

# VacCiencia

Boletín Científico

No. 27 (23-30 noviembre / 2022)



## EN ESTE NÚMERO

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

- Resumen de la información publicada por la OMS sobre 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.

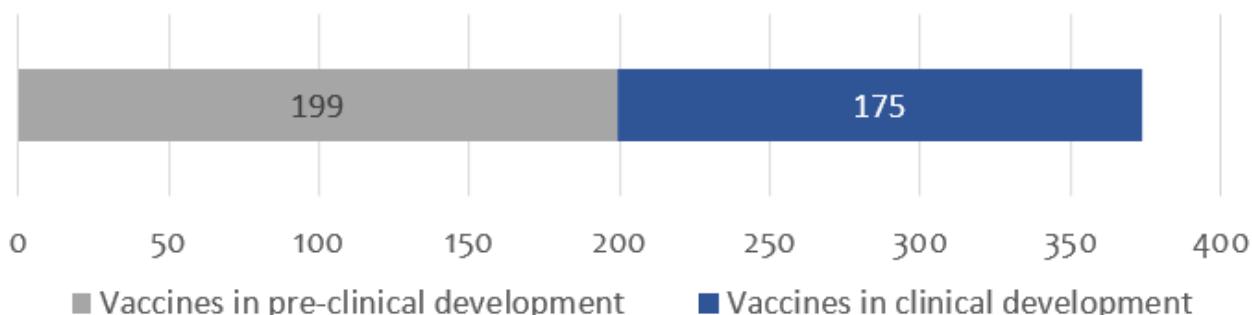
# Resumen de la información publicada por la OMS sobre los candidatos vacunales contra la COVID-19 en desarrollo a nivel mundial

Última actualización por la OMS: 23 de noviembre de 2022.

Fuente de información utilizada:



**175 Vacunas en evaluación clínica y 199 en evaluación preclínica**



## Candidatos vacunales en evaluación clínica por plataforma

| Platform   | Candidate vaccines (no. and %)                 |
|------------|--|
| PS         | Protein subunit 56 32%                         |
| VVnr       | Viral Vector (non-replicating) 23 13%          |
| DNA        | DNA 16 9%                                      |
| IV         | Inactivated Virus 22 13%                       |
| RNA        | RNA 41 24%                                     |
| VVr        | Viral Vector (replicating) 4 2%                |
| VLP        | Virus Like Particle 7 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% |

175

## Candidatos vacunales por vía de administración

| Route of administration |     |     |  |
|-------------------------|-----|-----|--|
| Oral                    | 5   | 3%  |  |
| Injectable              | 158 | 90% |  |
| SC                      | 5   | 3%  |  |
| ID                      | 9   | 5%  |  |
| IM                      | 144 | 82% |  |
| IN                      | 14  | 8%  |  |
| AE                      | 1   | 1%  |  |
| IH                      | 2   | 1%  |  |
| TBD / No Data (ND)      | 12  | 7%  |  |

## Número de dosis de los candidatos vacunales en evaluación clínica

| Number of doses & schedule | Candidate vaccines (no. and %) |            |
|----------------------------|--------------------------------|------------|
| <b>1 dose</b>              | <b>42</b>                      | <b>24%</b> |
| Day 0                      | 42                             |            |
| <b>2 doses</b>             | <b>98</b>                      | <b>56%</b> |
| Day 0 + 14                 | 8                              |            |
| Day 0 + 21                 | 35                             |            |
| Day 0 + 28                 | 55                             |            |
| <b>3 doses</b>             | <b>2</b>                       | <b>1%</b>  |
| Day 0 + 28 + 56            | 2                              |            |
| <b>TBD / No Data (ND)</b>  | <b>33</b>                      | <b>19%</b> |

## 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    |
| CanSino Biological Inc./China                                    | Vector viral no replicativo | Intranasal            | 3    |
| Vaxart/Estados Unidos  | Vector viral no replicativo | Oral                  | 2    |
| Univ. Hong Kong, Xiamen Univ./Beijing 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    |
| Intravacc B.V/Holanda  | Vector viral no replicativo | Subunidad proteica    | 1    |

## Candidatos vacunales en fase 4 de evaluación clínica

| Candidatos vacunales más avanzados/fabricante/país                      | Plataforma de la vacuna     |
|---|-----------------------------|
| Sinovac/China   | Virus Inactivado            |
| Sinopharm/Beijing Institute of Biological Products/China                | Virus Inactivado            |
| University of Oxford/AstraZeneca/Reino Unido                            | Vector viral no replicativo |
| CanSino Biological Inc./Beijing Institute Biotechnology/China (IM e IH) | Vector viral no replicativo |
| Janssen Pharmaceutical Companies/Estados Unidos                         | Vector viral no replicativo |
| Moderna/NIAID/Estados Unidos  | ARN                         |
| Pfizer/BioNTech Fosun Pharma/Estados Unidos                             | ARN                         |
| Medigen Vaccine Biol./Dynavax/NIAID/Taiwán/EE.UU                        | Subunidad proteica          |

## Candidatos vacunales mucosales en evaluación clínica

| Candidatos vacunales más avanzados/fabricante/país                       | Plataforma de la vacuna          |
|--|----------------------------------|
| Gamaleya Research Institute/Rusia  | Vector viral no replicativo      |
| Novavax/Estados Unidos   | Subunidad proteica               |
| Anhui Zhifei Longcom Biopharmac./Inst. Microbiol, Chin Acad Sci/China    | Subunidad proteica               |
| CureVac AG/Alemania  | ARN                              |
| Institute of Medical Biology/Chinese Academy of Medical Sciences         | Virus inactivado                 |
| Research Institute for Biological Safety Problems, Kazakhstan            | Virus inactivado                 |
| Inovio Pharmac. + Intern. Vacc Inst. + Advaccine Biopharm Co., Ltd       | ADN                              |
| Zydus Cadila Healthcare Ltd./India                                       | ADN                              |
| Bharat Biotech International Limited/India                               | Virus Inactivado                 |
| Sanofi Pasteur + GSK/Francia/Gran Bretaña                                | Subunidad proteica               |
| Shenzhen Kangtai Biological Products Co., Ltd./China                     | Virus Inactivado                 |
| Clover Biopharmaceuticals Inc./GSK/Dynavax/China/Reino Unido/EE.UU       | Subunidad proteica               |
| Vaxine Pty Ltd. + CinnaGen Co./Australia, Irán                           | Subunidad proteica               |
| Instituto Finlay de Vacunas/Cuba   | Subunidad proteica               |
| Federal Budget Res Inst State Res Cent Virol Biotechnol "Vector"/Rusia   | Subunidad proteica               |
| West China Hospital + Sichuan University/China                           | Subunidad proteica               |
| Vaxinity/EE.UU   | Subunidad proteica               |
| Univ. Hong Kong, Xiamen Univ. & Beijing Wantai Biological Pharm./China   | Vector viral replicativo         |
| Acad Milit Sci (AMS) Walvax Biotechnol, Suzhou Abogen Biosci/China       | ARN                              |
| Medicago Inc./Canadá   | Partícula similar a virus        |
| Codagenix/Serum Institute of India                                       | Virus vivo atenuado              |
| Center for Genetic Engineering and Biotechnology (CIGB)/Cuba             | Subunidad proteica               |
| Valneva, National Institute for Health Research, Reino Unido             | Virus inactivado                 |
| Biological E. Limited/India  | Subunidad proteica               |
| Nanogen Pharmaceutical Biotechnology/Vietnam                             | Subunidad proteica               |
| Shionogi/Japón   | Subunidad proteica               |
| Erciyes University/Turquía   | Virus inactivado                 |
| SK Bioscience Co., Ltd./CEPI/Corea del Sur/Noruega                       | Subunidad proteica               |
| Razi Vaccine and Serum Research Institute/Irán, India                    | Subunidad proteica               |
| Bharat Biotech International Limited/India                               | Vector viral no replicativo (IN) |
| Providence Therapeutics/Canadá   | ARN                              |
| POP Biotechnologies and EuBiologics Co.,Ltd/EEUU, Corea del Sur          | Subunidad proteica               |
| Jiangsu Rec-Biotechnology/China  | Subunidad proteica               |
| Radboud University/Holanda   | Partícula similar a virus        |
| Arcturus Therapeutics, Inc./Estados Unidos                               | ARN                              |
| Livzon Pharmaceutical/China  | Subunidad proteica               |
| National Vaccine and Serum Institute, China; Beijing Zhong Sheng Heng Yi | Subunidad proteica               |
| KM Biologics Co., Ltd./Japón   | Virus inactivado                 |
| Shanghai East Hospital and Stemirna Therapeutics/China                   | ARN                              |
| Bagheiat-allah University of Medical Sciences/AmitisGen/Irán             | Subunidad proteica               |
| Laboratorios Hipra, S.A./España  | Subunidad proteica               |
| Sinocelltech Ltd./China  | Subunidad proteica               |
| Chumakov Federal Scientific Center for Research/Rusia                    | Virus Inactivado                 |
| Airlangga University/Indonesia   | Virus Inactivado                 |
| PT Bio Farma/Indonesia   | Subunidad proteica               |
| AIM Vaccine and Liverna Therapeutics/China                               | ARN                              |
| China National Biotec Group Company Limited                              | Virus inactivado                 |

## Noticias en la Web

### Measles is an 'imminent threat' worldwide, CDC and WHO report finds

**Nov 23.** Measles is an "imminent threat" around the world, according to a new joint report released Wednesday by the Centers for Disease Control and Prevention and the World Health Organization.

Despite a two-dose vaccine that is more than 97% effective at preventing infection being available for decades, gains made at beating back the potentially dangerous childhood disease have been lost during the COVID-19 pandemic.

The report found that in 2021, nearly 40 million children -- a record-high -- missed a dose of the measles vaccine. Specifically, 25 million missed their first dose and 14.7 million missed their second dose.

"The paradox of the pandemic is that while vaccines against COVID-19 were developed in record time and deployed in the largest vaccination campaign in history, routine immunization programs were badly disrupted, and millions of kids missed out on life-saving vaccinations against deadly diseases like measles," said Dr. Tedros Adhanom Ghebreyesus, WHO Director-General, in a statement.

"Getting immunization programs back on track is absolutely critical. Behind every statistic in this report is a child at risk of a preventable disease," the statement continued.

To prevent the disease from spreading and to achieve herd immunity, the CDC and WHO say at least 95% of children need to receive the vaccine.

However, just 81% of children globally have received the first dose and 71% have received the second dose, the lowest coverage worldwide seen since 2008.

Consequently, there were 9 million cases of measles and 128,000 deaths around the world with at least 22 countries experiencing "large and disruptive outbreaks."

"The record number of children under-immunized and susceptible to measles shows the profound damage immunization systems have sustained during the COVID-19 pandemic," CDC Director Dr. Rochelle Walensky said in a statement.

"Measles outbreaks illustrate weaknesses in immunization programs, but public health officials can use outbreak response to identify communities at risk, understand causes of under-vaccination, and help deliver locally tailored solutions to ensure vaccinations are available to all."

No region of the world has achieved and sustained measles elimination, the report found. Since 2016, at least 10 countries that had previously eliminated measles reported outbreaks – including the U.S.

Measles is an incredibly contagious disease. According to the CDC, one infected patient can infect at least 10 close contacts who are not protected either through masking or vaccination.



*Sick child with red rash spots from measles. Bilanol/Getty Images/iStockphoto*

Measles complications can range from non-threatening, including rashes, to severe, such as viral sepsis, pneumonia or brain swelling.

Prior to the measles vaccine, an estimated 3 to 4 million Americans were infected annually with measles, 48,000 were hospitalized and 400 to 500 died, the CDC says.

"Plummeting measles vaccination rates should set off every alarm," Elizabeth Cousens, president and CEO of the United Nations Foundation, said in a statement. "Tens of millions of children are at risk of this deadly, yet entirely preventable disease until we get global vaccination efforts back on track. There is no time to waste. We must work urgently to ensure life-saving vaccines reach every last child."

Fuente: abc News. Disponible en <https://abcn.ws/3OP5jjX>

## **La verdad sobre el sangrado menstrual abundante tras ponerse las vacunas COVID**

**23 nov.** Un informe concluye el impacto de las vacunas ARNm (Pfizer y Moderna) frente a la COVID-19 en los ciclos menstruales tras la inoculación.

La Agencia Española de Medicamentos y Productos Sanitarios (AEMPS) ha estimado oportuna la publicación de un informe que analiza el impacto de las vacunas ARNm (Pfizer y Moderna) frente a la covid en la abundancia del sangrado menstrual, un fenómeno aparatoso de por sí, que cuando sobreviene de manera imprevista y cercana a un episodio inusual como una vacunación puede crear la lógica preocupación entre las mujeres que se hayan sometido a ese proceso de inmunización.



Tras los datos ofrecidos por los correspondientes ensayos clínicos, además de los extraídos de los programas de notificación espontánea de acontecimientos adversos tras la vacunación y los procedentes de la literatura médica. El Comité para la Evaluación de Riesgos en Farmacovigilancia Europeo (PRAC) de la Agencia Europea de Medicamentos (EMA) ha concluido que existe una posibilidad razonable de que la aparición de sangrado menstrual abundante esté relacionada con la administración de estas vacunas de ARNm.

### **El impacto en la fertilidad y la reproducción**

La alarma relacionada con este suceso no se centra exactamente en el mayor sangrado, ya que se ha comprobado que son episodios transitorios y sin una frecuencia de aparición concreta. La mayor preocupación, relacionada con el impacto en la fertilidad y la reproducción, no ha registrado ninguna evidencia. Además, el PRAC sigue considerando positivo el balance entre beneficio y riesgos de ambas vacunas.

### **Ausencia menstrual o duración del ciclo menstrual tras la vacuna COVID**

Hasta el pasado 9 de octubre se registraron en España 921 notificaciones de este trastorno tras la administración de Pfizer y 299 notificaciones con Moderna en mujeres de entre 12 y 49 años, con 15,6

millones de dosis de la primera y 6,2 millones de la segunda en ese mismo segmento de población. También se estudió la posible relación entre estas vacunas y la ausencia de menstruación (amenorrea), sin hallar evidencias de relación entre ambos hechos. La revista 'Science' se hizo eco de otros estudios, realizados tanto en Estados Unidos como en Noruega, que hablaban de casos de leve aumento en la duración del ciclo menstrual tras la vacunación anticovid; no obstante, se trata de episodios puntuales que desaparecen al cabo de dos ciclos.

Fuente: Heraldo Saludable. Disponible en <https://bit.ly/3P00mVt>

## Panama to donate 30,000 COVID-19 vaccines to Bahamas

**Nov 24.** Panamanian government has recently authorized to donate about 30,000 Pfizer vaccines to the Bahamas in order to fight off the Covid-19 pandemic, Panama's Health Minister Luis Francisco Sucre said on Thursday.

In response to questions from Prensa Latina News Agency, after attending an event to commemorate the International Children's Day, Francisco Sucre enlightened this new donation to The Bahamas will be possible following Panama had reached high immunization levels.

To date, Sucre stated, 85% of population has received at least one Covid-19 shot, 80% has received two doses, nearly 70% has received three doses and at least 45% has been fully vaccinated. These indicators will continue to rise.

For 1Q 2023, Sucre added, Panamanian President Laurentino Cortizo authorized to purchase mixed vaccines from the Pfizer pharmaceutical company, which would reinforce the country's present immunization program.

It would be mean and selfish if we have the possibility of aiding brotherly peoples to provide them with these doses, especially if they request collaboration with certain haste, he said.

Our collaboration is not only about vaccines, it is also important to share knowledge and strategies to reach current outcomes, Cortizo stressed.

At the same time, he reaffirmed Panama will receive 72,000 other Pfizer doses before the end of the year.

Sucre highlighted that both the World Health Organization (WHO) and the Pan American Health Organization (PAHO) have praised the vaccination levels achieved by Panama.



Fuente: Prensa Latina. Disponible en <https://bit.ly/3FfaiHn>

## Omicron boosters probably aren't very effective against mild Covid illness, but will likely prevent hospitalizations, experts say

**Nov 25.** The new omicron Covid boosters probably aren't very effective at preventing Covid infections and mild illness, but they will likely help keep the elderly and other vulnerable groups out of the hospital this winter, experts say.

The Centers for Disease Control and Prevention, in a real-world study published this week, found the boosters are less than 50% effective against mild illness across almost all adult age groups when compared to people who are unvaccinated.



For seniors, the booster was 19% effective at preventing mild illness when administered as their fourth dose, compared to the unvaccinated. It was 23% effective against mild illness when given as their fifth dose.

Though the vaccine's effectiveness against mild illness was low, people who received the boosters were better off than those who did not. The booster increased people's protection against mild illness by 28% to 56% compared to those who only received the old shots, depending on age and when they received their last dose.

The Food and Drug Administration authorized the boosters in late August with the goal of restoring the high levels of protection the vaccines demonstrated in late 2020 and early 2021. At that time, the shots were more than 90% effective against infection. But the first real-world data from the CDC indicates that the boosters aren't meeting those high expectations.

"The boosters give you some additional protection but it's not that strong, and you shouldn't rely on it as your sole protective device against infection," said John Moore, a professor of microbiology and immunology at Weill Cornell Medical College.

Moore said people at higher risk from Covid have every reason to get a booster since it modestly increases protection. But he said common sense measures such as masking and avoiding large crowds remain important tools for vulnerable groups since the boosters aren't highly effective against infection.

The CDC study looked at more than 360,000 adults with healthy immune systems who tested for Covid at retail pharmacies from September to November when omicron BA.5 was dominant. The participants received either the booster, got two or more doses of the old shots or they were unvaccinated. It then compared those who tested positive for Covid with those who did not.

The study did not evaluate how well the boosters performed against severe disease, so it's still unclear whether they will provide better protection against hospitalization than the old shots. The CDC in a statement said it will provide data on more severe outcomes when it becomes available.

Andrew Pekosz, a virologist at Johns Hopkins University, said the fact that the shots are providing some protection against infection in an era of highly immune evasive omicron subvariants is a good sign that they will provide strong protection against hospitalization. The vaccines have always performed better against severe disease than mild illness, he said.

"It's better than nothing. Certainly, it doesn't sort of show that the protection is incredibly high against infection," Pekosz said. "I would expect that you would then see even greater protection from hospitalization or death."

Dr. Paul Offit, a member of the FDA's vaccine advisory committee, said trying to prevent mild illness is not a viable public health strategy because the antibodies that block infection simply wane over time.

"Protection against mild disease just isn't that good in the omicron subvariant era. The goal is protecting against severe disease," said Offit, an infectious disease expert at Children's Hospital of Philadelphia who helped develop the rotavirus vaccine.

Dr. Celine Gounder, a senior public health fellow at the Kaiser Family Foundation, said she's not alarmed by the data. Reducing risk by even a modest amount at the individual level can have a significant positive effect on public health at the population level.

"If you can reduce risk among the elderly by even 30%, even 20%, that is significant when 90% of the COVID deaths are occurring in that group," Gounder said. "For me, what's really gonna matter is are you keeping that 65 year old out of the hospital."

The boosters, called bivalent vaccines, target both omicron BA.5 and the original Covid strain that first emerged in Wuhan, China in 2019. The original shots, called monovalent vaccines, only include the first Covid strain.

It's still unclear how the boosters will perform against more immune evasive omicron subvariants, such as BQ.1 and BQ.1.1, which are now dominant in the U.S. Pfizer and Moderna last week said early clinical trial data shows the boosters induce an immune response against these subvariants.

About 11% of those eligible for the new booster, or 35 million people, have received it so far, according to CDC data. About 30% of seniors have received the shot.

Fuente: CNBC. Disponible en <https://cnb.cx/3OUhfRB>

## **México recibió primer embarque de vacuna cubana Abdala antiCovid-19**

**26 nov.** El primer embarque de la vacuna cubana antiCovid-19 consistente en cuatro millones 92 mil 500 dosis envasadas que se aplicarán a personas adultas ya está en México, anunció Salud Pública.

El medicamento llegó después que fuera aprobado su uso emergente por la Comisión Federal para la Protección contra Riesgos Sanitarios (Cofepris), que hace casi un año, el 29 de diciembre de 2021, dictaminó procedente la autorización para uso de emergencia de Abdala, con la denominación distintiva: proteína recombinante del dominio de la unión al receptor del virus del SARS-CoV-2.

El fármaco fue trasladado desde La Habana, Cuba, al Aeropuerto Internacional «Felipe Ángeles» (AIFA), en Zumpango, Estado de México, en un avión Hércules de la Fuerza Área Mexicana, informó una nota de Salud Pública.

Agrega que en el arribo, traslado y seguridad de las dosis participó personal de Laboratorios de Biológicos y Reactivos de México (Birmex), del Centro Nacional para la Salud de la Infancia y la Adolescencia (Censia) y de la Comisión Federal para la Protección contra Riesgos Sanitarios (Cofepris), así como elementos del Ejército Mexicano y de la Guardia Nacional.



Con las dosis de Abdala que llegaron, y desde el primer embarque de otros laboratorios que arribó al país el 23 de diciembre del 2020 para su intenso programa de vacunación, México ha recibido un total de 193 millones 231 mil 845 envasadas de Pfizer-BioNTech, AstraZeneca, Sinovac, Centro Nacional de Investigación de Epidemiología y Microbiología Gamaleya, CanSino Biologics, Johnson & Johnson, Moderna y ahora la cubana.

Asimismo, en territorio mexicano, el laboratorio Drugmex ha envasado 14 millones 24 mil 840 dosis de CanSino Biologics, y el laboratorio Liomont 42 millones 991 mil 100 biológicos de AstraZeneca, lo que hace un total de 57 millones 15 mil 940 vacunas envasadas en el país, detalla la nota.

En suma, desde el 23 de diciembre de 2020 México ha tenido disponibles 250 millones 247 mil 785 biológicos. Hasta hoy se han recibido 217 embarques en 231 vuelos.

Fuente: Prensa Latina. Disponible en <https://bit.ly/3ORoVns>

## **EEUU investiga XBB, nueva variante de COVID-19**

**27 nov.** Los Centros para el Control y la Prevención de Enfermedades (CDC) investigan hoy una nueva variante de COVID-19 conocida como XBB, que representa el tres por ciento de todas las nuevas infecciones en Estados Unidos.

La prevalencia de la cepa crece más hasta ahora en el noreste, según las estimaciones de la agencia, pues genera más del cinco por ciento de los contagios en las regiones que van desde Nueva Jersey hasta Maine.

XBB está detrás de una gran cantidad de infecciones en algunos países del sur de Asia, y forma una parte

cada vez mayor de las secuencias de virus informadas de todo el mundo y de los viajeros internacionales que llegan.

Los CDC divulgaron estimaciones preliminares que sugerían cómo XBB podría duplicarse en proporción cada 12 días, un ritmo más rápido si se le compara con las variantes BQ.1 y BQ.1.1, ahora dominantes en el país.

Sin embargo, los principales funcionarios y expertos de la administración del presidente Joe Biden, dicen que no ven en XBB una amenaza similar a la variante Omicron surgida hace un año.

Acorde con la fuente, la variante BA.5 se redujo a menos de una de cada cinco nuevas infecciones en todo el país y BA.4 está prácticamente desaparecida.



Nombrada por primera vez por científicos en septiembre pasado, se cree que XBB es una combinación de dos subvariantes diferentes de Omicron, BA.2.10.1 y BA.2.75, que surgieron a principios de este año.

Es la última de una multitud de cepas ahora dominantes que portan mutaciones con la posibilidad de evadir los medicamentos clave de anticuerpos de COVID-19.

Sin embargo, a juicio de Derek Smith, director del Centro para la Evolución de Patógenos de la Universidad de Cambridge, no parece que sea particularmente más grave en comparación con otras variantes.

Fuente: Cubadebate. Disponible en <https://bit.ly/3iu7jC5>

## **A new generation of COVID-19 vaccine, or running out of steam? Here's how experts see the pandemic ending**

**Nov 27.** Will it end with a new generation, a future-proof vaccine or will the virus keep mutating until it eventually runs out of steam?

Two-and-a-half-years in and Australia is in the grip of a fourth COVID-19 wave. It's predicted to be shorter and sharper than before, but it will not be the last.

So what will the end look like? Experts differ on what will finally bring this pandemic to a close.

### **Future-proofing vaccines**

Deborah Burnett is on a team at Garvan Institute of Medical Research working on a transmission-blocking or "universal" vaccine.

Since the first variants were identified in late 2020, COVID-19 has mutated to produce multiple variants and subvariants, putting us in what some call a "COVID soup".

New subvariants appear more likely to evade current vaccines (although the vaccines we have now are still extremely effective at preventing serious illness and death).

A "variant-proof" vaccine would target a part of the virus which cannot easily mutate, making it effective against not just the variants we have had so far, but future ones, too, Dr Burnett says.

"There was this idea of herd immunity and, at first, people thought that, maybe, you could get that from natural infection, and then people thought you could get that from vaccines," she says.

"But, unfortunately, the virus has found a way around that by mutating."

In an article in the Lancet medical journal earlier this year, Annelies Wilder-Smith from the London school of hygiene and tropical medicine wrote that, until we have new vaccines that protect against transmission, "public health and social measures will still need to be tailored towards mitigating community and household transmission in order to keep the pandemic at bay".

The team at the Garvan Institute have developed a tool to test and triage multiple vaccines from labs around Australia, to select the most-effective ones, and have seen "promising results" from pre-clinical trials, Dr Burnett said.

"We're really hoping that, in the next year or two, there is a vaccine available that effectively ends transmission so it will finally be over."

### 'Running out of ways to mutate'

Professor Robert Booy thinks we are nearing the end of the pandemic — but says it won't come about because of a transmission-blocking vaccine.

"This new wave is a conglomeration of a whole bunch of subvariants but they're still Omicron — in 12 months we haven't had a new variant, we've just had mutations," Professor Booy, an infectious disease and vaccine expert, says.

The Omicron variant of the SARS-CoV-2 virus has been the only "variant of concern" since Delta was downgraded in June this year.

And, in the year or so since Omicron was first detected, it's spun off into more than 300 subvariants (which we know of).

"My most likely conclusion is to go 12 months without changing variants suggests that the virus is running out of ways to mutate," Professor Booy says.

"And it's quite clear also that the new infections and the new waves are resulting in less severe diseases and I think that's because we've got hybrid immunity — a combination of vaccine-induced and wild virus-induced immunity."

Vaccinations — and boosters for people who are eligible — still matter, and will "make a real difference" in riding out the latest wave, Professor Booy says.

The current vaccines have dramatically reduced serious illness, and adults with severely compromised immune systems can now get a fifth dose (and there is a push to widen eligibility as cases rise).



*Dr Deborah Burnett says a universal vaccine could end the pandemic. (Supplied: Garvan Institute)*

And new vaccines are still coming out, including shot-free vaccines and variant-specific boosters.

There are also currently 175 vaccines in clinical development.

### 'Time for community mandates has past'

COVID-19 will "fizzle out" and, like the common cold, become a virus we get at a young age, says James Trauer, an associate professor at Monash University's school of public health and preventative medicine.

"Children born today, who start getting their first exposure before they hit school, it's not going to be an issue for them."

Because of this, he says, community-wide mandates are no longer needed.

"I don't see any role to reducing community-wise transmission. I think we still need to look at reducing transmission in high-risk settings, [such as] hospital and aged care [but] the sort of controls we would need to put in place to reduce community-wide transmission are just not acceptable to people now and not really necessary either."

"The exception to that could be if we're suddenly hit by a bad variant — but, with each month that doesn't happen, we can be a little more comfortable that it's not just around the corner."

He says the focus should shift ahead to the next pandemic.

"We do need to look at sustainable interventions that can protect us from future pandemics and just improve respiratory health generally and strengthen our public health system, and work on social determinants of health, [such as] air quality and building ventilation."

Fuente: abc News. Disponible en <https://ab.co/3gNleCV>

## **OMS sustituye término de viruela del mono por "mpox" para evitar opiniones racistas**

28 nov. La Organización Mundial de la Salud (OMS) afirmó este lunes que comenzará a utilizar el término "mpox" para referirse a la viruela del mono en aras de evitar opiniones racistas y estigmatizantes.

El ente sanitario internacional de Naciones Unidas señaló que "ambas denominaciones se utilizarán simultáneamente durante un año mientras se elimina progresivamente viruela del mono".

En este sentido, la OMS apuntó que cuando se extendió el brote de viruela del mono a inicios del presente año "se observó y se informó a la OMS de un lenguaje racista y estigmatizante 'on line', en otros entornos y en algunas comunidades".

A partir de ello, varias delegaciones manifestaron en varios encuentros, tanto públicos como privados, su preocupación al respecto y solicitaron a la OMS una vía para cambiar la denominación.



En consonancia, la OMS incluirá el término "mpox" en la lista actualizada de enfermedades para el próximo año al referirse a la enfermedad inicialmente llamada "viruela del mono" en 1970 cuando fue descubierta en primates.

En lo referente a las traducciones, la organización sanitaria aseguró que "mpox" puede ser utilizados en otros idiomas, entretanto, precisó que "si surgen otros problemas de denominación, se abordarán mediante el mismo mecanismo".

De acuerdo con los datos oficiales de la OMS, en el presente año se han confirmado más de 81 000 casos en el orbe mientras que los más afectados son Estados Unidos con 29 000 positivos, Brasil con 9 900 y España con 7 400.

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

## **COVID en la Argentina: regreso del barbijo obligatorio, las vacunas que necesitan refuerzo y fecha estimada del pico, ¿qué anticipan los especialistas?**

**29 nov.** El escenario epidemiológico ingresó en su cuarta semana de incremento sostenido. La Ciudad de Buenos Aires vuelve a ser el epicentro a nivel nacional y desde el cuerpo médico ya instan a monitorear la situación de Brasil y Chile además de no descartar el posible regreso de los tapabocas.

El Ministerio de Salud informó en la última semana 3323 nuevos casos activos de coronavirus (COVID -19) en la Argentina, un 51% más respecto al período anterior, escenario que para los especialistas configura el inicio de una ola de contagios que podría, incluso, reflotar el regreso del barbijo en las zonas rojas.

El cuadro epidemiólogo suma un total de 28 jornadas consecutivas de alzas, con la Ciudad de Buenos Aires como epicentro, tendencia impulsada por las subvariantes de Ómicron, según detalló a Télam el virólogo molecular e integrante del Proyecto Argentino Interinstitucional de Genómica de SARS-CoV-2 (PAIS), Humberto Debat.

En vísperas del inicio oficial de la temporada de verano 2023 y con los antecedentes recientes de China (con tasas récord de infección), en la región sudamericana Chile ya siente los estragos del "perro del infierno" y "pesadilla", mientras que Brasil volvió a imponer el uso obligatorio de los protectores en aeropuertos y Perú emitió una alerta sanitaria.

"Venimos diciendo que el barbijo habría que seguir usándolo en determinada situación, como en el transporte público, en los lugares donde hay una gran cantidad de gente con poca aireación y en reuniones donde los ambientes están más cerrados", señaló a El Cronista el infectólogo y asesor del Gobierno en la pandemia, Eduardo López.

Para el sanitario, la curva creciente actual de contagios de COVID 19 en la Argentina responde también a la "baja cantidad de vacunas de refuerzo" administrada. Según datos que se desprenden del Monitor Público de Vacunación, de los 41.049.293 esquemas iniciados hace dos años atrás, sólo 6.261.537 complementaron con un segundo refuerzo.

"Casi el 50% de la gente tiene sólo dos dosis y no va del 25% con una cuarta. Es decir, tanto del primero como el segundo refuerzo, que son fundamentales para los sublinajes que están circulando hoy en la Argentina, no están completos", insistió López.



Ministerio de Salud  
Argentina

Dosis aplicadas

# 110.374.682 Aplicaciones

Vacunados con esquema iniciado

**41.049.293** Personas

Vacunados con esquema completo

**37.900.908** Personas

Vacunados con dosis adicional

**3.158.110** Personas

Vacunados con primer refuerzo

**21.811.044** Personas

Vacunados con segundo refuerzo

**6.261.537** Personas

Al ahondar en los números difundidos por la cartera nacional, 475 fueron los positivos diarios promedio de la última semana. Sin embargo, y a diferencia de los que ocurrió meses atrás, los fallecidos y pacientes en terapia aún permanecen estables, con un "muy leve crecimiento", de acuerdo al análisis de evolución que realiza el senador por Corrientes Martín Barriónuevo.

"Tal como está sucediendo en otros lugares del mundo, hay un rebrote de casos de COVID en la Argentina y la gente que se está vacunando con las dosis de refuerzo es muy baja", repasó el legislador provincial.

## **COVID-19 en la Argentina: cuándo se dará el Nuevo pico de contagios y cuántas vacunas se necesitan para evitar una ola mayor**

El médico clínico Luis Cámera proyectó en diálogo con El Cronista que para enero o febrero de 2023 "va a ser necesario" afianzar los esquemas de protección anti-COVID 19 en la Argentina con una quinta dosis, ritmo que luego se continuará con una sola aplicación anual.

"Van a haber estos brotes de idas y venidas a lo largo del tiempo. Sí también creo que será superable pero lo que no podemos dejar de ver, como una especie de talón de Aquiles, es la baja vacunación de refuerzo en la población joven. Es desde aquí donde vendrán los contagios", consideró.

Cámera se sumó también al pronóstico de regreso del barbijo como medida preventiva en algunos distritos, aunque enfatizó que al tratarse de subvariantes "extremadamente contagiosas", es "muy difícil" avanzar con otro tipo de restricciones.

"Lo único que es realmente útil es tener, por lo menos, tres dosis de vacunas para los jóvenes, cuatro para los mayores y eventualmente, una quinta", sentenció.

### **Alerta COVID: cuáles son los síntomas de las subvariantes de Ómicron que circulan en la Argentina**

El infectólogo Hugo Pizzi consideró en diálogo con El Cronista que el cuadro sintomatológico actual de COVID 19 con las subvariantes que se acrecienta en el país, es "distinto" a los registrados en 2020 y 2021, ya que "ahora con las vacunas, la resistencia del virus cambia".

Por su parte, Eduardo López indicó que la modificación sólo se presenta en el punto de vista de incubación respecto a la cepa Ómicron clásica. "Los sublinajes tienen un menor período de incubación. Ahora es de sólo 2 a 4 días, lo cual facilita mucho más la transmisibilidad", apuntó.

De acuerdo al apartado "Recomendaciones para equipos de salud" de la cartera conducida por la ministra Carla Vizzotti, la clasificación de casos confirmados de coronavirus por criterio clínico-epidemiológico en un paciente debe cumplir con al menos dos de los siguientes parámetros presentes a la vez:

- ⇒ fiebre
- ⇒ tos
- ⇒ odinofagia
- ⇒ dificultad para respirar
- ⇒ vómitos/diarrea
- ⇒ cefalea/mialgias
- ⇒ Rinitis/Congestión nasal
- ⇒ Presente Anosmia/disgeusia

En tanto, aquellos que cumpla al menos uno de los siguientes criterios epidemiológicos, serán diagnosticado por SARS-COV2:

Haber tenido contacto estrecho con un caso confirmado en los últimos 10 días;

Haber participado de un evento o espacio social/laboral u otro en el cual se hayan producido al menos 3 casos confirmados (brote),

Resida en una zona con incidencia superior a 500 casos c/100.000 habitantes en los últimos 14 días y la jurisdicción haya definido activar la confirmación por este criterio para la provincia, departamento o localidad de residencia.

Fuente: Cronista. Disponible en <https://bit.ly/3EUin32>

### **Syria receives two million cholera vaccines**

**Nov 30.** The Syrian Ministry of Health received two million doses of cholera vaccine from the World Health Organization (WHO), the United Nations Children's Fund (Unicef) and the Global Vaccine Initiative (GAVI).

The vaccines will be applied during the next vaccination campaign, slated to begin on December 4th and set to last for two weeks.

"Despite worldwide vaccine shortages, caused by growing cholera outbreaks, we have managed to secure current aid to improve the health response," said Health Minister Hassan Muhammad Al-Ghobash.

He noted that the vaccine is safe and was approved by the WHO, and has been used successfully around the world.

