VacCiencia

FINLAY EDICIONES

Boletín Científico

No. 5 (16 febrero-2 marzo/2025)

EN ESTE NÚMERO

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

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Delivering next-generation medicines and vaccines

Feb 17. Pharmaceutical companies have been at the forefront of advances in medical innovation that are leading to real improvements in the health of people worldwide. These advances are also supporting healthcare systems as they grapple with the rise of chronic diseases, ageing populations, the impact of climate change, and emerging infectious diseases, according to Dr. David Reddy, Director General of the International Federation of Pharmaceutical Manufacturers and Associations (IFPMA).

Over the past 20 years, the industry has launched over 940 novel active substances globally, addressing cancer, cardiovascular diseases, neurology, and infectious diseases, among others. There are over 12,700 medicines in various stages of clinical development globally, half of them biologics and the other half small molecules. By 2035, it is estimated that 700 new medicines could be launched that can prevent, slow, or stop disease progression.

“From my own experience working on mRNA technology decades ago, it has been hugely rewarding to see the acceleration of new mRNA vaccines after their use in the COVID-19 response. Today, 286 vaccines are under development, targeting a wide array of diseases beyond infectious ones, including cancer, allergies and even Alzheimer’s,” said Dr. Reddy, who holds a PhD in Cellular and Molecular Biology and has post-doctoral research experience in molecular neurobiology.

Dr. Reddy has more than 30 years of experience in the development and commercialization of medicines, including 13 years as the head of the Medicines for Malaria Venture (MMV). During his tenure as CEO of MMV, the organization saw 15 malaria medicines launched, 1.2 billion treatments distributed, saving more than 15 million lives, and raised around $900 million in funding.

He said that precision medicines that are already transforming cancer treatment now hold potential for chronic diseases as well. Advances such as CRISPR — a technology that research scientists use to selectively modify the DNA of living organisms — are likewise paving the way for potential cures for previously untreatable genetic disorders, with cell therapies diversifying treatment options across a range of diseases.

Dr. Reddy noted that this progress is underpinned by the pharmaceutical industry’s commitment to investing in the research and development that makes advances in medical innovation possible. The top 50 pharmaceutical companies alone are estimated to have spent a total of $167 billion in R&D in 2022. Moreover, the industry’s R&D spending is rising, increasing by almost 60% in the 10 years from 2012 to 2022.

“This R&D investment has a significant impact on health outcomes, but also strengthens healthcare systems and economies worldwide,” Dr. Reddy said.

Data from an IFPMA-commissioned analysis carried out by the independent economic research institute WifOR demonstrated that the industry contributed $2,295 billion to global GDP in 2022 through direct, indirect, and induced effects.

For every dollar generated by pharmaceutical activities, an additional $2.04 was created along the global supply chain. On top of the industry as a whole directly employing 7.8 million people worldwide, a further 44.7 million jobs were supported indirectly, and 22.4 million jobs were supported through induced effects in the supply chain.

Dr. Reddy pointed out that this data does not take into account the significant economic benefits that medicines and vaccines provide healthcare systems and more broadly to global economies. Just one study demonstrated that adult vaccination programs return 19 times their initial investment.

HIV is one area that clearly shows the remarkable impact pharmaceutical innovation has had on global health. Since the virus that causes AIDS was discovered, more than 30 medicines have been approved to treat HIV infection. With time, medicines have improved in tolerability, efficacy, and convenience for patients. A report from UNAIDS, based on data from 204 countries and territories, found that HIV infections decreased by 22% — from 2.11 million to 1.65 million — between 2010 and 2021, while HIV-related deaths decreased by 40% during the same period, from 1.19 million to 718,000.

A recent study suggests the early impact of HPV vaccination on cervical cancer deaths, observing a substantial reduction in mortality — a 62% drop in cervical cancer deaths among women under age 25 over the last decade in the US, where the HPV vaccine is recommended since 2006.

To sustain innovation for a healthier future, Dr. Reddy cautioned against taking the continued translation of scientific progress into the next generation of medicines and vaccines for granted. He said that underscoring the importance of creating a system that encourages investment and collaboration is needed for without which such innovation would simply not happen.

Fuente: Business World. Disponible en https://acortar.link/5rl4PL

Penmenvy FDA Approval History

Feb 17. Penmenvy (meningococcal groups A, B, C, W, and Y vaccine) is a vaccine indicated for active immunization to prevent invasive disease caused by Neisseria meningitidis serogroups A, B, C, W, and Y in individuals 10 through 25 years of age.

- FDA Approved: Yes (First approved February 14, 2025).
- Brand name: Penmenvy.
- Generic name: meningococcal groups A, B, C, W, and Y vaccine.
- Dosage form: Lyophilized Powder for Injection.
- Company: GlaxoSmithKline.
- Treatment for: Meningococcal Disease Prophylaxis.

Penmenvy combines the antigenic components of GSK's two well-established meningococcal vaccines: Bexsero (MenB vaccine) and Menveo (MenACWY vaccine). Penmenvy is a pentavalent MenABCWY vaccine that provides broad serogroup coverage in one vaccine, reducing the total number of injections required for protection against invasive meningococcal disease.

Invasive Meningococcal Disease (IMD) is an uncommon but serious illness that can lead to death for up to one in six of those who contract it in as little as 24 hours from onset, despite treatment. Approximately one in five survivors may experience long-term consequences such as brain damage, amputations, hearing loss, and nervous system problems. Adolescents and young adults between the ages of 16 and 23 years are at

high risk due to common behaviors that help transmit the bacteria that cause IMD such as living in close quarters like college dormitories.

Penmenvy protects against invasive meningococcal disease by complement-mediated antibody-dependent killing of Neisseria meningitidis serogroups A, B, C, W, and Y.

FDA approval of Penmenvy was supported by positive results from two phase III trials (NCT04502693 and NCT04707391) which evaluated the vaccine's safety, tolerability, and immune response in over 4,800 participants aged 10-25 years.- Bexsero was first approved in 2015 for the prevention of IMD caused by Neisseria meningitidis serogroup B in individuals aged 10 through 25 years.- Menveo was first approved in 2010 for the prevention of IMD caused by Neisseria meningitidis serogroups A, C, Y, and W in individuals aged from 2 months through 55 years of age.

Penmenvy is administered by intramuscular injection as two doses, spaced 6 months apart.

Warnings and precautions associated with Penmenvy include syncope (fainting).

Commonly reported (≥10%) solicited adverse reactions after Dose 1 and Dose 2, respectively in individuals aged 10 through 25 years include pain at the injection site (92% and 88%), fatigue (51% and 42%), headache (42% and 36%), myalgia (15% and 12%), nausea (15% and 10%), erythema (13% and 12%), and swelling (13% and 12%).Commonly reported (≥10%) solicited adverse reactions after Dose 1 and Dose 2, respectively in MenACWY conjugate vaccine-experienced individuals aged 15 through 25 years include pain at the injection site (80% and 74%), headache (41% and 33%), fatigue (40% and 33%), myalgia (15% and 13%), and nausea (15% and 12%).

Fuente: Drugs.com. Disponible en https://acortar.link/Pk3nHE

Vaccination against human papillomavirus to be carried out for the first time in Cuba

Feb 18. Cuba is today strengthening the preparation of health sector specialists to support the introduction in the country, for the first time, of the vaccine against the human papillomavirus (HPV).

