



EN ESTE NÚMERO

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Noticias en la Web

Cómo es la vacuna antineumocócica que se producirá en la Argentina

16 ene. Está basada en la vacuna anterior, que cubría 13 serotipos y los siete serotipos adicionales demostraron estar asociados con la resistencia a los antibióticos.

La vacuna antineumocócica 20 valente ("VCN20") se producirá en la Argentina tras un acuerdo firmado por los laboratorios Pfizer y Sinergium Biotech para comercializarla, la misma proporciona cobertura para 20 serotipos, está basada en la vacuna anterior, que cubría 13 serotipos y los siete serotipos adicionales (8, 10A, 11A, 12F, 15B, 22F y 33F) demostraron estar asociados con la resistencia a los antibióticos, la mayor gravedad de la enfermedad, el potencial invasivo y la prevalencia en casos pediátricos de neumococo.



Pfizer y Sinergium invertirán US\$20 millones para producir una vacuna contra el neumococo. NA

Además, los datos muestran que los siete serotipos adicionales incluidos en la vacuna con 20 serotipos están entre algunos de los serotipos más comunes que causan enfermedad neumocócica invasiva (IPD) en niños en países con programas de vacunación neumocócica existentes. Un estudio encontró que los siete serotipos adicionales por sí solos representaron un estimado del 37% de los casos de IPD en niños menores de cinco años en los Estados Unidos.

Para la población infantil, la VCN20 está incorporada al Calendario Nacional de Vacunación gratuito y obligatorio de la Argentina con un esquema de 2 dosis más un refuerzo (2, 4 y 12 meses), mientras que, para la vacunación de las personas adultas y en los mayores de 5 años con factores de riesgo, la VCN20 reemplazó en el calendario al esquema secuencial que incluía la administración de dos vacunas diferentes con intervalos variables según la edad y las comorbilidades.

La transición a la vacuna VCN20 representa un paso importante en la mejora de la prevención y el control de la enfermedad neumocócica en poblaciones pediátricas y adultas. Los beneficios de la actualización no se limitan solo a sus beneficios de salud y económicos: la vacuna VCN20 se suministrará en presentación de jeringa prellenada en lugar de la presentación de vial de dosis única actualmente disponible. Esta transición traerá eficiencias a los países debido a una mejor conveniencia y tiempo ahorrado durante la preparación de la vacuna y la eliminación del costo de compra y distribución de jeringas. Además, los envíos dentro de América Latina acortarán los tiempos de transporte y reducirán la huella de carbono general.

El acuerdo

A través del consorcio PECC (Consortio de Cooperación), conformado en 2012, los laboratorios presentaron una iniciativa privada para la producción local de la vacuna, la cual fue declarada de interés público por el Ministerio de Salud de la Nación y obtuvo la adjudicación de provisión para el Calendario Nacional de Inmunizaciones.

Como parte de este acuerdo, Pfizer localizará y producirá la vacuna antineumocócica 20 valente a través de una asociación de transferencia tecnológica con Sinergium Biotech, una empresa farmacéutica argentina con la que mantiene una alianza estratégica de más de 10 años para la manufactura local de vacunas; y por medio de la cual ha abastecido ya con más de 33 millones de dosis al Ministerio de Salud de Argentina.

Asimismo, Pfizer y la Organización Panamericana de la Salud (OPS) han acordado la adquisición de la vacuna antineumocócica producida por Pfizer en la región para los países miembros a través del Fondo Rotatorio, que es el mecanismo de cooperación que permite a los países de las Américas acceder a vacunas, medicamentos esenciales y suministros de salud pública a precios asequibles.

De esta manera, la concreción de la transferencia de tecnología a Sinergium Biotech y el acuerdo alcanzado con la OPS harán posible la exportación de vacunas producidas por Pfizer en Argentina a países de toda la región, posicionando al país dentro de un pequeño grupo de países en el mundo con esta capacidad.

La inversión estimada de la alianza estratégica Pfizer-Sinergium Biotech asciende a 20 millones de dólares estadounidenses, cifra que incluye obras de ingeniería, adquisición de equipamientos de última generación y entrenamiento calificado de los operarios, entre otros recursos.

Además, la adquisición local de la vacuna producirá beneficios en la economía del país en variables como mayor recaudación en IVA, Impuesto a las Ganancias, ingresos brutos, derechos de importación y tasas municipales, así como ahorro de divisas extranjeras, además del efecto multiplicador del desarrollo de las actividades en la economía y el incremento de las exportaciones.

“Nuestro consorcio con Sinergium se basa en un robusto proceso de transferencia de tecnología, el cual ha sido un punto de inflexión y ha permitido que Argentina se convierta en el primer país de América Latina y uno de los pocos en el mundo, con la capacidad técnica para envasar vacunas 13-valentes. Y ahora estamos expandiendo nuestro acuerdo para la producción de nuevas vacunas, con el potencial de exportar a toda la región”, dijo Agustina Ruiz Villamil, Country Manager de Pfizer South Cluster.

“Esto marca un hito significativo en nuestra asociación con Pfizer y la OPS, mejorando el acceso a vacunas innovadoras para las comunidades de toda la región. En Sinergium, estamos profundamente comprometidos con el avance de la salud pública en las Américas, y estamos orgullosos de desempeñar un papel integral en este importante esfuerzo”, dijo Alejandro Gil, CEO y Presidente de Sinergium Biotech.

El esfuerzo se basa en condiciones voluntarias mutuamente alineadas entre Pfizer, Sinergium y la OPS, y apoya la estrategia de la OPS para fomentar y construir un esfuerzo de preparación para enfrentar futuras pandemias en la región, con un enfoque en fortalecer la producción regional de vacunas y desarrollar capacidad y competencia.

Fuente: elDiarioAR. Disponible en <https://lc.cx/eyR0P7>

Histórico lanzamiento de estudio clínico fase 2 de la vacuna chilena contra el VRS

16 ene. La Pontificia Universidad Católica de Chile fue escenario de un evento histórico: la ceremonia oficial de lanzamiento de la fase 2 del estudio clínico de la vacuna chilena contra el Virus Respiratorio Sincicial humano (VRS), el cual se realizará en Europa.

Este trascendental avance consolida a Chile como líder en innovación científica, marcando un antes y un después en la investigación en salud pública tanto a nivel nacional como global. El evento, celebrado en la Sala de Consejo Superior de la Casa Central de la UC, reunió a destacadas autoridades, investigadores y representantes de instituciones nacionales e internacionales.

En sus palabras de apertura, el rector de la Universidad Católica Ignacio Sánchez subrayó la relevancia del evento para la institución y para el país. “Este hito refleja el compromiso de nuestra universidad con la excelencia académica y científica, poniendo a disposición de la humanidad soluciones innovadoras para enfrentar los grandes desafíos de salud pública”, destacó.

Por su parte, el embajador de Grecia en Chile, Nikolaos Piperigkos, destacó el espíritu de cooperación internacional que caracteriza al proyecto: “Esta colaboración demuestra cómo la ciencia puede unir naciones en la búsqueda de objetivos comunes para el bienestar global”.

Juan Pino, embajador de Chile en Grecia, puso en valor la dimensión diplomática y científica del evento. “El lanzamiento de esta etapa en Grecia es un ejemplo del impacto que tienen las alianzas estratégicas entre Chile y Europa en la ciencia y tecnología”, señaló.

Desde el Instituto Helénico Pasteur en Grecia, Ioannis Rabias, jefe del Departamento de Control de Calidad, expresó: “Estamos orgullosos de ser parte de este proyecto, que refuerza la importancia de la calidad y la rigurosidad en cada etapa del desarrollo científico”.

“Esta colaboración demuestra cómo la ciencia puede unir naciones en la búsqueda de objetivos comunes para el bienestar global”. Estas palabras resonaron con el espíritu de cooperación internacional que caracteriza al proyecto"- Embajador de Grecia en Chile, Nikolaos Piperigkos.

El Dr. Alexis Kalergis, Profesor Titular UC, director del Instituto Milenio en Inmunología e Inmunoterapia e investigador principal del estudio, enfatizó: “El inicio de esta etapa refuerza nuestro compromiso con la ciencia como un motor de cambio social y científico. Chile está demostrando que tiene la capacidad de liderar investigaciones de alto impacto a nivel global. Este avance es el fruto de años de trabajo colaborativo que recibe un reconocimiento internacional por la calidad del trabajo realizado y que se sostiene en decenas

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artículos científicos en revistas de alto impacto”.

Un esfuerzo colaborativo y de impacto global

El lanzamiento de esta nueva etapa, que fue recientemente aprobado por una agencia regulatoria europea vinculada a la Agencia Europea de Medicamentos (EMA), destaca el esfuerzo conjunto entre Chile y Europa.

Este estudio, enfocado en adultos mayores de 60 años, un grupo particularmente vulnerable al VRS, marca un avance significativo en la búsqueda de soluciones efectivas para desafíos de salud globales.

Participan también en la dirección del estudio la Dra. Susan Bueno, Profesora Titular UC y directora científica del Estudio Científico-Clínico Fase 2 de la vacuna VRS; el Dr. Hernán Peñaloza, profesor asistente UC y co-director científico; el Dr. Pablo González, profesor asociado UC y director ejecutivo del mismo estudio; la Dra. Katia Abarca, directora médico del estudio junto al Dr. Mario Calvo de la Universidad Austral de Chile, la Dra. Nicole Le Corre subdirectora médico del estudio y Antonia Reyes, coordinadora del estudio.

“Chile está demostrando que tiene la capacidad de liderar investigaciones de alto impacto a nivel global. Este avance es el fruto de años de trabajo colaborativo que recibe un reconocimiento internacional por la calidad del trabajo realizado y que se sostiene en decenas artículos científicos en revistas de alto impacto”- Dr. Alexis Kalergis, Profesor Titular UC, director del Instituto Milenio en Inmunología e Inmunoterapia.

Además de los oradores principales, el evento contó con la presencia de otras autoridades nacionales e internacionales, académicos de prestigio, representantes de organismos gubernamentales y socios estratégicos. Entre los asistentes destacados se encontraban el Dr. Enrique Paris, presidente del Instituto de Políticas Públicas en Salud y exministro de Salud; el Dr. Sergio Lavandero, presidente de la Academia Chilena de Ciencias; y Sra. Alejandra Pizarro, directora de la Agencia Nacional de Investigación y Desarrollo.

Fuente: Pontificia Universidad Católica de Chile. Disponible en <https://lc.cx/tZ2VD2>

Ministra de Salud de Bolivia anuncia la llegada de más de medio millón de vacunas contra la COVID-19

17 ene. Corresponden a la marca estadounidense Pfizer y su efecto protector dura un año.

La ministra de Salud, María Renée Castro, anunció este viernes que llegaron al país 560 mil dosis de vacunas contra la COVID-19 y que las dosis ya están siendo distribuidas a los diferentes centros de salud del país.

El Gobierno accedió a estas vacunas por medio del mecanismo Covax, a través de la OPS y la OMS, dijo la autoridad y especificó que se trata de vacunas de la marca Pfizer (EEUU), que “están actualizadas “gracias a la tecnología”.

“Eso nos está permitiendo luchar contra la variante y subvariante de todos los linajes de ómicron”, expresó la ministra a radio Panamericana, y aseguró que una dosis anual de esta vacuna es suficiente para proteger a la población del coronavirus.

En los primeros 15 días de enero, los centros de salud registraron 599 casos de COVID-19 y cuatro fallecidos, todos los pacientes sufrían enfermedades de base o alguna enfermedad crónica.

Autoridades de salud han informado que en el país, circula el linaje de coronavirus ómicron y su variante JN.1, que aparece con los síntomas tradicionales de resfrío, dolor en las articulaciones, fiebre alta, entre otros, por eso se reitera la importancia de la vacunación.

Fuente: Visión 360. Disponible en <https://lc.cx/8YXT51>

Premian resultados de la ciencia y la innovación

17 ene. La clausura de la Feria Nacional de Innovación para el Desarrollo Sostenible, que durante tres días sesionó en el capitalino Palacio de Convenciones, devino en escenario propicio para distinguir a 22 resultados científicos con alto impacto en la economía y la sociedad.

Con la presencia de Susely Morfa González, miembro del Comité Central del Partido y jefa de su departamento de Atención al Sector Social, Eduardo Martínez Díaz, viceprimer ministro y Armando Rodríguez Batista, titular de Ciencia, Tecnología y Medio Ambiente (Citma), recibieron el Premio Nacional a la Innovación Tecnológica los trabajos: Desarrollo del soporte analítico para las vacunas **SOBERANA 02** y **SOBERANA Plus**, del Instituto Finlay de Vacunas (IFV) y Establecimiento a escala industrial del proceso productivo de la síntesis en fase sólida de péptidos como nueva plataforma nacional para la producción de nuevos fármacos, aplicada en el Ingrediente Farmacéutico Activo del producto JUSVINZA, del Centro de Ingeniería Genética y Biotecnología (CIGB).

Merecieron también el lauro, Tecnología de fabricación de polvos abrasivos para el pulido de pisos y terrazas, a partir de procesamiento aluminotérmico de residuales industriales y minerales cubanos, a cargo del Centro de Investigaciones de Soldadura, Universidad Central de Las Villas y Empresa de Materiales de Construcción, de Villa Clara, NEREA-Productos, y Tecnologías Innovadoras para la agricultura cubana, Instituto de Ciencia y Tecnología de Materiales (IMRE) y Fundación Universitaria de Innovación y Desarrollo, de la Universidad de La Habana.

Se incluyen, además, Programa U33 para el análisis de redes eléctricas de subtransmisión y distribución, del Centro de Estudios Electroenergéticos de la Universidad Central de Las Villas, Despacho Nacional de Carga-Unión Nacional Eléctrica y Empresa de Tecnología de la Información y la Automática, de Sancti Spíritus-Unión Nacional Eléctrica y el titulado Instrumentos e indicadores para la evaluación de Bancos de Leche Humana en Cuba, Escuela Nacional de Salud Pública.

Completan el listado Caracterización Genética de aislamientos de SARS-CoV-2 y su aplicación en las evaluaciones de productos biofarmacéuticos cubanos contra la COVID-19, Centro de Investigaciones Científicas de la Defensa Civil, con la participación del CIGB y el IFV, Compendio de innovaciones en el manejo y control de los recursos hídricos para un desarrollo sostenible, Empresa de Aprovechamiento Hidráulico de Ciego de Ávila, Instituto Nacional de Recursos Hidráulicos y Estrategia organizacional para la implementación del programa de control de hipertensión en el primer nivel de atención, Hospital Universitario General Calixto García.

Trece trabajos fueron reconocidos con los Premios Especiales del Citma en sus diferentes categorías correspondientes al periodo 2022-2023, mientras el doctor en Ciencias Fernando González Bermúdez y el Máster en Ciencias Carlos Manuel Rodríguez Otero, resultaron galardonados con el Premio Nacional de Medio Ambiente.

Durante la ceremonia, el Centro de Investigación del Petróleo recibió el certificado que lo acredita como Empresa de Alta Tecnología. Igualmente, el Parque Científico Tecnológico de Matanzas y Servicios Médicos cubanos, rubricaron un convenio de colaboración para crear la Empresa Mixta Bioprint3D, dirigida a la producción y comercialización de dispositivos para la salud, basados en tecnología de fabricación aditiva y bioimpresión.

Fuente: Granma. Disponible en <https://lc.cx/1WTvWr>



SK bioscience Secures FDA Approval for Phase 3 Clinical Trial of 21-Valent Pneumococcal Conjugate Vaccine in the U.S.

Jan 20. SK bioscience has taken a significant step towards entering the global pneumococcal market by receiving approval to proceed with the Phase 3 clinical trial of its 21-valent pneumococcal conjugate vaccine candidate in the United States, following earlier approval in Korea.

This vaccine, alongside a newly announced next-generation pneumococcal vaccine, is expected to serve as a new growth engine for SK bioscience, promising a leading position in a market with annual revenues totaling several tens of trillions of won.

On January 17, SK bioscience announced the completion of the IND (Investigational New Drug) approval process for the Phase 3 clinical trial of its jointly developed vaccine candidate 'GBP410' with Sanofi, from both Korea's Ministry of Food and Drug Safety and the U.S. FDA.



The global Phase 3 trial of GBP410, which began dosing in Australia last month, will involve approximately 7,700 infants, children, and adolescents aged 6 weeks to 17 years. It will compare the immunogenicity and safety of GBP410 with existing approved pneumococcal vaccines through up to four doses.

In June 2023, SK bioscience and Sanofi successfully secured results from GBP410's Phase 2 trial, which involved 140 children aged 12 to 15 months and 712 infants aged 42 to 89 days. The comparison demonstrated equivalent immunogenicity between GBP410 and the control vaccine, Prevnar 13, for both primary and booster vaccinations.

On the safety front, no severe adverse events related to the vaccine were reported in the GBP410 group. Additionally, even when administered alongside other recommended vaccines for infants and children, such as tetanus, diphtheria, pertussis, polio, and Haemophilus influenzae type B vaccines, GBP410 maintained equivalent levels of immunogenicity and safety compared to the control vaccine.

GBP410 is notable for being the first vaccine candidate in clinical trials for infants to include more than 20 serotypes. It is expected to significantly contribute to reducing the incidence of invasive pneumococcal disease (IPD), a major health concern for infants.

According to the WHO, approximately 700,000 children under 5 worldwide die from pneumonia-related illnesses each year, with about 300,000 of these deaths due to pneumococcal disease. This creates a high demand for broad-spectrum pneumococcal vaccines like GBP410, which offer wider prevention coverage.

To prepare for GBP410's commercialization, SK bioscience, in collaboration with Sanofi, began expanding its vaccine manufacturing facility, 'L House,' in March last year.

Simultaneously, SK bioscience and Sanofi are expanding their collaboration on GBP410's development and commercialization, aiming to initiate new joint development projects, raising market expectations. Agreements

signed last month aim to develop next-generation pneumococcal conjugate vaccines for infants, children, and adults with potentially broader preventive effects than currently marketed products.

Under the new project, SK bioscience will receive an upfront payment of 50 million euros (approximately 75.5 billion won) from Sanofi, with milestone payments totaling up to 300 million euros (approximately 452.9 billion won) upon completion.

Both companies will equally share the research and development costs for the vaccine. Sanofi will bear all commercialization-related expenses, while SK bioscience will handle sales in Korea, and Sanofi will manage global sales. Profits from product sales will be shared between both parties according to a predetermined ratio.

Conjugate-type pneumococcal vaccines are known for their excellent preventive effects, holding 94% of market sales as of 2023, playing a crucial role in preventing pneumococcal disease.

According to Evaluate Pharma, the pneumococcal conjugate vaccine market is projected to grow at a CAGR of 4.7%, expanding from 11.9 trillion won in 2024 to 14.2 trillion won in 2028. SK bioscience plans to leverage advanced technology to target the 14 trillion-won global pneumococcal vaccine market, securing new future growth engines and establishing itself as a global-scale vaccine and biopharmaceutical company.

"The FDA's completion of the Phase 3 trial review for GBP410 is a key advancement in its development," said SK bioscience CEO Ahn Jae-yong. "The company's commitment to addressing unmet medical needs and providing safe and effective protection through GBP410 and future innovative next-generation pneumococcal vaccines exceeding 21-valent."

