# VacCiencia

FINLAY EDICIONES

## Boletín Científico

No. 1 (6-15 enero/2025)

## EN ESTE NÚMERO

VacCiencia es una publicación dirigida a investigadores y especialistas dedicados a la vacunología y temas afines, con el ojetivo de serle útil.

Usted puede realizar sugerencias sobre los contenidos y de esa forma crear una retroalimentación que nos permita acercarnos más a sus necesidades de información.


- Desarrollo de vacunas en Cuba: La ciencia desde el corazón.
- Noticias más recientes en la Web sobre vacunas.
- Artículos científicos más recientes de Medline sobre vacunas.
- Patentes más recientes en Patentscope sobre vacunas.


IFV INSTITUTO FINLAY DE VACUNAS

SiViFinlay

VaCyT



CUBA

# Desarrollo de vacunas en Cuba: La ciencia desde el corazón.

Cuba ha avanzado significativamente en el desarrollo de vacunas, basado en una sólida infraestructura a partir de la constitución del Grupo de las industrias biotecnológica y Farmacéutica BioCubaFarma, destacándose por su enfoque innovador y caracterizado por su capacidad para abordar problemas de salud pública. El país cuenta con un robusto sistema de ciencia e innovación tecnológica, y a ello se le suma, la voluntad política de un Estado que desde el triunfo revolucionario de enero de 1959 apostó a que este sería un país de mujeres y hombres de ciencia.

Los profesionales cubanos han recibido diez medallas de oro de la Organización Mundial de la Propiedad Intelectual (OMPI) en el transcurso de casi 30 años, y sus productos biotecnológicos ya estaban siendo exportados a 49 países antes de la pandemia, entre los que se incluyen vacunas empleadas en los programas de vacunación de América Latina.

A pesar de la complejidad para adquirir materias primas debido a las medidas restrictivas del bloqueo estadounidense, el Programa Nacional de Inmunización de Cuba ha sido, durante décadas, un pilar fundamental en la salud pública del país. Este programa, de carácter universal y gratuito, administra 17 vacunas —12 de ellas de producción nacional—y ha logrado mantener una cobertura superior al 98% en todo el territorio nacional. Sus resultados son notables: la eliminación de enfermedades como la difteria, el sarampión, la parotiditis, la rubéola, la poliomielitis y la tos ferina, mientras que otras, como el tétano y la enfermedad meningocócica, han dejado de ser problemas de salud pública debido a sus bajos niveles de incidencia.

Tres vacunas de producción nacional sobresalen por su carácter innovador: la primera vacuna antimeningocócica B del mundo VA-MENGOC-BC, eficaz contra el meningococo del serogrupo B, desarrollada a finales de la década de 1980; la vacuna contra la hepatitis B Heberbiovac HB, la primera en América Latina en ser calificada por la OMS y un inmunógeno muy exitoso; y la vacuna Quimi-Hib, contra *Haemophilus influenzae* tipo b (Hib) , principal agente causal de la meningitis bacteriana en el país, considerada la primera vacuna sintética, mediante síntesis química.

Y específicamente en el contexto de la pandemia de COVID-19, se desarrollaron cinco vacunas contra el SARS-CoV-2: Soberana 01, Soberana 02, Soberana Plus, Abdala y Mambisa.

Entre los principales actores en este ámbito, se encuentra el Instituto Finlay de Vacunas (IFV), institución científica cubana dedicada a la investigación, desarrollo y producción de vacunas. Este centro ha sido fundamental en la lucha contra diversas enfermedades infecciosas en Cuba y a nivel internacional.

De hecho, la reciente aprobación en 2024 del Registro Sanitario de la vacuna antineumocócica cubana Quimi-Vio, desarrollada por el IFV, constituyó otro hito en la historia de la vacunación en Cuba.

En el año 2023, el IFV, que opera bajo un modelo de ciclo cerrado, lo que significa que gestiona todo el proceso desde la investigación y desarrollo hasta la comercialización de las vacunas, fue clasificado como una Empresa de Alta Tecnología, destacándose por su capacidad innovadora y su impacto positivo en la

salud pública. Este reconocimiento resalta su compromiso con la ciencia y su papel crucial en el sistema de salud cubano.

La institución también busca expandir su alcance mediante colaboraciones internacionales. Recientemente firmó acuerdos con instituciones en otros países para compartir conocimientos y desarrollar conjuntamente nuevas tecnologías en el ámbito de las vacunas. En resumen, el Instituto Finlay de Vacunas es un pilar fundamental del sistema de salud cubano, con un enfoque integral en el desarrollo de soluciones vacunales que han demostrado ser efectivas tanto localmente como en contextos internacionales.

Otra de las más importantes instituciones cubanas que desarrollan vacunas es el Centro de Ingeniería Genética y Biotecnología (CIGB), también de BCF, el cual constituye un gran complejo investigativo-productivo dotado de equipamiento de punta, capacidades de producción importante y al desarrollo de nuevos productos en todas sus fases, desde el clonaje y la expresión de proteínas con técnicas de recombinación de ADN hasta la producción en escalas industriales y comercialización de sus productos.

Tiene un papel integrador en la esfera de la biotecnología cubana, con alta capacidad científico-técnica. Entre sus principales líneas de trabajo se encuentran la obtención por vía recombinante de proteínas y hormonas, vacunas y medios de diagnóstico, la producción de anticuerpos monoclonales, el aprovechamiento de la biomasa y su transformación por vía quimicoenzimática y la micropropagación de células y cultivos de tejidos.

Como parte del esfuerzo por impulsar la biotecnología en Cuba, fue inaugurado en noviembre de 2021, el Complejo Industrial Biotecnológico CIGB-Mariel. Constituye la primera industria de alta tecnología asentada en la Zona Especial de Desarrollo Mariel (ZEDM). Este complejo se dedica a la investigación, desarrollo y producción de vacunas y medicamentos innovadores, incluyendo tratamientos para enfermedades como el cáncer, la diabetes, autoinmunes e infecciosas, cerebrovasculares y la COVID-19, entre otras.

La industria biotecnológica y farmacéutica cubana, también cuenta con el Centro Nacional de Biopreparados (BIOCEN), empresa de alta tecnología, especializada en la producción de medicamentos biológicos y vacunas. Se enfoca en el desarrollo de novedosos proyectos agrupados en varias líneas de productos y servicios que incluyen la nanotecnología, vacunas de segunda generación para las alergias, nutracéuticos para la enfermedad de Alzheimer, y medicamentos tradicionales con nuevas formulaciones e indicaciones. Es pionero de la certificación de su sistema de gestión de la calidad en la biotecnología cubana, por la *Lloyd's Register Quality Assurance* y la Oficina Nacional de Normalización de Cuba. Actualmente se encuentra certificado por la AENOR.

BioCen también se ha consolidado como una de las principales instituciones dentro de la industria biofarmacéutica cubana al constituir la salida productiva de importantes resultados del quehacer científico-técnico de otras instituciones del sector.

Mientras que el Centro de Inmunología Molecular (CIM) se dedica a la investigación y desarrollo de productos biotecnológicos para el diagnóstico y tratamiento del cáncer, así como en la producción de anticuerpos monoclonales. Las vacunas terapéuticas contra el cáncer y los productos para el tratamiento del VIH/SIDA constituyen sus productos más destacados.

Dispone de 21 productos en línea de investigación, de los cuales 6 son comerciales con registro sanitario en 100 países. Cuenta con una capacidad exportadora de experiencia en más de 30 países y empresas mixtas en diversas latitudes (China, Singapur, Tailandia, EEUU-Mariel).

Cuba se ha posicionado como un líder en la producción de vacunas, tanto contra COVID-19 como en otros campos, gracias a su infraestructura biotecnológica única y a un enfoque centrado en la salud pública. Su capacidad para desarrollar y administrar vacunas efectivas es un testimonio del compromiso del país con la ciencia y la salud de su población.

**Referencias**


* Blog LSE. Las cinco vacunas de Cuba contra el COVID-19: la historia completa sobre Soberana 01/02/Plus, Abdala y Mambisa. Disponible en https://lc.cx/DN9WTz
* Revista Cubana de Salud Pública. Ciencia en equipo e introducción acelerada de vacunas en Cuba: una mirada desde el Proyecto Neumococo. Disponible en https://lc.cx/CC5IkD
* Universidad Nacional de La Plata. Desarrollo de vacunas biotecnológicas en Cuba y Argentina. Disponible en https://lc.cx/wYh5bk
* CITMA. Finlay Vaccine Institute, Cuba's eighth High Technology Company. Disponible en https://lc.cx/6g_fqw
* Cubadebate. Instituto Finlay de Vacunas (IFV). Disponible en https://lc.cx/Js7a0Y
* Sitio web Biocubafarma. Centro de Ingeniería Genética y Biotecnología (CIGB). Disponible en https://lc.cx/VQKcXU
* Sitio web Instituto Finlay de Vacunas. Cartera de productos. Disponible en https://lc.cx/S7Y465
* Sitio web Centro de Ingeniería Genética y Biotecnología. Productos. Vacunas. Disponible en https://lc.cx/6mk8kc
* Sitio web Biocubafarma. Inauguran complejo biotecnológico CIGB-Mariel, el más moderno del país. Disponible en https://lc.cx/qTRQAB
* UNICEF Cuba. Vacunas para crecer saludables. Disponible en https://lc.cx/JJOh6c
* Sitio web BIOCEN. Disponible en https://www.biocen.cu/
* Granma. Cuba ya cuenta con Quimi-Vio, una vacuna antineumocócica propia. Disponible en https://lc.cx/1vgQyb
* Sitio web BioCubaFarma. Centro de Inmunología Molecular. Disponible en https://lc.cx/_c2lfu


# Noticias en la Web

## GSK Leads Global Forum in Bangkok to Address Respiratory Health Challenges

**Jan 6**. GSK hosted the third annual RespiVerse Meeting on December 13 and 14 in Bangkok, Thailand. The event brought together renowned international speakers and healthcare professionals from 17 countries to address pressing global challenges in respiratory diseases, focusing on innovative solutions and collaborative strategies to advance respiratory health worldwide.

Dr. Gur Levy, Respiratory Medical Expert at GSK, said, "We have been pioneering efforts for decades to develop new therapeutic alternatives that set the standard for next-generation treatments and redefine the future of respiratory medicines for hundreds of millions of people with respiratory diseases."

By collaborating with top-level specialist physicians and highly qualified experts from around the world, GSK has developed a world-class program to achieve excellence in clinical practices and optimise new respiratory treatment outcomes for millions of patients.

"We research and develop a portfolio of vaccines, targeted biological products, and inhaled medicines at the forefront of the respiratory sector, aiming to improve outcomes and enhance the lives of people suffering from all types of asthma, COPD, and RSV. GSK is leveraging the latest scientific and technological advances to address the underlying dysfunction of these diseases and prevent their progression," said Levy.

This year's RespiVerse Meeting featured prominent international speakers and participants from regions including Southeast Asia, Latin America, Central America, and others. It integrated science, technology, and talent to identify the main clinical challenges in the respiratory area with an aim to develop scientific content that enhances the knowledge and professional practices of pulmonologists in Southeast Asia, the Middle East, Africa, and Latin America. The expert panel focused on four respiratory pathologies: moderate asthma, severe asthma, chronic obstructive pulmonary disease (COPD), and respiratory syncytial virus (RSV).

"Prevention is the cornerstone of public health, and the need is urgent when addressing respiratory diseases like respiratory syncytial virus (RSV), which can be more prevalent and dangerous than the flu. At GSK, we are dedicated to advancing vaccine innovation to protect vulnerable populations, particularly older adults, especially those with underlying medical conditions such as asthma, COPD, diabetes, and heart disease, from the significant health risks posed by RSV. By prioritizing prevention, we aim to ease the burden of RSV and promote healthier communities worldwide, especially in the context of an aging global society," said Dr. Arnas Berzanskis, VP & Regional Medical Affairs Head – Vaccines at GSK.

As part of this event, a media session featured renowned experts in the field including: Dr. Le Khac Bao, Deputy Head of Lung Disease Department, Gia Dinh People's Hospital; Dr. Fariz Nurwidya, Chairman and Associate Professor Division of Immunology and Interstitial Lung Disease, Department of Pulmonology and Respiratory Medicine Universitas Indonesia and Pulmonologist at Persahabatan Hospital dan Bunda General Hospital Jakarta; and Dr. Pailin Ratanawatkul, Assistant Professor in Pulmonary and Critical Care Medicine and Associate Director of the Center of Excellence at Srinagarind Hospital, Khon Kaen University. They discussed the causes and consequences of respiratory diseases affecting populations worldwide and challenges to be overcome.

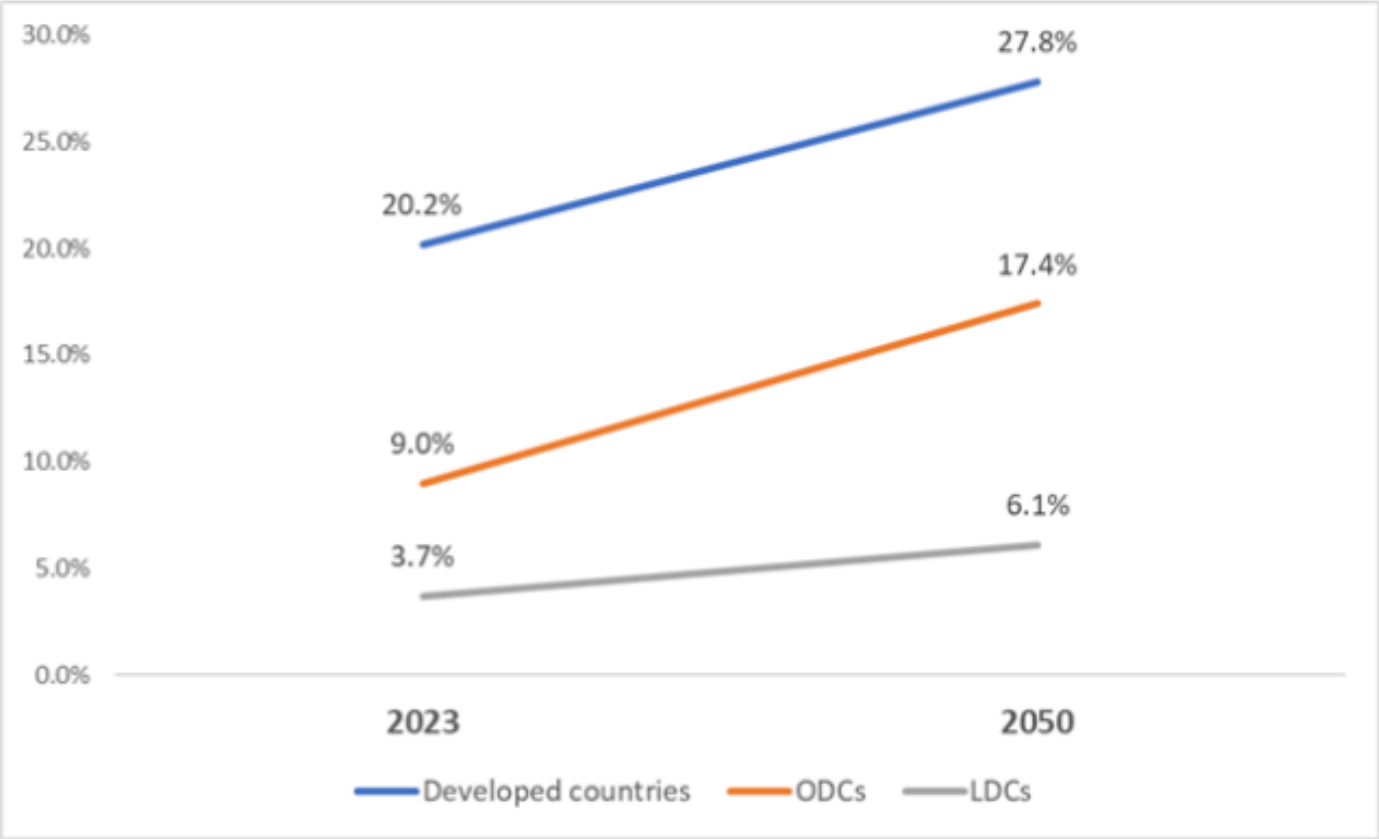
**Fuente**: Antara News. Disponible en https://lc.cx/5fG_8-

# How lifelong vaccination can tackle the challenges of an ageing world

**Jan 7**. Alongside climate change and rapid technological acceleration, demographic change is often cited as one of the biggest challenges facing the globe today.

Ensuring there is equitable access to innovative health solutions within this context of a rapidly ageing world has therefore never been more urgent. Whilst childhood vaccination programs have provided a strong foundation for global health for decades, it is critical that our focus expands to include a comprehensive, life-course immunization strategy. With the population of people aged 60+ projected to rise by over a third to 1.4 billion by 2030, adult vaccination will be a critical tool to reduce the strain on healthcare systems, protect vulnerable populations, and create more resilient societies. A recent Financial Times article highlighted that investment in healthcare for this demographic can lead to a "silver dividend", with a healthier older population increasing GDP by up to 1.5 percent in some countries.

**Proportion of persons aged 65 years and over by development group, 2023 & 2050**




***Abbreviations: ODCs, other developing countries; LDCs, least developed countries. Source: United Nations, 2023***

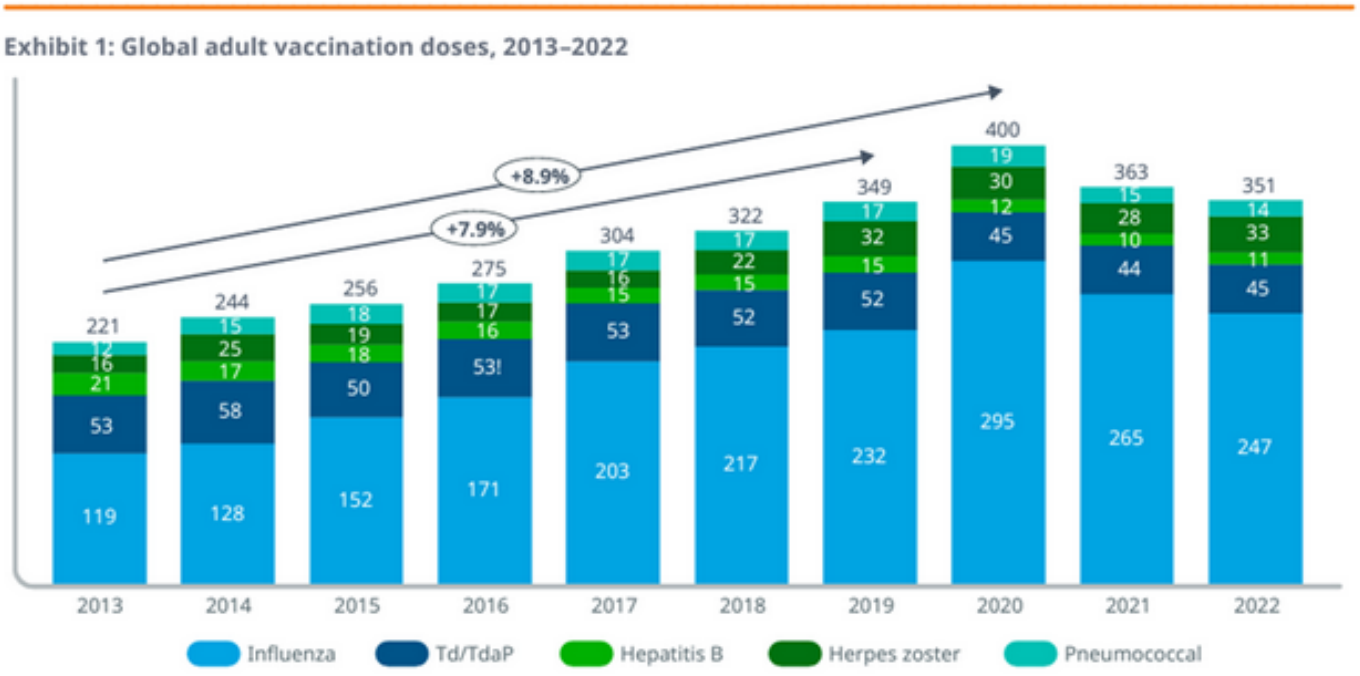
## The shift to lifelong vaccination: a vision for a healthier future

Vaccination is not just for children; it is a fundamental component of preventive health care across all life stages. Adults, particularly older adults, face significant risks from diseases like influenza, shingles, pneumococcal disease and HPV. Yet, a relatively small number of countries recommend vaccines for individuals of all ages. For example, the WHO recommends that all older adults receive a pneumococcal vaccine, but only 31 countries currently include any adult pneumococcal vaccinations in their schedules, leaving many adults unprotected.

While there was steady progress in adult vaccination up until 2019, overall levels of vaccine coverage for

adults have remained low. According to a report from GSK and IQVIA, in 2021 and 2022, more than 100 million potential doses were missed by adults globally compared to pre-pandemic projections. These figures underscore the urgent need for bold, collaborative action to reimagine how vaccines are delivered and prioritized across the lifespan.

**Global adult vaccination doses, 2013-2022**




Source: IQVIA MIDAS®, June 2023; CDC (Influenza Vaccination Coverage, Children 6 months through 17 years, United States); UK Government (Vaccination coverage for children and mothers).
Notes: Adult vaccinations includes influenza; diphtheria and tetanus (Td); diphtheria, tetanus and pertussis (TDaP); hepatitis B; herpes zoster and pneumococcal. Diphtheria, tetanus and pertussis vaccinations in combination with polio or hepatitis B are not included. A 75:25% adult: pediatric split for influenza and 1/3:2/3 split for pneumococcal has been applied in accordance with available adult and pediatric coverage (UK and US). Only hepatitis B doses of 1mL or larger were assumed for adult use.
Includes retail and non-retail from 76 countries covered by IQVIA MIDAS panels. These may not cover all vaccination delivery channels in each country.

A landmark study published by The Lancet revealed that global pediatric immunization efforts have saved an estimated 154 million lives — or the equivalent of six lives every minute of every year — over the past 50 years. Adopting a lifelong vaccination approach can enable the global population to enjoy the benefits of good health throughout their lives and mitigate potential health threats.

**Adult vaccines: expanding the pipeline, streamlining delivery**

The vaccine development pipeline is robust, with over 100 candidate vaccines in progress, 80% of which target adults. This shift is crucial in addressing diseases that predominantly affect adults, such as respiratory infectious diseases, hep B, and meningococcal diseases. These innovations promise to enhance public health outcomes significantly. However, continual innovation in vaccine formulation as well as continuous improvement in delivery is key to maximizing benefits and minimizing risks. Reformulating vaccines to include more strains or create combination vaccines can improve convenience and uptake, particularly among adults – as well as enhancing efficacy to reflect seasonality and aligning with the demands of a fast-paced society.

As one example – The United Kingdom has achieved relatively high flu vaccination rates among older adults, attributed in part to effective data management and the expanded role of pharmacies in vaccine administration. The NHS Digital Vaccinations Data Dashboard provides healthcare providers with real-time data on vaccination uptake, enabling targeted interventions to increase coverage. By adopting similar strategies, other countries can enhance their vaccination efforts and public health outcomes.

**Harnessing digital tools: from reactive care to proactive prevention**

Current health care systems are often reactive, focusing on treatment rather than prevention. Shifting towards a preventive model could alleviate pressure on these systems. Earlier this year, the Office of Health Economics published a report on the socioeconomic value of adult immunization, weighing the benefits of vaccines for individuals and societies against the costs of delivering such programs. The analysis found that adult immunization programs can return up to 19 times their initial investment through benefits to individuals, health care systems, and wider society.

Digital technology can play a significant role in helping to boost vaccine uptake – 21 European countries have developed or are developing systems to record vaccination information digitally, according to a survey by the European Center for Disease Prevention and Control. Five of the systems include automated reminders — the ability to nudge/remind adults of their next vaccination.

**"Adult immunization programs can return up to 19 times their initial investment through benefits to individuals, health care systems, and wider society ."**

As health care costs rise and chronic diseases such as cancer, diabetes and cardiovascular diseases, become more prevalent among older adults, vaccines offer a preventive solution that can reduce the burden on health care systems. This preventive approach not only improves individual health outcomes but also supports economic stability by decreasing health care expenses.

To unlock the full potential of vaccines, a multi-stakeholder approach is essential. Governments, health care providers, and the vaccine industry must collaborate to enhance vaccine awareness, accessibility, and uptake. By prioritizing vaccination across all life stages, we can build healthier, more resilient societies and economies.

**Fuente**: IFPMA. Disponible en https://lc.cx/PCZjA5

## RSV vaccines from Pfizer, GSK take another hit with new FDA warning mandate

**Jan 8**. The FDA will require GSK and Pfizer to include on the label of their respiratory syncytial virus (RSV) vaccines a warning about the risk of developing Guillain-Barré syndrome (GBS), a rare neurological condition that can cause paralysis.

The ruling will affect GSK's Arexvy and Pfizer's Abrysvo, both of which were approved by the agency in May of 2023 for adults 60 years or older and realized booming sales in their first year on the market.

Seven months ago, however, the sales potential for both shots declined significantly when the Centers for Disease Control and Prevention (CDC) recommended that they only be used by adults age 75 and older and those 60 and older who have a high risk of severe disease due to underlying medical conditions.


*The FDA has determined that vaccines for respiratory syncytial virus (RSV) from Pfizer and GSK, which are approved for seniors, will have to include a warning about the rare neurological condition Guillain-Barre syndrome. (Stock photo/Getty Images)*

In narrowing the population with its revised recommendation, the CDC cited the potential link between the vaccines and GBS.

On Tuesday, the FDA explained that its new guidelines come after the agency conducted a postmarketing observational study and evaluated the results of clinical trials and reports to its Vaccine Adverse Event Reporting System (VAERS).

Using Medicare claims data, the FDA determined that there is an increased risk of developing GBS in a 42-day window after RSV vaccination. For adults age 65 and older, there are an estimated nine cases of GBS per million doses of Pfizer's Abrysvo and an estimated seven cases of GBS per million doses of GSK's Arexvy, the FDA said.

"FDA has determined that the overall body of evidence suggests increased risks of GBS with Abrysvo and Arexvy, but that available evidence is insufficient to establish a causal relationship," the agency said in a safety communication.

While issuing its RSV warning mandate on Tuesday, the FDA added that the benefits of vaccination with Abrysvo and Arexvy "continue to outweigh their risks." During an FDA advisory panel meeting in October, the agency pointed out that each million of RSV vaccine doses administered could prevent nearly 10,000 hospitalizations in adults aged 60 and older.

"While the results of this observational study suggest an increased risk of GBS with Arexvy, available evidence is insufficient to establish a causal relationship," a GSK spokesperson said. "Arexvy has been administered to over 9 million people in the U.S. and has an overall acceptable safety profile."

"With 64 million people impacted by RSV globally and nearly half a million adults hospitalized in high income-countries every year, RSV vaccines respond to a significant unmet medical need," GSK's spokesperson added on Wednesday.

A Pfizer spokesperson reminded in an email that flu vaccines also have been associated with GBS.

"If there is an increased risk of GBS following flu vaccination, it is small, on the order of one to two additional GBS cases per million doses of flu vaccine administered," according to the CDC.

Additionally, in 2021, GBS cases were tied to the use of Johnson & Johnson's COVID-19 vaccine.

In 2023, GSK reported that Arexvy generated (PDF) sales of 1.238 million pounds sterling ($1.5 billion). In October, however, the company said that third-quarter sales of the shot had declined by 74% year over year to 188 million pounds sterling ($244 million).

In October, Pfizer reported a 5% year-over-year downturn in its third-quarter sales of Abrysvo. In 2023, the shot racked up (PDF) $890 million.

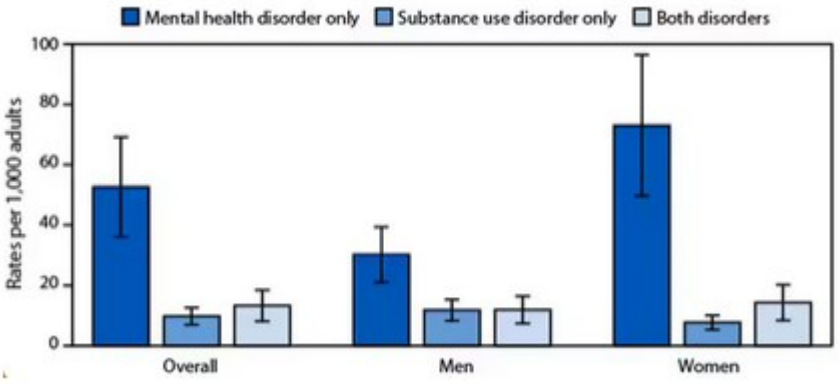
Earlier this week—in a letter to shareholders—Moderna CEO Stéphane Bancel acknowledged a "contraction" of the RSV market and the resulting decline in the prospects of the company's mRESVIA shot, which was approved in May of last year and generated just $10 million in sales in the third quarter. Moderna's vaccine has not been tied to GBS.

Six months ago, after the CDC panel narrowed its recommendations on who should receive RSV shots, London-based healthcare analytics company Airfinity sliced its 2030 RSV market value projection for seniors in the US from $4.7 billion to $1.7 billion.