According to Al-Ghobash, the vaccination campaign will begin in the provinces of Aleppo, Deir Ezzor, Hasakeh and Raqa, as they are currently the most affected by the disease and considered that the epidemiological situation there is under control and in a declining phase.

According to the latest report published by the health authorities, the cumulative total of confirmed cases rose to 1,556, while the number of deaths reached 49.



They explained that the main cause of death continues to be the delay in requesting medical attention at health centers.

Fuente: Prensa Latina. Disponible en <https://bit.ly/3XPFXqd>



### Síganos en redes sociales



@vaccimonitor



@finlayediciones



@finlayediciones

VacciMonitor es una revista dedicada a la vacunología y temas afines como Inmunología, Adyuvantes, Infectología, Microbiología, Epidemiología, Validación, Aspectos regulatorios, entre otros. Arbitrada, de acceso abierto y bajo la Licencia Creative Commons está indexada en:



**EBSCO**  
Information Services



**DOAJ** DIRECTORY OF  
OPEN ACCESS  
JOURNALS



**reDALyc.org**

**FreeMedical  
Journals**  
Promoting free access to medical journals

**HINARI**  
Research in Health

**latindex**  
Sistema Regional de Información en Línea para Revistas Científicas de América Latina, el Caribe, España y Portugal

**SeCiMed**



# Artículos científicos publicados en Medline

*Filters activated: Publication date from 2022/11/22 to 2022/11/30. “vaccine” (Title/Abstract) 498 records.*

## A multivalent nucleoside-modified mRNA vaccine against all known influenza virus subtypes.

Arevalo CP, Bolton MJ, Le Sage V, Ye N, Furey C, Muramatsu H, Alameh MG, Pardi N, Drapeau EM, Parkhouse K, Garretson T, Morris JS, Moncla LH, Tam YK, Fan SHY, Lakdawala SS, Weissman D, Hensley SE. Science. 2022 Nov 25;378(6622):899-904. doi: 10.1126/science.abm0271. Epub 2022 Nov 24. PMID: 36423275

## Identifying COVID-19 optimal vaccine dose using mathematical immunostimulation/immunodynamic modelling.

Rhodes S, Smith N, Evans T, White R. Vaccine. 2022 Nov 22;40(49):7032-7041. doi: 10.1016/j.vaccine.2022.10.012. Epub 2022 Oct 17. PMID: 36272876

## Defining and measuring vaccine hesitancy.

Larson HJ. Nat Hum Behav. 2022 Nov 23:1-2. doi: 10.1038/s41562-022-01484-7. Online ahead of print. PMID: 36418535

## Sustainable vaccine manufacturing in low- and middle-Income countries.

Hayman B, Kumar Suri R, Downham M. Vaccine. 2022 Nov 28;40(50):7288-7304. doi: 10.1016/j.vaccine.2022.10.044. Epub 2022 Nov 2. PMID: 36334966

## Excerpts from Dear Vaccine.

[No authors listed] Public Health Nurs. 2022 Nov 22. doi: 10.1111/phn.13145. Online ahead of print. PMID: 36413060

## Is vaccine confidence an unexpected victim of the COVID-19 pandemic?

Siani A, Tranter A. Vaccine. 2022 Nov 28;40(50):7262-7269. doi: 10.1016/j.vaccine.2022.10.061. Epub 2022 Oct 31. PMID: 36333226

## Unadjuvanted intranasal spike vaccine elicits protective mucosal immunity against sarbecoviruses.

Mao T, Israelow B, Peña-Hernández MA, Suberi A, Zhou L, Luyten S, Reschke M, Dong H, Homer RJ, Saltzman WM, Iwasaki A. Science. 2022 Nov 25;378(6622):eabo2523. doi: 10.1126/science.abo2523. Epub 2022 Nov 25. PMID: 36302057

## Novel approaches to reactivate pertussis immunity.

Blanchard-Rohner G. Expert Rev Vaccines. 2022 Dec;21(12):1787-1797. doi: 10.1080/14760584.2022.2149499. Epub 2022 Nov 23. PMID: 36400443

## Albumin-hitchhiking: Fostering the pharmacokinetics and anticancer therapeutics.

Famta P, Shah S, Jain N, Srinivasarao DA, Murthy A, Ahmed T, Vamburkar G, Shahrukh S, Singh SB, Srivastava S. J Control Release. 2022 Nov 25;353:166-185. doi: 10.1016/j.jconrel.2022.11.034. Online ahead of print. PMID: 36423870

## COVID-19 Vaccine-Related Myocardial and Pericardial Inflammation.

Furqan M, Chawla S, Majid M, Mazumdar S, Mahalwar G, Harmon E, Klein A. Curr Cardiol Rep. 2022 Nov 28:1-11. doi: 10.1007/s11886-022-01801-6. Online ahead of print. PMID: 36441403

[Polyanhydride Chemistry.](#)

Reddy PG, Domb AJ. Biomacromolecules. 2022 Nov 23. doi: 10.1021/acs.biomac.2c01180. Online ahead of print. PMID: 36417353

[Recent developments in the immunopathology of COVID-19.](#)

Zhang HP, Sun YL, Wang YF, Yazici D, Azkur D, Ogulur I, Azkur AK, Yang ZW, Chen XX, Zhang AZ, Hu JQ, Liu GH, Akdis M, Akdis CA, Gao YD. Allergy. 2022 Nov 24. doi: 10.1111/all.15593. Online ahead of print. PMID: 36420736

[Schistosome proteomics: updates and clinical implications.](#)

Castro-Borges W, Wilson RA. Expert Rev Proteomics. 2022 Nov 23:1-15. doi: 10.1080/14789450.2022.2142565. Online ahead of print. PMID: 36331139

[COVID-19 Vaccine Hesitancy Among Medicare Beneficiaries with and Without Cancer History: A US Population-based Study.](#)

Poghosyan H, Ni Z, Vlahov D, Nelson L, Nam S. J Community Health. 2022 Nov 25:1-10. doi: 10.1007/s10900-022-01174-5. Online ahead of print. PMID: 36427111

[Associations between COVID-19 vaccine uptake, race/ethnicity, and political party affiliation.](#)

Andersen JA, Gloster E, Hall S, Rowland B, Willis DE, Kraleti SS, McElfish PA. J Behav Med. 2022 Nov 22:1-7. doi: 10.1007/s10865-022-00379-2. Online ahead of print. PMID: 36417011

[Infliximab as a potential treatment for COVID-19.](#)

Velez MP, McCarthy MW. Expert Rev Anti Infect Ther. 2022 Nov 27:1-5. doi: 10.1080/14787210.2023.2151438. Online ahead of print. PMID: 36413380

[Parental attitudes in the pediatric emergency department about the COVID-19 vaccine.](#)

Schiff J, Schmidt AR, Pham PK, Pérez JB, Pannaraj PS, Chaudhari PP, Liberman DB. Vaccine. 2022 Nov 28;40(50):7328-7334. doi: 10.1016/j.vaccine.2022.10.046. Epub 2022 Oct 26. PMID: 36344362

[Opinions, attitudes, and barriers to pediatric vaccination in Argentina.](#)

Urueña A, Ruiz JI, Lew DA, David J, Fidanza E, Bianculli P, Rearte A, Vizzotti C. Vaccine. 2022 Nov 22;40(49):7042-7049. doi: 10.1016/j.vaccine.2022.10.008. Epub 2022 Oct 20. PMID: 36272874

[The role of Israeli researchers in the scientific literature regarding COVID-19 vaccines.](#)

Rosen B, Davidovitch N, Chodick G, Israeli A. Isr J Health Policy Res. 2022 Nov 23;11(1):39. doi: 10.1186/s13584-022-00548-3. PMID: 36419188

[Safety, tolerability and immunogenicity of Biological E's CORBEVAX™ vaccine in children and adolescents: A prospective, randomised, double-blind, placebo controlled, phase-2/3 study.](#)

Thuluva S, Paradkar V, Gunneri S, Yerroju V, Mogulla RR, Suneetha PV, Turaga K, Kyasani M, Manoharan SK, Adabala S, Sri Javvadi A, Medigeshi G, Singh J, Shaman H, Binayke A, Zaheer A, Awasthi A, Narang M, Nanjappa P, Mahantshetti N, Swarup Garg B, Pandey AK. Vaccine. 2022 Nov 22;40(49):7130-7140. doi: 10.1016/j.vaccine.2022.10.045. Epub 2022 Oct 31. PMID: 36328879

[Willingness to accept herpes zoster vaccines and the influencing factors in China.](#)

Jiang B, Wang Q, Wang Z, Xu Y, Yang T, Yang W, Jia M, Feng L. BMC Infect Dis. 2022 Nov 26;22(1):888. doi: 10.1186/s12879-022-07840-2. PMID: 36435780

[Safety and Immunogenicity of Inactivated SARS-CoV-2 Vaccine \(BBIBP-CorV\) in Hypertensive and/or Diabetic People Aged over 60 Years: A Prospective Open-Label Study.](#)

Huang R, Liu X, Xie F, Li J, Tang Z, Wu Y, Zhou P, Zhang D. Diabetes Ther. 2022 Nov 27:1-13. doi: 10.1007/s13300-022-01343-8. Online ahead of print. PMID: 36437418

[The humoral and cellular immune evasion of SARS-CoV-2 Omicron and sub-lineages.](#)

Xiang T, Wang J, Zheng X. Virol Sin. 2022 Nov 22:S1995-820X(22)00191-2. doi: 10.1016/j.virs.2022.11.007. Online ahead of print. PMID: 36427646

[Identifying early adopters of COVID-19 vaccines in Latin America.](#)

Arrieta A, García-Prado A, Sarmiento JP, Paz Castro C. Vaccine. 2022 Nov 22;40(49):7158-7166. doi: 10.1016/j.vaccine.2022.10.033. Epub 2022 Oct 21. PMID: 36328886

[Success of nano-vaccines against COVID-19: a transformation in nanomedicine.](#)

Sarangi MK, Padhi S, Rath G, Nanda SS, Yi DK. Expert Rev Vaccines. 2022 Dec;21(12):1739-1761. doi: 10.1080/14760584.2022.2148659. Epub 2022 Nov 27. PMID: 36384360

[Highlighting novel targets in immunotherapy for liver cancer.](#)

Ruff SM, Shannon AH, Beane JD, Pawlik TM. Expert Rev Gastroenterol Hepatol. 2022 Nov 23:1-13. doi: 10.1080/17474124.2022.2150841. Online ahead of print. PMID: 36404729

[Longitudinal Severe Acute Respiratory Syndrome Coronavirus 2 Vaccine Antibody Responses and Identification of Vaccine Breakthrough Infections Among Healthcare Workers Using Nucleocapsid Immunoglobulin G.](#)

Anderson M, Stec M, Gosha A, Mohammad T, Boler M, Tojo Suarez R, Behun D, Landay A, Cloherty G, Moy J. J Infect Dis. 2022 Nov 28;226(11):1934-1942. doi: 10.1093/infdis/jiac420. PMID: 36263799

[Rheumatic disease patient decision-making about COVID-19 vaccination: a qualitative analysis.](#)

Shaw YP, Hustek S, Nguyen N, Starlin M, Wipfler K, Wallace BI, Michaud K. BMC Rheumatol. 2022 Nov 29;6(1):76. doi: 10.1186/s41927-022-00307-6. PMID: 36443813

[Rift Valley fever MP-12 vaccine elicits an early protective immune response in mice.](#)

Morrill JC, Peters CJ, Bettinger GE, Palermo PM, Smith DR, Watts DM. Vaccine. 2022 Nov 28;40(50):7255-7261. doi: 10.1016/j.vaccine.2022.10.062. Epub 2022 Nov 1. PMID: 36333222

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

Chatterjee A, Chakravarty A. Curr Neurol Neurosci Rep. 2022 Nov 29. doi: 10.1007/s11910-022-01247-x. Online ahead of print. PMID: 36445631

[Impact of Vaccination, Prior Infection and Therapy on Omicron Infection and Mortality.](#)

Wang X, Zein J, Ji X, Lin DY. J Infect Dis. 2022 Nov 23:jiac460. doi: 10.1093/infdis/jiac460. Online ahead of print. PMID: 36415931

[Current situation and future direction of Newcastle disease vaccines.](#)

Hu Z, He X, Deng J, Hu J, Liu X. Vet Res. 2022 Nov 26;53(1):99. doi: 10.1186/s13567-022-01118-w. PMID: 36435802

[Antiviral drugs for influenza for 2022-2023.](#)

[No authors listed] Med Lett Drugs Ther. 2022 Nov 28;64(1664):185-190. PMID: 36397189

[Biologics for dengue prevention: up-to-date.](#)

Waickman AT, Newell K, Endy TP, Thomas SJ. Expert Opin Biol Ther. 2022 Nov 23. doi: 10.1080/14712598.2022.2151837. Online ahead of print. PMID: 36417290

[Protection against symptomatic infection with delta \(B.1.617.2\) and omicron \(B.1.1.529\) BA.1 and BA.2 SARS-CoV-2 variants after previous infection and vaccination in adolescents in England, August, 2021-March, 2022: a national, observational, test-negative, case-control study.](#)

Powell AA, Kirsebom F, Stowe J, Ramsay ME, Lopez-Bernal J, Andrews N, Ladhani SN. Lancet Infect Dis. 2022 Nov 24:S1473-3099(22)00729-0. doi: 10.1016/S1473-3099(22)00729-0. Online ahead of print. PMID: 36436536

[Reliably Assessing Duration of Protection for Coronavirus Disease 2019 Vaccines.](#)

Lin DY, Zeng D, Gu Y, Krause PR, Fleming TR. J Infect Dis. 2022 Nov 28;226(11):1863-1866. doi: 10.1093/infdis/jiac139. PMID: 35445269

[SARS-CoV-2 mRNA vaccination elicits robust antibody responses in children.](#)

Bartsch YC, St Denis KJ, Kaplonek P, Kang J, Lam EC, Burns MD, Farkas EJ, Davis JP, Boribong BP, Edlow AG, Fasano A, Shreffler WG, Zavadska D, Johnson M, Goldblatt D, Balazs AB, Yonker LM, Alter G. Sci Transl Med. 2022 Nov 23;14(672):eabn9237. doi: 10.1126/scitranslmed.abn9237. Epub 2022 Nov 23. PMID: 35881018

[Modern vaccine strategies for emerging zoonotic viruses.](#)

Ahmed A, Safdar M, Sardar S, Yousaf S, Farooq F, Raza A, Shahid M, Malik K, Afzal S. Expert Rev Vaccines. 2022 Dec;21(12):1711-1725. doi: 10.1080/14760584.2022.2148660. Epub 2022 Nov 27. PMID: 36384000

[Vaccines on demand, part II: future reality.](#)

Geall AJ, Kis Z, Ulmer JB. Expert Opin Drug Discov. 2022 Nov 23:1-9. doi: 10.1080/17460441.2022.2147501. Online ahead of print. PMID: 36384351

[Development of a quadruple PCR-based gene microarray for detection of vaccine and wild-type classical swine fever virus, African swine fever virus and atypical porcine pestivirus.](#)

Xia YJ, Xu L, Zhao JJ, Li YX, Wu RZ, Song XP, Zhao QZ, Liu YB, Wang Q, Zhang QY. Virol J. 2022 Nov 29;19(1):201. doi: 10.1186/s12985-022-01933-9. PMID: 36447230

[Effects of inactivated SARS-CoV-2 vaccination on male fertility: a retrospective cohort study.](#)

Dong Y, Li X, Li Z, Zhu Y, Wei Z, He J, Cheng H, Yang A, Chen F. J Med Virol. 2022 Nov 22. doi: 10.1002/jmv.28329. Online ahead of print. PMID: 36415120

[Measles in non-human primates.](#)

Dogadov DI, Kyuregyan KK, Goncharenko AM, Mikhailov MI. J Med Primatol. 2022 Nov 28. doi: 10.1111/jmp.12630. Online ahead of print. PMID: 36440505

[Autopsy-based histopathological characterization of myocarditis after anti-SARS-CoV-2-vaccination.](#)

Schwab C, Domke LM, Hartmann L, Stenzinger A, Longerich T, Schirmacher P. Clin Res Cardiol. 2022 Nov 27;1-10. doi: 10.1007/s00392-022-02129-5. Online ahead of print. PMID: 36436002

[Safety and immunogenicity of AGS-v PLUS, a mosquito saliva peptide vaccine against arboviral diseases: A randomized, double-blind, placebo-controlled Phase 1 trial.](#)

Friedman-Klabinoff DJ, Birkhold M, Short MT, Wilson TR, Meneses CR, Lacsina JR, Oliveira F, Kamhawi S, Valenzuela JG, Hunsberger S, Mateja A, Stoloff G, Pleguezuelos O, Memoli MJ, Laurens MB. EBioMedicine. 2022 Nov 24;86:104375. doi: 10.1016/j.ebiom.2022.104375. Online ahead of print. PMID: 36436281

["I'm scared that if I have the vaccine, it's going to make my lung condition worse, not better." COVID-19 vaccine acceptance in adults with underlying health conditions - A qualitative investigation.](#)

Steffens MS, Bullivant B, King C, Bolsewicz K. Vaccine X. 2022 Dec;12:100243. doi: 10.1016/j.jvacx.2022.100243. Epub 2022 Nov 24. PMID: 36447620

[The role of trust in COVID-19 vaccine hesitancy and acceptance among Black and White Americans.](#)

Marie Reinhart A, Tian Y, Lilly AE. Vaccine. 2022 Nov 28;40(50):7247-7254. doi: 10.1016/j.vaccine.2022.10.067. Epub 2022 Oct 31. PMID: 36333223

[Kikuchi-Fujimoto disease following SARS-CoV-2 vaccination.](#)

Ikeda K, Kakehi E, Adachi S, Kotani K. BMJ Case Rep. 2022 Nov 22;15(11):e250601. doi: 10.1136/bcr-2022-250601. PMID: 36414349

[Safety and immunogenicity of a third dose of COVID-19 protein subunit vaccine \(Covovax™\) after homologous and heterologous two-dose regimens.](#)

Kanokudom S, Chansaenroj J, Suntrronwong N, Assawakosri S, Yorsaeng R, Nilyanimit P, Aeemjinda R, Khanarat N, Vichaiwattana P, Klinfueng S, Thongmee T, Katanyutanon A, Thanason W, Arayapong J, Withaksabut W, Srimuan D, Thatsanatorn T, Sudhinaraset N, Wanlapakorn N, Honsawek S, Poovorawan Y. Int J Infect Dis. 2022 Nov 22:S1201-9712(22)00614-2. doi: 10.1016/j.ijid.2022.11.022. Online ahead of print. PMID: 36427701

[Countering Antivax Misinformation via Social Media: Message-Testing Randomized Experiment for Human Papillomavirus Vaccination Uptake.](#)

Kim SJ, Schiffelbein JE, Imset I, Olson AL. J Med Internet Res. 2022 Nov 24;24(11):e37559. doi: 10.2196/37559. PMID: 36422887

[Misinformation, Anticipated Regret, and Vaccine-Related Behaviors.](#)

Wong JC, Yang JZ. J Health Commun. 2022 Nov 23:1-10. doi: 10.1080/10810730.2022.2148022. Online ahead of print. PMID: 36416112

[Biotechnological Based Recombinant Protein Vaccines Developed Against Toxoplasmosis.](#)

Karakavuk T, Gül C, Karakavuk M, Gül A, Erkunt Alak S, Can H, Ün C, Döşkaya M, Gürüz AY, Değirmenci Döşkaya A. *Turkiye Parazitol Derg.* 2022 Nov 28;46(4):342-357. doi: 10.4274/tpd.galenos.2022.41636. PMID: 36444412

[Cost-minimization analysis of DTaP-IPV-Hib combination vaccine in China: a nationwide cross-sectional study.](#)

Liu B, Cao B, Wang C, Sun T, Miao Y, Zhang S, Zhao T, Cui F. *J Med Virol.* 2022 Nov 29. doi: 10.1002/jmv.28358. Online ahead of print. PMID: 36448181

[Retrospective study of the immunogenicity and safety of the CoronaVac SARS-CoV-2 vaccine in people with underlying medical conditions.](#)

Li C, Bi H, Fu Z, Li A, Wan N, Hu J, Yang F, Zhou TC, Liang Y, Su W, Shi T, Yang M, Wang R, Qin W, Yu X, Zheng HY, Zhou Z, Zheng YT, Wei J, Zeng G, Zhang Z; Precise-CoVaccine study group. *Commun Med (Lond).* 2022 Nov 25;2(1):151. doi: 10.1038/s43856-022-00216-2. PMID: 36434092

[Cost-effectiveness of 20-valent pneumococcal conjugate vaccine in Denmark compared with PPV23.](#)

Olsen J, Schnack H, Skovdal M, Vietri J, Mikkelsen MB, Poulsen PB. *J Med Econ.* 2022 Nov 25:1-49. doi: 10.1080/13696998.2022.2152235. Online ahead of print. PMID: 36426797

[Freeze-drying: A flourishing strategy to fabricate stable pharmaceutical and biological products.](#)

Abla KK, Mehanna MM. *Int J Pharm.* 2022 Nov 25;628:122233. doi: 10.1016/j.ijpharm.2022.122233. Epub 2022 Sep 30. PMID: 36183914

[\[Prevalence of COVID-19 vaccination and approval rating of the social implementation of its certification: the Japan COVID-19 and Society Internet Survey \(JACSIS\) in September and October 2021\].](#)

Tanaka H, Tabuchi T, Katanoda K. *Nihon Koshu Eisei Zasshi.* 2022 Nov 28. doi: 10.11236/jph.22-061. Online ahead of print. PMID: 36436937

[Vaccine hesitancy educational tools for healthcare providers and trainees: A scoping review.](#)

Lip A, Pateman M, Fullerton MM, Chen HM, Bailey L, Houle S, Davidson S, Constantinescu C. *Vaccine.* 2022 Nov 24:S0264-410X(22)01225-7. doi: 10.1016/j.vaccine.2022.09.093. Online ahead of print. PMID: 36437208

[Unilateral Axillary Lymphadenopathy after the Inactivated SARSCOV-2 \(CoronaVac\) Vaccine: Ultrasonographic Imaging.](#)

Elverici E, Özsoy A, Sayın B, Gökhan MB, Özkan E. *Balkan Med J.* 2022 Nov 24. doi: 10.4274/balkanmedj.galenos.2022.2022-4-107. Online ahead of print. PMID: 36421031

[Maternal vaccination-current status, challenges, and opportunities.](#)

Kurasawa K. *J Obstet Gynaecol Res.* 2022 Nov 28. doi: 10.1111/jog.15503. Online ahead of print. PMID: 36444417

[Acceptance of COVID-19 vaccine among healthcare workers in Africa, systematic review and meta-analysis.](#)

Figa Z, Temesgen T, Getnet A, Ganta M, Alemu A, Abebe M, Ashuro Z. *Public Health Pract (Oxf).* 2022 Nov 23;4:100343. doi: 10.1016/j.puhip.2022.100343. Online ahead of print. PMID: 36438628

[The influenza universe in an mRNA vaccine.](#)

Kelvin AA, Falzarano D. Science. 2022 Nov 25;378(6622):827-828. doi: 10.1126/science.adf0900. Epub 2022 Nov 24. PMID: 36423290

[Utilizing Biologics in Drug Desensitization.](#)

Yang BC, Castells MC. Curr Allergy Asthma Rep. 2022 Nov 29:1-11. doi: 10.1007/s11882-022-01052-z. Online ahead of print. PMID: 36445652

[Impact of SARS-CoV-2 vaccination of children ages 5-11 years on COVID-19 disease burden and resilience to new variants in the United States, November 2021-March 2022: A multi-model study.](#)

Borcherding RK, Mullany LC, Howerton E, Chinazzi M, Smith CP, Qin M, Reich NG, Contamin L, Levander J, Kerr J, Espino J, Hochheiser H, Lovett K, Kinsey M, Tallaksen K, Wilson S, Shin L, Lemaitre JC, Hulse JD, Kaminsky J, Lee EC, Hill AL, Davis JT, Mu K, Xiong X, Pastore Y, Piontti A, Vespignani A, Srivastava A, Porebski P, Venkatramanan S, Adiga A, Lewis B, Klahn B, Outten J, Hurt B, Chen J, Mortveit H, Wilson A, Marathe M, Hoops S, Bhattacharya P, Machi D, Chen S, Paul R, Janies D, Thill JC, Galanti M, Yamana T, Pei S, Shaman J, España G, Cavany S, Moore S, Perkins A, Healy JM, Slayton RB, Johansson MA, Biggerstaff M, Shea K, Truelove SA, Runge MC, Viboud C, Lessler J. Lancet Reg Health Am. 2023 Jan;17:100398. doi: 10.1016/j.lana.2022.100398. Epub 2022 Nov 22. PMID: 36437905

[Economic impact of vaccine safety incident in Ukraine: The economic case for safety system investment.](#)

Budigan Ni H, de Broucker G, Patenaude BN, Dudley MZ, Hampton LM, Salmon DA. Vaccine. 2022 Nov 24:S0264-410X(22)01374-3. doi: 10.1016/j.vaccine.2022.11.004. Online ahead of print. PMID: 36435704

[Oral vaccination using microdevices to deliver α-GalCer adjuvanted vaccine afford a mucosal immune response.](#)

Carlsen PHR, Kjeldsen RB, Pedersen GK, Christensen D, Nielsen LH, Boisen A. J Control Release. 2022 Nov 23;353:134-146. doi: 10.1016/j.jconrel.2022.11.015. Online ahead of print. PMID: 36372387

[Advances in vaccinia virus-based vaccine vectors, with applications in flavivirus vaccine development.](#)

Xie L, Li Y. Vaccine. 2022 Nov 22;40(49):7022-7031. doi: 10.1016/j.vaccine.2022.10.047. Epub 2022 Oct 29. PMID: 36319490

[DURABILITY OF HUMORAL AND CELL-MEDIATED IMMUNE RESPONSE AFTER SARS-CoV-2 mRNA VACCINE ADMINISTRATION.](#)

Mihaylova A, Lesichkova S, Baleva M, Nikolova-Vlahova M, Kundurzhiev T, Kolevski A, Naumova E. J Med Virol. 2022 Nov 29. doi: 10.1002/jmv.28360. Online ahead of print. PMID: 36448089

[Progress Toward Global Eradication of Dracunculiasis - Worldwide, January 2021-June 2022.](#)

Hopkins DR, Weiss AJ, Yerian S, Sapp SGH, Cama VA. MMWR Morb Mortal Wkly Rep. 2022 Nov 25;71(47):1496-1502. doi: 10.15585/mmwr.mm7147a2. PMID: 36417302

[Antigenicity and immunogenicity of chikungunya virus-like particles from mosquito cells.](#)

Tsai SK, Hsu YL, Chiao DJ, Shu PY, Lin HT, Chang SF, Lin HC, Huang SH, Wang CH, Hsiung CC, Lin CC, Wu TY, Kuo SC. Appl Microbiol Biotechnol. 2022 Nov 25:1-14. doi: 10.1007/s00253-022-12280-8. Online ahead of print. PMID: 36434113

[A modular and self-adjuvanted multivalent vaccine platform based on porcine circovirus virus-like nanoparticles.](#)

Liu ZH, Deng ZF, Lu Y, Fang WH, He F. J Nanobiotechnology. 2022 Nov 24;20(1):493. doi: 10.1186/s12951-022-01710-4. PMID: 36424615

[COVID-19 Scientific Publications From the Centers for Disease Control and Prevention, January 2020-January 2022.](#)

Meites E, Knuth M, Hall K, Dawson P, Wang TW, Wright M, Yu W, Senesie S, Stephenson E, Imachukwu C, Sayi T, Gurbaxani B, Svendsen ER, Khoury MJ, Ellis B, King BA. Public Health Rep. 2022 Nov 23:333549221134130. doi: 10.1177/00333549221134130. Online ahead of print. PMID: 36416100

[An Oil-in-Water adjuvant significantly increased influenza A/H7N9 split virus Vaccine-Induced circulating follicular helper T \(cT<sub>FH</sub>\) cells and antibody responses.](#)

Lai L, Roush N, Xu Y, Kabbani S, Beck A, Sherman A, Anderson EJ, Bellamy A, Weiss J, Cross K, Mulligan MJ. Vaccine. 2022 Nov 22;40(49):7065-7072. doi: 10.1016/j.vaccine.2022.09.041. Epub 2022 Oct 21. PMID: 36273986

[Spirituality is associated with Covid-19 vaccination scepticism.](#)

Zarzeczna N, Bertlich T, Večkalov B, Rutjens BT. Vaccine. 2022 Nov 25:S0264-410X(22)01463-3. doi: 10.1016/j.vaccine.2022.11.050. Online ahead of print. PMID: 36446652

[Long-Lasting Protection Induced by a Polyanhydride Nanovaccine against Respiratory Syncytial Virus in an Outbred Mouse Model.](#)

Stephens LM, Ross KA, McLellan JS, Narasimhan B, Varga SM. J Virol. 2022 Nov 23;96(22):e0150222. doi: 10.1128/jvi.01502-22. Epub 2022 Oct 31. PMID: 36314826

[A socio-ecological exploration to identify factors influencing the COVID-19 vaccine decision-making process among pregnant and lactating women: Findings from Kenya.](#)

Limaye RJ, Paul A, Gur-Arie R, Zavala E, Lee C, Fesshaye B, Singh P, Njagi W, Odila P, Munyao P, Njogu R, Mutwiwa S, Noguchi L, Morgan C, Karron R. Vaccine. 2022 Nov 28;40(50):7305-7311. doi: 10.1016/j.vaccine.2022.10.068. Epub 2022 Oct 31. PMID: 36336529

[The macroeconomics of age-varying epidemics.](#)

Giagheddu M, Papetti A. Eur Econ Rev. 2022 Nov 24:104346. doi: 10.1016/j.eurocorev.2022.104346. Online ahead of print. PMID: 36447836

[The effect of COVID-19 vaccination on epileptic seizures in patients with epilepsy: A clinical observation in China.](#)

Huang A, Lu Y, Ji J, Yao Y, Guan S, Chen Z, Yu L. Hum Vaccin Immunother. 2022 Nov 22:2141519. doi: 10.1080/21645515.2022.2141519. Online ahead of print. PMID: 36412219

[Identifying susceptibility of children and adolescents to the Omicron variant \(B.1.1.529\).](#)

Chun JY, Jeong H, Kim Y. BMC Med. 2022 Nov 23;20(1):451. doi: 10.1186/s12916-022-02655-z. PMID: 36419108

[Tissue-Targeted Drug Delivery Strategies to Promote Antigen-Specific Immune Tolerance.](#)

Rui Y, Eppler HB, Yanes AA, Jewell CM. *Adv Healthc Mater.* 2022 Nov 23:e2202238. doi: 10.1002/adhm.202202238. Online ahead of print. PMID: 36417578

[Persistent drop in confidence following US recommended pause of Ad26.COV2.S vaccine administration.](#)

Rader B, Chiang ME, Kriner DL, Weintraub RL, Brownstein JS. *Vaccine.* 2022 Nov 25:S0264-410X(22)01448-7. doi: 10.1016/j.vaccine.2022.11.035. Online ahead of print. PMID: 36443155

[Factors associated with COVID-19 booster vaccine willingness among migrants from the Eastern Mediterranean living in Australia: a cross-sectional study.](#)

Allen K, Lambert SB, Yuen A, Pourmarzi D. *BMC Public Health.* 2022 Nov 28;22(1):2205. doi: 10.1186/s12889-022-14608-5. PMID: 36443806

[A sublingual nanofiber vaccine to prevent urinary tract infections.](#)

Kelly SH, Votaw NL, Cossette BJ, Wu Y, Shetty S, Shores LS, Issah LA, Collier JH. *Sci Adv.* 2022 Nov 25;8(47):eabq4120. doi: 10.1126/sciadv.abq4120. Epub 2022 Nov 23. PMID: 36417519

[Modeling the dynamics of rubella disease with vertical transmission.](#)

Tilahun GT, Tolasa TM, Wole GA. *Heliyon.* 2022 Nov 24;8(11):e11797. doi: 10.1016/j.heliyon.2022.e11797. eCollection 2022 Nov. PMID: 36439721

[SARS-CoV-2 vaccines are not associated with hypercoagulability in apparently healthy people.](#)

Garabet L, Eriksson A, Tjønnfjord E, Cui XY, Olsen MK, Jacobsen HK, Jørgensen CT, Mathisen ÅB, Mowinckel MC, Ahlen MT, Sørvoll IH, Horvei KD, Ernstsen SL, Lægreid IJ, Stavik B, Holst R, Sandset PM, Ghanima W. *Res Pract Thromb Haemost.* 2022 Nov 25:100002. doi: 10.1016/j.rpth.2022.100002. Online ahead of print. PMID: 36448024

[Cost-effectiveness of Coronavirus Disease 2019 Vaccination in Low- and Middle-Income Countries.](#)

Siedner MJ, Alba C, Fitzmaurice KP, Gilbert RF, Scott JA, Shebl FM, Ciaranello A, Reddy KP, Freedberg KA. *J Infect Dis.* 2022 Nov 28;226(11):1887-1896. doi: 10.1093/infdis/jiac243. PMID: 35696544

[Genetics, structure, transmission, epidemiology, immune response, and vaccine efficacies of the SARS-CoV-2 Delta variant: A comprehensive review.](#)

Li H, Arcalas CJ, Song J, Rahmati M, Park S, Koyanagi A, Lee SW, Yon DK, Shin JI, Smith L. *Rev Med Virol.* 2022 Nov 24:e2408. doi: 10.1002/rmv.2408. Online ahead of print. PMID: 36420676

["They're trying to bribe you and taking away your freedoms": COVID-19 vaccine hesitancy in communities with traditionally low vaccination rates.](#)

Capurro G, Maier R, Tustin J, Jardine CG, Michelle Driedger S. *Vaccine.* 2022 Nov 28;40(50):7280-7287. doi: 10.1016/j.vaccine.2022.10.058. Epub 2022 Oct 31. PMID: 36334965

[Enhanced passive safety surveillance of high-dose and standard-dose quadrivalent inactivated split-virion influenza vaccines in Germany and Finland during the influenza season 2021/22.](#)

Gandhi-Banga S, Wague S, Shrestha A, Syrkina O, Talanova O, Nissilä M, Stuff K, Monfredo C. *Influenza Other Respir Viruses.* 2022 Nov 29. doi: 10.1111/irv.13071. Online ahead of print. PMID: 36448240

['VaxTax': a follow-up proposal for a global vaccine pandemic response fund.](#)

Germani F, Holzer F, Ortiz I, Biller-Andorno N, März JW. J Med Ethics. 2022 Nov 22:jme-2022-108491. doi: 10.1136/jme-2022-108491. Online ahead of print. PMID: 36414391

[The third inactivated vaccine booster dramatically enhanced SARS-CoV-2 antibody responses and did not influence the profile of prothrombotic antibody.](#)

Pan Y, Wang S, Liu G, Wang L, Yang L, Zeng X, Qian C, Lin J, Pan Z, Li Y. J Med Virol. 2022 Nov 28. doi: 10.1002/jmv.28356. Online ahead of print. PMID: 36443279

[Generation of Recombinant Rotaviruses Expressing Human Norovirus Capsid Proteins.](#)

Philip AA, Patton JT. J Virol. 2022 Nov 23;96(22):e0126222. doi: 10.1128/jvi.01262-22. Epub 2022 Oct 31. PMID: 36314817

[In Vivo Fate of Cowpea Mosaic Virus In Situ Vaccine: Biodistribution and Clearance.](#)

Affonso de Oliveira JF, Chan SK, Omole AO, Agrawal V, Steinmetz NF. ACS Nano. 2022 Nov 22;16(11):18315-18328. doi: 10.1021/acsnano.2c06143. Epub 2022 Oct 20. PMID: 36264973

[Intranasal COVID-19 Vaccine Disappointing in First-in-Human Trial.](#)

Slomski A. JAMA. 2022 Nov 22;328(20):2003. doi: 10.1001/jama.2022.18485. PMID: 36413233

[Designing of novel chimeric PvpA-pMGA protein of \*Mycoplasma gallisepticum\*, applicable for indirect ELISA.](#)