Fuente: KOREA IT TIMES. Disponible en <https://lc.cx/ol-BOg>

Cervical cancer awareness month: HPV vaccine should be made available through govt schemes

Jan 20. Cervical cancer is one of the leading causes of cancer-related deaths among women worldwide. Despite being preventable and treatable when detected early, many women in India continue to face challenges in accessing timely diagnosis, effective treatment, and preventive measures like HPV vaccination.

Hemant Kumar Rout speaks to Dr Sachin Sekhar Biswal, medical oncologist at Manipal Hospitals, Bhubaneswar, to discuss advancements in diagnosis, treatment and vaccine availability.



Q. What are the current trends in cervical cancer incidence and mortality rates in India, and how have they changed over the past decade?

Cervical cancer is the second most common cancer among women in India after breast cancer, with approximately 1.2 lakh new cases diagnosed annually. As per the data from global cancer observatory (Globocan 2022), cervical cancer is the ninth most common cause of cancer death worldwide. In India, it is the third most common cancer detected (both sexes combined).

Over the last decade, there has been a slight decline in incidence rates due to increased awareness, improved screening, and vaccination efforts. However, rural areas in the country still witness high mortality

rates due to delayed diagnosis and inadequate healthcare facilities.

Q. Which age groups and demographic segments are the most affected, and what are the key risk factors contributing to these patterns?

Higher prevalence of human papillomavirus (HPV) is a major cause of cervical cancer in India and other southeast Asian countries. Women aged 30-50 years are the most affected by cervical cancer. Poor access to healthcare, multiple pregnancies, and lack of education about sexual health contribute to higher prevalence. The risk factors most commonly associated with cervical cancer are multiple sexual partners, smoking, poor genital hygiene, early marriage, and low socio-economic status.

Q. What are the most common diagnostic methods for cervical cancer, and how accessible are they in urban and rural areas?

The most definitive diagnostic method of cervical cancer is a cervical biopsy. Before proceeding for cervical biopsy patients are often screened with the available tests such as pap smear, visual inspection with acetic acid (VIA) and HPV DNA testing. Since the latent period of the virus is high, screening plays a major role in the natural history and early detection of cervical cancer. In urban areas where availability of facilities is not an issue, the usual recommendation is a co-testing (pap smear and HPV DNA) once every five years. In rural areas, however, where the molecular diagnostic methods are not easily accessible, simple pap smear or VIA might be done for screening.

Q. What are the standard management and treatment options available for cervical cancer patients?

Once the diagnosis of cervical cancer is done, next comes staging. It is usually done with the help of a cross-sectional imaging such as CT scan, MRI or a PET-CT scan. In early cervical cancer, the disease can be cured with surgery. Even in advanced stages, the disease can be cured with chemoradiation (combined radiation and chemotherapy). Patients with metastatic disease (disease spread to distant organs) are seldom cured. Metastatic cervical cancer is treated with systemic therapy (chemotherapy, targeted therapy or immunotherapy). Outcomes of disease vary as per the nature of the healthcare facilities. The outcome is better in centres equipped with modern radiation and imaging techniques with high volume than patients treated at low volume centres.

Q. How accessible is the HPV vaccine in India, and what initiatives are being undertaken to improve vaccination coverage?

HPV vaccines are now universal and widely accepted. Accessibility has also improved with the costs going down. The need of the hour is to make the vaccines more and more accessible by reducing costs, creating awareness and availability through government schemes. Initiatives are being taken at different levels to increase awareness as well as vaccination coverage. The government is planning to integrate the HPV vaccine into the national immunisation schedule. Efforts are underway to develop an indigenous effective vaccine to reduce the economic burden. Currently available quadrivalent and nonavalent vaccines are recommended for prevention of cervical cancer as well as some other HPV related diseases.

Q. What are the red flags and how cervical cancer can be prevented?

Cervical cancer often develops gradually, starting as precancerous changes in the cervix. Recognising early symptoms and signs can significantly improve the disease outcomes. Some red flags include abnormal vaginal bleeding, pelvic pain, unexplained fatigue, frequent urination or urinary issues and leg swelling. Early

diagnosis and treatment of abnormal cervical cells detected through screening can prevent progression to cervical cancer.

Awareness is also the key to reduce the burden of cervical cancer. January is observed as global cervical cancer awareness month. WHO has its global strategy for cervical cancer elimination by the year 2030 through 90% HPV vaccination coverage, 70% screening coverage, and 90% access to treatment for cervical pre-cancer including access to palliative care.

Q. What role does diet play in the prevention and management of cervical cancer, and are there specific dietary recommendations for affected individuals?

A healthy diet rich in fruits, vegetables, and antioxidants can boost the immune system and may reduce the risk of cervical cancer. Maintaining an ideal weight and an active lifestyle can help reduce the cancer burden, not only in case of cervical cancer but also in other cancer types. Avoiding smoking and alcohol consumption will also lead to a decrease in the possibility to develop cervical cancer. Foods rich in antioxidants help to decrease the chance of developing cervical cancer. Specific dietary recommendations are there for patients undergoing active treatment for cervical cancer.

Fuente: The Indian Express. Disponible en <https://lc.cx/oSPiuX>

RSV Vaccine Demonstrates High Effectiveness in Preventing Severe Respiratory Disease in Older Adults

Jan 21. The RSVpreF vaccine is highly effective in preventing severe respiratory syncytial virus (RSV) infections in adults aged 60 and older, according to a study published in JAMA Network Open “Estimated vaccine effectiveness for respiratory syncytial virus-related lower respiratory tract disease”.

On June 21, 2023, the US Advisory Committee on Immunization Practices recommended that adults aged 60 and over may receive a single dose of RSVpreF. However, vaccine effectiveness (VE) against RSV-related hospitalizations and emergency department (ED) visits has not been fully described.

“We evaluated, in a large US health care network, RSVpreF effectiveness against first occurrence of RSV-related lower respiratory tract disease [LRTD] inpatient or ED visit,” wrote Sara Tartof, PhD, MPH, Department of Research and Evaluation, Kaiser Permanente Southern California in Pasadena, and coauthors.

The researchers analyzed 7047 patients with RSV-related LRTD events, including 623 RSV-positive cases and 6424 RSV-negative controls. Among the study participants, 8.8% tested positive for RSV, and 3.2% had received the RSVpreF vaccine. Most participants (93.3%) had ≥ 1 comorbidity, and more than half (57.4%) were aged 75 years or older.

The adjusted VE of RSVpreF against RSV-related LRTD hospitalization or ED visits was 91% (95% CI, 59%-98%) compared with strictly defined controls and 90% (95% CI, 59%-97%) in broader analyses. Patients who received the vaccine did so a median of 61 days before their LRTD encounter. Additionally, the vaccine demonstrated an 89% VE (95% CI, 13%-99%) against severe RSV-related LRTD requiring supplemental oxygen.

Sensitivity analyses focusing on the first LRTD event for each patient yielded similar VE results. Despite high VE, vaccination rates were relatively low, with significant demographic and health-related disparities among

recipients. Older adults, non-Hispanic Asian or Pacific Islander and White patients, and those with frequent outpatient visits were more likely to be vaccinated, while individuals with chronic obstructive pulmonary disease, diabetes, or peripheral vascular disease were less likely to receive the vaccine.

“Based on our study results and RSV incidence in older adults, for approximately every 250 persons vaccinated, 1 RSV-related ED or hospitalization encounter could be prevented in the first season after vaccination,” concluded the study authors.

Fuente: Pharmacy Learning Network. Disponible en <https://lc.cx/G7IDet>

Gavi and partners pioneer new approach to deliver critical vaccinations in humanitarian contexts

Jan 21. A new report, Gavi's Humanitarian Partnerships: achievements and learning, 2022–2024, shows how Gavi and humanitarian partners are bridging immunisation gaps to reach children and infants living in crisis-affected settings across 11 countries in Africa, paving the way for solutions that address the needs of some of the most vulnerable populations – while improving health security around the world.

According to the report, integrating humanitarian and immunisation services through Gavi's Humanitarian Partnerships (ZIP) has enabled the delivery of life-saving vaccines to children in hard-to-reach and conflict-afflicted communities, without compromising quality. By addressing and overcoming various equity barriers that have long hindered global vaccination progress, Gavi and partners have helped protect hundreds of thousands from life-threatening and highly contagious diseases like measles.

With new access to vaccinate children in these communities, the partnership has also pioneered new ways of working for the Vaccine Alliance, partnering with nongovernmental humanitarian organisations for the first time. ZIP has additionally delivered routine childhood vaccines to children up aged up to five years who previously missed out – an unprecedented achievement in humanitarian contexts.

“Gavi is unwavering in its commitment to ensuring every child, no matter their circumstances, has access to life-saving vaccines,” said Thabani Maphosa, Chief Country Delivery Officer at Gavi, the Vaccine Alliance. “Our partnership with humanitarian actors is a testament to this commitment, enabling us to reach communities affected by instability, insecurity, conflict and crisis. With the continued support of our donors and partners, we can redefine what is possible in humanitarian immunisation, ensuring full vaccine coverage even in the hardest-to-reach places.”

With protracted crises unfolding across the world, access to vaccines remains critical to avoid immunity gaps that leave communities vulnerable to preventable outbreaks and pose risks to global health security. Launched as a pilot in 2022, Gavi's Humanitarian Partnerships (ZIP) were designed to address inequities in vaccine access, prioritising communities that were previously left behind. Working in partnership with the IRC,



World Vision and consortia of local civil society organisations, the initiative has proven that effective immunisation programmes can succeed in even the most complex humanitarian contexts, including semi-autonomous or separatist areas, non-state armed group locations, refugee camps and among marginalised populations.

With millions of children missing out on routine vaccines every year, ZIP has addressed the urgent challenge of reaching 'zero-dose' children – those who have never received a single vaccine – and under-immunised children. Equally vital in the effort to sustainably protect communities is the task of rebuilding routine immunisation systems in these crisis-affected areas. ZIP is working to strike this balance, ensuring that both immediate needs and long-term health system resilience are addressed, while maintaining a coordinated approach with ministries of health in a manner that preserves ZIP's independence and neutrality.

As Gavi looks to 2025 and beyond, the insights drawn from ZIP will shape new commitments to expand immunisation services to reach even more children. By leveraging the learnings from the last two years, Gavi aims to set a new standard for delivering comprehensive vaccination coverage in the most challenging environments – a critical step toward achieving vaccine equity and health security worldwide.

Fuente: GAVI. Disponible en <https://lc.cx/e36aM0>

Free Meningococcal B vaccination now available for infants, adolescents

Jan 23. Approximately 4,200 infants and 18,500 teenagers across the NT are now eligible to receive free Meningococcal B vaccinations, which will be rolled into the regular immunisation schedule, the government has announced.

The free shots program that came into effect on January 1, provides vital protection for infants aged six weeks to two years and adolescents aged 14 to 19 years, safeguarding them against the potentially severe bacterial infection that can impact the brain and spinal cord.

Chief Minister Lia Finocchiaro said the program reflected the CLP Government's commitment to improve health outcomes for all Territorians and help ease the cost of living.

"This initiative delivers on our promise to ensure Territory families have access to vital protection against meningococcal B," Ms Finocchiaro said.

"From the beginning of this year, Year 9 students will receive the vaccine as part of the school immunisation schedule, while a catch-up program will be provided in schools later in the year for students in years 10, 11 and 12."

The meningococcal B vaccine was previously only available for free to Aboriginal children or those with specific medical conditions, while the program aims to ensure every eligible family can now access it for free.

"It's very exciting that we're now able to close the loop and add Meningitis B to the schedule, and hopefully, as the Chief Minister said, into the future, it will become part of the National Immunization program as well, and will be available around the country," NT Chief Health Officer Christine Connors said.

"So we've had over 600 children come and receive a meningitis B dose, which is very exciting. We thought lots of people would be on holidays and not thinking about it, so it's been a really fantastic take up for the little babies."

"I encourage all parents of young children to make contact with their GP or with the Community Care Centers and book in to come and get your meningitis B."

The free vaccine follows tragic the death of two-year-old Skylar, who succumbed to the illness in 2017.

Skylar's mother Sally Lawrence, who lobbied for the vaccine to be made free, encouraged all parents to get the shot for their children.

"We never had this opportunity. We didn't even know this [vaccine] existed, and obviously we lost our daughter," Ms Lawrence said. "So we definitely encourage families to take up this free vaccination."

NT Health has launched an awareness campaign to promote the meningococcal B vaccine, available through the NT School Immunisation Program and other healthcare providers.

Adolescents require two doses, while infants need three doses if under 12 months and two doses if over 12 months.

The vaccine can be given alongside other routine vaccinations starting at 6 weeks of age, and parents can access it through health clinics, pharmacies or their GP.

Over the last 10 years, the Territory has reported 18 instances of meningococcal B, resulting in three fatalities in the previous five years. Survivors of the illness frequently endure severe, long-term disabilities, affecting one in every four people diagnosed.

The CLP Government has invested \$1 million to fund the program, including a two-year catch-up initiative, and committed an additional \$500,000 annually to support ongoing vaccinations for infants and Year 9 students.

Fuente: NT Independent. Disponible en <https://lc.cx/QmQ-wi>

T-cell based dengue vaccine PRAHR wins best innovation award at GBU-Biothon

Jan 23. A TEAM of researchers at Gujarat Biotechnology University (GBU) Gandhinagar has developed an innovation of engineered T cell-based vaccine for dengue-Pathogen ReActive cells Harnessing T cell receptors (TCRs) – PRAHR — which has bagged the 'Best Societal Impact Award' at the first Biothon 2025 held on January 20 at GBU. The team led by Dr Ritesh Kumar Assistant Professor GBU Gandhinagar developed a novel vaccine concept to combat dengue, a major public health concern in tropical nations like India. This vaccine focuses on harnessing the body's T cells—immune warriors—to eliminate dengue-infected cells without triggering harmful immune responses.

"Unlike existing vaccines, which can sometimes worsen dengue infections upon subsequent exposure, this approach bypasses the risk of antibody-dependent enhancement (ADE), a complication associated with traditional vaccines. By engineering T cells to recognize and destroy infected cells, the vaccine offers a safer and more effective solution," Dr Ritesh Kumar mentoring the project told The Indian Express.

Researchers believe the innovative idea holds immense promise for tackling a wide range of diseases including cancer through cutting-edge immunoengineering technologies.

Dengue virus, which is the causative agent of dengue fever transmitted by Aedes mosquitoes, infects cells of immune system namely dendritic cells and macrophages. Most individuals infected, recover with little to no complications and develop substantial immunity against the infecting viral serotype.

“However, when exposed to another serotype of the virus (dengue virus has four serotypes, DENV 1-4) these individuals are at an increased risk of developing severe disease, a condition that clinicians call antibody-dependent disease enhancement or ADE. The first instance of viral infection, usually by a single serotype, culminates in the secretion of antibodies by B-cell activation, and the eventual elimination of the virus from the system. Thus, rendering the individual immune to the serotype encountered,” explains Dr Kumar.

Prof Rakesh Rawal, head of department Medical Biotechnology GBU told this paper, “A major complication arises at the time of second infection by another serotype, when antibodies generated in the first instance bind to viral antigens with a much lower affinity. The presence of these “low affinity” antibodies prevents clearance of the virus by agglutination and increases their uptake by immune cells possessing thus increasing the viral uptake and severity of infection.”

Further adding, Prof Rawal said, “Secondary dengue infections are often associated with pneumonia and death...Currently, there are only two dengue vaccines available and both being live vaccines have major safety concerns associated with their use...”

To identify potent TCR sequences, the group of four students-Nachiket Waman, Tanish Kumar, Karishma Mistry, Achal Nawghade-combined multi-serotype viral antigen identification with affinity-based enrichment of reactive T cells obtained from individuals with primary infection.

“The group ideated a fresh and unique approach to tackle a major health concern by employing cutting-edge immunoengineering technologies and impressed the panel of industry experts judging the event. Thus, winning us the Award for Best Societal Impact at Biothon 2025,” Nachiket Waman, animal biotechnology postgraduate student said.

Fuente: The Indian Express. Disponible en <https://lc.cx/uSH1Z4>



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[Past, present, and future of Phase 3 vaccine trial design: rethinking statistics for the 21st century.](#)

Janani L, Phillips R, Van Vogt E, Liu X, Waddington C, Cro S. Clin Exp Immunol. 2025 Jan 21;219(1):uxae104. doi: 10.1093/cei/uxae104. PMID: 39570146

[Chiral nanomaterials as vaccine adjuvants: a new horizon in immunotherapy.](#)

Wang K, Wang H, Wang X. Nanoscale. 2025 Jan 23;17(4):1932-1935. doi: 10.1039/d4nr03542a. PMID: 39676760

[Global vaccine research and application hotspots and trends: a systematic bibliometric analysis based on SCIE highly cited papers.](#)

Shi R, Cao H, He M, Wang Y, Zhu Y, Wang X, You C, Liang L, Xia X. BMJ Open. 2025 Jan 22;15(1):e094935. doi: 10.1136/bmjopen-2024-094935. PMID: 39843371

[Corrigendum to "Sustainability of measles, rubella, and congenital rubella syndrome \(CRS\) elimination in the United States, January 2022 - June 2024" \[Vaccine 46C \(2025\) 126681\].](#)

Hinman AR, Banerjee E, Brewer NT, Hayes ES, Kimberlin D, Orenstein WA, Roberts M, Zucker JR. Vaccine. 2025 Jan 21;48:126739. doi: 10.1016/j.vaccine.2025.126739. Online ahead of print. PMID: 39842149

[Advances in nucleic acid-based cancer vaccines.](#)

Liao HC, Liu SJ. J Biomed Sci. 2025 Jan 21;32(1):10. doi: 10.1186/s12929-024-01102-w. PMID: 39833784

[Adult vaccinations against respiratory infections.](#)

Torres A, Cilloniz C, Aldea M, Mena G, Miró JM, Trilla A, Vilella A, Menéndez R. Expert Rev Anti Infect Ther. 2025 Jan 23. doi: 10.1080/14787210.2025.2457464. Online ahead of print. PMID: 39849822

[Malaria: Factors affecting disease severity, immune evasion mechanisms, and reversal of immune inhibition to enhance vaccine efficacy.](#)

Su XZ, Xu F, Stadler RV, Teklemichael AA, Wu J. PLoS Pathog. 2025 Jan 23;21(1):e1012853. doi: 10.1371/journal.ppat.1012853. eCollection 2025 Jan. PMID: 39847577

[Tuberculosis vaccines and therapeutic drug: challenges and future directions.](#)

An Y, Ni R, Zhuang L, Yang L, Ye Z, Li L, Parkkila S, Aspatwar A, Gong W. Mol Biomed. 2025 Jan 22;6(1):4. doi: 10.1186/s43556-024-00243-6. PMID: 39841361

[Impacts of State COVID-19 Vaccine Mandates for Health Care Workers on Health Sector Employment in the United States.](#)

Wang Y, Callison K, Hernandez JH, Stoecker C. Am J Public Health. 2025 Jan 23:e1-e5. doi: 10.2105/AJPH.2024.307906. Online ahead of print. PMID: 39847751

[Leveraging mRNA technology for antigen based immuno-oncology therapies.](#)