**Fuente**: FIERCE PHARMA. Disponible en https://lc.cx/-9VxD8

# ACIP Expands Pneumococcal Vaccine Guidelines for Adults Aged 50 and Older

**Jan 8**. A recent update from the Advisory Committee on Immunization Practices (ACIP), published in the latest MMWR and Morbidity Report, confirms the ACIP parity recommendation for either PCV21 or PCV20 (Prevnar20) for adults aged 50 and older. Importantly, the risk-based recommendation for adults aged 19–49 remains unchanged.




***Serotypes included in pneumococcal vaccines currently recommended for adults — United States, 2024***
***Image credits: CDC***

**Why the Change?**

Expanding these recommendations seeks to improve pneumococcal disease prevention for adults aged 50–64, a group at moderate risk for disease, higher than adults aged 19–49 but lower than those aged 65 and older. The new guidelines also aim to reduce racial health disparities, particularly in Black and American Indian/Alaska Native (AI/AN) populations, who experience disproportionately higher rates of pneumococcal disease.

The updated recommendations now advise PCV vaccination for all adults aged 50 and older who have not yet received the vaccine or whose vaccination history is unknown. For individuals who started their vaccination series with PCV13, PPSV23 (the 23-valent polysaccharide vaccine) is no longer necessary to complete the series. Instead, these individuals should receive either PCV20 or PCV21 to complete their vaccination.

The key change is the parity recommendation for PCV21 or PCV20 for adults aged 50 and older. Both vaccines are recommended as viable options, but PCV21 is preferred due to its broader serotype coverage and cost-effectiveness. In areas where serotype 4 is more prevalent, PCV20 may still be the preferred choice.

Although, the risk-based pneumococcal vaccination guidelines for adults aged 19–49 remain unchanged. This group will continue to follow vaccination recommendations based on individual health risks, particularly for those with chronic conditions that put them at higher risk for pneumococcal disease.

Clinical trials and post-licensure surveillance have confirmed that PCV vaccines, including PCV15, PCV20, and PCV21, are safe and well-tolerated, with no major adverse events reported. Following PCV20 vaccination, a low signal for Guillain-Barré Syndrome (GBS) was observed, particularly in Medicare beneficiaries aged 65 and older, but the incidence remains low.

Economic analyses show that PCV21 is the most cost-effective option for adults aged 50–64, especially in areas with diverse circulating pneumococcal strains. PCV21 provides broader coverage compared to PCV20, though both vaccines are viable options.

The January 2025 update reflects finalized guidance from the October 2024 ACIP meeting and addresses concerns over cost-effectiveness and sereotype coverage. The age-based guidelines are expected to improve vaccination coverage and reduce pneumococcal disease in adults aged 50–64. Simplifying implementation compared to previous risk-based recommendations will make it easier for healthcare providers to offer vaccines in routine clinical settings.

**Fuente**: Contagion Live. Disponible en https://lc.cx/Wmot6U

## China administers its first dose of HPV vaccine for men

**Jan 10**. China administered its first dose of a human papillomavirus (HPV) vaccine for men in its central Hunan Province on Thursday afternoon, according to the provincial center for disease control and prevention.

The recipient in Changsha, the capital of Hunan Province, became the first man on the Chinese mainland to receive the HPV vaccine, after U.S. pharmaceutical giant Merck announced its quadrivalent HPV vaccine Gardasil had been approved for additional indications by the National Medical Products Administration.

After being approved for use in women on the Chinese mainland, the HPV vaccine is now available for males aged 9 to 26 to prevent diseases caused by HPV types 16 and 18, such as anal cancer, as well as genital warts caused by HPV types 6 and 11.

It is the first and only HPV vaccine authorized for use in men in China, according to the company.

“With this expanded approval, we look forward to helping protect this new population of Chinese males from certain HPV-related cancers and diseases,” said Joseph Romanelli, president of Human Health International at Merck, expressing optimism about tapping into this new market.

HPV is regarded as one of the world’s major public health issues, as it not only causes cervical cancer in women but can also lead to various malignant tumors in men, said professor Chen Xi, who works with the provincial center for disease control and prevention.

According to the National Health Commission, vaccinating men is also important for HPV prevention. The target population for the HPV vaccine is primarily women in China. While vaccination of women provides some cross-protection for men, relying solely on this is insufficient.

China has exerted more efforts to expand its opening-up in the medical field, drawing more global pharmaceutical giants like Merck to tap into the promising market. In September 2024, China announced that it would add exemptions to import tariffs and value-added tax for eligible drugs and medical devices in a special medical pilot zone in Hainan Province before 2025.

**Fuente**: Macau Business. Disponible en https://lc.cx/lHVbaH

## Cienfuegos terminará primera parte del ensayo clínico de vacuna contra el Neumococo 11-valente

**10 ene**. Investigadores de Cienfuegos terminarán durante el presente mes la primera parte del ensayo clínico de una vacuna contra el Neumococo 11-valente, que cerró la inclusión de 102 casos de niños lactantes en el municipio cabecera, casi todos ya con la segunda dosis y en extracciones de sangre para la seguridad inmunológica.

La Doctora María Felicia Casanova González, investigadora responsable de los ensayos clínicos para la vacuna promovidos por el Instituto Finlay Vacunas, de La Habana informó que la institución está apostando por una vacuna contra los 11 serotipos más prevalentes en Cuba, las Américas y los que el mundo dispone, que no puedan faltar.

"Debemos terminar en el presente año 2025 con el esquema total de este ensayo, afirma, y se ha demostrado por estudios anteriores, en lactantes también en nuestro país, que el esquema mejor para proteger por vida al bebé es una dosis a los dos meses, otra a los 4, y a los 11 meses de nacido".

En el mes de junio empezarán la tercera dosis y una extracción de sangre.

"Cienfuegos, una vez más tendrá niños protegidos contra una 11-valente, apunta, y de esta forma nuestro país contará muy pronto, con una 11-valente, asegurada en el niño lactante, que es la edad diana de enfermar gravemente por este germen. Debemos culminar en septiembre u octubre del 2025 el Ensayo Clínico".

Estos ensayos clínicos aportan a la salud del pueblo y se desarrollan también en la oriental provincia de Santiago de Cuba, gracias a la confianza del Instituto Finlay de Vacunas en los equipos de investigadores responsables y abnegados.

**Fuente**: Radio Rebelde. Disponible en https://lc.cx/27BqYm

## Merck's HPV vaccine gets China approval for men amid declining sales


**Jan 11**. Merck's human papillomavirus vaccine has been approved for men in China, it said on Wednesday, providing the U.S. drugmaker a much-needed boost in a key market where demand has been falling among women.

The shot, Gardasil, is already approved for women, but the vaccine's distributor in China has reduced stock due to weak demand. Merck has said weak sales in China were likely to continue in 2025.

This is the first HPV vaccine for men to be approved by China's National Medical Products Administration and can be used by children and men aged between 9 and 26 years to prevent certain cancers and HPV-related diseases, the company said.

HPV is a common cause for cervical cancer in women, while it increases the risk of genital warts and several types of cancers among men.

After blockbuster cancer treatment Keytruda, Gardasil has been one of Merck's top growth drivers outside the U.S.

Much of its international growth came from China after it was approved for women in 2017, but its sales took a hit in the recent quarters with revenue from the vaccine dropping 11% to $2.31 billion in the quarter ended Sept. 30.

Merck has said its demand was also impacted by Beijing's anti-corruption campaign that caused huge business disruptions and led to multinational drugmakers losing engagement with hospitals.

The company's overall sales in China slumped 40% to $996 million in the third quarter from $1.67 billion a year ago.

**Fuente**: MSN. Disponible en https://lc.cx/yoQdKk

## Cuba y Rusia firman convenio de cooperación para la investigación científica

**12 ene**. El Instituto Engelhardt de Biología Molecular (EIMB) de la Academia de Ciencias de Rusia (RAS) y el Centro de Inmunoensayo del Grupo de las industrias biotecnológica y farmacéutica de Cuba, Biocubafarma, firmaron este domingo un convenio de cooperación para la investigación científica.

Este acuerdo está enfocado a la obtención de productos que son prioridades para la salud pública de ambos países. También permitirá favorecer los procesos de desarrollo institucional del Centro de Inmunoensayo.

*Foto: Perfil de Facebook del Centro de Inmunoensayo.*

**Fuente**: Cubadebate. Disponible en https://lc.cx/gbWlt5

## Campañas de vacunación contra COVID-19 y VRS en Uruguay

**13 ene**. El Ministerio de Salud Pública (MSP) de Uruguay inicia desde hoy una nueva campaña de vacunación contra el SARS-CoV-2, virus causante de la COVID-19.

La inmunización se realizará con el el fármaco Comirnaty JN.1, vacuna desarrollada por la farmacéutica Pfizer y adaptada a la subvariante Ómicron JN.1 del virus.

En primera instancia se contemplará a los grupos de riesgo, entre adultos mayores, personas con comorbilidades y menores con inmunosupresión moderada a severa

También embarazadas, personas con síndrome de Down, personal de salud con potencial de riesgo y cuidadores.

El MSP recomienda que la administración de la dosis de refuerzo se realice al menos cuatro meses después de la última dosis recibida o haber cursado la infección.

El MSP también desplegará desde este lunes una campaña de vacunación para prevenir el contagio del VRS (virus respiratorio sinicital) para embarazadas mayores de 18 años que estén entre las 32 y las 36 semanas de gestación.

Se trata de inmunizar a los bebés lactantes menores de seis meses que durante el otoño y el invierno austral de este 2025 se enfrentarán a su primera temporada, en las que son más propicios a padecer infecciones respiratorias.

**Fuente**: Prensa Latina. Disponible en https://lc.cx/voBMsw

## FDA Requires GBS Warning for RSV Vaccines


**Jan 13**. The FDA required and approved safety labeling changes to the prescribing information for respiratory syncytial virus (RSV) vaccines to include a warning about the risk for Guillain-Barré syndrome (GBS) after vaccination.

The labeling will apply to both RSVPreF (Abrysvo, Pfizer) and RSVPreF3+AS01 (Arexvy, GSK). The U.S. prescribing information (USPI) for each vaccine has been revised to include the same language in the Warnings and Precautions section—that observational studies suggest an increased risk for GBS during the 42 days following vaccination with either product.

"GSK's top priority is patient safety. We are committed to monitoring and ensuring the safety of all our products, including Arexvy," a GKS spokesperson said, adding that the prescribing information has been updated.

"This [label change] was based upon safety information from the initial results of an ongoing retrospective analysis in individuals aged 65 years or older performed by the FDA over one season," the person said.

GBS is a rare disorder in which the body's immune system damages nerve cells, causing muscle weakness and sometimes paralysis. The risk after RSV vaccination is still rare, however. According to postmarketing analysis, GBS incidence following vaccination with RSVPreF3+AS01 and RSVPreF was less than 10 cases per 1 million vaccinations. However, that number was still higher than expected background rates, according to a presentation by Patricia Lloyd, PhD, ScM, a health statistician at the Office of Biostatistics and Pharmacovigilance at the FDA, who spoke in October to the Advisory Committee on Immunization Practices.

"During the October 2024 ACIP meeting, the FDA presented an update to their self-controlled case series study in adults 65 and older. Although not statistically significant, the data suggest an increased risk of GBS within 42 days following vaccination with Abrysvo. Based on this data, the FDA has requested an update to the Abrysvo USPI to include a warning about the risk of GBS following vaccine administration," a Pfizer spokesperson told Infectious Disease Special Edition in an email.

Additional data presented at the October ACIP Meeting found that 80% of the recommended population remains unvaccinated because they do not recognize their risk for RSV. Between 60,000 and 160,000 hospitalizations among those 60 and older in the United States are due to RSV, according to the American Lung Association. It is a leading cause of respiratory disease in older adults.

"GBS risk following RSV vaccination is rare, with fewer than 10 cases per 1 million vaccinations," the GSK spokesperson added. "While the results of this observational study suggest an increased risk for GBS with Arexvy, available evidence is insufficient to establish a causal relationship.

"We remain confident in the benefit-risk profile of Arexvy for the prevention of RSV-LRTD," the person added.

Abrysvo was initially approved on May 31, 2023, for the prevention of lower respiratory tract disease (LRTD) caused by RSV in people 60 years of age and older. Subsequently, the FDA expanded the indication for the vaccine to people 18 through 59 years of age who are at increased risk for LRTD caused by RSV and during pregnancy (32 through 36 weeks gestational age) for the prevention of LRTD and severe LRTD caused by RSV in infants from birth through 6 months of age.

Arexvy was initially approved on May 3, 2023, for the prevention of LRTD caused by RSV in people 60 years of age and older. Subsequently, FDA expanded the indication for people 50 through 59 who are at increased risk for LRTD caused by RSV.

The FDA requests that suspected adverse events be reported to the Vaccine Adverse Event Reporting System, which is co-managed by the FDA and the CDC.

**Fuente**: IDSE Infectious Disease Special Edition. Disponible en https://lc.cx/i19HJd

## Las empresas de Biocubafarma ejecutaron más de 390 proyectos en 2024

**14 ene**. El avance de la ciencia cubana no se detiene y realiza aportes significativos en beneficio de la sociedad. Muestra de ello es la ejecución, por parte de las instituciones de Biocubafarma, en 2024, de 396 proyectos, de ellos más de cien en cooperación con diferentes entidades; mientras se mantuvo como prioridad la investigación, el desarrollo y la innovación aplicadas a la obtención de nuevos servicios y tecnologías para la salud humana y para la rama agropecuaria.

Así lo expresó la doctora en Ciencias Mayda Mauri Pérez, presidenta del Grupo Empresarial Biocubafarma, al intervenir en la actividad conmemorativa de esa institución por el Día de la Ciencia Cubana, efectuada ayer, en el Palacio de Convenciones.

Destacó que, pese al escenario adverso prevaleciente en 2024, se introdujeron 26 nuevos productos en el mercado nacional, entre ellos la vacuna contra el neumococo QuimiVio-7, desarrollada por el Instituto Finlay de Vacunas; el ventilador pulmonar Combiovent, para cuidados intensivos de pacientes adultos, diseñado y producido por la Empresa Combiomed; y el ensayo Sumasignal FQ, sistema diagnóstico de Fibrosis quística, del Centro de InmunoEnsayo, por solo mencionar algunos.

También descuella, dijo Mauri Pérez, el registro sanitario en Cuba de 22 nuevos productos, entre los cuales aparecen nuevos fármacos y formulaciones de vacunas. También lograron emprenderse varias investigaciones que aportan evidencias adicionales de seguridad y eficacia de productos novedosos, como Jusvinza, para el tratamiento de la de la artritis reumatoide, Neuralcim, en pacientes con enfermedad de Alzheimer, y cigb-845, en ictus isquémico.

En la rama agropecuaria, recalcó los resultados en la demostración de la eficacia contra el virus de la Peste Porcina Clásica, de una vacuna de subunidad administrada por vía oral. Destaca, de igual modo, el otorgamiento de 52 patentes del Grupo Empresarial en el extranjero, y ocho en el país.

Otro aspecto que ilustra el dinamismo de la gestión de Biocubafarma en 2024 consistió en la creación de nuevas empresas en China, Rusia y Alemania, canales innovadores para acelerar el desarrollo e introducción de productos biofarmacéuticos novedosos.

**Fuente**: Granma. Disponible en https://lc.cx/PCb8UU

# Instituto Finlay de Vacunas actualiza sobre el ensayo clínico Neumo11 en población adulta

**15 ene**. Las infecciones causadas por neumococo, representan un importante problema de salud pública en todo el mundo, que afecta con mayor frecuencia y gravedad a niños menores de 2 años y adultos mayores de 50. Estas infecciones tienen un amplio espectro de enfermedades asociadas, que pueden variar desde otitis o neumonía hasta una enfermedad neumocócica invasiva.

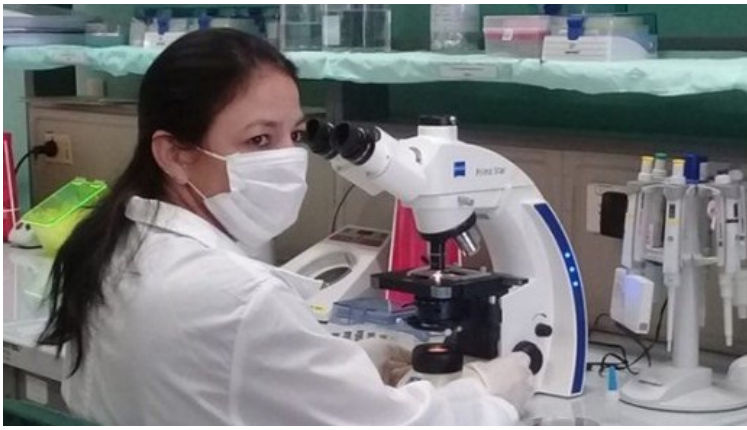


*Foto: Cortesía del Instituto Finlay de Vacunas.*

La prevención de la enfermedad neumocócica se basa fundamentalmente en la utilización de vacunas.

La investigación y desarrollo de vacunas contra neumococos es uno de los proyectos priorizados del Instituto Finlay de Vacunas.

Recientemente, se registró la vacuna antineumocócica conjugada de 7 valencias Quimi-Vio®, para los niños de uno a 5 años de edad. Desde septiembre de 2024 hasta la fecha se han vacunado más de 95 mil niños de dos años de edad en todo el país, donde la vacuna ha demostrado muy buen perfil de seguridad.

Ante la situación epidemiológica causada por la variedad de serotipos que provocan la enfermedad neumocócica invasiva, desde el año 2023 se ha estado desarrollando en el mundo una nueva generación de vacunas. El Instituto Finlay de Vacunas se ha propuesto desarrollar un candidato vacunal antineumocócico conjugado de 11 valencias.

Este candidato está siendo evaluado en un ensayo clínico en lactantes del primer semestre de la vida. Hasta el momento, se han vacunado 157 niños en Cienfuegos y Santiago de Cuba.

De esta manera, quedarían protegidos los lactantes y niños menores de 5 años con nuestras vacunas. Ahora, resulta necesario proteger a los adultos mayores de 50 años, quienes, por la inmunosenescencia, entre otros factores de riesgo, presentan un aumento en la carga de esta enfermedad.

Precisamente, a este grupo estamos dirigiendo la mirada. Por ello, aprobado por el Ministerio de Salud Pública (MINSAP) y autorizado por el Centro para el Control Estatal de Medicamentos, Equipos y Dispositivos Médicos (CECMED), se realiza un ensayo clínico fase II-III en adultos de 50 a 74 años de edad. Su objetivo es evaluar la seguridad, inmunogenicidad y eficacia del candidato vacunal conjugado antineumocócico de 11 valencias.

Este ensayo clínico se desarrollará en 4 sitios clínicos e inicia este 15 de enero la etapa II en el Instituto de Hematología e Inmunología. La próxima semana comenzará en 3 áreas de salud del municipio Plaza de la Revolución: 19 de Abril, Policlínico Abelardo Ramírez y Policlínico Cosme Ordoñez.

Con los resultados del estudio, la Institución pretende solicitar el autorizo de registro médico sanitario al CECMED y poder disponer de una vacuna para nuestros adultos y de esta manera, contribuir a un envejecimiento saludable.

**Fuente**: Cubadebate. Disponible en https://lc.cx/wKsxUK

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:

**Síganos en redes sociales**

@vaccimonitor

@finlayediciones

# Artículos científicos publicados en Medline

*Filters activated: (vaccine[Title/Abstract]) AND (("2025/01/06"[Date - Publication] : "2025/01/13"[Date - Publication])) 316 records.*

Understanding Kenyan policymakers' perspectives about the introduction of new maternal vaccines.

Limaye RJ, Fesshaye B, Singh P, Jalang'o R, Njogu RN, Miller E, Schue J, Sauer M, Lee C, Karron RA.Health Policy Plan. 2025 Jan 11;40(1):23-30. doi: 10.1093/heapol/czae059.PMID: 38955674

Cardiovascular events following coronavirus disease 2019 vaccination in adults: a nationwide Swedish study.

Xu Y, Li H, Santosa A, Wettermark B, Fall T, Björk J, Börjesson M, Gisslén M, Nyberg F.Eur Heart J. 2025 Jan 7;46(2):147-157. doi: 10.1093/eurheartj/ehae639.PMID: 39344920

Influenza vaccine outcomes: a meta-analysis revealing morbidity benefits amid low infection prevention.

Presa J, Arranz-Herrero J, Alvarez-Losa L, Rius-Rocabert S, Pozuelo MJ, Lalueza A, Ochando J, Eiros JM, Sanz-Muñoz I, Nistal-Villan E.Eur Respir Rev. 2025 Jan 8;34(175):240144. doi: 10.1183/16000617.0144-2024. Print 2025 Jan.PMID: 39778922

The evidence base for rotavirus vaccination in India: Current status, future needs.

Bhat N, Vodicka E, Clifford A, Ananth KB, Bavdekar A, Roy AD, Parashar U, Tate J, Haldar P, Kang G.Vaccine. 2025 Jan 12;44:126551. doi: 10.1016/j.vaccine.2024.126551. Epub 2024 Nov 29.PMID: 39615343

Determinants of COVID-19 and non-COVID-19 vaccine confidence in low- and middle-income countries: A systematic review of qualitative evidence and thematic synthesis.

Blukacz A, Obach A, Vásquez P, Campaña C, Huerta C, Bernal Y, Cabieses B.Vaccine. 2025 Jan 12;44:126546. doi: 10.1016/j.vaccine.2024.126546. Epub 2024 Nov 27.PMID: 39608248

Exploring Chatbot contributions to enhancing vaccine literacy and uptake: A scoping review of the literature.

Cosma C, Radi A, Cattano R, Zanobini P, Bonaccorsi G, Lorini C, Del Riccio M.Vaccine. 2025 Jan 12;44:126559. doi: 10.1016/j.vaccine.2024.126559. Epub 2024 Nov 30.PMID: 39615346

Effectiveness of 13-valent pneumococcal conjugate vaccine against vaccine-type invasive pneumococcal disease in older adults.

Hsiao A, Lewis N, Hansen J, Timbol J, Suaya JA, Alexander-Parrish R, Grant LR, Gessner BD, Klein NP.Vaccine. 2025 Jan 12;44:126543. doi: 10.1016/j.vaccine.2024.126543. Epub 2024 Dec 4.PMID: 39637487

Cancer vaccines: platforms and current progress.

Lei W, Zhou K, Lei Y, Li Q, Zhu H.Mol Biomed. 2025 Jan 10;6(1):3. doi: 10.1186/s43556-024-00241-8.PMID: 39789208

Addressing vaccine misinformation: The critical need for complete product information disclosure.

Pitts PJ, Poland GA.Vaccine. 2025 Jan 12;44:126558. doi: 10.1016/j.vaccine.2024.126558. Epub 2024 Nov 29.PMID: 39612806

Establishment of enterically transmitted hepatitis virus animal models using lipid nanoparticle-based full-length viral genome RNA delivery system.

Liu T, Li J, Yin X, Lu F, Zhao H, Wang L, Qin CF.Gut. 2025 Jan 11:gutjnl-2024-332784. doi: 10.1136/gutjnl-2024-332784. Online ahead of print.PMID: 39353724

Safety, reactogenicity, and immunogenicity of a novel 24-valent pneumococcal vaccine candidate in healthy, pneumococcal vaccine-naive Japanese adults: A phase 1 randomized dose-escalation trial.

Borys D, Smulders R, Haranaka M, Nakano T, Chichili GR, Ebara M, Hashimoto A, Iwahana M, Oizumi Y, Nanra J, Malley R, Sebastian S.Vaccine. 2025 Jan 12;44:126545. doi: 10.1016/j.vaccine.2024.126545. Epub 2024 Nov 29.PMID: 39612802

Mucosal SARS-CoV-2 S1 adenovirus-based vaccine elicits robust systemic and mucosal immunity and protects against disease in animals.

Aljehani ND, Tamming L, Khan MY, Abdulal RH, Alfaleh MA, Ghazwani A, Helal A, Alsulaiman RM, Sanki MA, Alluhaybi K, Sukareh FA, Alharbi RH, Alyami FH, ElAssouli M-Z, Shebbo S, Abdulaal WH, Algaissi A, Mahmoud AB, Basabrain M, Duque D, Bavananthasivam J, Chen W, Wang L, Sauve S, Abujamel TS, Altorki T, Alhabbab R, Tran A, Li X, Hashem AM.mBio. 2025 Jan 8;16(1):e0217024. doi: 10.1128/mbio.02170-24. Epub 2024 Dec 4.PMID: 39629990

Variability in Vaccine Response and Trajectory in Early Childhood and Association with Demographic Variables, Antibiotic Exposure and Infection Proneness.

Pichichero ME, Gonzalez E, Cox A, Thayer TC, Bajorski P.J Infect Dis. 2025 Jan 11:jiaf023. doi: 10.1093/infdis/jiaf023. Online ahead of print.PMID: 39797911

Knowledge about COVID-19 vaccines among Aboriginal and Torres Strait Islander people, and attitudes to and behaviours regarding COVID-19 and influenza vaccination: a survey.

Spierings S, Oguoma VM, Shakeshaft A, Walker J, Toombs M, Ward JS.Med J Aust. 2025 Jan 13;222(1):30-37. doi: 10.5694/mja2.52551. Epub 2024 Dec 10.PMID: 39655627

Dengue Virus Infection: Immune Response and Therapeutic Targets.

Tin Ern N, Komarasamy TV, Adnan NAA, Balasubramaniam VRMT.Am J Trop Med Hyg. 2024 Nov 12;112(1):37-44. doi: 10.4269/ajtmh.23-0545. Print 2025 Jan 8.PMID: 39531732

Quantifying the impact of pre-vaccination titre and vaccination history on influenza vaccine immunogenicity.

Hodgson D, Sánchez-Ovando S, Carolan L, Liu Y, Hadiprodjo AJ, Fox A, Sullivan SG, Kucharski AJ.Vaccine. 2025 Jan 12;44:126579. doi: 10.1016/j.vaccine.2024.126579. Epub 2024 Dec 5.PMID: 39638659

COVID-19 vaccine anxieties: exploring social and political drivers of vaccine attitudes in Kono District, Sierra Leone.

Malcolm LJ, McLean KE.J Biosoc Sci. 2025 Jan 8:1-16. doi: 10.1017/S0021932024000373. Online ahead of print.PMID: 39773779

The impact of vaccine access difficulties on HPV vaccine intention and uptake among female university students in China.

Wang W.Int J Equity Health. 2025 Jan 8;24(1):4. doi: 10.1186/s12939-024-02370-6.PMID: 39780149

Cost-effectiveness of 15-valent or 20-valent pneumococcal conjugate vaccine for U.S. adults aged 65 years and older and adults 19 years and older with underlying conditions.

Rosenthal M, Stoecker C, Leidner AJ, Cho BH, Pilishvili T, Kobayashi M.Vaccine. 2025 Jan 12;44:126567. doi: 10.1016/j.vaccine.2024.126567. Epub 2024 Dec 6.PMID: 39645434

Evaluating the effect of the antiPCSK9 vaccine on systemic inflammation and oxidative stress in CFA-challenged albino mice.

Momtazi-Borojeni AA, Banach M, Sahebkar A.Cardiol J. 2025 Jan 8. doi: 10.5603/cj.100585. Online ahead of print.PMID: 39776050

Digitalizing disease surveillance: experience from Sierra Leone.

Bridget M, Gebru GN, Odongo GS, Hedberg C, Elduma AH, Kanu JS, Bangura J, Squire JS, Foster MA.Health Policy Plan. 2025 Jan 11;40(1):85-96. doi: 10.1093/heapol/czae039.PMID: 38813658

Immunogenicity of yellow fever vaccine co-administered with 13-valent pneumococcal conjugate vaccine in rural Gambia: A cluster-randomised trial.

Osei I, Schmidt-Chanasit J, Licciardi PV, Secka O, D'Alessandro U, Salaudeen R, Sarwar G, Clarke E, Mohammed NI, Nguyen C, Greenwood B, Jansen S, Mackenzie GA.Vaccine. 2025 Jan 10;47:126712. doi: 10.1016/j.vaccine.2025.126712. Online ahead of print.PMID: 39798436

From Sequence to System: Enhancing IVT mRNA Vaccine Effectiveness through Cutting-Edge Technologies.

Xu L, Li C, Liao R, Xiao Q, Wang X, Zhao Z, Zhang W, Ding X, Cao Y, Cai L, Rosenecker J, Guan S, Tang J.Mol Pharm. 2025 Jan 6;22(1):81-102. doi: 10.1021/acs.molpharmaceut.4c00863. Epub 2024 Nov 27.PMID: 39601789

Associating Race, Income, and Discrimination with COVID-19 Vaccine Status, Hesitancy, and Access in the United States: A Cross-sectional Study.

Dinero RE, Kmush BL.J Racial Ethn Health Disparities. 2025 Jan 6. doi: 10.1007/s40615-024-02282-9. Online ahead of print.PMID: 39760838

Local and systemic reactogenicity after mRNA and protein-based COVID-19 vaccines compared to meningococcal vaccine (MenACWY) in a UK blinded, randomized phase 2 trial (COV-BOOST).

