 Nov;28 Suppl 2:2326-2336. doi: 10.1111/odi.13916. Epub 2021 May 31. PMID: 33991381

Willingness to Accept **COVID-19 Vaccine** and Associated Factors Among Adult Household Members in Dire Dawa City Administration, East Ethiopia.
Abdulhamid I, Usmael N, Shaweno T. Patient Prefer Adherence. 2022 Nov 1;16:2977-2988. doi: 10.2147/PPA.S380393. eCollection 2022. PMID: 36345291

High Uptake and Series Completion of **COVID-19 Vaccine** at Community-Based Vaccination for Latinos With Limited English Proficiency.
Bigelow BF, Saxton RE, Martínez DA, Flores-Miller A, Shin JM, Parent C, Williams S, Phillips KH, Yang C, Page KR. J Public Health Manag Pract. 2022 Nov-Dec 01;28(6):E789-E794. doi: 10.1097/PHH.0000000000001625. Epub 2022 Sep 5. PMID: 36074797

Individual-level factors associated with **COVID-19 vaccine** acceptance among U.S. patients with cancer.
Hathaway CA, Siegel EM, Gonzalez BD, Oswald LB, Peoples AR, Ulrich CM, Penedo FJ, Tworoger SS, Islam JY. Vaccine. 2022 Nov 2;40(46):6649-6657. doi: 10.1016/j.vaccine.2022.09.063. Epub 2022 Sep 28. PMID: 36210253

Perspectives about **COVID-19 vaccine** boosters among the U.S. paralysis community.
Burdick CE, Christopher CH. Rehabil Psychol. 2022 Nov;67(4):513-525. doi: 10.1037/rep0000471. Epub 2022 Sep 29. PMID: 36174136

Evaluation of immunogenicity and reactogenicity of **COVID-19** vaccines in pregnant women.
Blakeway H, Amin-Chowdhury Z, Prasad S, Kalafat E, Ismail M, Abdallah FN, Rezvani A, Amirthalingam G, Brown K, Le Doare K, Heath PT, Ladhani SN, Khalil A. Ultrasound Obstet Gynecol. 2022 Nov;60(5):673-680. doi: 10.1002/uog.26050. PMID: 36318630

A longitudinal study of **COVID-19** disclosure stigma and **COVID-19** testing hesitancy in the United States.
Dayton L, Song W, Kaloustian I, Eschliman EL, Strickland JC, Latkin C. Public Health. 2022 Nov;212:14-21. doi: 10.1016/j.puhe.2022.08.003. Epub 2022 Aug 26. PMID: 36182746

COVID-19 vaccine effectiveness against omicron (B.1.1.529) variant infection and hospitalisation in patients taking immunosuppressive medications: a retrospective cohort study.
Risk M, Hayek SS, Schiopu E, Yuan L, Shen C, Shi X, Freed G, Zhao L. Lancet Rheumatol. 2022 Nov;4(11):e775-e784. doi: 10.1016/S2665-9913(22)00216-8. Epub 2022 Aug 16. PMID: 35991760

Demographic disparities in **COVID-19 vaccine** hesitancy among U.S. adults: Analysis of household pulse survey data from Jul 21 to Oct 11 in 2021.
Wu YY, Zhang W. Vaccine. 2022 Nov 7:S0264-410X(22)01381-0. doi: 10.1016/j.vaccine.2022.10.094. Online ahead of print. PMID: 36371370

Miller Fisher syndrome following **COVID-19** vaccines: A scoping review.
Kim JE, Yoon BA, Kim YH, Kim JK, Bae JS. Acta Neurol Scand. 2022 Nov;146(5):604-609. doi: 10.1111/ane.13687. Epub 2022 Aug 8. PMID: 35938305

New Onset and Exacerbations of Psoriasis Following **COVID-19** Vaccines: A Systematic Review.
Wu PC, Huang IH, Wang CW, Tsai CC, Chung WH, Chen CB. Am J Clin Dermatol. 2022 Nov;23(6):775-799. doi: 10.1007/s40257-022-00721-z. Epub 2022 Sep 1. PMID: 36048409

Trends in **COVID-19 Vaccine** Acceptance in Spain, September 2020–May 2021.
Beca-Martínez MT, Romay-Barja M, Ayala A, Falcon-Romero M, Rodríguez-Blázquez C, Benito A, Forjaz MJ. Am J Public Health. 2022 Nov;112(11):1611-1619. doi: 10.2105/AJPH.2022.307039. Epub 2022 Aug 25. PMID: 36007207

Development of IgA vasculitis with severe glomerulonephritis after **COVID-19** vaccination: a case report and literature review.
Sugita K, Kaneko S, Hisada R, Harano M, Anno E, Hagiwara S, Imai E, Nagata M, Tsukamoto Y. CEN Case Rep. 2022 Nov;11(4):436-441. doi: 10.1007/s13730-022-00695-1. Epub 2022 Mar 11. PMID: 35275366

Natural History of Myocardial Injury After **COVID-19 Vaccine**-Associated Myocarditis.
Mustafa Alhussein M, Rabbani M, Sarak B, Dykstra S, Labib D, Flewitt J, Lydell CP, Howarth AG, Filipchuck N, Kealey A, Colbert J, Guron N, Kolman L, Merchant N, Bandali M, Bristow M, White JA. Can J Cardiol. 2022 Nov;38(11):1676-1683. doi: 10.1016/j.cjca.2022.07.017. Epub 2022 Aug 6. PMID: 35944800

Thrombocytopenia and pneumonitis associated with BNT16B2b2 mRNA **COVID-19 vaccine**: A case report.
Kojima Y, Takeyabu K, Satoh M, Konno S. Clin Infect Pract. 2022 Nov;16:100204. doi: 10.1016/j.clinpr.2022.100204. Epub 2022 Oct 5. PMID: 36212609

Factors associated with **COVID-19 vaccine** intention in Benin in 2021: A cross-sectional study.
Avahoundje EM, Dossou JP, Vigan A, Gaye I, Agossou C, Boyi C, Bello K, Mikponhoue J, Ba MF, Faye A, Ridde V. Vaccine X. 2022 Dec;12:100237. doi: 10.1016/j.jvacx.2022.100237. Epub 2022 Nov 3. PMID: 36348760

Predictors of second **COVID-19** booster dose or new **COVID-19 vaccine** hesitancy among nurses: A cross-sectional study.
Galanis P, Vraka I, Katsiroumpa A, Siskou O, Konstantakopoulou O, Katsoulas T, Mariolis-Sapsakos T, Kaitelidou D. J Clin Nurs. 2022 Nov 7. doi: 10.1111/jocn.16576. Online ahead of print. PMID: 36345133

Personal willingness to receive a **Covid-19 vaccine** and its relationship with intergroup psychology: Evidence from the Philippines and Pakistan.
Zagefka H, Dela Paz E, Macapagal MEJ, Ghazal S. Appl Psychol Health Well Being. 2022 Nov;14(4):1273-1290. doi: 10.1111/aphw.12334. Epub 2022 Jan 9. PMID: 35001533

Acquired Thrombotic Thrombocytopenic Purpura After BNT162b2 **COVID-19 Vaccine**: Case Report and Literature Review.
Hammami E, Lamarque M, Aujoulat O, Debliquis A, Drénou B, Harzallah I. Lab Med. 2022 Nov 3;53(6):e145-e148. doi: 10.1093/labmed/lmac016. PMID: 35482291

Immunoassay and mass cytometry revealed immunological profiles induced by inactivated BBIBP **COVID-19 vaccine**.
Cheng ZJ, Huang H, Liu Q, Zhong R, Liang Z, Xue M, Liu M, Li S, Wang H, Zheng P, Zheng C, Sun B. J Med Virol. 2022 Nov;94(11):5206-5216. doi: 10.1002/jmv.27983. Epub 2022 Jul 19. PMID: 35801663

Trust and Coping Beliefs Contribute to Racial Disparities in **COVID-19** Vaccination Intention.
McClaran N, Rhodes N, Yao SX. Health Commun. 2022 Nov;37(12):1457-1464. doi: 10.1080/10410236.2022.2035944. Epub 2022 Feb 9. PMID: 35135397

Chimeric mRNA based **COVID-19 vaccine** induces protective immunity against Omicron and Delta variants.
Hu Q, Zhao Y, Shaabani N, Lyu X, Powers C, Sun H, Cruz V, Stegman K, Xu J, Fossier A, Huang Y, Ho G, Kao Y, Wang Z, Wang Z, Hu Y, Zheng Y, Kyaw L, Zuluaga C, Wang H, Pei H, Allen R, Xie H, Ji H, Chen R. Mol Ther Nucleic Acids. 2022 Nov 2. doi: 10.1016/j.omtn.2022.10.021. Online ahead of print. PMID: 36345542

Investigating the **COVID-19 vaccine** discussions on Twitter through a multilayer network-based approach.
Bonifazi G, Breve B, Cirillo S, Corradini E, Virgili L. Inf Process Manag. 2022 Nov;59(6):103095. doi: 10.1016/j.ipm.2022.103095. Epub 2022 Sep 12. PMID: 36119754

Factors Associated with **COVID-19 Vaccine** Acceptance among Healthcare Professionals and Community Stakeholders in Hong Kong: A Cross-Sectional Study.
Lee RLT, Chien WT, Stubbs M, Cheng WLS, Chiu DCS, Fung KHK, Cheng HY, Chong YY, Tang ACY. Int J Environ Res Public Health. 2022 Nov 4;19(21):14499. doi: 10.3390/ijerph192114499. PMID: 36361376

Examining the relationships between trust in providers and information, mistrust, and **COVID-19 vaccine** concerns, necessity, and intentions.
Williamson LD, Tarfa A. BMC Public Health. 2022 Nov 7;22(1):2033. doi: 10.1186/s12889-022-14399-9. PMID: 36344953

Tolerability and immunogenicity of an intranasally-administered adenovirus-vectored **COVID-19 vaccine**: An open-label partially-randomised ascending dose phase I trial.
Madhavan M, Ritchie AJ, Aboagye J, Jenkin D, Provstgaad-Morys S, Tarbet I, Woods D, Davies S, Baker M, Platt A, Flaxman A, Smith H, Belij-Rammerstorfer S, Wilkins D, Kelly EJ, Villafana T, Green JA, Poulton I, Lambe T, Hill AVS, Ewer KJ, Douglas AD. EBioMedicine. 2022 Nov;85:104298. doi: 10.1016/j.ebiom.2022.104298. Epub 2022 Oct 10. PMID: 36229342

Low **COVID-19 Vaccine** Uptake in Young Children.
[No authors listed] Am J Nurs. 2022 Nov 1;122(11):14. doi: 10.1097/01.NAJ.0000897084.90266.6c. PMID: 36261894

Hearing disorder following **COVID-19** vaccination: A pharmacovigilance analysis using the **Vaccine** Adverse Event Reporting System.
Chen C, Fu F, Ding L, Xiao J. J Clin Pharm Ther. 2022 Nov;47(11):1789-1795. doi: 10.1111/jcpt.13767. Epub 2022 Sep 11. PMID: 36089844

Vaccine Champions Training Program: Empowering Community Leaders to Advocate for **COVID-19** Vaccines.
Kaufman J, Overmars I, Leask J, Seale H, Chisholm M, Hart J, Jenkins K, Danchin M. Vaccines (Basel). 2022 Nov 9;10(11):1893. doi: 10.3390/vaccines10111893. PMID: 36366401

Prevalence and factors associated with not receiving the booster dose of the **COVID-19 vaccine** in adults in Latin America and the Caribbean.
Urrunaga-Pastor D, Fernandez-Guzman D, Caira-Chuquineyra B, Herrera-Añazco P, Benites-Zapata VA, Bendezu-Quispe G. Travel Med Infect Dis. 2022 Nov-Dec;50:102409. doi: 10.1016/j.tmaid.2022.102409. Epub 2022 Aug 9. PMID: 35961489

Diagnostic Accuracy of **Vaccine** and **Vaccine** Excpient Testing in the Setting of Allergic Reactions to **COVID-19** Vaccines: A Systematic Review and Meta-analysis.
Greenhawt M, Shaker M, Golden DBK, Abrams EM, Blumenthal KG, Wolfson AR, Stone CA Jr, Krantz MS, Chu DK, Dwamena BA. Allergy. 2022 Nov 2. doi: 10.1111/all.15571. Online ahead of print. PMID: 36321821

Acceptance and willingness to pay under the different **COVID-19** vaccines: A contingent valuation method.
Prasert V, Thavorncharoensap M, Vatcharavongvan P. Res Social Adm Pharm. 2022 Nov;18(11):3911-3919. doi: 10.1016/j.sapharm.2022.06.001. Epub 2022 Jun 5. PMID: 35691798

Antibody response after **COVID-19** vaccination in intravenous immunoglobulin-treated immune neuropathies.
Svačina MKR, Meißner A, Schweitzer F, Ladwig A, Sprenger-Svačina A, Klein I, Wüstenberg H, Kohle F, Schneider C, Grether NB, Wunderlich G, Fink GR, Klein F, Di Cristanziano V, Lehmann HC. Eur J Neurol. 2022 Nov;29(11):3380-3388. doi: 10.1111/ene.15508. Epub 2022 Aug 8. PMID: 35842740

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 Nov;67(11):5029-5033. doi: 10.1007/s10620-022-07413-y. Epub 2022 Feb 17. PMID: 35175432

COVID-19 Vaccination in a Military Population: Evaluation of a Quality Improvement Initiative to Increase **Vaccine** Confidence and Reduce Hesitancy.
Batie CM, Hintz CN, Catchings SH, Thompson JA, Sabol VK. Mil Med. 2022 Nov 9:usac333. doi: 10.1093/milmed/usac333. Online ahead of print. PMID: 36350626

Updates on Coronavirus Disease 2019 in Children in Japan.
Aizawa Y, Takanashi S, Ogimi C. Pediatr Infect Dis J. 2022 Nov 1;41(11):e461-e467. doi: 10.1097/INF.0000000000003641. Epub 2022 Jul 18. PMID: 35895890

SARS-CoV-2 variants, immune escape, **COVID-19 vaccine**, and therapeutic strategies.
Que H, Chen L, Wei X. Sci China Life Sci. 2022 Nov 3:1-5. doi: 10.1007/s11427-021-2164-6. Online ahead of print. PMID: 36342589

Variables Associated With **COVID-19** Vaccination Among Israeli Adolescents and the Need for Targeted Interventions.
Shkalim Zemer V, Grossman Z, Cohen HA, Hoshen M, Gerstein M, Richenberg Y, Jacobson E, Grosu R, Yosef N, Cohen M, Ashkenazi S. Pediatr Infect Dis J. 2022 Nov 1;41(11):927-932. doi: 10.1097/INF.0000000000003664. Epub 2022 Aug 12. PMID: 35980828

Thromboembolic events after Ad.26.COV2.S **COVID-19 vaccine**: Reports to the **Vaccine** Adverse Event Reporting System.
Woo EJ, Mba-Jonas A, Thomas A, Baer B, Day B, Kim Y, Gomez-Lorenzo M, Nair N. Pharmacoepidemiol Drug Saf. 2022 Nov;31(11):1174-1181. doi: 10.1002/pds.5523. Epub 2022 Sep 5. PMID: 36065046

Factors Associated with COVID-19 **Vaccine** Uptake Among Adolescents and Young Adults Recently Diagnosed with Cancer.
Kwok G, Reese S, Dugad S, Donovan KA, Tsui J, Sahler OJZ, Levonyan-Radloff K, Barnett ME, Manne S, Ohman-Strickland P, Devine KA. J Adolesc Young Adult Oncol. 2022 Nov 11. doi: 10.1089/jayao.2022.0113. Online ahead of print. PMID: 36367717

Safety of the Fiocruz ChAdOx **COVID-19 vaccine** used in a mass vaccination campaign in Botucatu, Brazil.