Fatideh FP, Esmaelizad M, Kargar M, Tebianian M, Kafilzadeh F. J Genet Eng Biotechnol. 2022 Nov 29;20(1):160. doi: 10.1186/s43141-022-00434-0. PMID: 36445623

[Perspectives on the COVID-19 vaccine uptake: a qualitative study of community members and health workers in Zambia.](#)

Sialubanje C, Mukumbuta N, Ng'andu M, Sumani EM, Nkonkomalimba M, Lyatumba DE, Mwale A, Mpiana F, Zulu JM, Mweempwa B, Endres D, Mbolela M, Namumba M, Peters WC. BMJ Open. 2022 Nov 23;12(11):e058028. doi: 10.1136/bmjopen-2021-058028. PMID: 36418116

[Risk factors affecting COVID-19 vaccine effectiveness identified from 290 cross-country observational studies until February 2022: a meta-analysis and meta-regression.](#)

Petráš M, Máčalík R, Janovská D, Čelko AM, Dáňová J, Selinger E, Doleček J, Neradová S, Franklová M, Dlouhý P, Rosina J, Lesná IK. BMC Med. 2022 Nov 25;20(1):461. doi: 10.1186/s12916-022-02663-z. PMID: 36434597

[Vaccination barriers and drivers in Romania: a focused ethnographic study.](#)

Dube E, Pistol A, Stanescu A, Butu C, Guirguis S, Motea O, Popescu AE, Voivozeanu A, Grbic M, Trottier MÈ, Brewer NT, Leask J, Gellin B, Habersaat KB. Eur J Public Health. 2022 Nov 23:ckac135. doi: 10.1093/eurpub/ckac135. Online ahead of print. PMID: 36416573

[The choice of Taiwanese college students to vaccinate against severe special infectious pneumonia COVID-19 based on the integrated theory of planning behavior.](#)

Lee PC, Huang CY, Liang LL, Huang MH, Hsu MJ. Hum Vaccin Immunother. 2022 Nov 22:2148500. doi: 10.1080/21645515.2022.2148500. Online ahead of print. PMID: 36415127

[Intratracheal trimerized nanobody cocktail administration suppresses weight loss and prolongs survival of SARS-CoV-2 infected mice.](#)

Nagata K, Utsumi D, Asaka MN, Maeda R, Shirakawa K, Kazuma Y, Nomura R, Horisawa Y, Yanagida Y, Kawai Y, Sato K, Yamaoka Y, Miyakawa K, Ryo A, Yasutomi Y, Imura A, Takaori-Kondo A. Commun Med (Lond). 2022 Nov 26;2(1):152. doi: 10.1038/s43856-022-00213-5. PMID: 36435945

[Association of parent influenza vaccination and early childhood vaccinations using linked electronic health record data.](#)

Kaufmann J, DeVoe JE, Angier H, Moreno L, Cahen V, Marino M. Vaccine. 2022 Nov 22;40(49):7097-7107. doi: 10.1016/j.vaccine.2022.09.040. Epub 2022 Oct 28. PMID: 36404427

[Can risk area designation help increase vaccination coverage for Tick-Borne Encephalitis? Evidence from German claims data.](#)

Ghiani M, Hagemann C, Friedrich J, Maywald U, Wilke T, von Eiff C, Malerczyk C. Vaccine. 2022 Nov 28;40(50):7335-7342. doi: 10.1016/j.vaccine.2022.10.075. Epub 2022 Nov 5. PMID: 36347722

[Knowledge and attitude of students studying at health department towards HPV and HPV vaccination.](#)

Aksoy N, Ozturk N, Ulusoy S, Ömür MF. Vaccine. 2022 Nov 28;40(50):7211-7218. doi: 10.1016/j.vaccine.2022.10.016. Epub 2022 Oct 18. PMID: 36266128

[SARS-CoV-2 Vaccine Strain Selection: Guidance from Influenza.](#)

Monto AS, Lauring AS, Martin ET. J Infect Dis. 2022 Nov 25;jiac454. doi: 10.1093/infdis/jiac454. Online ahead of print. PMID: 36424890

[Boosting Dose of Pfizer-BioNTech mRNA Vaccine Against SARS-CoV-2 Does Not Affect Reproductive Outcomes in In-Vitro Fertilization Patients: A Cohort Study.](#)

Adler Lazarovits C, Smadja A, Kabessa M, Allouche Kam H, Nevo L, Godin M, Bentov Y, Beharier O, Esh Broder E, Holzer H, Hershko Klement A. J Womens Health (Larchmt). 2022 Nov 22. doi: 10.1089/jwh.2022.0163. Online ahead of print. PMID: 36413046

[Evaluation of immune response to single dose of quadrivalent HPV vaccine at 10-year post-vaccination.](#)

Joshi S, Anantharaman D, Muwonge R, Bhatla N, Panicker G, Butt J, Rani Reddy Poli U, Malvi SG, Esmy PO, Lucas E, Verma Y, Shah A, Zomawia E, Pimple S, Jayant K, Hingmire S, Chiwate A, Divate U, Vashist S, Mishra G, Jadhav R, Siddiqi M, Sankaran S, Pillai Rameshwari Ammal Kannan T, Kartha P, Shastri SS, Sauvaget C, Radhakrishna Pillai M, Waterboer T, Müller M, Sehr P, Unger ER, Sankaranarayanan R, Basu P. Vaccine. 2022 Nov 26:S0264-410X(22)01457-8. doi: 10.1016/j.vaccine.2022.11.044. Online ahead of print. PMID: 36446654

[A COVID-19 model incorporating variants, vaccination, waning immunity, and population behavior.](#)

LaJoie Z, Usherwood T, Sampath S, Srivastava V. Sci Rep. 2022 Nov 27;12(1):20377. doi: 10.1038/s41598-022-24967-z. PMID: 36437375

[Monitoring of molecular profiling of allergen-antibody responses in HDM-immunotherapy patients.](#)

Nittner-Marszalska M, Kopeć A, Foks-Ciekalska A, Lata A, Bogacz-Piaseczyńska A, Rosiek-Biegus M, Zajac M, Bożek A. Hum Vaccin Immunother. 2022 Nov 29:2148815. doi: 10.1080/21645515.2022.2148815. Online ahead of print. PMID: 36444880

[Global polio eradication: can we replicate the smallpox success story?](#)

Javed H, Rizvi MA, Fahim Z, Ehsan M, Javed M, Raza MA. Rev Med Virol. 2022 Nov 25:e2409. doi: 10.1002/rmv.2409. Online ahead of print. PMID: 36426668

[Typhoid conjugate vaccine effectiveness in Malawi: evaluation of a test-negative design using randomised controlled clinical trial data.](#)

Liang Y, Driscoll AJ, Patel PD, Datta S, Voysey M, French N, Jamka LP, Henrion MYR, Ndeketa L, Laurens MB, Heyderman RS, Gordon MA, Neuzil KM. Lancet Glob Health. 2022 Nov 25:S2214-109X(22)00466-1. doi: 10.1016/S2214-109X(22)00466-1. Online ahead of print. PMID: 36442498

[Humoral immunity and B-cell memory in response to SARS-CoV-2 infection and vaccination.](#)

Fryer HA, Hartley GE, Edwards ESJ, O'Hehir RE, van Zelm MC. Biochem Soc Trans. 2022 Nov 24:BST20220415. doi: 10.1042/BST20220415. Online ahead of print. PMID: 36421662

[Nasal vaccines: solutions for respiratory infectious diseases.](#)

Nakahashi-Ouchida R, Fujihashi K, Kurashima Y, Yuki Y, Kiyono H. Trends Mol Med. 2022 Nov 23:S1471-4914(22)00274-X. doi: 10.1016/j.molmed.2022.10.009. Online ahead of print. PMID: 36435633

[Headache After Vaccination: An Update on Recent Clinical Trials and Real-World Reporting.](#)

Garces KN, Cocores AN, Goadsby PJ, Monteith TS. Curr Pain Headache Rep. 2022 Nov 23:1-24. doi: 10.1007/s11916-022-01094-y. Online ahead of print. PMID: 36418848

[Applications of the hollow-fibre infection model \(HFIM\) in viral infection studies.](#)

Kembou-Ringert JE, Readman J, Smith CM, Breuer J, Standing JF. J Antimicrob Chemother. 2022 Nov 22:dkac394. doi: 10.1093/jac/dkac394. Online ahead of print. PMID: 36411255

[A recombinant baculovirus vector vaccine \(BacMCP\) against the infectious spleen and kidney necrosis virus \(ISKNV\).](#)

Zhu M, Shen Z, Gu Y, Tong X, Zhang Y, Pan J, Feng Y, Hu X, Wang Y, Cao G, Xue R, Gong C. J Fish Dis. 2022 Nov 24. doi: 10.1111/jfd.13731. Online ahead of print. PMID: 36423261

[Surface Engineering of Protein Nanoparticles Modulates Transport, Adsorption, and Uptake in Mucus.](#)

Pho T, Champion JA. ACS Appl Mater Interfaces. 2022 Nov 23;14(46):51697-51710. doi: 10.1021/acsami.2c14670. Epub 2022 Nov 10. PMID: 36354361

[Formulation, Device, and Clinical Factors Influencing the Targeted Delivery of COVID-19 Vaccines to the Lungs.](#)

Mossadeq S, Shah R, Shah V, Bagul M. AAPS PharmSciTech. 2022 Nov 23;24(1):2. doi: 10.1208/s12249-022-02455-x. PMID: 36416999

[Clinical trial and postmarketing safety experience with MenACWY-TT, a meningococcal group A, C, W, and Y tetanus conjugate vaccine.](#)

Serra L, Webber C, Burman C, Bueti P, Gorruso M, Mather S. Vaccine. 2022 Nov 22;40(49):7014-7021. doi: 10.1016/j.vaccine.2022.09.077. Epub 2022 Oct 22. PMID: 36283896

A high-throughput neutralizing assay for antibodies and sera evaluation against Epstein-Barr virus.

Zhong L, Krummenacher C, Zhang W, Hong J, Feng Q, Zhao Q, Chen Y, Zeng MS, Zeng YX, Xu M, Zhang X. Virol J. 2022 Nov 23;19(1):196. doi: 10.1186/s12985-022-01911-1. PMID: 36424667

Biomimetic Nanovaccines Potentiating Dendritic Cell Internalization via CXCR4-Mediated Macropinocytosis.

Yang C, Zhang F, Chen F, Chang Z, Zhao Y, Shao D, Sun W, Dong WF, Wang Z. Adv Healthc Mater. 2022 Nov 23:e2202064. doi: 10.1002/adhm.202202064. Online ahead of print. PMID: 36416257

Protection of vaccination versus hybrid immunity against infection with COVID-19 Omicron variants among Health-Care Workers.

Ntziora F, Kostaki EG, Karapanou A, Mylona M, Tseti I, Sipsas NV, Paraskevis D, Sfikakis PP. Vaccine. 2022 Nov 28;40(50):7195-7200. doi: 10.1016/j.vaccine.2022.09.042. Epub 2022 Sep 19. PMID: 36150972

A Comment on "COVID-19 Vaccine Hesitancy and Physician-led Intervention".

Sookaromdee P, Wiwanitkit V. Mil Med. 2022 Nov 26:usac375. doi: 10.1093/milmed/usac375. Online ahead of print. PMID: 36433747

Willingness to receive a vaccine is influenced by adverse events following immunisation experienced by others.

Christou-Ergos M, Wiley KE, Leask J. Vaccine. 2022 Nov 26:S0264-410X(22)01447-5. doi: 10.1016/j.vaccine.2022.11.034. Online ahead of print. PMID: 36446655

Why do Chinese older adults in Hong Kong delay or refuse COVID-19 vaccination? A qualitative study based on Grounded Theory.

Yuan J, Lam WTW, Xiao J, Ni YM, Cowling BJ, Liao Q. J Gerontol B Psychol Sci Soc Sci. 2022 Nov 23:gbac184. doi: 10.1093/geronb/gbac184. Online ahead of print. PMID: 36416594

A comprehensive review on the COVID-19 vaccine and drug delivery applications of interpenetrating polymer networks.

Aldaaais EA. Drug Deliv Transl Res. 2022 Nov 28:1-19. doi: 10.1007/s13346-022-01254-y. Online ahead of print. PMID: 36443634

Controversies around COVID-19 Vaccines and Antidepressants: Scope and Perspective in Malaysia.

Chong Guan N, Weng Hou S, Abousheishaa AA, Sue Yin L, Sulaiman ARB, Chee Khin K. Curr Drug Res Rev. 2022 Nov 23. doi: 10.2174/2589977515666221123093522. Online ahead of print. PMID: 36420879

The early evolution of COVID-19 incidence and mortality among people aged under 80 years or 80 years and above after COVID-19 vaccine implementation in the state of Bahia, Brazil.

Cruz MC, Nascimento-Carvalho CM. Vaccine. 2022 Nov 28;40(50):7191-7194. doi: 10.1016/j.vaccine.2022.10.059. Epub 2022 Oct 31. PMID: 36357288

Manganese enhances macrophage defense against Mycobacterium tuberculosis via the STING-TNF signaling pathway.

Qian K, Shan L, Shang S, Li T, Wang S, Wei M, Tang B, Xi J. Int Immunopharmacol. 2022 Nov 23;113(Pt B):109471. doi: 10.1016/j.intimp.2022.109471. Online ahead of print. PMID: 36435065

[Effectiveness estimates for enhanced trivalent influenza vaccines in an aged care summer outbreak.](#)

Kunasekaran M, Moa A, Hooshmand E, Trent M, Poulos CJ, Chughtai AA, Heslop DJ, Raina MacIntyre C. Vaccine. 2022 Nov 28;40(50):7170-7175. doi: 10.1016/j.vaccine.2022.06.018. Epub 2022 Oct 31. PMID: 36328885

[Protection of 2 and 3 mRNA Vaccine Doses Against Severe Outcomes Among Adults Hospitalized with COVID-19 - VISION Network, August 2021 - March 2022.](#)

DeSilva MB, Mitchell PK, Klein NP, Dixon BE, Tenforde MW, Thompson MG, Naleway AL, Grannis SJ, Ong TC, Natarajan K, Reese SE, Zerbo O, Kharbanda AB, Patel P, Stenehjem E, Raiyani C, Irving SA, Fadel WF, Rao S, Han J, Reynolds S, Davis JM, Lewis N, McEvoy C, Dickerson M, Dascomb K, Valvi NR, Barron MA, Goddard K, Vazquez-Benitez G, Grisel N, Mamawala M, Embi PJ, Fireman B, Essien IJ, Griggs EP, Arndorfer J, Gaglani M. J Infect Dis. 2022 Nov 23:jiac458. doi: 10.1093/infdis/jiac458. Online ahead of print. PMID: 36415904

[Impact of vaccination on postacute sequelae of SARS CoV-2 infection in patients with rheumatic diseases.](#)

Patel NJ, Cook C, Vanni K, Fu X, Wang X, Kawano Y, Qian G, Hang B, Srivatsan S, Banasiak EP, Kowalski E, Bade K, Zhang Y, Sparks JA, Wallace ZS. Ann Rheum Dis. 2022 Nov 28:ard-2022-223439. doi: 10.1136/ard-2022-223439. Online ahead of print. PMID: 36442978

[Generation of an Attenuated Chimeric Bat Influenza A Virus Live-Vaccine Prototype.](#)

Ran W, Schön J, Ciminski K, Kraft J, Kessler S, Euchner S, Hoffmann D, Pohlmann A, Beer M, Schwemmle M, Giese S. Microbiol Spectr. 2022 Nov 29:e0142422. doi: 10.1128/spectrum.01424-22. Online ahead of print. PMID: 36445145

[Was EU's COVID-19 vaccine procurement strategy irrational? A re-analysis based on cost-effectiveness considerations.](#)

Gandjour A. BMC Health Serv Res. 2022 Nov 24;22(1):1410. doi: 10.1186/s12913-022-08726-4. PMID: 36434631

[Omicron BA.2 breakthrough infection enhances cross-neutralization of BA.2.12.1 and BA.4/BA.5.](#)

Muik A, Lui BG, Bacher M, Wallisch AK, Toker A, Finlayson A, Krüger K, Ozhelvaci O, Grikscheit K, Hoehl S, Ciesek S, Türeci Ö, Sahin U. Sci Immunol. 2022 Nov 25;7(77):eade2283. doi: 10.1126/sciimmunol.ade2283. Epub 2022 Nov 18. PMID: 36125366

[Comparisons in the health and economic assessments of using quadrivalent versus trivalent influenza vaccines: a systematic literature review.](#)

Warmath CR, Ortega-Sánchez IR, Duca LM, Porter RM, Usher MG, Bresee JS, Lafond KE, Davis WW. Value Health. 2022 Nov 24:S1098-3015(22)04739-8. doi: 10.1016/j.jval.2022.11.008. Online ahead of print. PMID: 36436790

[Limited Humoral and Specific T-Cell Responses After SARS-CoV-2 Vaccination in PWH With Poor Immune Reconstitution.](#)

Benet S, Blanch-Lombarte O, Ainsua-Enrich E, Pedreño-Lopez N, Muñoz-Basagoiti J, Raich-Regué D, Perez-Zsolt D, Peña R, Jiménez E, de la Concepción MLR, Ávila C, Cedeño S, Escribà T, Romero-Martín L, Alarcón-Soto Y, Rodriguez-Lozano GF, Miranda C, González S, Bailón L, Blanco J, Massanella M, Brander C, Clotet B, Paredes R, Esteve M, Izquierdo-Useros N, Carrillo J, Prado JG, Moltó J, Mothe B. J Infect Dis. 2022 Nov 28;226(11):1913-1923. doi: 10.1093/infdis/jiac406. PMID: 36200261

[Safety and Immunogenicity of V114, a 15-valent Pneumococcal Conjugate Vaccine, Compared with 13-valent Pneumococcal Conjugate Vaccine in Japanese Adults Aged ≥65 Years: Subgroup Analysis of a Randomized Phase III Trial \(PNEU-AGE\).](#)

Kishino H, Sawata M, Igarashi R, Shirakawa M, Pedley A, Musey L, Platt HL, Buchwald UK. Jpn J Infect Dis. 2022 Nov 22;75(6):575-582. doi: 10.7883/yoken.JJID.2022.060. Epub 2022 Jul 29. PMID: 35908869

[Addressing COVID-19 vaccine hesitancy: A content analysis of government social media platforms in England and Italy during 2020-2021.](#)

Sesa G, Czabanowska K, Giangreco A, Middleton J. Public Health Pract (Oxf). 2022 Nov 24:100345. doi: 10.1016/j.puhip.2022.100345. Online ahead of print. PMID: 36447994

[Vaccine effectiveness against SARS-CoV-2 reinfection during periods of Alpha, Delta, or Omicron dominance: A Danish nationwide study.](#)

Nielsen KF, Moustsen-Helms IR, Schelde AB, Gram MA, Emborg HD, Nielsen J, Hansen CH, Andersen MA, Meaidi M, Wohlfahrt J, Valentiner-Branth P. PLoS Med. 2022 Nov 22;19(11):e1004037. doi: 10.1371/journal.pmed.1004037. eCollection 2022 Nov. PMID: 36413551

[Progress Toward Regional Measles Elimination - Worldwide, 2000-2021.](#)

Minta AA, Ferrari M, Antoni S, Portnoy A, Sbarra A, Lambert B, Hauryski S, Hatcher C, Nedelev Y, Datta D, Ho LL, Steulet C, Gacic-Dobo M, Rota PA, Mulders MN, Bose AS, Perea WA, O'Connor P. MMWR Morb Mortal Wkly Rep. 2022 Nov 25;71(47):1489-1495. doi: 10.15585/mmwr.mm7147a1. PMID: 36417303

[Understanding CDC's Vaccine Communication during the COVID-19 Pandemic and Its Effectiveness in Promoting Positive Attitudes toward the COVID-19 Vaccine.](#)

Hwang J, Borah P, Choi J, Ghosh S. J Health Commun. 2022 Nov 29:1-10. doi: 10.1080/10810730.2022.2149968. Online ahead of print. PMID: 36444564

[Cost-effectiveness analyses of 15- and 20-valent pneumococcal conjugate vaccines for Japanese elderly.](#)

Hoshi SL, Shono A, Seposo X, Okubo R, Kondo M. Vaccine. 2022 Nov 22;40(49):7057-7064. doi: 10.1016/j.vaccine.2022.10.010. Epub 2022 Oct 21. PMID: 36273987

[Trends, barriers and enablers to measles immunisation coverage in Saskatchewan, Canada: A mixed methods study.](#)

Ilesanmi MM, Abonyi S, Pahwa P, Gerdts V, Schwandt M, Neudorf C. PLoS One. 2022 Nov 23;17(11):e0277876. doi: 10.1371/journal.pone.0277876. eCollection 2022. PMID: 36417461

[Development and Evaluation of a Monoclonal Antibody-Based Blocking Enzyme-Linked Immunosorbent Assay for the Detection of Antibodies against Novel Duck Reovirus in Waterfowl Species.](#)

Yun T, Hua J, Ye W, Chen L, Ni Z, Zhu Y, Zhang C. Microbiol Spectr. 2022 Nov 29:e0258122. doi: 10.1128/spectrum.02581-22. Online ahead of print. PMID: 36445088

[Estimating the population level impact of a gonococcal vaccine candidate: Predictions from a simple mathematical model.](#)

Carey KA, Newman LM, Spicknall IH. Vaccine. 2022 Nov 28;40(50):7176-7181. doi: 10.1016/j.vaccine.2022.10.031. Epub 2022 Nov 1. PMID: 36333224

Predictors of herpes zoster vaccination among Australian adults aged 65 and over.

Ricks T, Trent MJ, MacIntyre CR. Vaccine. 2022 Nov 28;40(50):7182-7186. doi: 10.1016/j.vaccine.2022.10.064. Epub 2022 Nov 3. PMID: 36336528

An observational, cohort, multi-centre, open label phase IV extension study comparing preschool DTAP-IPV booster vaccine responses in children whose mothers were randomised to one of two pertussis-containing vaccines or received no pertussis-containing vaccine in pregnancy in England.

Sapuan S, Andrews N, Hallis B, Hole L, Jones CE, Matheson M, Miller E, Snape MD, Heath PT. Vaccine. 2022 Nov 22;40(49):7050-7056. doi: 10.1016/j.vaccine.2022.10.005. Epub 2022 Oct 20. PMID: 36272877

Sulfonium-Driven Neoantigen-Released DNA Nanodevice as a Precise Vaccine for Tumor Immunotherapy and Prevention.

Zhang Y, Xu H, Jiang L, Liu Z, Lian C, Ding X, Wan C, Liu N, Wang Y, Yu Z, Zhu L, Yin F, Li Z. ACS Nano. 2022 Nov 22;16(11):19509-19522. doi: 10.1021/acsnano.2c09708. Epub 2022 Nov 1. PMID: 36318615

Hepatitis A and hepatitis B infection risk among employees at schools for disabled pupils.

Lang F, Schoene K, Goessler F, Rose DM, Kegel P. Sci Rep. 2022 Nov 23;12(1):20198. doi: 10.1038/s41598-022-24579-7. PMID: 36424401

Comparison chart: Antiviral drugs for influenza for 2022-2023.

[No authors listed] Med Lett Drugs Ther. 2022 Nov 28;64(1664):e1-e5. PMID: 36397192

Specificity and Breadth of the Neutralizing Antibody Response to a Live-Attenuated Tetravalent Dengue Vaccine.

DeMaso CR, Karwal L, Zahralban-Steele M, Dominguez D, Springer ZL, Kaiser M, Palani S, Rindfleisch T, Bohning K, Hather G, Das S, Sharma M, Dean HJ. J Infect Dis. 2022 Nov 28;226(11):1959-1963. doi: 10.1093/infdis/jiac272. PMID: 35771658

Polysaccharide-based hydrogels for drug delivery and wound management: A review.

Sanjanwala D, Londhe V, Trivedi R, Bonde S, Sawarkar S, Kale V, Patravale V. Expert Opin Drug Deliv. 2022 Nov 28. doi: 10.1080/17425247.2022.2152791. Online ahead of print. PMID: 36440488

A multicenter study of ocular inflammation after COVID-19 vaccination.

Yasaka Y, Hasegawa E, Keino H, Usui Y, Maruyama K, Yamamoto Y, Kaburaki T, Iwata D, Takeuchi M, Kusuhara S, Takase H, Nagata K, Yanai R, Kaneko Y, Iwahashi C, Fukushima A, Ohguro N, Sonoda KH; JOIS Uveitis Survey Working Group. Jpn J Ophthalmol. 2022 Nov 22:1-8. doi: 10.1007/s10384-022-00962-9. Online ahead of print. PMID: 36417027

Hydrogel-guided strategies to stimulate an effective immune response for vaccine-based cancer immunotherapy.

Lei L, Huang D, Gao H, He B, Cao J, Peppas NA. Sci Adv. 2022 Nov 25;8(47):eadc8738. doi: 10.1126/sciadv.adc8738. Epub 2022 Nov 25. PMID: 36427310

Psychological Reactance Theory and COVID-19 Vaccine Mandates: The Roles of Threat Magnitude and Direction of Threat.

Kriss LA, Quick BL, Rains SA, Barbat JL. J Health Commun. 2022 Nov 23:1-10. doi: 10.1080/10810730.2022.2148023. Online ahead of print. PMID: 36416110

[Multiple COVID reinfections in a vaccinated psoriatic patient receiving adalimumab.](#)

Zargari O, Azimi SZ. J Dermatolog Treat. 2022 Nov 22:1-3. doi: 10.1080/09546634.2022.2149237. Online ahead of print. PMID: 36384391

[OGG1 inhibition suppresses African swine fever virus replication.](#)

Fan J, Lv X, Yang S, Geng S, Yang J, Zhao Y, Zhang Z, Liu Z, Guan G, Luo J, Zeng Q, Yin H, Niu Q. Virol Sin. 2022 Nov 23:S1995-820X(22)00190-0. doi: 10.1016/j.virs.2022.11.006. Online ahead of print. PMID: 36435451

[Co-creation of information materials within the assent process: From theory to practice.](#)

Fons-Martinez J, Ferrer-Albero C, Diez-Domingo J. Health Expect. 2022 Nov 23. doi: 10.1111/hex.13675. Online ahead of print. PMID: 36416386

[Quality of antibody responses by adults and young children to 13-valent pneumococcal conjugate vaccination and Streptococcus pneumoniae colonisation.](#)

Wolf AS, Mitsi E, Jones S, Jochems SP, Roalfe L, Thindwa D, Meiring JE, Msefula J, Bonomali F, Makhaza Jere T, Mbewe M, Collins AM, Gordon SB, Gordon MA, Ferreira DM, French N, Goldblatt D, Heyderman RS, Swarthout TD. Vaccine. 2022 Nov 28;40(50):7201-7210. doi: 10.1016/j.vaccine.2022.09.069. Epub 2022 Oct 6. PMID: 36210249

[Antibodies against SARS-CoV-2 S and N proteins in relapsing-remitting multiple sclerosis patients treated with disease-modifying therapies.](#)

Kulikowska J, Czarnowska A, Gudowska-Sawczuk M, Kulczyńska-Przybik A, Bazylewicz M, Collins F, Chorąży M, Mroczko B, Kochanowicz J, Kapica-Topczewska K, Kułakowska A. Neurol Neurochir Pol. 2022 Nov 24. doi: 10.5603/PJNNS.a2022.0067. Online ahead of print. PMID: 36421067

[Moral injury in health care: A focus on immunization.](#)

Ricciardelli R, MacDonald NE. Vaccine. 2022 Nov 22;40(49):7011-7013. doi: 10.1016/j.vaccine.2022.10.054. Epub 2022 Oct 29. PMID: 36319489

[Safety, efficacy, and DIVA feasibility on a novel live attenuated classical swine fever marker vaccine candidate.](#)

Tong C, Liu H, Wang J, Sun Y, Chen N. Vaccine. 2022 Nov 28;40(50):7219-7229. doi: 10.1016/j.vaccine.2022.10.035. Epub 2022 Oct 31. PMID: 36328881

[Fulminant Myocarditis and Acute Appendicitis after COVID-19 Vaccination: A Case Report.](#)

Kawano H, Yamamoto N, Kurohama H, Okano S, Kurobe M, Honda T, Akashi R, Yonekura T, Ikeda S, Izumikawa K, Maemura K. Intern Med. 2022 Nov 23. doi: 10.2169/internalmedicine.0680-22. Online ahead of print. PMID: 36418095

[Post-marketing surveillance study on influenza vaccine in South Korea using a nationwide spontaneous reporting database with multiple data mining methods.](#)

Lee H, Hong B, Kim S, Kim JH, Choi NK, Jung SY, Shin JY. Sci Rep. 2022 Nov 24;12(1):20256. doi: 10.1038/s41598-022-21986-8. PMID: 36424402

[Assessment of antibody responses against SARS-CoV-2 in unvaccinated individuals and vaccinees from Omicron-BA.2 infection in Zhaoqing, Guangdong Province, China.](#)

Zhang H, Jiang Y, Tan H, Zou L, Zheng Z, Huang Y, Lin S, Su L, Yu J, Deng X, He J, Liu C, Shen C, Li B. Virol J. 2022 Nov 25;19(1):197. doi: 10.1186/s12985-022-01912-0. PMID: 36434614

[Human antibody recognition and neutralization mode on the NTD and RBD domains of SARS-CoV-2 spike protein.](#)

Otsubo R, Minamitani T, Kobiyama K, Fujita J, Ito T, Ueno S, Anzai I, Tanino H, Aoyama H, Matsuura Y, Namba K, Imadome KI, Ishii KJ, Tsumoto K, Kamitani W, Yasui T. Sci Rep. 2022 Nov 22;12(1):20120. doi: 10.1038/s41598-022-24730-4. PMID: 36418391

[Reverse engineering approach: a step towards a new era of vaccinology with special reference to \*Salmonella\*.](#)

Vij S, Thakur R, Rishi P. Expert Rev Vaccines. 2022 Dec;21(12):1763-1785. doi: 10.1080/14760584.2022.2148661. Epub 2022 Nov 23. PMID: 36408592

[Tumour antigen spreading mediated by vaccine-boosted CAR T cells.](#)

Mateus-Tique J, Brown B. Nat Rev Immunol. 2022 Nov 24. doi: 10.1038/s41577-022-00811-3. Online ahead of print. PMID: 36434108

[Co-display of diverse Spike proteins on nanoparticles broadens sarbecovirus neutralizing antibody responses.](#)

Brinkkemper M, Veth TS, Brouwer PJM, Turner H, Poniman M, Burger JA, Bouhuijs JH, Olijhoek W, Bontjer I, Snitselaar JL, Caniels TG, van der Linden CA, Ravichandran R, Villaudy J, van der Velden YU, Sliepen K, van Gils MJ, Ward AB, King NP, Heck AJR, Sanders RW. iScience. 2022 Nov 22:105649. doi: 10.1016/j.isci.2022.105649. Online ahead of print. PMID: 36439375

[Effects of artificial intelligence aibo intervention on alleviating distress and fear in children.](#)

Tanaka K, Hayakawa M, Noda C, Nakamura A, Akiyama C. Child Adolesc Psychiatry Ment Health. 2022 Nov 23;16(1):87. doi: 10.1186/s13034-022-00519-1. PMID: 36424648

[Lot-to-lot consistency, immunogenicity, and safety of an inactivated SARS-CoV-2 vaccine \(CoronaVac\) in healthy adults: A randomized, double-blind, phase IV trial.](#)

Zhu D, Hu Y, Jiang Z, Yang T, Chu K, Zhang H, Hu J, Meng X, Tan Z, Wu J, Lian X, Li C, Pan H. Hum Vaccin Immunother. 2022 Nov 28:2135929. doi: 10.1080/21645515.2022.2135929. Online ahead of print. PMID: 36441137

[Fine-mapping the immunodominant antibody epitopes on consensus sequence-based HIV-1 envelope trimer vaccine candidates.](#)

Reiss EIMM, van Haaren MM, van Schooten J, Claireaux MAF, Maisonnasse P, Antanasijevic A, Allen JD, Bontjer I, Torres JL, Lee WH, Ozorowski G, Vázquez Bernat N, Kaduk M, Aldon Y, Burger JA, Chawla H, Aartse A, Tolazzi M, Gao H, Mundspurger P, Crispin M, Montefiori DC, Karlsson Hedestam GB, Scarlatti G, Ward AB, Le Grand R, Shattock R, Dereuddre-Bosquet N, Sanders RW, van Gils MJ. NPJ Vaccines. 2022 Nov 25;7(1):152. doi: 10.1038/s41541-022-00576-9. PMID: 36433972

[A phase I, open label, clinical study to assess the safety and immunogenicity of indigenously developed liquid \(DTwP-HepB-IPV-Hib\) hexavalent combination vaccine in healthy toddlers aged 16-24 months.](#)

Sharma H, Lalwani S, Parekh S, Pujari P, Shewale S, Palkar S, Hanumante N, Gokhale S, Ks J, Kumar R, Sharma I, Gairola S. Hum Vaccin Immunother. 2022 Nov 22:2146435. doi: 10.1080/21645515.2022.2146435. Online ahead of print. PMID: 36412272

[Anaphylaxis: Revision of the Brighton collaboration case definition.](#)

Gold MS, Amarasinghe A, Greenhawt M, Kelso JM, Kochhar S, Yu-Hor Thong B, Top KA, Turner PJ, Worm M, Law B. Vaccine. 2022 Nov 24:S0264-410X(22)01425-6. doi: 10.1016/j.vaccine.2022.11.027. Online ahead of print. PMID: 36435707

[Long-Term and Low-Level Envelope C2V3 Stimulation by Highly Diverse Virus Isolates Leads to Frequent Development of Broad and Elite Antibody Neutralization in HIV-1-Infected Individuals.](#)

Martin F, Marcelino JM, Palladino C, Bártolo I, Tracana S, Moranguinho I, Gonçalves P, Mateus R, Calado R, Borrego P, Leitner T, Clemente S, Taveira N. Microbiol Spectr. 2022 Nov 29:e0163422. doi: 10.1128/spectrum.01634-22. Online ahead of print. PMID: 36445130

[Measuring the impact of COVID-19 vaccination and immunity waning: A modelling study for Portugal.](#)

Caetano C, Morgado ML, Patrício P, Leite A, Machado A, Torres A, Pereira JF, Namorado S, Sottomayor A, Peralta-Santos A, Nunes B. Vaccine. 2022 Nov 22;40(49):7115-7121. doi: 10.1016/j.vaccine.2022.10.007. Epub 2022 Oct 17. PMID: 36404429

[Review of scientific evidence to support recommendations of the full-dose DTaP-IPV vaccination in pre-school age children in Italy.](#)

Bechini A, Zanella B, Bonito B, Bonanni P, Boccalini S. Expert Rev Vaccines. 2022 Dec;21(12):1819-1830. doi: 10.1080/14760584.2022.2130770. Epub 2022 Nov 27. PMID: 36178008

[Cost-effectiveness of revised US pneumococcal vaccination recommendations in underserved minority adults < 65-years-old.](#)

Wateska AR, Patricia Nowalk M, Lin CJ, Harrison LH, Schaffner W, Zimmerman RK, Smith KJ. Vaccine. 2022 Nov 28;40(50):7312-7320. doi: 10.1016/j.vaccine.2022.10.066. Epub 2022 Nov 3. PMID: 36336526

[The Role of Anti-Racist Community-Partnered Praxis in Implementing Restorative Circles Within Marginalized Communities in Southern California During the COVID-19 Pandemic.](#)

Adkins-Jackson PB, Vázquez E, Henry-Ala FK, Ison JM, Cheney A, Akingbulu J, Starks C, Slay L, Dorsey A, Marmolejo C, Stafford A, Wen J, McCauley MH, Summers L, Bermudez L, Cruz-Roman ZL, Castillo I, Kipke MD, Brown AF; STOP COVID-19 CA Vaccine Hesitancy Workgroup. Health Promot Pract. 2022 Nov 23:15248399221132581. doi: 10.1177/15248399221132581. Online ahead of print. PMID: 36419256

[Development and biological evaluation of pNIPAM-based nanogels as vaccine carriers.](#)

Laura Soriano Pérez M, Alejandro Funes J, Flores C, Exequiel Ibarra L, Andrea Forrellad M, Taboga O, Noelia Cariddi L, Salinas F, Héctor Ortega H, Alustiza F, Molina M. Int J Pharm. 2022 Nov 25:122435. doi: 10.1016/j.ijpharm.2022.122435. Online ahead of print. PMID: 36442723

[Pertussis, diphtheria, and tetanus antibodies seroprevalence in pregnant women and neonates, as a preliminary data for introduction of preconception or prenatal DTaP vaccination among Japanese society.](#)

Tsurane K, Umehara N, Nakayama T, Okada K, Inoue M, Ogawa K, Sago H, Miyasaka N, Yamaguchi K. Vaccine. 2022 Nov 22;40(49):7122-7129. doi: 10.1016/j.vaccine.2022.09.092. Epub 2022 Oct 28. PMID: 36404430

[Safety and tolerance of vaccines against SARS-CoV-2 infection in systemic lupus erythematosus: results from the COVAD study.](#)

R N, Nikiphorou E, Joshi M, Sen P, Lindblom J, Agarwal V, Lilleker JB, Tan AL, Salim B, Ziade N, Velikova T, Edgar Gracia-Ramos A, Kuwana M, Day J, Makol A, Distler O, Chinoy H, Traboco LS, Kusumo Wibowo SA, Zamora Tehozol EA, Serrano JR, La Torre IG; COVAD Study Group, Aggarwal R, Gupta L, Agarwal V, Parodis I. *Rheumatology (Oxford)*. 2022 Nov 22:keac661. doi: 10.1093/rheumatology/keac661. Online ahead of print. PMID: 36413073

[Cardiovascular safety of COVID-19 vaccines in real-world studies: a systematic review and meta-analysis.](#)

Chang Y, Lv G, Liu C, Huang E, Luo B. *Expert Rev Vaccines*. 2022 Nov 29:1-10. doi: 10.1080/14760584.2023.2150169. Online ahead of print. PMID: 36413786

[Effectiveness and safety of COVID-19 vaccine in pregnant women: a systematic review with meta-analysis.](#)

Tormen M, Taliento C, Salvioli S, Piccolotti I, Scutiero G, Cappadona R, Greco P. *BJOG*. 2022 Nov 28. doi: 10.1111/1471-0528.17354. Online ahead of print. PMID: 36444098

[\[Role, working methods and recommendations of the Standing Committee on Vaccinations \(STIKO\) in the context of the COVID-19 pandemic\].](#)

Vygen-Bonnet S, Schlaberg J, Koch J. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2022 Nov 22:1-11. doi: 10.1007/s00103-022-03610-2. Online ahead of print. PMID: 36416888

[Cost-effectiveness of respiratory syncytial virus preventive interventions in children: a model comparison study.](#)

Li X, Hodgson D, Flraig J, Kieffer A, Herring WL, Beyhaghi H, Willem L, Jit M, Bilcke J, Beutels P, Nair H, Campbell H, Pollard A, Openshaw P, Martinon-Torres F, Heikkinen T, Meijer A, Fischer TK, van den Berge M, Giaquinto C, Abram M, Swanson K, Rizkalla B, Vernhes C, Gallichan S, Aerssens J, Kumar V, Molero E. *Value Health*. 2022 Nov 25:S1098-3015(22)04746-5. doi: 10.1016/j.jval.2022.11.014. Online ahead of print. PMID: 36442831

[How Protective are Antibodies to SARS-CoV-2, the Main Weapon of the B-Cell Response?](#)

Pons S, Uhel F, Frapy E, Sérémé Y, Zafrani L, Aschard H, Skurnik D. *Stem Cell Rev Rep*. 2022 Nov 24. doi: 10.1007/s12015-022-10477-y. Online ahead of print. PMID: 36422774

[Deployment of a reservoir-targeted vaccine against \*Borrelia burgdorferi\* reduces the prevalence of \*Babesia microti\* coinfection in \*Ixodes scapularis\* ticks.](#)

Vannier E, Richer LM, Dinh DM, Brisson D, Ostfeld RS, Gomes-Solecki M. *J Infect Dis*. 2022 Nov 23:jiac462. doi: 10.1093/infdis/jiac462. Online ahead of print. PMID: 36416014

[Simultaneous carriage of multiple serotypes of Group B Streptococcus: Systematic review and meta-analysis.](#)

Barro C, Salloum M, Lim S, Delputte P, Le Doare K. *Vaccine*. 2022 Nov 23:S0264-410X(22)01421-9. doi: 10.1016/j.vaccine.2022.11.024. Online ahead of print. PMID: 36435703

[Role of \*Acacia catechu\* and \*Scutellaria baicalensis\* in Enhancing Immune Function Following Influenza Vaccination of Healthy Adults: A Randomized, Triple-Blind, Placebo-Controlled Clinical Trial.](#)

Lewis ED, Crowley DC, Guthrie N, Evans M. J Am Nutr Assoc. 2022 Nov 22;1-13. doi: 10.1080/27697061.2022.2145525. Online ahead of print. PMID: 36413261

[Developing communication tools on rotavirus vaccination to support family paediatricians in Italy.](#)

Marchetti F, Lamiani G, Bona M, Amerighi C, Ruffato B, Conforti G. Vaccine. 2022 Nov 22;40(49):7108-7114. doi: 10.1016/j.vaccine.2022.10.036. Epub 2022 Oct 29. PMID: 36404428 Free article.