Marchese AM, Beyhaghi H, Rousculp MD, Huang V, Liu X, Toback S, Faust SN.Vaccine. 2025 Jan 12;44:126569. doi: 10.1016/j.vaccine.2024.126569. Epub 2024 Dec 5.PMID: 39643572

COVID-19 pediatric vaccine Hesitancy: Themes and interactions with verified twitter accounts.

Le N, McMann TJ, Wenzel C, Li Z, Xu Q, Cuomo RE, Yang J, Mackey TK.Vaccine. 2025 Jan 8;47:126688. doi: 10.1016/j.vaccine.2024.126688. Online ahead of print.PMID: 39787796

Globally approved vaccines for COVID-19: a systematic review.

Magalhães BAP, Medeiros Minasi J, Lobato RC, Lemos LC, de Britto LS, Barros RM, de Martínez AMB, da Hora VP.Braz J Microbiol. 2025 Jan 9. doi: 10.1007/s42770-024-01600-x. Online ahead of print.PMID: 39786643

Chikungunya virus and armed forces: relevance and vaccine prospects.

Schmidt-Chanasit J, Hagen RM, Frickmann H.Eur J Clin Microbiol Infect Dis. 2025 Jan 6. doi: 10.1007/s10096-024-05028-x. Online ahead of print.PMID: 39762430

Nanoparticle Vaccine Triggers Interferon-Gamma Production and Confers Protective Immunity against Porcine Reproductive and Respiratory Syndrome Virus.

Sun Y, Gao Y, Su T, Zhang L, Zhou H, Zhang J, Sun H, Bai J, Jiang P.ACS Nano. 2025 Jan 6. doi: 10.1021/acsnano.4c12212. Online ahead of print.PMID: 39757928

Critical Insights Into Public Health Interventions: Partnership, Cultural and Racial Tensions, and Vaccine Hesitancy Within Somali Communities in the Upper Midwest, USA, and Western Norway.

Pernat CA, Pratt R, Ottemöller FG, Corbin JH.Health Promot Pract. 2025 Jan 7:15248399241308547. doi: 10.1177/15248399241308547. Online ahead of print.PMID: 39773222

Temperature-Directed Morphology Transformation Method for Precision-Engineered Polymer Nanostructures.

Bobrin VA, Sharma-Brymer SE, Monteiro MJ.ACS Nano. 2025 Jan 12. doi: 10.1021/acsnano.4c14506. Online ahead of print.PMID: 39801086

Assessing human B cell responses to influenza virus vaccines and adjuvants in a PBMC-derived in vitro culture system.

Gong S, Beukema M, De Vries-Idema J, Huckriede A.Vaccine. 2025 Jan 12;44:126563. doi: 10.1016/j.vaccine.2024.126563. Epub 2024 Dec 2.PMID: 39616951

Scoping review of infectious disease prevention, mitigation and management in passenger ships and at ports: mapping the literature to develop comprehensive and effective public health measures.

Anagnostopoulos L, Vasileiadis S, Kourentis L, Bogogiannidou Z, Voulgaridi I, Nichols G, Kalala F, Speletas M, Hadjichristodoulou C, Mouchtouri VA; EU HEALTHY SAILING project.Trop Med Health. 2025 Jan 9;53(1):3. doi: 10.1186/s41182-025-00681-0.PMID: 39780256

Current status of immunisation for herpes zoster.

Cunningham AL, Sandgren KJ, Taylor J.Hum Vaccin Immunother. 2025 Dec;21(1):2445384. doi: 10.1080/21645515.2024.2445384. Epub 2025 Jan 6.PMID: 39761810

The 2024 Public Health Emergency of International Concern: A Global Failure to Control Mpox.

Zumla A, Rosenthal PJ, Sam-Agudu NA, Ogoina D, Mbala-Kingebeni P, Ntoumi F, Nakouné E, Njouom R, Ndembi N, Mills EJ, Muyembe-Tamfum JJ, Nachega JB.Am J Trop Med Hyg. 2024 Oct 15;112(1):17-20. doi: 10.4269/ajtmh.24-0606. Print 2025 Jan 8.PMID: 39406210

A Bibliometric Analysis on Multi-epitope Vaccine Development Against SARS-CoV-2: Current Status, Development, and Future Directions.

Khalid K, Ahmad F, Anwar A, Ong SK.Mol Biotechnol. 2025 Jan 9. doi: 10.1007/s12033-024-01358-5. Online ahead of print.PMID: 39789401

Regional disparities of full pentavalent vaccine uptake and the determinants in Ethiopia: Mapping and spatial analysis using the EDHS data.

Bantie GM, Tadege M, Nigussie TZ, Woya AA, Tekile AK, Melese AA, Ayalew S, Beyene BB, Wubetu GY.PLoS One. 2025 Jan 9;20(1):e0312514. doi: 10.1371/journal.pone.0312514. eCollection 2025.PMID: 39787194

Safety and immunogenicity of ascending doses of influenza A(H7N9) inactivated vaccine with or without MF59.

Frey SE, Brady R, Jackson L, Goepfert P, El Sahly HM, Atmar RL, Rupp R, Creech CB, Abate G, Paulsen G, Weiss J, Wegel A, Roberts PC.Vaccine. 2025 Jan 10;47:126702. doi: 10.1016/j.vaccine.2024.126702. Online ahead of print.PMID: 39798434

In silicon desinging of RANKL-targeting vaccine for protection of osteoporosis based on the epitope of Denosumab.

Wu T, Guan B, Luo J, Li L, Zhang B, Yang Z, Tan L, Tao H.Int Immunopharmacol. 2025 Jan 10;144:113610. doi: 10.1016/j.intimp.2024.113610. Epub 2024 Nov 23.PMID: 39580862

One-year follow-up evaluation of approved Subolesin anti-tick vaccine in Uganda.

Kasaija PD, Kabi F, Semakula J, Kyakuwa I, Contreras M, de la Fuente G, Rutaisire J, Mugerwa S, Gortázar C, de la Fuente J.Vaccine. 2025 Jan 12;44:126562. doi: 10.1016/j.vaccine.2024.126562. Epub 2024 Nov 29.PMID: 39612805

Social complexity of a fentanyl vaccine to prevent opioid overdose conference proceedings: Radcliffe Institute for Advanced Study conference proceedings.

Weitzman ER; Opioid Vaccine Radcliffe Conference Meeting Group; Alegria M, Caplan A, Dowling D, Evans J, Fisher CE, Jordan A, Kossowsky J, Landau M, Larson H, Levy O, Levy S, Mnookin S, Reif S, Ross J, Sherman AC.Vaccine. 2025 Jan 12;44:126324. doi: 10.1016/j.vaccine.2024.126324. Epub 2024 Sep 23.PMID: 39317618

COVID-19 vaccine responses are influenced by distinct risk factors in naive and SARS-CoV-2 experienced hemodialysis recipients.

Gemander N, Kemlin D, Depickère S, Kelkar NS, Sharma S, Pannus P, Waegemans A, Olislagers V, Georges D, Dhondt E, Braga M, Heyndrickx L, Michiels J, Thiriard A, Lemy A, Baudoux T, Vandevenne M,

Goossens ME, Matagne A, Desombere I, Ariën KK, Ackerman ME, Le Moine A, Marchant A.Vaccine. 2025 Jan 12;44:126544. doi: 10.1016/j.vaccine.2024.126544. Epub 2024 Nov 29.PMID: 39608249

Use of social media and its influence on HPV vaccine hesitancy: US National Online Survey of mothers of adolescents, 2023.

Liebermann E, Kornides M, Matsunaga M, Lim E, Zimet G, Glauberman G, Kronen C, Fontenot HB.Vaccine. 2025 Jan 12;44:126571. doi: 10.1016/j.vaccine.2024.126571. Epub 2024 Dec 5.PMID: 39638660

The recent landscape of RSV vaccine research.

Kelleher K, Subramaniam N, Drysdale SB.Ther Adv Vaccines Immunother. 2025 Jan 10;13:25151355241310601. doi: 10.1177/25151355241310601. eCollection 2025.PMID: 39802673

Characterization of *Shigella flexneri* serotype 6 strains from geographically diverse low- and middle-income countries.

Gabor CE, Chong CE, Lemme-Dumit JM, Hazen TH, Baker KS, Kotloff KL, Kasumba IN, Tennant SM, Badji H, Hossain MJ, Omore R, Ochieng B, Awuor AO, Ogwel B, Juma J, Barry EM, Rasko DA.mBio. 2025 Jan 8;16(1):e0221024. doi: 10.1128/mbio.02210-24. Epub 2024 Dec 10.PMID: 39655936

Updated Review for Guidelines for Cervical Cancer Screening in Immunosuppressed Women Without HIV Infection.

Moscicki AB, Flowers L, Huchko MJ, Long ME, MacLaughlin KL, Murphy J, Spiryda LB, Scheckel CJ, Gold MA.J Low Genit Tract Dis. 2025 Jan 13. doi: 10.1097/LGT.0000000000000866. Online ahead of print.PMID: 39804372

Lipid nanoparticles deliver DNA-encoded biologics and induce potent protective immunity.

Chai D, Wang J, Lim JM, Xie X, Yu X, Zhao D, Maza PAM, Wang Y, Cyril-Remirez D, Young KH, Li Y.Mol Cancer. 2025 Jan 13;24(1):12. doi: 10.1186/s12943-024-02211-8.PMID: 39806486

Vaccine for hand, foot, and mouth disease (HFMD): A call to action.

Gam PH, Dung NM, Aziz JMA, Makram AM, Elsheikh R, Huy NT.Vaccine. 2025 Jan 12;44:126491. doi: 10.1016/j.vaccine.2024.126491. Epub 2024 Oct 28.PMID: 39467726

Corrigendum to "Immunogenicity during 6 months after SARS-CoV-2 infection is significantly different depending on previous COVID-19 vaccine regimens and a booster dose received" [Vaccine 42 (22) (2024) 126025].

Sritipsukho P, Sinlapamongkolkul P, Satdhabudha A, Chaiyakulsil C, Mahasirimongkol S, Sawaengdee W, Fukpho W, Khawcharoenporn T.Vaccine. 2025 Jan 12;44:126403. doi: 10.1016/j.vaccine.2024.126403. Epub 2024 Sep 27.PMID: 39341723

Association of baseline cytokines with antibody concentrations after diphtheria-tetanus-acellular pertussis booster vaccination in Finnish children.

Anabe D, Teräsjärvi JT, Barkoff AM, Knuutila A, Pape B, van Gageldonk P, Buisman A, Mertsola J, He Q.Vaccine. 2025 Jan 12;44:126573. doi: 10.1016/j.vaccine.2024.126573. Epub 2024 Nov 30.PMID: 39616006

A systematic review and meta-analysis of adverse events following measles-containing vaccines in infants less than 12 months of age.

Vittrup DM, Charabi S, Jensen A, Stensballe LG.Vaccine. 2025 Jan 11;47:126687. doi: 10.1016/j.vaccine.2024.126687. Online ahead of print.PMID: 39799850

Structural and Functional Glycosylation of the Abdala COVID-19 Vaccine.

Burnap SA, Calvaresi V, Cabrera G, Pousa S, Limonta M, Ramos Y, González LJ, Harvey DJ, Struwe WB.Glycobiology. 2025 Jan 12:cwaf001. doi: 10.1093/glycob/cwaf001. Online ahead of print.PMID: 39799562

Exploring the mindset of kidney transplant recipients regarding COVID-19 vaccination: An insightful survey analysis.

Pacacı B, Berke I, Barutcu Atas D, Tugcu M, Arikan H, Asicioglu E, Tuglular S, Velioglu A.Clin Nephrol. 2025 Jan 8. doi: 10.5414/CN111530. Online ahead of print.PMID: 39773658

A thematic analysis of UK COVID-19 vaccine hesitancy discussions on Twitter.

Jameel R, Greenfield S, Lavis A.BMC Public Health. 2025 Jan 7;25(1):61. doi: 10.1186/s12889-024-21125-0.PMID: 39773610

No person left behind: Understanding vaccine hesitancy in low- and middle-income countries.

Tyagi A, Bajaj SS, Nayeu EN, Stanford FC.Vaccine. 2025 Jan 12;44:126446. doi: 10.1016/j.vaccine.2024.126446. Epub 2024 Oct 16.PMID: 39419730

Core-genome guided novel therapeutic targets identification and chimeric vaccine designing against Rickettsia rickettsii.

Arshad F, Sarfraz A, Shehroz M, Nishan U, Perveen A, Ullah R, Ibrahim MA, Shah M.Sci Rep. 2025 Jan 6;15(1):921. doi: 10.1038/s41598-024-83395-3.PMID: 39762342

Influenza and Aging: Clinical Manifestations, Complications, and Treatment Approaches in Older Adults.

Rosero CI, Gravenstein S, Saade EA.Drugs Aging. 2025 Jan 7. doi: 10.1007/s40266-024-01169-y. Online ahead of print.PMID: 39775605

Next-generation vaccines for influenza B virus: advancements and challenges.

Ashraf MA, Raza MA, Imran A, Amjad MN.Arch Virol. 2025 Jan 6;170(2):25. doi: 10.1007/s00705-024-06210-4.PMID: 39762648

Quality assessment of fish vaccine data in the Norwegian Veterinary Prescription Register (VetReg).

Udhwani T, Dean KR, Sommerset I, Helgesen KO.BMC Vet Res. 2025 Jan 13;21(1):17. doi: 10.1186/s12917-024-04460-7.PMID: 39806339

Balancing fairness and efficiency in dynamic vaccine allocation during major infectious disease outbreaks.

Dai ZX, Lan HJ, Hai N, Wang JY, Wang HH.Sci Rep. 2025 Jan 8;15(1):1371. doi: 10.1038/s41598-024-84027-6.PMID: 39779729

Relationship between mental health and substance abuse on COVID-19 vaccine hesitancy in youth: A mixed methods longitudinal cohort study.

Everest L, Henderson J, Ma C, Prebeg M, Relihan J, Hawke LD.PLoS One. 2025 Jan 8;20(1):e0313157. doi: 10.1371/journal.pone.0313157. eCollection 2025.PMID: 39774518

Clinical phenotype of COVID-19 vaccine-associated myocarditis in Victoria, 2021-22: a cross-sectional study.

Smith J, Schrader S, Morgan H, Shenton P, Alafaci A, Cox N, Taylor AJ, Hare J, Jones B, Crawford NW, Buttery JP, Clothier HJ, Cheng DR.Med J Aust. 2025 Jan 13;222(1):23-29. doi: 10.5694/mja2.52557. Epub 2024 Dec 10.PMID: 39655683

Strong immune responses and robust protection following a novel protein in adjuvant tuberculosis vaccine candidate.

Korompis M, De Voss CJ, Li S, Richard A, Almujri SS, Ateere A, Frank G, Lemoine C, McShane H, Stylianou E.Sci Rep. 2025 Jan 13;15(1):1886. doi: 10.1038/s41598-024-84667-8.PMID: 39805855

Exploring cervical cancer mortality in Brazil: an ecological study on socioeconomic and healthcare factors.

Silva Filho ALD, Reis Romualdo G, Pinhati MES, Neves GL, Almeida Oliveira J, Moretti-Marques R, Nogueira-Rodrigues A, Tsunoda AT, Cândido EB.Int J Gynecol Cancer. 2025 Jan 6:ijgc-2024-005738. doi: 10.1136/ijgc-2024-005738. Online ahead of print.PMID: 39366720

Helminthiasis and mpox vaccination: challenges in Sub-Saharan Africa.

Ceccarelli G, Branda F, Scarpa F, Giovanetti M, Ciccozzi M.Infect Dis (Lond). 2025 Jan 8:1-3. doi: 10.1080/23744235.2025.2449902. Online ahead of print.PMID: 39773250

Respiratory syncytial virus (RSV) prevention: Perception and willingness of expectant parents in the Netherlands.

Harteveld LM, van Leeuwen LM, Euser SM, Smit LJ, Vollebregt KC, Bogaert D, van Houten MA.Vaccine. 2025 Jan 12;44:126541. doi: 10.1016/j.vaccine.2024.126541. Epub 2024 Nov 30.PMID: 39616950

A broad spectrum Shigella vaccine based on VirG(53)(-)(353) multiepitope region produced in a cell-free system.

Desalegn G, Abrahamson C, Ross Turbyfill K, Pill-Pepe L, Bautista L, Tamilselvi CS, Dunn D, Kapoor N, Sullinger B, Herrera M, Oaks EV, Fairman J, Pasetti MF.NPJ Vaccines. 2025 Jan 13;10(1):6. doi: 10.1038/s41541-025-01064-6.PMID: 39805874

Application of a quantitative uncertainty assessment to develop ranges of plausible toxicity values when using observational data in risk assessment: a case study examining associations between PFOA and PFOS exposures and vaccine response.

Wikoff DS, Vincent MJ, Heintz MM, Pastula ST, Reichert H, Klaren WD, Haws LC.Toxicol Sci. 2025 Jan 10:kfae152. doi: 10.1093/toxsci/kfae152. Online ahead of print.PMID: 39792025

Associations between family planning, healthcare access, and female education and vaccination among under-immunized children.

Castillo-Zunino F, Hester KA, Keskinocak P, Nazzal D, Smalley HK, Freeman MC.Vaccine. 2025 Jan 12;44:126540. doi: 10.1016/j.vaccine.2024.126540. Epub 2024 Nov 24.PMID: 39580975

mRNA vaccines with RBD mutations have broad-spectrum activity against SARS-CoV-2 variants in mice.

Liang X, Yuan Y, Wang J, Tang C, Yang Y, Zhou Y, Yang H, Huang Q, Yu W, Wang H, Yan Y, Lin D, Li Y, Du X, Yuan L, Quan W, Wu D, Lu S.NPJ Vaccines. 2025 Jan 13;10(1):7. doi: 10.1038/s41541-025-01066-4.PMID: 39805865

Vaccine hesitancy among health paraprofessionals: A mixed methods study.

Hergott M, Andreski M, Rovers J.PLoS One. 2025 Jan 7;20(1):e0312708. doi: 10.1371/journal.pone.0312708. eCollection 2025.PMID: 39774431

Assessing the Feasibility of Drone-Mediated Vaccine Delivery: An Exploratory Study.

Aggarwal S, Gupta P, Balaji S, Sharma S, Ghosh AK, Simmy, Bhargava B, Panda S.Health Sci Rep. 2025 Jan 7;8(1):e70208. doi: 10.1002/hsr2.70208. eCollection 2025 Jan.PMID: 39777282

Understanding uptake of the COVID-19 vaccination among the homeless: A mixed methods evaluation.

Phillips G, Racine E, Naughton AM, Lane J, Kearney PM.PLoS One. 2025 Jan 8;20(1):e0312617. doi: 10.1371/journal.pone.0312617. eCollection 2025.PMID: 39774402

Systematic Review of COVID-19 and COVID-19 mRNA Vaccine Myocarditis in Athletes: Incidence, Diagnosis, Prognosis, and Return-to-Play Principles.

Mahneva O, Fakhoury TR, Hanspal SS, Gonzalez Velazquez JO, Patel N, Henzlova MJ.Clin J Sport Med. 2025 Jan 9. doi: 10.1097/JSM.0000000000001320. Online ahead of print.PMID: 39784904

Investigating parental perceptions of respiratory syncytial virus (RSV) and attitudes to RSV vaccine in Jiangsu, China: Insights from a cross-section study.

Wang Q, Yang L, Li L, Xiu S, Yang M, Wang X, Shen Y, Wang W, Lin L.Vaccine. 2025 Jan 12;44:126570. doi: 10.1016/j.vaccine.2024.126570. Epub 2024 Nov 29.PMID: 39612804

Disparities in Cancer Stage Shifts Associated with the COVID-19 Pandemic in California, 2020 to 2021.

Wang K, Canchola AJ, McKinley M, Guan A, Vu A, Lin K, Meltzer D, Dixit N, Chu JN, Idossa D, Van Blarigan EL, Cheng I, Shariff-Marco S, Gomez SL.Cancer Epidemiol Biomarkers Prev. 2025 Jan 9;34(1):139-150. doi: 10.1158/1055-9965.EPI-24-0852.PMID: 39480161

Enhanced immunogenicity of a BoHV-1 gG-/tk- vaccine.

Zhang S, Liu G, Wang C, Guo A, Chen Y.Vaccine. 2025 Jan 7;47:126704. doi: 10.1016/j.vaccine.2025.126704. Online ahead of print.PMID: 39778477

Advancing Myocarditis Research: Evaluating Animal Models for Enhanced Pathophysiological Insights.

Xu Y, Tan Y, Peng Z, Liu M, Zhang B, Wei K.Curr Cardiol Rep. 2025 Jan 7;27(1):6. doi: 10.1007/s11886-024-02182-8.PMID: 39775161

Patterns and Predictors of COVID-19 Vaccine Uptake Among U.S. Active Duty Service Members, 2020-2022: Implications for Future Pandemics.

Sercy E, Stewart L, Craig-Kuhn MC, Stern C, Graham B, Michel A, Parmelee E, Pollett S, Burgess T, Tribble DR.Mil Med. 2025 Jan 11:usaf004. doi: 10.1093/milmed/usaf004. Online ahead of print.PMID: 39797791

Immunoinformatics design of a novel multiepitope vaccine candidate against non-typhoidal salmonellosis caused by Salmonella Kentucky using outer membrane proteins A, C, and F.

Igomu EE, Mamman PH, Adamu J, Muhammad M, Woziri AO, Sugun MY, Benshak JA, Anyika KC, Sam-Gyang R, Ehizibolo DO.PLoS One. 2025 Jan 10;20(1):e0306200. doi: 10.1371/journal.pone.0306200. eCollection 2025.PMID: 39792829

Designing of an mRNA vaccine against high-risk human papillomavirus targeting the E6 and E7 oncoproteins exploiting immunoinformatics and dynamic simulation.

Rahman MM, Masum MHU, Parvin R, Das SC, Talukder A.PLoS One. 2025 Jan 6;20(1):e0313559. doi: 10.1371/journal.pone.0313559. eCollection 2025.PMID: 39761277

Human migrations, anthropogenic changes, and insect-borne diseases in Latin America.

Wilke ABB, Farina P, Ajelli M, Canale A, Dantas-Torres F, Otranto D, Benelli G.Parasit Vectors. 2025 Jan 9;18(1):4. doi: 10.1186/s13071-024-06598-7.PMID: 39789650

Serum proteomic analysis identified ITIH4 as a potential novel biomarker for feline infectious peritonitis.

Jiao Y, Yang M, Fang L, Yan Y, Fu Z, Li M, Li L, Liu Z, Hu X, Wu B, Shi Y, Kang C, Shen Z, Peng G.J Proteomics. 2025 Jan 6;310:105338. doi: 10.1016/j.jprot.2024.105338. Epub 2024 Oct 23.PMID: 39454824

A Ferritin-Based Eg95 Nanoparticle Vaccine Adjuvanted with pCpG Eliciting Robust Immune Responses Against Cystic Echinococcosis in Mice Model.

Gao X, Zhu X, Liu X, Zhou C, Shang Y, Wu T, Jia H, Zhang Z, Li Y, Xin T.Int J Nanomedicine. 2025 Jan 8;20:309-325. doi: 10.2147/IJN.S499938. eCollection 2025.PMID: 39802377

Self-amplifying RNA virus vectors for drug delivery.

Lundstrom K.Expert Opin Drug Deliv. 2025 Jan 9:1-15. doi: 10.1080/17425247.2024.2445675. Online ahead of print.PMID: 39757959

Optimizing vaccine uptake in sub-Saharan Africa: a collaborative COVID-19 vaccination campaign in Madagascar using an adaptive approach.

Pavoncello V, Kislaya I, Andrianarimanana DK, Marchese V, Rakotomalala R, Rasamoelina T, Veilleux S, Guth A, Zafinimampera AOT, Ratefiarisoa S, Totofotsy O, Doumbia CO, Rakotonavalona R,

Ramananjanahary H, Randriamanantany ZA, May J, Rakotoarivelo RA, Puradiredja DI, Fusco D.Implement Sci. 2025 Jan 9;20(1):2. doi: 10.1186/s13012-024-01412-5.PMID: 39789551

A VZV-gE subunit vaccine decorated with mPLA elicits protective cellular immmune responses against varicella-zoster virus.

Meng T, Gao T, Qiao F, Xu H, Yu N, Zuo W, Yang J.Int Immunopharmacol. 2025 Jan 11;147:114033. doi: 10.1016/j.intimp.2025.114033. Online ahead of print.PMID: 39799738

Influenza vaccine effectiveness against medically attended outpatient illness, United States, 2023-24 season.

Chung JR, Price AM, Zimmerman RK, Moehling Geffel K, House SL, Curley T, Wernli KJ, Phillips CH, Martin ET, Vaughn IA, Murugan V, Scotch M, Saade EA, Faryar KA, Gaglani M, Ramm JD, Williams OL, Walter EB, Kirby M, Keong LM, Kondor R, Ellington SR, Flannery B; US Flu VE Network Investigators.Clin Infect Dis. 2025 Jan 6:ciae658. doi: 10.1093/cid/ciae658. Online ahead of print.PMID: 39761230

Post-exposure prophylaxis for the prevention of measles: A systematic review.

Montroy J, Yan C, Khan F, Forbes N, Krishnan R, Tunis M, Salvadori MI.Vaccine. 2025 Jan 8;47:126706. doi: 10.1016/j.vaccine.2025.126706. Online ahead of print.PMID: 39787800

Considering the impact of vaccine communication in the COVID-19 pandemic among adults in Canada: A qualitative study of lessons learned for future vaccine campaigns.

Parsons Leigh J, Moss SJ, MacDonald J, Cherak MS, Stelfox HT, Dubé È, Fiest KM, Halperin DM, Ahmed SB, MacDonald SE, Straus SE, Manca T, Ng Kamstra J, Soo A, Halperin SA.Hum Vaccin Immunother. 2025 Dec;21(1):2448052. doi: 10.1080/21645515.2024.2448052. Epub 2025 Jan 8.PMID: 39773304

The effectiveness of vaccines against COVID-19 in Mexico: A time series approach.

Flores D, Luna EM.Vaccine. 2025 Jan 12;44:126565. doi: 10.1016/j.vaccine.2024.126565. Epub 2024 Nov 30.PMID: 39615344

Vaccine Specifically for Immunocompromised Individuals against Superbugs.

Wang L, Zhang Y, Huang J, Wang S, Ji S, Wang S, Shi M, Zhang J, Shi Y, Luo Z, Jin Z, Jiang X, Li Q, Yang F, You J, Luo L.ACS Nano. 2025 Jan 10. doi: 10.1021/acsnano.4c12203. Online ahead of print.PMID: 39792029

Human papillomavirus vaccination coverage among adolescent boys and girls in the United States: A birth year cohort analysis of the National Immunization Survey-Teen, 2016-2022.

Nyika P, Yankey D, Elam-Evans LD, Meyer S, Pingali C, Stokley S, Singleton JA.Vaccine. 2025 Jan 12;44:126560. doi: 10.1016/j.vaccine.2024.126560. Epub 2024 Nov 30.PMID: 39615345

Tumor Vaccine Exploiting Membranes with Influenza Virus-Induced Immunogenic Cell Death to Decorate Polylactic Coglycolic Acid Nanoparticles.

Yang Y, Hu Y, Yang Y, Liu Q, Zheng P, Yang Z, Duan B, He J, Li W, Li D, Zheng X, Wang M, Fu Y, Long Q, Ma Y.ACS Nano. 2025 Jan 13. doi: 10.1021/acsnano.4c00654. Online ahead of print.PMID: 39806805

Factors influencing COVID-19 vaccine acceptability among household heads in northern Nigeria: a community-based cross-sectional study.

Ahmad SI, Aliyu H, Usman R, Abubakar A, Maijawa MA, Suleiman BA, Balogun MS, Olorukooba A, Umeokonkwo CD, Maiyaki A, Abubakar MS, Abba AA, Yisa M, Zubair I, Onu CH, Jatau TD, Garba F, Kabir S.BMJ Open. 2025 Jan 9;15(1):e083470. doi: 10.1136/bmjopen-2023-083470.PMID: 39788760

Enhancing COVID-19 Vaccine Acceptance Within Scotland Black, African, and Caribbean Communities and Lessons for Future Vaccination Programmes.

Adekola J, Audu JG, Okey-Adibe T, Abubakar A, Lance M, Blaize C, Miragoli M.J Racial Ethn Health Disparities. 2025 Jan 7. doi: 10.1007/s40615-024-02277-6. Online ahead of print.PMID: 39775745

Childhood Tuberculosis-Advances in Treatment and Prevention.

Owusu SK.Pediatr Pulmonol. 2025 Jan 7:e27375. doi: 10.1002/ppul.27375. Online ahead of print.PMID: 39777908

Controlling vaccine kinetics using tannic acid for enhanced humoral immunity.

Janes ME, Gottlieb AP, Park KS, Acharya S, Bibbey MG, Mitragotri S.J Control Release. 2025 Jan 8;379:135-146. doi: 10.1016/j.jconrel.2024.12.054. Online ahead of print.PMID: 39733913

Pneumonia Vaccines: Indications for Use and Current Safety Data in Pregnancy.