Floudas CS, Sarkizova S, Ceccarelli M, Zheng W.J Immunother Cancer. 2025 Jan 22;13(1):e010569. doi: 10.1136/jitc-2024-010569.PMID: 39848687

[Tick-borne encephalitis vaccine uptake, effectiveness, and impact in Sweden from 2018 to 2022.](#)

Palmborg A, Angulo FJ, Zhang P, Pilz A, Stark J, Moïsi JC, Jodar L.Sci Rep. 2025 Jan 23;15(1):2927. doi: 10.1038/s41598-025-86968-y.PMID: 39849089

[Immunogenicity and vaccine efficacy of Actinobacillus pleuropneumoniae-derived extracellular vesicles as a novel vaccine candidate.](#)

Hyun Park S, Kim YH, Lee HJ, Han JM, Seo BJ, Park GS, Kim C, Ryu YB, Kim WS.Virulence. 2025 Dec;16(1):2453818. doi: 10.1080/21505594.2025.2453818. Epub 2025 Jan 20.PMID: 39831520

[Multifunctional Mycobacterial Topoisomerases with Distinctive Features.](#)

Faheem I, Nagaraja V.ACS Infect Dis. 2025 Jan 18. doi: 10.1021/acsinfecdis.4c00880. Online ahead of print.PMID: 39825760

[Rational design of a triple-type HPV53/56/66 vaccine with one preferable base particle incorporating two identified immunodominant sites.](#)

Qian C, Chen J, Yang Y, Lu Y, Ren T, Jiang Y, Huang Y, Chi X, Zhang S, Zhang C, Li K, Shen J, Zhang S, Wang D, Zhou L, Li T, Zheng Q, Yu H, Gu Y, Xia N, Li S.J Nanobiotechnology. 2025 Jan 20;23(1):28. doi: 10.1186/s12951-024-03080-5.PMID: 39828682

[Proteomic characterization and comparison of the infective and adult life stage secretomes from Necator americanus and Ancylostoma ceylanicum.](#)

Wong Y, Rosa BA, Becker L, Camberis M, LeGros G, Zhan B, Bottazzi ME, Fujiwara RT, Ritmejerite E, Laha T, Chaiyadet S, Taweethavonsawat P, Brindley PJ, Bracken BK, Giacomini PR, Mitreva M, Loukas A.PLoS Negl Trop Dis. 2025 Jan 20;19(1):e0012780. doi: 10.1371/journal.pntd.0012780. eCollection 2025 Jan.PMID: 39832284

[Respiratory syncytial virus vaccine effectiveness among US veterans, September, 2023 to March, 2024: a target trial emulation study.](#)

Bajema KL, Yan L, Li Y, Argraves S, Rajeevan N, Fox A, Vergun R, Berry K, Bui D, Huang Y, Lin HM, Hynes DM, Lucero-Obusan C, Schirmer P, Cunningham F, Huang GD, Aslan M, Ioannou GN.Lancet Infect Dis. 2025 Jan 20:S1473-3099(24)00796-5. doi: 10.1016/S1473-3099(24)00796-5. Online ahead of print.PMID: 39848264

[Oral immunization with attenuated Salmonella Typhimurium as a carrier of DNA vaccine against infectious hematopoietic necrosis virus \(IHNV\) in rainbow trout \(Oncorhynchus mykiss\).](#)

Jalali SAH, Sepehri Nia S, Beyraghdar Kashkooli O, Soleimanin-Zad S.Fish Shellfish Immunol. 2025 Jan 17;158:110127. doi: 10.1016/j.fsi.2025.110127. Online ahead of print.PMID: 39828013

[Expert consensus and recommendations on the live attenuated hepatitis A vaccine and immunization practices in India.](#)

Shah N, Faridi MMA, Bhawe S, Ghosh A, Balasubramanian S, Arankalle V, Shah R, Chitkara AJ, Wadhwa A, Chaudhry J, Srinivasan R, Surendranath M, Sapru A, Mitra M. Hum Vaccin Immunother. 2025 Dec;21(1):2447643. doi: 10.1080/21645515.2024.2447643. Epub 2025 Jan 16. PMID: 39819191

[Closing the gap on vaccine uptake in developing countries: Is there a role for cash incentives?](#)

Sato R. Vaccine. 2025 Jan 22;48:126763. doi: 10.1016/j.vaccine.2025.126763. Online ahead of print. PMID: 39848129

[Real-world evidence of yellow Fever vaccination data-driven study.](#)

Farnsworth MG, Khanipov K, Botnar K, Weaver SC, Barrett ADT, Golovko G. Vaccine. 2025 Jan 22;48:126758. doi: 10.1016/j.vaccine.2025.126758. Online ahead of print. PMID: 39848130

[Association between adults' vaccine literacy and their intention to recommend older family members for influenza vaccine.](#)

Liao Z, Deng L, Luo J, Shi M, Huang Z, Song Z, Li S, Wu F, Yuan J, Chen H, Sun C. Vaccine. 2025 Jan 20;48:126757. doi: 10.1016/j.vaccine.2025.126757. Online ahead of print. PMID: 39837002

[Towards an HCV vaccine: an overview of the immunization strategies for eliciting an effective B-cell response.](#)

Costa GL, Sautto GA. Expert Rev Vaccines. 2025 Jan 18. doi: 10.1080/14760584.2025.2452955. Online ahead of print. PMID: 39825640

[The COVID-19 pandemic and Urology - reflecting on successful initiatives and lessons in Australia.](#)

Xu J, Alberto M, Woon D, Bolton D, Ischia J. BJU Int. 2025 Jan 19. doi: 10.1111/bju.16652. Online ahead of print. PMID: 39829160

[Vaccine-derived poliovirus type 3 emergence in Guinea, 2024.](#)

Faye M, Ndiaye N, Kouadio EK, Camara SA, Solano S, Kébé O, Nestor N, Modibo B, Keita D, Diakité B, Sidibé K, Kandé M, Landoh DE, Sylla M, Sow S, Dosseh A, Chia JE, Diop O, Sow A, Dia N, Sall AA, Cissé G, Faye O, Anfumbom K, Kipela JM. Lancet Infect Dis. 2025 Jan 20:S1473-3099(25)00017-9. doi: 10.1016/S1473-3099(25)00017-9. Online ahead of print. PMID: 39848262

[Emerging of non-vaccine Streptococcus pneumoniae serotypes colonizing the nasopharynx of children under the age of five years in the 13-valent pneumococcal conjugate vaccine era in Moshi district, Tanzania. A short communication.](#)

Ngocho JS, de Jongh CEVG, Sebba J, Mtei M, Kinabo G, Mmbaga BT, de Jonge M. Vaccine. 2025 Jan 21;48:126724. doi: 10.1016/j.vaccine.2025.126724. Online ahead of print. PMID: 39842150

[New onset of giant cell arteritis with ischaemic optic neuropathy following the seventh dose of COVID-19 mRNA vaccination: A case report and literature review.](#)

Ohmura SI, Yonezawa H, Yukishima T, Gohto Y, Obana A. *Mod Rheumatol Case Rep*. 2025 Jan 16;9(1):131-136. doi: 10.1093/mrcr/rxae042.PMID: 39096515

[Adherence to vaccination against SARS-CoV-2 and vaccine safety in patients with immunoglobulin G4-related disease.](#)

Mastromanno L, Giardina F, Gattamelata A, Colafrancesco S, Truglia S, Spinelli FR, Simoncelli E, Lucchino B, Conti F, Priori R. *Reumatismo*. 2025 Jan 22. doi: 10.4081/reumatismo.2025.1744. Online ahead of print.PMID: 39849976

[Elderly-onset inflammatory myopathy associated with Sjögren's syndrome following SARS-CoV-2 vaccination.](#)

Komori Y, Kobayashi S, Hatano K, Saito Y, Arai T, Kubo K. *Mod Rheumatol Case Rep*. 2025 Jan 16;9(1):104-109. doi: 10.1093/mrcr/rxae055.PMID: 39302732

[Mathematical model for understanding the relationship between diabetes and novel coronavirus.](#)

Kumari P, Singh HP, Singh S. *Gene*. 2025 Jan 20;934:148970. doi: 10.1016/j.gene.2024.148970. Epub 2024 Sep 30.PMID: 39357581

[Effectiveness of HPV vaccination in reducing infection among young Brazilian women.](#)

Santos ACDS, Silva NNT, da Silva IDC, Carneiro M, Coura-Vital W, Lima AA. *BMC Infect Dis*. 2025 Jan 20;25(1):88. doi: 10.1186/s12879-024-10284-5.PMID: 39833677

[A Japanese case of VEXAS syndrome after COVID-19 vaccination: Comparison with previously reported cases.](#)

Miyagi Y, Kobayashi H, Umebayashi Y, Okimura A, Nakatsugawa M, Maeda A, Kirino Y, Aoki A. *Mod Rheumatol Case Rep*. 2025 Jan 16;9(1):218-223. doi: 10.1093/mrcr/rxae054.PMID: 39242354

[The Role of Innate Immunity in Healthy Aging Through Antimicrobial Peptides.](#)

Cho Y, Hahm JH. *Immunology*. 2025 Jan 21. doi: 10.1111/imm.13899. Online ahead of print.PMID: 39838571

[Phenomenological Modeling of Antibody Response from Vaccine Strain Composition.](#)

Ovchinnikov V, Karplus M. *Antibodies (Basel)*. 2025 Jan 16;14(1):6. doi: 10.3390/antib14010006.PMID: 39846614

[Neutralizing antibody immune correlates in COVAIL trial recipients of an mRNA second COVID-19 vaccine boost.](#)

Zhang B, Fong Y, Dang L, Fintzi J, Chen S, Wang J, Rouphael NG, Branche AR, Diemert DJ, Falsey AR, Gracia DS, Baden LR, Frey SE, Whitaker JA, Little SJ, Kamidani S, Walter EB, Novak RM, Rupp R, Jackson LA, Yu C, Margaret CA, Molitor C, Borate B, Busch S, Benkeser D, Netzl A, Smith DJ, Babu TM, Kottkamp AC, Luetkemeyer AF, Immergluck LC, Presti RM, Bäcker M, Winokur PL, Mahgoub SM, Goepfert PA, Fusco DN, Atmar RL, Posavad CM, Mu J, Makowski M, Makhene MK, Nayak SU, Roberts PC, Gilbert

PB, Follmann D; Coronavirus Variant Immunologic Landscape Trial (COVAIL) Study Team. *Nat Commun.* 2025 Jan 17;16(1):759. doi: 10.1038/s41467-025-55931-w.PMID: 39824819

[Delay discounting predicts COVID-19 vaccine booster willingness.](#)

Halilova JG, Fynes-Clinson S, Terao CM, Addis DR, Rosenbaum RS. *Cogn Res Princ Implic.* 2025 Jan 23;10(1):1. doi: 10.1186/s41235-024-00609-y.PMID: 39847192

[Recombinant production platform for Group A Streptococcus glycoconjugate vaccines.](#)

Ajay Castro S, Passmore IJ, Ndeh D, Shaw HA, Ruda A, Burns K, Thomson S, Nagar R, Alagesan K, Reglinski M, Lucas K, Abouelhadid S, Schwarz-Linek U, Mawas F, Widmalm G, Wren BW, Dorfmueller HC. *NPJ Vaccines.* 2025 Jan 22;10(1):16. doi: 10.1038/s41541-025-01068-2.PMID: 39843476

[The cost-effectiveness of vaccination against COVID-19 illness during the initial year of vaccination.](#)

Prosser LA, Perroud J, Chung GS, Gebremariam A, Janusz CB, Mercon K, Rose AM, Avañcena ALV, Kim DeLuca E, Hutton DW. *Vaccine.* 2025 Jan 21;43:126725. doi: 10.1016/j.vaccine.2025.126725. Online ahead of print.PMID: 39842151

[Enterovirus and Parechovirus Neurologic Infections in Children: Clinical Presentations and Neuropathogenesis.](#)

Freeman MC, Messacar K. *J Pediatric Infect Dis Soc.* 2025 Jan 20;14(1):piae069. doi: 10.1093/jpids/piae069.PMID: 39776161

[Comprehensive Interventions in HBV Care: Nursing-Sensitive Approach.](#)

Zhang J, Xie X, Qi L. *Gynecol Obstet Invest.* 2025 Jan 16:1-26. doi: 10.1159/000542999. Online ahead of print.PMID: 39820185

[Genetic Code Expansion: Recent Developments and Emerging Applications.](#)

Huang Y, Zhang P, Wang H, Chen Y, Liu T, Luo X. *Chem Rev.* 2025 Jan 22;125(2):523-598. doi: 10.1021/acs.chemrev.4c00216. Epub 2024 Dec 31.PMID: 39737807

[Unraveling Cardiovascular Risks and Benefits of COVID-19 Vaccines: A Systematic Review.](#)

Satyam SM, El-Tanani M, Bairy LK, Rehman A, Srivastava A, Kenneth JM, Prem SM. *Cardiovasc Toxicol.* 2025 Jan 18. doi: 10.1007/s12012-024-09954-2. Online ahead of print.PMID: 39826014

[Norovirus replication, host interactions and vaccine advances.](#)

Prasad BVV, Atmar RL, Ramani S, Palzkill T, Song Y, Crawford SE, Estes MK. *Nat Rev Microbiol.* 2025 Jan 17. doi: 10.1038/s41579-024-01144-9. Online ahead of print.PMID: 39824927

[Extracellular vesicles from fifth-stage larval *Angiostrongylus cantonensis* upregulate cholesterol biosynthesis and suppress NLRP2-associated inflammatory responses in mouse astrocytes.](#)

Cheng C-J, Wang L-C, Chu LJ, Chen K-Y, Huang C-Y, Lan K-L, Huang K-Y. *mSystems.* 2025 Jan 21;10(1):e0101424. doi: 10.1128/msystems.01014-24. Epub 2024 Dec 5.PMID: 39636121

[Understanding barriers to influenza vaccination among parents is important to improve vaccine uptake among children.](#)

Davey SA, Elander J, Woodward A, Head MG, Gaffiero D. Hum Vaccin Immunother. 2025 Dec;21(1):2457198. doi: 10.1080/21645515.2025.2457198. Epub 2025 Jan 23. PMID: 39848626

[Assessment of MpoXplex, a high-throughput and multiplexed immunoassay: a diagnostic accuracy study.](#)

Jones S, Hicks B, Callaby H, Bailey D, Gordon NC, Rampling T, Houlihan C, Jones R, Pond M, Mehta R, Wright D, Oeser C, Tonge S, Linley E, Rowe C, Hallis B, Otter A. Lancet Microbe. 2025 Jan 17:100987. doi: 10.1016/j.lanmic.2024.100987. Online ahead of print. PMID: 39832516

[Characteristics influencing COVID-19 testing and vaccination among Spanish-speaking Latine persons in North Carolina.](#)

Aguilar-Palma SK, McCoy TP, Mann-Jackson L, Alonzo J, Jibriel MSE, Johnson DM, Locklear T, Tanner AE, Hall MA, Bertoni AG, Sucaldito AD, Russell LP, Rhodes SD. PLoS One. 2025 Jan 23;20(1):e0317794. doi: 10.1371/journal.pone.0317794. eCollection 2025. PMID: 39847561

[Broad-spectrum affinity chromatography of SARS-CoV-2 and Omicron vaccines from ligand screening to purification.](#)

Ma J, Dong X, Sun Y, Shi Q. J Chromatogr A. 2025 Jan 17;1743:465685. doi: 10.1016/j.chroma.2025.465685. Online ahead of print. PMID: 39842145

[A systematic approach for scalable purification of virus-like particles.](#)

Park EY, Minkner R. Protein Expr Purif. 2025 Jan 17:106664. doi: 10.1016/j.pep.2025.106664. Online ahead of print. PMID: 39828016

[SARS-CoV-2 vaccine based on ferritin complexes with screened immunogenic sequences from the Fv-antibody library.](#)

Jung J, Kim TH, Park JY, Kwon S, Sung JS, Kang MJ, Jose J, Lee M, Shin HJ, Pyun JC. J Mater Chem B. 2025 Jan 22;13(4):1383-1394. doi: 10.1039/d4tb01595a. PMID: 39668674

[Advances in designed bionanomolecular assemblies for biotechnological and biomedical applications.](#)

Snoj J, Zhou W, Ljubetič A, Jerala R. Curr Opin Biotechnol. 2025 Jan 18;92:103256. doi: 10.1016/j.copbio.2024.103256. Online ahead of print. PMID: 39827499

[The genome sequence of a non-capsular natural *Bacillus anthracis* strain of A.Br.001/002 canSNP group isolated from permafrost in Yakutia, Russia.](#)

Goncharova Y, Bakhteeva I, Mironova R, Skryabin Y, Kislichkina A, Solomentseva A, Timofeev V. Microbiol Resour Announc. 2025 Jan 16;14(1):e0110524. doi: 10.1128/mra.01105-24. Epub 2024 Nov 29. PMID: 39611799

[Integrating malaria vaccine and CRISPR/Cas9 gene drive: a comprehensive strategy for accelerated malaria eradication.](#)

Abraham IC, Aboje JE, Ukoaka BM, Tom-Ayegunle K, Amjad M, Abdulkader A, Agbo CE, Akinruli OA, Akisanmi TR, Oyetola EO, Olatunji G, Kokori E, Aderinto N. *Malar J.* 2025 Jan 17;24(1):17. doi: 10.1186/s12936-025-05243-7. PMID: 39825389

[Safety and immunogenicity of an mRNA-1273 vaccine booster in adolescents.](#)

Figuerola AL, Ali K, Berman G, Xu W, Deng W, Girard B, Yeakey A, Slobod K, Miller J, Das R, Priddy F; on behalf the TeenCOVE Study Group; List of TeenCOVE Investigators. *Hum Vaccin Immunother.* 2025 Dec;21(1):2436714. doi: 10.1080/21645515.2024.2436714. Epub 2025 Jan 21. PMID: 39836458

[Beta-variant recombinant SARS CoV-2 vaccine induces durable cross-reactive antibodies against Omicron BA variants.](#)

Launay O, Gupta R, Machabert T, Konate E, Rousseau A, Vigne C, Beckers F, Devlin L, Botelho-Nevers E, Cachanado M, Chidiac C, Deplanque D, Dussol B, Ben Ghezala I, Lachatre M, Lacombe K, Laine F, Luong Nguyen LB, Pavese P, Schmidt-Mutter C, Tivolacci MP, Chiczy RM, Coudsy B, Sridhar S, Touati A, Tartour E, Simon T. *Commun Med (Lond).* 2025 Jan 18;5(1):21. doi: 10.1038/s43856-024-00675-9. PMID: 39827332

[Genome-scale, functional screen of Plasmodium sexual replication.](#)

Prajapati SK, Williamson KC. *Trends Parasitol.* 2025 Jan 16:S1471-4922(24)00376-3. doi: 10.1016/j.pt.2024.12.014. Online ahead of print. PMID: 39824704

[Targeting murine metastatic cancers with cholera toxin A1-adjuvanted peptide vaccines.](#)