Clemens SAC, Fortaleza CMCB, Crowe M, Pollard A, Tasca KI, Grotto RMT, Martins MR, Spadaro AG, Barretti P, Verstraeten T, Clemens R. Vaccine. 2022 Nov 8;40(47):6722-6729. doi: 10.1016/j.vaccine.2022.08.026. Epub 2022 Aug 22. PMID: 36055876

COVID-19 vaccine-induced antibody and T-cell responses in immunosuppressed patients with inflammatory bowel disease after the third **vaccine** dose (VIP): a multicentre, prospective, case-control study.
Alexander JL, Liu Z, Muñoz Sandoval D, Reynolds C, Ibraheim H, Anandabaskaran S, Saifuddin A, Castro Seoane R, Anand N, 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, Goodhand JR, Hart AL, Lees CW, Boyton RJ, Kennedy NA, Ahmad T, Powell N; VIP study investigators. Lancet Gastroenterol Hepatol. 2022 Nov;7(11):1005-1015. doi: 10.1016/S2468-1253(22)00274-6. Epub 2022 Sep 9. PMID: 36088954

Immunogenicity of an mRNA-Based **COVID-19 Vaccine** among Adolescents with Obesity or Liver Transplants.
Tubjaroen C, Prachuapthunyachart S, Potjalongsilp N, Sodsai P, Hirankarn N, Jaru-Ampornpan P, Chongsrisawat V. Vaccines (Basel). 2022 Nov 4;10(11):1867. doi: 10.3390/vaccines10111867. PMID: 36366375

Could nucleocapsid be a next-generation **COVID-19 vaccine** candidate?
Saldivar-Espinoza B, Macip G, Pujadas G, Garcia-Vallve S. Int J Infect Dis. 2022 Nov 5:S1201-9712(22)00586-0. doi: 10.1016/j.ijid.2022.11.002. Online ahead of print. PMID: 36347459

Intranasal **COVID-19 vaccine** fails to induce mucosal immunity.
Carvalho T. Nat Med. 2022 Nov 3. doi: 10.1038/d41591-022-00106-z. Online ahead of print. PMID: 36329319

Relative **vaccine** effectiveness against Delta and Omicron **COVID-19** after homologous inactivated **vaccine** boosting: a retrospective cohort study.
Tang L, Zhang Y, Wang F, Wu D, Qian ZH, Zhang R, Wang AB, Huang C, Wang H, Ye Y, Lu M, Wang C, Ma YT, Pan J, Li YF, Lv XY, An Z, Rodewald L, Wang XY, Shao YM, Wu ZY, Yin Z. BMJ Open. 2022 Nov 11;12(11):e063919. doi: 10.1136/bmjopen-2022-063919. PMID: 36368753

AI-CoV Study: Autoimmune Encephalitis Associated With **COVID-19** and Its Vaccines-A Systematic Review.
Samim MM, Dhar D, Goyal S, Dey T, Parvin N, Shah RD, Singh V, Chowdhury S, Lal BM, Varghese N, Gohel A, Chowdhury A, Chatterjee A, Siddiqui S. J Clin Neurol. 2022 Nov;18(6):692-710. doi: 10.3988/jcn.2022.18.6.692. PMID: 36367067

Impact of information framing and vaccination characteristics on parental **COVID-19 vaccine** acceptance for children: a discrete choice experiment.
Wang K, Wong EL, Cheung AW, Chung VC, Wong CH, Dong D, Wong SY, Yeoh EK. Eur J Pediatr. 2022 Nov;181(11):3839-3849. doi: 10.1007/s00431-022-04586-6. Epub 2022 Sep 2. PMID: 36056176

Immunity waning after **COVID vaccine** booster *vs.* infection-better than expected.
Khoury J, Najjar-Debbiny R, Elemy A, Jabbour A, Haj J, Abu-Sini M, Yasin R, Amin M, Hellou E, Nasrallah N, Saffouri A, Hakim F. Infect Dis (Lond). 2022 Nov;54(11):828-831. doi: 10.1080/23744235.2022.2097304. Epub 2022 Jul 7. PMID: 35796285

Association of Systemic Adverse Reactions and Serum SARS-CoV-2 Spike Protein Antibody Levels after Administration of BNT162b2 mRNA **COVID-19 Vaccine**.
Takahashi W, Mizuno T, Hara K, Ara Y, Hurutani R, Agatsuma T, Fujimori M. Intern Med. 2022 Nov 1;61(21):3205-3210. doi: 10.2169/internalmedicine.9699-22. Epub 2022 Aug 20. PMID: 35989281

Predictors of unwillingness to receive **COVID -19** vaccines among Ethiopian Medical students.
Getachew D, Yosef T, Solomon N, Tesfaye M, Bekele E. PLoS One. 2022 Nov 2;17(11):e0276857. doi: 10.1371/journal.pone.0276857. eCollection 2022. PMID: 36322591

Breakthrough Infections, Hospital Admissions, and Mortality after Major **COVID-19** Vaccination Profiles: A Prospective Cohort Study.
Wichaidit M, Nopsopon T, Sunan K, Phutrakool P, Ruchikachorn P, Wanvarie D, Pratanwanich PN, Cheewaruangroj N, Punyabukkana P, Pongpirul K. Lancet Reg Health Southeast Asia. 2022 Nov 4:100106. doi: 10.1016/j.lansea.2022.100106. Online ahead of print. PMID: 36349259

Expert review of global real-world data on **COVID-19 vaccine** booster effectiveness and safety during the omicron-dominant phase of the pandemic.
Solante R, Alvarez-Moreno C, Burhan E, Chariyalertsak S, Chiu NC, Chuenkitmongkol S, Dung DV, Hwang KP, Ortiz Ibarra J, Kiertiburanakul S, Kulkarni PS, Lee C, Lee PI, Lobo RC, Macias A, Nghia CH, Ong-Lim AL, Rodriguez-Morales AJ, Richtmann R, Safadi MAP, Satari HI, Thwaites G. Expert Rev Vaccines. 2022 Nov 11:1-16. doi: 10.1080/14760584.2023.2143347. Online ahead of print. PMID: 36330971

Sever erythema multiforme post-**COVID-19** moderna **vaccine**: Case report and literature review.
Fadul A, Abdalla EM, Musa M, Al-Mashdali A, Mudathir Osman AE, Abdelmahuod E. Ann Med Surg (Lond). 2022 Nov;83:104461. doi: 10.1016/j.amsu.2022.104461. Epub 2022 Aug 20. PMID: 36035769

Under-awareness and over-diagnosis of **COVID-19 vaccine** 'allergy'.
Chiang V, Wong JCY, Chan TS, Lau CS, Li PH. Contact Dermatitis. 2022 Nov;87(5):459-460. doi: 10.1111/cod.14193. Epub 2022 Jul 30. PMID: 35880298

Pregnant women's acceptance and views on **COVID-19 vaccine** in Northern Italy.
Lubrano C, Vilca LM, Coco C, Schirripa I, Zuliani PL, Corneo R, Pavone G, Pellegrino A, Vignali M, Savasi V, Di Simone N, Cetin I. J Obstet Gynaecol. 2022 Nov 2:1-3. doi: 10.1080/01443615.2022.2139596. Online ahead of print. PMID: 36322410

Carotid free-floating thrombus during **COVID-19 vaccine** era: causality or not?
Ferraù L, Cotroneo M, Dell'Aera C, Giammello F, Grillo F, Brizzi T, Pitrone A, Vinci SL, Musolino RF, La Spina P. Neurol Sci. 2022 Nov;43(11):6179-6183. doi: 10.1007/s10072-022-06307-1. Epub 2022 Aug 3. PMID: 35921016

Oral lichen planus following mRNA **COVID-19** vaccination.
Kaomongkolgit R, Sawangarun W. Oral Dis. 2022 Nov;28 Suppl 2:2622-2623. doi: 10.1111/odi.14182. Epub 2022 Mar 22. PMID: 35263820

COVID-19 Vaccine Uptake Among Patients With Systemic Lupus Erythematosus in the American Midwest: The Lupus Midwest Network (LUMEN).
Chevet B, Figueroa-Parra G, Yang JX, Hulshizer CA, Gunderson TM, Duong SQ, Putman MS, Barbour KE, Crowson CS, Duarte-García A. J Rheumatol. 2022 Nov;49(11):1276-1282. doi: 10.3899/jrheum.220220. Epub 2022 Jul 1. PMID: 35777817

Immune responses following **COVID-19** infection in multiple sclerosis patients using immunomodulatory therapy.
Bilge N, Kesmez Can F, Yevgi R. Acta Neurol Belg. 2022 Nov 4:1-8. doi: 10.1007/s13760-022-02125-6. Online ahead of print. PMID: 36331727

COVID-19 vaccine effectiveness against hospitalization due to SARS-CoV-2: A test-negative design study based on Severe Acute Respiratory Infection (SARI) sentinel surveillance in Spain.
Mazagatos C, Delgado-Sanz C, Monge S, Pozo F, Oliva J, Sandonis V, Gandarillas A, Quiñones-Rubio C, Ruiz-Sopeña C, Gallardo-García V, Basile L, Barranco-Boada MI, Hidalgo-Pardo O, Vazquez-Cancela O, García-Vázquez M, Fernández-Sierra A, Milagro-Beamonte A, Ordobás M, Martínez-Ochoa E, Fernández-Arribas S, Lorusso N, Martínez A, García-Fulgueiras A, Sastre-Palou B, Losada-Castillo I, Martínez-Cuenca S, Rodríguez-Del Águila M, Latorre M, Larrauri A; SARI surveillance VE group in Spain. Influenza Other Respir Viruses. 2022 Nov;16(6):1014-1025. doi: 10.1111/irv.13026. Epub 2022 Jul 26. PMID: 35880469

MULTI-PARAMETRIC PREDICTION MODELS FOR **COVID-19 VACCINE** SELECTION: RESULTS OF A COMPARATIVE POPULATION-BASED COHORT STUDY.
Sieghart D, Hana CA, Haslacher H, Perkmann T, Heinz LX, Fedrizzi C, Anderle K, Wiedermann U, Condur I, Drapalik S, Steinbrecher H, Mrak D, Mucher P, Hasenoehrl T, Zrdavkovic A, Wagner B, Palma S, Jordakieva G, Jorda A, Firbas C, Wangner A, Haiden N, Bergmann F, Crevenna R, Zeitlinger M, Bonelli M, Aletaha D, Radner H. Clin Infect Dis. 2022 Nov 4:ciac840. doi: 10.1093/cid/ciac840. Online ahead of print. PMID: 36328594

Safety of mRNA **COVID-19** vaccines in patients with well-controlled myasthenia gravis.
Gamez J, Gamez A, Carmona F. Muscle Nerve. 2022 Nov;66(5):612-617. doi: 10.1002/mus.27703. Epub 2022 Aug 27. PMID: 36029224

Changes in preventive behaviour after **COVID-19** vaccination in Thailand: a cross-sectional study.
Ngamchaliew P, Kaewkuea N, Nonthasorn N, Vonnasrichan T, Rongsawat N, Rattanachai L, Chaipipattanakij W, Kamolnawin S, Vichitkunakorn P. BMC Public Health. 2022 Nov 8;22(1):2039. doi: 10.1186/s12889-022-14494-x. PMID: 36348474

An additional dose of viral vector **COVID-19 vaccine** and mRNA **COVID-19 vaccine** in kidney transplant recipients: A randomized controlled trial (CVIM 4 study).
Bruminhent J, Setthaudom C, Phornkittikorn P, Chaumdee P, Prasongtanakij S, Srisala S, Malathum K, Boongird S, Nongnuch A, Assanatham M, Nakgul L, Sanmeema N, Phuphuakrat A, Kiertiburanakul S;

Ramathibodi Transplant Infectious Diseases (RTID) Study Group. Am J Transplant. 2022 Nov;22(11):2651-2660. doi: 10.1111/ajt.17151. Epub 2022 Jul 26. PMID: 35841235

Reactions following Pfizer-BioNTech **COVID-19** mRNA vaccination and related healthcare encounters among 7,077 children aged 5-11 years within an integrated healthcare system.
Malden DE, Gee J, Glenn S, Li Z, Mercado C, Ogun OA, Kim S, Lewin BJ, Ackerson BK, Jazwa A, Weintraub ES, McNeil MM, Tartof SY. Vaccine. 2022 Nov 3:S0264-410X(22)01361-5. doi: 10.1016/j.vaccine.2022.10.079. Online ahead of print. PMID: 36351861

Ethnic Minorities' Perceptions of **COVID-19** Vaccines and Challenges in the Pandemic: A Qualitative Study to Inform **COVID-19** Prevention Interventions.
Zhou S, Villalobos JP, Munoz A, Bull S. Health Commun. 2022 Nov;37(12):1476-1487. doi: 10.1080/10410236.2022.2093557. Epub 2022 Jul 1. PMID: 35775369

Effect of priming interval on reactogenicity, peak immunological response, and waning after homologous and heterologous **COVID-19 vaccine** schedules: exploratory analyses of Com-COV, a randomised control trial.
Shaw RH, Liu X, Stuart ASV, Greenland M, Aley PK, Andrews NJ, Cameron JC, Charlton S, Clutterbuck EA, Collins AM, Dejnirattisai W, Dinesh T, Faust SN, Ferreira DM, Finn A, Green CA, Hallis B, Heath PT, Hill H, Lambe T, Lazarus R, Libri V, Long F, Mujadidi YF, Plested EL, Morey ER, Provstgaard-Morys S, Ramasamy MN, Ramsay M, Read RC, Robinson H, Screaton GR, Singh N, Turner DPJ, Turner PJ, Vichos I, Walker LL, White R, Nguyen-Van-Tam JS, Snape MD; Com-COV Study Group. Lancet Respir Med. 2022 Nov;10(11):1049-1060. doi: 10.1016/S2213-2600(22)00163-1. Epub 2022 Jun 9. PMID: 35690076

COVID-19 vaccine breakthrough infection among fully vaccinated healthcare workers in Duhok governorate, Iraqi Kurdistan: A retrospective cohort study.
Almufty HB, Mamani MMA, Ali AH, Merza MA. J Med Virol. 2022 Nov;94(11):5244-5250. doi: 10.1002/jmv.27985. Epub 2022 Jul 26. PMID: 35811398

Increasing **COVID-19** Vaccination Rates Among Patients With Serious Mental Illness: A Pilot Intervention Study.
Lim C, Van Alphen MU, Maclaurin S, Mulligan C, Macri B, Cather C, Freudenreich O. Psychiatr Serv. 2022 Nov 1;73(11):1274-1277. doi: 10.1176/appi.ps.202100702. Epub 2022 Apr 13. PMID: 35414188

Reversible neurological and brain MRI changes following **COVID-19** vaccination: A case report.
Rastogi A, Bingeliene A, Strafella AP, Tang-Wai DF, Wu PE, Mandell DM. J Neuroradiol. 2022 Nov;49(6):428-430. doi: 10.1016/j.neurad.2022.03.011. Epub 2022 Apr 2. PMID: 35381296

Immunogenicity and safety of **COVID-19 vaccine** in lung cancer patients receiving anticancer treatment: A prospective multicenter cohort study.
Nakashima K, Ishida M, Matsui H, Yoshida C, Nagai T, Shiraga M, Nakaoka H, Otsuka Y, Nakagama Y, Kaku N, Nitahara Y, Kido Y, Hirota Y. Hum Vaccin Immunother. 2022 Nov 11:2140549. doi: 10.1080/21645515.2022.2140549. Online ahead of print. PMID: 36369871

Comparative assessment of myocarditis and pericarditis reporting rates related to mRNA **COVID-19** vaccines in Europe and the United States.

Hatziantoniou S, Anastassopoulou C, Lazaros G, Vasileiou K, Tsioufis C, Tsakris A. Expert Rev Vaccines. 2022 Nov;21(11):1691-1696. doi: 10.1080/14760584.2022.2100765. Epub 2022 Jul 25. PMID: 35815358

Optimizing Safety Surveillance for **COVID-19** Vaccines at the National Pharmacovigilance Centre Lareb: One Year of **COVID-19 Vaccine** Experience.
Oosterhuis I, Scholl J, van Puijenbroek E, Kant A, van Hunsel F. Drug Saf. 2022 Nov 9. doi: 10.1007/s40264-022-01253-5. Online ahead of print. PMID: 36350465

Knowledge, attitudes, and practices of pregnant women regarding **COVID-19** vaccination in pregnancy in 7 low- and middle-income countries: An observational trial from the Global Network for Women and Children's Health Research.
Naqvi S, Saleem S, Naqvi F, Billah SM, Nielsen E, Fogleman E, Peres-da-Silva N, Figueroa L, Mazariegos M, Garces AL, Patel A, Das P, Kavi A, Goudar SS, Esamai F, Chomba E, Lokangaka A, Tshefu A, Haque R, Siraj S, Yousaf S, Bauserman M, Liechty EA, Krebs NF, Derman RJ, Carlo WA, Petri WA Jr, Hibberd PL, Koso-Thomas M, Thorsten V, McClure EM, Goldenberg RL. BJOG. 2022 Nov;129(12):2002-2009. doi: 10.1111/1471-0528.17226. Epub 2022 Jun 5. PMID: 35596701

Making Vaccines Equitably Available to All Persons in Pima County, Arizona, 2020-2021.
Cullen T, Mullins J, Rambaud CT, Lawlor P, Davis MV. Am J Public Health. 2022 Nov;112(11):1560-1563. doi: 10.2105/AJPH.2022.307040. PMID: 36223586

Vaccination in patients with kidney failure: lessons from **COVID-19**.
Babel N, Hugo C, Westhoff TH. Nat Rev Nephrol. 2022 Nov;18(11):708-723. doi: 10.1038/s41581-022-00617-5. Epub 2022 Aug 23. PMID: 35999285

Retrospective study on the safety of **COVID-19** vaccination in myasthenia gravis.
Urra Pincheira A, Alnajjar S, Katzberg H, Barnett C, Daniyal L, Rohan R, Bril V. Muscle Nerve. 2022 Nov;66(5):558-561. doi: 10.1002/mus.27657. Epub 2022 Jun 25. PMID: 35673960

Factors Influencing **COVID-19 Vaccine** Acceptance in the Workplace: Results From a Rapid Survey at 2 Corporations in Los Angeles County, California, 2021.
Fischbach L, Civen R, Boyd H, Flores DM, Cloud J, Smith LV, King J, Alvarez F, Kuo T. Public Health Rep. 2022 Nov-Dec;137(6):1207-1216. doi: 10.1177/00333549221118086. Epub 2022 Aug 25. PMID: 36004572

Racial and Ethnic Differences in Maternal and Child **COVID-19** Vaccination Intent Among Pregnant and Postpartum Women in the USA (April-June 2020): an Application of Health Belief Model.
Obasanya M, Igenoza O, Gupta S, McElroy K, Brannon GE, Brown K. J Racial Ethn Health Disparities. 2022 Nov 9. doi: 10.1007/s40615-022-01434-z. Online ahead of print. PMID: 36352345

Invited Commentary: Evolving Management of **COVID-19 Vaccine**-related Axillary Adenopathy.
Weinstein S. Radiographics. 2022 Nov-Dec;42(7):E201-E202. doi: 10.1148/rg.220180. Epub 2022 Aug 26. PMID: 36018787

Psychological and quality of life effects of vaccination against **COVID-19** in patients with systemic autoimmune diseases.