Dutra K, Berry H, Lazenby GB.Am J Perinatol. 2025 Jan 9. doi: 10.1055/a-2505-5434. Online ahead of print.PMID: 39701146

Role of Trained Immunity in Heath and Disease.

Das S, Lavine KJ.Curr Cardiol Rep. 2025 Jan 13;27(1):18. doi: 10.1007/s11886-024-02167-7.PMID: 39804563

Engineering Saccharomyces cerevisiae for medical applications.

Maneira C, Chamas A, Lackner G.Microb Cell Fact. 2025 Jan 9;24(1):12. doi: 10.1186/s12934-024-02625-5.PMID: 39789534

Monocytic reactive oxygen species-induced T cell apoptosis impairs cellular immune response to SARS-CoV-2 mRNA vaccine.

Gimenez S, Hamrouni E, André S, Picard M, Soundaramourty C, Lozano C, Vincent T, Tran TA, Kundura L, Estaquier J, Corbeau P.J Allergy Clin Immunol. 2025 Jan 10:S0091-6749(25)00011-9. doi: 10.1016/j.jaci.2025.01.003. Online ahead of print.PMID: 39800264

Metal-Protein Hybrid Materials: Unlocking New Frontiers in Biomedical Applications.

Pan Y, Zhao H, Huang W, Liu S, Qi Y, Huang Y.Adv Healthc Mater. 2025 Jan 7:e2404405. doi: 10.1002/adhm.202404405. Online ahead of print.PMID: 39778029

Nanostructured lipid carriers based mRNA vaccine leads to a T cell-inflamed tumour microenvironment favourable for improving PD-1/PD-L1 blocking therapy and long-term immunity in a cold tumour model.

Fournier C, Mercey-Ressejac M, Derangère V, Al Kadi A, Rageot D, Charrat C, Leroy A, Vollaire J, Josserand V, Escudé M, Escaich S, Ghiringhelli F, Decaens T, Navarro FP, Jouvin-Marche E, Marche PN.EBioMedicine. 2025 Jan 9;112:105543. doi: 10.1016/j.ebiom.2024.105543. Online ahead of print.PMID: 39793480

A pilot-test to support healthcare providers in promoting vaccine uptake among individuals with intellectual and developmental disabilities.

Hotez E, Rava J, Khorasani L, Levenson AP, Shen T, Chen L, Klomhaus AM, Kuo AA.Am J Prev Med. 2025 Jan 7:S0749-3797(25)00002-9. doi: 10.1016/j.amepre.2025.01.004. Online ahead of print.PMID: 39788332

CDC Recommends Lowering the Pneumococcal Vaccine Age to 50.

Anderer S.JAMA. 2025 Jan 7;333(1):13. doi: 10.1001/jama.2024.24265.PMID: 39641964

Preclinical development of lyophilized self-replicating RNA vaccines for COVID-19 and malaria with improved long-term thermostability.

Gulati GK, Simpson AC, MacMillen Z, Krieger K, Sharma S, Erasmus JH, Reed SG, Davie JW, Avril M, Khandhar AP.J Control Release. 2025 Jan 10;377:81-92. doi: 10.1016/j.jconrel.2024.11.023. Epub 2024 Nov 17.PMID: 39547422

Identifying risk factors for vomiting during diarrhea: A secondary analysis of a randomized trial of zinc supplementation.

Edwards JG, Dhingra P, Liu E, Dhingra U, Dutta A, Sudfeld CR, Deb S, Somji S, Aboud S, Kisenge R, Sazawal S, Ashorn P, Simon J, Manji KP, Duggan CP.J Pediatr Gastroenterol Nutr. 2025 Jan 13. doi: 10.1002/jpn3.12441. Online ahead of print.PMID: 39806793

Risk Communication and Community Engagement (RCCE) implementations to control cholera outbreak in Oromia region, Ethiopia.

Gobena D, Gudina EK, Fetensa G, Degfie TT, Debela T, Tamiru A, Bayissa ZB, Diriba D, Sarbessa T, Bekele D, Teferi N, Layesa A, Zewdie A, Ayele DW, Mersha MD, Bafikadu C, Wake SK, Abebe L, Kebebew T, Goshu T, Kenate B, Dessie Y, Mekonnen Z.Trop Med Health. 2025 Jan 13;53(1):4. doi: 10.1186/s41182-024-00679-0.PMID: 39800749

Impact of digital device utilization on public health surveillance to enhance city resilience during the public health emergency response: A case study of SARS-CoV-2 response in Thailand (2020-2023).

Chutarong W, Thammalikhit R, Kraiklang R, Sawangwong A, Saechang O, Guo Y, Zhang W.Digit Health. 2025 Jan 7;11:20552076241304070. doi: 10.1177/20552076241304070. eCollection 2025 Jan-Dec.PMID: 39777061

Unexpected renal side effects of mRNA COVID-19 vaccines; a single-center experience and short review.

Pethő Á, Dobi D, Kardos M, Schnabel K.Am J Med Sci. 2025 Jan 7:S0002-9629(25)00001-1. doi: 10.1016/j.amjms.2025.01.002. Online ahead of print.PMID: 39788422

Invalid Vaccine Doses Among Children Aged 0 to 35 Months: 2011 to 2020.

Albers AN, Michels SY, Daley MF, Glanz JM, Newcomer SR.Pediatrics. 2025 Jan 10:e2024068341. doi: 10.1542/peds.2024-068341. Online ahead of print.PMID: 39788151

Dual-Engineered Phage Vaccine Platform Facilitates STING Activation for Influenza Protection.

Wang F, Chen S, Xia Y, Liu C, Xu Z, Song R, Liu W, Liu T, Chen G, Liu Q.ACS Appl Mater Interfaces. 2025 Jan 8;17(1):419-429. doi: 10.1021/acsami.4c16246. Epub 2024 Dec 26.PMID: 39723915

Safety and immunogenicity of an inactivated recombinant Newcastle disease virus vaccine expressing SARS-CoV-2 spike: A randomised, comparator-controlled, phase 2 trial.

Thiem VD, Anh DD, Ha VH, Van Thom N, Thang TC, Mateus J, Carreño JM, Raghunandan R, Huong NM, Mercer LD, Flores J, Escarrega EA, Raskin A, Thai DH, Van Be L, Sette A, Innis BL, Krammer F, Weiskopf D.Vaccine. 2025 Jan 12;44:126542. doi: 10.1016/j.vaccine.2024.126542. Epub 2024 Nov 29.PMID: 39615342

Humoral immune response to SARS-CoV-2 vaccines in patients with autoimmune rheumatic diseases.

Corbalan PM, Tomas-Grau RH, Pera M, Ploper D, Espasa GV, Cazorla SI, Leguizamón ML, Pingitore EV, Barbaglia AL, Maldonado-Galdeano C, Bertolaccini MC, Soliz-Santander SE, Lucero LG, Ávila CL, Chehín RN, Sueldo HR, Socias SB, Bellomio VI.Arch Med Res. 2025 Jan 6;56(3):103141. doi: 10.1016/j.arcmed.2024.103141. Online ahead of print.PMID: 39765039

Return of poliomyelitis: A real risk in a country afflicted by scientific denialism.

Silva HM.Vaccine. 2025 Jan 12;44:126449. doi: 10.1016/j.vaccine.2024.126449. Epub 2024 Oct 18.PMID: 39426934

Socioeconomic disparities in childhood vaccine hesitancy among parents in China: The mediating role of social support and health literacy.

Yao X, Fu M, Peng J, Feng D, Ma Y, Wu Y, Feng L, Fang Y, Jiang M.Hum Vaccin Immunother. 2025 Dec;21(1):2444008. doi: 10.1080/21645515.2024.2444008. Epub 2025 Jan 8.PMID: 39773178

Preferences for and drivers of adult vaccination clinic site selection: A cross-sectional study in 30 provinces in China.

Liu Y, Cao Y, Li Y, Liu S, Xu Y, Yang W, Feng L.Hum Vaccin Immunother. 2025 Dec;21(1):2442104. doi: 10.1080/21645515.2024.2442104. Epub 2025 Jan 10.PMID: 39794927

Controlling the COVID-19 pandemic through vaccination: a perspective from Indonesia.

Sinuraya RK, Suwantika AA, Postma MJ.Expert Rev Vaccines. 2025 Jan 10. doi: 10.1080/14760584.2025.2451883. Online ahead of print.PMID: 39794268

Effect of mass campaigns with full and fractional doses of pneumococcal conjugate vaccine (Pneumosil) on the reduction of nasopharyngeal pneumococcal carriage in Niger: a three-arm, open-label, cluster-randomised trial.

Coldiron ME, Soumana I, Baudin E, Langendorf C, Mamiafo Tchoula C, Brah S, Karani A, Gallagher KE, Kagucia EW, Scott JAG, Grais RF.Lancet Infect Dis. 2025 Jan 8:S1473-3099(24)00719-9. doi: 10.1016/S1473-3099(24)00719-9. Online ahead of print.PMID: 39798587

Mpox virus (MPXV): comprehensive analysis of pandemic risks, pathophysiology, treatments, and mRNA vaccine development.

Eslamkhah S, Aslan ES, Yavas C, Akcalı N, Batur LK, Abuaisha A, Yildirim EE, Solak M, White KN.Naunyn Schmiedebergs Arch Pharmacol. 2025 Jan 8. doi: 10.1007/s00210-024-03649-9. Online ahead of print.PMID: 39777535

Effectiveness of BNT162b2 and CoronaVac against COVID-19-related severe outcomes among children and adolescents: A Brazilian nationwide cohort study.

de Lima EDS, Antunes MOB, de Souza JS, Jones MH, Stein RT, Pinto LA, Friedrich F, Scotta MC.Vaccine. 2025 Jan 12;44:126550. doi: 10.1016/j.vaccine.2024.126550. Epub 2024 Nov 26.PMID: 39603074

In situ detection of individual classical MHC-I gene products in cancer.

Gonzalez-Ericsson PI, Opalenik SR, Sanchez V, Palubinsky A, Hanna A, Sun X, Ocampo AA, Garcia G, Maldonado L, Morante Z, Vidaurre T, Valencia G, Gomez HL, Sanders ME, Kennedy LC, Phillips E, Balko JM.Cancer Immunol Res. 2025 Jan 13. doi: 10.1158/2326-6066.CIR-24-1003. Online ahead of print.PMID: 39804685

Autophagy-activating aluminum hydroxide nanovaccine for enhanced antigen presentation and anti-tumor immunity.

Chen D, Ling X, Wang Y, Zhang Q, He X, Dong Z, Li M, He Q.J Control Release. 2025 Jan 10;377:223-235. doi: 10.1016/j.jconrel.2024.11.018. Epub 2024 Nov 20.PMID: 39547420

Level of Expression of MHCI-Presented Neoepitopes Influences Tumor Rejection by Neoantigen-Specific CD8+ T Cells.

Deng L, Walsh SR, Nguyen A, Inkol JM, Westerveld MJ, Chen L, El-Sayes N, Mossman KL, Workenhe ST, Wan Y.Cancer Immunol Res. 2025 Jan 9;13(1):84-97. doi: 10.1158/2326-6066.CIR-23-0639.PMID: 39377761

Attitude to RSV Vaccination Among a Cohort of Pregnant Women in Jordan: A Cross-Sectional Survey Study.

Sallam M, Kherfan T, Al-Farajat A, Nemrawi L, Atawneh N, Fram R, Al-Tammemi AB, Barakat M, Fram K.Health Sci Rep. 2025 Jan 7;8(1):e70319. doi: 10.1002/hsr2.70319. eCollection 2025 Jan.PMID: 39777284

Antimicrobial Peptides Against Arboviruses: Mechanisms, Challenges, and Future Directions.

Owliaee I, Khaledian M, Shojaeian A, Madanchi H, Yarani R, Boroujeni AK, Shoushtari M.Probiotics Antimicrob Proteins. 2025 Jan 7. doi: 10.1007/s12602-024-10430-0. Online ahead of print.PMID: 39776036

Novel oral adjuvant to enhance cytotoxic memory like NK cell responses in HIV vaccine platform.

Alles M, Gunasena M, Isckarus C, De Silva I, Board S, Mulhern W, Collins PL, Demberg T, Liyanage NPM.NPJ Vaccines. 2025 Jan 11;10(1):5. doi: 10.1038/s41541-024-01053-1.PMID: 39799133

Protection against tuberculosis by vaccination of secreted chorismate mutase (Rv1885c) combined with a hepatitis B virus (HBV)-derived peptide, Poly6, and alum adjuvants.

Seo H, Kim BJ, Oh J, Jung S, Lee JY, Kim BJ.Vaccine. 2025 Jan 8;47:126710. doi: 10.1016/j.vaccine.2025.126710. Online ahead of print.PMID: 39787795

Rapid spread of the SARS-CoV-2 Omicron XDR lineage derived from recombination between XBB and BA.2.86 subvariants circulating in Brazil in late 2023.

Arantes I, Ito K, Gomes M, Carvalho FCd, Ferreira de Almeida WA, Khouri R, Miyajima F, Wallau GL, Naveca FG, Pereira EC; COVID-19 Fiocruz Genomic Surveillance Network; Mendonça Siqueira M, Resende PC, Bello G.Microbiol Spectr. 2025 Jan 7;13(1):e0119324. doi: 10.1128/spectrum.01193-24. Epub 2024 Nov 29.PMID: 39611827

Analytical review of facial nerve palsy following SARS-CoV-2 vaccination: comprehensive assessment.

Mirza AA, Almalki AH, AlMubarak Z, Spiegel JL, Dahm V, Lin VY.Eur Arch Otorhinolaryngol. 2025 Jan 10. doi: 10.1007/s00405-024-09173-z. Online ahead of print.PMID: 39792199

New pneumococcal serotype 20C is a WciG O-acetyltransferase deficient variant of canonical serotype 20B.

Yu J, Ravenscroft N, Davey P, Liyanage R, Lorenz O, Kuttel MM, Lo SW, Ganaie FA, Nahm MH.Microbiol Spectr. 2025 Jan 7;13(1):e0244324. doi: 10.1128/spectrum.02443-24. Epub 2024 Nov 29.PMID: 39612217

Expert consensus on the benefits of neuraminidase in conventional influenza vaccines: a Delphi study.

Youhanna J, Puig-Barberà J, Miller MS, Molrine D, Hadi M, Bapat S, Iheanacho I, Dodman S, Fikre T, Swinburn P; ADD-NA (Adding Neuraminidase) Delphi panel.BMC Infect Dis. 2025 Jan 11;25(1):53. doi: 10.1186/s12879-024-10277-4.PMID: 39794704

Development of a novel multi-epitope subunit mRNA vaccine candidate to combat Acinetobacter baumannii.

Ma S, Zhu F, Zhang P, Xu Y, Zhou Z, Yang H, Tan C, Chen J, Pan P.Sci Rep. 2025 Jan 9;15(1):1410. doi: 10.1038/s41598-024-84823-0.PMID: 39789105

Pilot Testing Digital Stories to Influence College Men's Intentions to Vaccinate Against HPV.

Koskan A, Venetis MK, Kim SW.J Cancer Educ. 2025 Jan 9. doi: 10.1007/s13187-024-02563-1. Online ahead of print.PMID: 39779643

Nasopharyngeal carriage of Streptococcus pneumoniae among children and their household members in southern Mozambique five years after PCV10 introduction.

Kahn R, Moiane B, Lessa FC, Massora S, Mabombo V, Chauque A, Tembe N, Mucavele H, Whitney CG, Sacoor C, Matsinhe G, Pimenta FC, da Gloria Carvalho M, Sigauque B, Verani J.Vaccine. 2025 Jan 8;47:126691. doi: 10.1016/j.vaccine.2024.126691. Online ahead of print.PMID: 39787794

Geographic disparities impacting oral vaccine performance: Observations and future directions.

Burke RM, Ramani S, Lynch J, Cooper LV, Cho H, Bandyopadhyay AS, Kirkwood CD, Steele AD, Kang G.Clin Exp Immunol. 2025 Jan 8:uxae124. doi: 10.1093/cei/uxae124. Online ahead of print.PMID: 39774633

Exploring intersectional determinants of, and interventions for, low uptake of human papillomavirus vaccine in sub-Saharan Africa: a scoping review protocol.

Kailemia PN, Mukami V.BMJ Open. 2025 Jan 8;15(1):e083848. doi: 10.1136/bmjopen-2023-083848.PMID: 39779276

Effectiveness of mRNA COVID-19 vaccines and hybrid immunity in preventing SARS-CoV-2 infection and symptomatic COVID-19 among adults in the United States.

Feldstein LR, Ruffin J, Wiegand RE, Borkowf CB, James-Gist J, Babu TM, Briggs-Hagen M, Chappell J, Chu HY, Englund JA, Kuntz JL, Lauring AS, Lo N, Carone M, Lockwood C, Martin ET, Midgley CM, Monto AS, Naleway AL, Ogilvie T, Saydah S, Schmidt MA, Schmitz JE, Smith N, Sohn I, Starita L, Talbot HK, Weil AA, Grijalva CG.J Infect Dis. 2025 Jan 8:jiaf007. doi: 10.1093/infdis/jiaf007. Online ahead of print.PMID: 39774936

Testing the Antigenic Potential of Transmembrane Proteins To Develop a Thermostable Tuberculosis MOF-Liposomal Vaccine.

Kumari S, Martinez-Garcia J, Ehrman RN, Tang W, Miles J, Basak P, Howlett TS, Wijesundara YH, Wang Z, Izzo A, Restrepo B, Lu L, Meloni G, Gassensmith JJ.ACS Infect Dis. 2025 Jan 10;11(1):204-215. doi: 10.1021/acsinfecdis.4c00771. Epub 2024 Dec 11.PMID: 39663556

Adenosinergic Signalling in Cervical Cancer Microenvironment.

Iser IC, Bertoni APS, Beckenkamp LR, Consolaro MEL, Maria-Engler SS, Wink MR.Expert Rev Mol Med. 2025 Jan 7;27:e5. doi: 10.1017/erm.2024.30.PMID: 39762204

Conserved Sequences from Dengue Virus Genomes Form Stable G-Quadruplexes.

Siemer JL, Le TT, Paul A, Boykin DW, Brinton MA, Wilson WD, Germann MW.ACS Infect Dis. 2025 Jan 10;11(1):88-94. doi: 10.1021/acsinfecdis.4c00615. Epub 2024 Dec 12.PMID: 39666861

Advances in cryo-electron microscopy (cryoEM) for structure-based drug discovery.

Rubach P, Majorek KA, Gucwa M, Murzyn K, Wlodawer A, Minor W.Expert Opin Drug Discov. 2025 Jan 10. doi: 10.1080/17460441.2025.2450636. Online ahead of print.PMID: 39789967

Safety and immunogenicity of a bivalent norovirus vaccine candidate in infants from 6 weeks to 5 months of age: A phase 2, randomized, double-blind trial.

Sáez-Llorens X, deAntonio R, López-Medina E, López P, Masuda T, Mendelman PM, Sherwood J, Baehner F, Borkowski A.Hum Vaccin Immunother. 2025 Dec;21(1):2450878. doi: 10.1080/21645515.2025.2450878. Epub 2025 Jan 13.PMID: 39803784

Evaluating the Immunoprotective and Diagnostic Potential of Schistosoma mansoni Epitopes from Sm050890 and Sm141290 Proteins Identified Through Reverse Vaccinology.

de Oliveira FM, Lopes GFM, Ribeiro RIMA, Villar JAFP, Fonseca CT, Lopes DO.Acta Parasitol. 2025 Jan 7;70(1):14. doi: 10.1007/s11686-024-00981-1.PMID: 39775981

A Bundled, Practice-Based Intervention to Increase HPV Vaccination.

Szilagyi PG, Fiks AG, Rand CM, Kate Kelly M, Russell Localio A, Albertin CS, Humiston SG, Grundmeier RW, Steffes J, Davis K, Shone LP, McFarland G, Abney DE, Stephens-Shields AJ.Pediatrics. 2025 Jan 6:e2024068145. doi: 10.1542/peds.2024-068145. Online ahead of print.PMID: 39756464

Tissue-resident memory T cells in diseases and therapeutic strategies.

Xie D, Lu G, Mai G, Guo Q, Xu G.MedComm (2020). 2025 Jan 12;6(1):e70053. doi: 10.1002/mco2.70053. eCollection 2025 Jan.PMID: 39802636

CoronaVac-induced antibodies that facilitate Fc-mediated neutrophil phagocytosis track with COVID-19 disease resolution.

Li C, Yu J, Issa R, Wang L, Ning M, Yin S, Li J, Wu C, Chen Y.Emerg Microbes Infect. 2025 Dec;14(1):2434567. doi: 10.1080/22221751.2024.2434567. Epub 2025 Jan 13.PMID: 39584817

Roadmap to discovery and early development of an mRNA loaded LNP formulation for liver therapeutic genome editing.

Bak A, Zhou L, Rejman J, Yanez Arteta M, Nilsson G, Ashford M.Expert Opin Drug Deliv. 2025 Jan 11. doi: 10.1080/17425247.2025.2452295. Online ahead of print.PMID: 39797693

Non-Polio Enterovirus Inhibitors: Scaffolds, Targets, and Potency—What's New?

Roux HFG, Touret F, Rathelot P, Sciò P, Coluccia A, Vanelle P, Roche M.ACS Infect Dis. 2025 Jan 10;11(1):21-46. doi: 10.1021/acsinfecdis.4c00606. Epub 2024 Dec 23.PMID: 39715453

Immunogenicity in mice and non-human primates of an Advax-CpG55.2-adjuvanted recombinant hemagglutinin seasonal quadrivalent influenza vaccine.

Honda-Okubo Y, Vaghasiya U, Petrovsky N.Vaccine. 2025 Jan 10;47:126707. doi: 10.1016/j.vaccine.2025.126707. Online ahead of print.PMID: 39798433

Corrigendum to How has post-implementation surveillance of high-coverage vaccination with HPV16/18-AS04 vaccine in England added to evidence about its cross-protective effects? Vaccine. 2024 Oct 24;42(24):126215. doi: 10.1016/j.vaccine.2024.126215. Epub 2024 Aug 29. PMID: 39213982.

Navarro-Torné A, Anderson A, Panwar K, Ghys E, Benninghoff B, Weynants V, Beddows S, Checchi M.Vaccine. 2025 Jan 9;47:126701. doi: 10.1016/j.vaccine.2024.126701. Online ahead of print.PMID: 39798435

CDC Recommends Second COVID-19 Vaccine Dose for Older Adults.

Anderer S.JAMA. 2025 Jan 7;333(1):12. doi: 10.1001/jama.2024.24258.PMID: 39641947

Chemical cross-linking facilitates antigen uptake and presentation and provides improved protection from Mpox with a dual-antigen subunit vaccine.

Chen L, Shang C, Wang Z, Zheng M, Zhang C, Li D, Yang Z, Dong Y, Xu Y, Yuan Y, Fan S, Zhong W, Lin J, Li X.MedComm (2020). 2025 Jan 8;6(1):e70045. doi: 10.1002/mco2.70045. eCollection 2025 Jan.PMID: 39781294

Immunogenicity of bivalent versus monovalent mRNA booster vaccination among adult paramedics in Canada who had received three prior mRNA wild-type doses.

Asamoah-Boaheng M, Goldfarb DM, Kayda I, Yap J, Kirkham T, Karim ME, Demers P, Copp JM, Grunau B.Access Microbiol. 2025 Jan 13;7(1):000791.v3. doi: 10.1099/acmi.0.000791.v3. eCollection 2025.PMID: 39807477

Myceliophthora thermophila as promising fungal cell factories for industrial bioproduction: From rational design to industrial applications.

Luo Z, Gao Y, Guo X, Chen Y, Rao Y.Bioresour Technol. 2025 Jan 9;419:132051. doi: 10.1016/j.biortech.2025.132051. Online ahead of print.PMID: 39798815

Non-colorectal Cancer Screening and Vaccinations in Patients with Inflammatory Bowel Disease: Expert Review.

Caldera F, Kane S, Long M, Hashash JG.Clin Gastroenterol Hepatol. 2025 Jan 10:S1542-3565(25)00020-5. doi: 10.1016/j.cgh.2024.12.011. Online ahead of print.PMID: 39800200

Distinct immunogenicity outcomes of DNA vaccines encoding malaria transmission-blocking vaccine target antigens Pfs230D1M and Pvs230D1.

Cao Y, da Silva Araujo M, Lorang CG, Dos Santos NAC, Tripathi A, Vinetz J, Kumar N.Vaccine. 2025 Jan 8;47:126696. doi: 10.1016/j.vaccine.2024.126696. Online ahead of print.PMID: 39787798

COVID-19 outbreaks in nursing homes in Los Angeles County, March 2020-April 2022.

van Rest A, Clarke A, Gounder P, Nie PK, Das C, Bush C, Rubin Z.Infect Control Hosp Epidemiol. 2025 Jan 7:1-7. doi: 10.1017/ice.2024.218. Online ahead of print.PMID: 39763242

The stability of PCV2 virus-like particles from mammalian cells and challenges for biotechnological applications.

Olivero-Deibe N, Frigini EN, Ramos N, Carrión F, Fadel F, Villarreal L, Benech JC, Arbiza J, Pantano S, Ortega C.Vaccine. 2025 Jan 12;44:126549. doi: 10.1016/j.vaccine.2024.126549. Epub 2024 Dec 2.PMID: 39616952

The trend in national childhood immunization program coverage throughout Serbian communities in Kosovo and Metohija from 2003 to 2022: pre-COVID-19 period vs. COVID-19 pandemic.

Filimonovic J, Stosic M, Gazibara T, Dotlic J, Joksimovic B, Subaric A, Stevanovic J, Radulovic A, Mijovic B, Subaric L, Kovacevic M, Radulovic J, Antonijevic A, Milic M.Vaccine. 2025 Jan 12;44:126576. doi: 10.1016/j.vaccine.2024.126576. Epub 2024 Dec 5.PMID: 39643571

A Comprehensive Review of mRNA-based Vaccines for COVID-19, A New Era in Pharmaceuticals: Unspecified and Unknown Aspects, Effects and Challenges.

Vosoughi P, Naghib SM, Rahmanian M, Mozafari MR.Curr Top Med Chem. 2025 Jan 6. doi: 10.2174/0115680266325847241121034100. Online ahead of print.PMID: 39779563

The risk of pregnancy-related adverse outcomes after COVID-19 vaccination: Propensity score-matched analysis with influenza vaccination.

Choi YJ, Jung J, Kang M, Choi MJ, Choi WS, Seo YB, Hyun HJ, Yoon Y, Choe YJ, Cho GJ, Kim YE, Kim DW, Seong H, Nham E, Yoon JG, Noh JY, Song JY, Kim WJ, Cheong HJ.Vaccine. 2025 Jan 12;44:126506. doi: 10.1016/j.vaccine.2024.126506. Epub 2024 Nov 25.PMID: 39591703

Delay of innate immune responses following influenza B virus infection affects the development of a robust antibody response in ferrets.

Rowe T, Fletcher A, Lange M, Hatta Y, Jasso G, Wentworth DE, Ross TM.mBio. 2025 Jan 8:e0236124. doi: 10.1128/mbio.02361-24. Online ahead of print.PMID: 39772665

Development of broadly protective influenza B vaccines.

Gu C, Babujee L, Pattinson D, Chiba S, Jester P, Maemura T, Neumann G, Kawaoka Y.NPJ Vaccines. 2025 Jan 7;10(1):2. doi: 10.1038/s41541-024-01058-w.PMID: 39774170

"Fear of the unknown": Health, disability, and stakeholder perspectives on the behavioral and social drivers of vaccination in children with disability in Fiji.

Power R, Vakaloloma U, Jahan I, Perera S, Tuibeqa I, Devi R, Volavola L, May W, Wilson D, Tuimabu L, Khandaker G, Sheel M; Australian Immunisation and Disability Investigators.PLOS Glob Public Health. 2025 Jan 8;5(1):e0004132. doi: 10.1371/journal.pgph.0004132. eCollection 2025.PMID: 39774815

Evaluation of an F Protein-Based Recombinant Protein for Immunization Against Respiratory Syncytial Virus.

Hernández-Mercado A, Barrón-García CB, Romo-Amador J, Córdova-Dávalos LE, Jiménez M, Fernández-Ruiz JC, Castañeda-Delgado JE, Montes de Oca-Luna R, Salinas E, Cervantes-García D.Viral Immunol. 2025 Jan 10. doi: 10.1089/vim.2024.0072. Online ahead of print.PMID: 39791530

Vaccination Strategies for Ebola in the Democratic Republic of Congo: The WHO-Ebola Modeling Collaboration.