[Current understanding of T cell immunity against SARS-CoV-2.](#)

Lu X, Yamasaki S. Inflamm Regen. 2022 Nov 29;42(1):51. doi: 10.1186/s41232-022-00242-6. PMID: 36447270

[Oral vaccination of mice with attenuated Salmonella encoding \*Trichinella spiralis\* calreticulin and serine protease 1.1 confers protective immunity in BALB/c mice.](#)

Bai SJ, Han LL, Liu RD, Long SR, Zhang X, Cui J, Wang ZQ. PLoS Negl Trop Dis. 2022 Nov 29;16(11):e0010929. doi: 10.1371/journal.pntd.0010929. eCollection 2022 Nov. PMID: 36445875

[A highly immunogenic vaccine platform against encapsulated pathogens using chimeric probiotic \*Escherichia coli\* membrane vesicles.](#)

Nakao R, Kobayashi H, Iwabuchi Y, Kawahara K, Hirayama S, Ramstedt M, Sasaki Y, Kataoka M, Akeda Y, Ohnishi M. NPJ Vaccines. 2022 Nov 26;7(1):153. doi: 10.1038/s41541-022-00572-z. PMID: 36435869

[Chemical Synthesis and Antigenicity Evaluation of \*Shigella dysenteriae\* Serotype 10 O-Antigen Tetrasaccharide Containing a \(S\)-4,6-O-Pyruvyl Ketal.](#)

Qin C, Li L, Tian G, Ding M, Zhu S, Song W, Hu J, Seeberger PH, Yin J. J Am Chem Soc. 2022 Nov 23;144(46):21068-21079. doi: 10.1021/jacs.2c05953. Epub 2022 Nov 10. PMID: 36354960

[Molecular Characterization and Expression Analysis of the Sterol-carrier Protein-2 Fragment in \*Anopheles sacharovi\* Generations.](#)

Aygün S, Düzlü Ö, Yıldırım A. Turkiye Parazitol Derg. 2022 Nov 28;46(4):312-321. doi: 10.4274/tpd.galenos.2022.68553. PMID: 36444407

[Post-COVID mRNA vaccine myocarditis in children: report of two cases.](#)

Shamekh A, Powell C, Ashabani A, Abdelgadir IS. BMJ Case Rep. 2022 Nov 28;15(11):e253383. doi: 10.1136/bcr-2022-253383. PMID: 36442910

[Advances in Computational Methods to Discover New NS2B-NS3 Inhibitors Useful Against Dengue and Zika viruses.](#)

José Dos Santos Nascimento I, Erlanny da Silva Rodrigues É, Figueiredo da Silva M, Xavier de Araújo-Júnior J, Olimpio de Moura R. Curr Top Med Chem. 2022 Nov 22. doi: 10.2174/1568026623666221122121330. Online ahead of print. PMID: 36415099

[Single-component lipid nanoparticles for engineering SOCS1 gene-silenced dendritic cells to boost tumor immunotherapy.](#)

Yu Z, Wu M, Huang Y, Wang Y, Chen Y, Long Q, Lin Z, Xue L, Ju C, Zhang C. Biomater Sci. 2022 Nov 28. doi: 10.1039/d2bm01549h. Online ahead of print. PMID: 36440740

[Humoral response and safety of the BNT162b2 and mRNA-1273 COVID-19 vaccines in allogeneic hematopoietic stem cell transplant recipients: An observational study.](#)

Nishikubo M, Shimomura Y, Maruoka H, Nasu S, Nishioka T, Sakizono K, Mitsuyuki S, Kubo T, Okada N, Nakagawa D, Kamijo K, Imoto H, Yamamoto R, Nagai Y, Hiramoto N, Yoshioka S, Yonetani N, Matsushita A, Miyakoshi C, Doi A, Ishikawa T. *J Infect Chemother.* 2022 Nov 25:S1341-321X(22)00317-8. doi: 10.1016/j.jiac.2022.11.010. Online ahead of print. PMID: 36442827

[Interference with LT \$\beta\$ R signaling by tick saliva facilitates transmission of Lyme disease spirochetes.](#)

Jin L, Jiang BG, Yin Y, Guo J, Jiang JF, Qi X, Crispell G, Karim S, Cao WC, Lai R. *Proc Natl Acad Sci U S A.* 2022 Nov 22;119(47):e2208274119. doi: 10.1073/pnas.2208274119. Epub 2022 Nov 16. PMID: 36383602

[KbvR mutant of Klebsiella pneumoniae affects the synthesis of type 1 fimbriae and provides protection to mice as a live attenuated vaccine.](#)

Zhang F, Meng Y, Xu L, Tian Y, Lu H, Xie J, Ma R, Li M, Li B. *Vet Res.* 2022 Nov 26;53(1):97. doi: 10.1186/s13567-022-01116-y. PMID: 36435858

[The influence of anxiety and fear of COVID-19 on vaccination hesitancy among postsecondary students.](#)

Šorgo A, Crnković N, Cesar K, Selak Š, Vrdelja M, Gabrovec B. *Sci Rep.* 2022 Nov 29;12(1):20564. doi: 10.1038/s41598-022-25221-2. PMID: 36446831

[HPV genotyping in biopsies of HSIL and invasive cervical cancers in women living with HIV: A cohort- and a nested -case control study.](#)

Gilles C, Rozenberg S, Buxant F, Manigart Y, de Wind R, Houte KV, Vandenbroeck D, Delforge M, Konopnicki D. *Vaccine.* 2022 Nov 28;40(50):7230-7237. doi: 10.1016/j.vaccine.2022.10.029. Epub 2022 Oct 31. PMID: 36328880

[The resurgence risk of COVID-19 in China in the presence of immunity waning and ADE: A mathematical modelling study.](#)

Zhou W, Tang B, Bai Y, Shao Y, Xiao Y, Tang S. *Vaccine.* 2022 Nov 22;40(49):7141-7150. doi: 10.1016/j.vaccine.2022.10.043. Epub 2022 Oct 26. PMID: 36328883

[Elucidating the Effect of Nanoscale Receptor-Binding Domain Organization on SARS-CoV-2 Infection and Immunity Activation with DNA Origami.](#)

Zhang J, Xu Y, Chen M, Huang Y, Song T, Yang C, Yang Y, Song Y. *J Am Chem Soc.* 2022 Nov 23;144(46):21295-21303. doi: 10.1021/jacs.2c09229. Epub 2022 Nov 10. PMID: 36356984

[A retrospective evaluation of side-effects associated with the booster dose of Pfizer-BioNTech/BNT162b2 COVID-19 vaccine among females in Eastern Province, Saudi Arabia.](#)

Hassan YAM, Daud Ali M, Al-Eid RR, Al-Ghuraya FA, Essa Alqasimi Z, Ahmad A, Eltrafi Z, Ghosn SA. *Vaccine.* 2022 Nov 22;40(49):7087-7096. doi: 10.1016/j.vaccine.2022.10.009. Epub 2022 Oct 17. PMID: 36404426

[Induction of cross-neutralizing antibodies by a permuted hepatitis C virus glycoprotein nanoparticle vaccine candidate.](#)

Sliepen K, Radić L, Capella-Pujol J, Watanabe Y, Zon I, Chumbe A, Lee WH, de Gast M, Koopsen J, Koekkoek S, Del Moral-Sánchez I, Brouwer PJM, Ravichandran R, Ozorowski G, King NP, Ward AB, van

Gils MJ, Crispin M, Schinkel J, Sanders RW. Nat Commun. 2022 Nov 25;13(1):7271. doi: 10.1038/s41467-022-34961-8. PMID: 36434005

[Association of cellular immunity with severity of COVID-19 from the perspective of antigen-specific memory T cell responses and cross-reactivity.](#)

Fujii SI, Yamasaki S, Iyoda T, Shimizu K. Inflamm Regen. 2022 Nov 29;42(1):50. doi: 10.1186/s41232-022-00239-1. PMID: 36447262

[Mathematical modeling of vaccination as a control measure of stress to fight COVID-19 infections.](#)

Paul JN, Mbalawata IS, Mirau SS, Masandawa L. Chaos Solitons Fractals. 2022 Nov 22;166:112920. doi: 10.1016/j.chaos.2022.112920. Online ahead of print. PMID: 36440088

[A conserved glutathione binding site in poliovirus is a target for antivirals and vaccine stabilisation.](#)

Bahar MW, Nasta V, Fox H, Sherry L, Grehan K, Porta C, Macadam AJ, Stonehouse NJ, Rowlands DJ, Fry EE, Stuart DI. Commun Biol. 2022 Nov 25;5(1):1293. doi: 10.1038/s42003-022-04252-5. PMID: 36434067

[Serological responses to the MVA-based JYNNEOS monkeypox vaccine in a cohort of participants from the Democratic Republic of Congo.](#)

Priyamvada L, Carson WC, Ortega E, Navarra T, Tran S, Smith TG, Pukuta E, Muyamuna E, Kabamba J, Nguete BU, Likafi T, Kokola G, Lushima RS, Tamfum JM, Okitolonda EW, Kaba DK, Monroe BP, McCollum AM, Petersen BW, Satheshkumar PS, Townsend MB. Vaccine. 2022 Nov 28;40(50):7321-7327. doi: 10.1016/j.vaccine.2022.10.078. Epub 2022 Nov 4. PMID: 36344361

[COVID-19 endgame: From pandemic to endemic? Vaccination, reopening and evolution in low- and high-vaccinated populations.](#)

Are EB, Song Y, Stockdale JE, Tupper P, Colijn C. J Theor Biol. 2022 Nov 24:111368. doi: 10.1016/j.jtbi.2022.111368. Online ahead of print. PMID: 36436733

[Is a Booster Dose of COVID-19 Vaccines Effective on Newly Dominant Omicron Subvariants Among University Students? Comparison Between BA.1 and BA.2 Dominancy.](#)

Miyauchi S, Hiyama T, Nakano Y, Yoshino A, Miyake Y, Okamoto Y. Am J Infect Control. 2022 Nov 23:S0196-6553(22)00813-6. doi: 10.1016/j.ajic.2022.11.015. Online ahead of print. PMID: 36435404

[Factors associated with repeated influenza vaccine uptake among aged care staff in an Australian sample from 2017 to 2019.](#)

Kunasekaran M, Poulos CJ, Chughtai AA, Heslop DJ, MacIntyre CR. Vaccine. 2022 Nov 28;40(50):7238-7246. doi: 10.1016/j.vaccine.2022.08.015. Epub 2022 Oct 31. PMID: 36328882

[Epidemiological study of HPV infection in 40,693 women in Putian: a population study based on screening for high-risk HPV infection.](#)

Chen Z, Lin H, Zheng J, Cai L, Chen Z, Li J, Yu L. BMC Infect Dis. 2022 Nov 28;22(1):893. doi: 10.1186/s12879-022-07893-3. PMID: 36443703

[A single-cell surgery microfluidic device for transplanting tumor cytoplasm into dendritic cells without nuclei mixing.](#)

Okeyo KO, Hiyaji R, Oana H. Biotechnol J. 2022 Nov 22:e2200135. doi: 10.1002/biot.202200135. Online ahead of print. PMID: 36412930

[Multisystem inflammatory syndrome and lymphohistiocytic myocarditis after Covid-19 vaccine in a middle-aged woman.](#)

Kobayashi K, Hamatani Y, Moriyoshi K, Iguchi M, Masunaga N, Terashima M, Abe M, Sasahashi N, Akao M. ESC Heart Fail. 2022 Nov 23. doi: 10.1002/ehf2.14252. Online ahead of print. PMID: 36417910

[Penile Intraepithelial Neoplasia: Distribution of subtypes, HPV genotypes and p16<sup>INK4a</sup> in 84 international cases.](#)

Fernández-Nestosa MJ, Clavero O, Sánchez DF, Giannico GA, Lobatti A, Cañete-Portillo S, Velázquez EF, Alemany L, Muñoz N, de San José S, Bosch FX, Cubilla AL. Hum Pathol. 2022 Nov 22:S0046-8177(22)00263-5. doi: 10.1016/j.humpath.2022.11.006. Online ahead of print. PMID: 36427594

[Sustained delivery of CpG oligodeoxynucleotide by acetalated dextran microparticles augments effector response to Computationally Optimized Broadly Reactive Antigen \(COBRA\) influenza hemagglutinin.](#)

Batty CJ, Amouzougan EA, A Carlock M, Ross TM, Bachelder EM, Ainslie KM. Int J Pharm. 2022 Nov 25;630:122429. doi: 10.1016/j.ijpharm.2022.122429. Online ahead of print. PMID: 36436743

[Addressing COVID-19 vaccine hesitancy: A content analysis of government social media platforms in England and Italy during 2020-2021.](#)

Sesa G, Czabanowska K, Giangreco A, Middleton J. Public Health Pract (Oxf). 2022 Nov 24:100345. doi: 10.1016/j.puhip.2022.100345. Online ahead of print. PMID: 36447994

[Recombinant vesicular stomatitis virus-vectored vaccine induces long lasting immunity against Nipah virus disease.](#)

Woolsey C, Borisevich V, Fears AC, Agans KN, Deer DJ, Prasad AN, O'Toole R, Foster SL, Dobias NS, Geisbert JB, Fenton KA, Cross RW, Geisbert T. J Clin Invest. 2022 Nov 29:e164946. doi: 10.1172/JCI164946. Online ahead of print. PMID: 36445779

[Using mechanistic model-based inference to understand and project epidemic dynamics with time-varying contact and vaccination rates.](#)

Plank MJ, Hendy SC, Binny RN, Vattiatto G, Lustig A, Maclaren OJ. Sci Rep. 2022 Nov 28;12(1):20451. doi: 10.1038/s41598-022-25018-3. PMID: 36443439

[Analysis of CT signs, radiomic features and clinical characteristics for delta variant COVID-19 patients with different vaccination status.](#)

Wei H, Shao Z, Tai J, Fu F, Lv C, Guo Z, Wu Y, Chen L, Bai Y, Wu Q, Yu X, Mu X, Shao F, Wang M. BMC Med Imaging. 2022 Nov 29;22(1):209. doi: 10.1186/s12880-022-00937-9. PMID: 36447133

[Host 5'-3' Exoribonuclease XRN1 Acts as a Proviral Factor for Measles Virus Replication by Downregulating the dsRNA-Activated Kinase PKR.](#)

BenDavid E, Pfaller CK, Pan Y, Samuel CE, Ma D. J Virol. 2022 Nov 23;96(22):e0131922. doi: 10.1128/jvi.01319-22. Epub 2022 Oct 27. PMID: 36300942

[The Authorization of the First COVID-19 Vaccines Changed the Level and Nature of Intent to Get Vaccinated.](#)

Schieferdecker D, Pfuhl G, Kothari A. J Health Commun. 2022 Nov 22:1-11. doi: 10.1080/10810730.2022.2148021. Online ahead of print. PMID: 36412127

[Neutralizing antibodies induced by homologous and heterologous boosters in CoronaVac vaccinees in Chile.](#)

Acevedo J, Acevedo ML, Gaete-Argel A, Araos R, Gonzalez C, Espinoza D, Rivas S, Pizarro P, Jarpa S, Soto-Rifo R, Jara A, Valiente-Echeverría F. Clin Microbiol Infect. 2022 Nov 24:S1198-743X(22)00589-4. doi: 10.1016/j.cmi.2022.11.017. Online ahead of print. PMID: 36436704

[Development of a personalized dendritic cell vaccine and single-cell RNA sequencing-guided assessment of its cell type composition.](#)

Li Q, Yang C, Tian H, Jiang J, Li P, Zhu X, Lei T, Yin R, Ding P, Bai P, Li Q. Cytotherapy. 2022 Nov 25:S1465-3249(22)01016-7. doi: 10.1016/j.jcyt.2022.10.013. Online ahead of print. PMID: 36443171

[Public health impact and cost-effectiveness of implementing a 'pre-vaccination screening' strategy with the dengue vaccine in Puerto Rico.](#)

Thommes E, Coudeville L, Muhammad R, Martin M, Nelson CB, Chit A. Vaccine. 2022 Nov 28;40(50):7343-7351. doi: 10.1016/j.vaccine.2022.10.071. Epub 2022 Nov 5. PMID: 36347720

[Erratum to 'Co-production to tackle vaccine uptake'.](#)

[No authors listed] Perspect Public Health. 2022 Nov 28:17579139221136786. doi: 10.1177/17579139221136786. Online ahead of print. PMID: 36440956

[Bioaerosol dispersion and environmental risk simulation: Method and a case study for a biopharmaceutical plant of Gansu province, China.](#)

Xu X, Wang C, Wang P, Chu Y, Guo J, Bo X, Lin A. Sci Total Environ. 2022 Nov 25:160506. doi: 10.1016/j.scitotenv.2022.160506. Online ahead of print. PMID: 36442625

[Mass photometry reveals SARS-CoV-2 spike stabilisation to impede ACE2 binding through altered conformational dynamics.](#)

Burnap SA, Struwe WB. Chem Commun (Camb). 2022 Nov 22;58(93):12939-12942. doi: 10.1039/d2cc04711j. PMID: 36317551

[High Attack Rate of Severe Acute Respiratory Syndrome Coronavirus 2 B.1.1.529 Among 2-Dose Vaccinated Populations in 2 Indoor Entertainment Setting Outbreaks.](#)

Liu B, Stepien S, Pye V, Law C, Dalton C, Durrheim DN, Macartney K. J Infect Dis. 2022 Nov 28;226(11):1882-1886. doi: 10.1093/infdis/jiac184. PMID: 35533079

[Effectiveness of mRNA Booster Vaccination Against Mild, Moderate, and Severe COVID-19 Caused by the Omicron Variant in a Large, Population-Based, Norwegian Cohort.](#)

Laake I, Skodvin SN, Blix K, Caspersen IH, Gjessing HK, Juvet LK, Magnus P, Mjaaland S, Robertson AH, Starrfelt J, Trogstad L, Feiring B. J Infect Dis. 2022 Nov 28;226(11):1924-1933. doi: 10.1093/infdis/jiac419. PMID: 36259543

[Monkeypox: Single dose of smallpox vaccine offers 78% protection, UKHSA reports.](#)

Mahase E. BMJ. 2022 Nov 23;379:o2829. doi: 10.1136/bmj.o2829. PMID: 36418027

[An observational, cohort, multi-centre, open label phase IV extension study comparing preschool DTAP-IPV booster vaccine responses in children whose mothers were randomised to one of two pertussis-containing vaccines or received no pertussis-containing vaccine in pregnancy in England.](#)

Sapuan S, Andrews N, Hallis B, Hole L, Jones CE, Matheson M, Miller E, Snape MD, Heath PT. Vaccine. 2022 Nov 22;40(49):7050-7056. doi: 10.1016/j.vaccine.2022.10.005. Epub 2022 Oct 20. PMID: 36272877

[SARS-CoV-2 Spike Protein-Activated Dendritic Cell-Derived Extracellular Vesicles Induce Antiviral Immunity in Mice.](#)

Barnwal A, Basu B, Tripathi A, Soni N, Mishra D, Banerjee A, Kumar R, Vrati S, Bhattacharyya J. ACS Biomater Sci Eng. 2022 Nov 29. doi: 10.1021/acsbiomaterials.2c01094. Online ahead of print. PMID: 36445062

[Longitudinal IgG antibody responses to Plasmodium vivax blood-stage antigens during and after acute vivax malaria in individuals living in the Brazilian Amazon.](#)

Tashi T, Upadhye A, Kundu P, Wu C, Menant S, Soares RR, Ferreira MU, Longley RJ, Mueller I, Hoang QQ, Tham WH, Rayner JC, Scopel KK, Lima-Junior JC, Tran TM. PLoS Negl Trop Dis. 2022 Nov 23;16(11):e0010773. doi: 10.1371/journal.pntd.0010773. Online ahead of print. PMID: 36417454

[Long-read assembly of major histocompatibility complex and killer cell immunoglobulin-like receptor genome regions in cynomolgus macaque.](#)

Hu Q, Huang X, Jin Y, Zhang R, Zhao A, Wang Y, Zhou C, Liu W, Liu X, Li C, Fan G, Zhuo M, Wang X, Ling F, Luo W. Biol Direct. 2022 Nov 29;17(1):36. doi: 10.1186/s13062-022-00350-w. PMID: 36447238

[Current state of, prospects for, and obstacles to mRNA vaccine development.](#)

Aljabali AAA, Bashatwah RM, Obeid MA, Mishra V, Mishra Y, Serrano-Aroca Á, Lundstrom K, Tambuwala MM. Drug Discov Today. 2022 Nov 22:103458. doi: 10.1016/j.drudis.2022.103458. Online ahead of print. PMID: 36427779

[Regimen of Coronavirus Disease 2019 Vaccination Influences Extent and Kinetics of Antibody Avidity.](#)

Rössler A, Kimpel J, Fleischer V, Huber S, von Laer D, Borena W, Würzner R; HEVACC Study Group. J Infect Dis. 2022 Nov 28;226(11):1909-1912. doi: 10.1093/infdis/jiac379. PMID: 36111560

[Pyoderma Gangrenosum Triggered by COVID-19 Vaccination in a Patient with Ulcerative Colitis: A Case Report.](#)

Kim YC, Shim HS, Jeong H, Park YJ. Int J Low Extrem Wounds. 2022 Nov 25:15347346221141173. doi: 10.1177/15347346221141173. Online ahead of print. PMID: 36426538

[The Number of Coronavirus Disease 2019 Vaccine Doses and Severe Clinical Outcomes in Older Patients Infected With a Severe Acute Respiratory Syndrome Coronavirus 2 Omicron Variant.](#)

Furukawa K, Kurahashi Y, Ishimaru H, Nishimura M, Arii J, Sano S, Tohma Y, Ohkita H, Nakamura S, Iwata S, Mori Y. J Infect Dis. 2022 Nov 28;226(11):2041-2042. doi: 10.1093/infdis/jiac395. PMID: 36161491

[Rituximab-treated rheumatic patients: B-cells predict seroconversion after COVID-19 boost or revaccination in initial vaccine non-responders.](#)

Ammitzbøll C, Kragh Thomsen M, Bøgh Andersen J, Jensen JMB, From Hermansen ML, Dahl Johannsen A, Larsen ML, Mistegaard CE, Mikkelsen S, Szabadoss F, Vils SR, Erikstrup C, Hauge EM, Troldborg A.

Rheumatology (Oxford). 2022 Nov 29:keac666. doi: 10.1093/rheumatology/keac666. Online ahead of print. PMID: 36445008

[Post-vaccination adverse reactions, decision regret, and willingness to pay for the booster dose of COVID-19 vaccine among healthcare workers: A mediation analysis.](#)

Luo C, Jiang W, Chen HX, Tung TH. Hum Vaccin Immunother. 2022 Nov 24:2146964. doi: 10.1080/21645515.2022.2146964. Online ahead of print. PMID: 36422511

[Effectiveness of on-site influenza vaccination strategy in Italian healthcare workers: a systematic review and statistical analysis.](#)

Bianchi FP, Stefanizzi P, Cuscianna E, Di Lorenzo A, Martinelli A, Tafuri S. Expert Rev Vaccines. 2022 Nov 22:1-8. doi: 10.1080/14760584.2023.2149500. Online ahead of print. PMID: 36409195

[Longitudinal single-cell analysis of SARS-CoV-2-reactive B cells uncovers persistence of early-formed, antigen specific clones.](#)

Scharf L, Axelsson H, Emmanouilidi A, Mathew NR, Sheward DJ, Leach S, Isakson P, Smirnov IV, Marklund E, Miron N, Andersson LM, Gisslén M, Murrell B, Lundgren A, Bemark M, Angeletti D. JCI Insight. 2022 Nov 29:e165299. doi: 10.1172/jci.insight.165299. Online ahead of print. PMID: 36445762

[Human Monkeypox Virus Infection in the Immediate Period After Receiving Modified Vaccinia Ankara Vaccine.](#)

Hazra A, Rusie L, Hedberg T, Schneider JA. JAMA. 2022 Nov 22;328(20):2064-2067. doi: 10.1001/jama.2022.18320. PMID: 36178700

[Humoral response after the fourth dose of the SARS-CoV-2 vaccine in the CKD spectrum: a prespecified analysis of the SENCOVAC study.](#)

Quiroga B, Soler MJ, Ortiz A, Jarava Mantecón CJ, Gomes Pérez VO, Bordils A, Lacueva J, Marin Franco AJ, Delgado Conde P, Muñoz Ramos P, Calderón González C, Cazorla López JM, Sanchez-Rodriguez J, Sánchez Horrillo A, Monzón Vázquez TR, Leyva A, Rojas J, Gansevoort RT, de Sequera P; SENCOVAC collaborative network, Rodríguez MTJ, Valverde RL, Carretero MP, Díaz MO, Tocora DG, Suárez ER, Santolaya AJS, Cobo PA, Talavan T, Calero RC, Gracia-Iguacel C, González-Parra E, Pereira M, Martin-Cleary C, Ramos-Verde A, Giorgi M, Sánchez C, Giraldo YG, Horrillo AS, Suárez PR, Perpén AF, Ramos AF, Villanueva LS, Cortiñas A, Arias PAD, Cárdenas AC, de Santos A, Núñez A, Cuadrado GB, de Gante LM, Repollet R, Polo CR, Moreso F, Azancot MA, Ramos N, Toapanta OBN, Cidraque I, Bermejo S, Agraz I, Prat O, Medina C, Pardo E, Prat O, Saiz A, Vila MAM, Guldris SC, Granados NM, Cabo MJC, Alarcón WL, Sánchez SP, Alexandru S, Suarez LGP, Saico SP, Tapia MP, Zamora R, Hernández RS, Osorio LR, García-Fernández N, Moreno PLM, González NA, Ortiz AS, Iñarrea MNB, Cabrera SS, López RO, Peregrí CM, Morales MLA, Cabello MDN, Mazuecos A, García T, Narváez C, Orellana C, Márquez MGS, Novillo CL, Ganga PLQ, Carrión FV, Herrera ALG, Castro NB, Cendrero RMR, Hidalgo-Barquero MVM, Gallego RH, Alvarez Á, Leo EV, León JLP, García MAM, Jiménez BG, Pérez VOG, de Dios Ramiro Moya J, Espinosa DL, Herrador AJ, Zurita MN, Álvarez LD, Martínez ÁG, Arroyo SB, Fernández RR, Vargas MJS, Casero RC, Useche G, García AB, Díaz ABM, de Miguel CS, Palacios Á, Henningsmeyer B, Calve EO, Moya JL, Sato Y, Marín MS, Tejedor S, Vaquera SM, di Riso MC, Torres I, Alfaro G, Halauko O, Rifai FEL, Martínez AD, Ávila PJ, Sánchez CA, Sainz MS, Martín JMB, Del Río García L, Canga JLP, Ochoa PMV, Pacios LM, Machado LL, Morales AQ, Cavalotti IM, Zorita IN, López SO, González SO, Montañez CS, Rubio AB, Del Peso Gilsanz G, Gonzalez MO, Villanueva RS, Oliva MOL, Varela JC, Enríquez AG, Casas CC, Alonso PO, Tabares LG, Barreiro JML, Solla LP, Gándara A, de la Garza WN, Fleming FF, Goyanes

MGR, Feijoo CC, Plaza MMM, Juan CB, de la Fuente GA, Del Valle KP, Contreras FJP, Lara NB, Ferri DG, de Bustillo Llorente EM, Rodríguez EG, De La Manzanara Perez VL, Arevalo MC, Calvo JAH, Carratalá MRL, Rodríguez LMM, Salazar MS, Prieto BB, Pérez JMP, Paraíso AG, Huarte E, Lanau M, Campos RA, Ubé JM, Godoy IB, Aguilera ET, Alea RT, Del Rosario Saldaña MS, Salgueira M, Arresté N, de Los Ángeles Rodríguez M, Collantes R, Martínez AI, Moyano MJ, Víbora EJ, Gash SC, Martínez LR, Cervera MCA, De Tomas MTR, Prieto BA, Toyos C, Del Rio JM, Acosta AR, Zamacona AC, Martin MIJ, Ortega SB, Ruiz MIG, Rubio AH, Ledesma PG, Alvarez AG, Poch E, Cucchiari D, Monzo JB, Cabrera BE, Hernández APR, Rebollo MSG, Hernández JMR, González AY, Alonso JC, Más AM, Calvé M, Cardona MG, Balaguer VC, Pesquera JIM, de la Rosa EC, Santarelli DR, Garcia AS, Martin-Caro AC, Santamaría IM, Cervienka M, de la Pisa AMU, Monzon LS, Anachuri KA, Garcia EH, Gomez VO, Estupiñán RS, Amado FV, Borges PP, Beloso MD, Alonso FA, Felpete NP, Ameneiro AM, Mera MC, Casares BG, Larrondo SZ, Kareaga NM, Del Valle AISS, García ARM, Linaza BV, Del Toro Espinosa N, Perico PE, Oliva JMS, Manrique J, Castaño I, Purroi C, Gómez N, Mansilla C, Utzurrum A, de Arellano Serna MR, Perich LG, Rincón MM, De La Manzanara Perez VL, Arevalo MC, Calvo JAH, Villoria JG, De Salinas APM. Nephrol Dial Transplant. 2022 Nov 24:gfac307. doi: 10.1093/ndt/gfac307. Online ahead of print. PMID: 36423334

[Fatal Cerebral Venous Thrombosis in a Pregnant Woman with Inherited Antithrombin Deficiency after BNT162b2 mRNA COVID-19 Vaccination.](#)

Takikawa K, Dojiri R, Kimura N, Miyata A, Sonoda T, Yamazaki N, Egashira S, Oi K, Uchida H, Kato K, Oda M, Yokosawa M, Kikuchi T, Sugawara T, Takahashi H. Tohoku J Exp Med. 2022 Nov 23;258(4):327-332. doi: 10.1620/tjem.2022.J095. Epub 2022 Nov 10. PMID: 36351615

[Neutralizing antibodies against SARS-CoV-2 variants following mRNA booster vaccination in adults older than 65 years.](#)

Durier C, Ninove L, Lefebvre M, Radenne A, Desaint C, Ropers J, Bauer R, Lebbah S, Carette D, Lachatre M, Lecompte AS, Deplanque D, Botelho-Nevers E, Conrad A, Dussol B, Maakaroun-Vermesse Z, Melica G, Nicolas JF, Verdon R, Kiladjian J, Loubet P, Schmidt-Mutter C, Dualé C, Ansart S, Priet S, Levier A, Molino D, Vieillard LV, Parfait B, Lelièvre JD, Tartour E, de Lamballerie X, Launay O; ANRS0002S CoviCompareP Group; AP-HP CoviCompareM Group; Biological resource centers; Laboratories; Trial coordination; Sponsor; Scientific Committee. Sci Rep. 2022 Nov 27;12(1):20373. doi: 10.1038/s41598-022-24409-w. PMID: 36437298

[Casirivimab/Imdevimab for Active COVID-19 Pneumonia Which Persisted for Nine Months in a Patient with Follicular Lymphoma during Anti-CD20 Therapy.](#)