Photo: Prensa Latina

Initially, it will be applied to a universe of 68,524 nine-year-old girls, taking into account the following scheme: one dose of 0.5 milliliters intramuscularly, and two doses in girls diagnosed with an immunodeficient disease, explained Dr. Lena Lopez Ambron, head of the National Immunization Program of the Ministry of Public Health (Minsap).

According to a report by Prensa Latina, the coverage objective is equal or higher than 95%, and the goal is to achieve the elimination of HPV-related cervical cancer, with less than four cases in 100,000 women per year, she explained.

The arrival of the immunobiological will be possible thanks to the joint efforts of the Global Alliance for Vaccines and Immunization, the Minsap, and the Pan American Health Organization/World Health Organization (PAHO/WHO), according to the national workshop on cervical cancer control held recently.

According to Dr. Miguel González, advisor at the PAHO/WHO Representation on the island, vaccination against HPV is one of the measures that are part of the global initiative for the elimination of cervical cancer,

together with early detection and access to treatment.

By 2030, the global goal is to vaccinate 90% of girls, detect lesions early in 70% of women, and treat 90% of patients, he said.

Data from the National Cancer Registry show that, in Cuba, one out of every five people dies of cancer, and one out of every three people who die between 30 and 69 years of age is due to this cause.

According to that source, more than 53,000 cases are diagnosed annually, and the trend is increasing, while the number of deaths from this cause, although it has not increased, has not decreased over the years.

Fuente: Granma. Disponible en https://acortar.link/oaxuig

Challenges mount for vaccine makers

Feb 19. End-of-year earnings reports reveal drugmakers are grappling with declining vaccination rates and an unpredictable Trump administration.

Vaccine makers are up against unique headwinds. On the one hand, technologies like mRNA have offered breakthroughs for tackling infectious diseases. But at the same time, market uptake and sales growth for several new shots have been sluggish in the last year.

Now, with Robert F. Kennedy Jr., a long-time vaccine critic, sworn in as the new head of the U.S. Department of Health and Human Services, drugmakers are also facing fresh regulatory uncertainty.

Recent earnings reports from the space's top players underscore this challenging environment.

But while drugmakers face issues like increased vaccine skepticism, they're also keeping the R&D wheels turning and gearing up for potential wins in 2025. Here's what end-of-year reports from some of the largest vaccine makers reveal about the industry's shifting winds.

The challenging RSV and flu landscape

Vaccination rates are falling broadly across disease areas.

Among young children, the divide in vaccination rates has fallen along political lines, with kindergartners from states where President Trump won the popular vote showing higher rates of vaccine exemptions, The New York Times reported in January.

Flu vaccination rates for the 2024-2025 season are also well below those from the previous three years, according to the Centers for Disease Control and Prevention data. The trend is happening while the U.S. faces its worst flu seasons since 2009, with at least 29 million illnesses, according to the CDC.

Yet, not every company has been hit by the downturn in flu shots. Sanofi, the largest influenza vaccine maker, reported that global sales for its flu jab were slightly down for the year, although 2024 was a particularly strong year for comparison, CEO Paul Hudson said during the company's earnings call.

Sanofi's vaccine portfolio was also buoyed by uptake in what's become a complex market for RSV.

Overall, the company's vaccine sales rose 13.5% during the year, mostly driven by European sales of Beyfortus, its RSV antibody approved for babies.

The new shot is among a swath of new RSV drugs that have debuted over the past few years, including a handful approved in the U.S. since 2023. But the breakthrough hasn't led to runaway sales for drugmakers amid the declining vaccination trend.

GSK's Arexvy, which became the first RSV vaccine approved in 2023 and protects older adults, reached about $734 million in sales in 2024, down 52% from the previous year, according to the company's year-end earnings report.

GSK placed some of the blame on the CDC after the agency's Advisory Committee on Immunization Practices changed its recommendations on who should get vaccinated against RSV last year, potentially reducing the patient population.

Still, the pharma company was bullish on Arexvy's future, with revaccination and age cohort expansion expected down the road.

"We really are in the foothills of this vaccine," said Emma Walmsley, CEO of GSK, during the fourth quarter earnings call.

In addition, Arexvy dominated the RSV space in 2024, holding onto about 58% of market share for the year, said Luke Miels, GSK's chief commercial officer.

"I think we are happy with that," he said. "The key point is to preserve value and position ourselves for the future, when we do think ACIP ultimately will move to expand this population."

GSK is aiming to hold onto its market control over Pfizer, which also saw sales of its RSV vaccine for older adults, Abrysvo, decline last year. In fact, Abrysvo sales plummeted 62% year over year in the fourth quarter alone. But Pfizer executives also noted during the company's year-end earnings call that the drug notched a 13% increase in market share during the year.

Moderna launched its RSV vaccine mResvia last year, marking the biopharma's second approved product. However, full-year sales were just $25 million. The vaccine is the third RSV shot approved for older adults, and like Pfizer and GSK, the company is bullish on its prospects.

"While early RSV sales were limited, we see long-term opportunity to expand our presence in this market both in the U.S. and internationally," CFO Jamey Mock said during the earnings call this month.

Regulatory upheaval

Now at the helm of HHS, Kennedy has wide-ranging ability to interfere with standardized vaccine polices, such as changing the role of ACIP, which advises the CDC on the use of vaccines.

Pfizer CEO Albert Bourla said he was "cautiously optimistic" about Kennedy's leadership position during the earnings call and noted he was looking forward to working on areas of agreement, such as chronic disease.

"The president introduced me to him, and we had dinner all three together, and we tried to understand his view," he said. "Do I expect that we will agree on everything on vaccines? I don't know. But I think probably … he will have a way more tempered view on how to interact with the vaccines. I think there are a lot of opportunities that probably outweigh the risks that we have with the radical change that… we are seeing now with the Trump administration."

Moderna CEO Stephane Bancel also offered some insight into how the company views the administration's new leadership during the year-end earnings call.

"We look forward to working with the new team as they get confirmed by the Senate," Bancel said. "Vaccines are a very important piece of keeping people healthy, and we look forward to having those discussions as people get confirmed."

Vaccine developments in the coming year

Looking ahead, drugmakers are intent on expanding their RSV base and are still funnelingR&D dollars into new vaccines.

Moderna is on the cusp of potentially snagging approvals for three new vaccines this year, including its next-gen COVID vaccine, an RSV jab for high-risk adults between 18-59 and a flu-COVID combo shot for people 50 and older.

With upcoming PDUFA dates in May and June for the new COVID and RSV shots, the biopharma has a lot on the line over the next several months. Moderna is also in a pivotal phase 3 study for a cytomegalovirus vaccine candidate and a two-season pivotal phase 3 study for a norovirus vaccine.

Elsewhere, Sanofi reported it moved forward with six new vaccine studies during the fourth quarter of 2024, including a phase 3 study for a candidate in pneumococcal in children. And GSK noted its pipeline includes plans to expand its shingles vaccine label during the first half of 2025.

Fuente: Pharma Voice. Disponible en https://goo.su/zahzhLH

PMA questions delay in dengue vax approval in Philippine

Feb 20. The Philippine Medical Association (PMA) has urged President Ferdinand Marcos Jr. to intervene and expedite the approval of new-generation dengue vaccines amid the surge of dengue cases in the country.