Ajelli M, Muyembe JJ, Touré A, Diallo A, Litvinova M, Merler S, Mulangu S, Bagayoko A, Bah A, Bah I, Barry A, Barry F, Chérif M, Condé D, Diallo AA, Diallo F, Diakité M, Doré K, Mapan KA, Koundouno T, Onivogui PK, Lamah F, Maneno H, Nomou A, Sekouba K, Sani I, Soumah A, Sy MM, Gsell PS, Halloran ME, Henao-Restrepo AM, Fall IS, Ryan MJ, Salama P, Vespignani A, Longini IM Jr.Int J Infect Dis. 2025 Jan 11:107779. doi: 10.1016/j.ijid.2025.107779. Online ahead of print.PMID: 39805421

Circular mRNA Vaccine against SARS-COV-2 Variants Enabled by Degradable Lipid Nanoparticles.

Huang K, Li N, Li Y, Zhu J, Fan Q, Yang J, Gao Y, Liu Y, Gao S, Zhao P, Wei K, Deng C, Zuo C, Sun Z.ACS Appl Mater Interfaces. 2025 Jan 9. doi: 10.1021/acsami.4c20770. Online ahead of print.PMID: 39789795

Conceptual debates in the study of canine & feline vaccine hesitancy: A response to Haeder 2023.

Motta M, Motta G, Stecula D.Vaccine. 2025 Jan 12;44:126397. doi: 10.1016/j.vaccine.2024.126397. Epub 2024 Sep 28.PMID: 39343704

Chitosan immunomodulation: insights into mechanisms of action on immune cells and signaling pathways.

Ghattas M, Dwivedi G, Chevrier A, Horn-Bourque D, Alameh MG, Lavertu M.RSC Adv. 2025 Jan 10;15(2):896-909. doi: 10.1039/d4ra08406c. eCollection 2025 Jan 9.PMID: 39802469

Investigating the effectiveness of whole-virus, protein-based, and vector-based SARS-CoV-2 vaccines on the rates of COVID-19 infection, hospitalization, and mortality: a historical cohort study in Iran.

Tanbakuchi D, Razavizadeh NT, Salari M, Farkhani EM, Shakeri MT, Tabatabaee SS, Raesi R, Ghavami V.BMC Infect Dis. 2025 Jan 9;25(1):44. doi: 10.1186/s12879-025-10449-w.PMID: 39789435

Spatiotemporal Dynamic Immunomodulation by Infection-Mimicking Gels Enhances Broad and Durable Protective Immunity Against Heterologous Viruses.

Jin SM, Cho JH, Seong Y, Chathuranga WAG, Gwak Y, Noh YW, Lee MH, Oh SS, Choi JH, Lee JS, Lim YT.Adv Sci (Weinh). 2025 Jan 13:e2412116. doi: 10.1002/advs.202412116. Online ahead of print.PMID: 39804984

Voices of Nanomedicine: Blueprint Guidelines for Collaboration in Addressing Global Unmet Medical Needs.

Prasad R, Ghosh A, Patel V, Peng B, Mendes BB, Win EHA, Delogu LG, Wong JY, Pischel KJ, Bellare JR, Bar-Shir A, Thakor AS, Parak WJ, Bhujwalla ZM, Zhang YS, Kommineni N, Rotello VM, Cai W, Lammers T, Odom TW, Padmanaban G, Peer D, Lovell JF, Srivastava R, Langer R, Conde J.ACS Nano. 2025 Jan 10. doi: 10.1021/acsnano.4c13513. Online ahead of print.PMID: 39792961

Augmented immunogenicity of the HPV16 DNA vaccine via dual adjuvant approach: integration of CpG ODN into plasmid backbone and co-administration with IL-28B gene adjuvant.

Zhou Y, Zhang T, Wang Z, Xu X.Virol J. 2025 Jan 8;22(1):3. doi: 10.1186/s12985-024-02604-7.PMID: 39780219

Mixed-methods reproductive health knowledge, attitudes and practices survey of IDPs, returnees and host communities in Jonglei State, South Sudan.

Lieberman Lawry L, Gabor R, Katele J, Baak Madut L, Sommers K, Manuel D, Nadolski C, Lado M, Koehlmoos T, Clemmer W.BMJ Open. 2025 Jan 6;15(1):e083905. doi: 10.1136/bmjopen-2024-083905.PMID: 39762096

Immune profile diversity is achieved with synthetic TLR4 agonists combined with the RG1-VLP vaccine in mice.

Matthews RL, Khan N, Beckman B, Sharma S, Dietz Z, Picking WD, Izmirlian G, Sanders C, Stocks SM, Difilippantonio S, Kirnbauer R, Roden RB, Pinto LA, Shoemaker RH, Ernst RK, Marshall JD.Vaccine. 2025 Jan 12;44:126577. doi: 10.1016/j.vaccine.2024.126577. Epub 2024 Dec 3.PMID: 39632208

Lessons Learned from a Quality Improvement Initiative to Increase COVID-19 Vaccination in Hospitalized Children.

Young DG, Rogers CS, Mayefsky I, Neufeld T, Niesen A, Reich PJ, Kao CM, Srinivasan M.Pediatr Qual Saf. 2025 Jan 7;10(1):e782. doi: 10.1097/pq9.0000000000000782. eCollection 2025 Jan-Feb.PMID: 39776950

Assessment of Humoral Response at SARS-CoV-2 Infection by Multipronged Functional Proteomics Approaches.

Juanes-Velasco P, Pérez-Arévalo JC, Arias-Hidalgo C, Nuño-Soriano A, Landeira-Viñuela A, Corrales F, Bernardo D, Cuesta-Sancho S, Rojo-Rello S, Lécrevisse Q, Góngora R, Sánchez-Santos JM, De Las Rivas J, Hernández ÁP, Fuentes M.J Proteome Res. 2025 Jan 7. doi: 10.1021/acs.jproteome.4c00635. Online ahead of print.PMID: 39772566

Effective Mucosal Adjuvantation of the Intranasal Enterovirus A71 Vaccine With Zymosan.

Chin CL, Lin YL, Cheng PY, Lee P, Chiang BL.Immunology. 2025 Jan 8. doi: 10.1111/imm.13895. Online ahead of print.PMID: 39780346

Differences in knowledge, attitudes and intentions towards HPV vaccination among young adults from diverse socio-cultural groups in Israel: A cross-sectional study.

Edelstein M, Shibli H, Bornstein J.Vaccine. 2025 Jan 12;44:126548. doi: 10.1016/j.vaccine.2024.126548. Epub 2024 Nov 28.PMID: 39612803

Establishing a new human pneumococcal standard reference serum, MPRSS-01.

Antonello JM, Murphy RD, Abeygunawardana C, Malinverni JC, Gowrisankar R, Green T, Greway R, Schmauch J, Howlett A, Bonhomme CJ, Nolan KM.mSphere. 2025 Jan 7:e0040424. doi: 10.1128/msphere.00404-24. Online ahead of print.PMID: 39772874

Human enteroviruses and the long road to acute flacid paralysis eradication.

Bosch A, Carcereny A, García-Pedemonte D, Fuentes C, Costafreda MI, Pintó RM, Guix S.J Appl Microbiol. 2025 Jan 6;136(1):lxae311. doi: 10.1093/jambio/lxae311.PMID: 39716474

Attitudes towards vaccination against COVID-19 during pregnancy and its determinants among people of reproductive age.

Qin C, Ding Y, Liu M, Liu J.Hum Vaccin Immunother. 2025 Dec;21(1):2450131. doi: 10.1080/21645515.2025.2450131. Epub 2025 Jan 11.PMID: 39797690

Guillain-Barré syndrome temporally associated with COVID-19 vaccines - Progress over time.

Laemmle-Ruff I, Morgan HJ, Harris A, Abruzzo V, Clothier HJ, Osowicki J, Buttery JP, Kiers L, Crawford NW.Vaccine. 2025 Jan 12;44:126072. doi: 10.1016/j.vaccine.2024.06.039. Epub 2024 Jun 17.PMID: 38890104

Visual analysis of the research frontiers, hotspots and development trends of immunization programs for women and children.

Zhang J, Zhang Y, Zhang L, Wang J, Qu X, Li M, Zhang R, Zhang B, Zhang Y, Zhou J.Hum Vaccin Immunother. 2025 Dec;21(1):2442508. doi: 10.1080/21645515.2024.2442508. Epub 2025 Jan 9.PMID: 39787614

The effectiveness of two doses of recombinant hepatitis E vaccine in response to an outbreak in Bentiu, South Sudan: a case-control and bias indicator study.

Nesbitt RC, Kinya Asilaza V, Alvarez C, Gitahi P, Nkemenang P, Duncker J, Haile M, Gakima P, Wamala JF, Loro FB, Koyuncu A, Biem D, Albela M, Rull M, Gignoux E, Rumunu J, Eckerle I, Ciglenecki I, Azman AS.Lancet Infect Dis. 2025 Jan 8:S1473-3099(24)00657-1. doi: 10.1016/S1473-3099(24)00657-1. Online ahead of print.PMID: 39798583

Vaccination against measles-mumps-rubella and rates of non-targeted infectious disease hospitalisations: Nationwide register-based cohort studies in Denmark, Finland, Norway, and Sweden.

Gehrt L, Möller S, Englund H, Laake I, Nieminen H, Feiring B, Lahdenkari M, Palmu AA, Trogstad L, Benn CS, Sørup S.J Infect. 2025 Jan 7:106365. doi: 10.1016/j.jinf.2024.106365. Online ahead of print.PMID: 39788159

Structural engineering of flagellin as vaccine adjuvant: quest for the minimal domain of flagellin for TLR5 activation.

Afzal H, Murtaza A, Cheng LT.Mol Biol Rep. 2025 Jan 7;52(1):104. doi: 10.1007/s11033-024-10146-y.PMID: 39775323

Unveiling the role of adhesin proteins in controlling *Acinetobacter baumannii* infections: a systematic review.

Pereira IL, Hartwig DD.Infect Immun. 2025 Jan 8:e0034824. doi: 10.1128/iai.00348-24. Online ahead of print.PMID: 39772848

Association between contextual factors and vaccine coverage against human papilomavirus in adolescents in the state of Minas Gerais, Brazil: global spatial regressions.

Luvisaro BMO, da Silva TPR, Gusmão JD, Ferraz ML, Nascimento LMD, Gomes LP, Matozinhos FP.BMC Infect Dis. 2025 Jan 7;25(1):34. doi: 10.1186/s12879-024-10263-w.PMID: 39773132

Challenges of using the test-negative design to measure vaccine effectiveness of multi-pathogen combination vaccines targeting one syndrome.

Kim SS, Garcia Quesada M, Prasad PV, Nelson KN, Lopman BA, Rogawski McQuade ET.Vaccine. 2025 Jan 12;44:126520. doi: 10.1016/j.vaccine.2024.126520. Epub 2024 Nov 12.PMID: 39537464

Safety and Immunogenicity of SARS-CoV-2 Spike Receptor-Binding Domain andN-Terminal Domain mRNA Vaccine.

Chalkias S, Pragalos A, Akinsola A, Berman G, Ampajwala M, Meyer J, Schoch L, Zhou W, Paila YD, Deng W, Feng J, de Windt E, Edwards D, Miller J, Das R.J Infect Dis. 2025 Jan 10:jiaf022. doi: 10.1093/infdis/jiaf022. Online ahead of print.PMID: 39792478

Three in four children age 12-23 months missed opportunities for vaccination in Sub-Saharan African countries: a multilevel mixed effect analysis of demographic health and surveys 2016-2023.

Jejaw M, Tafere TZ, Tiruneh MG, Hagos A, Teshale G, Tilahun MM, Negash WD, Demissie KA.BMC Public Health. 2025 Jan 7;25(1):62. doi: 10.1186/s12889-024-21273-3.PMID: 39773467

Preparation and application of porcine broadly neutralizing monoclonal antibodies in an immunoassay for efficiently detecting neutralizing antibodies against foot-and-mouth disease virus serotype O.

Cao Y, Li F, Xing X, Zhang H, Zhao Q, Sun P, Fu Y, Li P, Ma X, Zhang J, Zhao Z, Yuan H, Wang J, Wang T, Bao H, Bai X, Li D, Zhang Q, Li K, Lu Z.Microbiol Spectr. 2025 Jan 8:e0223424. doi: 10.1128/spectrum.02234-24. Online ahead of print.PMID: 39772731

mRNA vaccines in the context of cancer treatment: from concept to application.

Fu Q, Zhao X, Hu J, Jiao Y, Yan Y, Pan X, Wang X, Jiao F.J Transl Med. 2025 Jan 6;23(1):12. doi: 10.1186/s12967-024-06033-6.PMID: 39762875

Debulking influenza and herpes simplex virus strains by a wide-spectrum anti-viral protein formulated in clinical grade chewing gum.

Daniell H, Guo Y, Singh R, Karki U, Kulchar RJ, Wakade G, Pihlava JM, Khazaei H, Cohen GH.Mol Ther. 2025 Jan 8;33(1):184-200. doi: 10.1016/j.ymthe.2024.12.008. Epub 2024 Dec 10.PMID: 39663701

Incremental benefit of high dose compared to standard dose influenza vaccine in reducing hospitalizations.

Yaron S, Yechezkel M, Yamin D, Razi T, Borochov I, Shmueli E, Arbel R, Netzer D.NPJ Vaccines. 2025 Jan 9;10(1):3. doi: 10.1038/s41541-025-01065-5.PMID: 39788985

Safety and efficacy of the therapeutic DNA-based vaccine VB10.16 in combination with atezolizumab in persistent, recurrent or metastatic HPV16-positive cervical cancer: a multicenter, single-arm phase 2a study.

Hillemanns P, Zikan M, Forget F, Denys HG, Baurain JF, Rob L, Woelber L, Blecharz P, Bidzinski M, Chovanec J, Marmé F, Link T, Dannecker C, Rosholm A, Berg KCG, Oliveri RS, Lindemann K; VB C-02 investigators; VB C-02 study.J Immunother Cancer. 2025 Jan 7;13(1):e010827. doi: 10.1136/jitc-2024-010827.PMID: 39773564

Genomic epidemiology and evolution of *Bordetella pertussis* under the vaccination pressure of acellular vaccines in Beijing, China, 2020-2023.

Li Z, Xiao F, Hou Y, Jia B, Zhuang J, Cao Y, Ma J, Zhao J, Xu Z, Jia Z, Liu F, Pang L, Liu J.Emerg Microbes Infect. 2025 Dec;14(1):2447611. doi: 10.1080/22221751.2024.2447611. Epub 2025 Jan 8.PMID: 39725566

Understanding factors contributing to vaccination underutilization among Jewish ultra-orthodox communities in Israel: A cross-sectional study.

Gendler Y, Ofri L, Videl H.Vaccine. 2025 Jan 9;47:126711. doi: 10.1016/j.vaccine.2025.126711. Online ahead of print.PMID: 39793538

A low pre-existing anti-NS1 humoral immunity to DENV is associated with microcephaly development after gestational ZIKV exposure.

Castro-Trujillo S, Mejía WR, Segura K, Castro-Meneses J, Vega R, Salgado D, Fonseca CE, Ortiz ÁM, Perdomo-Celis F, Bosch I, Narváez CF.PLoS Negl Trop Dis. 2025 Jan 6;19(1):e0012193. doi: 10.1371/journal.pntd.0012193. eCollection 2025 Jan.PMID: 39761322

Adaptive immune response to a wild boar-derived recombinant hepatitis e virus capsid protein challenge in pigs.

Grigas J, Spancerniene U, Simanavicius M, Pautienius A, Stankevicius R, Tamosiunas PL, Stankevicius A.Vaccine. 2025 Jan 12;44:126561. doi: 10.1016/j.vaccine.2024.126561. Epub 2024 Nov 30.PMID: 39617676

High dose inactivated influenza vaccine inconsistently improves heterologous antibody responses in an elderly human cohort.

Billings WZ, Ge Y, Knight JH, Hemme H, Hammerton SM, Skarlupka AL, Cao W, Shen Y, Bahl J, Thomas PG, Ross TM, Handel A.J Infect Dis. 2025 Jan 8:jiaf003. doi: 10.1093/infdis/jiaf003. Online ahead of print.PMID: 39776178

Content and quality of consumer websites providing information about human papillomavirus infection in patients with systemic lupus erythematosus: An environmental scan.

Ruiz JI, Radabaugh C, Geng Y, Suarez-Almazor ME.Patient Educ Couns. 2025 Jan 9;133:108644. doi: 10.1016/j.pec.2025.108644. Online ahead of print.PMID: 39799731

Proficiency, Clarity, and Objectivity of Large Language Models Versus Specialists' Knowledge on COVID-19 Impacts in Pregnancy: A Cross-Sectional Pilot Study.

Bragazzi N, Buchinger M, Atwan H, Tuma R, Chirico F, Szarpak L, Farah R, Khamisy-Farah R.JMIR Form Res. 2025 Jan 9. doi: 10.2196/56126. Online ahead of print.PMID: 39794312

Dengue severity by serotype and immune status in 19 years of pediatric clinical studies in Nicaragua.

Narvaez F, Montenegro C, Juarez JG, Zambrana JV, Gonzalez K, Videa E, Arguello S, Barrios F, Ojeda S, Plazaola M, Sanchez N, Camprubí-Ferrer D, Kuan G, Paz Bailey G, Harris E, Balmaseda A.PLoS Negl Trop Dis. 2025 Jan 10;19(1):e0012811. doi: 10.1371/journal.pntd.0012811. Online ahead of print.PMID: 39792951

Effects of a multimedia campaign to increase human papillomavirus vaccine acceptance in Dhaka, Bangladesh.

Agha S, Francis S, Bernard D, Fareed A, Azad K, Qadri F.Hum Vaccin Immunother. 2025 Dec;21(1):2447105. doi: 10.1080/21645515.2024.2447105. Epub 2025 Jan 8.PMID: 39780523

Vaccine-induced T cell responses control Orthoflavivirus challenge infection without neutralizing antibodies in humans.

Kalimuddin S, Tham CYL, Chan YFZ, Hang SK, Kunasegaran K, Chia A, Chan CYY, Ng DHL, Sim JXY, Tan HC, Syenina A, Ngoh AQ, Hamis NZ, Chew V, Leong YS, Yee JX, Low JG, Chan KR, Ong EZ, Bertoletti A, Ooi EE.Nat Microbiol. 2025 Jan 10. doi: 10.1038/s41564-024-01903-7. Online ahead of print.PMID: 39794472

Immunoinformatics: A Veritable Toolbox for Livestock Omics and Veterinomics.

Yennamalli RM, Onteru SK.OMICS. 2025 Jan 8. doi: 10.1089/omi.2024.0208. Online ahead of print.PMID: 39778891

The perils of RFK Junior's anti-vaccine leadership for public health.

Yang YT.Lancet. 2025 Jan 11;405(10473):122. doi: 10.1016/S0140-6736(24)02603-5. Epub 2024 Dec 18.PMID: 39708828

Pentavalent Vaccine-Induced Immune Thrombocytopenia: A Case Report From Nepal.

Khadayat R, Shrestha S, Gautam T, Magar SR, Bhatta P.Clin Case Rep. 2025 Jan 6;13(1):e70064. doi: 10.1002/ccr3.70064. eCollection 2025 Jan.PMID: 39764259

Design, synthesis, and in-Silco ADME prediction of some novel bis(1,3,4-thiadiazoles) encapsulated lipid chitosan nano capsule decorative with magnetic nanoparticles and their potential anti-helicobacter pylori activity.

Salem ME, Elwahy AHM, Hassaneen HM, Selim AM, Mohammed HHH, Bagato N, Radwan IT.Int J Biol Macromol. 2025 Jan 9:139746. doi: 10.1016/j.ijbiomac.2025.139746. Online ahead of print.PMID: 39798735

Sex differences in parental reasons for lack of intent to initiate HPV vaccination among adolescents ages 13-17 years: National Immunization Survey - Teen 2019-2021.

Escabí-Wojna E, Alvelo-Fernández PM, Suárez E, Colón-López V.Vaccine. 2025 Jan 12;44:126584. doi: 10.1016/j.vaccine.2024.126584. Epub 2024 Dec 6.PMID: 39643573

Enterovirus and Parechovirus Neurologic Infections in Children: Clinical Presentations and Neuropathogenesis.

Freeman MC, Messacar K.J Pediatric Infect Dis Soc. 2025 Jan 8:piae069. doi: 10.1093/jpids/piae069. Online ahead of print.PMID: 39776161

The Uptake of the Influenza Vaccine in Patients With Cystic Fibrosis: A Retrospective Study.

Greenslade S, Tai A.J Paediatr Child Health. 2025 Jan 11. doi: 10.1111/jpc.16773. Online ahead of print.PMID: 39797528

Immunogenicity and safety of HepE Hecolin® in chronic hepatitis B patients at clinically stable stage: An open-label study in China.

Zhang L, Zhang Q, Liu J, Wu W, Jiang Z, Yan B, Cao Q, Liu H, Pan H, Lv J, Feng Y, Xu F, Huang S, Xu A.Hum Vaccin Immunother. 2025 Dec;21(1):2448882. doi: 10.1080/21645515.2024.2448882. Epub 2025 Jan 10.PMID: 39797410

Visualizing lipid nanoparticle trafficking for mRNA vaccine delivery in non-human primates.

Buckley M, Araínga M, Maiorino L, Pires IS, Kim BJ, Michaels KK, Dye J, Qureshi K, Zhang Y, Mak H, Steichen JM, Schief WR, Villinger F, Irvine DJ.Mol Ther. 2025 Jan 9:S1525-0016(25)00012-7. doi: 10.1016/j.ymthe.2025.01.008. Online ahead of print.PMID: 39797396

Long-term impact of 10-valent pneumococcal conjugate vaccine among children <5 years, Uganda, 2014-2021.

Wanyana MW, Migisha R, King P, Bulage L, Kwesiga B, Kadobera D, Ario AR, Harris JR.PLOS Glob Public Health. 2025 Jan 6;5(1):e0002980. doi: 10.1371/journal.pgph.0002980. eCollection 2025.PMID: 39761235

COVID-19 vaccine effectiveness against severe omicron-related outcomes in children aged 5 to 11 years in Ontario: A Canadian immunization research network (CIRN) study.

Piché-Renaud PP, Drover SSM, Austin PC, Morris SK, Buchan SA, Nasreen S, Schwartz KL, Tadrous M, Thampi N, Wilson SE, Wilson K, Guttmann A, Kwong JC.Vaccine. 2025 Jan 12;44:126539. doi: 10.1016/j.vaccine.2024.126539. Epub 2024 Nov 30.PMID: 39617675

A Universal Strategy of Anti-Tumor mRNA Vaccine by Harnessing "Off-the-Shelf" Immunity.

Fu J, Wu S, Bao N, Wu L, Qu H, Wang Z, Dong H, Wu J, Jin Y.Adv Sci (Weinh). 2025 Jan 6:e2401287. doi: 10.1002/advs.202401287. Online ahead of print.PMID: 39761175

Using "pop-up" clinics and live-attenuated influenza vaccine to reduce barriers to flu vaccination among college students.

Benzaken C, Mithal L, Tan T, Jhaveri R.J Am Coll Health. 2025 Jan 10:1-5. doi: 10.1080/07448481.2024.2439864. Online ahead of print.PMID: 39792970

Vaccination uptake is influenced by many cues during health information seeking online.

Khojah M, Sarhan MY.Health Info Libr J. 2025 Jan 8. doi: 10.1111/hir.12564. Online ahead of print.PMID: 39780332

Corrigendum to "A comparison of four self-controlled study designs in an analysis of COVID-19 vaccines and myocarditis using five European databases" [Vaccine 42 (12) (2024) 3039-3048].

Schultze A, Martin I, Messina D, Bots S, Belitser S, Carreras-Martínez JJ, Correcher-Martinez E, Urchueguía-Fornes A, Martín-Pérez M, García-Poza P, Villalobos F, Pallejà-Millán M, Bissacco CA, Segundo E, Souverein P, Riefolo F, Durán CE, Gini R, Sturkenboom M, Klungel O, Douglas I.Vaccine. 2025 Jan 12;44:126438. doi: 10.1016/j.vaccine.2024.126438. Epub 2024 Oct 13.PMID: 39396886

Integration of Immune Responses and Transcriptomic Signatures Reveals the Efficacy of Maternal Genetic Vaccination in a Pregnant Model and Its Neonates.

Ahmed S, Liu G, Sadiq A, Farooq U, Yang H, Yongbin L, Yiyu S, Xiaodong W, Jiang X.Immunology. 2025 Jan 6. doi: 10.1111/imm.13880. Online ahead of print.PMID: 39762199

SARS-COV-2 Pre-Exposure Prophylaxis With Tixagevimab-Cilgavimab in Haematological, Immunocompromised Patients in the Omicron Era.

Hoechstetter MA, Hollwich EM, Illner D, Pham TT, von Bergwelt-Baildon M, Dreyling M, Wendtner CM.Eur J Haematol. 2025 Jan 6. doi: 10.1111/ejh.14377. Online ahead of print.PMID: 39757858

Emerging nanotechnology-driven drug delivery solutions for malaria: Addressing drug resistance and improving therapeutic success.

Mishra A, Qamar F, Ashrafi K, Fatima S, Samim M, Mohmmed A, Abdin MZ.Int J Pharm. 2025 Jan 7;670:125163. doi: 10.1016/j.ijpharm.2024.125163. Online ahead of print.PMID: 39788401

Corrigendum to "Influenza B/Yamagata - extinct, eradicated or hiding? [Vaccine 42/26 (2024) 126450]".

MacIntyre CR, Akhtar Z, Moa A.Vaccine. 2025 Jan 12;44:126486. doi: 10.1016/j.vaccine.2024.126486. Epub 2024 Oct 29.PMID: 39477710

R21 in Matrix-M adjuvant in UK malaria-naive adult men and non-pregnant women aged 18-45 years: an open-label, partially blinded, phase 1-2a controlled human malaria infection study.

Venkatraman N, Silman D, Bellamy D, Stockdale L, Bowyer G, Edwards NJ, Griffiths O, Lopez FR, Powlson J, Mair C, Folegatti PM, Datoo MS, Morter R, Minassian AM, Poulton I, Collins KA, Brod F, Angell-Manning P, Berrie E, Brendish N, Glenn G, Fries L, Baum J, Blagborough AM, Roberts R, Lawrie AM, Angus B, Lewis DJM, Faust SN, Ewer KJ, Hill AVS.Lancet Microbe. 2025 Jan 9:100867. doi: 10.1016/S2666-5247(24)00083-1. Online ahead of print.PMID: 39805301

Host-virus interactions during infection with a wild-type ILTV strain or a glycoprotein G deletion mutant ILTV vaccine strain in an ex vivo system.

Gopakumar G, Coppo MJ, Diaz-Méndez A, Hartley CA, Devlin JM.Microbiol Spectr. 2025 Jan 13:e0118324. doi: 10.1128/spectrum.01183-24. Online ahead of print.PMID: 39804092

In Silico-Guided Discovery of Polysaccharide Derivatives as Adjuvants in Nanoparticle Vaccines for Cancer Immunotherapy.

Cui Z, Shi C, An R, Tang Y, Li Y, Cao X, Jiang X, Liu CC, Xiao M, Xu L.ACS Nano. 2025 Jan 9. doi: 10.1021/acsnano.4c08898. Online ahead of print.PMID: 39788571

The highly pathogenic strain of porcine deltacoronavirus disrupts the intestinal barrier and causes diarrhea in newborn piglets.

Yao X, Lu WH, Qiao WT, Zhang YQ, Zhang BY, Li HX, Li JL.Virulence. 2025 Dec;16(1):2446742. doi: 10.1080/21505594.2024.2446742. Epub 2025 Jan 6.PMID: 39758030

Evaluating small extracellular vesicle-based vaccination across heterologous *Salmonella* strains isolated from wastewater.

Emerson LE, Bhimani S, Rainey AL, Maurelli AT, Ferraro MJ.Infect Immun. 2025 Jan 13:e0048524. doi: 10.1128/iai.00485-24. Online ahead of print.PMID: 39804074

Improved Uptake of Vaccinations in Children With Adverse Events Following Immunization After Specialist Immunization Service Intervention in an Australian Pediatric Hospital.

Yee JS, Doyle R, Wen SC.Pediatr Infect Dis J. 2025 Jan 7. doi: 10.1097/INF.0000000000004719. Online ahead of print.PMID: 39774648

Serological insights from SARS-CoV-2 heterologous prime and boost responses in Thailand.

Ward D, Pattarapreeyakul L, Pitaksalee R, Thawong N, Sawaengdee W, Tuntigumthon S, Patterson C, Tetteh K, Campino S, Dhepakson P, Mahasirimongkol S, Clark TG.Sci Rep. 2025 Jan 9;15(1):1519. doi: 10.1038/s41598-024-84392-2.PMID: 39789037

Development of monoclonal antibodies for ASFV K205R protein and precise mapping of linear antigenic epitopes.

Zhou L, Song J, Sun Z, Wang M, Sun J, Li Y, Zhu R, Jiao L, Zhuang G, Wang N, Hu H, Zhang G, Wu Y.Int J Biol Macromol. 2025 Jan 8;296:139701. doi: 10.1016/j.ijbiomac.2025.139701. Online ahead of print.PMID: 39793793

*Klebsiella pneumoniae* derived outer membrane vesicles mediated bacterial virulence, antibiotic resistance, host immune responses and clinical applications.