Nagai H, Saito M, Adachi E, Sakai-Tagawa Y, Yamayoshi S, Kiso M, Kawamata T, Koga M, Kawaoka Y, Tsutsumi T, Yotsuyanagi H. Jpn J Infect Dis. 2022 Nov 22;75(6):608-611. doi: 10.7883/yoken.JJID.2022.092. Epub 2022 Jun 30. PMID: 35768273

[Early CD4<sup>+</sup> T cell responses induced by the BNT162b2 SARS-CoV-2 mRNA vaccine predict immunological memory.](#)

Bai J, Chiba A, Murayama G, Kuga T, Yahagi Y, Tabe Y, Tamura N, Miyake S. Sci Rep. 2022 Nov 27;12(1):20376. doi: 10.1038/s41598-022-24938-4. PMID: 36437407

[Longitudinal changes in cell-mediated immunity after varicella-zoster virus skin test in the general population; Shozu Herpes Zoster Study: SHEZ Study.](#)

Ikeda D, Imano H, Mori Y, Asada H, Yamanishi K, Okuno Y, Iso H. J Med Virol. 2022 Nov 23. doi: 10.1002/jmv.28336. Online ahead of print. PMID: 36418204

[Intradermal administration of the pneumococcal conjugate vaccine in mice results in lower antibody responses as compared to intramuscular administration.](#)

Uijen RF, van Beek LF, van Opzeeland F, Simonetti E, van Selm S, Bonduelle O, Combadière B, Langereis JD, de Jonge MI. Vaccine. 2022 Nov 26;S0264-410X(22)01456-6. doi: 10.1016/j.vaccine.2022.11.043. Online ahead of print. PMID: 36446656

[Estimating the economic burden of typhoid in children and adults in Blantyre, Malawi: A costing cohort study.](#)

Limani F, Smith C, Wachepa R, Chafuwa H, Meiring J, Noah P, Patel P, Patel PD, Debellut F, Pecenka C, Gordon MA, Bar-Zeev N. PLoS One. 2022 Nov 23;17(11):e0277419. doi: 10.1371/journal.pone.0277419. eCollection 2022. PMID: 36417455

[Seroepidemiology of enterovirus A71 infection in prospective cohort studies of children in southern China, 2013-2018.](#)

Yang J, Liao Q, Luo K, Liu F, Zhou Y, Zou G, Huang W, Yu S, Wei X, Zhou J, Dai B, Qiu Q, Altmeyer R, Hu H, Paireau J, Luo L, Gao L, Nikolay B, Hu S, Xing W, Wu P, van Doorn HR, Horby PW, Simmonds P, Leung GM, Cowling BJ, Cauchemez S, Yu H. Nat Commun. 2022 Nov 26;13(1):7280. doi: 10.1038/s41467-022-34992-1. PMID: 36435844

[Immune gene expression analysis indicates the potential of a self-amplifying Covid-19 mRNA vaccine.](#)

Ong EZ, Yee JX, Ooi JSG, Syenina A, de Alwis R, Chen S, Sim JXY, Kalimuddin S, Leong YS, Chan YFZ, Sekulovich R, Sullivan BM, Lindert K, Sullivan SB, Chivukula P, Hughes SG, Low JG, Ooi EE, Chan KR. NPJ Vaccines. 2022 Nov 28;7(1):154. doi: 10.1038/s41541-022-00573-y. PMID: 36443317

[Spontaneous preterm birth risk among HPV vaccinated and unvaccinated women: a nationwide retrospective cohort study of over 240 000 singleton births.](#)

McClymont E, Faber MT, Belmonte F, Kjaer SK. BJOG. 2022 Nov 24. doi: 10.1111/1471-0528.17349. Online ahead of print. PMID: 36424904

[The H240R Protein of African Swine Fever Virus Inhibits Interleukin 1 \$\beta\$  Production by Inhibiting NEMO Expression and NLRP3 Oligomerization.](#)

Zhou P, Dai J, Zhang K, Wang T, Li LF, Luo Y, Sun Y, Qiu HJ, Li S. J Virol. 2022 Nov 23;96(22):e0095422. doi: 10.1128/jvi.00954-22. Epub 2022 Nov 3. PMID: 36326277

[Recombinant zoster vaccine \(RZV\) second-dose series completion in adults aged 50-64 years in the United States.](#)

Leung J, Gray EB, Anderson TC, Sharkey SM, Dooling K. Vaccine. 2022 Nov 28;40(50):7187-7190. doi: 10.1016/j.vaccine.2022.10.065. Epub 2022 Nov 5. PMID: 36347721

[Background rates of 41 adverse events of special interest for COVID-19 vaccines in 10 European healthcare databases - an ACCESS cohort study.](#)

Willame C, Dodd C, Durán CE, Elbers R, Gini R, Bartolini C, Paoletti O, Wang L, Ehrenstein V, Kahlert J, Haug U, Schink T, Diez-Domingo J, Mira-Iglesias A, Carreras JJ, Vergara-Hernández C, Giaquinto C, Barbieri E, Stona L, Huerta C, Martín-Pérez M, García-Poza P, de Burgos A, Martínez-González M, Bryant

V, Villalobos F, Pallejà-Millán M, Aragón M, Carreras JJ, Souverein P, Thurin NH, Weibel D, Klungel OH, Sturkenboom M. Vaccine. 2022 Nov 22:S0264-410X(22)01429-3. doi: 10.1016/j.vaccine.2022.11.031. Online ahead of print. PMID: 36446653

[Impact of vaccination with SCB-2019 COVID-19 vaccine on transmission of SARS-CoV-2 infection: a household contact study in the Philippines.](#)

Tadesse BT, Bravo L, Marks F, Aziz AB, You YA, Sugimoto J, Li P, Garcia J, Rockhold F, Clemens R; HHC study group. Clin Infect Dis. 2022 Nov 26:ciac914. doi: 10.1093/cid/ciac914. Online ahead of print. PMID: 36433685

[Outcomes of laboratory-confirmed SARS-CoV-2 infection during resurgence driven by Omicron lineages BA.4 and BA.5 compared with previous waves in the Western Cape Province, South Africa.](#)

Davies MA, Morden E, Rousseau P, Arendse J, Bam JL, Boloko L, Cloete K, Cohen C, Chetty N, Dane P, Heekes A, Hsiao NY, Hunter M, Hussey H, Jacobs T, Jassat W, Kariem S, Kassanjee R, Laenen I, Roux SL, Lessells R, Mahomed H, Maughan D, Meintjes G, Mendelson M, Mnguni A, Moodley M, Murie K, Naude J, Ntusi NAB, Paleker M, Parker A, Pienaar D, Preiser W, Prozesky H, Raubenheimer P, Rossouw L, Schrueder N, Smith B, Smith M, Solomon W, Symons G, Taljaard J, Wasserman S, Wilkinson RJ, Wolmarans M, Wolter N, Boulle A. Int J Infect Dis. 2022 Nov 24:S1201-9712(22)00615-4. doi: 10.1016/j.ijid.2022.11.024. Online ahead of print. PMID: 36436752

[Determinants of the willingness of medical staff to vaccinate their children with a booster dose of the COVID-19 vaccine in Taizhou, China.](#)

Huang LL, Tung TH, Jiang YH, Hu WW, Yang YP. Hum Vaccin Immunother. 2022 Nov 28:2139098. doi: 10.1080/21645515.2022.2139098. Online ahead of print. PMID: 36440977

[Human papillomavirus genotyping using next generation sequencing \(NGS\) in cervical lesions: Genotypes by histologic grade and their relative proportion in multiple infections.](#)

Basiletti JA, Valls J, Poklépovich T, Fellner MD, Rol M, Alonso R, Correa RM, Colucci MC, Rodríguez de la Peña M, Falabella PG, Saíno A, Campos J, Herrero R, Almonte M, Picconi MA. PLoS One. 2022 Nov 23;17(11):e0278117. doi: 10.1371/journal.pone.0278117. eCollection 2022. PMID: 36417453

[Endotoxin-free gram-negative bacterium as a system for production and secretion of recombinant proteins.](#)

Shahar E, Emquies K, Bloch I, Eliahu D, Ben Adiva R, Pitcovski J, Yadid I. Appl Microbiol Biotechnol. 2022 Nov 29. doi: 10.1007/s00253-022-12295-1. Online ahead of print. PMID: 36445389

[Expansion of CD8+ T cell population in Lassa virus survivors with low T cell precursor frequency reveals durable immune response in most survivors.](#)

LaVergne SM, Sakabe S, Momoh M, Kanneh L, Bond N, Garry RF, Grant DS, de la Torre JC, Oldstone MBA, Schieffelin JS, Sullivan BM. PLoS Negl Trop Dis. 2022 Nov 28;16(11):e0010882. doi: 10.1371/journal.pntd.0010882. Online ahead of print. PMID: 36441765

[Prurigo pigmentosa following booster dose of COVID-19 vaccine.](#)

Skowron F, Carbonnelle-Puscian A. J Eur Acad Dermatol Venereol. 2022 Nov 22. doi: 10.1111/jdv.18766. Online ahead of print. PMID: 36433722

[Current Challenges with the Use of Test-Negative Designs for Modeling COVID-19 Vaccination and Outcomes.](#)

Shi X, Li KQ, Mukherjee B. Am J Epidemiol. 2022 Nov 29:kwac203. doi: 10.1093/aje/kwac203. Online ahead of print. PMID: 36446573

[Mouse Study of Combined DNA/Protein COVID-19 Vaccine to Boost High Levels of Antibody and Cell Mediated Immune Responses.](#)

He Q, Liu S, Liang Z, Lu S, Cun W, Mao Q. Emerg Microbes Infect. 2022 Nov 25:1-13. doi: 10.1080/22221751.2022.2152388. Online ahead of print. PMID: 36426608

[6-month antibody kinetics and durability after four doses of a SARS-CoV-2 vaccine in solid organ transplant recipients.](#)

Mitchell J, Chiang TP, Alejo JL, Kim JD, Chang A, Abedon AT, Avery RK, Tobian AAR, Levan ML, Warren DS, Garonzik-Wang JM, Segev DL, Massie AB, Werbel WA. Clin Transplant. 2022 Nov 27:e14868. doi: 10.1111/ctr.14868. Online ahead of print. PMID: 36437691

[Severe Acute Respiratory Syndrome Coronavirus 2 Anti-Spike Antibody Levels Following Second Dose of ChAdOx1 nCov-19 or BNT162b2 Vaccine in Residents of Long-term Care Facilities in England \(VIVALDI\).](#)

Stirrup O, Krutikov M, Tut G, Palmer T, Bone D, Bruton R, Fuller C, Azmi B, Lancaster T, Sylla P, Kaur N, Spalkova E, Bentley C, Amin U, Jadir A, Hulme S, Giddings R, Nacer-Laidi H, Baynton V, Irwin-Singer A, Hayward A, Moss P, Copas A, Shallcross L. J Infect Dis. 2022 Nov 28;226(11):1877-1881. doi: 10.1093/infdis/jiac146. PMID: 35429382

[Macrophage Activation Syndrome Complicated by Toxic Epidermal Necrolysis Following SARS-CoV-2 mRNA Vaccination.](#)

Franzblau LE, Mauskar M, Wysocki CA. J Clin Immunol. 2022 Nov 28:1-4. doi: 10.1007/s10875-022-01408-0. Online ahead of print. PMID: 36441289

[Prevalence of SARS-CoV-2 antibodies among Belgian nursing home residents and staff during the primary COVID-19 vaccination campaign.](#)

Meyers E, De Rop L, Deschepper E, Duysburgh E, De Burghgraeve T, Van Ngoc P, Digregorio M, Delogne S, Coen A, De Clercq N, Buret L, Coenen S, De Sutter A, Scholtes B, Verbakel JY, Cools P, Heytens S. Eur J Gen Pract. 2022 Nov 28:1-9. doi: 10.1080/13814788.2022.2149732. Online ahead of print. PMID: 36440533

[Association Between Immunogenicity and Reactogenicity: A Post Hoc Analysis of 2 Phase 3 Studies With the Adjuvanted Recombinant Zoster Vaccine.](#)

Callegaro A, Burny W, Hervé C, Hyung Kim J, Levin MJ, Zahaf T, Cunningham AL, Didierlaurent AM. J Infect Dis. 2022 Nov 28;226(11):1943-1948. doi: 10.1093/infdis/jiab536. PMID: 34662415

[COVID-19 vaccine for young children: will parents accept it?](#)

Curatola A, Ferretti S, Gatto A, Chiaretti A. Acta Paediatr. 2022 Nov 22. doi: 10.1111/apa.16601. Online ahead of print. PMID: 36415084

[Probing the biophysical constraints of SARS-CoV-2 spike N-terminal domain using deep mutational scanning.](#)

Ouyang WO, Tan TJC, Lei R, Song G, Kieffer C, Andrabi R, Matreyek KA, Wu NC. Sci Adv. 2022 Nov 25;8(47):eadd7221. doi: 10.1126/sciadv.add7221. Epub 2022 Nov 23. PMID: 36417523

[Hypermetabolic lymphadenopathy following the administration of COVID-19 vaccine and immunotherapy in a lung cancer patient: a case report.](#)

Tripathy S, Alvarez N, Jaiswal S, Williams R, Al-Khadimi M, Hackman S, Phillips W, Kaur S, Cervantez S, Kelly W, Taverna J. J Med Case Rep. 2022 Nov 25;16(1):445. doi: 10.1186/s13256-022-03660-9. PMID: 36434709

[Maximizing the impact of limited vaccine supply under different early epidemic conditions: a 2-city modelling analysis of monkeypox virus transmission among men who have sex with men.](#)

Knight J, Tan DHS, Mishra S. CMAJ. 2022 Nov 28;194(46):E1560-E1567. doi: 10.1503/cmaj.221232. PMID: 36442881

[Inactivated Vibrio cholerae Strains That Express TcpA via the toxT-139F Allele Induce Antibody Responses against TcpA.](#)

Kim EJ, Bae J, Ju YJ, Ju DB, Lee D, Son S, Choi H, Ramamurthy T, Yun CH, Kim DW. J Microbiol Biotechnol. 2022 Nov 28;32(11):1396-1405. doi: 10.4014/jmb.2209.09001. Epub 2022 Oct 12. PMID: 36317425

[Contextual Pathways Linking Cumulative Experiences of Racial Discrimination to Black American Men's COVID Vaccine Hesitancy.](#)

Curtis MG, Whalen CC, Pjesivac I, Kogan SM. J Racial Ethn Health Disparities. 2022 Nov 29:1-13. doi: 10.1007/s40615-022-01471-8. Online ahead of print. PMID: 36445684

[Knowledge on Human Papillomavirus \(HPV\), HPV screening and HPV vaccine among sexual health clinic patients in Martinique, French West Indies.](#)

Cabras O, Sylvanise L, Marquise A, Cabié A, Cuzin L. Infect Dis Now. 2022 Nov 24:S2666-9919(22)00272-X. doi: 10.1016/j.idnow.2022.11.003. Online ahead of print. PMID: 36436804

[Anti-SARS-CoV-2 antibody decay after vaccination and immunogenicity of the booster dose of the BNT162b2 mRNA vaccine in patients with psoriatic arthritis on TNF inhibitors.](#)

Venerito V, Stefanizzi P, Martinelli A, Fornaro M, Galeone MG, Tafuri S, Iannone F, Lopalco G. Clin Exp Rheumatol. 2022 Nov 24. doi: 10.55563/clinexprheumatol/hptln9. Online ahead of print. PMID: 36441661

[Low acceptance rate of COVID-19 vaccination and reduced quality of life among heart transplant recipients during the COVID-19 pandemic.](#)

Wu Q, Shen Y, Xie L, Zhang J, Qiu Z, Tang M, Chen L. J Card Surg. 2022 Nov 29. doi: 10.1111/jocs.17205. Online ahead of print. PMID: 36444896

[Non-standard viral genome-derived RNA activates TLR3 and type I IFN signaling to induce cDC1-dependent CD8+ T-cell responses during vaccination in mice.](#)

Fisher DG, Gnazzo V, Holthausen DJ, López CB. Vaccine. 2022 Nov 28;40(50):7270-7279. doi: 10.1016/j.vaccine.2022.10.052. Epub 2022 Nov 1. PMID: 36333225

[Two cases of challenging cutaneous lymphoid infiltrates presenting in the context of COVID-19 vaccination: a reactive lymphomatoid papulosis-like eruption and a bona fide lymphoma.](#)

Bresler SC, Menge TD, Tejasvi T, Carty SA, Hristov AC. J Cutan Pathol. 2022 Nov 28. doi: 10.1111/cup.14371. Online ahead of print. PMID: 36437812

Ministers plan to replicate vaccine task force for cancer, obesity, mental health, and addiction.

Iacobucci G. BMJ. 2022 Nov 28;379:o2880. doi: 10.1136/bmj.o2880. PMID: 36442872

Cellular Nanodiscs Made from Bacterial Outer Membrane as a Platform for Antibacterial Vaccination.

Noh I, Guo Z, Zhou J, Gao W, Fang RH, Zhang L. ACS Nano. 2022 Nov 28. doi: 10.1021/acsnano.2c08360. Online ahead of print. PMID: 36441916

Dynamics of humoral and cellular immunity elicited by the BNT162b2 mRNA vaccine in psoriatic patients under targeted immunosuppression: a longitudinal cohort study.

Zelini P, Isoletta E, Volontè M, Lilleri D, Cassaniti I, Musella V, Klersy C, Baldanti F, Brazzelli V. J Eur Acad Dermatol Venereol. 2022 Nov 26. doi: 10.1111/jdv.18787. Online ahead of print. PMID: 36433886

Designing a virtual mental health consultation program to support and strengthen childcare centers impacted by COVID-19: A randomized controlled trial protocol.

Natale R, Agosto Y, Bulotsky-Shearer RJ, St George SM, Jent J. Contemp Clin Trials. 2022 Nov 25:107022. doi: 10.1016/j.cct.2022.107022. Online ahead of print. PMID: 36442806

Can the triumph of mRNA vaccines against COVID-19 be extended to other viral infections of humans and domesticated animals?

Sehrawat S, Osterrieder N, Schmid DS, Rouse BT. Microbes Infect. 2022 Nov 23:105078. doi: 10.1016/j.micinf.2022.105078. Online ahead of print. PMID: 36435367

Humoral response to mRNA-based COVID-19 vaccine in patients with immune thrombocytopenia.

Mori A, Onozawa M, Kobayashi M, Tsukamoto S, Senjo H, Ishio T, Yokoyama E, Izumiyama K, Saito M, Muraki H, Morioka M, Teshima T, Kondo T. Br J Haematol. 2022 Nov 28. doi: 10.1111/bjh.18578. Online ahead of print. PMID: 36442510

Providing COVID-19 vaccination to refugees and displaced people: Lessons from the vaccine roll-out for the Rohingya refugees in Cox's Bazaar, Bangladesh.

Alam AM. Lancet Reg Health Southeast Asia. 2022 Nov 23:100120. doi: 10.1016/j.lansea.2022.100120. Online ahead of print. PMID: 36439026

Vaccination with the Omicron spike RBD boosts broadly neutralizing antibody levels and confers sustained protection even after acquiring immunity to the original antigen.

Azuma H, Kawano Y, Shitaoka K, Kawahara T, Ito A, Higashura A, Kitajima Y, Ohki S, Yasuda T. Int Immunol. 2022 Nov 22:dxac055. doi: 10.1093/intimm/dxac055. Online ahead of print. PMID: 36413150

Temporal association of vitreous hemorrhage and hypertension after COVID-19 mRNA vaccines.

Matsuo T, Noda H. Clin Case Rep. 2022 Nov 27;10(11):e6657. doi: 10.1002/ccr3.6657. eCollection 2022 Nov. PMID: 36447668

The immunodominance of RBD antigen of delta variant as vaccine candidate against SARS-CoV-2 infection.

Luo D, Li T, Yang X, Ning N, Zhang L, Gu H, Li D, Yu W, Hu Z, Wang H. J Med Virol. 2022 Nov 29. doi: 10.1002/jmv.28359. Online ahead of print. PMID: 36448090

[Author Correction: A self-amplifying RNA vaccine against COVID-19 with long-term room-temperature stability.](#)

Voigt EA, Gerhardt A, Hanson D, Jennewein MF, Battisti P, Reed S, Singh J, Mohamath R, Bakken J, Beaver S, Press C, Soon-Shiong P, Paddon CJ, Fox CB, Casper C. NPJ Vaccines. 2022 Nov 23;7(1):150. doi: 10.1038/s41541-022-00578-7. PMID: 36418864

[Acute myocardial infarction complicated by severe left ventricle systolic dysfunction in a young patient after Covid 19 vaccination: a case report.](#)

Boudihi A, El-Azrak M, Doudouh O, Ismaili N, El Ouafi N. Radiol Case Rep. 2022 Nov 23;18(2):435-440. doi: 10.1016/j.radcr.2022.09.053. eCollection 2023 Feb. PMID: 36439930

[Regarding: Factors associated with severe or fatal clinical manifestations of SARS-CoV-2 infection after receiving the third dose of vaccine.](#)

Jolobe O. J Intern Med. 2022 Nov 27. doi: 10.1111/jim.13591. Online ahead of print. PMID: 36437497

[COVID-19 intranasal vaccines: current progress, advantages, prospects, and challenges.](#)

Dhama K, Dhawan M, Tiwari R, Emran TB, Mitra S, Rabaan AA, Alhumaid S, Alawi ZA, Al Mutair A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2045853. doi: 10.1080/21645515.2022.2045853. Epub 2022 Mar 8. PMID: 35258416

[Vaccine hesitancy and receipt of mandatory and optional pediatric vaccines in Shanghai, China.](#)

Ji M, Huang Z, Ren J, Wagner AL. Hum Vaccin Immunother. 2022 Nov 30;18(5):2043025. doi: 10.1080/21645515.2022.2043025. Epub 2022 Mar 23. PMID: 35321621

[COVID-19 vaccination challenges: A mini-review.](#)

Mohseni Afshar Z, Barary M, Hosseinzadeh R, Karim B, Ebrahimpour S, Nazary K, Sio TT, Sullman MJM, Carson-Chahoud K, Moudi E, Babazadeh A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2066425. doi: 10.1080/21645515.2022.2066425. Epub 2022 May 5. PMID: 35512088

[Effectiveness, immunogenicity, and safety of the quadrivalent HPV vaccine in women and men aged 27-45 years.](#)

Maldonado I, Plata M, Gonzalez M, Correa A, Nossa C, Giuliano AR, Joura EA, Ferenczy A, Ronnett BM, Stoler MH, Jin Zhou H, Joshi A, Das R, Bautista O, Group T, Luxembourg A, Saah A, Buchwald UK. Hum Vaccin Immunother. 2022 Nov 30;18(5):2078626. doi: 10.1080/21645515.2022.2078626. Epub 2022 Jul 19. PMID: 35853188

[Medical and non-medical students' knowledge, attitude and willingness towards the COVID-19 vaccine in China: a cross-sectional online survey.](#)

Gao L, Su S, Du N, Han Y, Wei J, Cao M, Miao Q, Wang X. Hum Vaccin Immunother. 2022 Nov 30;18(5):2073757. doi: 10.1080/21645515.2022.2073757. Epub 2022 May 25. PMID: 35612817

[Preventing invasive meningococcal disease in early infancy.](#)

Presas J, Serra L, Weil-Olivier C, York L. Hum Vaccin Immunother. 2022 Nov 30;18(5):1979846. doi: 10.1080/21645515.2021.1979846. Epub 2022 Apr 28. PMID: 35482946

[Development and evaluation of a tetravalent botulinum vaccine.](#)

Shi DY, Liu FJ, Li ZY, Mao YY, Lu JS, Wang R, Pang XB, Yu YZ, Yang ZX. Hum Vaccin Immunother. 2022 Nov 30;18(5):2048621. doi: 10.1080/21645515.2022.2048621. Epub 2022 Apr 18. PMID: 35435814

[COVID-19 vaccine acceptance and hesitancy among ethnic minorities in Hong Kong.](#)

Chua GT, Lok Yan C, Wong WH, Sridhar S, To KK, Lau J, Gurung S, Mahtani S, Ho R, Li WS, Yam JC, Rosa Duque JS, Wong ICK, Lau YL, Kwan MYW, Ip P. Hum Vaccin Immunother. 2022 Nov 30;18(5):2054261. doi: 10.1080/21645515.2022.2054261. Epub 2022 Apr 27. PMID: 35475949

[COVID-19 vaccine willingness prior to and during the COVID-19 vaccination rollout in Australia.](#)

Wang B, Nolan R, Krumeich B, D'Onise K, Marshall H. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079345. doi: 10.1080/21645515.2022.2079345. Epub 2022 Jun 8. PMID: 35675106

[Factors associated with COVID-19 vaccine hesitancy in Senegal: A mixed study.](#)

Ba MF, Faye A, Kane B, Diallo AI, Junot A, Gaye I, Bonnet E, Ridde V. Hum Vaccin Immunother. 2022 Nov 30;18(5):2060020. doi: 10.1080/21645515.2022.2060020. Epub 2022 May 11. PMID: 35543616

[COVID-19 vaccine hesitancy between teachers and students in a college, a cross-sectional study in China.](#)

Chen Y, Zhang MX, Lin XQ, Wu H, Tung TH, Zhu JS. Hum Vaccin Immunother. 2022 Nov 30;18(5):2082171. doi: 10.1080/21645515.2022.2082171. Epub 2022 Jun 10. PMID: 35687077

[Vaccine uptake and barriers to vaccination among at-risk adult populations in the US.](#)

Kolobova I, Nyaku MK, Karakusevic A, Bridge D, Fotheringham I, O'Brien M. Hum Vaccin Immunother. 2022 Nov 30;18(5):2055422. doi: 10.1080/21645515.2022.2055422. Epub 2022 May 10. PMID: 35536017

[The COVID-19 vaccine concerns scale: Development and validation of a new measure.](#)

Gregory ME, MacEwan SR, Powell JR, Volney J, Kurth JD, Kenah E, Panchal AR, McAlearney AS. Hum Vaccin Immunother. 2022 Nov 30;18(5):2050105. doi: 10.1080/21645515.2022.2050105. Epub 2022 Apr 5. PMID: 35380510

[COVID-19 vaccine hesitancy: Considerations for reluctance and improving vaccine uptake.](#)

Parimi K, Gilkeson K, Creamer BA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2062972. doi: 10.1080/21645515.2022.2062972. Epub 2022 Apr 18. PMID: 35436173

[A longitudinal study of vaccine hesitancy attitudes and social influence as predictors of COVID-19 vaccine uptake in the US.](#)

Latkin C, Dayton L, Miller J, Yi G, Balaban A, Boodram B, Uzzi M, Falade-Nwulia O. Hum Vaccin Immunother. 2022 Nov 30;18(5):2043102. doi: 10.1080/21645515.2022.2043102. Epub 2022 Apr 13. PMID: 35417302

[Research progress on vaccine efficacy against SARS-CoV-2 variants of concern.](#)

Bian L, Liu J, Gao F, Gao Q, He Q, Mao Q, Wu X, Xu M, Liang Z. Hum Vaccin Immunother. 2022 Nov 30;18(5):2057161. doi: 10.1080/21645515.2022.2057161. Epub 2022 Apr 19. PMID: 35438600

Parent/guardian intentions to vaccinate children against COVID-19 in the United States.

Willis DE, Schootman M, Shah SK, Reece S, Selig JP, Andersen JA, McElfish PA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2071078. doi: 10.1080/21645515.2022.2071078. Epub 2022 May 4. PMID: 35506876

A comparison of seasonal influenza and novel Covid-19 vaccine intentions: A cross-sectional survey of vaccine hesitant adults in England during the 2020 pandemic.

Antonopoulou V, Goffe L, Meyer CJ, Grimani A, Graham F, Lecouturier J, Tang MY, Chadwick P, Sniehotta FF. Hum Vaccin Immunother. 2022 Nov 30;18(5):2085461. doi: 10.1080/21645515.2022.2085461. Epub 2022 Jul 11. PMID: 35816683

COVID-19 vaccine hesitancy and resistance in an urban Chinese population of Hong Kong: a cross-sectional study.

Yu BY, Lam JC, Lam SC, Li Y, Chen S, Lam MY, Yeung WF. Hum Vaccin Immunother. 2022 Nov 30;18(5):2072144. doi: 10.1080/21645515.2022.2072144. Epub 2022 May 25. PMID: 35612813

COVID-19 vaccine demand protest might have increased vaccine acceptance and uptake in South Africa.

Mavundza EJ, Ndwandwe D, Wiysonge CS. Hum Vaccin Immunother. 2022 Nov 30;18(5):2064691. doi: 10.1080/21645515.2022.2064691. Epub 2022 Apr 18. PMID: 35435798

Sex and educational attainment differences in HPV knowledge and vaccination awareness among unvaccinated-sexually active adults in Puerto Rico.

Castañeda-Avila MA, Oramas Sepúlveda CJ, Pérez CM, Ramos-Cartagena JM, Acosta Pagán K, Pérez-Santiago J, Godoy-Vitorino F, Ortiz AP. Hum Vaccin Immunother. 2022 Nov 30;18(5):2077065. doi: 10.1080/21645515.2022.2077065. Epub 2022 Jun 13. PMID: 35695750

The progress of peptide vaccine clinical trials in gynecologic oncology.

Tang M, Cai JH, Diao HY, Guo WM, Yang X, Xing S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2062982. doi: 10.1080/21645515.2022.2062982. Epub 2022 Jun 10. PMID: 35687860

Factors influencing COVID-19 vaccine acceptance and hesitancy among rural community in Bangladesh: A cross-sectional survey based study.

Roy DN, Huda MN, Azam MS. Hum Vaccin Immunother. 2022 Nov 30;18(5):2064685. doi: 10.1080/21645515.2022.2064685. Epub 2022 May 17. PMID: 35580319

Evaluating the attitudes and behavior of Hong Kong medical students toward receiving the COVID-19 vaccine.

Ngai NTY, Yip CCH, Khoo JR, Sridhar S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2074761. doi: 10.1080/21645515.2022.2074761. Epub 2022 Jun 13. PMID: 35695737

COVID-19 vaccine counseling and safety assessment in children and teenagers with underlying medical conditions in China: a single center study.

Zeng M, Zhai X, Chang H, Feng T, Zhu Y, Ma W, Wang X, Ge Y. Hum Vaccin Immunother. 2022 Nov 30;18(5):2082207. doi: 10.1080/21645515.2022.2082207. Epub 2022 Jun 27. PMID: 35759787

[Acceptability for COVID-19 vaccination: perspectives from Muslims.](#)

Wong LP, Alias H, Megat Hashim MMAA, Lee HY, AbuBakar S, Chung I, Hu Z, Lin Y. Hum Vaccin Immunother. 2022 Nov 30;18(5):2045855. doi: 10.1080/21645515.2022.2045855. Epub 2022 Apr 19. PMID: 35439106

[Nano alum: A new solution to the new challenge.](#)

Lu Y, Liu G. Hum Vaccin Immunother. 2022 Nov 30;18(5):2060667. doi: 10.1080/21645515.2022.2060667. Epub 2022 Apr 26. PMID: 35471916

[Intention to receive a COVID-19 vaccine booster dose and associated factors in Malaysia.](#)

Wong LP, Alias H, Siaw YL, Muslimin M, Lai LL, Lin Y, Hu Z. Hum Vaccin Immunother. 2022 Nov 30;18(5):2078634. doi: 10.1080/21645515.2022.2078634. Epub 2022 Jun 1. PMID: 35648441

[Two-Dose Severe Acute Respiratory Syndrome Coronavirus 2 Vaccine Effectiveness With Mixed Schedules and Extended Dosing Intervals: Test-Negative Design Studies From British Columbia and Quebec, Canada.](#)

Skowronski DM, Febriani Y, Ouakki M, Setayeshgar S, El Adam S, Zou M, Talbot D, Prystajecky N, Tyson JR, Gilca R, Brousseau N, Deceuninck G, Galanis E, Fjell CD, Sbihi H, Fortin E, Barkati S, Sauvageau C, Naus M, Patrick DM, Henry B, Hoang LMN, De Wals P, Garenc C, Carignan A, Drolet M, Jassem AN, Sadarangani M, Brisson M, Krajden M, De Serres G. Clin Infect Dis. 2022 Nov 30;75(11):1980-1992. doi: 10.1093/cid/ciac290. PMID: 35438175

[Hesitancy of COVID-19 vaccines: Rapid systematic review of the measurement, predictors, and preventive strategies.](#)

Anakpo G, Mishi S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2074716. doi: 10.1080/21645515.2022.2074716. Epub 2022 Jun 17. PMID: 35714274

[Safety of 4-valent human papillomavirus vaccine in males: a large observational post-marketing study.](#)

Amend KL, Turnbull B, Zhou L, Marks MA, Velicer C, Saddier P, Seeger JD. Hum Vaccin Immunother. 2022 Nov 30;18(5):2073750. doi: 10.1080/21645515.2022.2073750. Epub 2022 Jun 17. PMID: 35714277

[Vaccine management practices among healthcare workers in Morogoro, Tanzania: a cross-sectional study.](#)

Nestory B, Anasel M, Nyandwi JB, Asingizwe D. J Pharm Policy Pract. 2022 Nov 30;15(1):95. doi: 10.1186/s40545-022-00496-y. PMID: 36451255

[Individual-level social capital and COVID-19 vaccine hesitancy in Japan: a cross-sectional study.](#)

Machida M, Kikuchi H, Kojima T, Nakamura I, Saito R, Nakaya T, Hanibuchi T, Takamiya T, Odagiri Y, Fukushima N, Amagasa S, Watanabe H, Inoue S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2086773. doi: 10.1080/21645515.2022.2086773. Epub 2022 Jun 16.