Montero-López E, Peralta-Ramírez MI, Ortego-Centeno N, Callejas-Rubio JL, Ríos-Fernández R, Santos-Ruiz A. Lupus. 2022 Nov 10:9612033221134203. doi: 10.1177/09612033221134203. Online ahead of print. PMID: 36355914

COVID-19 vaccine booster in healthcare workers - reasons for refusing.
Cunha R, Ochoa-Leite C, Pires L, Morais M, Costa R, Rocha L. Pulmonology. 2022 Nov-Dec;28(6):476-477. doi: 10.1016/j.pulmoe.2022.02.007. Epub 2022 Feb 28. PMID: 35351400

Addressing Health Equity Goals for **COVID-19** Vaccination Using Integrated Data and Mapping Tools: A Collaboration Between Academia, Public Health, and Health Care Systems in Columbus and Franklin County, Ohio.
Hyder A, Graffagnino C, Barbeau R, Bennett S, Dent LD, French G, Glover A, Jones A, McAdams J, Nawaz S, Wontumi GM, Baryeh N. J Public Health Manag Pract. 2022 Nov-Dec 01;28(6):739-748. doi: 10.1097/PHH.0000000000001550. Epub 2022 Aug 3. PMID: 35976747

Breastfeeding Women's Attitudes About the SARS-COV-2 **Vaccine** in Spain.
Alfaro Blazquez R, González-Timoneda A, González-Timoneda M, Gómez Gómez M, Borrull-Guardeño J. J Hum Lact. 2022 Nov;38(4):609-618. doi: 10.1177/08903344221109592. Epub 2022 Jul 16. PMID: 35848166

The effect of **COVID-19** vaccination on the menstrual pattern and mental health of the medical students: A mixed-methods study from a low and middle-income country.
Kareem R, Sethi MR, Inayat S, Irfan M. PLoS One. 2022 Nov 10;17(11):e0277288. doi: 10.1371/journal.pone.0277288. eCollection 2022. PMID: 36355919

Hand-foot syndrome like eruption following mRNA **COVID-19 vaccine**.
Daldoul M, Korbi M, Ben Salah N, Bellalah A, Belhadjali H, Zili J. J Eur Acad Dermatol Venereol. 2022 Nov;36(11):e856-e857. doi: 10.1111/jdv.18338. Epub 2022 Jun 30. PMID: 35762924

Counselling of non-communicable diseases' patients for **COVID-19 vaccine** uptake in Jordan: Evaluating the intervention.
Al-Shaikh A, Mahmoud RI, Boukerdenna H, Muthu N, Aidyralieva C, Bellizzi S. Vaccine. 2022 Nov 2;40(46):6658-6663. doi: 10.1016/j.vaccine.2022.09.083. Epub 2022 Oct 3. PMID: 36216648

Attitude toward **COVID-19** vaccines and its association with depressive symptoms in 386,924 Chinese primary school students during **COVID-19** epidemic normalization.
Xu Q, Mao Z, Fan K, Wang J, Wei D, Wang X, Lou X, Lin H, Wang C, Wu C. J Psychosom Res. 2022 Nov;162:111021. doi: 10.1016/j.jpsychores.2022.111021. Epub 2022 Aug 28. PMID: 36063626

"We need to protect each other": **COVID-19** vaccination intentions and concerns among Racialized minority and Indigenous Peoples in Canada.
Manca T, Humble RM, Aylsworth L, Cha E, Wilson SE, Meyer SB, Greyson D, Sadarangani M, Parsons Leigh J, MacDonald SE; Canadian Immunization Research Network (CIRN) investigators. Soc Sci Med. 2022 Nov;313:115400. doi: 10.1016/j.socscimed.2022.115400. Epub 2022 Sep 29. PMID: 36206660

Safety of **COVID-19** vaccines in pregnancy: a Canadian National **Vaccine** Safety (CANVAS) network cohort study.

Sadarangani M, Soe P, Shulha HP, Valiquette L, Vanderkooi OG, Kellner JD, Muller MP, Top KA, Isenor JE, McGeer A, Irvine M, De Serres G, Marty K, Bettinger JA; Canadian Immunization Research Network. Lancet Infect Dis. 2022 Nov;22(11):1553-1564. doi: 10.1016/S1473-3099(22)00426-1. Epub 2022 Aug 11. PMID: 35964614

COVID-19 Vaccination Attitudes and Intentions Among U.S. Soldiers: Results from the U.S. Army Behavioral Health Advisory Team (BHAT).
Beymer MR, Gomez SAQ, Santo TJ, Bell AM, Quartana PJ. J Community Health. 2022 Nov 12. doi: 10.1007/s10900-022-01149-6. Online ahead of print. PMID: 36370254

Evaluation of Conspiracy Beliefs, **Vaccine** Hesitancy, and Willingness to Pay towards **COVID-19** Vaccines in Six Countries from Asian and African Regions: A Large Multinational Analysis.
Salman M, Mallhi TH, Tanveer N, Shehzadi N, Khan HM, Ul Mustafa Z, Khan TM, Hussain K, Mohamed MS, Maqbool F, Aftab RA, Butt MH, Panda DS, Alotaibi NH, Khedr AIM, Alanazi AS, Alatawi AD, Alzarea AI, Sulatana K, Khan YH. Vaccines (Basel). 2022 Nov 4;10(11):1866. doi: 10.3390/vaccines10111866. PMID: 36366374

Occupation, Worker Vulnerability, and **COVID-19** Vaccination Uptake: Analysis of the Virus Watch prospective cohort study.
Beale S, Burns R, Braithwaite I, Byrne T, Lam Erica Fong W, Fragaszy E, Geismar C, Hoskins S, Kovar J, Navaratnam AMD, Nguyen V, Patel P, Yavlinsky A, Van Tongeren M, Aldridge RW, Hayward A; Virus Watch Collaborative. Vaccine. 2022 Nov 7:S0264-410X(22)01362-7. doi: 10.1016/j.vaccine.2022.10.080. Online ahead of print. PMID: 36372668

Factors associated with willingness to take **COVID-19 vaccine** among pregnant women at Gondar town, Northwest Ethiopia: A multicenter institution-based cross-sectional study.
Aynalem ZB, Bogale TW, Bantie GM, Ayalew AF, Tamir W, Feleke DG, Yazew BG. PLoS One. 2022 Nov 3;17(11):e0276763. doi: 10.1371/journal.pone.0276763. eCollection 2022. PMID: 36327276

Humoral and Cellular Immune Responses After a 3-dose Course of mRNA-1273 **COVID-19 Vaccine** in Kidney Transplant Recipients: A Prospective Cohort Study.
Cucchiari D, Egri N, Rodriguez-Espinosa D, Montagud-Marrahi E, Casals-Urquiza J, Del Risco-Zevallos J, Bodro M, Ventura-Aguiar P, Cofan F, Cacho J, Molina-Andujar A, Rovira J, Banon-Maneus E, José Ramirez-Bajo M, Pérez-Olmos A, Garcia-Pascual M, Pascal M, Vilella A, Trilla A, Palou E, Revuelta I, Juan M, Campistol JM, Oppenheimer F, Moreno A, Miró JM, Bayés B, Diekmann F. Transplant Direct. 2022 Oct 7;8(11):e1389. doi: 10.1097/TXD.0000000000001389. eCollection 2022 Nov. PMID: 36245998

Clinically suspected lethal viral myocarditis combined with encephalitis: a **COVID-19 vaccine** complication.
Chen J, Wu T, Zhang C, Zhang Y, Liu Z, Wang Y. ESC Heart Fail. 2022 Nov 8. doi: 10.1002/ehf2.14229. Online ahead of print. PMID: 36347824

Humoral response and safety of BNT162b2 mRNA **vaccine** in children with rheumatic diseases.
Akgün Ö, Çakmak F, Guliyeva V, Demirkan FG, Tanatar A, Hançerli Torun S, Çin D, Meşe S, Ağaçfidan A, Aktay Ayaz N. Rheumatology (Oxford). 2022 Nov 2;61(11):4482-4490. doi: 10.1093/rheumatology/keac140. PMID: 35353139

COVID-19 vaccine effectiveness against SARS-CoV-2 infection during the Delta period, a nationwide study adjusting for chance of exposure, the Netherlands, July to December 2021.
van Ewijk CE, Kooijman MN, Fanoy E, Raven SF, Middeldorp M, Shah A, de Gier B, de Melker HE, Hahné SJ, Knol MJ. Euro Surveill. 2022 Nov;27(45). doi: 10.2807/1560-7917.ES.2022.27.45.2200217. PMID: 36367011

Ascertainment of vaccination status by self-report versus source documentation: Impact on measuring **COVID-19 vaccine** effectiveness.
Stephenson M, Olson SM, Self WH, Ginde AA, Mohr NM, Gaglani M, Shapiro NI, Gibbs KW, Hager DN, Prekker ME, Gong MN, Steingrub JS, Peltan ID, Martin ET, Reddy R, Busse LW, Duggal A, Wilson JG, Qadir N, Mallow C, Kwon JH, Exline MC, Chappell JD, Lauring AS, Baughman A, Lindsell CJ, Hart KW, Lewis NM, Patel MM, Tenforde MW; IVY Network Investigators. Influenza Other Respir Viruses. 2022 Nov;16(6):1101-1111. doi: 10.1111/irv.13023. Epub 2022 Jul 11. PMID: 35818721

Spatial modeling of **vaccine** deserts as barriers to controlling SARS-CoV-2.
Rader B, Astley CM, Sewalk K, Delamater PL, Cordiano K, Wronski L, Rivera JM, Hallberg K, Pera MF, Cantor J, Whaley CM, Bravata DM, Lee L, Patel A, Brownstein JS. Commun Med (Lond). 2022 Nov 10;2(1):141. doi: 10.1038/s43856-022-00183-8. PMID: 36357587

New onset of pemphigus foliaceus following BBIBP **COVID-19 vaccine**.
Pourani M, Bidari-Zerehpoosh F, Ayatollahi A, Robati RM. Dermatol Ther. 2022 Nov;35(11):e15816. doi: 10.1111/dth.15816. Epub 2022 Sep 22. PMID: 36093743

Reductions in stillbirths and preterm birth in **COVID-19** vaccinated women: a multi-center cohort study of vaccination uptake and perinatal outcomes.
Hui L, Marzan MB, Rolnik DL, Potenza S, Pritchard N, Said JM, Palmer KR, Whitehead CL, Sheehan PM, Ford J, Mol BW, Walker SP. Am J Obstet Gynecol. 2022 Nov 3:S0002-9378(22)00882-1. doi: 10.1016/j.ajog.2022.10.040. Online ahead of print. PMID: 36336084

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 Nov-Dec;34(6):572-584. doi: 10.7416/ai.2022.2502. Epub 2022 Feb 8. PMID: 35142334

Effect of communicating community immunity on **COVID-19 vaccine**-hesitant people from ethnically diverse backgrounds: an experimental vignette study in the UK.
Stoffel ST, Kaushal A, Grimani A, von Wagner C, Sniehotta FF, Vlaev I. BMJ Open. 2022 Nov 3;12(11):e065804. doi: 10.1136/bmjopen-2022-065804. PMID: 36328392

Evaluation of mRNA-1273 **Vaccine** in Children 6 Months to 5 Years of Age.
Anderson EJ, Creech CB, Berthaud V, Piramzadian A, Johnson KA, Zervos M, Garner F, Griffin C, Palanpurwala K, Turner M, Gerber J, Bennett RL, Ali K, Ampajwala M, Berman G, Nayak J, Chronis C, Rizzardi B, Muller WJ, Smith CA, Fuchs G, Hsia D, Tomassini JE, DeLucia D, Reuter C, Kuter B, Zhao X, Deng W, Zhou H, Ramirez Schrempp D, Hautzinger K, Girard B, Slobod K, McPhee R, Pajon R, Aunins A, Das R, Miller JM, Schnyder Ghamloush S; KidCOVE Study Group. N Engl J Med. 2022 Nov 3;387(18):1673-1687. doi: 10.1056/NEJMoa2209367. Epub 2022 Oct 19. PMID: 36260859

Measuring College Students' with Disabilities Attitudes Toward Taking **COVID-19** Vaccines.
Taylor ZW, Charran C. Interchange (Tor : 1984). 2022 Nov 3:1-9. doi: 10.1007/s10780-022-09482-4. Online ahead of print. PMID: 36345488

Self-reported influences on willingness to receive **COVID-19** vaccines among physically ill, mentally ill, and healthy individuals.
Roberts LW, Kim JP, Rostami M, Kasun M, Kim B. J Psychiatr Res. 2022 Nov;155:501-510. doi: 10.1016/j.jpsychires.2022.09.017. Epub 2022 Sep 21. PMID: 36191518

Positive perception of **COVID-19** vaccination in HAE: No significant impact of vaccination on disease course.
Oztop N, Demir S, Toprak ID, Unal D, Gelincik A. Allergy Asthma Proc. 2022 Nov 1;43(6):546-554. doi: 10.2500/aap.2022.43.220069. PMID: 36335410

Risk of acute liver injury following the mRNA (BNT162b2) and inactivated (CoronaVac) **COVID-19** vaccines.
Wong CKH, Mak LY, Au ICH, Lai FTT, Li X, Wan EYF, Chui CSL, Chan EWY, Cheng WY, Cheng FWT, Yuen MF, Wong ICK. J Hepatol. 2022 Nov;77(5):1339-1348. doi: 10.1016/j.jhep.2022.06.032. Epub 2022 Jul 9. PMID: 35817224

Hesitancy toward the Full **COVID-19** Vaccination among Kidney, Liver and Lung Transplant Recipients in Italy.
Costantino A, Morlacchi L, Donato MF, Gramegna A, Farina E, Dibenedetto C, Campise M, Redaelli M, Perego M, Alfieri C, Blasi F, Lampertico P, Favi E. Vaccines (Basel). 2022 Nov 10;10(11):1899. doi: 10.3390/vaccines10111899. PMID: 36366406

Re: Characteristics associated with serological **COVID-19 vaccine** response and durability in an older population with significant comorbidity.
Villacorta de la Cruz ME, Vilchez Osorio MJ, Segundo Ramos LS. Clin Microbiol Infect. 2022 Nov;28(11):1516-1517. doi: 10.1016/j.cmi.2022.06.002. Epub 2022 Jun 15. PMID: 35716913

Addressing **COVID-19 Vaccine** Hesitancy: The Role of Medical Students.
Frisch M, Chaudhary W, Zhang X, Parkas V, Forsyth B. Med Sci Educ. 2022 Nov 4:1-5. doi: 10.1007/s40670-022-01670-2. Online ahead of print. PMID: 36373129

American College of Rheumatology Guidance for **COVID-19** Vaccination in Patients With Rheumatic and Musculoskeletal Diseases: Version 5.
Curtis JR, Johnson SR, Anthony DD, Arasaratnam RJ, Baden LR, Bass AR, Calabrese C, Gravallese EM, Harpaz R, Kroger A, Sadun RE, Turner AS, Williams EA, Mikuls TR. Arthritis Rheumatol. 2022 Nov 8. doi: 10.1002/art.42372. Online ahead of print. PMID: 36345691

Adverse cutaneous reactions reported post **COVID-19** vaccination in Al Buraimi governorate, Sultanate of Oman.
Al Salmi A, Al Khamisani M, Al Shibli A, Al Maqbali S. Dermatol Ther. 2022 Nov;35(11):e15820. doi: 10.1111/dth.15820. Epub 2022 Sep 23. PMID: 36097882

Modelling optimal vaccination strategies against **COVID-19** in a context of Gamma variant predominance in Brazil.
Ferreira LS, de Almeida GB, Borges ME, Simon LM, Poloni S, Bagattini ÂM, da Rosa MQM, Diniz Filho JAF, Kuchenbecker RS, Camey SA, Kraenkel RA, Coutinho RM, Toscano CM. Vaccine. 2022 Nov 2;40(46):6616-6624. doi: 10.1016/j.vaccine.2022.09.082. Epub 2022 Oct 3. PMID: 36210250