Li L, Xu X, Cheng P, Yu Z, Li M, Yu Z, Cheng W, Zhang W, Sun H, Song X.Virulence. 2025 Dec;16(1):2449722. doi: 10.1080/21505594.2025.2449722. Epub 2025 Jan 10.PMID: 39792030

Randomised trial of same vs opposite arm co-administration of inactivated influenza and SARS-CoV-2 mRNA vaccines.

Lee WS, Selva KJ, Audsley J, Kent HE, Reynaldi A, Schlub TE, Cromer D, Khoury DS, Peck H, Aban M, Vu MN, Zheng MZM, Chung AW, Koutsakos M, Tan HX, Wheatley AK, Juno JA, Rockman S, Davenport MP, Barr I, Kent SJ.JCI Insight. 2025 Jan 9:e187075. doi: 10.1172/jci.insight.187075. Online ahead of print.PMID: 39786918

Re: Using observational data to explore the hypothesis that a single dose of current HPV vaccines can provide durable protection: Reply to the commentary written by Christine Velicer, Alain Luxembourg, Ya-Ting Chen, Melvin Kohn, and Alfred Saah, Merck & Co., Inc., Kenilworth, NJ, USA on the IARC-India HPV vaccine study.

Muwonge R, Basu P; IARC-India HPV vaccine study consortium.Vaccine. 2025 Jan 12;44:125062. doi: 10.1016/j.vaccine.2023.06.030. Epub 2023 Jun 14.PMID: 37328351

Randomized controlled trial comparing the immunogenicity of experimental Salmonella Dublin siderophore receptor vaccines in calves.

Hayman KP, Sacquitne C, Rowson AD, Burkhardt DT, Peterson MP, Straub DE, McGill JL, Gorden PJ.Am J Vet Res. 2025 Jan 7:1-8. doi: 10.2460/ajvr.24.08.0215. Online ahead of print.PMID: 39773372

Using human papillomavirus (HPV) vaccine in controlled temperature chain (CTC): A solution looking for a problem? Or a solution to problems that are not systematically documented?

Spasenoska D, Bloem P, Akaba H, Kahn AL.Vaccine. 2025 Jan 12;44:126399. doi: 10.1016/j.vaccine.2024.126399. Epub 2024 Sep 28.PMID: 39343703

Multi-Stakeholder Call to Action for the Future of Vaccine Post-Marketing Monitoring: Proceedings from the First Beyond COVID-19 Monitoring Excellence (BeCOME) Conference.

Bauchau V, Bollaerts K, Bryan P, Buttery J, Davis K, Chen RT, Feikin DR, Fretta A, Frise S, Gandhi-Banga S, Izurieta HS, Jouquelet-Royer C, Khromava A, Li L, Long R, MacDonald S, Marcelon L, Massouh R, Meeraus W, Munoz FM, Naim K, Nordenberg D, Nohynek H, Rubino H, Salmon DA, Sellers S, Serradell L, Torcel-Pagnon L, Wilkins J.Drug Saf. 2025 Jan 10. doi: 10.1007/s40264-024-01510-9. Online ahead of print.PMID: 39792303

Parental Acceptance of Human Papillomavirus Vaccination Among Females Treated for Childhood Cancer and/or With Hematopoietic Stem Cell Transplantation: A Cross-Sectional Study.

Cai J, Cheung YT, Gao Y, Hu W, Chen J, Pui CH, Deng P, Fei Y, Cao Q, Hudson MM.Pediatr Blood Cancer. 2025 Jan 7:e31529. doi: 10.1002/pbc.31529. Online ahead of print.PMID: 39776139

Neutralizing antibody test supports booster strategy for young individuals after SARS-CoV-2 Omicron breakthrough.

Yao Y, Yang Y, Wu Q, Liu M, Bao W, Wang Q, Cheng M, Chen Y, Yu Y, Cai Y, Zhang M, Yao J, He H, Jin C, Zheng C, Jin T, Tong D.Eur J Med Res. 2025 Jan 6;30(1):7. doi: 10.1186/s40001-024-02240-5.PMID: 39757187

Isolated loss of vaccine immunity in the protein losings syndrome in a patient with a reverse one and a half ventricle palliation ("failing Fontan-like physiology").

Leroy M, Weis A, Backhoff D, Santibanez S, Mankertz A, Jux C.Cardiol Young. 2025 Jan 7:1-3. doi: 10.1017/S1047951124036369. Online ahead of print.PMID: 39763208

Long, Synthetic *Staphylococcus aureus* Type 8 Capsular Oligosaccharides Reveal Structural Epitopes for Effective Immune Recognition.

Østerlid KE, Sorieul C, Unione L, Li S, García-Sepúlveda C, Carboni F, Del Bino L, Berni F, Arda A, Overkleeft HS, van der Marel GA, Romano MR, Jiménez-Barbero J, Adamo R, Codée JDC.J Am Chem Soc. 2025 Jan 10. doi: 10.1021/jacs.4c16118. Online ahead of print.PMID: 39792791

A lineage 1 branch porcine reproductive and respiratory syndrome virus live vaccine candidate provides broad cross-protection against HP-like PRRSV in piglets.

Li C, Li J, Gong B, Xu H, Guo Z, Xiang L, Zhang S, Sun Q, Zhao J, Zhang M, Tang YD, Leng C, Wu J, Wang Q, Peng J, Zhou G, Liu H, An T, Cai X, Tian ZJ, Zhang H.Virulence. 2025 Dec;16(1):2451754. doi: 10.1080/21505594.2025.2451754. Epub 2025 Jan 12.PMID: 39800863

Cancer vaccines compensate for the insufficient induction of protective tumor-specific immunity of CD3 bispecific antibody therapy.

Middelburg J, Schaap G, Sluijter M, Lloyd K, Ovcinnikovs V, Schuurman J, van der Burg SH, Kemper K, van Hall T.J Immunother Cancer. 2025 Jan 11;13(1):e010331. doi: 10.1136/jitc-2024-010331.PMID: 39800374

Comparative Effects of Antibiotic and Antimicrobial Peptide on Growth Performance, Gut Morphology, Intestinal Lesion Score, Ileal Microbial Counts, and Immune Status in Broilers Challenged with Necrotic Enteritis.

Muneeb M, Khan EU, Ali M, Haque MNU, Khan MUZ, Ahmad S.Probiotics Antimicrob Proteins. 2025 Jan 10. doi: 10.1007/s12602-025-10448-y. Online ahead of print.PMID: 39789384

Toward a Complete Elucidation of the Primary Structure-Activity in Pentaerythritol-Based One-Component Ionizable Amphiphilic Janus Dendrimers for In Vivo Delivery of Luc-mRNA.

Sahoo D, Atochina-Vasserman EN, Lu J, Maurya DS, Ona N, Vasserman JA, Ni H, Berkihiser S, Park WJ, Weissman D, Percec V.Biomacromolecules. 2025 Jan 13;26(1):726-737. doi: 10.1021/acs.biomac.4c01599. Epub 2024 Dec 17.PMID: 39688403

Co-activating STING-TLR9 pathways promotes radiotherapy-induced cancer vaccination.

Sun Y, Liu L, He H, Cui G, Zheng Y, Ye C, Qu L, Sun Y, Ji J, Lammers T, Zhang Y, Zhong Z.J Control Release. 2025 Jan 6:S0168-3659(24)00934-9. doi: 10.1016/j.jconrel.2024.12.079. Online ahead of print.PMID: 39778743

The effectiveness of coercive measures in motivating vaccination: Evidence from China during the COVID-19 pandemic.

Guan Y.Glob Public Health. 2025 Dec;20(1):2445827. doi: 10.1080/17441692.2024.2445827. Epub 2025 Jan 7.PMID: 39773331

Key virulence factors responsible for differences in pathogenicity between clinically proven live-attenuated Japanese encephalitis vaccine SA14-14-2 and its pre-attenuated highly virulent parent SA14.

Song BH, Yun SI, Goldhardt JL, Kim J, Lee YM.PLoS Pathog. 2025 Jan 7;21(1):e1012844. doi: 10.1371/journal.ppat.1012844. Online ahead of print.PMID: 39775684

A bivalent COVID-19 mRNA vaccine elicited broad immune responses and protection against Omicron subvariants infection.

Liu J, Wang L, Kurtesi A, Budylowski P, Potts KG, Menon H, Tan Y, Samaan P, Liu X, Wang Y, Hu Q, Samson R, Qi F, Evseev D, John C, Ellestad KK, Fan Y, Budiman F, Tohan ER, Udayakumar S, Yang J, Marcusson EG, Gingras AC, Mahoney DJ, Ostrowski MA, Martin-Orozco N.NPJ Vaccines. 2025 Jan 10;10(1):4. doi: 10.1038/s41541-025-01062-8.PMID: 39788981

COVID-19 and the impact of vaccination on the disease morbidity of Polish paediatric patients with inflammatory bowel disease.

Derda E, Meglicka M, Wiernicka A, Osiecki M, Kierkuś J, Szymańska E.Acta Paediatr. 2025 Jan 6. doi: 10.1111/apa.17574. Online ahead of print.PMID: 39757999

Expression of Concern for Teixeira et al., "Immunogenicity of a Prime-Boost Vaccine Containing the Circumsporozoite Proteins of Plasmodium vivax in Rodents".

American Society for Microbiology.Infect Immun. 2025 Jan 13:e0054424. doi: 10.1128/iai.00544-24. Online ahead of print.PMID: 39804089

Investigating the Immunogenic Properties of a Mutagenized NS3/4A-Based HCV Genotype 3a DNA Vaccine.

Chutoam P, Srisucharitpanit K, Intamaso U.Viral Immunol. 2025 Jan 9. doi: 10.1089/vim.2024.0063. Online ahead of print.PMID: 39792469

A surrogate BSL2-compliant infection model recapitulating key aspects of human Marburg virus disease.

Yang W, Zhou W, Liang B, Hu X, Wang S, Wang Z, Wang T, Xia X, Feng N, Zhao Y, Yan F.Emerg Microbes Infect. 2025 Dec;14(1):2449083. doi: 10.1080/22221751.2024.2449083. Epub 2025 Jan 12.PMID: 39745141

Perspectives on vaccination among unvaccinated members of a Canadian indigenous population.

Shields T, King KD, Cripps S, Edwards SA, Kwong JC, Mecredy G, Chaurasia A, Douglas O, Cooke M.Vaccine. 2025 Jan 9;47:126665. doi: 10.1016/j.vaccine.2024.126665. Online ahead of print.PMID: 39793536

A universal live vaccine platform against multiple serotypes Streptococcus suis based on polyvalent antigen protein.

Li W, Li YA, Wang S, Shi H.Vaccine. 2025 Jan 7;47:126700. doi: 10.1016/j.vaccine.2024.126700. Online ahead of print.PMID: 39778475

Preparing for the unthinkable: The resurgence of vaccine-preventable diseases.

Shah SS, Shaughnessy EE, Kinnear B.J Hosp Med. 2025 Jan 10. doi: 10.1002/jhm.13589. Online ahead of print.PMID: 39797463

Corrigendum to "Evaluation of the potential impact and cost-effectiveness of respiratory syncytial virus (RSV) prevention strategies for infants in Argentina" [Vaccine. Volume 42, Issue 23, 3 October 2024, 126234].

Guiñazú G, Dvorkin J, Mahmud S, Baral R, Pecenka C, Libster R, Clark A, Caballero MT.Vaccine. 2025 Jan 12;44:126402. doi: 10.1016/j.vaccine.2024.126402. Epub 2024 Oct 2.PMID: 39362800

Household transmission of SARS-CoV-2 in five US jurisdictions: Comparison of Delta and Omicron variants.

Baker JM, Nakayama JY, O'Hegarty M, McGowan A, Teran RA, Bart SM, Sosa LE, Brockmeyer J, English K, Mosack K, Bhattacharyya S, Khubbar M, Yerkes NR, Campos B, Paegle A, McGee J, Herrera R, Pearlowitz M, Williams TW, Kirking HL, Tate JE.PLoS One. 2025 Jan 9;20(1):e0313680. doi: 10.1371/journal.pone.0313680. eCollection 2025.PMID: 39787187

Protection induced by recombinant vaccinia virus targeting the ROP4 of Toxoplasma gondii in mice.

Yoon KW, Eom GD, Mao J, Kim MJ, Heo SI, Kang HJ, Chu KB, Moon EK, Quan FS.Exp Parasitol. 2025 Jan 10:108900. doi: 10.1016/j.exppara.2025.108900. Online ahead of print.PMID: 39800042

A PDMS/chitosan/MPMs composite film based on multi-field coupling enhancement for African swine fever virus P72 protein detection.

Guo X, Liu Y, Zhao D, Duan Q, Sang S.Mikrochim Acta. 2025 Jan 11;192(2):68. doi: 10.1007/s00604-024-06928-7.PMID: 39799276

Optimizing hepatitis B virus seroprotection in thoracic organ transplantation: The role of HepB-CpG (Heplisav-B) vaccination schedule.

Chiu CY, Sampathkumar P, Brumble LM, Vikram HR, Watt KD, Beam E.Vaccine. 2025 Jan 9;47:126705. doi: 10.1016/j.vaccine.2025.126705. Online ahead of print.PMID: 39793537

Identifying people with post-COVID condition using linked, population-based administrative health data from Manitoba, Canada: prevalence and predictors in a cohort of COVID-positive individuals.

Katz A, Ekuma O, Enns JE, Cavett T, Singer A, Sanchez-Ramirez DC, Keynan Y, Lix L, Walld R, Yogendran M, Nickel NC, Urquia M, Star L, Olafson K, Logsetty S, Spiwak R, Waruk J, Matharaarachichi S.BMJ Open. 2025 Jan 9;15(1):e087920. doi: 10.1136/bmjopen-2024-087920.PMID: 39788761

Immunogenicity in mice and non-human primates of an Advax-CpG55.2-adjuvanted recombinant hemagglutinin seasonal quadrivalent influenza vaccine.

Honda-Okubo Y, Vaghasiya U, Petrovsky N.Vaccine. 2025 Jan 10;47:126707. doi: 10.1016/j.vaccine.2025.126707. Online ahead of print.PMID: 39798433

Anti-tick vaccine in Uganda - from bench to field.

de la Fuente J, Gortázar C, Contreras M, Kabi F, Kasaija P, Mugerwa S, Rutaisire J.Vaccine. 2025 Jan 6:126695. doi: 10.1016/j.vaccine.2024.126695. Online ahead of print.PMID: 39765365

Long-term efficacy and anamnestic response of hepatitis B vaccine derived from Chinese hamster ovary cell after 18-20 years.

Su Q, Qiu F, Gao Z, Zhao Y, Ma J, Hao Z, Zhang S, Shen L, Bi S, Wang F, Zhou H.Vaccine. 2025 Jan 7;47:126655. doi: 10.1016/j.vaccine.2024.126655. Online ahead of print.PMID: 39787797

A Novel Microbe, Immunization Deaths, and Vaccination on Trial: BCG and the Lübeck Disaster of 1930.

Nakayama DK.Am Surg. 2025 Jan 9:31348251313994. doi: 10.1177/00031348251313994. Online ahead of print.PMID: 39788567

Altering the intracellular trafficking of Necator americanus GST-1 antigen yields novel hookworm mRNA vaccine candidates.

Silva de Oliveira A, Versteeg L, Briggs N, Adhikari R, Villar MJ, Redd JR, Hotez P, Bottazzi ME, Pollet J.PLoS Negl Trop Dis. 2025 Jan 10;19(1):e0012809. doi: 10.1371/journal.pntd.0012809. Online ahead of print.PMID: 39792959

Vaccination against measles-mumps-rubella and rates of non-targeted infectious disease hospitalisations: Nationwide register-based cohort studies in Denmark, Finland, Norway, and Sweden.

Gehrt L, Möller S, Englund H, Laake I, Nieminen H, Feiring B, Lahdenkari M, Palmu AA, Trogstad L, Benn CS, Sørup S.J Infect. 2025 Jan 7:106365. doi: 10.1016/j.jinf.2024.106365. Online ahead of print.PMID: 39788159

Rapid quantitative analysis of double-stranded plasmid DNA with capillary gel electrophoresis for applications in quality control and radiation research.

Hahn MB.Sci Rep. 2025 Jan 7;15(1):1068. doi: 10.1038/s41598-025-85132-w.PMID: 39774149

Machine Learning for Personalized and Prediction of Longitudinal COVID-19 Vaccine Responses in Transplant Recipients.

Daungsupawong H, Wiwanitkit V.Am J Transplant. 2025 Jan 8:S1600-6135(25)00001-2. doi: 10.1016/j.ajt.2025.01.001. Online ahead of print.PMID: 39793898

Effect of text message reminders to improve paediatric immunisation rates: a randomised controlled quality improvement project.

Rosen K, Krelle H, King WC, Klapheke N, Pina P, Anderman J, Chung A, Mendoza F, Bagheri A, Stadelman J, Tsuruo S, Horwitz LI.BMJ Qual Saf. 2025 Jan 6:bmjqs-2024-017893. doi: 10.1136/bmjqs-2024-017893. Online ahead of print.PMID: 39762025

Symptom Evolution in Individuals with Ongoing Symptomatic COVID-19 and Post COVID-19 Syndrome After SARS-CoV-2 Vaccination Versus Influenza Vaccination.

Rjoob K, Antonelli M, Murray B, Molteni E, Cheetham N, Canas LS, Modat M, Pujol JC, Hu C, Bowyer V, Wolf J, Spector TD, Ourselin S, Hammers A, Duncan EL, Steves CJ, Sudre CH.J Infect. 2025 Jan 10:106406. doi: 10.1016/j.jinf.2024.106406. Online ahead of print.PMID: 39800064

Effects of different educational interventions on cervical cancer knowledge and human papillomavirus vaccination uptake among young women in Japan: Preliminary results of a cluster randomized controlled trial.

Takahashi Y, Sasamori Y, Higuchi R, Kaku A, Kumagai T, Watanabe S, Nishizawa M, Takasaki K, Nishida H, Ichinose T, Hirano M, Miyagawa Y, Hiraike H, Kido K, Ishikawa H, Nagasaka K.PLoS One. 2025 Jan 7;20(1):e0311588. doi: 10.1371/journal.pone.0311588. eCollection 2025.PMID: 39774513

Mass doses of fractional pneumococcal vaccine in humanitarian settings.

Russell FM, Mulholland K, Greenslade L.Lancet Infect Dis. 2025 Jan 8:S1473-3099(24)00768-0. doi: 10.1016/S1473-3099(24)00768-0. Online ahead of print.PMID: 39798582

A numerical evaluation of the economic tradeoff of vaccination against chikungunya virus in Brazil.

Albani VVL, Massad E.Math Biosci. 2025 Jan 8:109376. doi: 10.1016/j.mbs.2025.109376. Online ahead of print.PMID: 39793922

mosGILT antibodies interfere with Plasmodium sporogony in Anopheles gambiae.

Dolan B, Correa Gaviria T, Dong Y, Cresswell P, Dimopoulos G, Chuang YM, Fikrig E.Nat Commun. 2025 Jan 11;16(1):592. doi: 10.1038/s41467-025-55902-1.PMID: 39799117

CryoEM structure of an MHC-I/TAPBPR peptide-bound intermediate reveals the mechanism of antigen proofreading.

Sun Y, Pumroy RA, Mallik L, Chaudhuri A, Wang C, Hwang D, Danon JN, Dasteh Goli K, Moiseenkova-Bell VY, Sgourakis NG.Proc Natl Acad Sci U S A. 2025 Jan 14;122(2):e2416992122. doi: 10.1073/pnas.2416992122. Epub 2025 Jan 9.PMID: 39786927

Decreasing hepatitis B seroprevalence in pregnant women in Taiwan between 2016 and 2021: a claim-based cohort study.

Chien LN, Vargas-Zambrano JC, Ku MY.BMC Public Health. 2025 Jan 9;25(1):111. doi: 10.1186/s12889-025-21308-3.PMID: 39789546

Identification of a broad-inhibition influenza neuraminidase antibody from pre-existing memory B cells.

Wang X, Kong H, Chu B, Yang Q, Lin C, Liu R, Chen C, Gao Y, Wang G, Wang D, Qin C, Ye X, Yu L, Xu X, Jin J, Sun R, Chen H, Wu X, Zhang Z.Cell Host Microbe. 2025 Jan 8;33(1):151-166.e8. doi: 10.1016/j.chom.2024.12.004. Epub 2024 Dec 30.PMID: 39740671

[Chinese expert consensus on the diagnosis and treatment of pneumonia in the elderly (2024 Edition)].

Respiratory Branch of Chinese Geriatrics Society.Zhonghua Jie He He Hu Xi Za Zhi. 2025 Jan 12;48(1):18-34. doi: 10.3760/cma.j.cn112147-20240611-00328.PMID: 39757093

COVID scientists as rhetorical citizens: Persuasive op-eds and public debate over science policy.

Syfert C, Ceccarelli L.Public Underst Sci. 2025 Jan 10:9636625241304064. doi: 10.1177/09636625241304064. Online ahead of print.PMID: 39791249

Synthetic rational design of live-attenuated Zika viruses based on a computational model.

Roopin M, Zafrir Z, Siridechadilok B, Suphatrakul A, Julander J, Tuller T.Nucleic Acids Res. 2025 Jan 11;53(2):gkae1313. doi: 10.1093/nar/gkae1313.PMID: 39797731

Neutralization of omicron subvariants and antigenic cartography following multiple COVID 19 vaccinations and repeated omicron non JN.1 or JN.1 infections.

Suntronwong N, Kanokudom S, Duangchinda T, Chantima W, Pakchotanon P, Klinfueng S, Puenpa J, Thatsanathorn T, Wanlapakorn N, Poovorawan Y.Sci Rep. 2025 Jan 9;15(1):1454. doi: 10.1038/s41598-024-84138-0.PMID: 39789099

A cost analysis of the anaesthetic management of patients with confirmed or suspected coronavirus disease 2019 (COVID-19) in a tertiary referral hospital in Queensland, Australia.

Hodge AT, Tognolini AR, Martin EK, Eley VA.Anaesth Intensive Care. 2025 Jan 6:310057X241272108. doi: 10.1177/0310057X241272108. Online ahead of print.PMID: 39757841

Infectious disease hospitalization after receipt of human papillomavirus vaccine: a nationwide register-based cohort study among Danish, Finnish, Norwegian, and Swedish girls.

Laake I, Feiring B, Gehrt L, Englund H, Lahdenkari M, Sørup S, Nieminen H, Trogstad L.Eur J Epidemiol. 2025 Jan 6. doi: 10.1007/s10654-024-01197-3. Online ahead of print.PMID: 39760962

Evaluation of anti-SARS-CoV-2 RBD antibody response after booster dose of SpikoGen® in individuals with two previous doses of Sinopharm and its association with HLA-DR and -DQ alleles.

Hajijafary AH, Malekmohammad S, Feizi A, Bemani P.Hum Immunol. 2025 Jan 6;86(1):111227. doi: 10.1016/j.humimm.2024.111227. Online ahead of print.PMID: 39764935

Isolation and structure of broad SIV-neutralizing antibodies reveal a proximal helical MPER epitope recognized by a rhesus multi-donor class.

Gorman J, Du R, Lai YT, Ahmadi MS, King HAD, Song K, Manalang K, Gonelli CA, Schramm CA, Cheng C, Nguyen R, Ambrozak D, Druz A, Shen CH, Yang Y, Douek DC, Kwong PD, Roederer M, Mason RD.Cell Rep. 2025 Jan 8;44(1):115163. doi: 10.1016/j.celrep.2024.115163. Online ahead of print.PMID: 39792559

Enhancing vaccine half-life as a novel strategy for improving immune response durability of subunit vaccines.

Shen Z, Li C, Song W, Liu L, Kong Y, Huang A, Bao Q, Ying T, Wu Y.PLoS Pathog. 2025 Jan 8;21(1):e1012845. doi: 10.1371/journal.ppat.1012845. Online ahead of print.PMID: 39778011

Association Between Child Varicella Vaccination and Zoster in Household Adults: A Retrospective Japanese Cohort Study.

Sato S, Ono S, Sasabuchi Y, Michihata N, Uemura K, Yasunaga H.Acta Paediatr. 2025 Jan 13. doi: 10.1111/apa.17582. Online ahead of print.PMID: 39804145

Antimicrobial susceptibility profiles of Mycoplasma hyosynoviae strains isolated from five European countries between 2018 and 2023.

Klein U, Földi D, Nagy EZ, Tóth L, Belecz N, Költő K, Wehmann E, Marton S, Merenda M, Gastaldelli M, Catania S, Spergser J, Siesenop U, Vyt P, Bányai K, Kreizinger Z, Depondt W, Gyuranecz M.Sci Rep. 2025 Jan 7;15(1):1243. doi: 10.1038/s41598-024-85052-1.PMID: 39774192

The role of a vaccine booster for a fractional order model of the dynamic of COVID-19: a case study in Thailand.

Pongsumpun P, Pongsumpun P, Tang IM, Lamwong J.Sci Rep. 2025 Jan 7;15(1):1162. doi: 10.1038/s41598-024-80390-6.PMID: 39774616

Multivalent S2 subunit vaccines provide broad protection against Clade 1 sarbecoviruses in female mice.

Halfmann PJ, Patel RS, Loeffler K, Yasuhara A, Van De Velde LA, Yang JE, Chervin J, Troxell C, Huang M, Zheng N, Wright ER, Thomas PG, Wilson PC, Kawaoka Y, Kane RS.Nat Commun. 2025 Jan 7;16(1):462. doi: 10.1038/s41467-025-55824-y.PMID: 39774966

Engineered Mycobacterium tuberculosis triple-kill-switch strain provides controlled tuberculosis infection in animal models.

Wang X, Su H, Wallach JB, Wagner JC, Braunecker BJ, Gardner M, Guinn KM, Howard NC, Klevorn T, Lin K, Liu YJ, Liu Y, Mugahid D, Rodgers M, Sixsmith J, Wakabayashi S, Zhu J, Zimmerman M, Dartois V, Flynn JL, Lin PL, Ehrt S, Fortune SM, Rubin EJ, Schnappinger D.Nat Microbiol. 2025 Jan 10. doi: 10.1038/s41564-024-01913-5. Online ahead of print.PMID: 39794471

Safety and immunogenicity of an optimized self-replicating RNA platform for low dose or single dose vaccine applications: a randomized, open label Phase I study in healthy volunteers.

Maine CJ, Miyake-Stoner SJ, Spasova DS, Picarda G, Chou AC, Brand ED, Olesiuk MD, Domingo CC, Little HJ, Goodman TT, Posy JL, Gonzalez J, Bayone TL, Sparks J, Gary EN, Xiang Z, Tursi NJ, Hojecki CE, Ertl HCJ, Weiner DB, Casmil IC, Blakney AK, Essink B, Somodevilla G, Wang NS, Geall AJ, Goldberg Z, Aliahmad P.Nat Commun. 2025 Jan 7;16(1):456. doi: 10.1038/s41467-025-55843-9.PMID: 39774967

Influenza A Virus H7 nanobody recognizes a conserved immunodominant epitope on hemagglutinin head and confers heterosubtypic protection.

Chen ZS, Huang HC, Wang X, Schön K, Jia Y, Lebens M, Besavilla DF, Murti JR, Ji Y, Sarshad AA, Deng G, Zhu Q, Angeletti D.Nat Commun. 2025 Jan 9;16(1):432. doi: 10.1038/s41467-024-55193-y.PMID: 39788944

Chest Pain With Significantly Elevated Troponins: Be Wary of False Positives.

Narayanan TT, Naneishvili T, Moody W, Townend J, Ludman P.Cureus. 2025 Jan 6;17(1):e77018. doi: 10.7759/cureus.77018. eCollection 2025 Jan.PMID: 39777375

Post hoc analysis: 6 Months immunogenicity after third dose of BNT162b2 vs JNJ-78436735 After Two Doses of BNT162b2 vaccine in Solid Organ Transplant Recipients.

Natori Y, Martin E, Mattiazzi A, Arosemena L, Burke GW, Munagala MR, Manickavel S, Sota K, Pallikkuth S, Chen J, Bini J, Simkins J, Anjan S, Vianna RM, Guerra G.Immunol Lett. 2025 Jan 9:106968. doi: 10.1016/j.imlet.2024.106968. Online ahead of print.PMID: 39798807

Behavioral intention to receive self-financed and fully-subsidized herpes zoster vaccines among community-living older adults in Hong Kong: A random telephone survey.

Liang X, Gu E, Cheung DH, Ye D, Yu FY, Fang Y, Mo PKH, Wang Z.Hum Vaccin Immunother. 2025 Dec;21(1):2448890. doi: 10.1080/21645515.2024.2448890. Epub 2025 Jan 6.PMID: 39763200

Using an inferior decoy alternative to nudge COVID-19 vaccination.

Grimani A, Stoffel ST, von Wagner C, Sniehotta FF, Vlaev I.Sci Rep. 2025 Jan 11;15(1):1672. doi: 10.1038/s41598-024-84853-8.PMID: 39799148

Socioeconomic disparities in influenza vaccination uptake: impact of the COVID-19 pandemic in South Korea.