[High rates of vaccine hesitancy among pregnant women during the coronavirus disease 2019 \(COVID-19\) pandemic in Japan.](#)

Saitoh A, Takaku M, Saitoh A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2064686. doi: 10.1080/21645515.2022.2064686. Epub 2022 Apr 27. PMID: 35476032

[Hope as a predictor for COVID-19 vaccine uptake in the US: a cross-sectional survey of 11,955 adults.](#)

Adam M, Mohan D, Forster S, Chen S, Gates J, Yu F, Bärnighausen T. Hum Vaccin Immunother. 2022 Nov 30;18(5):2072138. doi: 10.1080/21645515.2022.2072138. Epub 2022 Jun 3. PMID: 35659447

[Relationship between T-cell-dependent and T-cell-independent vaccines after neurotrauma: is the B-cell response preserved?](#)

Ljunghill Hedberg A, Pauksens K, Enblad P, Larsson A, Sjölin J. Hum Vaccin Immunother. 2022 Nov 30;18(5):2088971. doi: 10.1080/21645515.2022.2088971. Epub 2022 Jun 15. PMID: 35704795

[Acceptance of the COVID-19 vaccine based on the health belief model: a multicenter national survey among medical care workers in China.](#)

Wang H, Huang YM, Su XY, Xiao WJ, Si MY, Wang WJ, Gu XF, Ma L, Li L, Zhang SK, Yang CX, Yu YQ, Qiao YL. Hum Vaccin Immunother. 2022 Nov 30;18(5):2076523. doi: 10.1080/21645515.2022.2076523. Epub 2022 May 18. PMID: 35583502

[Explorative study regarding influenza vaccine hesitancy among HIV-infected patients.](#)

Marchese V, Storti S, Morganti C, Tiecco G, Degli Antoni M, Focà E, Castelli F, Quiros-Roldan E. Hum Vaccin Immunother. 2022 Nov 30;18(5):2046434. doi: 10.1080/21645515.2022.2046434. Epub 2022 Mar 31. PMID: 35357270

[The influence of men on HPV vaccination of their spouse/partner in China.](#)

Lin Y, Cai CZ, Hu Z, Zimet GD, Alias H, Wong LP. Hum Vaccin Immunother. 2022 Nov 30;18(5):2049132. doi: 10.1080/21645515.2022.2049132. Epub 2022 Apr 5. PMID: 35380926

[Methylparaben as a preservative in the development of a multi-dose HPV-2 vaccine.](#)

Miao C, Ma X, Fan J, Shi L, Wei J. Hum Vaccin Immunother. 2022 Nov 30;18(5):2067421. doi: 10.1080/21645515.2022.2067421. Epub 2022 Apr 26. PMID: 35471842

[Health and economic burden associated with 15-valent pneumococcal conjugate vaccine serotypes in Korea and Hong Kong.](#)

Mohanty S, Hu T, Yang G, Khan TK, Owusu-Edusei K, Sukarom I. Hum Vaccin Immunother. 2022 Nov 30;18(5):2046433. doi: 10.1080/21645515.2022.2046433. Epub 2022 Apr 14. PMID: 35420975

[Immunogenicity and reactogenicity after heterologous prime-boost vaccination with CoronaVac and ChAdOx1 nCov-19 \(AZD1222\) vaccines.](#)

Cohen G, Jungsomsri P, Sangwongwanich J, Tawinprai K, Siripongboonsitti T, Porntharukchareon T, Wittayasak K, Thonwirak N, Soonklang K, Sornsamdang G, Auewarakul C, Mahanonda N. Hum Vaccin Immunother. 2022 Nov 30;18(5):2052525. doi: 10.1080/21645515.2022.2052525. Epub 2022 Mar 24. PMID: 35323079

[When good messages go wrong: Perspectives on COVID-19 vaccines and vaccine communication from generally vaccine accepting individuals in Canada.](#)

Capurro G, Tustin J, Jardine CG, Driedger SM. Hum Vaccin Immunother. 2022 Nov 30:2145822. doi: 10.1080/21645515.2022.2145822. Online ahead of print. PMID: 36452995

[Health professionals' COVID-19 vaccine acceptance and associated factors in Wollega University referral hospital, Western Ethiopia: A cross-sectional study.](#)

Tolossa T, Fetensa G, Ayala D, Wakuma B. Hum Vaccin Immunother. 2022 Nov 30;18(5):2069960. doi: 10.1080/21645515.2022.2069960. Epub 2022 May 24. PMID: 35608849

[Effectiveness of mRNA-1273, BNT162b2, and BBIBP-CorV vaccines against infection and mortality in children in Argentina, during predominance of delta and omicron covid-19 variants: test negative, case-control study.](#)

Castelli JM, Rearte A, Olszevicki S, Voto C, Del Valle Juarez M, Pesce M, Iovane AN, Paz M, Chaparro ME, Buyayisqui MP, Markiewicz MB, Landoni M, Giovacchini CM, Vizzotti C. BMJ. 2022 Nov 30;379:e073070. doi: 10.1136/bmj-2022-073070. PMID: 36450402

[A study on the willingness and influencing factors of novel coronavirus vaccination among medical personnel in North China.](#)

Hao J, Liu H, Shi J, Wang Q, Su X, Shi Z, Yu Y, Liu B, Qiao Y. Hum Vaccin Immunother. 2022 Nov 30;18(5):2031775. doi: 10.1080/21645515.2022.2031775. Epub 2022 Apr 4. PMID: 35377280

[Breakthrough SARS-CoV-2 infections after vaccination: a critical review.](#)

Mohseni Afshar Z, Barary M, Hosseinzadeh R, Alijanpour A, Hosseinzadeh D, Ebrahimpour S, Nazary K, Sio TT, Sullman MJM, Carson-Chahoud K, Babazadeh A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2051412. doi: 10.1080/21645515.2022.2051412. Epub 2022 Mar 18. PMID: 35302905

[Long-Term immunopersistence and safety of the \*Escherichia coli\*-produced HPV-16/18 bivalent vaccine in Chinese adolescent girls.](#)

Yao X, He W, Wu X, Gu J, Zhang J, Lin B, Bi Z, Su Y, Huang S, Hu Y, Wu T, Zhang J, Xia N. Hum Vaccin Immunother. 2022 Nov 30;18(5):2061248. doi: 10.1080/21645515.2022.2061248. Epub 2022 Apr 13. PMID:

[Victorian Specialist Immunisation Services \(VicSIS\) - bolstering adult clinics for COVID-19 vaccines.](#)

Gordon SF, Virah Sawmy E, Duckworth E, Wolthuizen M, Clothier HJ, Chea M, Tenneti N, Blow N, Buttery JP, de Luca J, Korman TM, Barnes S, Slade C, Maggs C, Giles ML, Teh BW, Aboltins C, Langan KM, Van Diemen A, Crawford NW. Hum Vaccin Immunother. 2022 Nov 30;18(5):2052701. doi: 10.1080/21645515.2022.2052701. Epub 2022 Apr 26. PMID: 35471988

[AVPCancerFree: Impact of a digital behavior change intervention on parental HPV vaccine -related perceptions and behaviors.](#)

Shegog R, Savas LS, Healy CM, Frost EL, Coan SP, Gabay EK, Preston SM, Spinner SW, Wilbur M, Becker E, Teague T, Vernon SW. Hum Vaccin Immunother. 2022 Nov 30;18(5):2087430. doi: 10.1080/21645515.2022.2087430. Epub 2022 Jun 14. PMID: 35699953

[Post COVID-19 vaccination Guillain-Barre syndrome: three cases.](#)

Tabatabaei S, Rezania F, Alwedaie SMJ, Malekdar E, Badi Z, Tabatabaei SM, Mirzaasgari Z. Hum Vaccin Immunother. 2022 Nov 30;18(5):2045153. doi: 10.1080/21645515.2022.2045153. Epub 2022 Mar 3. PMID: 35240922

[Determinants of human papillomavirus \(HPV\) vaccine uptake among girls in France: A population-based telephone survey.](#)

Dib F, Mayaud P, Renaudie C, Launay O, Chauvin P. Hum Vaccin Immunother. 2022 Nov 30;18(5):2083894. doi: 10.1080/21645515.2022.2083894. Epub 2022 Jun 29. PMID: 35766886

[Short-term side effects of COVID-19 vaccines: A cross-sectional study in Jordan.](#)

Nassar RI, Alnatour D, Thiab S, Nassar A, El-Hajji F, Basheti IA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2082792. doi: 10.1080/21645515.2022.2082792. Epub 2022 Jun 27. PMID: 35759219

[A multicenter, single-blind, randomized, phase-2/3 study to evaluate immunogenicity and safety of a single intramuscular dose of biological E's Vi-capsular polysaccharide-CRM<sub>197</sub> conjugate typhoid vaccine \(TyphiBEV™\) in healthy infants, children, and adults in comparison with a licensed comparator.](#)

Thuluva S, Paradkar V, Matur R, Turaga K, Gv SR. Hum Vaccin Immunother. 2022 Nov 30;18(5):2043103. doi: 10.1080/21645515.2022.2043103. Epub 2022 Mar 25. PMID: 35333702

[A phase I randomized, double-blind, placebo-controlled study to evaluate the safety, tolerability, and immunogenicity of a live-attenuated quadrivalent dengue vaccine in flavivirus-naïve and flavivirus-experienced healthy adults.](#)

Russell KL, Rupp RE, Morales-Ramirez JO, Diaz-Perez C, Andrews CP, Lee AW, Finn TS, Cox KS, Falk Russell A, Schaller MM, Martin JC, Hyatt DM, Gozlan-Kelner S, Bili A, Coller BG. Hum Vaccin Immunother. 2022 Nov 30;18(5):2046960. doi: 10.1080/21645515.2022.2046960. Epub 2022 Mar 15. PMID: 35290152

[Antecedents to COVID-19 vaccine uptake among patients and employees in the Veterans Health Administration.](#)

LoBrutto LR, Elwy AR, Miano D, Ann Petrakis B, Kyrish A, Javier S, Erhardt T, Midboe AM, Carbonaro R, Jasuja GK, McInnes DK, Maguire EM, Asch SM, Gifford AL, Clayman ML. Transl Behav Med. 2022 Nov 30:ibac085. doi: 10.1093/tbm/ibac085. Online ahead of print. PMID: 36448882

[Reply letter to "Immunogenicity and safety of a quadrivalent high-dose inactivated influenza vaccine compared with a standard-dose quadrivalent influenza vaccine in healthy people aged 60 years or older: a randomized Phase III trial".](#)

Hadigal S, Colombo L, Haughe S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2085470. doi: 10.1080/21645515.2022.2085470. Epub 2022 Jun 8. PMID: 35674507

[Factors associated to COVID-19 vaccine acceptance in Mexican patients with rheumatic diseases: A cross-sectional and multicenter study.](#)

Guaracha-Basañez GA, Contreras-Yáñez I, Álvarez-Hernández E, Reyes-Cordero G, Flores-Alvarado DE, González-Chávez SA, Galarza-Delgado DÁ, Martínez-Leyva PR, Moctezuma-Ríos JF, García-García C, Medrano-Ramírez G, Gastelum-Strozzi A, Pacheco-Tena C, Peláez-Ballestas I, Pascual-Ramos V. Hum Vaccin Immunother. 2022 Nov 30;18(5):2049131. doi: 10.1080/21645515.2022.2049131. Epub 2022 Apr 7. PMID: 35389817

[Adenovirus vector-based vaccines as forefront approaches in fighting the battle against flaviviruses.](#)

Shoushtari M, Roohvand F, Salehi-Vaziri M, Arashkia A, Bakhshi H, Azadmanesh K. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079323. doi: 10.1080/21645515.2022.2079323. Epub 2022 Jun 17. PMID: 35714271

[Adoptive tumor infiltrating lymphocytes cell therapy for cervical cancer.](#)

Zhu Y, Zhou J, Zhu L, Hu W, Liu B, Xie L. Hum Vaccin Immunother. 2022 Nov 30;18(5):2060019. doi: 10.1080/21645515.2022.2060019. Epub 2022 Apr 25. PMID: 35468048

[Safety and immunogenicity of the first Kazakh inactivated vaccine for COVID-19.](#)

Nurpeisova A, Khairullin B, Abitaev R, Shorayeva K, Jekebekov K, Kalimolda E, Kerimbayev A, Akylbayeva K, Abay Z, Myrzakhmetova B, Nakhanov A, Absatova Z, Nurabayev S, Orynbayev M, Assanzhanova N, Abeuov K, Kutumbetov L, Kassenov M, Abduraimov Y, Zakarya K. Hum Vaccin Immunother. 2022 Nov 30;18(5):2087412. doi: 10.1080/21645515.2022.2087412. Epub 2022 Aug 12. PMID: 35960911

[Estimation of single-dose varicella vaccine effectiveness in South Korea using mathematical modeling.](#)

Suh J, Choi JK, Lee J, Park SH. Hum Vaccin Immunother. 2022 Nov 30;18(5):2085468. doi: 10.1080/21645515.2022.2085468. Epub 2022 Jun 15. PMID: 35704399

[Comparing the meningococcal serogroup C immune response elicited by a tetanus toxoid conjugate quadrivalent meningococcal vaccine \(MenACYW-TT\) versus a quadrivalent or monovalent C tetanus toxoid conjugate meningococcal vaccine in healthy meningococcal vaccine-naïve toddlers: A randomised, controlled trial.](#)

Knuf M, Rämet M, Breinholt Stærke N, Bertrand-Gerentes I, Thollot Y, B'Chir S, Arroum H, Oster P. Hum Vaccin Immunother. 2022 Nov 30;18(5):2052657. doi: 10.1080/21645515.2022.2052657. Epub 2022 Apr 21. PMID: 35445641

[First vaccination after birth: serious adverse events of Bacillus Calmette-Guérin \(BCG\) in real-world.](#)

Lu J, Zhang X, Xu H, Li Z. Hum Vaccin Immunother. 2022 Nov 30;18(5):2080443. doi: 10.1080/21645515.2022.2080443. Epub 2022 Jun 10. PMID: 35687363

[The development trend of influenza in China from 2010 to 2019.](#)

Zhou N, Dai H, Zha W, Lv Y. Hum Vaccin Immunother. 2022 Nov 30;18(5):2071558. doi: 10.1080/21645515.2022.2071558. Epub 2022 Jun 17. PMID: 35714270

[Factors influencing COVID-19 vaccine acceptance and hesitancy: Correspondence.](#)

Sookaromdee P, Wiwanitkit V. Hum Vaccin Immunother. 2022 Nov 30;18(5):2085471. doi: 10.1080/21645515.2022.2085471. Epub 2022 Jun 15. PMID: 35704781

[Knowledge, attitudes, and practices of the United Arab Emirates population towards Herpes Zoster vaccination: A cross-sectional study.](#)

Al-Khalidi T, Genidy R, Almutawa M, Mustafa M, Adra S, Kanawati NE, Binashour T, Barqawi HJ. Hum Vaccin Immunother. 2022 Nov 30;18(5):2073752. doi: 10.1080/21645515.2022.2073752. Epub 2022 May 27. PMID: 35622980

[Delta variant \(B.1.617.2\) of SARS-CoV-2: Mutations, impact, challenges and possible solutions.](#)

Dhawan M, Sharma A, Priyanka, Thakur N, Rajkhowa TK, Choudhary OP. Hum Vaccin Immunother. 2022 Nov 30;18(5):2068883. doi: 10.1080/21645515.2022.2068883. Epub 2022 May 4. PMID: 35507895

[Group A streptococcal disease in paediatric inpatients: a European perspective.](#)

Boeddha NP, Atkins L, de Groot R, Driessen G, Hazelzet J, Zenz W, Carroll ED, Anderson ST, Martinon-Torres F, Agyeman PKA, Galassini R, Herberg J, Levin M, Schlapbach LJ, Emonts M. Eur J Pediatr. 2022 Nov 30. doi: 10.1007/s00431-022-04718-y. Online ahead of print. PMID: 36449079

[Phenanthroline Catalysis in Stereoselective 1,2-cis Glycosylations.](#)

Li J, Nguyen HM. Acc Chem Res. 2022 Nov 30. doi: 10.1021/acs.accounts.2c00636. Online ahead of print. PMID: 36448710

[Binding and neutralizing abilities of antibodies towards SARS-CoV-2 S2 domain.](#)

Gao X, Fan L, Zheng B, Li H, Wang J, Zhang L, Li J, Zhu F. Hum Vaccin Immunother. 2022 Nov 30;18(5):2055373. doi: 10.1080/21645515.2022.2055373. Epub 2022 Apr 13. PMID: 35417303

[Kikuchi-Fujimoto disease can present as delayed lymphadenopathy after COVID-19 vaccination.](#)

Kashiwada T, Saito Y, Terasaki Y, Shirakura Y, Shinbu K, Tanaka T, Tanaka Y, Seike M, Gemma A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2071080. doi: 10.1080/21645515.2022.2071080. Epub 2022 May 18. PMID: 35583472

[Willingness to Receive the COVID-19 Vaccine in California: Disparities by Race and Citizenship Status.](#)

Bacong AM, Haro-Ramos AY. J Racial Ethn Health Disparities. 2022 Nov 30:1-10. doi: 10.1007/s40615-022-01468-3. Online ahead of print. PMID: 36449129

[Enhanced Immune Responses to Mucosa by Functionalized Chitosan-Based Composite Nanoparticles as a Vaccine Adjuvant for Intranasal Delivery.](#)

Lin Y, Sun B, Jin Z, Zhao K. ACS Appl Mater Interfaces. 2022 Nov 30;14(47):52691-52701. doi: 10.1021/acsami.2c17627. Epub 2022 Nov 16. PMID: 36382954

[Investigation of factors affecting COVID-19 vaccine acceptance among communities of universities in the United Arab Emirates.](#)

EI Gamal M, Siddiqua A, Abdul WK, Almurshidi BH, Howari FM. Hum Vaccin Immunother. 2022 Nov 30;18(5):2068930. doi: 10.1080/21645515.2022.2068930. Epub 2022 May 20. PMID: 35594545

[Waning effectiveness of SARS-CoV-2 mRNA vaccines in older adults: a rapid review.](#)

Nanishi E, Levy O, Ozonoff A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2045857. doi: 10.1080/21645515.2022.2045857. Epub 2022 Mar 3. PMID: 35240940

[Plantaricin NC8 αβ rapidly and efficiently inhibits flaviviruses and SARS-CoV-2 by disrupting their envelopes.](#)

Omer AAM, Hinkula J, Tran PT, Melik W, Zattarin E, Aili D, Selegård R, Bengtsson T, Khalaf H. PLoS One. 2022 Nov 30;17(11):e0278419. doi: 10.1371/journal.pone.0278419. eCollection 2022. PMID: 36449554

[Antibody Recognition of CD4-Induced Open HIV-1 Env Trimers.](#)

Yang Z, Dam KA, Gershoni JM, Zolla-Pazner S, Bjorkman PJ. J Virol. 2022 Nov 30:e0108222. doi: 10.1128/jvi.01082-22. Online ahead of print. PMID: 36448805

[COVID-19 vaccine acceptance among cold-chain workers in Shenzhen, China: A cross-sectional survey.](#)

Liu L, Zhang M, Chen H, Xian J, Cao H, Zhou X, Gu Z, Liu H, Li Q, Wu F, Chen Q, Lin Q. Hum Vaccin Immunother. 2022 Nov 30;18(5):2056400. doi: 10.1080/21645515.2022.2056400. Epub 2022 Apr 25. PMID: 35468306

[Usability, acceptability, and feasibility of a High-Density Microarray Patch \(HD-MAP\) applicator as a delivery method for vaccination in clinical settings.](#)

Davies C, Taba M, Deng L, Karatas C, Bag S, Ross C, Forster A, Booy R, Skinner SR. Hum Vaccin Immunother. 2022 Nov 30;18(4):2018863. doi: 10.1080/21645515.2021.2018863. Epub 2022 Jan 31. PMID: 35100525

[Vaccine manufacturing is essential to ensure access.](#)

Palomares LA. Hum Vaccin Immunother. 2022 Nov 30;18(4):2060616. doi: 10.1080/21645515.2022.2060616. Epub 2022 Jun 27. PMID: 35759378

[A matter of trust: a qualitative comparison of the determinants of COVID-19 vaccine hesitancy in Taiwan, the United States, the Netherlands, and Haiti.](#)

Wang CW, de Jong EP, Faure JA, Ellington JL, Chen CS, Chan CC. Hum Vaccin Immunother. 2022 Nov 30;18(5):2050121. doi: 10.1080/21645515.2022.2050121. Epub 2022 Mar 29. PMID: 35349382

[Hospitalization costs for children with pneumonia in Shanghai, China from 2019 to 2020.](#)

Wang J, Xu ZH, Lu J. Hum Vaccin Immunother. 2022 Nov 30;18(5):2081459. doi: 10.1080/21645515.2022.2081459. Epub 2022 Jun 2. PMID: 35653718

[Longevity of immunity following COVID-19 vaccination: a comprehensive review of the currently approved vaccines.](#)

Jamshidi E, Asgary A, Shafiekhani P, Khajeamiri Y, Mohamed K, Esmaily H, Jamal Rahi S, Mansouri N. Hum Vaccin Immunother. 2022 Nov 30;18(5):2037384. doi: 10.1080/21645515.2022.2037384. Epub 2022 Apr 13. PMID: 35417285

[Clinical evaluation of the lot-to-lot consistency of an enterovirus 71 vaccine in a commercial-scale phase IV clinical trial.](#)

Chen J, Jin P, Chen X, Mao Q, Meng F, Li X, Chen W, Du M, Gao F, Liu P, Li X, Guo C, Xie T, Lu W, Li Q, Li L, Yan X, Guo X, Du H, Li X, Duan K, Zhu F. Hum Vaccin Immunother. 2022 Nov 30;18(5):2063630. doi: 10.1080/21645515.2022.2063630. Epub 2022 Jun 17. PMID: 35714273

[Engineering a HemoMap Nanovaccine for Inducing Immune Responses against Melanoma.](#)

Dai H, Huang Y, Guo J, Li L, Ke Y, Cen L, Meng F, Chen X, Liu B, Qian X. ACS Appl Mater Interfaces. 2022 Nov 30;14(47):52634-52642. doi: 10.1021/acsami.2c14379. Epub 2022 Nov 16. PMID: 36383430

[Willingness toward COVID-19 vaccination, coadministration with other vaccines and receive a COVID-19 vaccine booster: a cross-sectional study on the guardians of children in China.](#)

Ma L, Yang J, Zhang T, Han X, Huang Q, Yang Y, Feng L, Yang W, Wang C. Hum Vaccin Immunother. 2022 Nov 30;18(5):2049169. doi: 10.1080/21645515.2022.2049169. Epub 2022 Apr 13. PMID: 35417663

[Antibody response to SARS-CoV-2 vaccines among hospitalized patients in China: a case-control study.](#)

Li FP, Shi GF, Lin ZZ, Zhu XL, Wang LJ, Tung TH, Zhang MX. Hum Vaccin Immunother. 2022 Nov 30;18(5):2088966. doi: 10.1080/21645515.2022.2088966. Epub 2022 Jun 16. PMID: 35708313

[Explaining COVID-19 postvaccination-related immune thrombotic thrombocytopenia: a hypothesis-generating \*in-silico\* approach.](#)

Konstantinou GN. Hum Vaccin Immunother. 2022 Nov 30;18(5):2050654. doi: 10.1080/21645515.2022.2050654. Epub 2022 Apr 12. PMID: 35412949

[Safety and immunogenicity of a quadrivalent, inactivated, split-virion influenza vaccine \(IIV4-W\) in healthy people aged 3-60 years: a phase III randomized clinical noninferiority trial.](#)

Huang X, Fan T, Li L, Nian X, Zhang J, Gao X, Zhao W, Chen W, Zhang Z, Yao Z, Han X, Shi J, Wang Y, Bian H, Shi N, Li X, Duan K, Li G, Yang X. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079924. doi: 10.1080/21645515.2022.2079924. Epub 2022 Jun 17. PMID: 35714276

[Recent advances in applying G-quadruplex for SARS-CoV-2 targeting and diagnosis: A review.](#)

Zhai LY, Su AM, Liu JF, Zhao JJ, Xi XG, Hou XM. Int J Biol Macromol. 2022 Nov 30;221:1476-1490. doi: 10.1016/j.ijbiomac.2022.09.152. Epub 2022 Sep 18. PMID: 36130641

[Public acceptability of COVID-19 vaccines and its predictors in Middle Eastern/North African \(MENA\) countries: a systematic review.](#)

Dadras O, SeyedAlinaghi S, Karimi A, Shamsabadi A, Mahdiabadi S, Mohammadi P, Amiri A, Shojaei A, Pashaei Z, Mirzapour P, Qaderi K, MohsseniPour M, Alilou S, Mehraeen E, Jahanfar S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2043719. doi: 10.1080/21645515.2022.2043719. Epub 2022 Mar 23. PMID: 35318872

[Burden of vaccine-preventable diseases among at-risk adult populations in the US.](#)

Kolobova I, Nyaku MK, Karakusevic A, Bridge D, Fotheringham I, O'Brien M. Hum Vaccin Immunother. 2022 Nov 30;18(5):2054602. doi: 10.1080/21645515.2022.2054602. Epub 2022 Apr 21. PMID: 35446725

[Cost effectiveness and budget impact of universal varicella vaccination in Russia.](#)

Marijam A, Safanova E, Scherbakov M, Shpeer E, Van Oorschot D, Rudakova A, Tatochenko V, Briko N. Hum Vaccin Immunother. 2022 Nov 30;18(5):2045152. doi: 10.1080/21645515.2022.2045152. Epub 2022 Mar 8. PMID: 35258445

[Impact of polio vaccines \(oral polio vaccine - OPV or inactivated polio vaccine - IPV\) on rotavirus vaccine-associated intussusception.](#)

Martini Rodrigues CC, Fernandes EG, Dos Santos PP, Eguti RY, Pedroso-de-Lima AC, da Silva GT, Sartori AMC. Hum Vaccin Immunother. 2022 Nov 30;18(5):2063594. doi: 10.1080/21645515.2022.2063594. Epub 2022 Apr 19. PMID: 35439100

[Switching from trivalent to quadrivalent inactivated influenza vaccines in Uruguay: a cost-effectiveness analysis.](#)

Bianculli PM, Bellier L, Mangado IO, Pérez CG, Mieres G, Lazarov L, Petitjean A, Dibarboire H, Lopez JG. Hum Vaccin Immunother. 2022 Nov 30;18(5):2050653. doi: 10.1080/21645515.2022.2050653. Epub 2022 Mar 28. PMID: 35344679

[Development and standardization of a COVID-19 Vaccination Anxiety scale for Adult Urban Indian Population \(CVAS-A\).](#)

Khurana R, Gupta L, Kumar N. Hum Vaccin Immunother. 2022 Nov 30;18(5):2059307. doi: 10.1080/21645515.2022.2059307. Epub 2022 Apr 20. PMID: 35442144

["I don't think there's a point for me to discuss it with my patients": exploring health care providers' views and behaviours regarding COVID-19 vaccination.](#)

Dubé E, Labbé F, Malo B, Manca T, Aylsworth L, Driedger SM, Graham J, Greysen D, MacDonald N, Meyer SB, Parsons Leigh J, Sadarangani M, Wilson S, MacDonald SE. Hum Vaccin Immunother. 2022 Nov 30;18(5):2088970. doi: 10.1080/21645515.2022.2088970. Epub 2022 Jun 29. PMID: 35767434

[Opportunities and challenges for commercializing microarray patches for vaccination from a MAP developer's perspective.](#)

Forster A, Junger M. Hum Vaccin Immunother. 2022 Nov 30;18(4):2050123. doi: 10.1080/21645515.2022.2050123. Epub 2022 Mar 31. PMID: 35356872

[Exploring the impact of media and information on self-reported intentions to vaccinate against COVID-19: A qualitative interview-based study.](#)

Parsons Leigh J, Halperin D, Mizen SJ, FitzGerald EA, Moss SJ, Fiest KM, Di Castri A, Stelfox HT, Halperin S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2048623. doi: 10.1080/21645515.2022.2048623. Epub 2022 Apr 13. PMID: 35417284

[Key stakeholder perspectives on challenges and opportunities for rural HPV vaccination in North and South Carolina.](#)

Fish LJ, Harrison SE, McDonald JA, Yelverton V, Williams C, Walter EB, Vasudevan L. Hum Vaccin Immunother. 2022 Nov 30;18(5):2058264. doi: 10.1080/21645515.2022.2058264. Epub 2022 Apr 19. PMID: 35439108

[Effects of maternal antibodies in infants on the immunogenicity and safety of inactivated polio vaccine in infants.](#)

Gao S, Wei M, Chu K, Li J, Zhu F. Hum Vaccin Immunother. 2022 Nov 30;18(5):2050106. doi: 10.1080/21645515.2022.2050106. Epub 2022 Apr 8. PMID: 35394898

[Trends in hospitalization and death rates among patients with head and neck cancer in Spain, 2009 to 2019.](#)

Carazo-Casas C, Gil-Prieto R, Hernández-Barrera V, Gil de Miguel Á. Hum Vaccin Immunother. 2022 Nov 30;18(5):2082192. doi: 10.1080/21645515.2022.2082192. Epub 2022 Aug 5. PMID: 35930449

[Demonstration of durable hepatitis B immune memory in children vaccinated with a DTaP5-IPV-HepB-Hib infant-toddler series 7 to 8 years previously.](#)

Ahonen A, Zhang Y, Marček T, Lumley J, Johnson DR, Guris D, Wilck MB. Hum Vaccin Immunother. 2022 Nov 30;18(5):2073747. doi: 10.1080/21645515.2022.2073747. Epub 2022 Jun 2. PMID: 35653552

[Etiology of pediatric lower respiratory tract infections in South Korea.](#)

Yang JW, Jo DS. Hum Vaccin Immunother. 2022 Nov 30;18(5):2048579. doi: 10.1080/21645515.2022.2048579. Epub 2022 Mar 28. PMID: 35344458

[Projected risks and health benefits of vaccination against herpes zoster and related complications in US adults.](#)

Janusz CB, Anderson TC, Leidner AJ, Lee GM, Dooling K, Prosser LA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2060668. doi: 10.1080/21645515.2022.2060668. Epub 2022 Apr 27. PMID: 35476029

[Public health and budget impacts of switching from a trivalent to a quadrivalent inactivated influenza vaccine in Paraguay.](#)

Arbo A, Martinez-Cuellar C, Vazquez C, Bellier L, Adorno C, Dibarboore H, Lopez JG, Petitjean A, Bianculli P. Hum Vaccin Immunother. 2022 Nov 30;18(5):2069974. doi: 10.1080/21645515.2022.2069974. Epub 2022 May 11. PMID: 35543602

[HLA Class I Supertype Classification Based on Structural Similarity.](#)

Shen Y, Parks JM, Smith JC. J Immunol. 2022 Nov 30;ji2200685. doi: 10.4049/jimmunol.2200685. Online ahead of print. PMID: 36453976

[Self-Reported adverse events among Chinese healthcare workers immunized with COVID-19 vaccines composed of inactivated SARS-CoV-2.](#)

Cheng Y, Li T, Zheng Y, Xu B, Bi Y, Hu Y, Zhou YH. Hum Vaccin Immunother. 2022 Nov 30;18(5):2064134. doi: 10.1080/21645515.2022.2064134. Epub 2022 Apr 22. PMID: 35452357

[Safety and immunogenicity of 3 formulations of a Sabin inactivated poliovirus vaccine produced on the PER.C6® cell line: A phase 2, double-blind, randomized, controlled study in infants vaccinated at 6, 10 and 14 weeks of age.](#)

Ong-Lim AL, Shukarev G, Trinidad-Aseron M, Caparas-Yu D, Greijer A, Duchene M, Scheper G, van Paassen V, Le Gars M, Cahill CP, Schuitemaker H, Douoguih M, Jacquet JM. Hum Vaccin Immunother. 2022 Nov 30;18(5):2044255. doi: 10.1080/21645515.2022.2044255. Epub 2022 Mar 28. PMID: 35344464

[Using a "systems therapeutic for physiological renormalization" approach to vaccine development. Covid-19 as an example.](#)

Maguire G. Hum Vaccin Immunother. 2022 Nov 30;18(5):2043105. doi: 10.1080/21645515.2022.2043105. Epub 2022 Mar 3. PMID: 35240929

[The need for vaccination in adults with chronic \(noncommunicable\) diseases in India - lessons from around the world.](#)

Vora A, Di Pasquale A, Kolhapure S, Agrawal A, Agrawal S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2052544. doi: 10.1080/21645515.2022.2052544. Epub 2022 Apr 13. PMID: 35416747

[Intention to vaccinate young children against COVID-19: A large-scale survey of Hong Kong parents.](#)

Lau EYH, Li JB, King Chung Chan D. Hum Vaccin Immunother. 2022 Nov 30;18(5):2065838. doi: 10.1080/21645515.2022.2065838. Epub 2022 Apr 22. PMID: 35452345

[How the COVID 19 pandemic will shape influenza public health initiatives: The UK experience.](#)

Ashraf M, Rajaram S, English PM. Hum Vaccin Immunother. 2022 Nov 30;18(5):2056399. doi: 10.1080/21645515.2022.2056399. Epub 2022 Apr 18. PMID: 35435806

[Interim analysis from a phase 2 randomized trial of EuCorVac-19: a recombinant protein SARS-CoV-2 RBD nanoliposome vaccine.](#)

Lovell JF, Baik YO, Choi SK, Lee C, Lee JY, Miura K, Huang WC, Park YS, Woo SJ, Seo SH, Kim JO, Song M, Kim CJ, Choi JK, Kim J, Choo EJ, Choi JH. BMC Med. 2022 Nov 30;20(1):462. doi: 10.1186/s12916-022-02661-1. PMID: 36447243

[Universal antibody targeting the highly conserved fusion peptide provides cross-protection in mice.](#)

Muralidharan A, Gravel C, Harris G, Hashem AM, Zhang W, Safronetz D, Van Domselaar G, Krammer F, Sauve S, Rosu-Myles M, Wang L, Chen W, Li X. Hum Vaccin Immunother. 2022 Nov 30;18(5):2083428. doi: 10.1080/21645515.2022.2083428. Epub 2022 Jun 20. PMID: 35724343

[Factors affecting willingness to participate in vaccine clinical trials in an underdeveloped country: perspective from Nepal.](#)

Chapagain RH, Adhikari S, Giri BR, Ray P, Shrestha NJ, Prajapati B, Joshi P, Pokharel S, Tamang SM, Gupta BP, Wartel TA, Sahastrabuddhe S, Rai GK, Saluja T. Hum Vaccin Immunother. 2022 Nov 30;18(5):2051413. doi: 10.1080/21645515.2022.2051413. Epub 2022 Mar 30. PMID: 35353657

[Immunogenicity of a trivalent influenza vaccine and persistence of induced immunity in adults aged ≥60 years in Taizhou City, Zhejiang Province, China, during the 2018-2019 season.](#)

Liao Y, Jin Y, Zhang H, Yang J, Fu J, Lv H. Hum Vaccin Immunother. 2022 Nov 30;18(5):2071061. doi: 10.1080/21645515.2022.2071061. Epub 2022 Jun 10. PMID: 35687101

[Evaluation of influenza vaccination coverage in Shanghai city during the 2016/17 to 2020/21 influenza seasons.](#)

Wu L, Guo X, Liu J, Ma X, Huang Z, Sun X. Hum Vaccin Immunother. 2022 Nov 30;18(5):2075211. doi: 10.1080/21645515.2022.2075211. Epub 2022 May 27. PMID: 35621293

[Immunotherapies targeting neoantigens are effective in PD-1 blockade-resistant tumors.](#)

Sun C, Nagaoka K, Kobayashi Y, Maejima K, Nakagawa H, Nakajima J, Kakimi K. Int J Cancer. 2022 Nov 30. doi: 10.1002/ijc.34382. Online ahead of print. PMID: 36451303

[Parents' attitudes, knowledge and practice towards vaccinating their children against COVID-19: a cross-sectional study.](#)

Al-Qerem W, Al Bawab AQ, Hammad A, Jaber T, Khdaire SI, Kalloush H, Ling J, Mosleh R. Hum Vaccin Immunother. 2022 Nov 30;18(5):2044257. doi: 10.1080/21645515.2022.2044257. Epub 2022 Mar 3. PMID: 35240943

[Anal Human Papillomavirus Infection in Kidney Transplant Recipients Compared With Immunocompetent Controls.](#)

Larsen HK, Kjaer SK, Haedersdal M, Kjaer AK, Bonde JH, Sørensen SS, Thomsen LT. Clin Infect Dis. 2022 Nov 30;75(11):1993-1999. doi: 10.1093/cid/ciac285. PMID: 35438132

[Public engagement during a typhoid conjugate vaccine trial in Lalitpur, Nepal- experience, challenges and lessons learnt.](#)

Dahal A, Shakya M, Pant D, Adhikari A, Colin-Jones R, Theiss-Nyland K, Pollard AJ, Basnyat B, Shrestha S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2043104. doi: 10.1080/21645515.2022.2043104. Epub 2022 Mar 3. PMID: 35240925

[Safety and clinical efficacy of human rabies immunoglobulin in post exposure prophylaxis for category III animal exposures.](#)

Haradanahalli RS, Fotedar N, Kumari N, Narayana DHA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2081024. doi: 10.1080/21645515.2022.2081024. Epub 2022 Jun 10. PMID: 35687876

[How ready was the US vaccination infrastructure and network of immunization information systems for COVID-19 vaccination campaigns: Recommendations to strengthen the routine vaccination program and prepare for the next pandemic.](#)

Shen AK, Sobczyk EA, Coyle R, Tirmal A, Hannan C. Hum Vaccin Immunother. 2022 Nov 30;18(5):2088010. doi: 10.1080/21645515.2022.2088010. Epub 2022 Jul 7. PMID: 35796624

[Guillain-Barre Syndrome Following SARS-CoV-2 Vaccination: A Case Report.](#)

Gunawan PY, Tiffani P, Lalisan L. Clin Psychopharmacol Neurosci. 2022 Nov 30;20(4):777-780. doi: 10.9758/cpn.2022.20.4.777. PMID: 36263653

[A cost-effectiveness analysis of PHiD-CV compared to PCV13 in a national immunization program setting in Tunisia.](#)

Lagoubi Y, Sfar MT, Gomez JA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079305. doi: 10.1080/21645515.2022.2079305. Epub 2022 Jun 15. PMID: 35703731

[Assessment of mumps-containing vaccine effectiveness by dose during 2006 to 2020 in Quzhou, China.](#)