Characteristics associated with serological **COVID-19 vaccine** response and durability in an older population with significant comorbidity: author's response.
Søgaard OS; ENFORCE WRITING GROUP. Clin Microbiol Infect. 2022 Nov;28(11):1518. doi: 10.1016/j.cmi.2022.06.014. Epub 2022 Jun 20. PMID: 35738323

Kinetics of cellular and humoral responses to third **COVID-19 vaccine** in heart transplant recipients: Correspondence.
Sokaromdee P, Wiwanitkit V. J Heart Lung Transplant. 2022 Nov;41(11):1649. doi: 10.1016/j.healun.2022.07.002. Epub 2022 Jul 8. PMID: 35989144

Pregnant individuals' information needs and intention to vaccinate their children with routine and **COVID-19** vaccines: Findings from a cross-sectional survey.
Vasudevan L, Stinnett S, Hart L, Gomez Altamirano P, Gonzalez A, Weaver K, Gray B, Bartlett J. Int J Gynaecol Obstet. 2022 Nov 9. doi: 10.1002/ijgo.14571. Online ahead of print. PMID: 36353745

Personality, Defenses, Mentalization, and Epistemic Trust Related to Pandemic Containment Strategies and the **COVID-19 Vaccine**: A Sequential Mediation Model.
Tanzilli A, Cibelli A, Liotti M, Fiorentino F, Williams R, Lingiardi V. Int J Environ Res Public Health. 2022 Nov 1;19(21):14290. doi: 10.3390/ijerph192114290. PMID: 36361183

A case of anti-melanoma differentiation-associated gene 5 antibody-positive dermatomyositis-associated rapidly progressive interstitial lung diseases developed after administration of **COVID-19 vaccine** and subsequent pneumococcal **vaccine**.
Takahashi S, Kato A, Hashimoto K, Takehara T, Ishioka K, Takanashi S. Respirol Case Rep. 2022 Nov 2;10(12):e01064. doi: 10.1002/rcr2.1064. eCollection 2022 Dec. PMID: 36348741

Effect of Previous **COVID-19** Vaccination on Humoral Immunity 3 Months after SARS-CoV-2 Omicron Infection and Booster Effect of a Fourth **COVID-19** Vaccination 2 Months after SARS-CoV-2 Omicron Infection.
Kim J, Seo H, Kim HW, Kim D, Kwon HJ, Kim YK. Viruses. 2022 Nov 6;14(11):2458. doi: 10.3390/v14112458. PMID: 36366556

COVID-19 Vaccine-Induced Multisystem Inflammatory Syndrome With Polyserositis Detected by FDG PET/CT: Reply.
Lee SJ, Kim SH. Clin Nucl Med. 2022 Nov 1;47(11):e723. doi: 10.1097/RLU.0000000000004247. Epub 2022 Apr 29. PMID: 35485865

Preferences and willingness of accepting **COVID-19 vaccine** booster: Results from a middle-income country.

Chang CT, Lim XJ, Chew CC, Rajan P, Chan HK, Abu Hassan MR, Akmal Shafie A, Lee SWH. Vaccine. 2022 Nov 1:S0264-410X(22)01334-2. doi: 10.1016/j.vaccine.2022.10.057. Online ahead of print. PMID: 36371369

Interim Recommendations from the Advisory Committee on Immunization Practices for the Use of Bivalent Booster Doses of **COVID-19** Vaccines - United States, October 2022.
Rosenblum HG, Wallace M, Godfrey M, Roper LE, Hall E, Fleming-Dutra KE, Link-Gelles R, Pilishvili T, Williams J, Moulia DL, Brooks O, Talbot HK, Lee GM, Bell BP, Daley MF, Meyer S, Oliver SE, Twentyman E. MMWR Morb Mortal Wkly Rep. 2022 Nov 11;71(45):1436-1441. doi: 10.15585/mmwr.mm7145a2. PMID: 36355612

Re: **COVID-19 Vaccine**-Induced Multisystem Inflammatory Syndrome With Polyserositis Detected by FDG PET/CT.
Sookaromdee P, Wiwanitkit V. Clin Nucl Med. 2022 Nov 1;47(11):e722-e723. doi: 10.1097/RLU.0000000000004344. Epub 2022 Aug 17. PMID: 35972506

Protective effects of prior third dose mRNA vaccination in rural nursing home residents during SARS-CoV-2 outbreaks.
Rhynold ES, Quan S, Orr PH, LaBine L, Singer A, St John PD. J Am Geriatr Soc. 2022 Nov;70(11):3245-3249. doi: 10.1111/jgs.17996. Epub 2022 Aug 8. PMID: 35938635

VAERS-reported new-onset seizures following use of **COVID-19** vaccinations as compared to influenza vaccinations.
Avasarala J, McLouth CJ, Pettigrew LC, Mathias S, Qaiser S, Zachariah P. Br J Clin Pharmacol. 2022 Nov;88(11):4784-4788. doi: 10.1111/bcp.15415. Epub 2022 Jun 3. PMID: 35599598

Disseminated intravascular coagulation complicating mild or asymptomatic maternal **COVID-19**.
Carpenter J, Combs CA, Kahn B, Maurel K, Clark R; COVID-19 DIC in Pregnancy Study Group. AJOG Glob Rep. 2022 Nov;2(4):100110. doi: 10.1016/j.xagr.2022.100110. Epub 2022 Sep 23. PMID: 36168543

Could nucleocapsid be a next-generation **COVID-19 vaccine** candidate - author's reply.
Orons B, Larson C, Caroen S, Reid TR. Int J Infect Dis. 2022 Nov 5:S1201-9712(22)00587-2. doi: 10.1016/j.ijid.2022.11.001. Online ahead of print. PMID: 36347457

Effects of nonsteroidal anti-inflammatory drugs on ultrasound findings of mRNA **COVID-19 vaccine**-related lymphadenopathy.
Akman B, Kaya AT. J Clin Ultrasound. 2022 Nov 9. doi: 10.1002/jcu.23390. Online ahead of print. PMID: 36350142

Quantifying the effect of inequitable global **vaccine** coverage on the **COVID-19** pandemic.
[No authors listed] Nat Med. 2022 Nov 4:1-2. doi: 10.1038/s41591-022-02065-x. Online ahead of print. PMID: 36333402

Humoral Immunogenicity of 3 **COVID-19** Messenger RNA **Vaccine** Doses in Patients With Inflammatory Bowel Disease.

Schell TL, Knutson KL, Saha S, Wald A, Phan HS, Almasry M, Chun K, Grimes I, Lutz M, Hayney MS, Farraye FA, Caldera F. Inflamm Bowel Dis. 2022 Nov 2;28(11):1781-1786. doi: 10.1093/ibd/izac082. PMID: 35396992

Oral lichen planus following the administration of vector-based **COVID-19 vaccine** (Ad26.COV2.S).
Troeltzsch M, Gogl M, Berndt R, Troeltzsch M. Oral Dis. 2022 Nov;28 Suppl 2:2595-2596. doi: 10.1111/odi.14025. Epub 2021 Sep 30. PMID: 34543493

Why not? Motivations for entering a volunteer register for clinical trials during the **COVID-19** pandemic.
Russo S, Bani M, Terraneo M, Quaglia V, Nuvolati G, Cavaliere R, Capici S, Cazzaniga ME, Strepparava MG. Eur J Clin Pharmacol. 2022 Nov;78(11):1791-1800. doi: 10.1007/s00228-022-03385-0. Epub 2022 Sep 14. PMID: 36102931

Functional Disorders as a Common Motor Manifestation of **COVID-19** Infection or Vaccination.
Fung WKW, Sa'di Q, Katzberg H, Chen R, Lang AE, Cheung AM, Fasano A. Eur J Neurol. 2022 Nov 11. doi: 10.1111/ene.15630. Online ahead of print. PMID: 36366936

A Population-Based Analysis of the Risk of Glomerular Disease Relapse after **COVID-19** Vaccination.
Canney M, Atiquzzaman M, Cunningham AM, Zheng Y, Er L, Hawken S, Zhao Y, Barbour SJ. J Am Soc Nephrol. 2022 Nov 4:ASN.2022030258. doi: 10.1681/ASN.2022030258. Online ahead of print. PMID: 36332971

An intersectional analysis of sociodemographic disparities in **Covid-19** vaccination: A nationwide register-based study in Sweden.
Spetz M, Lundberg L, Nwaru C, Li H, Santosa A, Ng N, Leach S, Gisslén M, Hammar N, Nyberg F, Rosvall M. Vaccine. 2022 Nov 2;40(46):6640-6648. doi: 10.1016/j.vaccine.2022.09.065. Epub 2022 Sep 28. PMID: 36210254

Durability of antibodies post vaccination with two doses of inactivated BBIBP-CorV **vaccine**.
Mahmoud S, Ganesan S, Sharif-Askari NS, Cantarutti F, Wilson H, Ogrodzki P, Halwani R, Alkaabi N, Zaher WA. Curr Med Res Opin. 2022 Nov 7:1-7. doi: 10.1080/03007995.2022.2139969. Online ahead of print. PMID: 36274640

COVID-19 vaccine-induced Recurrence of the Radiation Recall Phenomenon in the Laryngeal Mucosa Due to a VEGF Inhibitor.
Tatekawa S, Hoshino S, Takemoto N, Oda M, Akino Y, Iwahori K, Hirata T, Hayashi K, Tamari K, Seo Y, Isohashi F, Shimizu S, Ogawa K. Adv Radiat Oncol. 2022 Nov-Dec;7(6):101048. doi: 10.1016/j.adro.2022.101048. Epub 2022 Aug 14. PMID: 35992570

Immunogenicity and safety of SpikoGen®, an adjuvanted recombinant SARS-CoV-2 spike protein **vaccine** as a homologous and heterologous booster vaccination: A randomized placebo-controlled trial.
Tabarsi P, Anjidani N, Shahpari R, Roshanzamir K, Fallah N, Andre G, Petrovsky N, Barati S. Immunology. 2022 Nov;167(3):340-353. doi: 10.1111/imm.13540. Epub 2022 Jul 13. PMID: 35758850

Nurse Practitioners Navigating the Consequences of Directives, Policies, and Recommendations Related to the **COVID-19** Pandemic in Long-Term Care Homes.

McGilton KS, Krassikova A, Wills A, Durante V, Yeung L, Vellani S, Sidani S, Escrig-Pinol A. J Appl Gerontol. 2022 Nov;41(11):2296-2306. doi: 10.1177/07334648221110210. Epub 2022 Jun 25. PMID: 35758019

Role of drug delivery technologies in the success of **COVID-19** vaccines: a perspective.
Labouta HI, Langer R, Cullis PR, Merkel OM, Prausnitz MR, Gomaa Y, Nogueira SS, Kumeria T. Drug Deliv Transl Res. 2022 Nov;12(11):2581-2588. doi: 10.1007/s13346-022-01146-1. Epub 2022 Mar 15. PMID: 35290656

Manifestation of a cancer-associated TIF-1 gamma dermatomyositis after **COVID-19 vaccine**.
Ooi XT, Choi EC, Lee JS. Int J Dermatol. 2022 Nov;61(11):1425-1426. doi: 10.1111/ijd.16358. Epub 2022 Jul 14. PMID: 35834656

Low incidence of neurological recurrent side-effects following **COVID-19** reimmunization.
Koh JS, Hoe RHM, Chen GJ, Goh Y, Tan BYQ, Yong MH, Hui AC, Tu TM, Yong KP, Angon J, Tan K, Quek AML, Umapathi T, Seet RCS. QJM. 2022 Nov 10:hcac251. doi: 10.1093/qjmed/hcac251. Online ahead of print. PMID: 36355458

Daily briefing: China reports first roll-out of inhalable **COVID-19 vaccine**.
Graham F. Nature. 2022 Nov 1. doi: 10.1038/d41586-022-03548-0. Online ahead of print. PMID: 36323898

Preventive Measures for SARS-CoV-2 in the Workplace and **Vaccine** Acceptance: Assessment of Knowledge, Attitudes and Behaviors of Workers in Southern Italy.
Pelullo CP, Tortoriello P, Torsiello L, Lombardi C, Napolitano F, Di Giuseppe G. Vaccines (Basel). 2022 Nov 5;10(11):1872. doi: 10.3390/vaccines10111872. PMID: 36366380

New-onset Adult-onset Still's Disease Following **COVID-19** Vaccination: Three Case Reports and a Literature Review.
Matsuda M, Funakubo Asanuma Y, Yokota K, Sakai S, Yazawa H, Maruyama T, Tsuzuki Wada T, Araki Y, Mimura T. Intern Med. 2022 Nov 9. doi: 10.2169/internalmedicine.0590-22. Online ahead of print. PMID: 36351580

Urticaria relapse after mRNA **COVID-19** vaccines in patients affected by chronic spontaneous urticaria and treated with antihistamines plus omalizumab: A single-center experience.
Picone V, Napolitano M, Martora F, Guerriero L, Fabbrocini G, Patruno C. Dermatol Ther. 2022 Nov;35(11):e15838. doi: 10.1111/dth.15838. Epub 2022 Sep 27. PMID: 36109351

Mass Screening of SARS-CoV-2 With Rapid Antigen Tests in a Receding Omicron Wave: Population-Based Survey for Epidemiologic Evaluation.
Kwan TH, Wong NS, Chan CP, Yeoh EK, Wong SY, Lee SS. JMIR Public Health Surveill. 2022 Nov 9;8(11):e40175. doi: 10.2196/40175. PMID: 36240027

Auricular Acupressure for Adverse Events Following Immunization After **COVID-19 Vaccine** Injection: A Multicentre, Blinded, Randomized Controlled Trial.
Fu Q, Xie H, Zhou L, Li X, Liu Y, Luo H, Zhang C, Peng W, Wang Z, Su C, Xiao Z, Lin H, Xiao X, Wu X, Huang J, Wang X, Hu S, Tang J, Xiao H, Zhou J, Feng C, Wang L, Ao Z, Chen X, Zhang Q, Jiang L.

Complement Ther Med. 2022 Nov 10:102900. doi: 10.1016/j.ctim.2022.102900. Online ahead of print. PMID: 36372315

Rural-Urban Disparities in **Vaccine** Hesitancy among Adults in South Tyrol, Italy.
Barbieri V, Wiedermann CJ, Lombardo S, Plagg B, Gärtner T, Ausserhofer D, Wiedermann W, Engl A, Piccoliori G. Vaccines (Basel). 2022 Nov 5;10(11):1870. doi: 10.3390/vaccines10111870. PMID: 36366378

An episode of oral mucositis after the first administration of the ChAdOx1 **COVID-19 vaccine**.
Azzi L, Toia M, Stevanello N, Maggi F, Forlani G. Oral Dis. 2022 Nov;28 Suppl 2:2583-2585. doi: 10.1111/odi.13874. Epub 2021 Apr 19. PMID: 33844386

A potent, broadly protective **vaccine** against SARS-CoV-2 variants of concern.
Wang Z, An J, Liu K, Yu P, Fang X, Li J, Zhu H, Zhu Q, Huang C, Zhang C, Zhao B, Bao L, Song Y, Cao X, Hu D, Jiang Y, Shi L, Zhou L, Fan J, Guan W, Zhou C, Hu Z, Yuan Z, Liu J, Shan C, Liu G. NPJ Vaccines. 2022 Nov 12;7(1):144. doi: 10.1038/s41541-022-00571-0. PMID: 36371432

A Multiresource Event Model Developed to Increase Access to **COVID-19** Vaccines in Pima County, Arizona, Summer 2021.
Monroy A, Cullen T. Public Health Rep. 2022 Nov-Dec;137(6):1061-1065. doi: 10.1177/00333549221114896. Epub 2022 Aug 2. PMID: 35915992

Humoral response to mRNA-based **COVID-19 vaccine** in patients with de novo and pre-existing immune thrombocytopenia with exacerbation of thrombocytopenia after vaccination.
Mori A, Onozawa M, Kobayashi M, Tsukamoto S, Ishio T, Yokoyama E, Izumiyama K, Saito M, Muraki H, Morioka M, Teshima T, Kondo T. Br J Haematol. 2022 Nov;199(4):627-630. doi: 10.1111/bjh.18447. Epub 2022 Sep 12. PMID: 36096497

Transplacental transmission of SARS-CoV-2 immunoglobulin G antibody to infants from maternal **COVID-19 vaccine** immunization before pregnancy.
Yang Y, Xing H, Zhao Y. J Med Virol. 2022 Nov 11. doi: 10.1002/jmv.28296. Online ahead of print. PMID: 36367230