Paul S, Kaya M, Johnsson O, Grauers Wiktorin H, Törnell A, Arabpour M, Hellstrand K, Martner A. *Hum Vaccin Immunother.* 2025 Dec;21(1):2455240. doi: 10.1080/21645515.2025.2455240. Epub 2025 Jan 23. PMID: 39848921

[A lyophilised formulation of chimpanzee adenovirus vector for long-term stability outside the deep-freeze cold chain.](#)

Mathot F, Lefebvre E, Francq BG, Guillaume D, Bourlès E. *Commun Med (Lond).* 2025 Jan 18;5(1):23. doi: 10.1038/s43856-025-00740-x. PMID: 39827305

[Saponin-based adjuvant uptake and induction of antigen cross-presentation by CD11b+ dendritic cells and macrophages.](#)

Huis In 't Veld LG, Cornelissen LA, van den Bogaard L, Ansems M, Ho NI, Adema GJ. *NPJ Vaccines.* 2025 Jan 22;10(1):15. doi: 10.1038/s41541-024-01056-y. PMID: 39843492

[Investigating assumptions in motivational interviewing among general practitioners: a qualitative study.](#)

Aujoulat P, Manac'h A, Le Reste C, Le Goff D, Le Reste JY, Barais M. *BMC Prim Care.* 2025 Jan 20;26(1):15. doi: 10.1186/s12875-025-02706-3. PMID: 39833675

[Time to start taking time seriously: how to investigate unexpected biological rhythms within infectious disease research.](#)

Edgar RS, O'Donnell AJ, Xiaodong Zhuang A, Reece SE. *Philos Trans R Soc Lond B Biol Sci.* 2025 Jan 23;380(1918):20230336. doi: 10.1098/rstb.2023.0336. Epub 2025 Jan 23. PMID: 39842489

[Roll out and prospects of the malaria vaccine R21/Matrix-M.](#)

Seidlein LV. PLoS Med. 2025 Jan 17;22(1):e1004515. doi: 10.1371/journal.pmed.1004515. eCollection 2025 Jan. PMID: 39823400

[Update of diagnostic methods in tuberculosis \(TB\).](#)

Matteo MJ, Latini MC, Martinovic DN, Bottiglieri M. Rev Argent Microbiol. 2025 Jan 18:S0325-7541(24)00164-0. doi: 10.1016/j.ram.2024.12.008. Online ahead of print. PMID: 39828451

[\[Retrospective analysis in children with vaccination granuloma\].](#)

Trefzer L, Kerl-French K, Weins AB, Schnopp C. Dermatologie (Heidelb). 2025 Jan 23. doi: 10.1007/s00105-024-05457-x. Online ahead of print. PMID: 39847061

[Wall teichoic acid glycosylation of bovine-associated Staphylococcus aureus strains.](#)

Exel CE, Tamminga SM, Man-Bovenkerk S, Temming AR, Hendriks A, Spaninks M, van Sorge NM, Benedictus L. Vet Microbiol. 2025 Jan 20;302:110403. doi: 10.1016/j.vetmic.2025.110403. Online ahead of print. PMID: 39842365

[A Qualitative Study of Attitudes Toward HPV Vaccine Recommendation in Otolaryngology Clinics.](#)

Janio EA, Walker C, Steere E, Seaman AT, Askelson N, Pagedar NA. Laryngoscope Investig Otolaryngol. 2025 Jan 21;10(1):e70085. doi: 10.1002/lio2.70085. eCollection 2025 Feb. PMID: 39840027

[Immunological and protective evaluation of purE/purK gene-deletion mutant of Brucella melitensis M5 strain.](#)

Wang X, Ji X, Feng S, Sun Y, Zhu L, Liu J. Microb Pathog. 2025 Jan 17;200:107308. doi: 10.1016/j.micpath.2025.107308. Online ahead of print. PMID: 39828225

[Combating Salmonella: a focus on antimicrobial resistance and the need for effective vaccination.](#)

Nazir J, Manzoor T, Saleem A, Gani U, Bhat SS, Khan S, Haq Z, Jha P, Ahmad SM. BMC Infect Dis. 2025 Jan 20;25(1):84. doi: 10.1186/s12879-025-10478-5. PMID: 39833704

[Development of a broad-spectrum epitope-based vaccine against Streptococcus pneumoniae.](#)

Nahian M, Shahab M, Khan MR, Akash S, Banu TA, Sarkar MH, Goswami B, Chowdhury SF, Islam MA, Abu Rus'd A, Begum S, Habib A, Shaikh AA, Oliveira JIN, Akter S. PLoS One. 2025 Jan 16;20(1):e0317216. doi: 10.1371/journal.pone.0317216. eCollection 2025. PMID: 39820032

[Vaccination strategies in a pair formation model for human papillomavirus infection: An optimal control approach.](#)

Saldaña F. J Theor Biol. 2025 Jan 21;597:111994. doi: 10.1016/j.jtbi.2024.111994. Epub 2024 Nov 16. PMID: 39557360

[Childhood vaccinations and the risk of leukemia: A nationwide cohort study.](#)

Alberts A, Kjaer SK, Sørensen SH, Winther JF, Schmiegelow K, Sopina L, Erdmann F, Hargreave M. Int J Cancer. 2025 Jan 16. doi: 10.1002/ijc.35338. Online ahead of print. PMID: 39821269

[Corrigendum to "The immunogenicity and safety of Group B Streptococcal maternal vaccines: A systematic review" \[Vaccine 42 \(2024\) 84-98\].](#)

Bjerkhaug AU, Ramalingham S, Mboizi R, Le Doare K, Klingenberg C. *Vaccine*. 2025 Jan 22;48:126732. doi: 10.1016/j.vaccine.2025.126732. Online ahead of print. PMID: 39848128

[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 22;17(3):4699-4710. doi: 10.1021/acsami.4c20770. Epub 2025 Jan 9. PMID: 39789795

[Challenges to promoting maternal respiratory syncytial virus vaccination in Japan.](#)

Oka E, Ueda Y, Yagi A, Machida M, Furuse Y, Tabuchi T. *Vaccine*. 2025 Jan 22;48:126767. doi: 10.1016/j.vaccine.2025.126767. Online ahead of print. PMID: 39848132

Pfizer's Abrysvo vaccine is highly effective in preventing severe lower respiratory tract illness in those at high risk from the Respiratory Syncytial Virus (RSV). ...However, Japan is enduring a state of broad vaccine hesitancy. In light of our experiences with Jap ...

[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 16:1-14. doi: 10.1080/17460441.2025.2450636. Online ahead of print. PMID: 39789967

[Effectiveness of a 2-dose varicella vaccination program in Changzhou, China, during the transitional period \(2017-2022\): a registry-based case-cohort study.](#)

Xiong S, Han C, Wu D, Mi X, Zhang P, Gao H, Cao G, Yao F, Chen C, Lv X. *BMC Public Health*. 2025 Jan 17;25(1):207. doi: 10.1186/s12889-025-21348-9. PMID: 39825294

[Association of gross domestic product with equitable access to childhood vaccines in 195 countries: a systematic review and meta-analysis.](#)

Dinga JN, Akinbobola JS, Afolayan FID, Njoh AA, Kassa T, Lazarus DD, Dieye Y, Kassa GM, Duedu KO, Tshifhiwa N, Oumouna M; AFVANET -African Vaccinology Network. *BMJ Glob Health*. 2025 Jan 19;10(1):e015693. doi: 10.1136/bmjgh-2024-015693. PMID: 39828433

[Facilitators and Barriers to COVID-19 Vaccine Uptake Among Meat Processing Workers in Nebraska: A Mixed-Methods Analysis Using the COM-B Model.](#)

Ramos AK, Prado PS, Carvajal-Suárez M, Herstein JJ, Trinidad N, Lowe AE. *Health Promot Pract*. 2025 Jan 16:15248399241303889. doi: 10.1177/15248399241303889. Online ahead of print. PMID: 39817319

[Surveillance on the coverage of herpes zoster vaccine and post-marketing adverse events in Jiangsu province, China.](#)

Sun X, Zhang L, Zhang T, Sun J, Xu Y, Liu L, Liu YB, Hu R, Fu Y, Wang Z, Sun H. *Hum Vaccin Immunother*. 2025 Dec;21(1):2449714. doi: 10.1080/21645515.2025.2449714. Epub 2025 Jan 19. PMID: 39827897

[Chain Length Does Matter: Development of High-Potency QS-21-Based Vaccine Adjuvants.](#)

Luo Z, Wang H, Ge W, Wang Y, Zhou S, Jing R, Siddique MN, Ma X, Zheng H, Wang X. *J Med Chem.* 2025 Jan 23;68(2):1511-1525. doi: 10.1021/acs.jmedchem.4c02173. Epub 2025 Jan 2. PMID: 39745876

[Significant abundance of bacterial flagellin and expression of its surface localized receptor toll-like receptor 5 and cytokine interleukin-22 in South African infants with poor oral rotavirus vaccine take.](#)

Haindongo NJ, Seheri M, Magwira CA. *Gut Pathog.* 2025 Jan 17;17(1):3. doi: 10.1186/s13099-024-00672-2. PMID: 39825457

[Comparative evaluation of protective efficacy of experimental inactivated vaccines against haemorrhagic septicaemia.](#)

Dhakarwal P, Medhi M, Muthuchelvan D, Chaudhuri P, Viswas KN, Patel BHM, Shivachandra SB, Bhanuprakash V, Ramakrishnan MA. *Braz J Microbiol.* 2025 Jan 20. doi: 10.1007/s42770-024-01610-9. Online ahead of print. PMID: 39832111

[Review on bacterial outer membrane vesicles: structure, vesicle formation, separation and biotechnological applications.](#)

Zhao X, Wei Y, Bu Y, Ren X, Dong Z. *Microb Cell Fact.* 2025 Jan 21;24(1):27. doi: 10.1186/s12934-025-02653-9. PMID: 39833809

[Respiratory Syncytial Virus Vaccination Is Associated With Increased Odds of Preterm Birth.](#)

Kuitunen I, Haapanen M. *Acta Paediatr.* 2025 Jan 20. doi: 10.1111/apa.17595. Online ahead of print. PMID: 39831688

[New insights into gold nanoparticles in virology: A review of their applications in the prevention, detection, and treatment of viral infections.](#)

Teimouri H, Taheri S, Saidabad FE, Nakazato G, Maghsoud Y, Babaei A. *Biomed Pharmacother.* 2025 Jan 17;183:117844. doi: 10.1016/j.biopha.2025.117844. Online ahead of print. PMID: 39826358

[High coverage and equitable distribution of COVID-19 vaccine uptake in two vulnerable areas in Bangladesh.](#)

Islam MN, De Allegri M, Bonnet E, Sarker M, Goudet JM, Franceschin L, Ridde V. *PLOS Glob Public Health.* 2025 Jan 17;5(1):e0004178. doi: 10.1371/journal.pgph.0004178. eCollection 2025. PMID: 39823518

[Interactions between live attenuated influenza vaccine and nasopharyngeal microbiota among children aged 24-59 months in The Gambia: a phase 4, open-label, randomised controlled trial.](#)

Peno C, Jagne YJ, Clerc M, Balcazar Lopez C, Armitage EP, Sallah H, Drammeh S, Senghore E, Goderski G, van Tol S, Meijer A, Ruiz-Rodriguez A, de Steenhuijsen Piters W, de Koff E, Jarju S, Lindsey BB, Camara J, Bah S, Mohammed NI, Kampmann B, Clarke E, Dockrell DH, de Silva TI, Bogaert D. *Lancet Microbe.* 2025 Jan 17:100971. doi: 10.1016/j.lanmic.2024.100971. Online ahead of print. PMID: 39832517

[Population Attributable Fraction of Non-Vaccination and Under-Vaccination of COVID-19 Due to Vaccine Hesitancy, 2022.](#)

Nguyen KH, Chung EL, Bednarczyk RA, Vasudevan L. Am J Epidemiol. 2025 Jan 20;kwaf009. doi: 10.1093/aje/kwaf009. Online ahead of print. PMID: 39838524

[Peptide fibrils as a vaccine: Proof of concept.](#)

Zabrodskaia Y, Sivak K, Sergeeva M, Aleksandrov A, Kalinina E, Taraskin A, Erokin M, Erokina E, Egorov V. J Immunol Methods. 2025 Jan 18;113811. doi: 10.1016/j.jim.2025.113811. Online ahead of print. PMID: 39832622

[Insights into pathologic mechanisms occurring during serious adverse events following live zoster vaccination.](#)

Kennedy PGE, Grose C. J Virol. 2025 Jan 17:e0181624. doi: 10.1128/jvi.01816-24. Online ahead of print. PMID: 39818965

[DNA Nanostructures-Based In Situ Cancer Vaccines: Mechanisms and Applications.](#)

Lin B, Liu Y, Chen Q, Li M, Xu L, Chen Q, Tan Y, Liu Z. Small Methods. 2025 Jan 22:e2401501. doi: 10.1002/smt.202401501. Online ahead of print. PMID: 39840607

[Evolutionary analysis of a coupled epidemic-voluntary vaccination behavior model with immunity waning on complex networks.](#)

Meng X, Fan Y, Qiao Y, Lin J, Cai Z, Si S. Risk Anal. 2025 Jan 18. doi: 10.1111/risa.17699. Online ahead of print. PMID: 39826914

[Manganese dioxide-based in situ vaccine boosts antitumor immunity via simultaneous activation of immunogenic cell death and the STING pathway.](#)

Peng P, Cao J, Cheng W, Ming H, He B, Duan X, Li L, Tian Y, Nice EC, Zhang Z, Huang C, Zheng S. Acta Biomater. 2025 Jan 18;S1742-7061(25)00037-6. doi: 10.1016/j.actbio.2025.01.029. Online ahead of print. PMID: 39832699

[Heterologous Prime-Boost immunization with Adenoviral vector and recombinant subunit vaccines strategies against dengue virus type 2.](#)

Shoushtari M, Salehi-Vaziri M, Kadkhodazadeh M, Teimoori A, Arashkia A, Roohvand F, Teimoori-Toolabi L, Pouriayevali MH, Azadmanesh K. Int Immunopharmacol. 2025 Jan 19;148:114032. doi: 10.1016/j.intimp.2025.114032. Online ahead of print. PMID: 39832457

[Nationwide representative serosurvey of third-grade school children to evaluate the hepatitis B vaccination impact in Kyrgyzstan, 2022.](#)

Brandl M, Zhumagulova G, Ishenapysova G, Nurmatov Z, Kuchuk TE, Zamirbekova N, Sattarova G, Temirbekova S, Bekenova Z, Gassowski M, Mosina L, Mozalevskis A, Dudareva S, Datta SS. BMC Infect Dis. 2025 Jan 22;25(1):100. doi: 10.1186/s12879-025-10491-8. PMID: 39844081

[An mpox quadrivalent mRNA vaccine elicits sustained and protective immunity in mice against lethal vaccinia virus challenge.](#)

Li E, Yang Q, Xie W, Gong Q, Guo X, Zhou J, Zhang J, Chuai X, Wang Y, Chiu S. *Emerg Microbes Infect.* 2025 Dec;14(1):2447619. doi: 10.1080/22221751.2024.2447619. Epub 2025 Jan 22. PMID: 39745170

[Virulence and pathogenicity of group B *Streptococcus*: Virulence factors and their roles in perinatal infection.](#)

Megli CJ, Carlin SM, Giacobe EJ, Hillebrand GH, Hooven TA. *Virulence.* 2025 Dec;16(1):2451173. doi: 10.1080/21505594.2025.2451173. Epub 2025 Jan 23. PMID: 39844743

[Navigating vaccine confidence: A mixed methods study investigating healthcare providers' perspectives across four non-EU European regions.](#)

Claessens T, Eagan RL, Hendrickx G, Van Damme P, Larson HJ, Karafillakis E. *Vaccine.* 2025 Jan 20;47:126694. doi: 10.1016/j.vaccine.2024.126694. Online ahead of print. PMID: 39837102

[Current understanding of human bioaccumulation patterns and health effects of exposure to perfluorooctane sulfonate \(PFOS\).](#)

Suman TY, Kwak IS. *J Hazard Mater.* 2025 Jan 16;487:137249. doi: 10.1016/j.jhazmat.2025.137249. Online ahead of print. PMID: 39842114

[Safety of two-dose schedule of COVID-19 adsorbed inactivated vaccine \(CoronaVac; Sinovac/Butantan\) and heterologous additional doses of mRNA BNT162b2 \(Pfizer/BioNTech\) in immunocompromised and immunocompetent individuals.](#)

Miyaji KT, Ibrahim KY, Infante V, Moreira RM, Santos CFD, Belizário JC, Pinto MIM, Marinho AKBB, Pereira JM, Mello LS, Silva VGLD, Sato PK, Strabelli TMV, Ragiotta L, Pacheco PHTM, Braga PE, Loch AP, Precioso AR, Sartori AMC; Study Group; França JÍ, Lima MA, Ando MCS, Rodrigues CCM, Song ATW, Lara AN, Belizário AC, Lima AHSB, Zanetti ACB, Paulo ARDSA, Rosa BMDS, Moraes BDGC, Oliveira BR, Picone CM, Aranda CS, Troli CP, Kokron CM, Terrabuio DRB, Abdala E, David Neto E, Nakanishi ÉYS, Lima FMS, Firmino FB, Santos FBAD, Bacal F, Fatobene G, Santana JO, Kalil J, Barbosa J, Gonçalves LP, Otuyama LJ, Pierrotti LC, Compte LCM, Marinho L, Chaer LN, Seguro LF, Azevedo LS, Ueda MA, Terreri MT, Barros MAMT, Grecco O, Sejas ONE, Musqueira PT, Ito RKL, Teixeira SSS, Fidalgo S, Costa SF, Campos SV, Fernandes TH, Rocha VG, Coelho VC. *Rev Inst Med Trop Sao Paulo.* 2025 Jan 20;67:e2. doi: 10.1590/S1678-9946202567002. eCollection 2025. PMID: 39841781

[Knowledge, attitude, and reasons for non-uptake of human papilloma virus vaccination among nursing students.](#)

Chauhan S, Tiwari SK, Dubey V, Tripathi P, Pandey P, Singh A, Choudhary NPS. *BMC Med.* 2025 Jan 21;23(1):35. doi: 10.1186/s12916-025-03874-w. PMID: 39838402

[Changes and determinants of pneumococcal vaccine uptake in Ethiopia.](#)

Mamo BT, Geram FG, Getnet KY, Bonger ZT. *PLOS Glob Public Health.* 2025 Jan 22;5(1):e0004192. doi: 10.1371/journal.pgph.0004192. eCollection 2025. PMID: 39841683

[MA104 cell line is permissive for human bocavirus 1 infection.](#)

Tang J, Chen S, Deng Y, Liu J, Huang D, Fu M, Xue B, Liu C, Wu C, Wang F, Zhou Y, Yang Q, Chen X. *J Virol.* 2025 Jan 23:e0153924. doi: 10.1128/jvi.01539-24. Online ahead of print. PMID: 39846742

[A Synthetic Oligosaccharide Resembling Francisella tularensis Strain 15 O-Antigen Capsular Polysaccharide as a Lead for Tularemia Diagnostics and Therapeutics.](#)