The appeal was made by the country's doctors at the launching of the Empowering Networks to Defeat Dengue or End Dengue Coalition — founded by PMA, in partnership with healthcare organizations, the academe, researchers, and advocates — on Tuesday in Quezon City, with the collective goal of achieving zero dengue deaths by 2030.

December 04, 2017 Empty vials of dengue vaccine Dengvaxia injected to the elementary students of Manila are collated at the Manila Central Vaccine storage room in Sta Cruz Manila. Sanofi Pasteur Philippines producer of Dengvaxia says that the dengue vaccine does not contain viruses that can make people ill with dengue or severe dengue. —File photo by Edwin Bacasmas.

In a letter addressed to Marcos read during the event by Dr. Erica Tania Davillo, chair of the PMA's ad hoc committee on dengue advocacy, the organization acknowledged that the safety of dengue vaccines was of "utmost concern" because of the country's previous experience with Dengvaxia.

"[But] with recent advances in vaccine technology, there are new-generation dengue vaccines in the market or in Phase 3 clinical trials, which showed promise in terms of vaccine effectiveness and safety," it added.

Next-gen vaccines

The PMA specifically cited Qdenga of Japanese pharmaceutical company Takeda, which is approved in 40 countries and one of the only two dengue vaccines approved by the World Health Organization (WHO) to prevent dengue in highly endemic countries like the Philippines. (The other WHO-approved dengue vaccine is Dengvaxia of French pharmaceutical giant Sanofi Pasteur.)

"Having witnessed the devastating impact of dengue on our patients and their families, we strongly urge the government to grant access to these new-generation dengue vaccines and allow Filipinos the right to protect themselves from this dreadful disease," the PMA said.

Dr. Lulu Bravo, executive director of the Philippine Foundation for Vaccination, expressed concern over the delay of the approval of the certificate of public registration of Qdenga, noting that vaccine licensing typically takes about a year.

"If you recall, Dengvaxia was licensed within six months, but Qdenga has been in the process for two years with no approval yet," she added, noting that studies on the safety and efficacy of new-generation vaccine have been ongoing for over a decade.

Food and Drug Administration (FDA) spokesperson Pamela Sevilla declined to comment on the status of Takeda's application for Qdenga, which it filed in 2023.

"The FDA cannot disclose any personal or sensitive information pertaining to any brand or product unless otherwise allowed through a letter by the company owner. Rest assured that we will inform the public of any outcome soon," she said in a message to the Inquirer.

Last month, the Union of Local Authorities of the Philippines president and Quirino Gov. Dax Cua also expressed impatience over why Qdenga was still not approved by the FDA.

"The dengue vaccine, which is already being used by our neighboring countries, would be a great help in addressing the threat of dengue. That's why I hope we can approve its use as soon as possible," Cua said.

Health Secretary Teodoro Herbosa previously explained that even if Qdenga is cleared by the FDA, it could not yet be used for mass vaccination by the government without approval from the Health Technology Assessment Council.

WHO-cleared

The WHO in May last year cleared Qdenga for use in children aged 6 to 16 in areas with high infection rates. The prequalification made it eligible for procurement through United Nations agencies like the UN Children's Fund.

The vaccine, which contains weakened versions of the four dengue virus strains, is recommended as a two-dose schedule with a minimum interval of three months between doses.

Fuente: INQUIRER.NET. Disponible en https://goo.su/YUjwl4F

VaxLab, Duke-NUS Study Vaccine Challenges in Asia

Fab 21. Asian countries that graduate from donor funding programs face unique challenges in introducing new vaccines to national immunization programs, a new report from the Innovation Lab for Vaccine Delivery Research(VaxLab) finds.

Participants at a Feb. 10 workshop in Singapore to discuss challenges in vaccine coverage across 13 Asian countries.

The report, which is available on the website of the Asia Pacific Observatory on Health Systems and Policies (APO), highlights the disparities in vaccine coverage and inclusion of vaccines in national immunization programs in 13 Asian countries. While vaccine coverage rates were high in all countries, middle-income countries that are no longer eligible for donor funding through organizations such as GAVI, the Global Vaccine Alliance, covered the fewest vaccine-preventable diseases in their national immunization programs.

Policymakers, researchers and leders of international organizations from across Asia discussed the report's findings at a workshop on Feb. 10 inSingapore, co-hosted by the SingHealth Duke-NUS Global Health Institute and the Asia Pacific Immunization Coalition.

“Funding remains a major concern for sustaining immunization efforts,”said Xinyu Zhang, Ph.D., a research assistant professor of global health at Duke Kunshan University and former postdoctoral researcher at the Duke Global Health Institute, who was the lead author of the report. “GAVI-eligible countries rely heavily on external funding, while GAVI-ineligible countries depend on domestic financing. Countries that graduate from GAVI support face a 'funding cliff,' which poses a significant challenge to maintaining immunization rates,”

While most countries have achieved over 90 percent coverage for routine vaccinations, newer vaccines such as human papillomavirus (HPV) vaccine, pneumococcal conjugate vaccine and rotavirus vaccine show lower coverage rates, according to the report.

“The findings from this report underscore the urgent need for sustainable immunization systems and stronger regional collaboration in Asia,” said Shenglan Tang, M.D., Ph.D., director of VaxLab and co-director of the Global Health Research Center at Duke Kunshan University.

To address these challenges, workshop participants discussed key areas for strengthening national immunization programs, emphasizing the need for sustainable financing and increased domestic investment. Innovative financing mechanisms and regional collaboration on cost-sharing and procurement were highlighted as essential to maintaining long-term immunization efforts.

Participants stressed the importance of building public trust through transparent communication and involving communities as active partners. The workshop also underscored the need to invest in robust monitoring and evaluation systems to support evidence-based decision-making and efficient resource allocation.

Fuente: Duke Global Health. Disponible en https://goo.su/zApzwSK

Study reveals the benefits of new vaccine

Feb 23. A new study has revealed that there has been a 62% reduction in respiratory syncytial virus (RSV) related hospitalisations among the eligible age group following the introduction of the vaccine.

The study, conducted by Public Health Scotland (PHS) in collaboration with the University of Strathclyde, and published in The Lancet Infectious Diseases, concludes that the RSV vaccine is highly effective in reducing hospitalisations in older adults.

RSV is a common and highly infectious respiratory virus that affects the breathing system and can be very serious for those who are at the highest risk of serious illness, including older adults.

Scotland's new RSV vaccination programme was launched last August, with local health boards inviting adults aged 75-79, including those turning 75 before July 2025, to come forward for their free vaccine ahead of winter. By the end of November, uptake of the vaccine in this older adult population had reached 68%.

This study is the first to evidence the positive impact of the vaccination programme in reducing hospitalisations and underlines the importance of older adults coming forward for their vaccine. One dose offers multi-year protection and the study's results show that, in the first year alone, the programme has reduced serious illness among older adults.

Dr Sam Ghebrehewet, head of immunisation and vaccination at PHS, said: "The success of the RSV programme marks another significant step in protecting the population of Scotland against preventable diseases.