Adaptive humoral immune response and cellular immune status in cancer patients and patients under immunosuppression vaccinated against SARS-CoV-2.
Kos IA, Kiefer M, Brill K, Cetin O, Bittenbring JT, Ahlgrimm M, Smola S, Lohse S, Christofyllakis K, Kaddu-Mulindwa D, Neumann F, Moritz B, Lorenz T. Expert Rev Vaccines. 2022 Nov;21(11):1683-1689. doi: 10.1080/14760584.2022.2116009. Epub 2022 Aug 26. PMID: 35994606

A systematic and thematic analysis of the top 100 cited articles on mRNA **vaccine** indexed in Scopus database.
Musa HH, Musa TH. Hum Vaccin Immunother. 2022 Nov 3:2135927. doi: 10.1080/21645515.2022.2135927. Online ahead of print. PMID: 36328513

Knowledge and attitudes of pregnant women about Coronavirus vaccines in Turkiye.
Kaya Odabaş R, Demir R, Taspinar A. J Obstet Gynaecol. 2022 Nov 12:1-8. doi: 10.1080/01443615.2022.2144174. Online ahead of print. PMID: 36369924

SARS-CoV-2 variants offer a second chance to fix **vaccine** inequities.
Hotez PJ. Nat Rev Microbiol. 2022 Nov 2:1-2. doi: 10.1038/s41579-022-00824-8. Online ahead of print. PMID: 36324031

Process evaluation of in-person, news and social media engagement of a community-based programme Brown Buttabean Motivation (BBM): a research protocol.
Savila F, Bamber A, Smith S, Fernandez KV, Harding T, Letele D, van der Werf B, Loheni M, Bagg W, Swinburn B, Goodyear-Smith F. BMJ Open. 2022 Nov 1;12(11):e062092. doi: 10.1136/bmjopen-2022-062092. PMID: 36319060

COVID-19 vaccine safety during the antenatal period in women with idiopathic inflammatory myopathies.
Andreoli L, Sen P, Lini D, Vincze MN, Schreiber K; COVAD Study Group, Agarwal V, Aggarwal R, Gupta L. Rheumatology (Oxford). 2022 Nov 12:keac644. doi: 10.1093/rheumatology/keac644. Online ahead of print. PMID: 36370070

Pityriasis rubra pilaris following booster dose of mRNA (Pfizer-BioNTech) **COVID-19 vaccine**.
Hlaca N, Zagar T, Kastelan M, Peternel S, Brajac I, Dujmovic-Hasanbegovic K, Prpic-Massari L. Dermatol Ther. 2022 Nov;35(11):e15791. doi: 10.1111/dth.15791. Epub 2022 Sep 7. PMID: 36029037

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 Nov-Dec;34(6):650-655. doi: 10.7416/ai.2022.2499. Epub 2022 Feb 3. PMID: 35107123

Serological survey for SARS-CoV-2 antibodies among tribal communities of Odisha post-second wave.
Kshatri JS, Bhattacharya D, Giri S, Palo SK, Kanungo S, Mansingh A, Parai D, Dany SS, Bisoyee A, Choudhary HR, Sinha A, Sahoo RK, Bhoi T, Mohanta AR, Ota AB, Mohanty B, Sahoo UK, Pati S; Odisha State Serosurvey Team. Indian J Med Res. 2022 Nov 9. doi: 10.4103/ijmr.ijmr_3428_21. Online ahead of print. PMID: 36348590

Association between history of SARS-CoV-2 infection and severe systemic adverse events after mRNA **COVID-19** vaccination among U.S. adults.
Tompkins LK, Baggs J, Myers TR, Gee JM, Marquez PL, Kennedy SB, Peake D, Dua D, Hause AM, Strid P, Abara W, Rossetti R, Shimabukuro TT, Shay DK. Vaccine. 2022 Nov 1:S0264-410X(22)01342-1. doi: 10.1016/j.vaccine.2022.10.073. Online ahead of print. PMID: 36372665

Serum Metabolic Correlates of the Antibody Response in Subjects Receiving the Inactivated **COVID-19 Vaccine**.
Zhang Y, Yue Q, Zhu H, Song J, Li D, Liu W, Jiang S, Jiang N, Qiu C, Ai J, Zhang Y, Zhang W. Vaccines (Basel). 2022 Nov 9;10(11):1890. doi: 10.3390/vaccines10111890. PMID: 36366398

Acute asthma exacerbation due to the SARS-CoV-2 **vaccine** (Pfizer-BioNTech BNT162b2 messenger RNA **COVID-19 vaccine** [Comirnaty®]).
Ando M, Satonaga Y, Takaki R, Yabe M, Kan T, Omote E, Yamasaki T, Komiya K, Hiramatsu K. Int J Infect Dis. 2022 Nov;124:187-189. doi: 10.1016/j.ijid.2022.09.019. Epub 2022 Sep 16. PMID: 36122668

Safe administration of subsequent mRNA **COVID-19 vaccine** doses following a possible allergic reaction to the first dose.
Roth MS, Chantraine S, Morales Mateluna CA, Hartmann K, Berger CT. J Eur Acad Dermatol Venereol. 2022 Nov;36(11):e880-e883. doi: 10.1111/jdv.18387. Epub 2022 Jul 12. PMID: 35771081

Applying two behavioral theories to predict the willingness to receive **COVID-19 vaccine** booster in the elderly: A cross-sectional study.
Wang J, Li T, Ge J, Zhou M, Walker AN, Chen J, Zhang T, Zhang K, Gu S, You H. Res Social Adm Pharm. 2022 Nov 3:S1551-7411(22)00387-4. doi: 10.1016/j.sapharm.2022.10.011. Online ahead of print. PMID: 36357271

The association of three doses of the BNT162b2 mRNA **vaccine** with abnormal bleeding and an irregular menstrual cycle among premenopausal females: A single institute observation study.
Namiki T, Komine-Aizawa S, Takada K, Takano C, Trinh QD, Hayakawa S. J Obstet Gynaecol Res. 2022 Nov;48(11):2903-2910. doi: 10.1111/jog.15400. Epub 2022 Aug 17. PMID: 36319205

Kinetics of cellular and humoral responses to third BNT162B2 **COVID-19 vaccine** over six months in heart transplant recipients - Implications for the omicron variant: Correspondence.
Peled Y, Patel JK, Afek A, Mandelboim M. J Heart Lung Transplant. 2022 Nov;41(11):1649-1650. doi: 10.1016/j.healun.2022.07.012. Epub 2022 Jul 22. PMID: 35961828

Opinion leaders and Structural Hole Spanners Influencing Echo Chambers in Discussion about **COVID-19** Vaccines on Social Media in China: Network Analysis.
Wang D, Zhou Y, Ma F. J Med Internet Res. 2022 Nov 9. doi: 10.2196/40701. Online ahead of print. PMID: 36367965

A Social Cognitive Theory Approach to Understanding Parental Attitudes and Intentions to Vaccinate Children during the **COVID-19** Pandemic.
Zhu Y, Beam M, Ming Y, Egbert N, Smith TC. Vaccines (Basel). 2022 Nov 7;10(11):1876. doi: 10.3390/vaccines10111876. PMID: 36366384

Bioinformatics approach for the construction of multiple epitope **vaccine** against omicron variant of SARS-CoV-2.
Zaib S, Akram F, Liaqat ST, Altaf MZ, Khan I, Dera AA, Uddin J, Khan A, Al-Harrasi A. Sci Rep. 2022 Nov 9;12(1):19087. doi: 10.1038/s41598-022-23550-w. PMID: 36352060

Safety of BNT162b2 or CoronaVac **COVID-19** vaccines in patients with heart failure: A self-controlled case series study.
Ye X, Huang C, Wei Y, Li STH, Yan VKC, Yiu KH, Tse HF, Ma T, Qin X, Chui CSL, Lai FTT, Li X, Wan EYF, Wong CKH, Wong ICK, Chan EW. Lancet Reg Health West Pac. 2022 Nov 7:100630. doi: 10.1016/j.lanwpc.2022.100630. Online ahead of print. PMID: 36373159

Ensuring Equitable Access to the **COVID-19 Vaccine**: The Experience of A Local Health Unit in Rome, Italy.
Turatto F, Sassano M, Goletti M, Severoni S, Grossi A, Parente P. Healthcare (Basel). 2022 Nov 10;10(11):2246. doi: 10.3390/healthcare10112246. PMID: 36360587

COVID-19 vaccine immunogenicity among chronic liver disease patients and liver transplant recipients: reply.
Cheung KS, Mok CH, Seto WK, Yuen MF. Clin Mol Hepatol. 2022 Nov 10. doi: 10.3350/cmh.2022.0377. Online ahead of print. PMID: 36353766

Temporary Reactive Response of Axillary Lymph Nodes to **COVID-19** Vaccination on ^{18}F-rhPSMA-7.3 PET/CT in Patients with Prostate Cancer.
Notohamiprodjo S, Eiber M, Lohrmann C, Weber WA. J Nucl Med. 2022 Nov;63(11):1673-1676. doi: 10.2967/jnumed.121.263758. Epub 2022 Mar 3. PMID: 35241484

Epidemiological and clinical features of SARS-CoV-2 infection in children during the outbreak of Omicron variant in Shanghai, March 7-31, 2022.
Wang X, Chang H, Tian H, Zhu Y, Li J, Wei Z, Wang Y, Xia A, Ge Y, Liu G, Cai J, Zhu Q, Zhai X, Zeng M. Influenza Other Respir Viruses. 2022 Nov;16(6):1059-1065. doi: 10.1111/irv.13044. Epub 2022 Aug 31. PMID: 36043446

Comment on "Oral lichen planus following the administration of vector based **COVID-19 vaccine** (Ad26.COV2.S)". Authors' reply.
Troeltzsch M, Berndt R, Troeltzsch M. Oral Dis. 2022 Nov;28 Suppl 2:2610-2611. doi: 10.1111/odi.14060. Epub 2021 Nov 10. PMID: 34704310

Explaining demographic differences in **COVID-19** vaccination stage in the United States - April-May 2021.
Huang Q, Abad N, Bonner KE, Baack B, Petrin R, Hendrich MA, Lewis Z, Brewer NT. Prev Med. 2022 Nov 10:107341. doi: 10.1016/j.ypmed.2022.107341. Online ahead of print. PMID: 36372280

Widespread cutaneous eruption following **COVID-19 vaccine** in the setting of immunotherapy.
El-Behaedi S, Ng S, Goyal PK, Choi JN. JAAD Case Rep. 2022 Nov;29:48-50. doi: 10.1016/j.jdcr.2022.08.043. Epub 2022 Sep 2. PMID: 36068793

A disproportionality analysis for the association of central nervous system demyelinating diseases with **COVID-19** vaccination using the World Health Organization pharmacovigilance database.
Kim JE, Park J, Song TJ. Mult Scler. 2022 Nov;28(13):2112-2123. doi: 10.1177/13524585221109397. Epub 2022 Jul 13. PMID: 35822296

Immunological responses following the third dose of the BNT162b2 SARS-CoV-2 **vaccine** among Japanese healthcare workers.
Tamura M, Fujita R, Sato T, Sato R, Kato Y, Nagasawa M, Matsumoto T. J Infect Chemother. 2022 Nov;28(11):1478-1482. doi: 10.1016/j.jiac.2022.07.006. Epub 2022 Jul 31. PMID: 35921965

Engaging Empathically: Effects of a Motivational Interviewing Learning Session and Standardized Patient Encounter on Medical Student Confidence in Counseling **COVID-19 Vaccine**-Hesitant Patients.
Nihalani S, Gerlach G, Fothergill L, Uchiyama E, Mark Saunders J, Athauda G, Toonkel RL. Acad Med. 2022 Nov 1;97(11S):S138. doi: 10.1097/ACM.0000000000004890. Epub 2022 Oct 18. PMID: 36287669

Response to Berry et al's "Cutaneous small-vessel vasculitis following single-dose Janssen Ad26.COV2.S vaccination".

Matthews NH, Pichan CM, Hristov AC, Markovitz DM, Darland AM. JAAD Case Rep. 2022 Nov;29:62-63. doi: 10.1016/j.jdcr.2021.08.041. Epub 2022 Jan 21. PMID: 35155725

Proportionality, wrongs and equipoise for natural immunity exemptions: response to commentators.
Pugh J, Savulescu J, Brown RC, Wilkinson D. J Med Ethics. 2022 Nov;48(11):881-883. doi: 10.1136/jme-2022-108450. Epub 2022 Aug 4. PMID: 35927021

Investigation of Adverse Events Experienced by Healthcare Workers following Immunization with Homologous orHeterologous **COVID-19** Booster Vaccinations.
Wei Y, Wang Y, Liu J, Zha Y, Yang Y, Li N, Zhou Y, Roberts JZN, Liu L, Li Y. Vaccines (Basel). 2022 Nov 4;10(11):1869. doi: 10.3390/vaccines10111869. PMID: 36366377

An autopsy case report of aortic dissection complicated with histiolymphocytic pericarditis and aortic inflammation after mRNA **COVID-19** vaccination.
Takahashi M, Kondo T, Yamasaki G, Sugimoto M, Asano M, Ueno Y, Nagasaki Y. Leg Med (Tokyo). 2022 Nov;59:102154. doi: 10.1016/j.legalmed.2022.102154. Epub 2022 Sep 29. PMID: 36191411

Germline variants of IGHV3-53 / V3-66 are determinants of antibody responses to the BNT162b2 mRNA **COVID-19 vaccine**.
Mashimo Y, Yamazaki K, Kageyama T, Tanaka S, Taniguchi T, Matsushita K, Igari H, Hanaoka H, Yokote K, Nakajima H, Onouchi Y. J Infect. 2022 Nov 2:S0163-4453(22)00614-4. doi: 10.1016/j.jinf.2022.10.015. Online ahead of print. PMID: 36341890

AIDH Summit 2022 - Automated social media surveillance for detection of **vaccine** safety signals: a validation study.
Khademi Habibabadi S, Palmer C, Dimaguila GL, Javed M, Clothier HJ, Buttery J. Appl Clin Inform. 2022 Nov 9. doi: 10.1055/a-1975-4061. Online ahead of print. PMID: 36351547

Effect of Vaccination Time Intervals on SARS-COV-2 Omicron Variant Strain Infection in Guangzhou: A Real-World Matched Case-Control Study.
Li Y, Guo T, Zhong J, Fang C, Xiong H, Hu Z, Zhu Y, Tan J, Liu S, Jing Q, Zhang D. Vaccines (Basel). 2022 Nov 1;10(11):1855. doi: 10.3390/vaccines10111855. PMID: 36366363

Agreement Between Pregnant Individuals' Self-Report of Coronavirus Disease 2019 (**COVID-19**) Vaccination and Medical Record Documentation.
Wielgosz K, Dawood FS, Stockwell MS, Varner M, Newes-Adeyi G, Ellington S, Vargas C, Bruno AM, Powers E, Morrill T, Reichle L, Battarbee AN, Tita AT. Obstet Gynecol. 2022 Nov 3. doi: 10.1097/AOG.0000000000004994. Online ahead of print. PMID: 36357976

Safety of coronavirus disease 2019 vaccines in 213 adult patients with sickle cell disease.
Joseph L, Corbasson A, Manceau S, Khimoud D, Meunier B, Cheminet G, Lefrere F, Jannot AS, Lu E, Arlet JB. Br J Haematol. 2022 Nov 10. doi: 10.1111/bjh.18547. Online ahead of print. PMID: 36354234

Autoimmune Reaction Associated With Long **COVID** Syndrome and Cardiovascular Disease: A Genetic Case Report.
Safronenka A, Capcha JMC, Webster KA, Buglo E, Tamariz L, Goldberger JJ, Shehadeh LA. JACC Case Rep. 2022 Nov 3:101644. doi: 10.1016/j.jaccas.2022.09.014. Online ahead of print. PMID: 36348978

Reporting complete heart block in a patient with polyarteritis nodosa after **COVID-19** vaccination.
Mehrabi Nasab E, Athari SS. ESC Heart Fail. 2022 Nov 8. doi: 10.1002/ehf2.14227. Online ahead of print. PMID: 36347818

Reaching a Tipping Point for Neurorehabilitation Research: Obstacles and Opportunities in Trial Design, Description, and Pooled Analysis.
Savage WM, Harel NY. Neurorehabil Neural Repair. 2022 Nov;36(10-11):659-665. doi: 10.1177/15459683221124112. Epub 2022 Sep 13. PMID: 36113101

Are corticosteroids useful in the treatment of brain edema associated with venous cerebral thrombosis (CVT) in patients with **COVID-19 vaccine**-related CVT? A controversial topic.
Di Pietro M, Dono F, Sensi SL. Neurol Sci. 2022 Nov;43(11):6187-6188. doi: 10.1007/s10072-022-06338-8. Epub 2022 Aug 20. PMID: 35987930

Correction to: Assessing Case Fatality on Cases of Thrombosis with Concurrent Thrombocytopenia Following **COVID-19 Vaccine** AstraZeneca (Vaxzevria) in the United Kingdom: A Review of Spontaneously Reported Data.
Lane S, Shakir S. Drug Saf. 2022 Nov;45(11):1439-1440. doi: 10.1007/s40264-022-01233-9. PMID: 36057085