Yin Z, Wen T, Fang Q, Zheng C, Gong X, Li J, Wang S, Xiang Z. Hum Vaccin Immunother. 2022 Nov 30;18(5):2086774. doi: 10.1080/21645515.2022.2086774. Epub 2022 Jun 8. PMID: 35675040

[The impact of COVID-19 pandemic on rabies post-exposure prophylaxis services in Asia.](#)

Gongal G, Sampath G, Kishore J, Bastola A, Punrin S, Gunesekera A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2064174. doi: 10.1080/21645515.2022.2064174. Epub 2022 May 5. PMID: 35512248

[Safety and immunogenicity of inactivated COVID-19 vaccination in adult rheumatic patients in South China: a prospective study.](#)

Zeng H, Liu H, Liu Z, Zhou X, Lu X, Yan Z, Zhou Y, Dai L, Chen Y, Yang T, Yin Z, Ye Z. Hum Vaccin Immunother. 2022 Nov 30;18(5):2090176. doi: 10.1080/21645515.2022.2090176. Epub 2022 Jul 25. PMID: 35878733

[Adolescent girls' recommendations for the design of a human papillomavirus vaccination program in Sindh, Pakistan: a qualitative study.](#)

Ali RF, Arif Siddiqi D, Mirza A, Naz N, Abdullah S, Kembhavi G, Tam CC, Offeddu V, Chandir S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2045856. doi: 10.1080/21645515.2022.2045856. Epub 2022 Mar 3. PMID: 35240928

[Modeling long-term persistence after 8 years of hepatitis B booster vaccination in 5- to 15-year-old children.](#)

Qiu Y, Wu ZK, Wu J, Yao J, Liu Y, Ren W, Sun YJ, Shen LZ, Ren JJ. Hum Vaccin Immunother. 2022 Nov 30;18(5):2061247. doi: 10.1080/21645515.2022.2061247. Epub 2022 May 4. PMID: 35507912

[Parental intention to vaccinate adolescents with HPV vaccine in selected communities in Ibadan, Southwest Nigeria: an application of Integrated Behavioral Model.](#)

Balogun FM, Omotade OO. Hum Vaccin Immunother. 2022 Nov 30;18(5):2069959. doi: 10.1080/21645515.2022.2069959. Epub 2022 May 13. PMID: 35561294

[Multifactorial influences underpinning a decision on COVID-19 vaccination among healthcare workers: a qualitative analysis.](#)

Yoon S, Goh H, Matchar D, Sung SC, Lum E, Lam SSW, Low JGH, Chua T, Graves N, Ong ME. Hum Vaccin Immunother. 2022 Nov 30;18(5):2085469. doi: 10.1080/21645515.2022.2085469. Epub 2022 Jun 10. PMID: 35687802

[The association between adverse reactions and immune response against SARS-CoV-2 spike protein after vaccination with BNT162b2 among healthcare workers in a single healthcare system: a prospective observational cohort study.](#)

Jubishi D, Okamoto K, Hamada K, Ishii T, Hashimoto H, Shinohara T, Yamashita M, Wakimoto Y, Otani A, Hisasue N, Ikeda M, Harada S, Okugawa S, Moriya K, Yanagimoto S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2048559. doi: 10.1080/21645515.2022.2048559. Epub 2022 Mar 25. PMID: 35333697

[Partnering on vaccines to counter multi-drug resistant threats: Workshop proceedings, Biomedical Advanced Research and Development Authority.](#)

Bergmann JN, Killen-Cade RR, Parish LA, Albrecht MT, Wolfe DN. Hum Vaccin Immunother. 2022 Nov 30;18(5):2058840. doi: 10.1080/21645515.2022.2058840. Epub 2022 Apr 13. PMID: 35417305

[Effect of elderly individuals' perceptions and attitudes toward COVID-19 pandemic on rejecting COVID-19 vaccination.](#)

Beyazgul B, Koruk İ, Kuzan R. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079338. doi: 10.1080/21645515.2022.2079338. Epub 2022 Jun 10. PMID: 35687362

[Letter to the editor: Safety and immunogenicity of a novel recombinant rabies vaccine.](#)

Agarwal A, Mathur SB. Hum Vaccin Immunother. 2022 Nov 30;18(5):2085472. doi: 10.1080/21645515.2022.2085472. Epub 2022 Jun 17. PMID: 35714278

[Measles immunity gap among reproductive-age women participating in a simulated HIV vaccine efficacy trial in Zambia.](#)

Malama K, Tichacek A, Kelly H, Parker R, Inambao M, Sharkey T, Wall KM, Kilembe W, Price MA, Fast P, Priddy F, Allen S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2066426. doi: 10.1080/21645515.2022.2066426. Epub 2022 Apr 21. PMID: 35446726

[The association between social media use and hesitancy toward COVID-19 vaccine booster shots in China: A web-based cross-sectional survey.](#)

Wang R, Qin C, Du M, Liu Q, Tao L, Liu J. Hum Vaccin Immunother. 2022 Nov 30;18(5):2065167. doi: 10.1080/21645515.2022.2065167. Epub 2022 Jun 7. PMID: 35671384

[Long-term effect of mobile phone-based education and influencing factors of willingness to receive HPV vaccination among female freshmen in Shanxi Province, China.](#)

Sun L, Hu J, Gao H, Wang S, Wang B, Wang J, Li H, Wang J, Yuan C, Zhang X. Hum Vaccin Immunother. 2022 Nov 30;18(5):2051990. doi: 10.1080/21645515.2022.2051990. Epub 2022 Apr 21. PMID: 35446735

[Barriers to healthcare workers reporting adverse events following immunization in Zhejiang province, China.](#)

Lv H, Pan X, Wang Y, Liang H, Yu H. Hum Vaccin Immunother. 2022 Nov 30;18(5):2083865. doi: 10.1080/21645515.2022.2083865. Epub 2022 Jul 12. PMID: 35820038

[Localized lipoatrophy and inadvertent subcutaneous administration of a COVID-19 vaccine.](#)

Cook IF. Hum Vaccin Immunother. 2022 Nov 30;18(5):2042136. doi: 10.1080/21645515.2022.2042136. Epub 2022 Mar 8. PMID: 35258436

[A universal flu vaccine on the horizon.](#)

O'Leary K. Nat Med. 2022 Nov 30. doi: 10.1038/d41591-022-00113-0. Online ahead of print. PMID: 36450841

[SARS-CoV-2 vaccine breakthrough reinfection in a health-care worker of Iraq: A case report.](#)

Hasan DA, Maulud SQ, Jalal PJ, Priyanka, Choudhary OP. Hum Vaccin Immunother. 2022 Nov 30;18(5):2055947. doi: 10.1080/21645515.2022.2055947. Epub 2022 Apr 13. PMID: 35417318

[Maternal SARS-CoV-2 sero-surveillance using newborn dried blood spot \(DBS\) screening specimens highlights extent of low vaccine uptake in pregnant women.](#)

Moat SJ, Hillier S, de Souza S, Perry M, Cottrell S, Lench A, Payne H, Jolles S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2089498. doi: 10.1080/21645515.2022.2089498. Epub 2022 Jun 22. PMID: 35731129

[Extracellular product of Pseudomonas aeruginosa in growth medium is involved in the pro-inflammatory cytokine response of human oral epithelial cells in vitro.](#)

Ali MN, Zgair AK. Polim Med. 2022 Nov 30. doi: 10.17219/pim/155849. Online ahead of print. PMID: 36449403

[Integrating the CARD \(Comfort Ask Relax Distract\) system in a mass vaccination clinic to improve the experience of individuals during COVID-19 vaccination: a pre-post implementation study.](#)

Tetui M, Grindrod K, Waite N, VanderDoes J, Taddio A. Hum Vaccin Immunother. 2022 Nov 30;18(5):2089500. doi: 10.1080/21645515.2022.2089500. Epub 2022 Jun 20. PMID: 35723609

[Burden of opioid use for pain management among adult herpes zoster patients in the US and the potential impact of vaccination.](#)

Poirrier JE, DeMartino JK, Nagar S, Carrico J, Hicks K, Meyers J, Stoddard J. Hum Vaccin Immunother. 2022 Nov 30;18(5):2040328. doi: 10.1080/21645515.2022.2040328. Epub 2022 Apr 1. PMID: 35363119

[Intention to participate in COVID-19 vaccine clinical trials in May 2021: a cross-sectional survey in the general French population.](#)

Gagneux-Brunon A, Ward JK, Bonneton M, Verger P, Launay O, Botelho-Nevers E. Hum Vaccin Immunother. 2022 Nov 30;18(5):2072630. doi: 10.1080/21645515.2022.2072630. Epub 2022 May 13. PMID: 35561252

[Incubation Temperature and Period During Denarase Treatment and Microfiltration Affect the Yield of Recombinant Adenoviral Vectors During Downstream Processing.](#)

Sonugür FG, Babahan C, Abdi Abgarmi S, Akbulut H. Mol Biotechnol. 2022 Nov 30:1-11. doi: 10.1007/s12033-022-00616-8. Online ahead of print. PMID: 36451062

[Associations between vaccination and quality of life among Taiwan general population: A comparison between COVID-19 vaccines and flu vaccines.](#)

Lin CY, Fan CW, Ahorsu DK, Lin YC, Weng HC, Griffiths MD. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079344. doi: 10.1080/21645515.2022.2079344. Epub 2022 Jun 9. PMID: 35679589

[Telmisartan Nanosuspension for Inhaled Therapy of COVID-19 Lung Disease and Other Respiratory Infections.](#)

Chen D, Yun X, Lee D, DiCostanzo JR, Donini O, Shikuma CM, Thompson K, Lehrer AT, Shimoda L, Suk JS. Mol Pharm. 2022 Nov 30. doi: 10.1021/acs.molpharmaceut.2c00448. Online ahead of print. PMID: 36448927

[Live recombinant Newcastle disease virus vectored vaccine expressing the haemagglutinin of H9N2 avian influenza virus suppresses viral replication in chickens.](#)

Lee J, Cho AY, Kim DH, Lee JB, Park SY, Choi IS, Lee SW, Song CS. Avian Pathol. 2022 Nov 30:1-8. doi: 10.1080/03079457.2022.2148516. Online ahead of print. PMID: 36377478

[Lipid Microparticles Show Similar Efficacy With Lipid Nanoparticles in Delivering mRNA and Preventing Cancer.](#)

Ji A, Xu M, Pan Y, Diao L, Ma L, Qian L, Cheng J, Liu M. Pharm Res. 2022 Nov 30:1-15. doi: 10.1007/s11095-022-03445-1. Online ahead of print. PMID: 36451070

[Understanding the content of COVID-19 vaccination and pregnancy videos on YouTube: An analysis of videos published at the start of the vaccine rollout.](#)

Laforet PE, Basch CH, Tang H. Hum Vaccin Immunother. 2022 Nov 30;18(5):2066935. doi: 10.1080/21645515.2022.2066935. Epub 2022 May 4. PMID: 35507867

[Pediatric hematology/oncology physician and nurse practitioner attitudes towards the COVID-19 vaccines: A qualitative study.](#)

Miller ME, Rahim MQ, Coven SL, Jacob SA, Zimet GD, Meagher CG, Ott MA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2048560. doi: 10.1080/21645515.2022.2048560. Epub 2022 Mar 28. PMID: 35344683

[One child, one appointment: how institutional discourses organize the work of parents and nurses in the provision of childhood vaccination for First Nations children.](#)

MacDonald SE, Graham B, Paragg J, Foster-Boucher C, Waters N, Shea-Budgell M, McNeil D, Kunyk D, Bedingfield N, Dubé E, Kenzie L, Svenson LW, Littlechild R, Nelson G. Hum Vaccin Immunother. 2022 Nov 30;18(5):2048558. doi: 10.1080/21645515.2022.2048558. Epub 2022 Mar 31. PMID: 35358016

[Cost-utility analysis of increasing uptake of universal seasonal quadrivalent influenza vaccine \(QIV\) in children aged 6 months and older in Germany.](#)

Molnar D, Anastassopoulou A, Poulsen Nautrup B, Schmidt-Ott R, Eichner M, Schwehm M, Dos Santos G, Ultsch B, Bekkati-Berkani R, von Krempelhuber A, Van Vlaenderen I, Van Bellinghen LA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2058304. doi: 10.1080/21645515.2022.2058304. Epub 2022 Apr 29. PMID: 35486410

[Recommendations and Health Technology Assessment \(HTA\) landscape evaluation for pediatric pneumococcal conjugate vaccines \(PCV\) in Europe: A systematic literature review.](#)

Bencina G, Fues Wahl H, Tsoumani E, Salomonsson S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2060017. doi: 10.1080/21645515.2022.2060017. Epub 2022 Apr 19. PMID: 35438039

[US Severe Acute Respiratory Syndrome Coronavirus 2 Epsilon Variant: Highly Transmissible but With an Adjusted Muted Host T-Cell Response.](#)

Plummer JT, Contreras D, Zhang W, Binek A, Zhang R, Dezem F, Chen SS, Davis BD, Sincuir Martinez J, Stotland A, Kreimer S, Makhoul E, Heneidi S, Eno C, Shin B, Berg AH, Cheng S; CORALE Study Group, Jordan SC, Vail E, Van Eyk JE, Morgan MA. Clin Infect Dis. 2022 Nov 30;75(11):1940-1949. doi: 10.1093/cid/ciac295. PMID: 35438777

[Pneumococcal serotypes in adults hospitalized with community-acquired pneumonia in Greece using urinary antigen detection tests: the EGNATIA study, November 2017 - April 2019.](#)

Liapikou A, Konstantinidis A, Kossyvaki V, Skiadas J, Menegas D, Méndez C, Beavon R, Begier E, Gessner BD, Milionis H, Tsimihodimos V, Baxevanos G, Argiriadou T, Terrovitou C, Toumbis M; EGNATIA Study Group. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079923. doi: 10.1080/21645515.2022.2079923. Epub 2022 Jun 15. PMID: 35703733

[Attitudes of COVID-19 vaccination among college students: A systematic review and meta-analysis of willingness, associated determinants, and reasons for hesitancy.](#)

Geng H, Cao K, Zhang J, Wu K, Wang G, Liu C. Hum Vaccin Immunother. 2022 Nov 30;18(5):2054260. doi: 10.1080/21645515.2022.2054260. Epub 2022 Apr 19. PMID: 35438612

[Influences of social media usage on public attitudes and behavior toward COVID-19 vaccine in the Arab world.](#)

Biswas MR, Ali H, Ali R, Shah Z. Hum Vaccin Immunother. 2022 Nov 30;18(5):2074205. doi: 10.1080/21645515.2022.2074205. Epub 2022 Jun 7. PMID: 35671370

[Impact of a focus education in Zoom on COVID-19 vaccine hesitancy in Hong Kong parents of the preschoolers.](#)

Wong WH, So HK, Rosa Duque JS, Tso WW, Chong PC, Kwan MY, Lau YL. Hum Vaccin Immunother. 2022 Nov 30;18(5):2081460. doi: 10.1080/21645515.2022.2081460. Epub 2022 Jun 7. PMID: 35671466

[What makes us more susceptible to false memories in the era of COVID-19? A focus on vaccines and Green Pass.](#)

Scuotto C, Ilardi CR, Maggi G, Ilardi A, Gamboz N, Staiano M, Borrelli G, La Marra M, Perrella R. Brain Behav. 2022 Nov 30:e2815. doi: 10.1002/brb3.2815. Online ahead of print. PMID: 36448933

[Age-specific seroprotection after Hepatitis B virus vaccination among Korean American pediatric population in Queens, New York.](#)

Min E, Min J, Kim R. Hum Vaccin Immunother. 2022 Nov 30;18(5):2053404. doi: 10.1080/21645515.2022.2053404. Epub 2022 Apr 4. PMID: 35378050

[The eight-year long-term follow-up on the effectiveness of the quadrivalent human papillomavirus vaccine in Chinese women 20-45 years of age.](#)

Zhao C, Zhao Y, Li J, Li M, Su Y, Mi X, La Tu SY, Shen D, Ren L, Li Y, Wang L, Wei L. Hum Vaccin Immunother. 2022 Nov 30;18(5):2052700. doi: 10.1080/21645515.2022.2052700. Epub 2022 Mar 31. PMID: 35358015

[Antigen-adjuvant interactions, stability, and immunogenicity profiles of a SARS-CoV-2 receptor-binding domain \(RBD\) antigen formulated with aluminum salt and CpG adjuvants.](#)

Bajoria S, Kaur K, Kumru OS, Van Slyke G, Doering J, Novak H, Rodriguez Aponte SA, Dalvie NC, Naranjo CA, Johnston RS, Silverman JM, Kleanthous H, Love JC, Mantis NJ, Joshi SB, Volkin DB. Hum Vaccin Immunother. 2022 Nov 30;18(5):2079346. doi: 10.1080/21645515.2022.2079346. Epub 2022 Jun 6. PMID: 35666264

[Single Low-Dose Nanovaccine for Long-Term Protection against Anthrax Toxins.](#)

Holay M, Krishnan N, Zhou J, Duan Y, Guo Z, Gao W, Fang RH, Zhang L. Nano Lett. 2022 Nov 30. doi: 10.1021/acs.nanolett.2c03881. Online ahead of print. PMID: 36448694

[Acute encephalitis after COVID-19 vaccination: A case report and literature review.](#)

Gao JJ, Tseng HP, Lin CL, Hsu RF, Lee MH, Liu CH. Hum Vaccin Immunother. 2022 Nov 30;18(5):2082206. doi: 10.1080/21645515.2022.2082206. Epub 2022 Jun 14. PMID: 35700455

[Human papillomavirus vaccine coverage in male-male partnerships attending a sexual health clinic in Melbourne, Australia.](#)

Chow EPF, Phillips TR, Bowesman H, Ong JJ, Tran J, Aung ET, Chen MY, Fairley CK. Hum Vaccin Immunother. 2022 Nov 30;18(5):2068929. doi: 10.1080/21645515.2022.2068929. Epub 2022 Jun 17. PMID: 35714275

[Two adolescent cases of acute tubulointerstitial nephritis after second dose of COVID-19 mRNA vaccine.](#)

Choi JH, Kang KS, Han KH. Hum Vaccin Immunother. 2022 Nov 30;18(5):2059308. doi: 10.1080/21645515.2022.2059308. Epub 2022 Apr 6. PMID: 35385678

[Epidemiological characteristic of rubella by age group during 12 years after the national introduction of rubella vaccine in Hangzhou, China.](#)

Wang J, Xu Y, Wang X, Liu Y, Zhang X, Du J, Che X, Gu W, Zhang X, Jiang W, Wang Y. Hum Vaccin Immunother. 2022 Nov 30;18(5):2054208. doi: 10.1080/21645515.2022.2054208. Epub 2022 Mar 28. PMID: 35344684

[A comparison of the test-negative and the matched case-control study designs for estimation of EV71 vaccine immunological surrogate endpoints from a randomized controlled trial.](#)

Zhang L, Jin P, Wei M, Jiang H, Li J, Zhu F. Hum Vaccin Immunother. 2022 Nov 30;18(5):2073751. doi: 10.1080/21645515.2022.2073751. Epub 2022 Jun 9. PMID: 35678636

[Kawasaki disease following immunization reported to the Canadian Immunization Monitoring Program ACTive \(IMPACT\) from 2013 to 2018.](#)

Alsager K, Khatri Vadlamudi N, Jadavji T, Bettinger JA, Constantinescu C, Vaudry W, Tan B, Sauvé L, Sadarangani M, Halperin SA, Top KA. Hum Vaccin Immunother. 2022 Nov 30;18(5):2088215. doi: 10.1080/21645515.2022.2088215. Epub 2022 Jul 7. PMID: 35797728

[COVID-19 vaccine associated transverse myelitis-Evusheld as an option when vaccination is not recommended due to severe adverse events.](#)

Fitzsimmons WE. Hum Vaccin Immunother. 2022 Nov 30;18(5):2068338. doi: 10.1080/21645515.2022.2068338. Epub 2022 May 5. PMID: 35511579

[Thyroid eye disease following administration of the BNT162B2 COVID-19 vaccine.](#)

Fujita H, Makino S, Hasegawa T, Saima Y, Tanaka Y, Nagashima S, Kakehashi A, Kaburaki T. QJM. 2022 Nov 30:hcac265. doi: 10.1093/qjmed/hcac265. Online ahead of print. PMID: 36448695

[Safety of COVID-19 vaccination in pregnant women: A study of the adverse perinatal outcomes.](#)

Kugelman N, Riskin A, Kedar R, Riskin-Mashiah S. Int J Gynaecol Obstet. 2022 Nov 30. doi: 10.1002/ijgo.14599. Online ahead of print. PMID: 36452977

[Can We Justify Intralesional Immunotherapy with Measles-mumps-rubella Vaccine for Recalcitrant Facial Warts?](#)

Al-Mandalawi MD. Oman Med J. 2022 Nov 30;37(6):e451. doi: 10.5001/omj.2022.97. eCollection 2022 Nov. PMID: 36458238

[What Do We Know About the Smallpox Virus? A Journey Between Clinic and Therapy.](#)

Zovi A, Ferrara F, Sorrentino S, Langella R, Trama U, Boccellino M, Vitiello A. Pharm Res. 2022 Nov 30:1-7. doi: 10.1007/s11095-022-03447-z. Online ahead of print. PMID: 36451069 Free PMC article.

[Decay rate of antiS1/S2 IgG serum levels after 6 months of BNT162b2 vaccination in a cohort of COVID-19-naive and COVID-19-experienced subjects.](#)

Borgonovo F, Stangalini CA, Tinelli C, Mariani C, Mileto D, Cossu MV, Abbati L, Bilardo L, Gagliardi G, Cutrera M, Pellicciotta M, Armiento L, Dedivitiis G, Capetti AF, Rizzardini G. Hum Vaccin Immunother. 2022 Nov 30;18(5):2060018. doi: 10.1080/21645515.2022.2060018. Epub 2022 May 5. PMID: 35511791

[Effectiveness of Messenger RNA Coronavirus Disease 2019 Vaccines Against Symptomatic Severe Acute Respiratory Syndrome Coronavirus 2 Infections During the Delta Variant Epidemic in Japan: Vaccine Effectiveness Real-time Surveillance for SARS-CoV-2 \(VERSUS\).](#)

Maeda H, Saito N, Igarashi A, Ishida M, Suami K, Yagiuchi A, Kimura Y, Komino M, Arai H, Morikawa T, Motohashi I, Miyazawa R, Moriyama T, Kamura H, Terada M, Kuwamitsu O, Hayakawa T, Sando E, Ohara Y, Teshigahara O, Suzuki M, Morimoto K. Clin Infect Dis. 2022 Nov 30;75(11):1971-1979. doi: 10.1093/cid/ciac292. PMID: 35438137 Free PMC article.

[Can a supranational medicines agency restore trust after vaccine suspensions? The case of Vaxzevria.](#)

Albanese A, Fallucchi F, Verheyden B. PLoS One. 2022 Nov 30;17(11):e0277554. doi: 10.1371/journal.pone.0277554. eCollection 2022. PMID: 36449501 Free article.

[A time-motion study of the COVID-19 vaccination process in an urban primary health center of Odisha, India.](#)

Alekhya G, Giri PP, M C A, Behera BK, Subba SH. Hum Vaccin Immunother. 2022 Nov 30;18(5):2073759. doi: 10.1080/21645515.2022.2073759. Epub 2022 Jun 21. PMID: 35727159 Free PMC article.

[Kinetics of Neutralizing Antibodies against Omicron Variant in Vietnamese Healthcare Workers after Primary Immunization with ChAdOx1-S and Booster Immunization with BNT162b2.](#)

Chau NNV, Nguyet LA, Dung NT, Quang VM, Truong NT, Toan LM, Hung LM, Man DNH, Khoa DB, Phong NT, Ngoc NM, Thao HP, Ty DTB, Thanh PB, Ny NTH, Thanh LK, Thuy CT, Anh NT, Hong NTT, Nhu LNT, Yen LM, Thwaites G, Thanh TT, Tan LV; for OUCRU COVID-19 Research Group. Am J Trop Med Hyg. 2022 Nov 30:tpmd220434. doi: 10.4269/ajtmh.22-0434. Online ahead of print. PMID: 36450229

[Willingness to pay for booster dose of COVID-19 vaccine among healthcare workers in Taizhou, China.](#)

Pan SJ, Yang YP, Zhang MX, Tung TH. Hum Vaccin Immunother. 2022 Nov 30;18(5):2063629. doi: 10.1080/21645515.2022.2063629. Epub 2022 May 6. PMID: 35522922

[Antibody titres elicited by the 2018 seasonal inactivated influenza vaccine decline by 3 months post-vaccination but persist for at least 6 months.](#)

Mordant FL, Price OH, Rudraraju R, Slavin MA, Marshall C, Worth LJ, Peck H, Barr IG, Sullivan SG, Subbarao K. Influenza Other Respir Viruses. 2022 Nov 30. doi: 10.1111/irv.13072. Online ahead of print. PMID: 36451293

[Generation of Novel Severe Acute Respiratory Syndrome Coronavirus 2 Variants on the B.1.1.7 Lineage in 3 Patients With Advanced Human Immunodeficiency Virus-1 Disease.](#)

Riddell AC, Kele B, Harris K, Bible J, Murphy M, Dakshina S, Storey N, Owoyemi D, Pade C, Gibbons JM, Harrington D, Alexander E, McKnight Á, Cutino-Moguel T. Clin Infect Dis. 2022 Nov 30;75(11):2016-2018. doi: 10.1093/cid/ciac409. PMID: 35616095 Free PMC article.

[Measuring parents' acceptance of non-national immunization program vaccines for children and its influencing factors during the COVID-19 pandemic in Shanghai, China.](#)

Wu L, Huang Z, Guo X, Liu J, Sun X. Hum Vaccin Immunother. 2022 Nov 30;18(5):2069427. doi: 10.1080/21645515.2022.2069427. Epub 2022 Jun 21. PMID: 35727599 Free PMC article.

[The influence of parent-child gender on intentions to refuse HPV vaccination due to safety concerns/side effects, National Immunization Survey - Teen, 2010-2019.](#)

Chido-Amajuoyi OG, Talluri R, Jackson I, Shete SS, Domgue JF, Shete S. Hum Vaccin Immunother. 2022 Nov 30;18(5):2086762. doi: 10.1080/21645515.2022.2086762. Epub 2022 Jul 7. PMID: 35797721 Free PMC article.

[Need of booster vaccine doses to counteract the emergence of SARS-CoV-2 variants in the context of the Omicron variant and increasing COVID-19 cases: An update.](#)

Mohapatra RK, El-Shall NA, Tiwari R, Nainu F, Kandi V, Sarangi AK, Mohammed TA, Desingu PA, Chakraborty C, Dhama K. Hum Vaccin Immunother. 2022 Nov 30;18(5):2065824. doi: 10.1080/21645515.2022.2065824. Epub 2022 May 20. PMID: 35594528

[Arsenic trioxide elicits prophylactic and therapeutic immune responses against solid tumors by inducing necroptosis and ferroptosis.](#)

Chen J, Jin Z, Zhang S, Zhang X, Li P, Yang H, Ma Y. Cell Mol Immunol. 2022 Nov 30. doi: 10.1038/s41423-022-00956-0. Online ahead of print. PMID: 36447031

[Early-stage antibody kinetics after the third dose of BNT162b2 mRNA COVID-19 vaccination measured by a point-of-care fingertip whole blood testing.](#)

Hagiya H, Nakano Y, Furukawa M, Sunada N, Hasegawa T, Sakurada Y, Hasegawa K, Yamamoto K, Ogawa H, Obara T, Ageta K, Matsumoto N, Matsuo R, Kadokami T, Higashikage A, Hikita T, Yorifuji T, Toyooka S, Maeda Y, Yokokura Y, Otsuka F, Nakayama M. Sci Rep. 2022 Nov 30;12(1):20628. doi: 10.1038/s41598-022-24464-3. PMID: 36450786

Erythema nodosum after COVID-19 vaccine: Report of two pediatric cases.

Gonzalez-Canete M, Pinto-Pulido EL, Vega-Diez D, Rodriguez-Villa A, Moreno-Artero E, Andina Martinez D, Torrelo A. Pediatr Dermatol. 2022 Nov 30. doi: 10.1111/pde.15205. Online ahead of print. PMID: 36451284

Non-human primate to human immunobridging demonstrates a protective effect of Ad26.ZEBOV, MVA-BN-Filo vaccine against Ebola.

Bockstal V, Leyssen M, Heerwagh D, Spiessens B, Robinson C, Stoop JN, Roozendaal R, Van Effelterre T, Gaddah A, Van Roey GA, Solforosi L, Zahn R, Callendret B, Hendriks J, Luhn K, Douoguih M, Schuitemaker H, Van Hoof J. NPJ Vaccines. 2022 Nov 30;7(1):156. doi: 10.1038/s41541-022-00564-z. PMID: 36450746 Free PMC article.

Transarterial Embolization for Shoulder Injury Related to Vaccine COVID-19 Administration.

Fernández Martínez AM, Cuesta Marcos MT, Rodríguez Prieto J. Cardiovasc Intervent Radiol. 2022 Nov 30:1-3. doi: 10.1007/s00270-022-03319-4. Online ahead of print. PMID: 36450993 Free PMC article.

Letter to the editor: Backdrop context of the study "Intention to vaccinate young children against COVID-19: a large-scale survey of Hong Kong parents".

Lau EYH, Li JB, King Chung Chan D. Hum Vaccin Immunother. 2022 Nov 30;18(5):2090179. doi: 10.1080/21645515.2022.2090179. Epub 2022 Jul 12. PMID: 35820044 Free PMC article.

## Patentes registradas en Patentscope

Estrategia de búsqueda: *Vaccine in the title or abstract AND 20221122:20221130 as the publication date 50 records*

1. [20220370595](#) Buffer Free, Acid Stable Low Dose Volume Rotavirus Vaccine

US - 24.11.2022

Clasificación Internacional [A61K 39/15](#) N° de solicitud 17877986 Solicitante Bharat Biotech International Limited Inventor/a Krishna Mohan Vadrevu

A buffer free, acid stable, low dose volume rotavirus vaccine is disclosed. The vaccine is available in dose volume of less than 1 ml per dose for oral administration and it is without any buffer. The vaccine also does not require pre or post administration of any antacid at the time of oral administration of the vaccine to the subject to neutralize the stomach acid. The vaccine exemplifies nominal drop in vaccine titer at pH 2-4 for a time span of 30 minutes. The vaccine is stable at -20° C. for at least 60 months.

2. [WO/2022/246144](#) MICRONEEDLE VACCINE AGAINST SEVERE ACUTE RESPIRATORY SYNDROME CORONAVIRUS 2 (SARS-COV-2)

WO - 24.11.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/US2022/030177 Solicitante MEDIGEN VACCINE BIOLOGICS CORPORATION Inventor/a CHEN, Charles

The present invention relates to a microneedle vaccine against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), especially to a microneedle vaccine having a recombinant SARS-CoV-2 S protein and providing a sustained release of the recombinant SARS-CoV-2 S protein in a subject.

3. [WO/2022/242649](#) NOVEL CORONAVIRUS SARS-COV-2 MUTANT VACCINE AND APPLICATION  
WO - 24.11.2022

Clasificación Internacional [C07K 19/00](#) Nº de solicitud PCT/CN2022/093354 Solicitante LIVZON  
MABPHARM INC. Inventor/a LIN, Jingjing

The present invention relates to a novel coronavirus SARS-CoV-2 mutant vaccine and an application. The vaccine comprises a fusion protein, and the fusion protein comprises: (1) an interferon or a functional fragment thereof; (2) a novel coronavirus SARS-CoV-2 or a functional fragment thereof; and (3) an immunoglobulin Fc region. The mutant vaccine of the present invention has a long-acting effect, is beneficial to industrial production, is equivalent to normal IFN in activity, is higher in immunogenicity and neutralizing antibody titer, can increase the defense capability against a mutant strain, and can be used as a new generation of mutant vaccine drugs for resisting epidemic spreading of novel coronavirus.

4.[20220370579](#)THERAPEUTIC ANTICANCER NEOEPITOPE VACCINE

US - 24.11.2022

Clasificación Internacional [A61K 39/00](#) Nº de solicitud 17557988 Solicitante NYKODE THERAPEUTICS ASA Inventor/a Stine Granum

The present invention relates to an anticancer vaccine which includes polynucleotides or polypeptides, methods of treatment of cancer wherein such an anticancer vaccine is used as well as methods for producing the vaccine. The vaccine includes a polynucleotide with a nucleotide sequence encoding a targeting unit, a dimerization unit, a first linker and an antigenic unit. The antigenic unit includes from 3 to 50 antigenic subunits separated by a second linker with each antigenic subunit having at least a part of a cancer neoepitope sequence. The vaccine can include a polypeptide encoded by the polynucleotide or a dimeric protein with two polypeptides encoded by the polynucleotide.

5.[20220373547](#)Compositions for Determining Vaccine Potency

US - 24.11.2022

Clasificación Internacional [G01N 33/569](#) Nº de solicitud 17879265 Solicitante BioMadison, Inc. Inventor/a Ward C. Tucker

Compositions for determining the efficacy and/or potency of a vaccine preparation are described herein. Splenocytes from immunized animals are isolated and can be frozen. Upon thawing such cells are activated by exposure to a series of dilutions of a vaccine preparation being tested and a series of dilutions of a reference vaccine with known characteristics. Cells secreting immunogen-specific antibody and cells secreting nonspecific antibody are enumerated, as is the amount of immunogen-specific and nonspecific antibody produced. Comparison between the results from the vaccine preparations provides a measure of relative vaccine efficacy and/or potency.

6.[WO/2022/241560](#)COMBINATION THERAPY TUMOUR CELL VACCINE

WO - 24.11.2022

Clasificación Internacional [A61K 39/39](#) Nº de solicitud PCT/CA2022/050792 Solicitante QUEEN'S UNIVERSITY AT KINGSTON Inventor/a SEAVER, Kyle

A cancer vaccine includes at least one tumour associated antigen (TAA), at least one Toll-like receptor (TLR) agonist, at least one cytokine, and a pharmaceutically acceptable vehicle. The at least one TAA may be provided by dead tumour cells, such as  $\gamma$ -irradiated tumour cells or lysis and UV treated tumour cells, the at least one TLR agonist may comprise 5 CpG-1826 and the at least one cytokine may comprise IL-27. When administered to a mammalian subject the cancer vaccine prevents, inhibits, or slows tumour development in the subject, and the vaccine may provide a long-term T cell activation and memory against tumour development in the subject. 0

7.[WO/2022/242162](#)PREPARATION METHOD FOR COMPOSITE VACCINE ADJUVANT BASED ON ALUMINUM OXYHYDROXIDE NANO CARBOXYL MODIFICATION

WO - 24.11.2022

Clasificación Internacional [A61K 39/39](#) Nº de solicitud PCT/CN2021/139666 Solicitante DALIAN UNIVERSITY OF TECHNOLOGY Inventor/a XUE, Changying

A preparation method for a composite vaccine adjuvant based on aluminum oxyhydroxide nano carboxyl modification. In the preparation method, a carboxylated hydroxyl oxidized nano-particles function as a carrier, but are not limited to functioning as a carrier; a carboxylation method is simple and convenient to operate; the carboxylated hydroxyl oxidized nano-particles are compounded with a novel CpG-ODN adjuvant, such that the half-life period of a CpG adjuvant is prolonged; the compounding of the adjuvant shows a synergistic effect, such that the Th2 type immunostimulation ability of the adjuvant is enhanced, and the possibility of Th1 type immunity is also given to the adjuvant; in addition, the verification process for the effect of the adjuvant is simple, easy to control, and short in consumed time, such that a good concept is provided for engineering development and utilization of a vaccine adjuvant.