Pradhan K, Reuber EE, Sletten ET, Tomaso H, Seeberger PH. *Angew Chem Int Ed Engl.* 2025 Jan 21;64(4):e202416432. doi: 10.1002/anie.202416432. Epub 2024 Oct 31. PMID: 39417793

[Identification and characterization of CD83 and CD276 as markers of dendritic cells in olive flounder \(Paralichthys olivaceus\).](#)

Sohn MY, Jeong JM, Kang G, Woo WS, Kim KH, Son HJ, Park CI. *Fish Shellfish Immunol.* 2025 Jan 21:110149. doi: 10.1016/j.fsi.2025.110149. Online ahead of print. PMID: 39848419

[Are psychological attitudes towards vaccination an expression of personality? A cross-sectional study on COVID-19 vaccination in France.](#)

Lièvre G, Sicsic J, Galmiche S, Charmet T, Fontanet A, Mueller J. *BMC Public Health.* 2025 Jan 17;25(1):209. doi: 10.1186/s12889-025-21364-9. PMID: 39825254

[Safety and humoral immunogenicity of the ChAdOx1 nCoV-19 vaccine administered as a fourth dose booster following two doses of ChAdOx1 nCoV-19 and a third dose of BNT162b2 \(COV009\): A prospective cohort study.](#)

Feng S, Bibi S, Aley PK, Cappuccini F, Clutterbuck EA, Conlin K, Ebrahimi N, Eordogh A, Faust SN, Felle S, Green J, Gill H, Mujadidi Y, Oladunjoye I, Owino N, Plested E, Robinson H, Stuart A, Voysey M, Pollard AJ, Lambe T. *J Infect.* 2025 Jan 16;90(2):106423. doi: 10.1016/j.jinf.2025.106423. Online ahead of print. PMID: 39826861

[Impact of COVID-19 vaccinations in India: a state-wise analysis.](#)

Adhikary A, Pal M, Maiti R. *BMC Public Health.* 2025 Jan 20;25(1):219. doi: 10.1186/s12889-025-21401-7. PMID: 39828683

[Prosthetic Double Valve Endocarditis Caused by Streptococcus pneumoniae Due to Overwhelming Post-Splenectomy Infection \(OPSI\) in a Pre-Vaccine Licensure Era: A Case Report.](#)

Ito T, Yokota K, Yamamoto S. *J Infect Chemother.* 2025 Jan 20:102632. doi: 10.1016/j.jiac.2025.102632. Online ahead of print. PMID: 39842511

[Modelling the impact and cost-effectiveness of upcoming Zika virus vaccines on congenital Zika syndrome.](#)

Song H, Jin S, Yang GJ, Lim NWH, Lim JT, Dickens BL. *Vaccine.* 2025 Jan 16;48:126728. doi: 10.1016/j.vaccine.2025.126728. Online ahead of print. PMID: 39823847

[Novel vaccine strategies to induce respiratory mucosal immunity: advances and implications.](#)

Zhou M, Xiao H, Yang X, Cheng T, Yuan L, Xia N. *MedComm (2020).* 2025 Jan 16;6(2):e70056. doi: 10.1002/mco2.70056. eCollection 2025 Feb. PMID: 39830020

[Safety and immunogenicity of different 17DD yellow fever vaccines in golden-headed tamarins \(Leontopithecus chrysomelas\): Inhibition of viremia and RNAemia after homologous live-attenuated vaccination.](#)

Silva-Fernandes AT, Moreira SB, Gaspar LP, Cajaraville ACDRA, Simões M, Pereira RC, Gomes MPB, Santos VO, Santos RT, da Silva AMV, Fernandes CB, Caride EC, Borges MJB, Guimarães RC, Marchevsky RS, de Lima SMB, Ano Bom APD, Pissinatti A, Freire MDS. *Vaccine*. 2025 Jan 17;48:126721. doi: 10.1016/j.vaccine.2025.126721. Online ahead of print. PMID: 39826431

[Tracking acute flaccid paralysis in Niger: a half-decade epidemiological portrait \(2016-2021\).](#)

Ishagh EK, Ouédraogo MT, Oumarou B, Kaya MS, Diawara GA, Camara AM, Moussa S, Bienvenu K, Toko J, Harouna H, Moussa H, Kofi N', Tamuzi JL, Katoto PDMC, Wiysonge CS, Anya BM, Tshikolasoni MC. *BMC Infect Dis*. 2025 Jan 17;25(1):79. doi: 10.1186/s12879-025-10457-w. PMID: 39825249

[Burden of pertussis in infants in the Eastern Mediterranean Region and the impact of maternal vaccination: a systematic review.](#)

Saad RK, Khader Y, Munoz FM, Lami F, Mohsni E, Haddad N. *BMC Public Health*. 2025 Jan 22;25(1):268. doi: 10.1186/s12889-025-21329-y. PMID: 39844105

[Risk of Kawasaki Disease/Multisystem Inflammatory Syndrome Following COVID-19 Vaccination in Korean Children: A Self-Controlled Case Series Study.](#)

Kim S, Ko HY, Oh J, Yoon D, Kim JH, Choe YJ, Shin JY; CoVaSC Investigators. *J Korean Med Sci*. 2025 Jan 20;40(3):e10. doi: 10.3346/jkms.2025.40.e10. PMID: 39834222

[A single residue switch mediates the broad neutralization of Rotaviruses.](#)

Huang Y, Song F, Zeng Y, Sun H, Sheng R, Wang X, Liu L, Luo G, Jiang Y, Chen Y, Zhang M, Zhang S, Gu Y, Yu H, Li S, Li T, Zheng Q, Ge S, Zhang J, Xia N. *Nat Commun*. 2025 Jan 20;16(1):838. doi: 10.1038/s41467-025-56114-3. PMID: 39833145

[Navigating HPV Vaccination: a Qualitative Study on Chinese Women's Decision-Making Experiences.](#)

Li D, Zhang W, Stinson J, Jibb L, Killackey T, Pope N, Wu F, Yuan C. *J Cancer Educ*. 2025 Jan 20. doi: 10.1007/s13187-024-02555-1. Online ahead of print. PMID: 39831945

[Sustained immunogenicity of bivalent protein COVID-19 vaccine SCTV01C against antigen matched and mismatched variants.](#)

Wang G, Zhao K, Zhao X, Cui Y, He P, Zhang T, Wang Y, Shi R, Li Y, Wang Q, Ren Y, Chen Z, Zhao X, Xie Z, Liang Y, Tian Q, Pan J, Zhang C, Han Y, Dai Y, Ni S, Zhang Y, Yang X, Fu Y, Liu D, Li J, Zhang M, Hu Z, Xie L. *Expert Rev Vaccines*. 2025 Jan 20. doi: 10.1080/14760584.2025.2456231. Online ahead of print. PMID: 39834144

[The mRNA-1647 vaccine: A promising step toward the prevention of cytomegalovirus infection \(CMV\).](#)

Akingbola A, Adegbesan A, Adewole O, Adegoke K, Benson AE, Jombo PA, Uchechukwu Eboson S, Oluwasola V, Aiyenuro A. *Hum Vaccin Immunother*. 2025 Dec;21(1):2450045. doi: 10.1080/21645515.2025.2450045. Epub 2025 Jan 17. PMID: 39825496

[Mpox primer for clinicians: what makes the difference in 2024?](#)

Abdel-Rahman SM, Bayıcı BZ, Keske Ş, Kuşkucu M, Özsüreği Y, Rimoin AW, Rodriguez-Morales AJ, Ergönül Ö. *Curr Opin Infect Dis*. 2025 Jan 16. doi: 10.1097/QCO.0000000000001091. Online ahead of print. PMID: 39813011

[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 21;19(2):2099-2116. doi: 10.1021/acsnano.4c08898. Epub 2025 Jan 9. PMID: 39788571

[CRISPR/Cas9-mediated genomic insertion of functional genes into *Lactiplantibacillus plantarum* WCFS1.](#)

Wiull K, Haugen LK, Eijsink VGH, Mathiesen G. *Microbiol Spectr*. 2025 Jan 16:e0202524. doi: 10.1128/spectrum.02025-24. Online ahead of print. PMID: 39817779

[Process intensification of the baculovirus expression vector system using a perfusion process with a low multiplicity of infection at high cell concentrations.](#)

Altenburg JJ, Juarez-Garza BE, van Keimpema J, van Oosten L, Pijlman GP, van Oers MM, Wijffels RH, Martens DE. *Biotechnol Prog*. 2025 Jan 23:e3527. doi: 10.1002/btpr.3527. Online ahead of print. PMID: 39846509

[Designing of an innovative conserved multi-epitope subunit vaccine targeting SARS-CoV-2 glycoprotein and nucleoprotein through immunoinformatic.](#)

Adelusi TI, Ogunlana AT, Oyewole MP, Ojo TO, Olaoba OT, Oladipo EK, Akash S, Ibenmoussa S, Bourhia M, Jardan YAB, Sitotaw B. *Sci Rep*. 2025 Jan 20;15(1):2563. doi: 10.1038/s41598-024-72495-9. PMID: 39833186

[Immunogenicity of the 9-valent human papillomavirus vaccine: Post hoc analysis from five phase 3 studies.](#)

Giuliano AR, Palefsky JM, Goldstone SE, Bornstein J, De Coster I, Guevara AM, Mogensen O, Schilling A, Van Damme P, Vandermeulen C, Ellison MC; Thomas Group; Kaplan S, Lin J, Bonawitz R, Luxembourg A. *Hum Vaccin Immunother*. 2025 Dec;21(1):2425146. doi: 10.1080/21645515.2024.2425146. Epub 2025 Jan 22. PMID: 39840832

[Vaccine policy experts concerned about second Trump Administration.](#)

Furlow B. *Lancet Respir Med*. 2025 Jan 17:S2213-2600(25)00005-0. doi: 10.1016/S2213-2600(25)00005-0. Online ahead of print. PMID: 39832515

[Recombinant expression systems for production of stabilised virus-like particles as next-generation polio vaccines.](#)

Sherry L, Bahar MW, Porta C, Fox H, Grehan K, Nasta V, Duyvesteyn HME, De Colibus L, Marsian J, Murdoch I, Ponndorf D, Kim SR, Shah S, Carlyle S, Swanson JJ, Matthews S, Nicol C, Lomonosoff GP, Macadam AJ, Fry EE, Stuart DI, Stonehouse NJ, Rowlands DJ. *Nat Commun*. 2025 Jan 18;16(1):831. doi: 10.1038/s41467-025-56118-z. PMID: 39827284

[Strategies for introducing and implementing vaccines for adults into national immunization programs in Europe: Good practices and key insights of the adult immunization board meeting.](#)

Boccalini S, Bechini A, Del Riccio M, Weinberger B, Wysocki J, Martinelli D, Wichmann O, Likki T, Hendrickx G, Van Damme P, Wyndham-Thomas C, Bonanni P, Pattyn J. *Hum Vaccin Immunother.* 2025 Dec;21(1):2451487. doi: 10.1080/21645515.2025.2451487. Epub 2025 Jan 17. PMID: 39825592

[Revealing a novel GI-19 lineage infectious bronchitis virus sub-genotype with multiple recombinations in South Korea using whole-genome sequencing.](#)

Kim JY, Le HD, Thai TN, Kim JK, Song HS, Her M, Kim HR. *Infect Genet Evol.* 2025 Jan 16;128:105717. doi: 10.1016/j.meegid.2025.105717. Online ahead of print. PMID: 39826890

[Microneedle-mediated intradermal delivery of Bacille Calmette-Guérin \(BCG\) vaccines for single-dose tuberculosis vaccination.](#)

Lee S, Kim T, Seong KY, Yim SG, Lee WK, Kim S, Lee KO, Yang SY, Ryoo S. *Tuberculosis (Edinb).* 2025 Jan 16;151:102608. doi: 10.1016/j.tube.2025.102608. Online ahead of print. PMID: 39832400

[The detection of Japanese encephalitis virus \(JEV\) in the Murray region, New South Wales: a public health investigation.](#)

Shava GM, Todd K, Oakman T, Rahman S, Hueston L, Glasgow K, Roberts-Witteveen A. *Commun Dis Intell* (2018). 2025 Jan 22;49. doi: 10.33321/cdi.2025.49.004. PMID: 39837614

[\[Analysis of the surveillance system for adverse events following Immunization \(AEFI\) related to COVID-19 vaccines in Colombia, 2021-2023\]](#)
[Análise do sistema de vigilância de ESAVI por vacinas contra a COVID-19 na Colômbia, 2021-2023\].](#)

Saza-Londoño W, Pinzón-Fajardo DY, Urrea-Duque MV, Pinzón-Niño EL, Sánchez-León EM, Urieles-Sierra KI, Pinto-Díaz CA, Molina-León HF. *Rev Panam Salud Publica.* 2025 Jan 20;49:e2. doi: 10.26633/RPSP.2025.2. eCollection 2025. PMID: 39835250

[Genetic diversity and antigenic variability of foot-and-mouth disease virus strains in Egypt.](#)

Hosein HI, Abosria K, Rouby SR, El-Nahass ES, Zin Eldin ALA, Ewies SS, Abdel-Moneim AS. *Trop Anim Health Prod.* 2025 Jan 21;57(2):29. doi: 10.1007/s11250-025-04275-0. PMID: 39833593

[Discovery of three novel neutralizing antibody epitopes on the human astrovirus capsid spike and mechanistic insights into virus neutralization.](#)

Lanning S, Aguilar-Hernández N, Serrão VHB, López T, O'Rourke SM, Lentz A, Ricemeyer L, Espinosa R, López S, Arias CF, DuBois RM. *J Virol.* 2025 Jan 23:e0161924. doi: 10.1128/jvi.01619-24. Online ahead of print. PMID: 39846739

[TroTNFα, a teleost tumour necrosis factor of golden pompano \(*Trachinotus ovatus*\), enhances pathogen clearance and acts as an immune adjuvant.](#)

Zhang P, Wu Y, Chen X, Wang G, Li P, Cao Z, Du H, Zhang C, Du X, Chen G, Zhou Y, Sun Y. *Int J Biol Macromol.* 2025 Jan 20;299:140128. doi: 10.1016/j.ijbiomac.2025.140128. Online ahead of print. PMID: 39842583

[Generation of chimeric forms of rhesus macaque rhadinovirus expressing KSHV envelope glycoproteins gH and gL for utilization in an NHP model of infection.](#)

Estep RD, Li H, Govindan AN, McDonald KA, Axthelm MK, Wong SW. *J Virol.* 2025 Jan 21:e0192324. doi: 10.1128/jvi.01923-24. Online ahead of print. PMID: 39835812

[Maternal exposure to legacy PFAS compounds PFOA and PFOS is associated with disrupted cytokine homeostasis in neonates: The Upstate KIDS study \(2008-2010\).](#)

Jones LE, Ghassabian A, Yeung E, Mendola P, Kannan K, Bell EM. *Environ Int.* 2025 Jan 16;196:109288. doi: 10.1016/j.envint.2025.109288. Online ahead of print. PMID: 39848095

[Uptake of Recommended Vaccines During Pregnancy Among Publicly and Privately Insured People in the United States, December 2020-September 2022.](#)

Rowe SL, Sullivan SG, Munoz FM, Coates MM, Arah OA, Regan AK. *Am J Public Health.* 2025 Jan 23:e1-e10. doi: 10.2105/AJPH.2024.307899. Online ahead of print. PMID: 39847749

[Factors Influencing Adolescent COVID-19 Vaccination During the Omicron Surge.](#)

Rosen BL, Lee MR, Chandler EL, Meisman A, Kahn JA, Klein MD, Real FJ. *Health Promot Pract.* 2025 Jan 21:15248399241311583. doi: 10.1177/15248399241311583. Online ahead of print. PMID: 39834335

[Nanoparticles as Delivery Vehicles for Vaccines: The Use of Gold Nanoparticles.](#)

Kizilbash N, Suhail N, Soliman M, Elmagzoub RM, Marsh M, Farooq R. *Curr Pharm Biotechnol.* 2025 Jan 20. doi: 10.2174/0113892010363803250110052220. Online ahead of print. PMID: 39838661

[Characterization by LC-MS/MS analysis of KLH vaccine conjugated with a tick antigen peptide.](#)

Pousa S, Ramos-Bermúdez PE, Besada V, Cabrales-Rico A, Guirola Cruz O, Garay HE, Rodríguez-Mallón A, Zettl K, Wiśniewski JR, González LJ. *Analyst.* 2025 Jan 16. doi: 10.1039/d4an01449a. Online ahead of print. PMID: 39817672

[Evaluation of the adherence of municipalities and states to the Ministry of Health's microplanning for high-quality vaccination activities and the increase in vaccination coverage in Brazil.](#)

Araújo ACM, da Silva TPR, Velasquez-Melendez G, Nascimento LMD, Ferraz CC, Matozinhos FP, Fernandes EG. *BMC Public Health.* 2025 Jan 18;25(1):217. doi: 10.1186/s12889-025-21326-1. PMID: 39827108

[Psychological reactance to vaccine mandates on Twitter: a study of sentiments in the United States.](#)

Hsieh PH. *J Public Health Policy.* 2025 Jan 19. doi: 10.1057/s41271-025-00554-0. Online ahead of print. PMID: 39828759

[Factors influencing hepatitis B vaccination intention and behavior among college students in Tibet: Insights from the expanded theory of planned behavior.](#)

Chen Q, Ma J, Wu R, Wang Y, Ma X, Zheng X, Jin H. *Hum Vaccin Immunother.* 2025 Dec;21(1):2452026. doi: 10.1080/21645515.2025.2452026. Epub 2025 Jan 16. PMID: 39817760

[Mucosal immunity elicited by a human-Fcγ receptor-I targeted intranasal vaccine platform enhances resistance against nasopharyngeal colonization of *Streptococcus pneumoniae* and induces broadly protective immunity against respiratory pathogens.](#)

Kumar S, Hazlett K, Bai G. *Vaccine.* 2025 Jan 16;48:126729. doi: 10.1016/j.vaccine.2025.126729. Online ahead of print. PMID: 39823848

[Sofosbuvir as post-exposure prophylaxis for yellow fever-associated viscerotropic disease \(YEL-AVD\).](#)

Barrett J, Muntengesa E, Warrell C, Rampling T, Owen J, Patel D, Bhagani S, Moores R, Scobie A. *J Antimicrob Chemother.* 2025 Jan 17:dkae484. doi: 10.1093/jac/dkae484. Online ahead of print. PMID: 39821333

[Antibody responses against influenza A decline with successive years of annual influenza vaccination.](#)

Sullivan SG, Khvorov A, Carolan L, Dowson L, Hadiprodjo AJ, Sánchez-Ovando S, Liu Y, Leung VKY, Hodgson D, Blyth CC, Macnish M, Cheng AC, Haugenauer M, Clark J, Dougherty S, Macartney K, Koirala A, Khatami A, Jadhav A, Marshall H, Riley KE, Wark PAB, Delahunty C, Subbarao K, Kucharski AJ, Fox A. *NPJ Vaccines.* 2025 Jan 17;10(1):11. doi: 10.1038/s41541-024-01057-x. PMID: 39820465

[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 22;147(3):2829-2840. doi: 10.1021/jacs.4c16118. Epub 2025 Jan 10. PMID: 39792791

[Passive infusion of an S2-Stem broadly neutralizing antibody protects against SARS-CoV-2 infection and lower airway inflammation in rhesus macaques.](#)