SARS-CoV-2 Spike-specific IFN-γ T-cell Response After **COVID-19** Vaccination in Patients With Chronic Kidney Disease, on Dialysis, or Living With a Kidney Transplant.
Imhof C, Messchendorp AL, van der Heiden M, Baan CC, van der Molen RG, Remmerswaal EBM, de Vries RD, Diavatopoulos DA, Boerma A, Bakker FJ, Oosterhout E, Bemelman FJ, Hilbrands LB, Reinders MEJ, Gansevoort RT, Sanders JS, van Baarle D. Transplant Direct. 2022 Oct 18;8(11):e1387. doi: 10.1097/TXD.0000000000001387. eCollection 2022 Nov. PMID: 36284929

Successful alternative vaccination with BNT162b2 mRNA **COVID-19 vaccine** for new-onset IgA vasculitis after receiving mRNA-1273-case report.
Morioka F, Nakatani S, Tsuda A, Mori K, Emoto M. CEN Case Rep. 2022 Nov;11(4):511-512. doi: 10.1007/s13730-022-00735-w. Epub 2022 Sep 17. PMID: 36114985

Hamsters Protected from SARS-CoV-2 Delta Variant Challenge after Two Doses of Adjuvanted SARS-CoV-2 Recombinant Spike Protein (S-2P) and One Dose of Beta S-2P.
Kuo TY, Lien CE, Lin YJ, Lin MY, Wu CC, Tang WH, Campbell JD, Traquina P, Chuang YS, Liu LT, Cheng J, Chen C. J Infect Dis. 2022 Nov 1;226(9):1562-1567. doi: 10.1093/infdis/jiac153. PMID: 35451470

Acute multifocal placoid pigment epitheliopathy following administration of the first dose of the BNT162B2 **COVID-19 vaccine**.
Nagaoka K, Makino S. QJM. 2022 Nov 10:hcac253. doi: 10.1093/qjmed/hcac253. Online ahead of print. PMID: 36355470

[**COVID-19 VACCINE** ADVERSE EVENTS IN A POPULATION AGED 5-17 YEARS: A STUDY FROM THE VAERS DATABASE].
Villa-Zapata L, Gomez-Lumbreras A, Lee Y, Tan MS, Malone D. An Pediatr (Barc). 2022 Nov 3. doi: 10.1016/j.anpedi.2022.10.011. Online ahead of print. PMID: 36345293

Correction: Does the Integration of Migrants in the Host Society Raise **COVID-19 Vaccine** Acceptance? Evidence From a Nationwide Survey in Japan.
Teng Y, Hanibuchi T, Nakaya T. J Immigr Minor Health. 2022 Nov 10. doi: 10.1007/s10903-022-01419-4. Online ahead of print. PMID: 36357518

Patentes registradas en Patentscope

Estrategia de búqueda: *Vaccine in the title or abstract AND 20221101:20221112 as the publication date 67 records*

1.WO/2022/233287VACCINE REAGENT AND VACCINATION METHOD
WO - 10.11.2022
Clasificación Internacional C12N 15/50 Nº de solicitud PCT/CN2022/090848 Solicitante STEMIRNA THERAPEUTICS CO., LTD. Inventor/a LI, Hangwen
A vaccine combination, a kit and a method for preventing and/or treating novel coronavirus infections. The combination contains a first composition and a second composition, wherein the first composition contains an inactivated vaccine, and the second composition contains an mRNA vaccine.

2.WO/2022/235046HER2 VACCINE COMPOSITION
WO - 10.11.2022
Clasificación Internacional G01N 33/68 Nº de solicitud PCT/KR2022/006321 Solicitante ASTON SCI. INC. Inventor/a DISIS, Mary L
The present invention relates to a method for monitoring long-term immunogenicity of a DNA vaccine composition. The monitoring method of the present invention is a method capable of continuously monitoring long-term immunogenicity from an early stage. The long-term immunogenicity monitoring method of the present invention can be applied to the HER2-ICD DNA vaccine composition in a manner that does not burden the patient.

3.WO/2022/235044HER2 VACCINE COMPOSITION
WO - 10.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/KR2022/006314 Solicitante ASTON SCI. INC. Inventor/a DISIS, Mary L
The present invention relates to a HER2-ICD DNA vaccine composition. The vaccine composition according to the present invention does not cause significant adverse effects and retains immunogenicity for HER2-ICD for a long period of time when practically administered to breast cancer patients, thus allowing for the effective prevention of not only recurrence or metastasis in breast cancer patients who have been in a remission state due to chemotherapy, but also progression of breast cancer.

4.20220347283VACCINE TO PREVENT MYCOPLASMAL INFECTIONS IN WATERFOWL
US - 03.11.2022
Clasificación Internacional A61K 39/02 Nº de solicitud 17850422 Solicitante GalenBio, Inc. Inventor/a Susan SZATHMARY
An improved vaccine for immunization of waterfowl such as ducks and geese comprises an inactivated strain of a *Mycoplasma* infecting waterfowl, such as *Mycoplasma* sp. strain 1220; the vaccine can include an excipient and an adjuvant. Methods for immunization of waterfowl with the vaccine are also described.

5.20220354941PNEUMOCOCCAL CAPSULAR SACCHARIDE CONJUGATE VACCINE
US - 10.11.2022

Clasificación Internacional A61K 39/09 Nº de solicitud 17854377 Solicitante GLAXOSMITHKLINE BIOLOGICALS SA Inventor/a Ralph Leon BIEMANS
The present invention is in the field of pneumococcal capsular saccharide conjugate vaccines. Specifically, an immunogenic composition for infants is provided comprising a multivalent *Streptococcus pneumoniae* vaccine comprising 2 or more capsular saccharide conjugates from different serotypes, wherein the composition comprises a serotype 22F saccharide conjugate. Such a vaccine may be used in infant populations to reduce the incidence of elderly pneumococcal disease such as exacerbations of COPD and/or IPD.

6.WO/2022/233630SARS-COV-2 SUBUNIT VACCINE
WO - 10.11.2022
Clasificación Internacional A61K 39/12 Nº de solicitud PCT/EP2022/060942 Solicitante HIPRA SCIENTIFIC, S.L.U. Inventor/a BARREIRO VAZQUEZ, Antonio
The present invention relates to a protein subunit vaccine comprising at least one antigen characterized in that it comprises at least one monomer from at least one variant of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), wherein the at least one monomer is selected from the group consisting of the S1 subunit of the Spike protein or the receptor-binding domain (RBD) of the Spike protein. In an aspect of the present invention, the protein subunit vaccine comprises at least one antigen characterized in that it comprises two monomers from at least one variant of SARS-CoV-2, wherein each of the monomers are selected from the group consisting of the S1 subunit or RBD protein, and wherein the monomers are chemically bound to each other, optionally through a linker, forming fusion dimers or non-fusion dimers. The protein subunit vaccine may further comprise at least an adjuvant and at least an immunostimulant.

7.WO/2022/233629SARS-COV-2 SUBUNIT VACCINE
WO - 10.11.2022
Clasificación Internacional A61K 39/12 Nº de solicitud PCT/EP2022/060941 Solicitante HIPRA SCIENTIFIC, S.L.U. Inventor/a BARREIRO VAZQUEZ, Antonio
The present invention relates to a protein subunit vaccine comprising at least one antigen characterized in that it comprises at least one monomer from at least one variant of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), wherein the at least one monomer is selected from the group consisting of the S1 subunit of the Spike protein or the receptor- binding domain (RBD) of the Spike protein. In an aspect of the present invention, the protein subunit vaccine comprises at least one antigen characterized in that it comprises two monomers from at least one variant of SARS-CoV-2, wherein each of the monomers are selected from the group consisting of the S1 subunit or RBD protein, and wherein the monomers are chemically bound to each other, optionally through a linker, forming fusion dimers or non-fusion dimers. The protein subunit vaccine may further comprise at least an adjuvant and at least an immunostimulant.

8.4082569KOLLAGENHYDROLYSATE ALS IMPFSTOFFADJUVANTIEN
EP - 02.11.2022
Clasificación Internacional A61K 39/39 Nº de solicitud 21171614 Solicitante DSM IP ASSETS BV Inventor/a GIESSER JOANNE
It has been found that collagen hydrolysates have pro-inflammatory activities, and thus can be used as vaccine adjuvants.

9.WO/2022/235045HER2 VACCINE COMPOSITION
WO - 10.11.2022
Clasificación Internacional G01N 33/68 Nº de solicitud PCT/KR2022/006317 Solicitante ASTON SCI. INC. Inventor/a DISIS, Mary L

The present invention relates to a method for predicting the reactivity of a HER2-ICD DNA vaccine composition, that is, the acquisition of immunogenicity and a therapeutic effect, wherein the method is by measuring immunogenicity against a HER2-ICD antigen prior to vaccination. Additionally, a DNA vaccination target can be selected using the method for predicting the reactivity of the present invention.

10.20220347293Recombinant Herpes Zoster Vaccine Composition and Application Thereof
US - 03.11.2022
Clasificación Internacional A61K 39/25 Nº de solicitud 17623525 Solicitante IMMUNE-PATH BIOTECHNOLOGY (SUZHOU) CO., LTD. Inventor/a Li SHI
Disclosed in the present invention are a recombinant herpes zoster vaccine composition and an application thereof. Compared with other combinations of antigens and adjuvants, the novel vaccine composition provided by the present invention has a more beneficial immune effect.

11.4082568DENGUE-IMPFSTOFF-EINHEITSDOSIS UND VERABREICHUNG DAVON
EP - 02.11.2022
Clasificación Internacional A61K 39/295 Nº de solicitud 22151940 Solicitante TAKEDA VACCINES INC Inventor/a WALLACE DEREK WILLIAM
The invention relates to a unit dose of a dengue vaccine composition and methods and uses for preventing dengue disease and methods for stimulating an immune response to all four dengue virus serotypes in a subject or subject population. The unit dose of a dengue vaccine composition includes constructs of each dengue serotype, such as TDV-1, TDV-2, TDV-3 and TDV-4, at various concentrations in order to improve protection from dengue infection.

12.20220347281VACCINE FOR THE PREVENTION OF BREAST CANCER RELAPSE
US - 03.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 17076635 Solicitante The Henry M. Jackson Foundation for the Advancement of Military Medicine, Inc. Inventor/a George E. PEOPLES
The invention features methods to induce and maintain a protective cytotoxic T-lymphocyte response to a peptide of the HER2/neu oncogene, E75, with the effect of inducing and maintaining protective or therapeutic immunity against breast cancer in a patient in clinical remission. The methods comprise administering to the patient an effective amount of a vaccine composition comprising a pharmaceutically acceptable carrier, an adjuvant such as recombinant human GM-CSF, and the E75 peptide at an optimized dose and schedule. The methods further comprise administering an annual or semi-annual booster vaccine dose due to declining E75-specific T cell immunity. The invention also features vaccine compositions for use in the methods.

13.WO/2022/235629DIAGNOSTIC TEST FOR VACCINE VALIDATION AND AUTHENTICATION AND METHODS OF USE THEREOF
WO - 10.11.2022
Clasificación Internacional G01N 33/543 Nº de solicitud PCT/US2022/027414 Solicitante QUANTUM MATERIALS CORPORATION Inventor/a ROBINSON, Andrew
The present invention encompasses a diagnostic test and method to authenticate the veracity of a vaccine. The diagnostic test and method are especially useful in a specific and sensitive immunochromatographic ("ICT") assay, performable within about 15 minutes, for the authentication, validation, and veracity of a vaccine in a vial prior to administration to a human, such as a COVID-19 vaccine.

14.20220347295VACCINE DELIVERY METHOD
US - 03.11.2022
Clasificación Internacional A61K 39/39 Nº de solicitud 17838890 Solicitante UNIVERSITY OF GEORGIA RESEARCH FOUNDATION, INC. Inventor/a Donald A. Harn

A vaccine delivery method is presented that includes a composition including as one component a slurry matrix that is a liquid at room temperature and a gel at physiological pH, physiological salt concentrations and/or physiological temperatures and as a second component one or more antigens. Also included are methods of inducing an immune response in a subject and vaccinating a subject by administering such compositions.

15.4082567NEUARTIGER CORONAVIRUS-IMPFSTOFF BASIEREND AUF INFLUENZAVIRUS-VEKTOR UND HERSTELLUNGSVERFAHREN DAFÜR
EP - 02.11.2022
Clasificación Internacional A61K 39/215 Nº de solicitud 21873704 Solicitante GUANGZHOU N BIOMED LTD Inventor/a CHEN LING
Disclosed are a novel coronavirus vaccine based on an influenza virus vector and a preparation method thereof. The vaccine can efficiently express two antigens, i.e., its own HA antigen and an exogenous SC2R1 antigen, enabling the vaccine to induce immune responses to the two antigens, thus achieving the purpose of preventing both influenza virus and novel coronavirus, thereby eliminating the impacts of the two major infectious diseases of influenza and novel coronavirus on social economy, etc. at one time. In addition, based on existing mature influenza platform techniques, the influenza vaccine can be prepared and produced on a large scale, and the use of influenza vaccines has a long history and good safety.

16.20220349883DIAGNOSTIC TEST FOR VACCINE VALIDATION AND AUTHENTICATION AND METHODS OF USE THEREOF
US - 03.11.2022
Clasificación Internacional G01N 33/543 Nº de solicitud 17532403 Solicitante Quantum Materials Corporation Inventor/a Andrew ROBINSON
The present invention encompasses a diagnostic test and method to authenticate the veracity of a vaccine. The diagnostic test and method are especially useful in a specific and sensitive immunochromatographic assay, performable within about 15 minutes for the authentication, validation, and veracity of a vaccine, such as a COVID-19 vaccine, in a vial prior to administration to a human.

17.WO/2022/231116EXOSOME PLATFORM-BASED ANTIVIRAL VACCINE
WO - 03.11.2022
Clasificación Internacional C07K 14/005 Nº de solicitud PCT/KR2022/003331 Solicitante CK-EXOGENE CO., LTD. Inventor/a KIM, Jae Young
The present invention relates to an exosome platform-based antiviral vaccine, which can induce a strong immune response to viruses and induce a stable and long-term immune response even to viruses with frequent mutations, so as to be utilized effectively for the purpose of antiviral vaccines.

18.WO/2022/226671OLIGOSACCHARIDE VACCINE FOR SPECIFIC PREVENTION OF FUNGAL INFECTION, AND PREPARATION METHOD THEREFOR
WO - 03.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/CN2021/000153 Solicitante SHANDONG ACADEMY OF PHARMACEUTICAL SCIENCES Inventor/a LIU, Fei
An oligosaccharide vaccine for specific prevention of a fungal infection, and a preparation method therefor. The vaccine is formed by coupling a thiolated protein and an oligosaccharide. The thiolated protein is formed by introducing a thiol group (-SH) into a carrier protein containing a primary amino group (-NH2), and then coupled to the oligosaccharide by means of the coupling effect of a bridging agent to form the oligosaccharide vaccine. The carrier protein is a non-human protein, and the oligosaccharide is a chitosan oligosaccharide mixture and/or a chitin oligosaccharide mixture. The vaccine has strong immunogenicity, can activate Th17 cell immunity, and can identify and protect against infections caused by fungi.

19.20220349884DIAGNOSTIC TEST FOR VACCINE VALIDATION AND AUTHENTICATION AND METHODS OF USE THEREOF
US - 03.11.2022
Clasificación Internacional G01N 33/543 Nº de solicitud 17735415 Solicitante Quantum Materials Corporation Inventor/a Andrew ROBINSON
The present invention encompasses a diagnostic test and method to authenticate the veracity of a vaccine. The diagnostic test and method are especially useful in a specific and sensitive immunochromatographic ("ICT") assay, performable within about 15 minutes, for the authentication, validation, and veracity of a vaccine in a vial prior to administration to a human, such as a COVID-**19** vaccine.

20.WO/2022/226672CHITIN OLIGOSACCHARIDE VACCINE FOR PREVENTING FUNGAL INFECTION AND PREPARATION METHOD THEREFOR
WO - 03.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/CN2021/000154 Solicitante SHANDONG ACADEMY OF PHARMACEUTICAL SCIENCES Inventor/a YUAN, Dandan
A chitin oligosaccharide vaccine for preventing fungal infection and a preparation method therefor. The vaccine is formed by coupling an oligosaccharide and a carrier protein, and is a conjugate formed by means of the condensation of an aldehyde group (-CHO) on the oligosaccharide and an amino group (-NH2) on the carrier protein and the action of a reducing agent. The carrier protein is a non-human protein, and the oligosaccharide is a mixture of chitin oligosaccharides. The provided vaccine is highly immunogenic, is able to activate Th17 cell immunity, and may identify and protect from infection caused by fungi.