8.[4090380](#)VERFAHREN ZUR BEHANDLUNG VON KREBS MIT GM-CSF CODIEREND FÜR POLYNUKLEOTID UND ZUSÄTZLICHEN MITTELN

EP - 23.11.2022

Clasificación Internacional [A61K 48/00](#) Nº de solicitud 21704094 Solicitante GRADALIS INC Inventor/a NEMUNAITIS JOHN

Compositions and methods for prevention of ovarian cancer recurrence and for the treatment of BRCA1/2-wild type ovarian cancer are disclosed herein. In some embodiments, the composition comprises an autologous tumor cell vaccine comprising cells genetically modified for furin knockdown and GM-CSF expression. In some embodiments, the method comprises administration of an autologous tumor cell vaccine prior to administration of a combination of the autologous tumor cell vaccine and atezolizumab. Also disclosed herein are methods for treating a cancer in an individual comprising a wild-type BRCA1 gene, a wild-type BRCA2 gene, or a combination thereof, and is identified as homologous recombination deficiency (HRD)-negative.

9.[20220370588](#)APPLICATION OF PSEUDOMONAS AERUGINOSA VACCINE IN TREATING INFECTION ASSOCIATED WITH BURN OR SCALD INJURY

US - 24.11.2022

Clasificación Internacional [A61K 39/104](#) Nº de solicitud 17637057 Solicitante Sichuan University Inventor/a Zhenling WANG

The present invention belongs to the field of microbiology, and particularly relates to an application of a *Pseudomonas aeruginosa* vaccine in prevention and treatment of burn and scald complicated with bacterial infection. The burn and scald of the present invention include burns and scalds, and degree of the scalds includes I degree, superficial II degree, deep II degree, or III degree scalds. Site of the scalds includes skin, mucosa or other tissues. The *Pseudomonas aeruginosa* vaccine of the present invention can effectively prevent and treat burn and scald complicated with *Pseudomonas aeruginosa* infection caused by multidrug-resistant *Pseudomonas aeruginosa* by activating the specific immune response of the body. The *Pseudomonas aeruginosa* vaccine of the present invention can reduce the bacterial load in the immunized subject through the established immunization procedures, thereby providing a technical solution that can effectively prevent burn and scald complicated with *Pseudomonas aeruginosa* infection, which avoids the technical problems caused by the use of antibiotics such as poor effectiveness, difficulty in curing and proneness to drug resistance in the prior art to a certain degree.

10.[20220370589](#)METHODS FOR TREATING, AMELIORATING OR PREVENTING INFECTIONS USING DRUG AND VACCINATION COMBINATION TREATMENT

US - 24.11.2022

Clasificación Internacional [A61K 39/12](#) Nº de solicitud 17525775 Solicitante TOPELIA AUSTRALIA PTY LTD (ACN 652 771 670) Inventor/a Thomas Julius BORODY

In alternative embodiments, provided are methods for treating, ameliorating, decreasing the chances of having any adverse effects from, decreasing the severity of adverse effects from, or preventing an infection by administration of an antibiotic and/or an anti-viral drugs and a vaccine directed to a causative agent of the infection and/or an attenuated and/or a live, viable or infectious causative agent of the infection. In alternative embodiments, the infection is bacterial or viral. In alternative embodiments, the viral infection is a coronavirus infection such a Covid-19 infection. In alternative embodiments, methods as provided herein prevent or decrease the prevalence or severity of "vaccine breakthrough infections" after vaccination, where external mutants of COVID-19 infect patients in spite of the fact that they have undergone immunization, for example, to prevent a mutant or variant COVID-19 infection. In alternative embodiments, an antiviral combination administered in coordination with a vaccine comprises PF-07321332 or PAXLOVID™ and/or ritonavir, or ivermectin, doxycycline and a zinc or a zinc salt. In alternative embodiments, methods as provided herein are used to prevent in vivo mutations of such mutant infectious agent to enhance the efficacy of an administered vaccination; in other words, methods as provided herein are used to prevent in vivo replication of an acquired viral mutant or variant infectious agent, and thus also prevents ongoing mutations of the viral infectious agent because using the combination antiviral co-therapy where there is no replication of infectious agent and so there is no possible further mutation of the infectious agent.

11. [20220370594](#) WHOLE AVIAN-ORIGIN REVERSE GENETIC SYSTEM AND ITS USE IN PRODUCING H7N9 SUBTYPE AVIAN INFLUENZA VACCINE

US - 24.11.2022

Clasificación Internacional [A61K 39/145](#) Nº de solicitud 17726577 Solicitante SOUTH CHINA AGRICULTURAL UNIVERSITY Inventor/a Wenbao QI

The present disclosure discloses a whole avian-origin reverse genetic manipulation system and its use in producing a recombinant H7N9 avian influenza vaccine. The whole avian-origin reverse genetic manipulation system is an eight-plasmid reverse genetic manipulation system based on H5N2 subtype avian influenza D7 virus strain, which is comprised of 8 recombinant plasmids respectively containing PB2, PB1, PA, HA, NP, NA, M and NS gene fragments derived from H5N2 subtype avian influenza D7 virus strain. The genome of the recombinant H7N9 subtype avian influenza vaccine of the present disclosure is comprised of an NA gene and a modified HA gene derived from a highly pathogenic H7N9 subtype avian influenza virus strain, as well as PB2, PB1, PA, NP, M and NS genes derived from H5N2 subtype avian influenza D7 virus strain.

12. [WO/2022/242652](#) VACCINE, USE THEREOF AND CANCER VACCINE COCKTAIL

WO - 24.11.2022

Clasificación Internacional [A61K 39/00](#) Nº de solicitud PCT/CN2022/093380 Solicitante HUNG, Mien-Chie Inventor/a CHAO, Kun-San

A vaccine including a vector and a transgene is provided. The transgene encodes a plurality of peptides and is packaged in the vector, in which the peptides in order include a secretion signal peptide, at least one tumor antigen, at least one co-inhibitory peptide and a toll-like receptor 9 (TLR9) antagonist.

13. [20220370597](#) RECOMBINANT PROTEIN AND VACCINE COMPOSITION OF PORCINE EPIDEMIC DIARRHEA VIRUS

US - 24.11.2022

Clasificación Internacional [A61K 39/215](#) Nº de solicitud 17586211 Solicitante Jiangsu Academy of Agricultural Sciences Inventor/a Bin Li

A recombinant protein and a vaccine composition for porcine epidemic diarrhea (PED) are provided. The recombinant protein is a fusion protein formed by connecting the truncated segment of S protein (Spike protein) from porcine epidemic diarrhea virus (PEDV) in tandem with the Fc fragment of porcine IgG, and

the truncated fragment of S protein is preferably selected from N-terminal domain (NTD) with sialic acid binding activity in S1 subunit of S protein, neutralizing epitope domain (COE) and multiple B-cell epitopes in S2 subunit; the vaccine composition contains recombinant protein and adjuvants. The recombinant protein of the application can produce IgG antibody and neutralizing antibody titers of rather high level after immunizing mice, and the proportions of CD3<sup>+</sup>CD4<sup>+</sup>, CD3<sup>+</sup>CD8<sup>+</sup> lymphocytes and the concentrations of IFN-γ and IL-4 in lymphocytes are significantly increased.

14. [2606693](#) Fusion protein

GB - 23.11.2022

Clasificación Internacional [C07K 14/165](#) Nº de solicitud 202105044 Solicitante EXOSIS INC Inventor/a JAMES ROBERT EDGAR

The fusion protein comprises a tetraspanin exosomal protein and one or more immunogenic proteins. The tetraspanin may be CD63, CD9 or CD81, or a fragment or variant thereof. The protein may be capable of eliciting an immune response against a SARS-CoV-2 protein, such as the spike protein. Also claimed is an exosome or membrane preparation comprising the fusion protein, a vaccine composition comprising the exosome or membrane preparation, a nucleic acid molecule, an expression vector and a cell comprising the fusion protein. Also claimed is a method of preventing or ameliorating an infection comprising providing the subject with a therapeutically effective amount of the exosome, membrane preparation or vaccine composition. The exosome may comprise a DC receptor ligand and/or an immune enhancing moiety.

15. [WO/2022/244801](#) HTLV-1 NUCLEIC ACID LIPID PARTICLE VACCINE

WO - 24.11.2022

Clasificación Internacional [A61K 39/21](#) Nº de solicitud PCT/JP2022/020646 Solicitante NATIONAL INSTITUTES OF BIOMEDICAL INNOVATION, HEALTH AND NUTRITION Inventor/a ISHII Ken

Provided is a vaccine for the treatment and/or prevention of infection by human T-cell leukemia virus type 1 (HTLV-1). A lipid particle of the present invention has encapsulated therein a nucleic acid that enables expression of the Tax antigen or the gp46 antigen of HTLV-1. The particle includes a lipid including a cationic lipid represented by general formula (Ia) or a pharmaceutically acceptable salt thereof. In the formula: R1 and R2 independently represent a C1-C3 alkyl group; L1 represents a C17-C19 alkenyl group optionally having one or more C2-C4 alkanoyloxy groups; L2 represents a C10-C19 alkyl group optionally having one or more C2-C4 alkanoyloxy groups or represents a C10-C19 alkenyl group optionally having one or more C2-C4 alkanoyloxy groups; and p represents 3 or 4.

16. [WO/2022/244831](#) CORONAVIRUS VACCINE SUITABLE FOR ELDERLY INDIVIDUALS

WO - 24.11.2022

Clasificación Internacional [A61K 39/12](#) Nº de solicitud PCT/JP2022/020772 Solicitante OKINAWA INSTITUTE OF SCIENCE AND TECHNOLOGY SCHOOL CORPORATION Inventor/a ISHIKAWA Hiroki The present invention provides a vaccine or an immunogenic composition that can be useful in an elderly human subject.

17. [WO/2022/242446](#) LACTOBACILLUS PLANTARUM AND USE THEREOF IN PREPARATION OF COVID-19 VACCINE IMMUNOPOTENTIATOR

WO - 24.11.2022

Clasificación Internacional [C12N 1/20](#) Nº de solicitud PCT/CN2022/089867 Solicitante SHANGHAI PUBLIC HEALTH CLINICAL CENTER Inventor/a XU, Jianguo

Disclosed in the present invention is a strain of Lactobacillus plantarum guanke, wherein the strain has the deposit number CGMCC NO. 21720, was deposited on 22 January, 2021, has the classification name Lactobacillus plantarum guanke, and was deposited in the China General Microbiological Culture Collection Center. The strain provided in the present invention can significantly improve the neutralizing

antibody titer in serum carrying SARS-CoV-2 and prolong the protection time. Further provided in the present invention is the use of the strain in the preparation of a vaccine immunopotentiator.

18. [20220372081](#) WHOLE AVIAN-ORIGIN REVERSE GENETIC SYSTEM AND RECOMBINANT H5N2 SUBTYPE AVIAN INFLUENZA VIRUS, VACCINE AND USES THEREOF  
US - 24.11.2022

Clasificación Internacional [C07K 14/005](#) N° de solicitud 17726567 Solicitante SOUTH CHINA AGRICULTURAL UNIVERSITY Inventor/a Wenbao QI

The present disclosure discloses a whole avian-origin reverse genetic system, a recombinant H5N2 subtype avian influenza virus, a vaccine containing the virus, and a preparation method and application thereof. The genome of the recombinant virus is comprised of a modified HA gene derived from a highly pathogenic H5N6 subtype avian influenza virus strain, as well as PB2, PB1, PA, NP, NA, M and NS genes derived from H5N2 subtype avian influenza D7 virus strain. The recombinant virus is a recombinant H5N2 avian influenza virus rescued from the D7 virus strain as a backbone, which is an avirulent virus strain with the original immunogenicity, and can maintain a high virus titer during the chick embryo culture process. The recombinant virus fully meets the biological safety requirements and has a good application prospect.

19. [WO/2022/244825](#) INFLUENZA VIRUS NUCLEIC ACID LIPID PARTICLE VACCINE

WO - 24.11.2022

Clasificación Internacional [A61K 39/145](#) N° de solicitud PCT/JP2022/020745 Solicitante DAIICHI SANKYO COMPANY, LIMITED Inventor/a TOMOZAWA Takanori

Provided is a vaccine for preventing and/or treating infection caused by influenza viruses, in which a lipid particle contains a nucleic acid capable of expressing a hemagglutinin (HA) protein of an influenza virus, wherein a lipid includes a cationic lipid represented by general formula (Ia) or a pharmaceutically acceptable salt thereof. [In the formula, R1, R2, p, L1, and L2 are defined as in the description of the specification.]

20. [WO/2022/246292](#) ELECTROCHEMICAL DIAGNOSTIC SYSTEM AND METHODS OF OBTAINING AND USING ELECTROCHEMICAL DIAGNOSTIC RESULTS

WO - 24.11.2022

Clasificación Internacional [G01N 33/543](#) N° de solicitud PCT/US2022/030393 Solicitante PERSOWN, INC. Inventor/a KARUMANCHI, Devi Kalyan

Devices, systems, kits, methods, and techniques are described herein that are useful for detecting analytes in body or test fluids using a functionalized electrochemical test strip and potentiostatic measurements, allowing for quickly (within 5 minutes) identifying whether or not an individual has a particular disease or condition, such as infection by SARS-CoV-2 or a variant or vaccine-induced immunity or natural immunity to infection by SARS-CoV-2 or a variant, or whether an individual would benefit from a vaccine booster. The test results can be used for applications including facilitating or controlling access at events, venues, or transportation systems, or generating exposure notifications. The electrodes include a SAM linked to the capture agents via a click chemistry based linker. There's also a charged passivation component (e.g. thiolated PEG) in the SAM. Charged glycosaminoglycans in the SAM contribute to anti-fouling and improving the sensitivity of the device.

21. [20220370581](#) VACCINE AND METHOD FOR TREATING CANCER

US - 24.11.2022

Clasificación Internacional [A61K 39/00](#) N° de solicitud 17746112 Solicitante China Medical University Inventor/a Kun-San Chao

A vaccine including a vector and a transgene is provided. The transgene encodes a plurality of peptides and is packaged in the vector, in which the peptides in order include a secretion signal peptide, at least one tumor antigen, at least one co-inhibitory peptide and a toll-like receptor 9 (TLR9) antagonist.

22.[20220370600](#)MULTIGENIC MVA-SARS-COV-2 VACCINE

US - 24.11.2022

Clasificación Internacional [A61K 39/215](#) Nº de solicitud 17747358 Solicitante BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM Inventor/a Haitao HU

The present invention includes compositions and methods of making and using an immunogenic protein for mucosal delivery comprising at least 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99%, or 100% amino acid identity to a multigenic coronavirus vaccine on a modified vaccinia ankara (MVA) vector that expresses a viral nucleoprotein (N) protein and a spike (S) protein.

23.[20220373510](#)METHODS OF OBTAINING AND USING ELECTROCHEMICAL DIAGNOSTIC

RESULTS

US - 24.11.2022

Clasificación Internacional [G01N 27/49](#) Nº de solicitud 17566836 Solicitante PERSOWN, Inc. Inventor/a Devi Kalyan Karumanchi

Methods and techniques are described for analyzing test fluids to determine presence, absence, or concentration of analytes in the test fluids. The methods may correspond to diagnostic testing, such as quickly (within 5 minutes) identifying whether or not an individual may have a particular disease or condition, such as infection by SARS-CoV-2 or a SARS-CoV-2 variant or vaccine-induced immunity or natural immunity to infection by SARS-CoV-2 or a SARS-CoV-2 variant, or whether an individual would benefit from a vaccine booster. The test results can be used for a variety of applications including facilitating or controlling access at events, venues, or transportation systems, or generating exposure notifications.

24.[4091629](#)DIVERGENTE IMPFSTOFFZUSAMMENSETZUNG GEGEN PCV2B UND VERFAHREN ZUR VERWENDUNG

EP - 23.11.2022

Clasificación Internacional [A61K 39/12](#) Nº de solicitud 22171259 Solicitante ZOETIS SERVICES LLC Inventor/a NITZEL GREGORY PAUL

This invention provides a vaccine composition for protecting pigs against PCV2, including a highly virulent porcine circovirus type 2b (PCV2b) divergent strain, the composition including a PCV2b divergent ORF2 polypeptide, wherein the ORF2 polypeptide comprises Leucine (L) at position 89, Threonine (T) at position 90, and Asparagine (N) at position 134, according to the numbering of SEQ ID NO: 1 herein.

25.[20220370587](#)Cellular Adjuvants for Viral Infection

US - 24.11.2022

Clasificación Internacional [A61K 39/108](#) Nº de solicitud 17684121 Solicitante NantBio, Inc. Inventor/a Kayvan Niazi

Two-component vaccine formulations and methods are contemplated where the vaccine has an adjuvant component and a therapeutic component. The therapeutic component comprises preferably a recombinant therapeutic virus encoding a therapeutic antigen while the adjuvant component comprises a non-host cell or immune stimulating portion thereof. Notably, use of the adjuvant component will result in significant uptake of the therapeutic component into immune competent cells, even in the absence of receptors for entry of the therapeutic component. In addition, such adjuvant also stimulates expression of the therapeutic antigen.

26.[WO/2022/244815](#)HPV INFECTIOUS DISEASE VACCINE

WO - 24.11.2022

Clasificación Internacional [C12N 15/88](#) Nº de solicitud PCT/JP2022/020713 Solicitante DAIICHI SANKYO COMPANY, LIMITED Inventor/a ONODERA Yoshikuni

Provided are lipid particles in which is encapsulated a nucleic acid, whereby: a vaccine for preventing and/or treating an infection by human papillomavirus type-6 and/or type-11 can be provided; and an E6 antibody and an E7 antibody to the human papillomavirus can be expressed. The lipid particles contain: a lipid that is a cationic lipid represented by general formula (Ia); or a pharmaceutically acceptable salt thereof. [In the formula, R1, R2, p, L1 and L2 are defined as described in the specification.]

**27. [20220370499](#) IMMUNOTHERAPIES FOR TARGETING OF TUMOR VASCULATURE**

US - 24.11.2022

Clasificación Internacional [A61K 35/17](#) Nº de solicitud 17748997 Solicitante Therapeutic Solutions International, Inc. Inventor/a Thomas E. Ichim

Disclosed are novel means, protocols, and compositions of matter for creating targeted immune responses and/or induction of immunological memory towards the tumor vasculature. In one embodiment pluripotent stem cells are transfected with one or more genes capable of eliciting immunity, induced to differentiate into endothelial-like cells which resemble the tumor endothelial cells, and utilized as a vaccine. In some embodiment's genes are engineered under control of specific promoters to allow for various specificities of activity. In one specific embodiment pluripotent stem cells engineered to endow properties capable of inducing expression of the α-Gal epitope (Galα1,3Galα1,4GlcNAc-R). Addition of adjuvants to enhance antigen presentation of the vaccine composition, as well as means of stimulating systemic enhancement of circulating endothelial specific T cells are also disclosed.

**28. [20220370603](#) COMPOSITIONS OF CARDIOLIPIN ADJUVANTS AND METHODS OF USE THEREOF**

US - 24.11.2022

Clasificación Internacional [A61K 39/39](#) Nº de solicitud 17324752 Solicitante The University of Hong Kong Inventor/a Liwei Lu

Compositions and methods for enhancing antigen-specific immunity in a subject are provided.

Pharmaceutical compositions including an effective amount of an immuno-stimulatory cardiolipin as an adjuvant in combination with an antigen and methods of use thereof for stimulating protective immunity to the antigen in a subject are provided. Administration of the combination of the antigen and cardiolipin adjuvant is effective to enhance antigen-specific immunity in a subject to a greater degree than administering to the subject the same amount of the antigen alone. The active agents can be administered together or separately. In preferred forms the cardiolipin is cardiolipin species (C18:2)4. In preferred forms the antigen is formulated as a vaccine, such as an influenza vaccine. A preferred amount by weight of each reagent is about 10-40% cardiolipin to about 90-60% antigen(s), inclusive.

**29. [20220370292](#) AUTOMATED SYRINGE FILLING AND MEASURING SYSTEM AND METHODS OF**

USING SAME

US - 24.11.2022

Clasificación Internacional [A61J 1/20](#) Nº de solicitud 17303141 Solicitante Auto Vaccine Innovation Inventor/a Akhil Seth

Methods and devices are provided precision filling of medical syringes. Generally, the methods and devices are designed to determine and measure dosages and fill a syringe with a precise amount from a medication vial and to store or transmit to a medical records storage system data associated with the process. In one embodiment, the fill apparatus weighs, photographs and stores information on a syringe and medicine vial, fills the syringe from the vial and confirms transfer of the medicine to the syringe from the vial.

**30. [4091630](#) IMPFSTOFFE MIT R-DOTAP**

EP - 23.11.2022

Clasificación Internacional [A61K 39/145](#) Nº de solicitud 22150878 Solicitante PDS BIOTECHNOLOGY CORP Inventor/a BEDU-ADDO FRANK

The present disclosure provides vaccine compositions comprising at least one adjuvant and at least one antigen, wherein the adjuvant is a cationic lipid. The disclosure also provides methods of treating a disease in a mammal, methods of preventing a disease in a mammal, and methods of effecting antigen cross presentation to induce a humoral immune response and a cellular immune response in a mammal utilizing the vaccine compositions. Cross presentation of various antigens can be achieved by formulating the specific antigens with cationic lipids possessing adjuvant properties.

31.[20220372500](#) ATTENUATED NOCARDIA SERIOLAE AND CONSTRUCTION METHOD AND USE THEREOF

US - 24.11.2022

Clasificación Internacional [C12N 15/76](#) Nº de solicitud 17428791 Solicitante GUANGDONG OCEAN UNIVERSITY Inventor/a Liguun XIA

The present disclosure provides an attenuated *Nocardia seriolae* and its construction method and use thereof, which belongs to the technical field of genetic engineering. In the present disclosure, part or all of the glutamate endopeptidase homologue (GluNS) gene sequence of wild-type *Nocardia seriolae* is knocked out by means of genetic engineering to construct an attenuated strain with the characterized of good protection to the host. The attenuated strain may not only effectively reduce the pathogenicity of the bacteria, but also retain good immunogenicity. At the same time, the attenuated *Nocardia seriolae* constructed in the present disclosure may also have the characteristics of high genetic stability and may be used as a vaccine candidate strain for the preparation of a vaccine or other biological products for preventing and treating Nocardiosis.

32.[20220372158](#) RNA-CODED ANTIBODY

US - 24.11.2022

Clasificación Internacional [C07K 16/28](#) Nº de solicitud 17813530 Solicitante CureVac AG Inventor/a Ingmar HOERR

The present application describes an antibody-coding, non-modified or modified RNA and the use thereof for expression of this antibody, for the preparation of a pharmaceutical composition, in particular a passive vaccine, for treatment of tumours and cancer diseases, cardiovascular diseases, infectious diseases, autoimmune diseases, virus diseases and monogenetic diseases, e.g. also in gene therapy. The present invention furthermore describes an in vitro transcription method, in vitro methods for expression of this antibody using the RNA according to the invention and an in vivo method.

33.[20220372104](#) IMMUNOTHERAPY WITH B\*07 RESTRICTED PEPTIDES AND COMBINATION OF PEPTIDES AGAINST CANCERS AND RELATED METHODS

US - 24.11.2022

Clasificación Internacional [C07K 14/725](#) Nº de solicitud 17832383 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.

34.[20220370601](#) SARS-CoV-2 POLYPEPTIDES

US - 24.11.2022

Clasificación Internacional [A61K 39/215](#) Nº de solicitud 17748715 Solicitante MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH Inventor/a Gregory A. POLAND

This document provides methods and materials related to selected severe acute respiratory distress coronavirus 2 (SARS-CoV-2) polypeptides. For example, this document provides vaccine compositions that contain one or more selected SARS-CoV-2 polypeptides provided herein and that have the ability to induce or increase immune responses against coronaviruses such as SARS-CoV-2 within a mammal (e.g., a human).

35.[20220375624](#) SYSTEMS, APPARATUS AND METHODS OF REAL-TIME CELLULAR COMMUNICATION ASSISTED VACCINE TRACKING SYSTEM

US - 24.11.2022

Clasificación Internacional [G16H 50/80](#) Nº de solicitud 17323175 Solicitante AT&T Intellectual Property I, L.P. Inventor/a Yupeng Jia

Aspects of the subject disclosure may include, for example, a method that includes receiving, by a processing system including a processor coupled to a communication network, data regarding participation by a network subscriber in a public health program. The data includes a real-time report of an event relating to the subscriber participation, and is sent from subscriber equipment to a base station of the communication network via a dedicated information element. The method also includes determining a rate of participation in the program by a population of a community in a coverage area of the base station. The method further includes training a model for participation in the program by members of the community; the training comprises applying machine learning to the model. The method also includes adjusting the model in accordance with the data; administration of the program is modified in accordance with the model. Other embodiments are disclosed.

36.[WO/2022/242432](#) PEPTIDE VACCINE FOR VIRUS INFECTION

WO - 24.11.2022

Clasificación Internacional [C07K 7/04](#) Nº de solicitud PCT/CN2022/089266 Solicitante VACINO BIOTECH CO., LTD. Inventor/a CHANG, Jia-Ming

Provided is an immunogenic composition against virus infection, especially to an immunogenic composition having peptides that are capable of binding to major histocompatibility complex (MHC) molecules and inducing a broad-spectrum immunity against coronavirus.

37.[20220370583A\\*03](#) RESTRICTED PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST CANCERS AND RELATED METHODS

US - 24.11.2022

Clasificación Internacional [A61K 39/00](#) Nº de solicitud 17876899 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.

38.[20220373498](#) ELECTROCHEMICAL DIAGNOSTIC SYSTEM

US - 24.11.2022

Clasificación Internacional [G01N 27/327](#) Nº de solicitud 17566828 Solicitante PERSOWN, Inc. Inventor/a Devi Kalyan Karumanchi

Described are devices, systems, kits, methods, and techniques for analyzing test fluids to determine presence, absence, or concentration of analytes in the test fluids and useful for performing diagnostic testing, such as to quickly identify whether or not an individual may have a particular disease or condition, such as infection by SARS-CoV-2 or a SARS-CoV-2 variant or vaccine-induced immunity or natural immunity to infection by SARS-CoV-2 or a SARS-CoV-2 variant. The devices, systems, kits, methods, and techniques described herein can be used to detect analytes in body fluids using a functionalized electrochemical test strip and potentiostatic measurements, allowing for prompt identification of whether or not an individual has a particular disease or condition, such as in a period of 5 minutes or less.

39. [20220370596](#) SYNTHETIC pDNA VACCINES AGAINST COVID-19

US - 24.11.2022

Clasificación Internacional [A61K 39/215](#) Nº de solicitud 17323357 Solicitante Imam Abdulrahman Bin Faisal University Inventor/a Iman ALMANSOUR

A pDNA-based vaccine against SARS-CoV-2 and methods for preventing or treating COVID-19 using it.

40. [WO/2022/246084](#) SARS-COV-2 POLYPEPTIDES

WO - 24.11.2022

Clasificación Internacional [A61K 39/215](#) Nº de solicitud PCT/US2022/030068 Solicitante MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH Inventor/a POLAND, Gregory A.

This document provides methods and materials related to selected severe acute respiratory distress coronavirus 2 (SARS-CoV-2) polypeptides. For example, this document provides vaccine compositions that contain one or more selected SARS-CoV-2 polypeptides provided herein and that have the ability to induce or increase immune responses against coronaviruses such as SARS-CoV-2 within a mammal (e.g., a human).

41. [4090348](#) VERFAHREN ZUM BEHANDELN VON VIRALINFEKTIONEN

EP - 23.11.2022

Clasificación Internacional [A61K 38/00](#) Nº de solicitud 21741817 Solicitante UNIV CALIFORNIA Inventor/a HARTIGAN-O'CONNOR DENNIS J

Provided herein are methods for preventing or treating a human immunodeficiency virus (HIV) infection or a simian immunodeficiency virus (SIV) infection in a subject. The methods include administering to the subject (a) a reservoir-depleting agent that binds to a host protein on a reservoir cell, and (b) an antiviral vaccine.

42. [WO/2022/244845](#) THERAPEUTIC AGENT FOR DISEASE ASSOCIATED WITH ABNORMAL LIPID

WO - 24.11.2022

Clasificación Internacional [A61K 39/00](#) Nº de solicitud PCT/JP2022/020850 Solicitante NATIONAL UNIVERSITY CORPORATION KUMAMOTO UNIVERSITY Inventor/a OIKE, Yuichi

The purpose of the present invention is to provide a novel therapeutic agent for dyslipidemia, which targets angiopoietin-like factor 3. According to the present invention, a vaccine composition is provided, which contains a peptide having a portion of the sequence for angiopoietin-like factor 3 (ANGPTL3) as an active ingredient, in which the peptide comprises at least one peptide selected from the group consisting of EPKSRA (SEQ ID NO: 3), EPKSRFAMLD (SEQ ID NO: 4) and EPKSRFAMLDDVK (SEQ ID NO: 5).

43. [WO/2022/246327](#) A BROADLY PROTECTIVE PROPHYLACTIC VACCINE AGAINST

PSEUDOMONAS AERUGINOSA

WO - 24.11.2022

Clasificación Internacional [G01N 21/25](#) Nº de solicitud PCT/US2022/030565 Solicitante UNIVERSITY OF KANSAS Inventor/a PICKING, Wendy L.

Disclosed are compositions comprising a fusion polypeptide comprising i) a fusion of a needle tip protein or an antigenic fragment thereof and/or a translocator protein or an antigenic fragment thereof from a

Type III secretion system (T3SS) of a Gram negative bacteria and ii) the A1 subunit of the labile toxin (LTA1) from enterotoxigenic Escherichia coli or cholera toxin. and methods of their use.

44. [20220370599](#) MESSENGER RNA THERAPEUTICS AND COMPOSITIONS

US - 24.11.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud 17734703 Solicitante Greenlight Biosciences, Inc.  
Inventor/a James Robbins ABSHIRE

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.

45. [4090322](#) VON TUMORZELLEN STAMMENDE EXOSOMEN UND VERFAHREN ZUM BEHANDELN  
VON KOLOREKTALEM KREBS

EP - 23.11.2022

Clasificación Internacional [A61K 31/00](#) N° de solicitud 21705012 Solicitante UNIV MINNESOTA  
Inventor/a SUBRAMANIAN SUBBAYA

The present invention provides tumor-derived extracellular vesicles (EVs) lacking an immune suppressive factor, for example, miR-424, methods of making and methods of use for treating cancer. Further the present invention provide vaccine compositions comprising modified tumor-derived EVs for use in treating secondary tumors.

46. [WO/2022/241760](#) SAFER VACCINES

WO - 24.11.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/CN2021/095146 Solicitante WANG, Huiru  
Inventor/a WANG, Huiru

The invention provides safer vaccines that induce less adverse reactions particular the serious adverse reactions in a host. Also provided are compositions including these safer vaccines, as well as polynucleotides, vectors, host cells, methods, and kits related thereto. Further provided are methods and kits for preventing or treating infectious diseases, infection-relating diseases, and adverse reactions of vaccines in an individual by administering to the individual a safer vaccine that induce less adverse reactions, or by administering to the individual a pathogenic antigen that neutralize pathogenic antibodies. Yet further provided are methods for identification of the presence of pathogenic antibodies inducible by a pathogen or the vaccines relating to the pathogen.

47. [20220373559](#) DETECTION OF ANTIBODIES AGAINST RAN PROTEINS FROM SERUM AND  
TISSUE LYSATES

US - 24.11.2022

Clasificación Internacional [G01N 33/68](#) N° de solicitud 17761764 Solicitante University of Florida  
Research Foundation, Incorporated Inventor/a Laura Ranum

Aspects of the disclosure relate to methods and compositions (e.g., kits) for detecting anti-repeat-associated non-ATG (RAN) protein antibodies in a subject (e.g., a subject that has been administered a therapeutic anti-RAN protein antibody or a vaccine against a disease or disorder associated with RAN protein expression, translation, and/or accumulation, for example amyotrophic lateral sclerosis (ALS) and/or frontotemporal dementia (FTD)). In some embodiments, methods described by the disclosure comprise detecting one or more anti-RAN protein antibodies in a biological sample obtained from a subject by an electrochemiluminescence-based immunoassay using one or more target di-amino acid

repeat peptides. In some embodiments, the disclosure relates to kits comprising one or more di-amino acid repeat peptides and an electrochemiluminescence-based immunoassay plate and/or reagents.

48. [20220370007](#) METHOD AND APPARATUS FOR ANALYZING SPECTRUM OF AUDITORY THERAPY FREQUENCIES

US - 24.11.2022

Clasificación Internacional [A61B 5/00](#) N° de solicitud 17641986 Solicitante Sound Vaccine, Inc. Inventor/a Eun Yee KWAK

An apparatus for auditory therapy frequency spectrum analysis includes: a processor and a memory connected to the processor, wherein the memory stores program instructions executable by the processor to receive a hearing threshold of a user for each of n frequency bands in which an audible frequency band is divided with 1/k octave resolution, calculate n hearing threshold representative values for each of the n frequency bands according to a preset criterion, determine a group to which the user belongs by using the calculated n hearing threshold representative values, and determine acoustic stimulus signals of frequency bands sequentially required for the user to be treated based on the determined group.

49. [20220370604](#) PEPTIDE VACCINE FOR VIRUS INFECTION

US - 24.11.2022

Clasificación Internacional [A61K 39/39](#) N° de solicitud 17726688 Solicitante Vacino Biotech Co., Ltd.

Inventor/a Jia-Ming CHANG

The present invention relates to an immunogenic composition against virus infection, especially to an immunogenic composition having peptides that are capable of binding to major histocompatibility complex (MHC) molecules and inducing a broad-spectrum immunity against coronavirus.

50. [WO/2022/245258](#) ARTIFICIAL GENE N1NEW FOR ENCODING THE NUCLEOCAPSID PROTEIN OF THE CORONAVIRUS SARS-COV-2, AND RECOMBINANT PLASMID PET-28A-N1NEW FOR EXPRESSING SAID ARTIFICIAL GENE

WO - 24.11.2022

Clasificación Internacional [A61K 39/215](#) N° de solicitud PCT/RU2022/050153 Solicitante THE FEDERAL STATE UNITARY ENTERPRISE "THE SAINT-PETERSBURG SCIENTIFIC RESEARCH INSTITUTE OF VACCINES AND SERUMS AND THE ENTERPRISE FOR THE PRODUCTION OF BACTERIAL PREPARATIONS" OF FEDERAL MEDICAL AND BIOLOGIC AGENCY Inventor/a BELOZEROVA, Natalia Sergeevna

The invention relates to biotechnology and immunology. Proposed are a gene that allows the production of an artificial protein having immunogenic properties with respect to SARS-CoV-2, a plasmid containing said gene, as well as the artificial protein itself, which is obtained using an E.coli cell line modified by said plasmid. The recombinant protein obtained has immunogenic properties with respect to SARS-CoV-2 and can be used as an active substance for producing a vaccine against SARS-CoV-2.

**NOTA ACLARATORIA:** Las noticias y otras informaciones que aparecen en este boletín provienen de sitios públicos, debidamente referenciados mediante vínculos a Internet que permiten a los lectores acceder a las versiones electrónicas de sus fuentes originales. Hacemos el mayor esfuerzo por verificar de buena fe la objetividad, precisión y certeza de las opiniones, apreciaciones, proyecciones y comentarios que aparecen en sus contenidos, pero este boletín no puede garantizarlos de forma absoluta, ni se hace responsable de los errores u omisiones que pudieran contener. En este sentido, sugerimos a los lectores cautela y los alertamos de que asumen la total responsabilidad en el manejo de dichas informaciones; así como de cualquier daño o perjuicio en que incurran como resultado del uso de estas, tales como la toma de decisiones científicas, comerciales, financieras o de otro tipo.

Edición: Annia Ramos Rodríguez [aramos@finlay.edu.cu](mailto:aramos@finlay.edu.cu)

Ma. Victoria Guzmán Sánchez [mguzman@finlay.edu.cu](mailto:mguzman@finlay.edu.cu)

Randelys Molina Castro [rmolina@finlay.edu.cu](mailto:rmolina@finlay.edu.cu)

Irina Crespo Molina [icrespo@finlay.edu.cu](mailto:icrespo@finlay.edu.cu)

Yamira Puig Fernández [yamipuig@finlay.edu.cu](mailto:yamipuig@finlay.edu.cu)

Rolando Ochoa Azze [ochoa@finlay.edu.cu](mailto:ochoa@finlay.edu.cu)