Edwards CT, Karunakaran KA, Garcia E, Beutler N, Gagne M, Golden N, Aoued H, Pellegrini KL, Burnett MR, Honeycutt CC, Lapp SA, Ton T, Lin MC, Metz A, Bombin A, Goff K, Scheuermann SE, Wilkes A, Wood JS, Ehnert S, Weissman S, Curran EH, Roy M, Dessasau E, Paiardini M, Upadhyay AA, Moore IN, Maness NJ, Douek DC, Piantadosi A, Andrabi R, Rogers TR, Burton DR, Bosinger SE. *PLoS Pathog.* 2025 Jan 23;21(1):e1012456. doi: 10.1371/journal.ppat.1012456. Online ahead of print. PMID: 39847599

[Development of Virus-Like Particles \(VLPs\) for Hepatitis C Virus genotype 4: a novel approach for vaccine development in Egypt.](#)

Ali AA, Azouz RAM, Hussein NA, El-Shenawy R, Helmy NM, El-Abd YS, Tabll AA. *BMC Biotechnol.* 2025 Jan 18;25(1):8. doi: 10.1186/s12896-024-00935-5. PMID: 39827115

[Promoting aged care COVID-19 and influenza vaccination through education of Australian residential aged care staff: A mixed methods project evaluation.](#)

Tranter I, Judd D, Stickley M, Vasant B, Pollard G, Swindells C, Anuradha S. *Vaccine*. 2025 Jan 17;48:126742. doi: 10.1016/j.vaccine.2025.126742. Online ahead of print. PMID: 39826430

[A study of association between maternal tetanus toxoid immunization and neonatal mortality in the context of Bangladesh.](#)

Naha SK, Arpon MEI, Siddique RT, Ripa FR, Hasan MN, Uddin MJ. *PLoS One*. 2025 Jan 17;20(1):e0316939. doi: 10.1371/journal.pone.0316939. eCollection 2025. PMID: 39823396

[Adaptive clinical trial of AZD7442 and SARS-CoV-2 vaccination in immunosuppressed patients highly vulnerable to infection with SARS-CoV-2 virus \(RAPID-PROTECTION\): protocol for a multicentre, interventional open-label, randomised controlled trial.](#)

Varley M, Euden J, Adams R, Barnes E, Bodman C, Choy E, Cicconi P, Dagley V, Ewer K, Griffin S, Harris D, Hill A, Hood K, Knapper S, Pringle S, Porter C, Ottensmeier CH, Raisanen L, Ray R, Tangney R, Wilson K, Nixon LS, Thomas-Jones E, Tuthill M. *BMJ Open*. 2025 Jan 20;15(1):e084345. doi: 10.1136/bmjopen-2024-084345. PMID: 39832967

[Challenges and opportunities of vaccination during pregnancy: perspectives of 20 healthcare professionals.](#)

Razai MS, Hargreaves S, Oakeshott P. *J Public Health Policy*. 2025 Jan 22. doi: 10.1057/s41271-025-00548-y. Online ahead of print. PMID: 39843966

[Development of a novel multi-epitope mRNA vaccine candidate to combat SFTSV pandemic.](#)

Zhu F, Ma S, Xu Y, Zhou Z, Zhang P, Peng W, Yang H, Tan C, Chen J, Pan P. *PLoS Negl Trop Dis*. 2025 Jan 22;19(1):e0012815. doi: 10.1371/journal.pntd.0012815. Online ahead of print. PMID: 39841716

[Protective immunity induced by a novel P1 adhesin C-terminal anchored mRNA vaccine against *Mycoplasma pneumoniae* infection in BALB/c mice.](#)

Zeng Q, Sun P, Li W, Tang Y, Hu Y, Zhou J, Zhou Y, Chen L, Yimou W. *Microbiol Spectr*. 2025 Jan 20:e0214024. doi: 10.1128/spectrum.02140-24. Online ahead of print. PMID: 39831768

[Factors associated with menstrual-related disturbances following SARS-CoV-2 vaccination: a Spanish retrospective observational study in formerly menstruating women.](#)

González M, Al-Adib M, Rodríguez AB, Carrasco C. *Women Health*. 2025 Jan 17:1-15. doi: 10.1080/03630242.2025.2451360. Online ahead of print. PMID: 39819300

[Effect of the Number of Vaccine Doses Before Starting Anti-CD20 Therapy on Seroprotection Rates Against Hepatitis B Virus in People With MS.](#)

Carvajal R, Guananga-Álvarez D, Tur C, Esperalba J, Rodríguez-Barranco M, Rando-Segura A, Borrás-Bermejo B, Cobo-Calvo A, Carbonell-Mirabent P, Zules-Oña R, Rodrigo-Pendas JA, Martínez-Gómez X, Montalbán X, Tintore M, Otero-Romero S. *Neurology*. 2025 Feb 11;104(3):e210281. doi: 10.1212/WNL.0000000000210281. Epub 2025 Jan 16. PMID: 39819099

[Prior influenza virus infection alleviates an arbovirus encephalitis by reducing viral titer, inflammation, and cellular infiltrates in the central nervous system.](#)

Foo IJH, Chua BY, Chang SY, Jia X, van der Eerden A, Fazakerley JK, Kedzierska K, Kedzierski L.J Virol. 2025 Jan 16:e0210824. doi: 10.1128/jvi.02108-24. Online ahead of print.PMID: 39817772

[Ending vaccine hegemony: Rethinking foreign aid in global health responses.](#)

Teegala S, Bajaj SS, Tomori O.PLOS Glob Public Health. 2025 Jan 16;5(1):e0004177. doi: 10.1371/journal.pgph.0004177. eCollection 2025.PMID: 39821155

[Construction and analysis of the immune effect of subunit vaccines based on the flagellin FlaB and FlaC of *Vibrio harveyi*.](#)

Zhang H, Du H, Sun K, Wang J, Li P, Zhou Y, Sun Y.Fish Shellfish Immunol. 2025 Jan 16;158:110130. doi: 10.1016/j.fsi.2025.110130. Online ahead of print.PMID: 39826628

[Parental Factors Associated With Measles-Mumps-Rubella Vaccination in US Children Younger Than 5 Years.](#)

Zhou EG, Cantor J, Gertz A, Elbel B, Brownstein JS, Rader B.Am J Public Health. 2025 Jan 16:e1-e5. doi: 10.2105/AJPH.2024.307912. Online ahead of print.PMID: 39818999

[Construction of a Vero cell line expression human KREMEN1 for the development of CVA6 vaccines.](#)

Zhang D, Zou Y, Wu J, Xu L, Ke Z, Wu Y, Zhou Z, Fang M, Chen L, Xu H, Chu J, Xia N, Zhu R, Cheng T.Virol J. 2025 Jan 17;22(1):12. doi: 10.1186/s12985-024-02618-1.PMID: 39825444

[Analysis of a case of pilomatricoma in an adolescent after receiving recombinant hepatitis B vaccine \(CHO cell\) in Beijing of China.](#)

Li L, Xu J, Zhang D, Cai J, Li Z, Zhang X, Li S.Hum Vaccin Immunother. 2025 Dec;21(1):2448023. doi: 10.1080/21645515.2024.2448023. Epub 2025 Jan 21.PMID: 39838727

[SARS-CoV-2 seropositivity amongst healthcare workers in South Africa during the Omicron wave: natural infection versus vaccination.](#)

Hoffmann DJ, Meyer PWA, Worsley CM, van der Mescht MA, Visser A, Pillay TS.J Clin Pathol. 2025 Jan 16:jcp-2024-209722. doi: 10.1136/jcp-2024-209722. Online ahead of print.PMID: 39824540

[Hepatitis B infection \(HBsAg and HBeAg\) status among women attending antenatal care at public healthcare facilities of South Africa, 2017.](#)

Moonsamy S, Pillay P, Singh BA, Puren A, Ward JW, Prabdhial-Sing N.PLOS Glob Public Health. 2025 Jan 22;5(1):e0003567. doi: 10.1371/journal.pgph.0003567. eCollection 2025.PMID: 39841729

[Effect of vaccination against foot-and-mouth disease during mid-pregnancy on the neutralizing antibody response in the cow.](#)

Banu S, Kishor PV, Krishnappa S, Ramasamy Periyasamy TS, Sakthivel J, Hosuru Joyappa D, Patel BHM, Teggi H, Somagond A, Vijayapillai U, Gowane GR, Krishnaswamy N.Vaccine. 2025 Jan 18;48:126738. doi: 10.1016/j.vaccine.2025.126738. Online ahead of print.PMID: 39827599

[Characteristics of Invasive Pneumococcal Diseases Cases Among U.S. Children With Hematologic Malignancies Before and After Introduction of Thirteen-valent Pneumococcal Conjugate Vaccine, 2005-2019.](#)

Hamilton K, Luvsansharav UO, Xing W, Gierke R, King J, Farley MM, Schaffner W, Thomas A, Chai SJ, Harrison LH, Holtzman C, McGuire SM, Petit S, Barnes M, Angeles KM, Chochua S, McGee L, Kobayashi M. *Pediatr Infect Dis J.* 2025 Jan 17. doi: 10.1097/INF.0000000000004730. Online ahead of print. PMID: 39836562

[Empowering African Expertise: Enhancing Safety Data Integration and Signal Detection for COVID-19 Vaccines Through the African Union Smart Safety Surveillance Joint Signal Management Group.](#)

Nambasa VP, Gunter HM, Adeyemo MB, Bhawaneedin NY, Blockman M, Sabblah GT, Gyapong JO, Guantai EM, Abebe T, Abebe W, Lawson HJ, Leburu MC, Mohammed A, Ampona-Achiano K, Matlala MF, Elemuwa UG, Mogtari H, Nyarko AK, Schönfeldt M, Kamupira M, McCarthy K, Tefera YL, Alemu A, Yusuf KM, Emelife O, Sidibe L, Dandajena K, Onu K, Adeyeye MC, Darko DM, Gerba H, Semete B, Siyoi F, Ambali A, Meyer JC. *Drug Saf.* 2025 Jan 22. doi: 10.1007/s40264-024-01493-7. Online ahead of print. PMID: 39843797

[Vaccinia growth factor-dependent modulation of the mTORC1-CAD axis upon nutrient restriction.](#)

Dsouza L, Pant A, Pope B, Yang Z. *J Virol.* 2025 Jan 16:e0211024. doi: 10.1128/jvi.02110-24. Online ahead of print. PMID: 39817770

[The cytoplasmic tail of IBV spike mediates intracellular retention via interaction with COPI-coated vesicles in retrograde trafficking.](#)

Liang R, Tian J, Liu K, Ma L, Yang R, Sun L, Zhao J, Zhao Y, Zhang G. *J Virol.* 2025 Jan 22:e0216424. doi: 10.1128/jvi.02164-24. Online ahead of print. PMID: 39840971

[Current Status and Future Trends in Myocarditis Related to the COVID-19 Vaccines: A Visual and Bibliometric Analysis.](#)

Zhang Y, Wang M, Wang J. *Curr Vasc Pharmacol.* 2025 Jan 17. doi: 10.2174/0115701611287623250107074054. Online ahead of print. PMID: 39835549

[Use of Polymerase Chain Reaction to Characterize the Etiology of Culture-Negative Empyema and Parapneumonic Effusion Among Alaska Native Children-2018-2023.](#)

Steinberg J, DeByle C, Westley B, Gotcsik M, Geis J, Velusamy S, Fischer M. *J Pediatric Infect Dis Soc.* 2025 Jan 20;14(1):pia131. doi: 10.1093/jpids/pia131. PMID: 39713952

[Immunogenic dying cells elicit potent anti-tumor T cell immunity against lung metastasis and tumorigenesis.](#)

Hu M, Meng X, Wang T, Wang Y, Chen X, Xu D, He W, Zhang H, Guo W, Jing B, Zhang S, Xu J, Sun B, Sun X, Liu T, Ni N, Zhang T, Cui W, Wu X, Xia L, Yao F, Zhang F, Du J, Deng J. *J Cancer Res Clin Oncol.* 2025 Jan 18;151(1):38. doi: 10.1007/s00432-025-06087-z. PMID: 39825073

[Metalloparticle-Engineered Pickering Emulsion Displaying AAV-Vectored Vaccine for Enhancing Antigen Expression and Immunogenicity Against Pathogens.](#)

Guo Z, Wu F, Guo C, Hu R, Ou Y, Zhu Y, Luo S, Song Y, He P, He C, Xu Y, Tang X, Qin M, Wang H, Du G, Sun X. *Adv Mater.* 2025 Jan 19:e2412627. doi: 10.1002/adma.202412627. Online ahead of print. PMID: 39828538

[Long-term immunogenicity of a single-dose live recombinant chimeric Japanese encephalitis vaccine in adults.](#)

Mills DJ, Gyawali N, Nammunige NA, Mills C, Devine GJ, Lau CL, Furuya-Kanamori L. *J Travel Med.* 2025 Jan 21:taaf006. doi: 10.1093/jtm/taaf006. Online ahead of print. PMID: 39836415

[A CRISPR-Cas12a-based universal rapid scrub typhus diagnostic method targeting 16S rRNA of *Orientia tsutsugamushi*.](#)

Park BJ, Heo ST, Kim M, Yoo JR, Bae EJ, Kang SY, Park S, Han KR, Lee KH, Lee JM, Lee H, Song YJ. *PLoS Negl Trop Dis.* 2025 Jan 22;19(1):e0012826. doi: 10.1371/journal.pntd.0012826. Online ahead of print. PMID: 39841710

[A Universal Therapeutic Vaccine Leveraging Autologous Pre-Existing Immunity to Eliminate in Situ Uniformly Engineered Heterogeneous Tumor Cells.](#)

Wu F, Guo Z, Yang J, Ou Y, Xie X, Liao H, Guo C, Zhan Y, Wu H, Hu R, Xu Y, Tang X, Wang H, Ye L, He P, He C, Huang L, Luo S, Sun X, Yang Z. *Adv Mater.* 2025 Jan 21:e2412430. doi: 10.1002/adma.202412430. Online ahead of print. PMID: 39838750

[Pneumococcal and Herpes Zoster Vaccination Rates Among U.S. Veterans With Chronic Inflammatory Disease on Biologic Medications: A Quality Improvement Project.](#)

Phomakay V, Gupta S, Swims M, Pattanaik D. *Mil Med.* 2025 Jan 21:usaf009. doi: 10.1093/milmed/usaf009. Online ahead of print. PMID: 39836378

[Protect or prevent? A practicable framework for the dilemmas of COVID-19 vaccine prioritization.](#)

Arghal R, Rubin H, Saeedi Bidokhti S, Sarkar S. *PLoS One.* 2025 Jan 22;20(1):e0316294. doi: 10.1371/journal.pone.0316294. eCollection 2025. PMID: 39841676

[Co-infections of *Enterococcus cecorum* and various avian pathogens resulted in varying rates of SPF broilers with an *E. cecorum* infection.](#)

Manders T, Kense M, Dijkman R, Wiegel J, Matthijs M, de Wit S. *Avian Pathol.* 2025 Jan 21:1-31. doi: 10.1080/03079457.2025.2450428. Online ahead of print. PMID: 39834256

[Efficiency enhancement in main path extraction in mRNA vaccine field: A novel approach leveraging intermediate patents, with shielding origin and terminus patent edges.](#)

Zhang T, Jian Z, Chen J, Xu D, Yang X, Lu Y, Yan S, Pan L, Wu Q, Ouyang Z. *Hum Vaccin Immunother.* 2025 Dec;21(1):2454078. doi: 10.1080/21645515.2025.2454078. Epub 2025 Jan 22. PMID: 39838876

[Comparative Analysis of COVID-19 Severity and Mortality Among Vaccinated and Unvaccinated Individuals During the Delta Variant Surge in a Tertiary Care Center: A Cohort Study.](#)

Hasani F, Norouzi Z, Jazi K, Roshandel G, Norouzi A. Health Sci Rep. 2025 Jan 16;8(1):e70346. doi: 10.1002/hsr2.70346. eCollection 2025 Jan. PMID: 39831077

[Validation of a multiplexed immunoassay for immunological analysis of pre erythrocytic malaria vaccines.](#)

Stockdale LK, Provstgaard-Morys S, Bellamy D, Woods D, Rapi K, Bajer A, Hollingdale B, Muñoz O, Malik S, Hill AVS, Ewer KJ. NPJ Vaccines. 2025 Jan 20;10(1):14. doi: 10.1038/s41541-024-01039-z. PMID: 39833208

[Administration of antigenically distinct influenza viral particle combinations as an influenza vaccine strategy.](#)

Zhu X, Luo Z, Leonard RA, Hamele CE, Spreng RL, Heaton NS. PLoS Pathog. 2025 Jan 22;21(1):e1012878. doi: 10.1371/journal.ppat.1012878. eCollection 2025 Jan. PMID: 39841684

[Childhood opportunity index and vaccine uptake in pediatric COVID-19 hospitalizations.](#)

Shah RM, Parzen-Johnson S, Sun S, Patel SJ. Vaccine. 2025 Jan 16;48:126734. doi: 10.1016/j.vaccine.2025.126734. Online ahead of print. PMID: 39823851

[Interferon \(IFN\)-gamma \(\$\gamma\$ \) inducible protein 10 \(IP-10\) in the diagnosis of latent and active tuberculosis in Bacille Calmette Guerin \(BCG\)-vaccinated pediatric population.](#)

Druszczynska M, Seweryn M, Wawrocki S, Pankowska A, Kulbachko A, Jurczak M, Kowalewska-Pietrzak M. PLoS One. 2025 Jan 21;20(1):e0314400. doi: 10.1371/journal.pone.0314400. eCollection 2025. PMID: 39836665

[Effectiveness of the AZD1222 vaccine against COVID-19 hospitalization in Europe: final results from the COVIDRIVE test-negative case-control study.](#)

de Munter L, Meeraus W, Dwivedi A, Mitratza M, Wyndham-Thomas C, Carty L, Ouwens M, Hartig-Merkel W, Drikite L, Rebry G, Casas I, Mira-Iglesias A, Icardi G, Otero-Romero S, Baumgartner S, Martin C, Holemans X, Ten Kate GL, Bollaerts K, Taylor S. Eur J Public Health. 2025 Jan 21:ckae219. doi: 10.1093/eurpub/ckae219. Online ahead of print. PMID: 39836896

[Impairment of the T cell memory response in chronic lymphocytic leukemia patients after SARS-CoV-2 vaccination.](#)

Raineri D, Mazzucca CB, Moia R, Bruna R, Kustrimovic N, Cappellano G, Bellan M, Perazzi M, Gaidano G, Chiocchetti A. Vaccine. 2025 Jan 18;48:126723. doi: 10.1016/j.vaccine.2025.126723. Online ahead of print. PMID: 39827600

[HLA I immunopeptidome of synthetic long peptide pulsed human dendritic cells for therapeutic vaccine design.](#)

Kessler AL, Pieterman RFA, Doff WAS, Bezstarosti K, Bouzid R, Klarenaar K, Jansen DTSL, Luijten RJ, Demmers JAA, Buschow SI. NPJ Vaccines. 2025 Jan 18;10(1):12. doi: 10.1038/s41541-025-01069-1. PMID: 39827205