21.WO/2022/230485VACCINE COMPOSITION FOR TRANSPULMONARY OR TRANSNASAL ADMINISTRATION
WO - 03.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/JP2022/014205 Solicitante NAGASAKI UNIVERSITY Inventor/a SASAKI Hitoshi
A vaccine composition for transpulmonary or transnasal administration contains a nucleic-acid-containing carrier having such a structure that a complex comprising a nucleic acid encoding an antigen protein and a cationic molecule is coated with γ-polyglutamic acid or a salt thereof. In the vaccine composition for transpulmonary or transnasal administration, the charge ratio among the nucleic acid, the cationic molecule, and the γ-polyglutamic acid or the salt thereof may be 1:(2 to 8 inclusive):(4 to 16 inclusive). The cationic molecule may be 1,2-dioleoyl-3-trimethylammoniumpropane.

22.WO/2022/231402COMPOSITION FOR PREPARING AVIAN CELL FOR PRODUCTION OF ANTIVIRAL VACCINE AND COMPOSITION FOR PREPARING VIRUS-RESISTANT AVIAN CELL
WO - 03.11.2022
Clasificación Internacional C12N 15/85 Nº de solicitud PCT/KR2022/006261 Solicitante SEOUL NATIONAL UNIVERSITY R&DB FOUNDATION Inventor/a HAN, Jae Yong
The present invention relates to a composition for preparing avian cells for production of an antiviral vaccine and a composition for preparing virus-resistant avian cells. The composition for preparing avian cells for production of an antiviral vaccine according to the present invention can be preferably utilized as a composition for production of an antiviral vaccine and used to provide a method for production of an antiviral vaccine having a high titer. In addition, the composition for preparing virus-resistant avian cells can preferably provide a method for preparing virus-resistant avian cells or virus-resistant birds.

23.202011057169VERO-CELL BASED LIVE ATTENUATED VACCINE CANDIDATE VIRUS FOR CANINE DISTEMPER USING INDIGENOUS STRAIN

IN - 04.11.2022
Clasificación Internacional A61K / Nº de solicitud 202011057169 Solicitante Indian Council of Agricultural Research Inventor/a Ashok Kumar
VERO-CELL BASED LIVE ATTENUATED VACCINE CANDIDATE VIRUS FOR CANINE DISTEMPER USING INDIGENOUS STRAINThe present invention provides vero-cell based live attenuated vaccine candidate virus for canine distemper using indigenous strain CDV(Dog)/Bly/Ind/2018 isolated from a dog [CDV(Dog)/Bly/Ind/2018], belonging to new genetic lineage India-I/Asia-5.

24.WO/2022/232364VACCINE RNA-PEPTIDE AGAINST SARS-COV-2 WITH ENDOGENOUS EXOSOMES AS CARRIER
WO - 03.11.2022
Clasificación Internacional A61K 38/45 Nº de solicitud PCT/US2022/026684 Solicitante ELIDAN DYNAMIC LLC Inventor/a CRUZ RODRIGUEZ, Luis
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.

25.WO/2022/229676SYSTEM AND METHODS FOR PROVIDING AN INTEGRATED DIGITAL PLATFORM FOR ADVERSE EVENT MONITORING, TIMELY SIGNAL ANALYSIS AND PREDICTION, IN RELATION TO CORONAVIRUS VACCINE
WO - 03.11.2022
Clasificación Internacional G06Q 10/04 Nº de solicitud PCT/IB2021/053538 Solicitante MUNIRATHINAM, Dharani Inventor/a MUNIRATHINAM, Dharani
A method for providing an integrated digital platform for adverse event active surveillance, timely signal analysis and prediction, in relation to a vaccine, includes the steps of, receiving and collecting, via an input engine, data corresponding to the vaccine; analysing, via an analytics and automation engine, the data corresponding to the vaccine, as received and collected via the input engine; automating, via the analytics and automation engine, multiple workflows associated with the data corresponding to the vaccine, as analysed via the analytics and automation engine; and, generating, via an output engine, structured data and real time information corresponding to the vaccine, based on the multiple workflows associated with the data corresponding to the vaccine, as automated via the analytics and automation engine.

26.4081245VERFAHREN ZUM ENTWURF EINES REKOMBINANTEN POCKENVIRUS FÜR EINEN THERAPEUTISCHEN IMPFSTOFF
EP - 02.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 20839042 Solicitante TRANSGENE Inventor/a GRELLIER BENOÎT
The present invention generally relates to a process for designing a recombinant poxvirus for a therapeutic vaccine, i.e. personalized cancer vaccine, said recombinant poxvirus comprising one or more expression cassettes, each for expression of a fusion of a plurality of peptides, i.e. neopeptides, characterized in that it comprises performing by processing means (11) of a server (1) the steps of : (a) selecting a first subset of candidate peptides, wherein said peptides present transmembrane scores below a TMS threshold; (b) determining an optimal distribution of the candidate peptides from said first subset to the expression cassette(s) among a plurality of possible distributions, wherein said optimal distribution presents, if there are at least two expression cassettes, the lowest range between the hydropathy scores of at least two expression cassettes; (c) for each expression cassette, determining an

optimal slot allocation of the candidate peptides as function of cassette slot occupancy rule so as to select the peptide fusion with the lowest TM score; (d) determining a DNA transfer sequence comprising the nucleotide sequence of the one or more expression cassette(s) for generation of said recombinant poxvirus.

27.20220347291VACCINE FOR USE IN THE PROPHYLAXIS AND/OR TREATMENT OF A DISEASE
US - 03.11.2022
Clasificación Internacional A61K 39/235 Nº de solicitud 17732076 Solicitante INPROTHER APS Inventor/a Peter HOLST
The present invention relates to an adenoviral vector capable of encoding a virus-like particle (VLP), said VLP displaying an inactive immune-suppressive domain (ISD). The vaccine of the invention shows an improved immune response from either of both of the response pathways initiated by CD4 T cells or CD8 T cells.

28.20220347282ANTI-TUMOR DNA VACCINE WITH PD-1 AND LAG-3 PATHWAY BLOCKADE
US - 03.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 17732237 Solicitante WISCONSIN ALUMNI RESEARCH FOUNDATION Inventor/a Douglas McNeel
The present invention provides combination therapies and methods of treating cancer, including, cancers that are resistant to PD-1 therapy. The combination therapies described herein comprise a DNA vaccine to a tumor antigen, anti-PD-1 therapy, and an anti-LAG-3 therapy, which provides an increased T cell response against the cancer.

29.WO/2022/233102METHOD FOR PROPHYLAXIS OR TREATMENT OF CORONAVIRUS INFECTION USING IMMUNOMODULATOR AND VACCINE COMPOSITIONS COMPRISING THE SAME
WO - 10.11.2022
Clasificación Internacional A61K 39/215 Nº de solicitud PCT/CN2021/113352 Solicitante ADVAGENE BIOPHARMA CO., LTD. Inventor/a HSU, Yu-Shen
The present disclosure provides a method for the treatment or prophylaxis of coronavirus infection, comprising administering a therapeutically effective amount of an immunomodulator to a subject in need thereof or at risk of coronavirus infection. A vaccine composition comprising a pharmaceutically effective amount of an immunomodulator is also provided.

30.4085924ANTIKÖRPER ZUR NEUTRALISIERUNG DES HUMANEN IMMUNDEFIZIENZVIRUS (HIV)
EP - 09.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 22168900 Solicitante THERACLONE SCIENCES INC Inventor/a CHAN-HUI PO-YING
The specification shows a method for obtaining a broadly neutralizing antibody (bNab), including screening memory B cell cultures from a donor PBMC sample for neutralization activity against a plurality of HIV-1 species, cloning a memory B cell that exhibits broad neutralization activity; and rescuing a monoclonal antibody from that memory B cell culture. The resultant monoclonal antibodies may be characterized by their ability to selectively bind epitopes from the Env proteins in native or monomeric form, as well as to inhibit infection of HIV-1 species from a plurality of clades. Compositions containing human monoclonal anti-HIV antibodies used for prophylaxis, diagnosis and treatment of HIV infection are provided. Methods for generating such antibodies by immunization using epitopes from conserved regions within the variable loops of gp120 are provided. Immunogens for generating anti-HIV1 bNAbs are also shown. Furthermore, methods for vaccination using suitable epitopes are shown.

31.4085925ANTIKÖRPER ZUR NEUTRALISIERUNG DES HUMANEN IMMUNDEFIZIENZVIRUS (HIV)
EP - 09.11.2022

Clasificación Internacional A61K 39/118 Nº de solicitud 22171792 Solicitante INT AIDS VACCINE INITIATIVE Inventor/a FREY STEVEN
The invention provides a method for obtaining a broadly neutralizing antibody (bNab), wherein said antibody is PGG14 having a heavy chain comprising the amino acid sequence of SEQ ID NO: 20 and a light chain comprising the amino acid sequence of SEQ ID NO: 22. Said method includes screening memory B cell cultures from a donor PBMC sample for neutralization activity against a plurality of HIV-1 species, cloning a memory B cell that exhibits broad neutralization activity; and rescuing a monoclonal antibody from that memory B cell culture. The resultant monoclonal antibody of the invention is characterized by its ability to selectively bind epitopes from the Env proteins in native or monomeric form, as well as to inhibit infection of HIV-1 species from a plurality of clades. Compositions containing said human monoclonal anti-HIV antibody of the invention, which are used for prophylaxis, diagnosis and treatment of HIV infection, are provided. Methods for generating such antibody by immunization using epitopes from conserved regions within the variable loops of gp120 are provided. Immunogens for generating anti-HIVl bNAbs are also provided. Furthermore, methods for vaccination using suitable epitopes are provided.

32.20220354935VACCINATION AGAINST FUNGAL EPITOPES TO PREVENT INFLAMMATORY BOWEL DISEASES
US - 10.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 17726481 Solicitante Lundquist Institute for Biomedical Innovation at Harbor-UCLA Medical Center Inventor/a Ashraf S. IBRAHIM
The invention provides a vaccine against inflammatory bowel disease (IBD), such as Crohn's disease, ulcerative colitis, and the like. The vaccine comprises a polypeptide comprising a *Candida* adhesin antigen, typically an isolated agglutinin-like sequence (Als) protein antigen, formulated with one or more pharmaceutically acceptable carriers or excipients.

33.2606411Immunogen selection and immunogenic compositions
GB - 09.11.2022
Clasificación Internacional G16B 40/30 Nº de solicitud 202106580 Solicitante INSTADEEP LTD Inventor/a KARIM BEGUIR
A method of selecting immunogens for inclusion in an immunogenic composition (vaccine) by identifying at least one variant of a reference (wild-type) immunogen. A language model is used to evaluate data from a plurality of variants and data representing the reference immunogen. A characteristic vector derived from an output feature map of a hidden layer of the language model is extracted. Dimension reduction is performed on each vector to generate a plurality of points, each point associated with a different variant. Clusters of variants are identified and a middle point for each cluster is calculated. A distance score for each variant is generated, derived from that variants vector and the middle point of at least one cluster of variants. A variant based on the distance score is identified and at least one immunogen is selected from at least one variant for inclusion in the vaccine. The variant can be identified using a pareto front. A further aspect is a method of making the vaccine composition using the above method. A further aspect is a vaccine created using the above method. The immunogen can be the spike protein of SARS-CoV-2. The immunogen can comprise SEQ ID Nos 1 to 10.

34.202247060722MALARIA TRANSMISSION-BLOCKING VACCINES
IN - 04.11.2022
Clasificación Internacional A61K / Nº de solicitud 202247060722 Solicitante PATH Inventor/a KING, C. Richter
Malaria transmission-blocking vaccines with good preservation stability and immunostimulatory action are provided. According the present invention, combination use of a pharmaceutical composition comprising

(4E,8E,12E,16E,20E)-N-{2-[{4-[(2-amino-4-{[(3S)-1-hydroxyhexan-3-yl]amino}-6-methylpyrimidin-5-yl)methyl]benzyl}(methyl)amino]ethyl}-4,8,12,17,21,25-hexamethylhexacosa-4,8,12,16,20,24-hexaeneamide, or a pharmaceutically acceptable salt thereof, as a vaccine adjuvant with enhanced specific immune response against antigens and good preservation stability and a malaria vaccine with non-glycosylation, homogeneity, and biological activity allow for the provision of malaria transmission-blocking vaccines with good preservation stability and immunostimulatory action.

35.20220347292HUMAN CYTOMEGALOVIRUS VACCINE
US - 03.11.2022
Clasificación Internacional A61K 39/245 Nº de solicitud 17641967 Solicitante ModernaTX, Inc. Inventor/a Lori Panther
Aspects of the invention relate to methods for producing an antigen-specific immune response to human cytomegalovirus (hCMV) in a subject by administering mRNA vaccines comprising hCMV antigenic polypeptides gH, gL, UL128, UL130, UL131 A and gB formulated in lipid nanoparticles, wherein the antigen-specific immune response to hCMV results in neutralizing antibodies that have i) a geometric mean titer of at least 3-fold against epithelial cell infection or ii) a geometric mean ratio of 9-41 against epithelial cell infection or iii) a geometric mean ratio of 4-8-fold against fibroblast infection.

36.202217037098TUMOR CELL VACCINES
IN - 04.11.2022
Clasificación Internacional A61K / Nº de solicitud 202217037098 Solicitante NEUVOGEN, INC. Inventor/a FERRARO, Bernadette
The present disclosure provides an allogeneic whole cell cancer vaccine platform that includes compositions and methods for treating and preventing cancer. Provided herein are compositions containing a therapeutically effective amount of cells from one or more cancer cell lines, some or all of which are modified to (I) inhibit or reduce expression of one or more immunosuppressive factors by the cells, and/or (II) express or increase expression of one or more immunostimulatory factors by the cells, and/or (ill) express or increase expression of one or more tumor-associated antigens (TAAs), including TAAs that have been mutated, and which comprise cancer cell lines that natively express a heterogeneity of tumor associated antigens and/or neoantigens. Also provided herein are methods of making the vaccine compositions, methods of preparing, and methods of use thereof.

37.20220347261GALECTIN-TARGETING IMMUNOTHERAPY
US - 03.11.2022
Clasificación Internacional A61K 38/16 Nº de solicitud 17726623 Solicitante VLP Therapeutics, Inc. Inventor/a Wataru AKAHATA
The present disclosure provides a virus like particle comprising a viral structural protein and a galectin epitope peptide, and a composition or vaccine comprising thereof, its use in a medicine, particularly in an immunotherapy.

38.4081534IMPFSTOFF ZUM SCHUTZ GEGEN STAPHYLOKOKKEN-EXOTOXIN
EP - 02.11.2022
Clasificación Internacional C07K 14/31 Nº de solicitud 21798731 Solicitante BIOMEDIZINISCHE FORSCHUNG & BIO PRODUKTE AG Inventor/a EIBL MARTHA M
A detoxified Staphylococcal Exotoxin B (SEB) toxin that is mutated to comprise at least two point mutations at amino acid positions 21 to 25 in the SEB toxin sequence SEQ ID NO:1, wherein said at least two point mutations comprise a deletion of any of aa21-22, aa22-23, aa23-24, aa24-25, aa21-23, aa22-24, or aa23-25, or at corresponding amino acid positions in any other naturally-occurring SEB toxin sequence that has at least 95% sequence identity to SEQ ID NO:1.

39.WO/2022/232218RECOMBINANT CEDAR VIRUS CHIMERAS

WO - 03.11.2022
Clasificación Internacional C12N 7/00 Nº de solicitud PCT/US2022/026456 Solicitante THE HENRY M. JACKSON FOUNDATION FOR THE ADVANCEMENT OF MILITARY MEDICINE, INC. Inventor/a BRODER, Christopher C.
Described herein are replication-competent recombinant Cedar virus chimeras are described that are engineered to express antigenic surface or soluble proteins/polypeptides of a non-CedV henipavirus, such as of a pathogenic henipavirus, such as Nipah virus or Hendra virus. Vaccine compositions containing the recombinant Cedar virus chimeras are also described, as are therapeutic methods and uses for protecting against pathogenic henipavirus infection.

40.20220354946TREATMENT OF INSECT BITE HYPERSENSITIVITY
US - 10.11.2022
Clasificación Internacional A61K 39/35 Nº de solicitud 17750896 Solicitante UNIVERSITÄT ZÜRICH Inventor/a Antonia FETTELSCHOSS
The present invention relates to compositions, immunogenic or vaccine compositions and pharmaceutical compositions for the prevention or treatment of insect bite 5 hypersensitivity of equine mammals, preferably of horses. Furthermore, the invention provides methods for preventing or treating insect bite hypersensitivity of equine mammals, preferably of horses.

41.WO/2022/232937SARS-COV-2 MULTI-EPITOPE VACCINES
WO - 10.11.2022
Clasificación Internacional A61K 39/12 Nº de solicitud PCT/CA2022/050705 Solicitante THE UNIVERSITY OF BRITISH COLUMBIA Inventor/a JEFFERIES, Wilfred
The present invention provides multi-epitope vaccines comprising or capable of expressing one or more concatemers of epitopes from a viral pathogen, namely, SARS-CoV-2. wherein at least a portion of the epitopes are from conserved viral proteins and wherein the vaccine comprises or expresses epitopes for all MHC I and MHC II alleles with a frequency > 1 % in the target population.