"Public Health Scotland continues to work closely with local health boards to ensure as many people as possible receive their vaccine. As well as being offered to older adults, the vaccine is also offered during pregnancy. Getting vaccinated is the best and simplest thing you can do to protect yourself, or your newborn baby, against serious illness caused by RSV." Neil Gray, Cabinet Secretary for Health and Social Care, added: "We were pleased to be the first nation in the UK to introduce the new RSV vaccine in time to maximise the benefit to the more vulnerable ahead of winter. This research demonstrates just how many people avoided ending up in hospital as a result."

Fuente: Angus County World. Disponible en https://goo.su/l4vwHL

Cervical Cancer Elimination Continues in the Americas in 2025

Feb 24. The Pan American Health Organization (PAHO) and the Spanish Agency for International Development Cooperation recently formalized a memorandum of understanding to reinforce their shared commitment to improving public health across the Americas.

Announced on February 21, 2025, the memorandum covers various areas of cooperation aligned with the United Nations' Sustainable Development Goals, with a key focus on eliminating cervical cancer. Each year, cervical cancer claims the lives of approximately 40,000 women in the Americas.

PAHO Director Jarbas Barbosa emphasized the significance of this collaboration for the region.

“Spain’s support in the fight against cervical cancer and other public health areas is critical for strengthening the health systems. With AECID’s support, we can make progress toward the elimination of this cancer, which disproportionately impacts women in the most vulnerable situations,” said Dr. Barbosa in a press release.

PAHO is leading efforts to eliminate cervical cancer in the Americas, aligning its actions with the World Health Organization's 90-70-90 targets.

These aim for 90% of girls fully vaccinated with the HPV vaccine by age 15, 70% of women screened using a high-performance test by age 35 and 45, 90% with pre-cancer treatment, and 90% with invasive cancer managed.

In the Americas, the PAHO recommends vaccinating against human papillomavirus (HPV). However, only 48 countries have introduced an HPV vaccine, and coverage rates vary widely.

Few countries have reached 90% HPV vaccination coverage, while others remain below 10%.

The PAHO's Revolving Fund announced on February 7, 2025, that the general availability of the 9-valent HPV vaccine will be easier and more affordable for Latin American countries. Health agencies are debating HPV dosage protocols.

The PAHO stated it is working to close these gaps, ensuring access to safe and affordable vaccines and diagnostic tools through its Regional Revolving Funds.

Fuente: VAX BEFORE TRAVEL. Disponible en https://n9.cl/778jva

BTIG mantiene la calificación de Compra para las acciones de Vaxcyte, con un objetivo de 160 dólares

Feb 24. BTIG reafirmó su postura positiva sobre las acciones de Vaxcyte (NASDAQ:PCVX), manteniendo una calificación de Compra y un precio objetivo de 160,00 dólares. La empresa, con una capitalización bursátil de aproximadamente 10.000 millones de dólares, goza de un fuerte apoyo de Wall Street, con objetivos de los analistas que oscilan entre 135 y 163 dólares. Según datos de InvestingPro, Vaxcyte mantiene una calificación de consenso de los analistas muy favorable de 1,2, lo que indica fuertes recomendaciones de compra en general.

La firma se centra en los próximos datos provisionales del ensayo de Fase 2 de VAX-24, el candidato a vacuna neumocócica de Vaxcyte para bebés. Aunque no se espera que se revelen datos en la conferencia de resultados trimestrales del martes, los analistas consideran que este ensayo es una evaluación significativa de la plataforma de Vaxcyte. El análisis de InvestingPro muestra que la empresa mantiene una puntuación global JUSTA de salud financiera, con puntuaciones particularmente fuertes en impulso de precio y gestión de flujo de caja. Los suscriptores pueden acceder a 6 ProTips adicionales y métricas financieras completas para evaluar mejor el potencial de inversión de Vaxcyte.

Los analistas prevén que VAX-24 pueda superar a las vacunas existentes al fallar en menos serotipos después de las tres primeras dosis administradas a los niños. El rendimiento después de tres dosis es particularmente importante porque indica el nivel de protección que tienen los niños antes de recibir una cuarta dosis de refuerzo. En comparación, PREVNAR20, una vacuna actualmente aprobada, falló en seis serotipos después de tres dosis, mientras que se espera que VAX-24 falle en dos como máximo, con la posibilidad de no fallar en ninguno.

La dirección de Vaxcyte ha indicado que la proporción de serotipos en VAX-31 para bebés refleja la de la formulación para adultos, lo que sugiere una fuerte traducción de la inmunogenicidad de adultos a bebés. Pequeños ajustes en las proporciones de serotipos en VAX-31 tienen como objetivo mejorar la eficacia de la vacuna aprovechando la respuesta inmunitaria de los serotipos más fuertes.

De cara al futuro, Vaxcyte planea iniciar un estudio de no inferioridad de Fase 3 en adultos a mediados de 2025, con datos principales previstos para 2026 y una posible entrada en el mercado en 2027. La sólida posición financiera de la empresa se evidencia por su robusto ratio de liquidez de 17,88 y un mínimo ratio de deuda sobre capital de 0,01, lo que sugiere recursos suficientes para financiar sus programas de desarrollo clínico. El candidato VAX-31 de la empresa ha demostrado una alta inmunogenicidad y un perfil de seguridad favorable, posicionándolo como un fuerte competidor para el mercado de vacunas neumocócicas para adultos una vez aprobado.

La reciente recomendación del Comité Asesor sobre Prácticas de Inmunización (ACIP) de reducir la edad recomendada para las vacunas conjugadas neumocócicas a 50 años o más podría ampliar significativamente el mercado total al que puede dirigirse VAX-31.

Se espera que los datos finales de las tres primeras dosis de VAX-24 estén disponibles a finales del primer trimestre de 2025, con resultados de la dosis de refuerzo previstos para finales de año. Además, se proyectan resultados principales del estudio de Fase 2 de VAX-31 en bebés para mediados de 2026, seguidos de datos de inmunogenicidad de la dosis de refuerzo nueve meses después.

En otras noticias recientes, Vaxcyte ha anunciado el avance a la etapa final de su estudio de Fase 2 para VAX-31, un candidato a vacuna conjugada neumocócica. Esta etapa evaluará aún más la seguridad, tolerabilidad e inmunogenicidad de la vacuna en bebés sanos, y la empresa planea publicar datos principales de la serie de inmunización primaria a mediados de 2026. Además, Goldman Sachs ha iniciado la cobertura de Vaxcyte con una calificación de Compra, citando fuertes datos clínicos para sus programas principales como un indicador positivo para el futuro de la empresa. La firma ha establecido un precio objetivo de 135,00 dólares, destacando el potencial de VAX-31 y otros activos en desarrollo para impulsar el crecimiento a largo plazo.

La plataforma tecnológica patentada de Vaxcyte ha sido fundamental para superar los desafíos tradicionales en el desarrollo de vacunas, posicionando a la empresa como un actor significativo en el mercado de vacunas neumocócicas. Los esfuerzos de la empresa para abordar los desafíos de las vacunas de próxima generación han sido bien recibidos, y Goldman Sachs señala la reducción de riesgos de VAX-31 como un factor clave en su potencial regulatorio y comercial. Estos desarrollos subrayan el compromiso de Vaxcyte de avanzar en su cartera de vacunas y expandir su presencia en el mercado.