Yeo M, Seo J, Lim J.BMC Public Health. 2025 Jan 6;25(1):42. doi: 10.1186/s12889-024-21254-6.PMID: 39762824

Two coding-complete genomes of porcine reproductive and respiratory syndrome virus 2 (PRRSV-2) from field clinical samples in the Philippines.

Montecillo A, Ferrer JBC, Baybay Z, Balmes RM, Falconite-Cudal R, Alba MG, Fabros KA, Dela Paz TJ, Villegas LC, Cariaso W, Pantua H.Microbiol Resour Announc. 2025 Jan 8:e0116424. doi: 10.1128/mra.01164-24. Online ahead of print.PMID: 39772906

Impact of RSVpreF vaccination on reducing the burden of respiratory syncytial virus in infants and older adults.

Du Z, Pandey A, Moghadas SM, Bai Y, Wang L, Matrajt L, Singer BH, Galvani AP.Nat Med. 2025 Jan 9. doi: 10.1038/s41591-024-03431-7. Online ahead of print.PMID: 39789324

Immunogenicity of a recombinant chimera composed of CROP domain segments from the hemorrhagic and lethal toxins of Paeniclostridium sordellii.

Rodrigues RR, Conrad N, Alves Ferreira MR, Júnior CM, Ferreira Alves ML, Sedrez PA, Müller V, Neis A, Bilhalva MA, Galvão CC, Leivas Leite FP, Conceição FR.Anaerobe. 2025 Jan 8:102938. doi: 10.1016/j.anaerobe.2025.102938. Online ahead of print.PMID: 39793918

Outbreak of Rotavirus Diarrheal Infection among Adults in King County, Washington, January-June 2023.

Ma J, Kumbhakar RG, Casto A, Chow EJ, Englund JA, Gautam R, Jaimes J, Tate JE, Smart S, Mani NS, Cohen SA, Hussein A, Rietberg K, Bryson-Cahn C, Fang FC.J Infect Dis. 2025 Jan 8:jiaf013. doi: 10.1093/infdis/jiaf013. Online ahead of print.PMID: 39774704

An engineered immunogen activates diverse HIV broadly neutralizing antibody precursors and promotes acquisition of improbable mutations.

Swanson OM, Zhang QE, Van Itallie E, Tian M, Brown AR, Harris C, Kapingidza AB, Rhodes B, Smith LM, Venkatayogi S, Cronin K, Frazier M, Parks R, Bar M, Jiang C, Martin Beem JS, Cheng HL, Davis J, McGovern K, Newman A, Edwards RJ, Cain D, Alam SM, Wiehe K, Saunders KO, Acharya P, Alt F, Haynes BF, Azoitei ML.Sci Transl Med. 2025 Jan 8;17(780):eadr2218. doi: 10.1126/scitranslmed.adr2218. Epub 2025 Jan 8.PMID: 39772772

The clinical range and management of spontaneous rupture of the pathological malarial spleen (SRPMS): A short case series from Sudan.

Eltahir EA, Ibnouf MAM, Ibnouf MMAM, Ahmed MH, Imam MH, Ahmed A.Int J Surg Case Rep. 2025 Jan 6;127:110818. doi: 10.1016/j.ijscr.2025.110818. Online ahead of print.PMID: 39778495

An in vitro nanocarrier-based B cell antigen loading system; tumor growth suppression via transfusion of the antigen-loaded B cells in vivo.

Kawaguchi Y, Shimizu T, Takata H, Ando H, Ishida T.Int J Pharm. 2025 Jan 7:125189. doi: 10.1016/j.ijpharm.2025.125189. Online ahead of print.PMID: 39788395

Expanded Recommendations for Use of Pneumococcal Conjugate Vaccines Among Adults Aged ≥50 Years: Recommendations of the Advisory Committee on Immunization Practices - United States, 2024.

Kobayashi M, Leidner AJ, Gierke R, Xing W, Accorsi E, Moro P, Kamboj M, Kuchel GA, Schechter R, Loehr J, Cohen AL.MMWR Morb Mortal Wkly Rep. 2025 Jan 9;74(1):1-8. doi: 10.15585/mmwr.mm7401a1.PMID: 39773952

Retraction Notice to "New relapse of multiple sclerosis and neuromyelitis optica as a potential adverse event of AstraZeneca AZD1222 vaccination for COVID-19" [Multiple Sclerosis and Related Disorders 57 (2022) 103321].

Fragoso YD, Gomes S, Gonçalves MVM, Mendes JE, de Oliveira BES, Rocha CF, Cruz Dos Santos GA, Tauil CB, Araujo RV, Peron JPS.Mult Scler Relat Disord. 2025 Jan 9;94:106260. doi: 10.1016/j.msard.2025.106260. Online ahead of print.PMID: 39793521

A new RH5.1/Matrix-M candidate malaria vaccine: a promising finding to boost malaria elimination in Africa.

Dereje N, Fallah MP, Tajudeen R, Kaseya J.Lancet Infect Dis. 2025 Jan 7:S1473-3099(24)00860-0. doi: 10.1016/S1473-3099(24)00860-0. Online ahead of print.PMID: 39793595

Case-only analysis of routine surveillance data: detection of increased vaccine breakthrough infections with SARS-CoV-2 variants in Europe.

Brown JP, Mook P, Vanhaverbeke M, Gimma A, Hagan J, Singini I, Avdičová M, Cullen G, Dotsenko L, Mossong J, Sadkowska-Todys M, Suija H, Bundle N, Pebody R.Epidemiol Infect. 2025 Jan 6:1-18. doi: 10.1017/S0950268824001833. Online ahead of print.PMID: 39757926

# Patentes registradas en Patentscope

Estrategia de búqueda: (Vaccine) AND DP:([06.01.2025 TO 13.01.2025]) *as the publication date 44 records.*

1.WO/2025/007890NOVEL VACCINE DELIVERY SYSTEM

WO - 09.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/CN2024/103366Solicitante XIAMEN UNIVERSITYInventor/a GE, Shengxiang

Provided is a novel vaccine delivery system. The novel vaccine delivery system can realize lymph node co-delivery of an antigen and an adjuvant, thereby effectively enhancing the immune-promoting effect of the adjuvant, and significantly improving the antigen-specific immune response; moreover, the vaccine delivery system is superior to an oil-type composite adjuvant system that is commonly clinically used. Particularly, the vaccine delivery system exhibits a significant anti-tumor effect in tumor prevention and treatment, thereby providing a new idea for development and application of a novel vaccine delivery system.

2.WO/2025/007995TUMOR VACCINE, AND PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 09.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/CN2024/111762Solicitante THE GBA NATIONAL INSTITUTE FOR NANOTECHNOLOGY INNOVATIONInventor/a ZHAO, Ruifang

The present application belongs to the technical field of medicine. Disclosed are a tumor vaccine, and a preparation method therefor and the use thereof. The raw materials of the tumor vaccine comprise a bacterial cell membrane and a liposome complex, wherein the raw materials of the liposome complex comprise a liposome and an aromatic lipid compound. The tumor vaccine provided includes the bacterial cell membrane and the liposome compound, wherein the liposome compound can fuse cells, the bacterial cell membrane can activate immunity, and the two used in combination can generate an excellent synergistic effect. Therefore, the immune escape state of the tumor cells is changed, DC cells infiltrating the tumor tissue can recognize and phagocytize tumor cells, and tumor antigens are presented, so that an in situ tumor vaccine is formed to achieve the anti-tumor effect. Moreover, the tumor vaccine provided has conventional raw materials, a simple preparation method, and good uniformity, which are beneficial to practical production and application.

3.WO/2025/007754TUMOR VACCINE FOR MULTI-TARGET IMMUNE CHECKPOINT TUMOR ANTIBODY LOADED IMMUNE CELLS, AND USE OF TUMOR VACCINE

WO - 09.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/CN2024/100346Solicitante THE FIRST AFFILIATED HOSPITAL OF ZHENGZHOU UNIVERSITYInventor/a MENG, Hui

The present invention relates to the technical field of medicine, and provides a tumor vaccine for multi-target immune checkpoint tumor antibody loaded immune cells, and a use of the tumor vaccine. The tumor vaccine is obtained by gene transduction of a ZG16 recombinant protein or a LECTIN short peptide to DCs or in-vitro incubation of a ZG16 recombinant protein, a LECTIN short peptide, and DCs. According to the present invention, combination of ZG16 and DCs based on a ZG16 gene transduction method can up-regulate CD40 expression of the DCs, and promote maturation of the DCs. In addition, in-vitro incubation of the ZG16 recombinant protein, the LECTIN short peptide, and the DCs can up-regulate the expression of CD40 on the surface of the DCs by means of intervention and direct combination, and promote the function of the DCs, thereby effectively reducing immunosuppression in solid tumors.

4.4486376IMPFSTOFFKONJUGATE AUS TRANSMUKOSALEM AMPHIPHILEM PROTEIN

EP - 08.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 23712999Solicitante MASSACHUSETTS INST TECHNOLOGYInventor/a IRVINE DARRELL J

What is disclosed is a vaccine comprising an immunogen conjugated to an albumin- binding polymer-lipid tail, wherein the vaccine is suitable for transmucosal (*e.g,* intranasal) administration. Also disclosed is a method of using the vaccine to immunize a subject by transmucosal (*e.g*, intranasal) administration of an effective amount of the vaccine, alone or with an adjuvant.

5.20250009871APPLICATION OF NOVEL CORONAVIRUS VACCINE PEPTIDE AND NANOEMULSION PREPARATION THEREOF IN PREVENTION OF NOVEL CORONAVIRUS WILD AND MUTANT STRAINS

US - 09.01.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18564932Solicitante SHANGHAI INSTITUTE OF MATERIA MEDICA, CHINESE ACADEMY OF SCIENCESInventor/a Likun GONG

Disclosed are an application of a coronavirus SARS-CoV-2 vaccine polypeptide, a polypeptide composition and a nanoemulsion preparation thereof in the prevention of coronavirus SARS-CoV-2 wild and mutant strain infections. Specifically, provided is a coronavirus SARS-CoV-2 vaccine polypeptide having an amino acid sequence derived from an S protein of SARS-CoV-2 wild and mutant strains, the vaccine polypeptide can enable the body to generate high-level and durable humoral immune responses against SARS-CoV-2 and to produce high titers of RBD-binding antibodies and neutralizing antibodies that block the binding of RBD to ACE2. The vaccine polypeptide can be used to prevent infections of SARS-CoV-2 wild strain and B.1.1.7, B.1.351, B.1.617, B.1.1.529 and other mutant strains.

6.20250009861ANTI-CANCER VACCINE COMPOSITION COMPRISING PEPTIDES DERIVED FROM TUMOR-ASSOCIATED ANTIGEN, AND ADJUVANT CONSISTING OF LIPOPEPTIDE AND IMMUNOACTIVE SUBSTANCE, AND USE THEREOF

US - 09.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud 18694931Solicitante CHA VACCINE RESEARCH INSTITUTE CO., LTDInventor/a Jung Sun Yum

The present invention pertains to: an anti-cancer vaccine composition comprising [peptides derived from a tumor-associated antigen (TAA)] and [an adjuvant consisting of a lipopeptide and an immunoactive substance]; and a use thereof. Specifically, the peptides derived from a tumor-associated antigen specifically bind to a human leukocyte antigen (HLA), a combination of the peptides having the above characteristics is mixed with

the adjuvant in an optimal ratio to prepare a vaccine composition, and the vaccine composition is used for preventing or treating cancer.

7.WO/2025/006263DESIGN OF UNIVERSAL INFLUENZA VACCINE CANDIDATES VIA ANTIGEN REORIENTATION

WO - 02.01.2025

Clasificación Internacional Nº de solicitud PCT/US2024/034466Solicitante CZ BIOHUB SF, LLCInventor/a XU, Duo

New vaccine compositions comprising a modified antigen H7 HA bound to the surface of an adjuvant or carrier by electrostatic interactions are disclosed. The antigen of the vaccine composition is presented in a defined orientation on an adjuvant surface such that epitope accessibility is altered, and an immune response is redirected toward specific epitopes. In some embodiments the vaccine composition comprises one or more recombinant antigen polypeptides adsorbed to an alum particle. In some embodiments, the recombinant antigen polypeptide comprises a Region of Repetitive Carboxylic Groups (RRC) or a Region of Repetitive Lysyl/Guanidino Groups (RRL).

8.20250000967EXOSOME-BASED ANTIVIRAL VACCINE AND MANUFACTURING METHOD THEREOF

US - 02.01.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18708756Solicitante CK-EXOGENE CO., LTD.Inventor/a Jae Young KIM

The present invention relates to an exosome platform-based antiviral vaccine. with the ability to induce a strong immune response to viruses and induce a stable and long-term immune response even to viruses with frequent mutations, the exosome platform-based antiviral vaccine can be utilized effectively for use as an antiviral vaccine.

9.20250009867COXSACKIEVIRUS B4 STRAIN AND APPLICATION THEREOF

US - 09.01.2025

Clasificación Internacional A61K 39/125Nº de solicitud 18792611Solicitante Institute of Medical Biology, Chinese Academy of Medical SciencesInventor/a Shaohui Ma

A coxsackievirus B4 strain and application thereof are disclosed. The strain is named KM140-G01 and is preserved in China Center for Type Culture Collection (CCTCC) on Jun. 18, 2023, and the preservation number is CCTCC NO: V202356, the preservation address is Wuhan University, China. The strain is a humanized coxsackievirus B4 wild type single purified strain, and has strong virus replication capacity, good genetic stability and immunogenicity; the strain can be applied to the development of human coxsackievirus B4 vaccine production strains, and is suitable for the development of attenuated coxsackievirus B4 vaccine and inactivated coxsackievirus B4 vaccine; the method can also be used for establishing an infection model on Vero cells and suckling mice, and is used for CVB4 infection and pathogenic mechanism research, CVB4 vaccine evaluation and antiviral drug screening.

10.WO/2025/000972RECOMBINANT ONCOLYTIC VACCINIA VIRUS AND USE THEREOF

WO - 02.01.2025

Clasificación Internacional C12N 7/01Nº de solicitud PCT/CN2023/140367Solicitante SUZHOU ONLYV BIOTECHNOLOGY LIMITED COMPANYInventor/a JU, Songguang

Provided in the present invention is a recombinant oncolytic vaccinia virus, which is operably inserted into a synonymously mutated exogenous gene capable of expressing 4-1BBL; and also provided is the use of the recombinant oncolytic vaccinia virus in the preparation of a drug for preventing or treating tumors and cancers. The present invention has the following beneficial effects: the synonymous-mutation-based recombinant vaccinia virus VV-mH4-1BBL retains the original oncolytic effect of the oncolytic virus and the functions thereof of initiating and enhancing anti-tumor immune responses, and improves the safety by means of deleting the TK gene; 4-1BBL is highly expressed on the surface of a tumor cell, such that 4-1BBL can enhance the anti-tumor immunity by means of exciting a 4-1BB signal from 4-1BB+ immune cells (including T cells) in the tumor microenvironment, and 4-1BBL is also confined within tumor tissues to exert the function thereof in a centralized manner, thereby avoiding potential systemic toxic side effects; and the introduction of a synonymous mutation site enables the virus to detect the expression of a therapeutic (exogenous) 4-1BBL gene during treatment.

11.4486769IMPFSTOFF MIT EINEM ANTIKÖRPER ODER EINEM FC-HALTIGEN FUSIONSPROTEIN MIT EINEM FC-TEIL EINES ANTIKÖRPERS

EP - 08.01.2025

Clasificación Internacional C07K 16/08Nº de solicitud 23707954Solicitante HEIDELBERG IMMUNOTHERAPEUTICS GMBHInventor/a ARNDT MICHAELA

Described is a vaccine for use in actively immunising a subject against an infectious disease or a malignant disease, said vaccine comprising: (a) an antibody against an antigen correlated with said infectious disease or malignant disease; or (b) an Fc-containing fusion protein comprising an Fc part of an antibody fused to an antigen correlated with said infectious disease or malignant disease, wherein said Fc part is capable of binding a receptor present on or in an antigen presenting cell (APC) selected from the group consisting of Type I: activatory FcγRI, FcγRIIa, FcγRIIc, FcγRIIIa, FcγRIIIb, and inhibitory FcγRIIb; and Type II: neonatal FcR (FcRn) and cytosolic TRIM21. Moreover, described is a vaccine for use in actively immunising a subject against an HSV-associated disease; and (a) wherein said antibody is an anti-HSV antibody and said subject suffers from an acute HSV-associated disease, preferably an acute HSV infection; or (b) wherein in said Fc-containing fusion protein comprising an Fc part of an antibody fused to an antigen, the antigen correlates with an HSV-associated disease.

12.20250009869COMPOSITION CONTAINING INFLUENZA VACCINE

US - 09.01.2025

Clasificación Internacional A61K 39/145Nº de solicitud 18898203Solicitante JAPAN as represented by DIRECTOR GENERAL of National Institute of Infectious DiseasesInventor/a Yoshimasa Takahashi

The present invention provides a composition comprising a universal influenza vaccine antigen and a vaccine adjuvant.

13.WO/2025/007994HYDROGEL AND PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 09.01.2025

Clasificación Internacional A61K 9/06Nº de solicitud PCT/CN2024/111644Solicitante THE GBA NATIONAL INSTITUTE FOR NANOTECHNOLOGY INNOVATIONInventor/a ZHAO, Ruifang

The present application belongs to the technical field of medicine. Disclosed are a hydrogel, and a preparation method therefor and the thereof. The raw materials of the hydrogel comprise mPEG-PLGA, a chemokine and an immunoadjuvant. The hydrogel can be used to construct an artificial lymph node-like structure in the vicinity of the tumor, whereby naive T cells in the draining periphery and DC cells within the tumor are enriched in the hydrogel, and the enriched immune cells are further matured and differentiated in the artificial lymph node, thereby achieving a specific response to the tumor antigen, and generating an immune effect against tumor cells. In addition, the hydrogel shows the generation of a novel ectopic vaccine against tumors, which has both the specificity of personalized tumor treatment and the universality of a universal vaccine, that is, the vaccine does not need to be uniquely designed for each patient and has wide applicability. Moreover, the hydrogel has conventional raw materials and a simple preparation method, both of which are beneficial to practical production and application.

14.20250009859HER2 VACCINE COMPOSITION

US - 09.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud 18292905Solicitante ASTON SCI. INC.Inventor/a Hun JUNG

The present invention relates to an HER2-ICD DNA vaccine composition. The vaccine composition according to the present invention can effectively inhibit growth of gastric cancer without serious side effects in an animal model transplanted with a human gastric cancer cell line that expresses HER2, and thus may be usefully used in treatment of gastric cancer.

15.20250011396MULTIVALENT CARRIERS AND RELATED VACCINE COMPOSITIONS

US - 09.01.2025

Clasificación Internacional C07K 16/10Nº de solicitud 18811229Solicitante California Institute of TechnologyInventor/a Alexander A. Cohen

Disclosed herein include multivalent carriers comprising a plurality of heterologous *coronavirus* proteins antigens derived from different *coronaviruses*. The multivalent carriers herein described can elicit heterologous binding and neutralization properties against *coronaviruses* that differ from the *coronaviruses* from which the *coronavirus* antigens are derived to produce the multivalent carriers. Also provided herein include vaccine compositions comprising the multivalent carriers and related methods using the vaccine compositions in various therapeutic and prophylactic applications.

16.4483897IMMUNISIERUNGS- UND/ODER THERAPEUTISCHER IMPFSTOFF UND ZUBEREITUNG ZUR VERWENDUNG BEI DER VORBEUGUNG UND/ODER BEHANDLUNG VON COLIBAKTERIOSE BEI FERKELN

EP - 01.01.2025

Clasificación Internacional A61K 39/108Nº de solicitud 23461615Solicitante ZAKL BADAWCZO WDROZENIOWY OSRODKA SALMONELLA IMMUNOLAB SP Z O OInventor/a LIEDER DOROTA

The subject matter of the present invention is a vaccine for use in the prevention and/or treatment of colibacterioses in piglets, which contains a mixture of four strains of whole inactivated Escherichia coli bacteria, strains obtained from animals with symptoms of either post-weaning diarrhea or edema disease, and the Stx2eB protein with the sequence SEQ ID NO: 1 and/or SEQ ID NO: 3 and/or SEQ ID NO: 5.The subject matter of the

invention is also an immunizing and/or therapeutic preparation against colibacterioses in piglets, which contains the above-defined vaccine for administration by injection and chicken IgY antibodies to E. coli strains having O:139, O:149, F:4, F18, F5 antigens, for oral administration.

17.20250009863LYME DISEASE RNA VACCINE

US - 09.01.2025

Clasificación Internacional A61K 39/02Nº de solicitud 18741976Solicitante SANOFIInventor/a Vincent PAVOT

The present disclosure provides a Lyme disease vaccine, comprising a messenger RNA (mRNA) comprising an open reading frame (ORF) encoding at least one antigenic polypeptide derived from at least one bacteria of the genus *Borrelia*, and methods of eliciting an immune response by administering said vaccine.

18.4482851NEUARTIGER LEBENDER MULTIANTIGENER REKOMBINANTER IMPFSTOFF GEGEN TUBERKULOSE

EP - 01.01.2025

Clasificación Internacional C07K 14/35Nº de solicitud 23757083Solicitante THE REGENTS OF UNIV OF CALIFORNIAInventor/a HORWITZ MARCUS A

Tuberculosis (TB), caused by Mycobacterium tuberculosis (Mtb), remains a deadly global disease. Embodiments of the invention comprise an improved vaccine for generating an immune response and preventing or treating mycobacterial diseases such as tuberculosis in humans and animals. Embodiments of the invention also comprise a method for using the vaccine against such mycobacterial diseases.

19.4484551VERWENDUNG DES BCG-GENS BCG-1820 ZUR HERSTELLUNG EINES REKOMBINANTEN BCG-IMPFSTOFFS GEGEN TUBERKULOSE

EP - 01.01.2025

Clasificación Internacional C12N 1/21Nº de solicitud 22928058Solicitante SHANGHAI PULMONARY HOSPITALInventor/a GE BAOXUE

Provided are a BCG recombinant strain ΔBCG_1820 in which BCG_1820 gene is knocked out, a preparation method therefor, and the use thereof in preparing a tuberculosis vaccine. The BCG recombinant strain ΔBCG_1820 can induce macrophages to produce more antibacterial peptides, so as to endow a host with a stronger capability to resist tubercle bacillus infection, and has the potential to be a candidate vaccine for tubercle bacillus.

20.WO/2025/000310PREPARATION METHOD FOR CASTRATING AP205 VIRUS-LIKE PARTICLE SUBUNIT VACCINE

WO - 02.01.2025

Clasificación Internacional C12N 15/62Nº de solicitud PCT/CN2023/103567Solicitante SHENZHEN HERZ LIFE SCIENCE TECHNOLOGY CO., LTDInventor/a ZHA, Lisha

The present invention relates to the fields of molecular biology, virology, immunology and medicine, and in particular to a preparation method for a castrating AP205 virus-like particle subunit vaccine.

21.WO/2025/005260VACCINE ADJUVANT COMPOSITION AND USE THEREOF

WO - 02.01.2025

Clasificación Internacional A61K 39/39Nº de solicitud PCT/JP2024/023566Solicitante JAPAN AS REPRESENTED BY DIRECTOR GENERAL OF NATIONAL INSTITUTE OF INFECTIOUS DISEASESInventor/a TAKAHASHI, Yoshimasa

The present disclosure provides a vaccine adjuvant composition containing: a macromolecular polymer having acrylic acid as a constituent unit; and a cationic surfactant.

22.WO/2025/006385NOVEL MALARIA VACCINE COMPRISING AMA1 AND RON2 ANTIGENS

WO - 02.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/US2024/035244Solicitante THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICESInventor/a TOLIA, Niraj

Apical membrane antigen 1 (AMA1) is a key malaria vaccine candidate and target of neutralizing antibodies. AMA1 binds to a loop in rhoptry neck protein 2 (RON2L) to form the moving junction during parasite invasion of host cells, and this complex is conserved among apicomplexan parasites. AMA1-RON2L complex immunization achieves higher growth inhibitory activity than AMA1 alone and protects mice against *Plasmodium yoelii* challenge. Here, three single-component AMA1-RON2L immunogens were designed that retain the structure of the two-component AMA1-RON2L complex: one structure-based design (SBD1) and two insertion fusions. All immunogens elicited high antibody titers with potent growth inhibitory activity, yet these antibodies did not block RON2L binding to AMA1. The SBD1 immunogen induced significantly more potent strain-transcending neutralizing antibody responses against diverse strains of *Plasmodium falciparum* than AMA1 or AMA1-RON2L complex vaccination. This indicates that SBD1 directs neutralizing antibody responses to strain-transcending epitopes in AMA1 that are independent of RON2L binding. This work underscores the importance of neutralization mechanisms that are distinct from RON2 blockade. The stable single-component SBD1 immunogen elicits potent strain-transcending protection that may drive the development of next-generation vaccines for improved malaria and apicomplexan parasite control.

23.20250002907STABLE CORONAVIRUS PROTEINS AND VACCINE COMPOSITIONS THEREOF

US - 02.01.2025

Clasificación Internacional C12N 15/11Nº de solicitud 18884675Solicitante University of WashingtonInventor/a Daniel ELLIS

Provided herein are compositions and methods comprising mutated coronavirus “S” spike proteins or receptor binding domains thereof that have an increased expression level, yield and stability compared to its corresponding native or wild-type coronavirus spike protein under the same expression, culture or storage conditions. These mutated spike proteins can be used for generating a protein-based vaccine against one or more coronaviruses.

24.WO/2025/002359VARICELLA ZOSTER VIRUS (VZV) VACCINE

WO - 02.01.2025

Clasificación Internacional C12N 15/38Nº de solicitud PCT/CN2024/102410Solicitante SHENZHEN SHENXIN BIOTECHNOLOGY CO., LTD.Inventor/a LI, Linxian

Provided are a non-natural nucleic acid, a genetic engineering vector, a host cell, a delivery vector, a pharmaceutical composition and a use thereof, and a varicella zoster virus (VZV) vaccine. The non-natural nucleic acid comprises a polynucleotide encoding a VZV gE protein or a fragment thereof.

25.WO/2025/003976RECOMBINANT VIRUS-LIKE PARTICLES

WO - 02.01.2025

Clasificación Internacional Nº de solicitud PCT/IB2024/056308Solicitante SEQIRUS INC.Inventor/a CAI, Yongfei

The present disclosure relates to a recombinant virus-like particle (VLP) comprising an antigen for use as a vaccine. In an aspect, the present disclosure relates to a recombinant VLP comprising a capsid fusion protein for use as a vaccine.

26.20250000959NUCLEIC ACID MOLECULES, FUSION PROTEINS, AND MRNA VACCINES WITH ENHANCED ANTIGEN PRESENTATION BY RECRUITING LIGANDS

US - 02.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud 18791328Solicitante WESTGENE BIOPHARMA CO., LTDInventor/a Xiangrong SONG

The present invention relates to the field of biomedicine, and mainly relates to a vaccine design method for enhancing an antigen-presenting effect. A target antigen and a ligand such as a polypeptide or a protein domain having an E3 ubiquitin ligase binding or recruitment function are jointly coded in a same nucleic acid sequence, thereby promoting the degradation of the antigen protein by means of a proteasome approach, increasing the number and abundance of antigen peptides having antigen epitopes, and forming more peptide-MHC (p-MHC) complexes, and the complexes are presented on the surfaces of the cells, thereby enhancing subsequent immune response, and exerting an efficient tumor immunotherapy effect. The nucleic acid, the protein and the polypeptide vaccine provided have an efficient antigen-presenting effect and strong immunogenicity, and have good clinical application prospects.

27.20250014709INTELLIGENT DESIGN METHOD OF TYPE I DIABETES VACCINE

US - 09.01.2025

Clasificación Internacional G16H 20/17Nº de solicitud 18894542Solicitante SHANGHAI INSTITUTE FOR ADVANCED STUDY ZHEJIANG UNIVERSITYInventor/a Ruhong ZHOU

Provided is an intelligent design method of a type I diabetes vaccine. The method according to the disclosure includes following steps: performing a computer-simulated amino acid mutation design on initial type I diabetes autoantigen sequences obtained from patients with type I diabetes, accompanied with a rational design based on a structure of an HLA-polypeptide molecule-TCR ternary complex.

28.20250002871BETACORONAVIRUS ATTENUATED STRAIN

US - 02.01.2025

Clasificación Internacional C12N 7/00Nº de solicitud 18708189Solicitante THE RESEARCH FOUNDATION FOR MICROBIAL DISEASES OF OSAKA UNIVERSITYInventor/a Shiro TAKEKAWA

The purpose of the present invention is to provide a strain that is useful as a novel betacoronavirus vaccine. It is revealed that novel betacoronavirus, according to the present invention, having a prescribed substitution mutation relating to temperature sensitivity in combination with a prescribed deletion mutation relating to attenuation, is useful as a betacoronavirus vaccine strain having excellent attenuated characteristics.