[Safety and efficacy of an inactivated tetravalent water-in-oil emulsion Escherichia coli vaccine against the E. coli peritonitis syndrome.](#)

Landman WJM, van Eck JHH, Schellekens M, Feberwee A. *Avian Pathol.* 2025 Jan 17;1-11. doi: 10.1080/03079457.2024.2448510. Online ahead of print. PMID: 39743962

[Modifying non-coding regions of linear DNA vaccines to explore the interplay of expression and inflammation in immunogenicity.](#)

Stirling DC, de Miguel Ferrer M, Kim S, Wane M, Kysh D, Caproni LJ, Tregoning JS. *Hum Vaccin Immunother.* 2025 Dec;21(1):2430826. doi: 10.1080/21645515.2024.2430826. Epub 2025 Jan 20. PMID: 39829233

[Evaluation of the Queensland JEV vaccine program response to the 2022 Australian outbreak - CORRIGENDUM.](#)

Misan A, Lambert SB, Phung H, Young MK. *Epidemiol Infect.* 2025 Jan 17;153:e14. doi: 10.1017/S0950268825000019. PMID: 39819498

[Evaluating the Impact of the "We Can Do This" Campaign's Heavy-Up Advertising on Initial COVID-19 Vaccine Uptake.](#)

Kim JC, Dahlen H, Dupervil D, Ihongbe TO, Moffett KW, Hoffman B, Denison B, Kranzler EC, Yu K, Margolis KA, Hoffman L. *Health Commun.* 2025 Jan 19;1-10. doi: 10.1080/10410236.2025.2449713. Online ahead of print. PMID: 39828658

[Dynamic ultrasound evaluation and treatment of subcoracoid bursitis after HPV vaccination: a case of shoulder injury related to vaccine administration \(SIRVA\).](#)

Keles A, Illeez OG, Giray B, Giray E. *J Ultrasound.* 2025 Jan 20. doi: 10.1007/s40477-025-00984-2. Online ahead of print. PMID: 39833485

[Revealing trends in measles immunity during periods of varying measles circulation in Madagascar.](#)

Menezes A, Hay JA, Razafindratsimandresy R, Randriamanantena AH, Yang L, Héraud JM, Cauchemez S, Wesolowski A, Grenfell B, Graham AL, Metcalf CJE. *Am J Epidemiol.* 2025 Jan 20;kwaf005. doi: 10.1093/aje/kwaf005. Online ahead of print. PMID: 39838518

[Prolonged immune response to tick-borne Ehrlichia chaffeensis infection using a genetically modified live vaccine.](#)

Madesh S, McGill J, Jaworski DC, Ferm J, Ferm D, Liu H, Fitzwater S, Nair A, Hove P, Alizadeh K, Knox C, Thackrah A, Ganta RR. *Vaccine.* 2025 Jan 17;48:126730. doi: 10.1016/j.vaccine.2025.126730. Online ahead of print. PMID: 39826432

[Healthcare use in 12-18-year-old adolescents vaccinated against SARS-CoV-2 versus unvaccinated in a national register-based Danish cohort.](#)

Berg SK, Wallach-Kildemoes H, Rasmussen LR, Nygaard U, Birk NM, Bundgaard H, Ersbøll AK, Thygesen LC, Nielsen SD, Christensen AV. *Nat Hum Behav.* 2025 Jan 20. doi: 10.1038/s41562-024-02097-y. Online ahead of print. PMID: 39833423

[Potent human antibodies against SpA5 identified by high-throughput single-cell sequencing of phase I clinical volunteers' B cells.](#)

Wang W, Li X, Ou Y, Zhou J, Gu Y, Liu B, Zheng Y, Wang Y, Zhang R, Zou Q, Zuo Q, Wang B. *iScience*. 2024 Dec 18;28(1):111627. doi: 10.1016/j.isci.2024.111627. eCollection 2025 Jan 17. PMID: 39834865

[Regulatory workshop on standardisation of clinical procedures, endpoints and data robustness of human challenge studies - A stakeholder meeting report.](#)

Meln I, Cnossen V, Corti N, Andeweg A, Baay M, Chiu C, Coia J, Cornely O, Cox RJ, Dasyam D, De Keersmaecker SCJ, Deming M, Waldock J, Engelhardt OG, Guo M, Haj-Ali Saflo O, Hensen A, Jeeninga R, Kolstoe S, Krut O, Kuijper EJ, Leal L, Mazur N, Mohn KGI, Morel S, Osterhaus A, Moreira AP, Smits WK, Sridhar S, Toomey D, van Gerven J, Vehreschild MJGT, Yarzabal JP, Zimmer-Harwood P, Neels P, Olesen OF, Roestenberg M, Kamerling IMC. *Biologicals*. 2025 Jan 16;90:101818. doi: 10.1016/j.biologicals.2025.101818. Online ahead of print. PMID: 39824043

[Field-based safety evaluation of rVHSV-GdeltaTM in aquaculture and verification of vaccine efficacy through freeze-dried prototyping in olive flounder.](#)

Kim SY, Kim SY, Kim MS. *Fish Shellfish Immunol*. 2025 Jan 16;110132. doi: 10.1016/j.fsi.2025.110132. Online ahead of print. PMID: 39826632

[Field-based safety evaluation of rVHSV-GdeltaTM in aquaculture and verification of vaccine efficacy through freeze-dried prototyping in olive flounder.](#)

Kim SY, Kim SY, Kim MS. *Fish Shellfish Immunol*. 2025 Jan 16;110132. doi: 10.1016/j.fsi.2025.110132. Online ahead of print. PMID: 39826632

[Understanding COVID-19 Vaccine Acceptance Among Iranian Pregnant Women: Insights From a Multicenter Cross-Sectional Study.](#)

Khawaja MH, Khawaja OD. *Health Sci Rep*. 2025 Jan 21;8(1):e70381. doi: 10.1002/hsr2.70381. eCollection 2025 Jan. PMID: 39839580

[Focus Groups With Guatemalan Community Leaders About Barriers to Cervical Cancer Prevention and Control.](#)

Garcia K, Alvarez G, Iacob E, Kepka D. *Health Promot Pract*. 2025 Jan 23:15248399241309897. doi: 10.1177/15248399241309897. Online ahead of print. PMID: 39846135

[CD137 agonism enhances anti-PD1 induced activation of expanded CD8⁺ T cell clones in a neoadjuvant pancreatic cancer clinical trial.](#)

Montagne JM, Mitchell JT, Tandurella JA, Christenson ES, Danilova LV, Deshpande A, Loth M, Sidiropoulos DN, Davis-Marcisak E, Bergman DR, Zhu Q, Wang H, Kagohara LT, Engle LL, Green BF, Favorov AV, Ho WJ, Lim SJ, Zhang R, Li P, Gai J, Mo G, Mitchell S, Wang R, Vaghasia A, Hou W, Xu Y, Zimmerman JW, Elisseeff JH, Yegnasubramanian S, Anders RA, Jaffee EM, Zheng L, Fertig EJ. *iScience*. 2024 Dec 10;28(1):111569. doi: 10.1016/j.isci.2024.111569. eCollection 2025 Jan 17. PMID: 39811671

[Anti-immune complex antibodies are elicited during repeated immunization with HIV Env immunogens.](#)

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Brown S, Antanasijevic A, Sewall LM, Garcia DM, Brouwer PJM, Sanders RW, Ward AB. *Sci Immunol*. 2025 Jan 17;10(103):eadp5218. doi: 10.1126/sciimmunol.adp5218. Epub 2025 Jan 17. PMID: 39823319

[Acute zonal occult outer retinopathy \(AZOOR\) complex associated with torpedo retinopathy following COVID-19 recombinant mRNA vaccination: a case report of a rare clinical presentation.](#)

Chang NW, Kuo CH, Chou HD, Chen YH. *BMC Ophthalmol*. 2025 Jan 17;25(1):25. doi: 10.1186/s12886-025-03844-z. PMID: 39825320

[The Development of Opioid Vaccines as A Novel Strategy for the Treatment of Opioid Use Disorder and Overdose Prevention.](#)

Tuncturk M, Kushwaha S, Heider RM, Oesterle T, Weinshilboum R, Ho MF. *Int J Neuropsychopharmacol*. 2025 Jan 20;pyaf005. doi: 10.1093/ijnp/pyaf005. Online ahead of print. PMID: 39831679

[Danish parents' vaccination readiness is associated with their children's officially registered vaccination history.](#)

Santana AP, Søbørg B, Jacobsen SU, Zettler I, Böhm R. *Vaccine*. 2025 Jan 16;47:126693. doi: 10.1016/j.vaccine.2024.126693. Online ahead of print. PMID: 39823752

[Vaccination against SARS-CoV-2 provides low-level cross-protection against common cold coronaviruses in mouse and non-human primate animal models.](#)

Naghbosadat M, Babuadze GG, Pei Y, Hurst J, Salvant E, Gaete K, Biondi M, Moloo B, Goldstein A, Avery S, Ma K, Pietraszek A, Wootton SK, Alhaboub A, Martin B, Mubareka S, Corredor J, Sultana A, Adeekoa A, Budylowski P, Ostrowski M, Chao J, Nagy E, Kozak R. *J Virol*. 2025 Jan 16:e0139024. doi: 10.1128/jvi.01390-24. Online ahead of print. PMID: 39817773

[Antigenicity evaluation of the synthetic trisaccharides related to *Plesiomonas shigelloides* serotype O51 O-antigen containing an acetamidino group.](#)

Qin C, Han W, Tian G, Zou X, Maciejewska A, Lukasiewicz J, Seeberger PH, Hu J, Yin J. *Carbohydr Res*. 2025 Jan 16;550:109388. doi: 10.1016/j.carres.2025.109388. Online ahead of print. PMID: 39832422

[Potent antiviral action detected in *Tontelea micrantha* extracts against *Alphavirus chikungunya*.](#)

Lopes RP, Máximo Vaz MA, Ferreira FL, Sousa GF, Magalhães CLB, Vieira-Filho SA, Siqueira Ferreira JM, Tótola AH, Duarte LP, Carlos de Magalhães J. *Drug Dev Ind Pharm*. 2025 Jan 17:1-9. doi: 10.1080/03639045.2024.2449130. Online ahead of print. PMID: 39754533

[Corrigendum to "A Phase III, multicenter, randomized, double-blind, active comparator-controlled study to evaluate the safety, tolerability, and immunogenicity of V114 compared with PCV13 in healthy infants \(PNEU-PED-EU-1\)" \[Vaccine 41 \(2023\) 3387-3398\].](#)

Martinon-Torres F, Wysocki J, Szenborn L, Carmona-Martinez A, Poder A, Dagan R, Richmond P, Gilbert C, Trudel MC, Flores S, Lupinacci R, McFetridge R, Wiedmann RT, Chen Q, Gerrits H, Bannietts N, Musey L, Bickham K, Kaminski J; V114-025 PNEU-PED-EU-1 study group. *Vaccine*. 2025 Jan 20;48:126628. doi: 10.1016/j.vaccine.2024.126628. Online ahead of print. PMID: 39837003

[The Effects of Motivational Interviewing on Promoting Human Papillomavirus Vaccination Initiation and Completion Among South Asian Mother/Daughter Dyads: A Pilot Randomised Controlled Trial.](#)

Chan DNS, Choi KC, Lee PPK, So WKW. *Int J Behav Med.* 2025 Jan 17. doi: 10.1007/s12529-025-10349-y. Online ahead of print. PMID: 39825031

[Immunogenicity persistence after four intramuscular triple-dose or standard-dose hepatitis B vaccine in patients receiving methadone maintenance treatment: A 1-year follow-up study in China.](#)

Mo X, Men Z, Gao L, Gao Y, Yao T, Liu Y, Yuan Y, Xue T, Wang F, Wang S, Wang K, Liang X, Feng Y. *Hum Vaccin Immunother.* 2025 Dec;21(1):2447108. doi: 10.1080/21645515.2024.2447108. Epub 2025 Jan 17. PMID: 39819251

[Pathogenic *Aeromonas veronii* with the cheZ-mshK-aerA triple-gene mutant is attenuated and exhibits a potential candidate as a live attenuated vaccine.](#)

Lu J, Wei J, Liu K, Li D, Li Z, Yu Y, Ye H, Li Y, Xu H, Pan X, Wu R. *Fish Shellfish Immunol.* 2025 Jan 17:110125. doi: 10.1016/j.fsi.2025.110125. Online ahead of print. PMID: 39828014

Patentes registradas en Patentscope

Estrategia de búsqueda: (Vaccine) AND DP:([16.01.2025 TO 23.01.2025]) as the publication date 31 records.

1. [WO/2025/016310](#) MRNA ENCODING ZIKA VIRUS ANTIGEN PEPTIDE, AND MRNA **VACCINE** BASED ON MRNA AND PREPARATION METHOD THEREFOR

WO - 23.01.2025

Clasificación Internacional [C12N 15/40](#)Nº de solicitud PCT/CN2024/105185 Solicitante INSTITUTE OF MICROBIOLOGY, CHINESE ACADEMY OF SCIENCES Inventor/a GAO, Fu

Provided are an mRNA encoding a Zika virus antigen peptide, an mRNA construct encoding a Zika virus antigen peptide, a recombinant expression plasmid for producing the mRNA, an mRNA **vaccine** against Zika virus based on the mRNA and a preparation method for the mRNA **vaccine**. The mRNA **vaccine** against Zika virus can not only avoid induced generation of FL epitope antibodies so as to significantly reduce or eliminate the ADE effect, but also generate high-level neutralizing antibodies higher than those of other **vaccine** vector platforms so as to effectively prevent or treat Zika virus infectious diseases, and has better clinical application values and prospects.

2. [WO/2025/018831](#) PAPILLOMAVIRUS-LIKE PARTICLE-BASED ANTI-AMYLOID BETA ALZHEIMER'S DISEASE **VACCINE**

WO - 23.01.2025

Clasificación Internacional [A61K 39/12](#)Nº de solicitud PCT/KR2024/010434 Solicitante POSVAX CO., LTD. Inventor/a KIM, Hong-Jin

The present invention relates to a papillomavirus-like particle-based anti-amyloid beta Alzheimer's disease vaccine. More specifically, the present invention relates to an Alzheimer's disease vaccine in which an amyloid beta epitope is loaded on virus-like particles of human papillomavirus (HPV). According to the present invention, an antibody-inducing effect against amyloid beta can be greatly improved by linking amyloid beta peptide fragments to HPV VLPs that have excellent structural characteristics and immune characteristics. In addition, it has been identified that the vaccine prepared in the present invention exhibits better immunogenicity and antibody conversion rate than a conventional VLP-based Alzheimer's disease vaccine.

3. WO/2025/011594 **VACCINE** FOR PREVENTING FELINE CALICIVIRUS INFECTION, AND PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 16.01.2025

Clasificación Internacional C07K 14/085Nº de solicitud PCT/CN2024/104803 Solicitante CANSINO (SHANGHAI) BIOLOGICAL RESEARCH CO., LTD. Inventor/a LIU, Xingpo

A vaccine for preventing a feline calicivirus disease, and a preparation method therefor and the use thereof. By means of antigen sequence design and screening, an antigen peptide and an mRNA nucleic acid molecule having excellent expression effects are obtained, and thus a vaccine prepared therefrom has a good immune effect and can induce the production of a highly-effective and durable level neutralizing antibody against a feline calicivirus at a very low dose and dosing regimen; meanwhile, the mRNA vaccine has the characteristics of a good stability, a high delivery efficiency, safety, effectiveness and a controllable quality.

4. WO/2025/011592 **VACCINE** FOR PREVENTING FELINE HERPESVIRUS INFECTION, AND PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 16.01.2025

Clasificación Internacional C07K 19/00Nº de solicitud PCT/CN2024/104800 Solicitante CANSINO (SHANGHAI) BIOLOGICAL RESEARCH CO., LTD. Inventor/a LIU, Xingpo

Provided are a vaccine for preventing feline herpesvirus infection, and a preparation method therefor and the use thereof. By means of antigen sequence design and screening, an antigen peptide and an mRNA nucleic acid molecule having excellent expression effects are obtained, and thus a vaccine prepared therefrom has a good immune effect and can induce the production of a highly-effective and durable level neutralizing antibody against a feline herpesvirus at a very low dose and dosing regimen; meanwhile, the mRNA vaccine has the characteristics of a good stability, a high delivery efficiency, safety, effectiveness and a controllable quality.

5. WO/2025/011593 **VACCINE** FOR PREVENTING FELINE PANLEUKOPENIA, PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 16.01.2025

Clasificación Internacional C07K 14/015Nº de solicitud PCT/CN2024/104801 Solicitante CANSINO (SHANGHAI) BIOLOGICAL RESEARCH CO., LTD. Inventor/a LIU, Xingpo

Provided are a **vaccine** for preventing feline panleukopenia, a preparation method therefor and a use thereof. An antigen peptide and an mRNA nucleic acid molecule that are obtained by means of antigen sequence design and screening are excellent in expression effect, so that a prepared **vaccine** has a good immune effect, and under a very low-dosage administration scheme, can induce production of a potent and lasting level neutralizing antibody for a feline panleukopenia virus. Moreover, an mRNA **vaccine** has the characteristics of being good in stability, high in delivery efficiency, safe, effective, and controllable in quality.

6. WO/2025/017142 RSV **VACCINE**

WO - 23.01.2025

Clasificación Internacional A61K 39/12 N° de solicitud PCT/EP2024/070438 Solicitante ASTRAZENECA
AB Inventor/a LALIBERTE, Jason Paul

Provided herein is a **vaccine** against RSV. The **vaccine** comprises an mRNA encoding a stabilised prefusion RSV F protein immunogen linked to a scaffold based on lumazine synthase.

7. WO/2025/017349 PEPTIDE-BASED DNA **VACCINE** PLATFORM

WO - 23.01.2025

Clasificación Internacional A61K 38/00 N° de solicitud PCT/IB2023/057301 Solicitante HOSSEINKHANI,
Saman Inventor/a HOSSEINKHANI, Saman

The present disclosure relates to methods of generating a peptide-based DNA **vaccine** platform. In particular, the present disclosure relates to a method of generating the peptide-based DNA **vaccine** platform against COVID-19. A method of introducing a cargo into the cells of a living body is disclosed. The method of introducing the cargo into the cells of a living body may include administering a nanocomplex to the cells of the living body. The nanocomplex includes at least one chimeric peptide linked to the cargo. The chimeric peptide includes an endosomal escape motif, a nucleus entry motif, and a DNA condensing motif linked together in any order. The cargo is preferably comprising a genetically engineered construct comprising a nucleic acid sequence. The present disclosure further relates to the uses of the present disclosure in the methods of gene delivery, gene therapy, and cancer treatment.