Fuente: Investing.com. Disponible en https://n9.cl/0m474c

IMUNON Announces New Immunogenicity Data from Phase 1 Clinical Trial of Its DNA Vaccine in Treatment of COVID-19

Feb 26. IMUNON, Inc. (NASDAQ: IMNN), a clinical-stage company focused on developing non-viral DNA-mediated immunotherapy and evaluating an adaptation of the platform's potential as a next-generation vaccine, today announced new safety and immunogenicity data from ongoing analyses of results from the Company's first Phase 1 proof-of-concept clinical trial of IMNN-101, its investigational DNA plasmid vaccine based on the Company's proprietary PlaCCine® technology platform. The Phase 1 study was conducted in 24 healthy volunteers as a seasonal COVID-19 vaccine, targeting the SARS-CoV-2 Omicron XBB1.5 spike antigen. IMNN-101 was administered as a single dose vaccine without a booster dose in study participants who were previously vaccinated against the Omicron XBB1.5 variant. Results demonstrated that IMNN-101 is safe and well-tolerated with no serious adverse effects. IMNN-101 induced a persistent 2- to 4-fold increase in serum neutralizing antibody (NAb) titers from baseline through Week 4, further increasing NAb titers between Week 2 and Week 4. The immune response was observed against the XBB1.5 variant and many newer variants following treatment, demonstrating the IMNN-101 vaccine's cross-reactivity.

"We have strong evidence of vaccine immunogenicity based on the neutralizing antibody response against the Omicron XBB.1.5 strain in this trial, and expect partnering interest in our proof-of-concept data from the PlaCCine platform," said Stacy Lindborg, Ph.D., president and chief executive officer of IMUNON. "These data demonstrate that our first-in-human vaccine based on our PlaCCine platform is safe and immunogenic and is well-suited to developing vaccine candidates for protecting the population against a potential future exposure to a pathogen or controlling a rising pathogen. Given proof of immunogenicity, early indications of durability of protection, and competitive advantages in the stability of our vaccine at workable temperatures compared with available mRNA vaccines, we believe that IMNN-101 has significant potential as a superior next-generation vaccine and will seek potential partners for further development."

The participants in the Phase 1 trial had high baseline immune characteristics presumably from prior infection and multiple previous vaccinations against COVID-19 and ongoing infection as evidenced by the rise in viral nucleocapsid antigen during the study period. Modest increases in T cell responses were observed in this setting of trial participants having received multiple immunizations prior to the study.

"Data from this trial is of high quality and show that IMUNON's DNA vaccine is immunogenic in humans. Following immunization, participants' NAb titers increased through Week 4 with a 2- to 4-fold increase from baseline, a clear and convincing response to the vaccination," said Ai-ris Collier, M.D., Co-Director of the Clinical Trials Unit, Center for Virology and Vaccine Research Center, Beth Israel Deaconess Medical Center.

The Phase 1 clinical data of IMNN-101 is consistent with strong evidence of immunogenicity and protection for the PlaCCine platform in rodents and non-human primates, with prior preclinical results showing that protection exceeded 95% in non-human primates, which is comparable to mRNA vaccines. The robust immunogenicity profile, expected durability of protection, comparative ease of manufacturing, and stability at workable temperatures (up to one year at 4°C and one month at 37°C) suggest that our vaccine based on the PlaCCine technology platform may be a potential viable alternative to available messenger RNA (mRNA) vaccines.

About PlaCCine® and IMNN-101

IMNN-101 utilizes the company's PlaCCine® technology platform, a proprietary composition of a DNA

plasmid that regulates the expression of key pathogen antigens and a novel synthetic DNA delivery system. The plasmid-based expression vector accommodates single or multiple antigens through its flexible vector design, offers manufacturing flexibility compared to with viral or other DNA or protein vaccines, and the synthetic delivery system protects DNA from degradation and facilitates DNA uptake after injection with acceptable safety.

About the Phase 1 PoC Clinical Trial

This U.S. Phase 1 proof-of-concept (PoC) study inoculated 24 participants to evaluate three escalating doses of IMNN-101 with eight participants at each dose. All participants were treated at DM Clinical Research in Philadelphia. For this study, IMNN-101 has been designed to protect against the SARS-CoV-2 Omicron XBB1.5 variant, in accordance with the FDA's Vaccines and Related Biological Products Advisory Committee's June 2023 announcement of the framework for updated COVID-19 doses. The primary objectives of the study are to evaluate safety and tolerability in healthy adults. Secondary objectives include evaluating IMNN-101's ability to elicit neutralizing antibody responses, cellular responses and their associated durability.

About IMUNON

IMUNON is a clinical-stage biotechnology company focused on advancing a portfolio of innovative treatments that harness the body's natural mechanisms to generate safe, effective and durable responses across a broad array of human diseases, constituting a differentiating approach from conventional therapies. IMUNON is developing its non-viral DNA technology across its modalities. The first modality, TheraPlas®, is developed for the coding of cytokines and other therapeutic proteins in the treatment of solid tumors where an immunological approach is deemed promising. The second modality, PlaCCine®, is developed for the delivery of DNA-coded viral antigens that can elicit a strong immunological response. This technology may represent a promising platform for the development of vaccines in infectious diseases.

The Company's lead clinical program, IMNN-001, is a DNA-based immunotherapy for the localized treatment of advanced ovarian cancer currently in Phase 2 development. IMNN-001 works by instructing the body to produce safe and durable levels of powerful cancer-fighting molecules, such as interleukin-12 and interferon gamma, at the tumor site. Additionally, the Company has entered a first-in-human study of its COVID-19 booster vaccine (IMNN-101). We will continue to leverage these modalities and to advance the technological frontier of plasmid DNA to better serve patients with difficult-to-treat conditions. For more information on IMUNON, visit www.imunon.com.

Fuente: First Word PHARMA. Disponible en https://n9.cl/gm1du

Brasil anuncia su primera vacuna contra el dengue y proyecta producir 60 millones de dosis anuales

26 feb. El Gobierno de Brasil anunció este martes el desarrollo de la primera vacuna contra el dengue producida íntegramente en el país, un avance clave en la lucha contra esta enfermedad que ha alcanzado cifras récord en los últimos años. A partir de 2026, la producción alcanzará las 60 millones de dosis anuales, destinadas a ser distribuidas en la red de salud pública.

La vacuna, de dosis única y con eficacia comprobada contra los cuatro serotipos del virus del dengue, será elaborada por el Instituto Butantan, un prestigioso centro de investigación biomédica en Brasil, en alianza con la empresa china WuXi Biologics. El proyecto cuenta con una inversión inicial de 1.260 millones de reales (aproximadamente 221 millones de dólares).

El anuncio fue realizado en una ceremonia oficial encabezada por el presidente brasileño, Luiz Inácio Lula da Silva, y la ministra de Salud, Nísia Trindade. La funcionaria presentó el proyecto en un contexto político complejo, marcado por especulaciones sobre una posible reforma del gabinete en la que podría perder su cargo.

Una vacuna clave para enfrentar la crisis sanitaria

El dengue es una enfermedad viral transmitida por el mosquito *Aedes aegypti* y se ha convertido en un problema de salud pública en Brasil y otros países tropicales. En 2024, Brasil alcanzó una cifra récord de 6,65 millones de casos probables y registró 6.022 muertes, la cantidad más alta de decesos desde que se tiene registro.