29.4486378IMPFSTOFFZUSAMMENSETZUNG MIT EINEM ANTIGEN UND EINEM TLR3-AGONISTEN

EP - 08.01.2025

Clasificación Internacional A61K 39/215Nº de solicitud 23711954Solicitante ISR IMMUNE SYSTEM REGULATION HOLDING AB PUBLInventor/a WINQVIST OLA

A vaccine composition comprising one or more proteins expressed on the surface of a respiratory virus or bacterium and one or more pharmaceutically acceptable excipient, wherein the composition is in particulate form having a mean particle size in a range of from 2 to 50 μm. The protein is contained in the composition in its correctly folded three-dimensional structure.

30.20250000964NEOADJUVANT USAGE OF PLANT VIRUS OR VIRUS-LIKE PARTICLES FOR CANCER TREATMENT

US - 02.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 18703610Solicitante TRUSTEES OF DARTMOUTH COLLEGEInventor/a Steven Fiering

A neoadjuvant for use in treating cancer includes an in situ vaccine and optionally an immune check point therapeutic. The in situ vaccine includes at least one of cowpea mosaic virus or cowpea mosaic virus-like particles.

31.20250014696DIGITAL VACCINE SYSTEM, METHOD AND DEVICE

US - 09.01.2025

Clasificación Internacional G16H 10/60Nº de solicitud 18889107Solicitante VYDIANT, INCInventor/a James Kaput

A digital vaccine system, method and device that maintains a health knowledge base, inputs user characteristics, generates health scores based on the user characteristics and provides pathogen risk recommendations based on the user characteristics, health scores and knowledge base, wherein the recommendations are indicated by the knowledge base to be likely to improve the user's health.

32.20250000972INTRANASAL VACCINE COMPOSITION AND METHOD FOR BOOSTING USING THE SAME

US - 02.01.2025

Clasificación Internacional A61K 39/39Nº de solicitud 18374118Solicitante ADVAGENE BIOPHARMA CO., LTD.Inventor/a YU-SHEN HSU

The present disclosure provides a method for vaccinating a subject against a mucosal virus infection, comprising administering to the subject an immunologically effective amount of an intranasal booster, wherein the intranasal booster comprises detoxified *Escherichia coli* labile toxin (LT) and an antigen from the mucosal virus, and wherein the subject has been previously primed. An intranasal vaccine composition comprising an

immunologically effective amount of a mucosal virus antigen adjuvanted with a detoxified *Escherichia coli* labile toxin (LT) is also provided.

33.20250000966MRNA VACCINE DESIGN VIA THE ALTERATION OF CODON USAGE

US - 02.01.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18701156Solicitante The Cleveland Clinic FoundationInventor/a Jae U. Jung

The present disclosure provides compositions and polynucleotides for increasing expression of an immunogenic and/or antigenic polypeptide (e.g., in a vaccine). The disclosure further provides methods of using the disclosed compositions, polynucleotides, and vaccines for the treatment of diseases and disorders (e.g., infections). The compositions and polynucleotides include a first nucleic acid encoding a viral regulatory protein and a second nucleic acid encoding an immunogenic polypeptide, wherein the immunogenic polypeptide is codon-optimized to a vims from which the regulatory protein is derived.

34.20250002540EXOSOMAL NUCLEIC ACID VACCINE COMPOSITION FOR PROTECTION AGAINST SARS-COV-2 INFECTION AND DISEASE

US - 02.01.2025

Clasificación Internacional C07K 14/005Nº de solicitud 18690177Solicitante The Johns Hopkins UniversityInventor/a Stephen J. Gould

The present invention relates to an extracellular vesicle (EV)-based nucleic acid composition or vaccine (EV-NAV), comprising EVs loaded with polynucleotides each encoding, e.g., the SARS-CoV-2 spike protein, and polynucleotides each encoding, e.g., SARS-CoV-2 nucleocapsid protein, wherein said polynucleotides are designed to be simultaneously expressed, and to induce a humoral immune response and/or a cellular immune response, in a subject. The present invention also relates to compositions and methods for the design, preparation, manufacture, formulation, and therapeutic or prophylactic use of said EV-NAVs, e.g., exosomes loaded with mRNAs encoding multiple surface and cytoplasmic antigens derived from, e.g., SARS-CoV-2, to elicit strong humoral and cellular immune responses.

35.4483898INTRANASALE IMPFSTOFFZUSAMMENSETZUNG UND VERFAHREN ZUR VERSTÄRKUNG DAMIT

EP - 01.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 23199080Solicitante ADVAGENE BIOPHARMA CO LTDInventor/a HSU YU-SHEN

The present disclosure provides a method for vaccinating a subject against a mucosal virus infection, comprising administering to the subject an immunologically effective amount of an intranasal booster, wherein the intranasal booster comprises detoxified Escherichia coli labile toxin (LT) and an antigen from the mucosal virus, and wherein the subject has been previously primed. An intranasal vaccine composition comprising an immunologically effective amount of a mucosal virus antigen adjuvanted with a detoxified Escherichia coli labile toxin (LT) is also provided.

36.4486375IMPFSTOFFZUSAMMENSETZUNG MIT EINEM ANTIGEN UND EINEM TLR3-AGONISTEN

EP - 08.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 23709932Solicitante ISR IMMUNE SYSTEM REGULATION HOLDING AB PUBLInventor/a WINQVIST OLA

A vaccine composition comprising one or more proteins expressed on the surface of a respiratory virus or bacterium and one or more pharmaceutically acceptable excipient, wherein the composition is in particulate form having a mean particle size in a range of from 2 to 50 μm. The protein is contained in the composition in its correctly folded three-dimensional structure.

37.4482521NEUE KATIONISCHE ADJUVANSZUSAMMENSETZUNG

EP - 01.01.2025

Clasificación Internacional A61K 39/39Nº de solicitud 23705576Solicitante STATENS SERUMINSTITUTInventor/a WOODWORTH JOSHUA

The present invention relates to an adjuvant composition comprising dimethyldioctadecyl ammonium salt (DDA), monomycoloyl glycerol (MMG), and the CpG ODN 2006 oligodeoxynucleotide having SEQ ID NO:1 or a sequence having 90% identity to SEQ ID NO:1. Another aspect of the present invention is a vaccine comprising said adjuvant composition and at least one antigen, and the use of said vaccine in prevention or treatment of an infectious disease.

38.20250009873METHODS OF PREVENTING, TREATING, OR REDUCING THE SEVERITY OF COVID-19 IN IMMUNOCOMPROMISED BLOOD CANCER PATIENTS

US - 09.01.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18711088Solicitante CITY OF HOPEInventor/a Don J. DIAMOND

Disclosed are methods of preventing or treating a coronavirus infection in a blood cancer patient having received a cellular therapy by administration of a synthetic MVA-based vaccine.

39.4486374IMPFSTOFFZUSAMMENSETZUNG GEGEN ZWEI RESPIRATORISCHE VIREN

EP - 08.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 23707750Solicitante VAXXELInventor/a DUBOIS JULIA

The present invention relates to a viral strain derived from the human *metapneumovirus* (hMPV) strain having a genome sequence represented by sequence SEQ ID NO. 1, wherein said genome sequence comprises the following genetic modifications: (i) inactivation of the endogenous gene coding for the SH protein and/or for the G protein, and (ii) presence of an exogenous nucleotide sequence coding for at least one extracellular domain of the F protein of the human respiratory syncytial virus (hRSV), said domain being wild-type or mutated.

40.WO/2025/003979COMBINATION RNA VACCINE

WO - 02.01.2025

Clasificación Internacional Nº de solicitud PCT/IB2024/056311Solicitante SEQIRUS INC.Inventor/a RAMANATHAN, Palaniappan

The present disclosure relates to combination RNA vaccines and uses thereof. The present disclosure also relates to conventional mRNA vaccines and self-replicating RNA vaccines for the treatment of diseases or conditions including respiratory syncytial virus (RSV).

41.20250000961RECOMBINANT BACULOVIRUSES, VACCINE COMPOSITIONS THAT COMPRISE IT, AND METHODS FOR INDUCING AN IMMUNE RESPONSE

US - 02.01.2025

Clasificación Internacional A61K 39/04Nº de solicitud 18658166Solicitante Instituto Nacional de Tecnologia AgropecuariaInventor/a Maria Paula Molinari

A recombinant baculovirus having a) a nucleotide sequence encoding a fusion protein, wherein said fusion protein includes an antigen fused to a baculovirus capsid peptide operatively linked to a first promoter and b) a nucleotide sequence encoding a lipid viral envelope protein bound to a second promoter.

42.4486371KREBSIMPFSTOFFE UND VERFAHREN ZUR VERWENDUNG DAVON

EP - 08.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud 23713509Solicitante BRIACELL THERAPEUTICS CORPInventor/a WILLIAMS WILLIAM V

The present disclosure provides modified human cancer cells that express exogenous human leukocyte antigen (HLA) alleles. The present disclosure also provides expression vectors for simultaneous expression of one or more HLA alleles. Methods for using the modified human cancer cells of the present disclosure as a whole-cell cancer vaccine for treating a cancer in a subject are provided.

43.20250009868OVERCOMING ANTIBODY-INTERFERENCE IN AVIANS

US - 09.01.2025

Clasificación Internacional A61K 39/145Nº de solicitud 18576496Solicitante Intervet Inc.Inventor/a Maria Cornelia Wilhelmina Van Hulten

The present invention provides a recombinant protein, and a recombinant vector expressing that protein, that can be used for the vaccination of seropositive avians, whereby the antibodies in the avian target are specific for an antigen comprised in that recombinant protein. By comprising in the recombinant protein also a domain that can bind to a cell surface protein on avian antigen presenting cells (APCs), the antigen is targeted to those APCs. It was found that this type of vaccine could safely overcome the negative effects of antibody interference, even after a single dose, even in very young avians, and even in the context of very high antibody levels.

44.20250000744AMPOULE FOR ORAL VACCINE ADMINISTRATION AND METHODS OF USE

US - 02.01.2025

Clasificación Internacional A61J 1/06Nº de solicitud 18710007Solicitante Merck Sharp & Dohme LLCInventor/a Ramprasad B. Halthore

An ampoule includes a body having a cavity for storing a medicament, a neck coupled to the body and defining a nozzle in communication with the cavity of the body, a removable cap coupled to the nozzle, and an anti-choking miter coupled to the removable cap, the anti-chocking miter being wider than the removable cap.

45.4482520MRNA-IMPFSTOFFE DER NÄCHSTEN GENERATION

EP - 01.01.2025

Clasificación Internacional A61K 39/215Nº de solicitud 23719064Solicitante FUTR BIO LTDAInventor/a MANSUR DANIEL SANTOS

Described herein are next generation vaccine compositions, including mRNA vaccines having flavivirus untranslated regions and vaccines comprising a (major histocompatibility complex) MHC binding peptide.

46.4488367INSEKTENZELLENSTAMM DER RHABDOVIRUS-NEGATIVEN SPODOPTERA FRUGIPERDA, SCREENING DAFÜR, IDENTIFIZIERUNG DAVON UND VERWENDUNG DAVON

EP - 08.01.2025

Clasificación Internacional C12N 5/10Nº de solicitud 22929655Solicitante WESTVAC BIOPHARMA CO LTDInventor/a SHEN GUOBO

The present invention belongs to the technical field of genetic engineering and cell engineering, and particularly relates to a rhabdovirus negative Spodoptera frugiperda insect cell strain, screening therefor, identification thereof and use thereof. According to the present invention, a rhabdovirus negative Spodoptera frugiperda insect cell strain WSK-Sf9 is obtained by means of screening and identification and is deposited under CCTCC NO: C202246. The cell strain is verified by means of a variety of different high-sensitivity assay methods, such as nested PCR, transcriptome next-generation sequencing, fluorescence-based quantitative PCR and probe-based quantitative PCR, and the Sf-rhabdovirus negative Spodoptera frugiperda insect cell strain WSK-Sf9 is finally obtained by means of screening. The cell is tested for asepsis, mycoplasma, exogenous viruses, tumorigenicity, etc. according to pharmacopoeial requirements, and the results show that the cell meets the requirements in all the tests; the cell can produce recombinant proteins on the basis of a baculovirus expression system and can be used for recombinant protein vaccine production.

47.4483893IMPFVERFAHREN UND ZUCHTFISCHE

EP - 01.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud 23759735Solicitante NISSUI CORPInventor/a UMEDA NAOKO

A vaccination method including inoculating a vaccine liquid by inserting an injection needle into a back or tail muscle of farmed fish.

48.WO/2025/005816SARS-COV-2 PROTEIN EPITOPES AND USE THEREOF IN PREVENTION AND DIAGNOSIS OF CORONAVIRUS INFECTIONS

WO - 02.01.2025

Clasificación Internacional C07K 14/005Nº de solicitud PCT/PL2024/050047Solicitante INSTYTUT IMMUNOLOGII I TERAPII DOŚWIADCZALNEJ IM.LUDWIKA HIRSZFELDA PAN WE WROCŁAWIUInventor/a GÓRSKA, Sabina

The subject of the invention are novel peptides derived from SARS-CoV-2 coronavirus proteins, the peptides being immunoreactive epitopes that interact with convalescent serum, use thereof in prevention and diagnosis of SARS-CoV-2 infections, and an innovative SARS-CoV-2 vaccine, comprising immunoreactive peptides and a thermostable nanoadjuvant that enables effective intranasal administration.

49.20250011371RECOMBINANT SARS-COV-2 IMMUNOGENIC PROTEIN PRODUCED IN PLANTS AND THE USE THEREOF

US - 09.01.2025

Clasificación Internacional C07K 14/005Nº de solicitud 18276605Solicitante BAIYA PHYTOPHARM CO., LTD.Inventor/a Waranyoo PHOOLCHAROEN

The present invention demonstrates a recombinant vector for producing immunogenic substance from plants which can induce an immune response in mammals against the coronavirus disease 2019 (COVID-19). Said recombinant vector comprises at least a fragment of SARS CoV-2 receptor binding domain protein (SARS CoV-2 RBD) and a fusion protein sequence. The recombinant vector is introduced into plant cells, preferably by means of *Agrobacterium* sp., thereby the plant cell can express a recombinant protein which can act as an immunogenic substance. The recombinant protein of the present invention significantly demonstrates an ability to trigger immunogenicity in mammals which prevents infectious disease caused by severe acute respiratory syndrome coronavirus 2. Further, the method of inducing an immune response against SARS-CoV-2 in mammals is also provided herein. The present invention further demonstrates the use of such recombinant protein as a vaccine to prevent the coronavirus disease 2019 (COVID-19).

50.2993834HIV VACCINE IMMUNOGENS

ES - 10.01.2025

Clasificación Internacional C07K 14/005Nº de solicitud 19893005Solicitante The Rockefeller UniversityInventor/a NUSSENZWEIG, Michel

51.WO/2025/006737GENETICALLY DETOXIFIED MUTANT OF NEISSERIA AND OUTER MEMBRANE VESICLE (OMV) VACCINE

WO - 02.01.2025

Clasificación Internacional A61K 39/095Nº de solicitud PCT/US2024/035804Solicitante THE UNITED STATES OF AMERICA, as represented by the secretary, DEPARTMENT OF HEALTH AND HUMAN SERVICESInventor/a BASH, Margaret C.

Disclosed are isolated PorA$^-$PorB$^-$RmpM$^-$LpxL1$^-$*N. meningitidis* and compositions including an effective amount of OMVs produced from these PorA$^-$PorB$^-$RmpM$^-$LpxL1$^-$ *N. meningitidis*. Also disclosed are methods for using these compositions to induce an immune response to *Neisseria*, such as *N. meningitidis* and *N. gonorrhoeae.*

52.WO/2025/010117INFLUENZA B HEADLESS HA UNIVERSAL VACCINES

WO - 09.01.2025

Clasificación Internacional A61K 9/51Nº de solicitud PCT/US2024/032554Solicitante GEORGIA STATE UNIVERSITY RESEARCH FOUNDATION, INC.Inventor/a WANG, Baozhong

Disclosed herein are influenza vaccines capable of providing broad cross-protection. Also disclosed are pharmaceutical compositions comprising a nanoparticle disclosed herein and an adjuvant, in some embodiments, it includes vaccine compositions and methods base on a truncated influenza HA protein lacking a head domain. For example, disclosed herein is a polypeptide comprising a truncated influenza HA protein lacking at least a portion of the HA head domain, also referred to herein as a head-removed HA (hrHA).

53.WO/2025/002588METHOD FOR SCREENING OF EXTRACELLULAR TISSUE PEPTIDES IN MAMMALIAN TISSUE SAMPLES FOR HEALTH STATUS EVALUATION, DISEASE DIAGNOSTICS AND NEOANTIGEN DISCOVERY

WO - 02.01.2025

Clasificación Internacional G01N 33/569Nº de solicitud PCT/EP2023/081235Solicitante UNIWERSYTET GDANSKIInventor/a KOTE, Sachin

This invention refers to method for screening of extracellular tissue peptides in mammalian tissue samples for health status evaluation, disease diagnosis and neoantigen discovery. The invention involved preparing and analyzing tissue samples from solid tumors, focusing on extracellular peptidomics and tissue major histocompatibility complex (MHC) class I immunopeptidomics. The method is antibody-free, utilizing amino acid sequencing with tandem mass spectrometry. It is a straightforward, inexpensive, and rapid way to comprehensively profile the solid tumor peptidomics (extracellular peptidome and MHC class I immunopeptidomics). The method has potential to screen and used as biomarkers for health status evaluation, disease diagnostics, neoantigen discovery and prognosis of salivary gland tumors. Furthermore, the tissue MHC class I immunopeptidomics approach for neoantigen discovery, vaccine development, and design of immunotherapies.

54.20250011781METHODS AND COMPOSITIONS TARGETING NUCLEUS ACCUMBENS-ASSOCIATED PROTEIN-1 FOR TREATMENT OF AUTOIMMUNE DISORDERS AND CANCERS

US - 09.01.2025

Clasificación Internacional C12N 15/113Nº de solicitud 18712539Solicitante THE TEXAS A&M UNIVERSITY SYSTEMInventor/a Jianxun SONG

Provided herein are methods of for enhancing or inducing an anti-tumor response or treating an autoimmune disorder by administering a therapeutically effective amount of an inhibitor of NAC 1. Also, provided herein are methods of enhancing effectiveness of a vaccine in a subject by administering to the subject a therapeutically effective amount of an inhibitor of NAC 1. Inhibitors of NAC1 can include a chemical agent, such as a composition containing NIC3, or a biological agent that inhibit the function of NAC1 protein, such as an isolated antibody or its binding fragment thereof that binds to NAC1. Inhibitors of NAC 1 can include a biological agent that reduces the expression of NAC1 gene, such as a NAC 1-targeted siRNA administered as a nanoliposome or a CRISPR/Cas-based genome editing composition targeting the NAC1 Gene.

55.4482477POLYMER-LIPID-HYBRIDNANOPARTIKEL MIT EINEM LIPID UND EINEM BLOCKCOPOLYMER SOWIE VERFAHREN ZUR HERSTELLUNG UND VERWENDUNGEN DAVON

EP - 01.01.2025

Clasificación Internacional A61K 9/51Nº de solicitud 23710967Solicitante ACM BIOLABS PTE LTDInventor/a NALLANI MADHAVAN

The present invention relates to a polymer-lipid hybrid nanoparticle comprising a lipid and a block copolymer, wherein the amount of said lipid, expressed in mole percentage (mole %) present in the polymer-lipid hybrid nanoparticle, wherein the mole percentage refers to the total amount of all components that form the polymer-lipid nanoparticle, is greater than the amount of said block copolymer, expressed in mole percentage, present in the polymer-lipid hybrid nanoparticle. The invention also relates to such a polymer-lipid hybrid nanoparticle further comprising a soluble encapsulated antigen, wherein said soluble encapsulated antigen is a protein and/or polynucleotide. The invention further relates to a method of encapsulating such an antigen in such a polymer-lipid hybrid nanoparticle as well as to a composition comprising such a polymer-lipid hybrid nanoparticle and uses of such a polymer-lipid hybrid nanoparticle and/or composition as a vaccine, a pharmaceutical, means of targeting cells, tissues and/or organs and/or non-viral delivery system capable of delivering nucleotides to inside a cell.

56.4484955VERFAHREN ZUM SCREENING VON EXTRAZELLULÄREN GEWEBEPEPTIDEN IN SÄUGETIERGEWEBEPROBEN ZUR BEURTEILUNG DES GESUNDHEITSZUSTANDS, KRANKHEITSDIAGNOSE UND NEOANTIGEN-ENTDECKUNG

EP - 01.01.2025

Clasificación Internacional G01N 33/569Nº de solicitud 23182549Solicitante UNIV GDANSKIInventor/a KOTE SACHIN

This invention refers to method for screening of extracellular tissue peptides in mammalian tissue samples for health status evaluation, disease diagnosis and neoantigen discovery. The invention involved preparing and analyzing tissue samples from solid tumors, focusing on extracellular peptidomics and tissue major histocompatibility complex (MHC) class I immunopeptidomics. The method is antibody-free, utilizing amino acid sequencing with tandem mass spectrometry. It is a straightforward, inexpensive, and rapid way to comprehensively profile the solid tumor peptidomics (extracellular peptidome and MHC class I immunopeptidomics). The method has potential to screen and used as biomarkers for health status evaluation, disease diagnostics, neoantigen discovery and prognosis of salivary gland tumors. Furthermore, the tissue MHC class I immunopeptidomics approach for neoantigen discovery, vaccine development, and design of immunotherapies.

57.WO/2025/001408PHOSPHORUS-CONTAINING OR SULFUR-CONTAINING MACROCYCLIC PYRAZOLOPYRIMIDINE COMPOUND AND USE THEREOF

WO - 02.01.2025

Clasificación Internacional C07D 515/18Nº de solicitud PCT/CN2024/086746Solicitante ZHEJIANG YANGSHENGTANG INSTITUTE OF NATURAL MEDICATION CO., LTD.Inventor/a XU, Pan

The present application relates to the field of biomedicine, and particularly relates to a small-molecule phosphorus-containing or sulfur-containing macrocyclic pyrazolopyrimidine compound, which has better immunomodulatory activity. Also provided in the present invention is the use of the small-molecule phosphorus-containing or sulfur-containing macrocyclic pyrazolopyrimidine compound in the prevention or treatment of TLR7-related diseases, and the use thereof as a vaccine adjuvant, a photodynamic therapeutic agent and a conjugated drug.

58.20250000963LIVE ATTENUATED ZIKA VIRUS WITH 3'UTR DELETION, VACCINE CONTAINING AND USE THEREOF

US - 02.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 18210829Solicitante Board of Regents, The University of Texas SystemInventor/a Pei-Yong SHI

The present invention discloses a live attenuated strain of Zika virus (ZIKV) having a deletion in the 3' untranslated region (3'UTR) of the viral genome, which may affect viral RNA synthesis and sensitivity to type I interferon inhibition, but may not affect viral RNA translation. The present invention also discloses the use of these live attenuated ZIKV strains in the preparation of ZIKV vaccines and for providing immunoprotection against ZIKV infection and congenital ZIKV syndrome, particularly in pregnant females.

59.WO/2025/003756MULTIVALENT INFLUENZA MRNA VACCINES

WO - 02.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud PCT/IB2024/000346Solicitante SANOFIInventor/a ALEFANTIS, Timothy

The present disclosure provides multivalent influenza vaccine compositions comprising at least three messenger RNAs (mRNAs) encoding a combination of influenza A and influenza B hemagglutinin (HA) antigens, wherein the mRNA encoding the HA antigen of the influenza A virus is present in a different ratio (w/w) than the mRNA encoding the influenza B virus, and methods of eliciting an immune response by administering said compositions. In particular, the disclosures relate to mRNA encoding these antigens formulated in a lipid nanoparticle (LNP).

60.20250000809ENCAPSULATED BIOMOLECULES FOR INTRACELLULAR DELIVERY

US - 02.01.2025

Clasificación Internacional A61K 9/51Nº de solicitud 18575330Solicitante Åbo AkademiInventor/a Hongbo Zhang

According to an example aspect of the present invention, there are provided biomolecules encapsulated with Metal Organic Frameworks (MOFs) for use in intracellular delivery and controlled release of the biomolecules within cells, in vitro and in vivo. The invention also discloses the use of MOFs in combination with biomolecules for gene editing, cancer therapy and vaccine development.

61.4482518ARGINASE-2-IMPFSTOFF

EP - 01.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud 23708178Solicitante IO BIOTECH APSInventor/a ANDERSEN MADS HALD

The present invention relates to novel polypeptides derived from Arginase 2 (ARG2), polynucleotides encoding said polypeptides, and compositions comprising said polypeptides or polynucleotides. The invention also concerns uses of said polypeptides, polynucleotides and compositions.

62.20250011731PRODUCTION OF VIRUSES IN CELL CULTURE

US - 09.01.2025

Clasificación Internacional C12N 7/02Nº de solicitud 18755417Solicitante Commonwealth Scientific and Industrial Research OrganisationInventor/a Andrew Bean

The present invention relates to methods of replicating viruses in vitro. In particular, the invention relates to a genetically modified population of cells, and/or a population of cells treated with an exogenous compound, wherein the cells are capable of producing more virus than cells lacking the genetic modification and/or lacking treatment with the exogenous compound. The invention also relates to methods of producing populations of such cells, as well as the use of the viruses obtained to prepare vaccine compositions.

63.WO/2025/006577COMPOSITIONS FOR PREVENTION OF CARDIOMYOPATHY SYNDROME

WO - 02.01.2025

Clasificación Internacional Nº de solicitud PCT/US2024/035580Solicitante ELANCO US INC.Inventor/a MACDONALD, Alicia

The present disclosure provides exemplary sequences and compositions that can be used to active immunization of animals to aid in the prevention of cardiomyopathy syndrome (CMS) caused by Piscine Myocarditis Virus (PMCV). Vaccines and kits comprising the sequences and compositions are also provided, as well as methods of administering the vaccine to non-human animals.

64.20250009875VACCINES FOR IN VIVO EXPRESSION OF NUCLEIC ACIDS AND METHODS OF USING THE SAME

US - 09.01.2025

Clasificación Internacional A61K 39/385Nº de solicitud 18085478Solicitante ORBIS HEALTH SOLUTIONS, LLCInventor/a Thomas E. Wagner

The present disclosure provides particles for delivering a nucleic acid that encodes an immunogenic peptide in an antigen presenting cell. The disclosed particles can function as a vaccine and can be used to treat or prevent a viral or bacterial infection in a subject by expressing in vivo an immunogenic peptide, thereby stimulating the subject's immune system to attack the virus or bacteria that naturally express the immunogenic peptide.

65.4482849MURAMYLDIPEPTIDE UND VERFAHREN ZU IHRER HERSTELLUNG

EP - 01.01.2025

Clasificación Internacional C07K 9/00Nº de solicitud 23759481Solicitante COUNCIL SCIENT IND RESInventor/a KUMAR HALMUTHUR MAHABALARAO SAMPATH

The present invention relates to Muramyl dipeptide compounds having adjuvant activity. The present invention also discloses the process for the preparation of Muramyl dipeptide compound and their intermediates. The immuno-modulating properties of the Muramyl dipeptide compound and their use as NOD2 agonistic adjuvants in vaccine formulations is also disclosed.

66.4486377RHINOVIRUS-IMPFSTOFF

EP - 08.01.2025

Clasificación Internacional A61K 39/125Nº de solicitud 23720929Solicitante IP2IPO INNOVATIONS LTDInventor/a JOHNSTON SEBASTIAN

The invention relates to immunogenic compositions, and in particular, to immunogenic compositions for preventing, treating or ameliorating human rhinovirus (RV) infections. The invention is especially concerned with RV VPo peptides (or proteins) and polynucleotides encoding such peptides, and their use in immunogenic compositions for eliciting an immune response and preventing rhinovirus infections.

67.WO/2025/001407POLYARYL-CONTAINING MACROCYCLIC COMPOUNDS AND USES THEREOF

WO - 02.01.2025

Clasificación Internacional C07D 498/18Nº de solicitud PCT/CN2024/086745Solicitante ZHEJIANG YANGSHENGTANG INSTITUTE OF NATURAL MEDICATION CO., LTD.Inventor/a XU, Pan

The present application relates to the field of biological medicine, and particularly relates to small-molecule polyaryl-containing macrocyclic compounds which have better immunoregulation activity. Further provided in the present invention are the use of the small-molecule polyaryl-containing macrocyclic compounds in

preventing or treating TLR7-related diseases, and the uses of same as vaccine adjuvants, photodynamic therapeutic agents and drug conjugates.

68.20250000971TLR4 AGONIST FOR MODULATING IMMUNE RESPONSE

US - 02.01.2025

Clasificación Internacional A61K 39/385Nº de solicitud 18697267Solicitante The Children's Medical Center CorporationInventor/a Ofer Levy

Provided herein are uses for an immunostimulatory compound for stimulating an immune response when administered either alone or as an adjuvant in a vaccine. Also provided herein are kits, compositions, and methods of administration for the compound described.

---

---

***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*
*Randelys Molina Castro rmolina@finlay.edu.*
*Claudia Camejo Salas ccamejo@finlay.edu.cu*
*Yamira Puig Fernández yamipuig@finlay.edu.cu*

FINLAY EDICIONES



CUBA