8. WO/2025/015893 UROPATHOGENIC ESCHERICHIA COLI RECOMBINANT PROTEIN COMPOSITION LS, CONSTRUCTION, EXPRESSION AND PURIFICATION METHOD THEREFOR, AND USE THEREOF

WO - 23.01.2025

Clasificación Internacional C12N 9/90 N° de solicitud PCT/CN2024/073775 Solicitante ZHEJIANG CHINESE MEDICAL UNIVERSITY Inventor/a ZHU, Aisong

An uropathogenic escherichia coli recombinant protein composition LS, a construction, expression and purification method therefor, and a use thereof, relating to the technical field of genetic engineering. The method comprises: carrying out PCR amplification on LpcA and SurA genes, and respectively inserting the LpcA and SurA genes into multiple cloning sites of a cloning vector to construct a recombinant vector; then converting the recombinant vector into an escherichia coli expression protein; and finally, carrying out purification to obtain a composition LS of an LpcA protein and an SurA protein, wherein the composition LS

can be used in a urinary tract infection vaccine. The present invention has the following advantages: a protein vaccine can induce relatively strong cell and humoral immune response of animals; and animal challenge experiments show that the protein vaccine has the protection effect of reducing the bacterial loads of the bladder and the kidney.

9. 20250018026 NASAL VACCINE-SPRAYING FORMULATION FOR SIMULTANEOUSLY TARGETING NASAL MUCOSA AND NASOPHARYNX

US - 16.01.2025

Clasificación Internacional A61K 39/145Nº de solicitud 18710489 Solicitante TOKO YAKUHHIN KOGYO CO., LTD. Inventor/a Taizou KAMISHITA

The present invention relates to a formulation base prepared by adding polyethylene glycol to crosslinked polyacrylic acid, and a formulation for spraying nasal vaccine comprising an antigen, which have optimized spray pattern targeting simultaneously both of nasal mucosa and nasopharynx.

10. WO/2025/014272 CHIMERIC VIRUS EXPRESSING INFECTIOUS BURSAL DISEASE AND/OR AVIAN INFLUENZA ANTIGEN AND VACCINE COMPOSITION COMPRISING SAME

WO - 16.01.2025

Clasificación Internacional C12N 7/00Nº de solicitud PCT/KR2024/009841 Solicitante BIOD CO., LTD Inventor/a JANG, Hyung-Kwan

The present specification relates to a chimeric virus expressing infectious bursal disease and/or avian influenza antigen, and a vaccine composition comprising same.

11. 20250018022 NOVEL RECOMBINANT PORCINE CIRCOVIRUS TYPE 2 PROTEIN AND USE THEREOF

US - 16.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 18711502 Solicitante INNOVAC INC. Inventor/a Tae Wook HAHN

The present invention relates to a novel recombinant porcine circovirus type 2 protein and use thereof and, more specifically, to: a novel recombinant porcine circovirus type 2 protein; and a vaccine composition, an immunogenic composition, and a feed composition, comprising same. It was confirmed that the novel recombinant porcine circovirus type 2 protein according to the present invention showed excellent antibody titers against both PCV2b and type 2d. This means that when the recombinant porcine circovirus type 2 protein of the present invention is used as a vaccine, porcine circovirus-related diseases can be effectively prevented by cross-protecting both PCV2b and PCV2d genotypes, and thus the porcine circovirus type 2 protein of the present invention can be used in various ways in the field of pig farming.

12. 20250018021 NOROVIRUS VACCINE AND METHODS OF USE

US - 16.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 18705288 Solicitante The Trustees of the University of Pennsylvania Inventor/a Elena Atochina-Vasserman

Provided is a Norovirus **vaccine** comprising mRNA molecules encoding Norovirus VP1 antigens and methods of use thereof to treat or prevent a disease or disorder associated with Norovirus infection.

13. WO/2025/017003 METHOD FOR BOOSTING THE EFFICACY OF IMMUNOTHERAPY AND ENHANCING THE HOST IMMUNE RESPONSE

WO - 23.01.2025

Clasificación Internacional C07K 16/22Nº de solicitud PCT/EP2024/070099 Solicitante ANDREMACON S.R.L. Inventor/a MARFIA, Giovanni

The present invention concerns the field of immunotherapies suitable for activating the immune response in a patient. More in detail the present invention relates to anti-EPO negative functional modulators, useful as active ingredients in a pharmaceutical composition for immunomodulating strategies in therapy (eg cancer immunotherapies, infectious, inflammatory diseases) or a pharmaceutical composition for immuno-activation, boosting cell based or pharmacological or **vaccine** based immunotherapies and stimulating the immune system response of a patient in need thereof. In particular, the invention also describes how to restore the immune response in pathological conditions such as cancer and refractory infectious diseases enhancing and assuring the therapeutic access of immunotherapies strategies and abolishing the "tolerogenic" stimuli through products consisting in inhibitors of EPO pathway that can for example serve as active pharmaceutical ingredients of **vaccine** compositions that stimulate immune responses in cancer, infectious and inflammatory diseases and transfer into patients..

14. WO/2025/012303 VIRAL INACTIVATION REACTOR AND METHOD

WO - 16.01.2025

Clasificación Internacional A61L 2/00Nº de solicitud PCT/EP2024/069447 Solicitante CRANFIELD UNIVERSITY Inventor/a KOZIOL, Krzysztof

Viral inactivation apparatus and method for the inactivation of live virus species. A fluid flow bioreactor is provided having an elongate flow channel adapted to control fluid flow characteristics of a solution containing suspended viral particles for irradiation by a suitable radiation source to produce inactive viral species suitable for **vaccine** synthesis. The present bioreactor configuration is advantageous to control administration of irradiation dosage to reliably and efficiently create inactivated viral species at 100% effectiveness whilst preserving structural integrity of the viral species so as to provide an effective inactivated **vaccine**.

15. WO/2025/011658 NOVEL MARKERS FOR TUMOR NEOANTIGEN VACCINES

WO - 16.01.2025

Clasificación Internacional A61K 31/00Nº de solicitud PCT/CN2024/105334 Solicitante ANDA BIOLOGY MEDICINE DEVELOPMENT (SHENZHEN) CO., LTD Inventor/a HU, Landian

Novel markers relating to tumor neoantigen vaccines. Novel method of assessing responsiveness of a subject to a tumor neoantigen **vaccine**, or novel method of predicting the risk of tumor relapse in a subject before or after receiving at least one dose of tumor neoantigen **vaccine**. TCRs generated under the stimulation of the tumor neoantigen vaccines.

16. WO/2025/010801 GAS-CONTAINING MULTIVESICULAR LIPID NANOPARTICLE, AND USE THEREOF AND PREPARATION METHOD THEREFOR

WO - 16.01.2025

Clasificación Internacional A61K 9/51Nº de solicitud PCT/CN2023/115136 Solicitante DALIAN INSTITUTE OF CHEMICAL PHYSICS, CHINESE ACADEMY OF SCIENCES Inventor/a CHEN, Guangwen

A gas-containing multivesicular lipid nanoparticle, and a use thereof and a preparation method therefor. The lipid nanoparticle is a multivesicular nanoparticle composed of a lipid vesicle having a core filled with water and a lipid vesicle having a core filled with gas. The lipid nanoparticle is used as a delivery system for a nucleic acid or a small molecule chemical drug, and a corresponding vaccine or pharmaceutical composition is prepared by rapidly mixing raw materials in the presence of ultrasound and a surfactant. The lipid nanoparticle also provides an oxygen-rich or hydrogen-rich environment having a positive biological effect while delivering a nucleic acid or small molecule chemical drug, thereby improving the delivery efficiency of nucleic acids or small molecule chemical drugs. In addition, ultrasound can be applied in vitro to achieve directional explosion of the gas-containing vesicle, thereby further improving the bioavailability and the targeting performance of nucleic acids or small molecule chemical drugs.

17. WO/2025/011146 METHOD FOR PREPARING CELL LINE FOR AMPLIFICATION OF REPLICATION-DEFECTIVE RECOMBINANT VIRUS, DEFECTIVE VIRUS AND USE THEREOF

WO - 16.01.2025

Clasificación Internacional C12N 15/85Nº de solicitud PCT/CN2024/090885 Solicitante MELTON (SHENZHEN) BIOMEDICAL TECHNOLOGY CO., LTD. Inventor/a ZHANG, Xi

A method for preparing a cell line for the amplification of a replication-defective recombinant virus, a defective virus and the use thereof, which belong to the technical field of genetic engineering. In the method for preparing the cell line for the amplification of the replication-defective recombinant virus, replication-related virus genes can be efficiently integrated into a cell genome by means of the gene transfer function of a transposase, and the expression of the replication-related genes is activated under the action of Cre recombinase, thereby activating the translation of corresponding proteins and ensuring the packaging and amplification of the replication-defective virus in cells, such that large-scale amplification of the replication-defective recombinant virus is realized. The cell line prepared by means of the provided method is suitable for the replication of a corresponding replication-defective recombinant virus, and provides a raw material basis for preparing a vaccine using a replication-defective recombinant virus as a candidate antigen and for preparing a gene therapy vector.

18. WO/2025/012376 IONIZABLE LIPIDS

WO - 16.01.2025

Clasificación Internacional C07C 323/12Nº de solicitud PCT/EP2024/069656 Solicitante ETHERNA IMMUNOTHERAPIES NV Inventor/a DE COEN, Ruben

The present invention generally relates to the field of ionizable (also termed cationic) lipids, and in particular provides a novel type of such lipids as represented by any of the formulae disclosed herein. The present

invention further provides methods for making such lipids as well as uses thereof, in particular in the preparation of nanoparticle compositions, more in particular nanoparticle compositions comprising nucleic acids. It further provides **vaccine** formulations and pharmaceutical formulations comprising nanoparticle compositions based on the ionizable lipids disclosed herein.

19. 20250018006 COMPOSITIONS AND METHODS FOR DENGUE VIRUS CHIMERIC CONSTRUCTIONS IN VACCINES

US - 16.01.2025

Clasificación Internacional A61K 38/16Nº de solicitud 18768774Solicitante Takeda Vaccines, Inc.Inventor/a Dan STINCHCOMB

Embodiments herein report compositions, uses and manufacturing of dengue virus constructs and live attenuated dengue viruses. Some embodiments concern a composition that includes, but is not limited to, a tetravalent dengue virus composition. In certain embodiments, compositions can include constructs of one or more serotypes of dengue virus, such as dengue-1 (DEN-1) virus, dengue-2 (DEN-2) virus, dengue-3 (DEN-3) or dengue-4 (DEN-4) virus constructs. In other embodiments, constructs disclosed herein can be combined in a composition to generate a **vaccine** against more one or more dengue virus constructs that may or may not be subsequently passaged in mammalian cells.

20. WO/2025/017540 METHOD OF TREATMENT OF HIV INFECTION WITH **VACCINE**

WO - 23.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud PCT/IB2024/057053Solicitante AELIX THERAPEUTICS, S.L.Inventor/a BRANDER, Christian

The present disclosure relates to methods for determining the magnitude of a subject's immune response against a HIVACAT T-cell immunogen (HTI or "HTI immunogen") and whether the subject can avoid antiretroviral therapy (ART). These methods are helpful for treating human immunodeficiency virus (HIV) and/or deciding whether to administer, continue or stop antiretroviral therapy in a subject. The present disclosure also relates to antigens, compositions, and kits related to such methods.

21. WO/2025/014455 SARS CORONAVIRUS-2 ENVELOPE PROTEIN PRODUCED IN THE BACULOVIRUS EXPRESSION SYSTEM

WO - 16.01.2025

Clasificación Internacional C12P 19/34Nº de solicitud PCT/TR2024/050800Solicitante T.C. ANKARA UNIVERSITESI REKTORLUGUIInventor/a OGUZOGLU, Tuba Cigdem

The invention relates to a SARS Coronavirus-2 (SARS-CoV-2) envelope protein produced in a baculovirus expression system. The inventive protein is a recombinant protein derived from the envelope gene of a local SARS-CoV-2 isolate. It is intended to be used as a candidate protein in recombinant **vaccine** platforms that can be prepared to protect against Covid-19 infection. Within the scope of the invention, a protein that can form the basis for the antibody ELISA method that can be prepared for the indirect diagnosis of SARS-CoV-2 infection has been produced.

22. 20250018023 ZIKA VIRUS VACCINE

US - 16.01.2025

Clasificación Internacional A61K 39/12Nº de solicitud 18799291 Solicitante Valneva Austria GmbH Inventor/a Jana Barbero Calzado

Described herein are Zika virus vaccines and compositions and methods of producing and administering said vaccines to subjects in need thereof.

23. WO/2025/017202 PORPHYROMONAS GINGIVALIS ANTIGENIC CONSTRUCTS

WO - 23.01.2025

Clasificación Internacional C12N 9/52Nº de solicitud PCT/EP2024/070627 Solicitante SANOFI Inventor/a GIRERD-CHAMBAZ, Yves

This invention relates to compositions (e.g. vaccine compositions) which can be used to immunise against P. gingivalis infections. The compositions comprise P. gingivalis antigens and antigen combinations which can be used to immunise against P. gingivalis, used in the form of nucleic acids (e.g. mRNAs) encoding antigenic proteins or in the form of recombinant protein antigens.

24. WO/2025/019872 IDENTIFICATION OF NOVEL SEQUENCES OF THE ERVMER34-1 HUMAN ENDOGENOUS RETROVIRAL SEQUENCE FAMILY, AND MODIFICATION OF THOSE SEQUENCES FOR A MORE EFFECTIVE ANTI-CANCER VACCINE AND OTHER POTENTIAL ANTI-CANCER THERAPIES

WO - 23.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/US2024/039057 Solicitante THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES Inventor/a SCHLOM, Jeffrey

The invention provides a protein or polypeptide derived from ERVMER34-1. The invention further provides a nucleic acid encoding the inventive protein or polypeptide, a vector comprising the nucleic acid, cells comprising the protein or polypeptide, nucleic acid, and/or vector, and composition, such as a pharmaceutical composition, comprising any of the foregoing. These reagents (the inventive protein or polypeptide, nucleic acid, vector, cell, or composition thereof) are useful for immunological treatment and prophylaxis of diseases, particularly cancers.

25. WO/2025/015276 COMPOSITIONS AND METHODS OF ENHANCING IMMUNE RESPONSES TO STREPTOCOCCUS

WO - 16.01.2025

Clasificación Internacional A61K 39/108Nº de solicitud PCT/US2024/037808 Solicitante LAYTON, Sherryll Inventor/a LAYTON, Sherryll

A vaccine composition for mammals/Fish against Streptococcus comprising an amino acid sequence selected from the group consisting of Sequence Number (ID): 1, Sequence Number (ID): 2, and Sequence Number (ID): 3, and a pharmaceutically acceptable carrier.

26. WO/2025/012350 VECTORS EXPRESSING ATTENUATED RNA VIRUS OF THE FAMILY ARTERIVIRIDAE AND USES THEREOF

WO - 16.01.2025

Clasificación Internacional C07K 14/00Nº de solicitud PCT/EP2024/069578 Solicitante VIROVET NV Inventor/a FRANÇOIS, Katrien

47 ABSTRACT VECTORS EXPRESSING ATTENUATED RNA VIRUS OF THE FAMILY ARTERIVIRIDAE AND USES THEREOF Provided herein is a vector for use as a medicament, wherein said vector comprises a viral expression cassette comprising a cDNA of an attenuated RNA virus genome operably linked to a promoter, wherein the RNA virus is a virus of the family Arteriviridae. Also provided herein is a pharmaceutical composition comprising such vector and a method for preparing a vaccine against an RNA virus of the family Arteriviridae.

27. 20250018024 COMPOSITIONS AND METHODS FOR PROTEIN EXPRESSION WITH RNA

US - 16.01.2025

Clasificación Internacional A61K 39/125Nº de solicitud 18893827 Solicitante ExcepGen Inc Inventor/a Barbara Mertins

The compositions and methods provided herein include a ribonucleic acid (RNA) encoding a nuclear cytoplasmic transport (NCT) inhibitor protein to improve target protein expression, e.g., a target protein encoded by a DNA vector, a messenger RNA, a self-amplifying RNA, or an RNA comprising an unmodified uridine nucleotide. The compositions and methods provided herein may be used to improve the expression of any target protein, for example a viral protein antigen for use in a vaccine.

28. 20250018027 CORONAVIRUS DERIVED RNA REPLICONS AND THEIR USE AS VACCINES

US - 16.01.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18713083 Solicitante CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS Inventor/a Luis ENJUANES SÁNCHEZ

A propagation-defective, replication-competent RNA replicon derived from the SARS-CoV-2 coronavirus that comprises a polynucleotide sequence SEQ_ID 2 or a variant of SEQ_ID 2 having at least 80% identity, more preferably 85% identity, even more preferably at least 90% identity, and even more preferably 91% or 92% or 93% or 94% or 95% or 96% or 97% or 98% or even up to 99% identity with respect to the SEQ_ID 2 polynucleotide sequence, wherein the variant of SEQ_ID 2 does not comprise sequences suitable for expressing an ORF8 protein, wherein the ORF8 protein is encoded by a gene having at least 80% identity to the sequence of SEQ_ID 36, methods of preparation thereof and the use in vaccine compositions.

29. WO/2025/017537 ACTIVE IMMUNIZATION FOR TREATING ATOPIC DERMATITIS

WO - 23.01.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/IB2024/057049 Solicitante INSTITUT PASTEUR DE MONTEVIDEO Inventor/a BARBEITO ERBA, Luis Héctor

An immunogenic fusion protein used for active immunization or a bivalent vaccine in the treatment of atopic dermatitis (AD) in a subject and a method thereof. The immunogenic fusion protein includes a IL31

polypeptide and at least one substance P polypeptide (SP). The invention is particularly useful for treating and/or preventing AD and symptoms related to AD including pruritus in mammals.

30. [WO/2025/010482](#) MODIFIED GnRH PEPTIDE AND ITS CONJUGATE FOR MAMMALIAN IMMUNOCASTRATION, MANUFACTURING METHOD, COMPOSITION AND KIT

WO - 16.01.2025

Clasificación Internacional [C07K 1/107](#)Nº de solicitud PCT/BR2024/050167 Solicitante OURO FINO SAÚDE ANIMAL LTDA Inventor/a MARIA FAIM, Livia

The present invention falls within the fields of molecular biology, medical sciences and immunology, and especially relates to preparations for medical purposes. In particular, the present invention relates to a modified peptide of the gonadotropin-releasing hormone (GnRH) and its conjugate for immunocastration of mammals, especially pigs, to the method of manufacturing the modified GnRH antigen, to a composition and to a kit comprising said [vaccine](#) composition, for the purposes of improving mammal carcass quality, animal welfare and food utilisation (feed conversion), producing less waste and using less water, thus contributing to effectively sustainable production (ESG).

31. [WO/2025/018848](#) COMPOSITION FOR ENHANCING IMMUNITY, COMPRISING HAFNIA ALVEI-DERIVED LIPOPOLYSACCHARIDE AND CARBOMER

WO - 23.01.2025

Clasificación Internacional [A61K 9/113](#)Nº de solicitud PCT/KR2024/010497 Solicitante EUTILEX CO., LTD. Inventor/a LEE, Hyung Tae

The present invention relates to a composition for enhancing immunity, comprising a Hafnia alvei-derived lipopolysaccharide and a carbomer. The composition for enhancing immunity, according to the present invention, has an excellent antigen-specific antibody formation promoting ability, and can effectively induce cellular and humoral immunity in an individual. Therefore, the composition for enhancing immunity of the present invention can be usefully utilized in various fields such as prevention of various infectious diseases caused by pathogens, immunity enhancement, [vaccine](#) assistance, and the like.

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