Si bien en lo que va de 2025 se ha registrado una reducción del 30 % en los casos probables con respecto al mismo período del año anterior (402.000 casos hasta la fecha), algunas regiones continúan en situación crítica. Es el caso del estado de São Paulo, que declaró emergencia sanitaria tras reportar 200.000 casos probables entre enero y febrero, con 102 muertes confirmadas y otras 225 en investigación.

La crisis del dengue no se limita a Brasil. En países vecinos como Perú, la situación también es alarmante. En 2023, el país registró más de 270.000 casos y 423 muertes, convirtiéndose en la peor epidemia de dengue en su historia reciente.

El cambio climático, con temperaturas más altas y lluvias intensas, ha contribuido a la proliferación del mosquito transmisor, afectando especialmente al norte del país. La llegada de la nueva vacuna brasileña podría representar una oportunidad para Perú de fortalecer su estrategia de inmunización y mitigar los efectos de futuros brotes.

Un esfuerzo de inmunización sin precedentes

Para combatir la propagación del dengue, Brasil implementó en 2024 una campaña de vacunación con la vacuna desarrollada por la farmacéutica japonesa Takeda, conocida como Qdenga. Sin embargo, debido a la disponibilidad limitada de dosis, solo 3,3 millones de niños entre 10 y 14 años pudieron ser inmunizados.

Este año, el Ministerio de Salud ha adquirido nueve millones de dosis adicionales de la vacuna japonesa, con la posibilidad de incrementar la cantidad en el segundo semestre. No obstante, la producción nacional de la nueva vacuna de Butantan permitirá a Brasil contar con una fuente propia y masiva de inmunización, lo que representa un paso decisivo en la lucha contra el dengue.

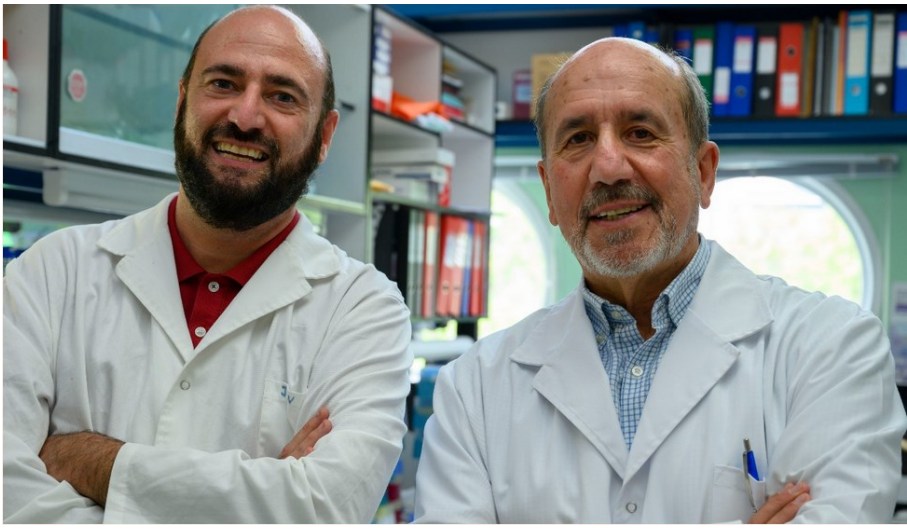
La introducción de esta vacuna refuerza la estrategia de salud pública del país para frenar la incidencia de la enfermedad, reducir la mortalidad y mitigar el impacto del dengue en el sistema sanitario.

Con este avance, Brasil se posiciona a la vanguardia en la producción de vacunas contra enfermedades tropicales y fortalece su autonomía en la fabricación de inmunizantes clave para su población. Además, este desarrollo puede beneficiar a otros países de la región, como Perú, que podrían acceder a las dosis brasileñas para enfrentar su propia crisis sanitaria y mejorar la respuesta ante brotes futuros.

Fuente: Salud con Lupa. Disponible en https://n9.cl/eyv57

La vacuna contra la COVID-19 del CSIC que se cedió a la OMS aún no se ha probado en humanos

27 feb. En agosto de 2023, el Consejo Superior de Investigaciones Científicas (CSIC) transfirió a la Organización Mundial de la Salud (OMS) la patente de su prototipo de vacuna contra la COVID-19. Se trata de la inyección desarrollada por los prestigiosos investigadores Juan García Arriaza y Mariano Esteban, del Centro Nacional de Biotecnología (CNB-CSIC). Los estudios preclínicos demostraron una eficacia del 100% en modelos animales, previniendo la replicación del virus en pulmones y cerebro y evitando daños asociados. Sin embargo, un año y medio después de la cesión a la OMS y de cinco del inicio de la pandemia del coronavirus, desde el CSIC indican a THE OBJECTIVE que esta aún no ha iniciado sus ensayos clínicos en humanos.



Los investigadores Juan García Arriaza y Mariano Esteban. | CSIC

En marzo de 2020, el Gobierno concedió 4,5 millones de euros al CSIC para el desarrollo de vacunas contra el coronavirus. En total, fueron tres inyecciones las que los científicos del Consejo Superior de Investigaciones Científicas pusieron en marcha. La de los investigadores Arriaza y Esteban es la única de las tres vacunas para la cual se llegó a pedir autorización a la Agencia Española del Medicamento (Aemps) para iniciar ensayos en humanos, en 2021. De hecho, en mayo de ese año, el Gobierno otorgó al CSIC 2,4 millones de euros para llevar a cabo los ensayos clínicos de fase I/II combinado en los que participarían varios hospitales españoles. Sin embargo, la autorización de la Aemps para el comienzo de estos estudios médicos en personas nunca llegó y, finalmente, en agosto de 2023, el CSIC –organismo dependiente del Ministerio de Ciencia e Innovación– decidió transferir su vacuna, basada en el virus vaccinia MVA como vector, a la OMS.

Ahora, según ha explicado el propio Mariano Esteban a THE OBJECTIVE, la inoculación «está en proceso de consideración por las autoridades suizas para iniciar un ensayo clínico en 2025 como parte de la concesión de un proyecto europeo (2024-2028), cuyo objetivo es comparar cuatro vacunas frente al SARS-CoV-2 (dos aprobadas por la EMA y las otras dos, una francesa y la nuestra española) desde el punto de vista celular, molecular e inmune, para de esta forma conocer en profundidad las diferencias y ventajas de cada una de las vacunas». La autorización corresponde a las autoridades sanitarias suizas y francesas, ya que el ensayo clínico se realizará en París y Lausanne.

¿Por qué la Aemps no autorizó sus ensayos en humanos?

Es muy confuso por qué la Aemps rechazó autorizar el inicio de los ensayos clínicos en humanos. Sin una versión oficial sobre los motivos que paralizaron el proceso, hubo información contradictoria sobre sus ensayos con macacos. Se publicó que uno de los animales utilizados en las pruebas había sufrido daños; sin embargo, los científicos desmintieron esta información y afirmaron que la vacuna era totalmente segura en los tres modelos animales en que se ha había probado: ratones, hámsteres y macacos. «La vacuna confiere

una protección del 100% contra la infección causada por el SARS-CoV-2 en los tres modelos animales, controlando la replicación del virus en las vías respiratorias y en los pulmones, la patología pulmonar y previniendo la tormenta de citoquinas», subrayaron Arriaza y Esteban en un comunicado.