42.4082566NEUE VERWENDUNG EINER BCG-IMMUNOGENEN FORMULIERUNG ZUR EXPRESSION EINES RESPIRATORISCHEN SYNZITIALEN VIRUSPROTEINS GEGEN HMPV
EP - 02.11.2022
Clasificación Internacional A61K 39/04 Nº de solicitud 20906538 Solicitante UNIV PONTIFICIA CATOLICA CHILE Inventor/a KALERGIS ALEXIS
The invention relates to the novel use of an immunogenic formulation containing the bacillus Calmette-Guérin (BCG) strain at a concentration between 104-109 bacteria, expressing at least one protein or immunogenic fragment of respiratory syncytial virus (RSV, Human orthopneumovirus), in a pharmaceutically acceptable saline buffer solution because it serves to prepare a vaccine useful to prevent, treat, or attenuate human metapneumovirus (hMPV) infections.

43.20220347286INACTIVATED VACCINE FOR CHIKUNGUNYA VIRUS
US - 03.11.2022
Clasificación Internacional A61K 39/12 Nº de solicitud 17851813 Solicitante The Government of the United States, as Represented by the Secretary of the Army Inventor/a Stephen J. THOMAS
The disclosure generally provides a purified inactivated chikungunya virus (CHIKV), methods for producing the purified inactivated CHIKV, immunogenic compositions and vaccines comprising the purified inactivated CHIKV and methods for the prevention and/or treatment of infection by CHIKV.

44.WO/2022/232846METHODS AND COMPOSITIONS FOR LARGE-SCALE CONJUGATABLE POLYMER AND PROTEIN SYNTHESIS
WO - 03.11.2022

Clasificación Internacional B01J 16/00 Nº de solicitud PCT/US2022/072027 Solicitante LIGANDAL, INC. Inventor/a WATSON, Andre
Methods and compositions for manufacturing large-scale quantities of conjugatable peptides/peptoids/polymers/nucleic acids and conjugatable proteins, as well as hybrid materials consisting of synthetic and unnatural amino acids, glycopeptides, proteoglycans, and other molecular modifications are disclosed, for a variety of purposes including rapid antidote and vaccine applications in biodefense, therapeutics, diagnostics, theranostics, thin films, multilayered assemblies, biofilms, sensors, drug delivery vehicles, gene delivery vehicles, gene editing vehicles, staged release compounds, and the like.

45.4084820FUSIONSPROTEINE UND IHRE VERWENDUNGSVERFAHREN
EP - 09.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 20908778 Solicitante UNIV JOHNS HOPKINS Inventor/a YARCHOAN MARK
The invention features compositions and methods for treating and preventing cancer. In one aspect, isolated fusion proteins are provided that comprise a DNAJB1 portion and a PRKACA portion. In a further aspect, compositions are provided, including immunogenic compositions that comprise an isolated fusion protein comprising a DNAJB1 portion and a PRKACA portion. In a yet further aspect, a cancer vaccine is provided that comprises an isolated fusion protein comprising a DNAJB1 portion and a PRKACA portion.

46.202247060886ENHANCEMENT OF THE PRODUCTION OF ADENOVIRUS-BASED GENETRANSFER VECTORS
IN - 04.11.2022
Clasificación Internacional C12N / Nº de solicitud 202247060886 Solicitante GREFFEX, INC. Inventor/a STAERZ, Uwe, D.
In one aspect, the embodiments disclosed herein relate to the production of fully-deleted adenovirus-based gene delivery vectors packaged without the use of an adenoviral helper virus, and more particularly in their use in the transfer of genes and the expression of proteins, vaccine development, and cell engineering. In another aspect, the production of adenoviral vectors deleted of all adenoviral genes is described that carry genes of interest with detrimental or toxic activities to eukaryotic cells.

47.20220354943Therapeutic Agent Effectiveness and its Route of Adminstration
US - 10.11.2022
Clasificación Internacional A61K 39/145 Nº de solicitud 17634990 Solicitante Altimmune, Inc Inventor/a Vyjayanthi Krishnan
Disclosed herein are methods for generating a protective immunogenic response via intranasal administration of an immunogenic composition (e.g., vaccine)/therapeutic immunogenic composition in a mammalian subject. Certain dosing positions of the subject during the administration of immunogenic agents, such that nostrils are tilted upwards, while in a modified sitting, reclining and/or supine posture, is surprisingly correlated with the generation of a strong immunogenic response in both humans and animals.

48.WO/2022/232687MESSENGER RNA THERAPEUTICS AND COMPOSITIONS
WO - 03.11.2022
Clasificación Internacional A61K 39/215 Nº de solicitud PCT/US2022/027290 Solicitante GREENLIGHT BIOSCIENCES, INC. Inventor/a ABSHIRE, James Robbins
In the various aspects and embodiments, this disclosure provides messenger RNA (mRNA) constructs for therapeutic delivery, as well as methods for making such mRNA constructs and pharmaceutical compositions comprising the same (including mRNA vaccine compositions). In still other aspects, the invention provides methods for treating patients by expression of therapeutic proteins, including for

preventing or reducing probability of infection by, or illness involving, a virus. Exemplary viruses include coronaviruses (such as SARS-CoV-2 and variants therefore) and influenza viruses, among others.

49.202011056344EXPRESSION AND PURIFICATION OF RBD (RECEPTOR BINDING DOMAIN) OF CORONA VIRUS
IN - 04.11.2022
Clasificación Internacional C07K / Nº de solicitud 202011056344 Solicitante NATIONAL INSTITUTE OF IMMUNOLOGY Inventor/a Priyank Singhvi
EXPRESSION AND PURIFICATION OF RECEPTOR BINDING DOMAIN (RBD) OF CORONAVIRUSThe present invention relates to a process and a system for expression, purification and refolding of recombinant receptor binding domain (RBD) of coronavirus expressed as bacterial inclusion bodies. The process involves isolation of inclusion bodies, solubilization at alkaline pH followed by an acidic pH shock, refolding of solubilized protein and purification of refolded protein. The process has the potential to produce bioactive recombinant RBD in the cost-effective manner which can be further used for development of protein-based vaccine against COVID-19.

50.20220347294COMPOSITIONS AND METHODS FOR INCREASING THE EFFICACY OF IMMUNOTHERAPIES AND VACCINES
US - 03.11.2022
Clasificación Internacional A61K 39/39 Nº de solicitud 17762980 Solicitante The Regents of the University of Michigan Inventor/a James J. Moon
This invention relates generally to compositions and methods for increasing the efficacy of immunotherapies and vaccines. In particular, the present invention relates to elevating the richness and diversity of a subject's gut microbiome through administration of an agent (e.g., fiber containing prebiotic agent (e.g., epigallocatechin gallate (EGCG), fucoidan, potato starch, oligofructose and inulin)) (e.g., melatonin) with an immunotherapy or vaccine. Such compositions and methods are useful for treating cancer, infectious pathogens, autoimmune diseases, neurological disorders, and/or obesity.

51.20220347201CYCLIC DINUCLEOTIDES AS AGONISTS OF STIMULATOR OF INTERFERON GENE DEPENDENT SIGNALLING
US - 03.11.2022
Clasificación Internacional A61K 31/7084 Nº de solicitud 17809190 Solicitante Board of Regents, The University of Texas System Inventor/a Maria Emilia DI FRANCESCO
Disclosed herein are new cyclic dinucleotide compounds and compositions and their application as pharmaceuticals for the treatment of disease. Methods of modulation of immune response to disease, and induce Stimulator of Interferon Genes (STING) dependent type I interferon production and co-regulated genes in a human or animal subject are also provided for the treatment diseases such as cancer, particularly metastatic solid tumors and lymphomas, inflammation, allergic and autoimmune disease, infectious disease, and for use as anti-viral agents and vaccine adjuvants.

52.20220347289NUCLEOTIDE SEQUENCES ENCODING PEPTIDE ANTIGENS OF SARS-COV-2 VIRUS AND USE THEREOF
US - 03.11.2022
Clasificación Internacional A61K 39/215 Nº de solicitud 17260160 Solicitante GUANGZHOU N BIOMED LTD. Inventor/a Ling Chen
The present disclosure discloses nucleotide sequences as shown by SEQ ID NO: 1, SEQ ID NO: 2 and the nucleotide sequences having at least 90% homology therewith, which encode peptide antigens of SARS-CoV-2 virus. According to some embodiments of the present disclosure, the nucleotide sequences can be effectively expressed in human cells and produce the corresponding peptides, thereby inducing an

immune-protective response accordingly. Thus, the nucleotide sequences of the present disclosure are expected to be developed as a vaccine against SARS-CoV-2 infection.

53.WO/2022/236014NON-VIRAL DNA VECTORS FOR VACCINE DELIVERY
WO - 10.11.2022
Clasificación Internacional A61K 39/12 Nº de solicitud PCT/US2022/028019 Solicitante GENERATION BIO CO. Inventor/a SAMAYOA, Phillip
The application describes methods and compositions comprising ceDNA vectors useful for the expression of antigens and immunogenic peptides in a cell, tissue or subject, and methods of treatment and/or prevention of various infectious diseases, autoimmune disorders and cancers.

54.20220348630IMMUNOTHERAPY WITH B*07 RESTRICTED PEPTIDES AND COMBINATION OF PEPTIDES AGAINST CANCERS AND RELATED METHODS
US - 03.11.2022
Clasificación Internacional C07K 14/725 Nº de solicitud 17743771 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.

55.20220356208PEPTIDES AND COMBINATION THEREOF FOR USE IN THE IMMUNOTHERAPY AGAINST CANCERS
US - 10.11.2022
Clasificación Internacional C07K 7/06 Nº de solicitud 17860821 Solicitante Immatics Biotechnologies GmbH Inventor/a Juliane Sarah WALZ
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.

56.20220356227PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST OVARIAN CANCER AND OTHER CANCERS
US - 10.11.2022
Clasificación Internacional C07K 14/74 Nº de solicitud 17350879 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.

57.20220348622NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST LUNG CANCER, INCLUDING NSCLC, SCLC AND OTHER CANCERS
US - 03.11.2022
Clasificación Internacional C07K 14/47 Nº de solicitud 17860827 Solicitante Immatics Biotechnologies GmbH Inventor/a Colette SONG
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.

58.20220348621NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST LUNG CANCER, INCLUDING NSCLC, SCLC AND OTHER CANCERS
US - 03.11.2022
Clasificación Internacional C07K 14/47 Nº de solicitud 17860600 Solicitante Immatics Biotechnologies GmbH Inventor/a Colette SONG
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.

59.20220354936NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST VARIOUS CANCERS
US - 10.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 17345517 Solicitante Immatics Bioechnologies 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.

60.4082562POLYPEPTIDE, DIE MUTIERTE FORMEN DES MENSCHLICHEN VEGF-A MIT NEUANORDNUNGEN VON DISULFIDBINDUNGEN UMFASSEN UND ZUSAMMENSETZUNGEN, DIE DIESELBEN ENTHALTEN
EP - 02.11.2022
Clasificación Internacional A61K 39/00 Nº de solicitud 20905192 Solicitante CT INGENIERIA GENETICA BIOTECNOLOGIA Inventor/a BEQUET ROMERO MÓNICA
Polypeptides comprising functional mutants of an isoform of the human vascular endothelial growth factor A (VEGF-A) folded in a non-natural re-arrangement, where the second and fourth cysteine of the mutant's polypeptide chain is only forming intramolecular bridges, while the seventh and eight are only part of intermolecular bonds. The invention further comprises antigenic preparations containing at least one of

these polypeptides, and the pharmaceutical compositions comprising such antigenic preparations and vaccine adjuvants. The antigenic preparations according to the invention are used in the manufacturing of a drug, for the treatment of diseases related to the increment of angiogenesis, inflammation, and immunosuppression, as well as for the restoration of the immune system.

61.20220356220NOVEL PEPTIDES AND COMBINATION OF PEPTIDES AND SCAFFOLDS THEREOF FOR USE IN IMMUNOTHERAPY AGAINST COLORECTAL CARCINOMA (CRC) AND OTHER CANCERS
US - 10.11.2022
Clasificación Internacional C07K 14/47 Nº de solicitud 17345457 Solicitante Immatics Biotechnologies GmbH Inventor/a Oliver SCHOOR
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.

62.20220347285ATTENUATED DENGUE VIRUSES
US - 03.11.2022
Clasificación Internacional A61K 39/12 Nº de solicitud 17621125 Solicitante CODAGENIX INC. Inventor/a Steffen Mueller
The present invention provides for modified Flavivirus such as a modified dengue virus type 1, 2, 3, 4, a combination of these, or a tetravalent combination of these. The modification according to various aspects of the invention results in reduced viral protein expression compared to a parent virus, wherein the reduction in expression is the result of recoding one or more regions of the virus. For example, the prM, or envelope (E) region can be recoded. In various embodiments one or more regions are recoded by reducing the codon pair bias or codon usage bias of the protein-encoding sequence. These modified Flaviviruses are used as vaccine compositions to provide a protective immune response.

63.20220347447Personal medical device for administering treatment via mucous membrane
US - 03.11.2022
Clasificación Internacional A61M 31/00 Nº de solicitud 17226043 Solicitante Andrada I Bucataru Inventor/a Andrada I Bucataru
The current pandemic due to Covid-19 stresses the importance of effectively treating highly contagious and deadly infections. The described medical device is meant to help the medical community by enabling them to treat patients more effectively. The delivery mechanism focuses on the mucous membrane. It is noninvasive and easy to use by patients directly. The device is hand-held, with incorporated germicidal UVC lights. It has two chambers connected by an internal application tip. The tip connects to a removable container which can be used with the prescribed treatment/therapy, vaccine, or viral testing fluid/reagent, as needed. Due to its versatility, non-invasive nature and germicidal properties, this device supports rapid response to infectious diseases, such as COVID-19. It may also further promote the development and use of different inoculation and drug techniques and delivery systems by enabling easy administration, via the mucous membrane.

64.WO/2022/226594THERMALLY STABLE VACCINE FORMULATIONS UTILISING METAL ORGANIC FRAMEWORK (MOF) SHELLS
WO - 03.11.2022

Clasificación Internacional A61K 47/34 Nº de solicitud PCT/AU2022/050390 Solicitante COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION Inventor/a SINGH, Ruhani
The present application relates to metal-organic framework (MOF) encapsulation or viral vaccines and vectors. The present application discloses methods for stabilizing viral vaccines and vectors and provides MOF encapsulated viral vaccines and vectors with improved stability.

65.20220347097VACCINE FOR ELICITING IMMUNE RESPONSE COMPRISING LIPID FORMULATIONS AND RNA ENCODING MULTIPLE IMMUNOGENS
US - 03.11.2022
Clasificación Internacional A61K 9/127 Nº de solicitud 17848299 Solicitante GLAXOSMITHKLINE BIOLOGICALS SA Inventor/a Andrew Geall
Provided are vaccines for eliciting an immune response. The vaccines for eliciting an immune response comprise RNA encoding an immunogen, which is delivered in a liposome for the purposes of immunisation. The liposome includes lipids which have a pKa in the range of 5.0 to 7.6 and, preferably, a tertiary amine. These liposomes can have essentially neutral surface charge at physiological pH and are effective for immunisation.

66.2606364Immunogen identification and categorisation
GB - 09.11.2022
Clasificación Internacional G16B 40/30 Nº de solicitud 202106376 Solicitante INSTADEEP LTD Inventor/a ALEXANDER MUIK
A method of selecting variants of a reference immunogen for preparing an immunogenic composition (vaccine). The reference immunogen is a wild-type immunogen. A language model is used to evaluate data from a plurality of variants and the reference immunogen. A characteristic vector derived from an output feature map of a hidden layer of the language model is extracted. Dimension reduction is performed on each vector to generate a plurality of points in a lower dimensional space, each point associated with a different variant. Clusters of variants are identified. For each cluster a measure of distance to the reference immunogen is generated. A score is generated for each variant in the cluster based partly on the generated distance for that cluster. A variant of the reference immunogen is selected, based partly on the generated scores. The score can be based on a generated epitope score. An ensemble of language models can be used. The data can represent a protein sequence of the variant. The language model can be a recurrent neural network or a transformer-based language model. The measure of distance can be L1 distances. Further aspects are immunogenic compositions and a method of performing trend analysis using the above method.

67.20220355089CORE-SHELL MICRONEEDLE PLATFORM FOR TRANSDERMAL AND PULSATILE DRUG/VACCINE DELIVERY AND METHOD OF MANUFACTURING THE SAME
US - 10.11.2022
Clasificación Internacional A61M 37/00 Nº de solicitud 17871490 Solicitante University of Connecticut Inventor/a Thanh D. Nguyen
A core-shell microneedle system and a method of manufacturing the microneedle system provides a pulsatile drug delivery system which is programmed to release drugs/vaccines at predictable times using biodegradable polymers and with controllable dosages. This microneedle system can be fully embedded into the skin and then release drugs/vaccines as sharp bursts in a timely manner, similar to multiple bolus injections.

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