De esta forma, tras no conseguir el espaldarazo de las autoridades sanitarias españolas, el CSIC firmó la cesión de esta vacuna para que llegue a países en desarrollo. La transferencia de esta tecnología se realizó de forma gratuita a través de la iniciativa COVID-19 Technology Access Pool (C-TAP) de la OMS y la organización Medicines Patent Pool (MPP), con el objetivo de facilitar la producción y distribución de la vacuna en países de ingresos bajos y medios.

El CSIC acordó no cobrar regalías por la explotación de la vacuna siempre que se fabrique para estos países.

¿Qué ha pasado con las otras dos vacunas del CSIC?

Las otras dos vacunas contra la COVID-19 desarrolladas por el CSIC son la del químico y virólogo Luis Enjuanes y la del médico e investigador Vicente Larraga. Con respecto a la primera, el propio Enjuanes, en una entrevista con el Colegio Oficial de Médicos de Ciudad Real el pasado mes de enero, indicó que la inyección podrá estar lista a finales de este año. «Tenemos que asegurar que en personas no se producen efectos secundarios. En marzo empezaríamos los ensayos clínicos de fase 1 y 2 y 3 en personas», explica el investigador, que agrega que están preparando dos versiones de la vacuna intranasal e intramuscular para ver cuál es más segura y eficaz.

«La aplicación intranasal tiene gran recelo en las agencias evaluadoras. Aunque nuestra preferencia es esa», indica el experto, que asegura están «acelerando los procesos» debido a que han empezado a colaborar con una gran multinacional. A diferencia de las vacunas que hay ahora, la de Enjuanes es esterilizante, es decir, que bloquearía al virus en la vía de entrada, las mucosas nasales. Las de ahora impiden que la infección avance y la enfermedad se agrave. La suya evitaría la propia infección.

En el caso de la inoculación de Larraga, en 2022 completó con éxito sus pruebas en dos especies animales y se preparaba para iniciar ensayos preclínicos en macacos, con la esperanza de obtener autorización para pruebas en humanos hacia finales de ese año. Sin embargo, hasta la fecha no se han publicado actualizaciones adicionales sobre el avance de esta vacuna en ensayos clínicos o su disponibilidad para el público.

Fuente: THE OBJECTIVE. Disponible en https://n9.cl/fmpis

Bavarian Nordic Receives Marketing Authorization in Europe for Chikungunya Vaccine for Persons Aged 12 and Older

Feb 28. Bavarian Nordic A/S (OMX: BAVA) from Denmark, announced that the European Commission has granted marketing authorization in Europe for VIMKUNYA® for active immunization for the prevention of disease caused by chikungunya virus in individuals 12 years and older.

The virus-like particle (VLP) single-dose vaccine is the first chikungunya vaccine approved in Europe for persons as young as 12 years old. The approval, valid in all EU member states, as well as in Iceland, Liechtenstein, and Norway, marks the second approval of VIMKUNYA, following the approval by the U.S. Food and Drug Administration (FDA) earlier this month. Bavarian Nordic also recently submitted a Marketing Authorization Application (MAA) to the UK Medicines and Healthcare products Regulatory Agency (MHRA) with potential approval of the chikungunya vaccine in the UK in the first half of 2025.

Bavarian Nordic will launch VIMKUNYA in key European markets in the first half of 2025.

“We are highly encouraged by the European Commission’s accelerated decision to approve our chikungunya vaccine in Europe, which offers a differentiated profile for travelers, including those as young as 12 years,” said Paul Chaplin, President and CEO of Bavarian Nordic. “As we expand our presence across Europe, this vaccine will help to further consolidate our leading position in travel vaccines, and we look forward to making the vaccine available in key markets during the first half of 2025.”

The marketing authorization was granted by the European Commission upon recommendation by the Committee for Medicinal Products for Human Use (CHMP) of the European Medicines Agency (EMA) in January 2025 and was based on results from two phase 3 clinical trials which enrolled more than 3,500 healthy individuals 12 years of age and older. The studies met their primary endpoints, with results showing that 21 days after vaccination, the vaccine induced neutralizing antibodies in up to 97.8% of the vaccinated individuals and demonstrated a rapid immune response starting to develop within one week.

About chikungunya

Chikungunya is a mosquito-borne disease caused by the chikungunya virus (CHIKV). In the past 20 years, the virus has emerged across several regions in Asia, Africa, and the Americas, including many popular travel destinations, often causing large unpredictable outbreaks. Since its discovery, CHIKV has been identified in more than 110 countries, with evidence of transmission confirmed in more than 50 countries over the past five years1. Chikungunya typically presents with acute symptoms, including fever, rash, fatigue, headache, and often severe and incapacitating joint pain. Most patients recover, but 30-40% of those affected may develop chronic symptoms that can last for months or even years2. In 2024, approximately 480,000 cases of chikungunya and over 200 deaths were reported worldwide3. Recent data suggest that chikungunya is severely underreported and often misdiagnosed as dengue fever due to a similar symptom profile4.

About VIMKUNYA® Chikungunya vaccine (recombinant, adsorbed)

VIMKUNYA is an adjuvanted VLP recombinant protein vaccine for active immunization for the prevention of disease caused by chikungunya virus (CHIKV) in individuals 12 years and older. Because VLPs contain no virus genetic material, the vaccine cannot infect cells, reproduce or cause disease. VIMKUNYA will be available as a suspension for injection in a pre-filled syringe.

While the mechanism of action of CHIKV VLP vaccine still needs to be further characterised, it is thought that the vaccine can induce protection from CHIKV infection by inducing neutralising antibodies against certain CHIKV proteins resulting in neutralisation of live virus. An adjuvant is added to increase the magnitude of vaccine-mediated immune responses. The most common side effects are injection site pain, fatigue, headache, and myalgia.

Full product information will be available from:

https://www.ema.europa.eu/en/medicines/human/EPAR/vimkunya

About Bavarian Nordic

Bavarian Nordic is a global vaccine company with a mission to improve health and save lives through innovative vaccines. We are a preferred supplier of mpox and smallpox vaccines to governments to enhance public health preparedness and have a leading portfolio of travel vaccines.

For more information, visit www.bavarian-nordic.com

Fuente: First Word PHARMA. Disponible en https://n9.cl/le92z

Infant PCV13 Immune Response Blunted by Vaccination in Respiratory Viral Seasons

Feb 28. A blunted immune response was observed among young infants who received their first dose of a pneumococcal 13-valent conjugate vaccine (PCV13) during peak respiratory viral seasons, according to study findings published in *Clinical Infectious Diseases.*

"Infants who receive their first pneumococcal conjugate vaccine (PCV) dose during a respiratory viral season may have increased susceptibility to respiratory viral immune blunting with higher carrier-load PCVs. ".

Researchers conducted a post hoc analysis of a large, double-blinded, randomized study that compared outcomes of PCV13 vs PCV7 administration in infants at 2, 4, 6, and 12 months of age. The analysis occurred from February 2008 to July 2009 and comprised infants in Israel who received their first PCV dose at 7 to 9 weeks of age either during or outside of a respiratory viral season. The researchers used local epidemiologic data to define the respiratory viral season as December through April and collected blood samples from infants at 7 and 13 months of age (1 month after vaccination) to assess serum anticapsular-binding immunoglobulin (Ig) G antibodies for each serotype included in PCV13. Geometric mean serotype-specific IgG concentrations (GMC) were calculated for statistical analysis.

Among 1058 infants included in the final analysis, 533 received PCV13 and 525 received PCV7. Of 404 PCV13 recipients and 405 PCV7 recipients tested at post-infant series (post-primary) visits, 179 and 188, respectively, were vaccinated during respiratory viral seasons, while 225 and 217, respectively, were not. Across all 4 groups, patient sex, ethnicity, and age at receipt of each dose were similar.

In the PCV13 group, the researchers observed lower GMCs for all serotypes 1 month after completion of the 3-dose series in patients who received the first dose during vs outside of respiratory viral seasons. The between-group difference reached statistical significance for 10 of the 13 serotypes. Similar results were observed among subgroups of PCV13 and PCV7 recipients who received the first 2 vaccine doses during vs outside of respiratory viral seasons.

"The current study provides a unique opportunity to demonstrate both the influence of seasonality and increased carrier load on the immune response of infants to PCVs."

Further analysis of patients in the PCV13 group showed that GMCs after receipt of a booster dose at 13 months of age were higher than those following completion of the 3-dose series, indicating a robust booster response. However, the GMC ratio of PCV administration during vs outside of respiratory viral seasons was lower for 11 of the 13 serotypes and reached statistical significance for 2 serotypes. The researchers noted similar findings in a subgroup analysis of patients who received the first 2 vaccine doses during vs outside of the respiratory viral season.

In the PCV7 group, patients vaccinated during vs outside of respiratory viral seasons exhibited no significant differences in immune response following completion of the 3-dose series at 7 months of age. Moreover, vaccination during a respiratory viral season was associated with higher GMCs following receipt of a booster dose at 13 months of age.

Study limitations include the lack of data regarding pathogen exposure and the inability to rule in or rule out the occurrence of asymptomatic transmission.

According to the researchers, "The current study provides a unique opportunity to demonstrate both the

influence of seasonality and increased carrier load on the immune response of infants to PCVs."

Disclosure: This research was supported by Pfizer Inc. One study author declared affiliations with biotech, pharmaceutical, and/or device companies. Please see the original reference for a full list of disclosures.

Fuente: Infectious Disease ADVISOR. Disponible en https://n9.cl/zqhib

Zydus Lifesciences introduces WHO-recommended flu vaccine in 2025

Feb 28. Zydus Lifesciences, a leading, discovery-based, global pharmaceutical company is ready to launch the season's first India's Flu protection as per WHO recommended composition of quadrivalent influenza virus vaccines for use in the 2025 southern hemisphere. The company's Quadrivalent Inactivated Influenza vaccine VaxiFlu-4 will offer protection against:

- ⇒ A/Victoria/4897/2022 (H1N1) pdm09-like virus,
- ⇒ A/Croatia/10136RV/2023 (H3N2)-like virus,
- ⇒ B/Austria/1359417/2021 (B/Victoria lineage)-like virus,
- ⇒ B/Phuket/3073/2013 (B/Yamagata lineage)-like virus.

Zydus Lifesciences quadrivalent vaccine, by covering strains of both influenza A and influenza B, provides a broader protection and significantly reduces the risk of vaccine mismatch. The vaccine has been cleared by the Central Drug Laboratory (CDL).

VaxiFlu-4 is being marketed by Zydus Vaxxicare-a division of the group focussing on preventives. The Quadrivalent Inactivated Influenza vaccine has been developed at the Vaccine Technology Centre (VTC) in Ahmedabad which has proven capabilities in researching, developing, and manufacturing of safe and efficacious vaccines.

Development of Zydus Lifesciences

Speaking on the development Dr. Sharvil Patel, Managing Director, Zydus Lifesciences Limited said, "Preventives are the key to public health in both the developing and the developed world and vaccines have the potential to improve the quality of life. In India, there is a pressing need for access to affordable, high-quality vaccines that can address healthcare challenges. With vaccines like VaxiFlu-4 we are serving the cause of public health through annual immunization and preventing flu outbreaks."

Because of annual and occasional outbreaks, the control of influenza has become a major public health challenge. Annual Influenza (flu) vaccination is the best way to prevent flu and its potentially serious complications. Influenza is a contagious respiratory illness caused by influenza viruses which spreads from person to person, mainly through airborne respiratory droplets generated from coughing and sneezing or direct contact with an infected surface or individual.

It can cause illnesses that range in severity and at times lead to hospitalization and death-with the latter occurring mainly in high-risk groups, such as under-five children, the elderly, and people with immunosuppressive and chronic medical conditions. According to the World Health Organization (WHO), seasonal influenza results in 290,000-650,000 deaths every year.

Fuente: HEALTHCARERADIUS. Disponible en https://n9.cl/fv9m6

Moderna Inc (MRNA) Secures UK Approval for RSV Vaccine mRESVIA

Mar 1. Moderna Inc (MRNA, Financial) announced that the UK's Medicines and Healthcare products Regulatory Agency (MHRA) has granted marketing authorization for mRESVIA (mRNA-1345). This vaccine is designed for active immunization to prevent lower respiratory tract disease (LRTD) caused by respiratory syncytial virus (RSV) in adults aged 60 and older. This approval marks Moderna's second product authorized in the UK, underscoring the company's commitment to combating respiratory diseases through mRNA technology.

Positive Aspects

* mRESVIA is Moderna's second approved product in the UK, highlighting the company's expanding portfolio.
* The vaccine targets a significant health issue, as RSV is a leading cause of respiratory infections in the elderly.
* Phase 3 clinical trials showed positive results with no serious safety concerns.
* The vaccine will be produced at the Moderna Innovation and Technology Centre in Oxfordshire, enhancing local manufacturing capabilities.

Negative Aspects

* The approval is limited to adults aged 60 and older, potentially restricting the market size.
* There are inherent risks and uncertainties associated with forward-looking statements regarding vaccine efficacy and safety.

Financial Analyst Perspective

From a financial standpoint, the approval of mRESVIA in the UK represents a strategic expansion of Moderna's product offerings, potentially increasing revenue streams. The successful Phase 3 trial results and the absence of serious safety concerns are likely to bolster investor confidence. However, the market is limited to a specific age group, which may impact the overall financial impact. Investors should also consider the risks associated with forward-looking statements and regulatory challenges in other markets.

Market Research Analyst Perspective

The authorization of mRESVIA in the UK positions Moderna as a key player in the respiratory vaccine market, particularly for the elderly demographic. The high incidence of RSV-related health issues in the UK underscores the demand for effective vaccines. Moderna's focus on local manufacturing at the Oxfordshire facility could enhance supply chain efficiency and responsiveness to market needs. However, the competitive landscape and regulatory hurdles in other regions remain critical factors to monitor.

Fuente: Gurufocus. Disponible en https://n9.cl/g8p8t6

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Filters activated: (vaccine[Title/Abstract]) AND (("2025/02/15"[Date - Publication] : "2025/02/28"[Date - Publication])) records.

Monkeypox Vaccine.

[No authors listed]2025 Feb 15. Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006–.PMID: 35877947

COVID-19 Vaccines.

[No authors listed]2025 Feb 15. Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006–.PMID: 33355732

RNA neoantigen vaccines prime long-lived CD8$^+$ T cells in pancreatic cancer.

Sethna Z, Guasp P, Reiche C, Milighetti M, Ceglia N, Patterson E, Lihm J, Payne G, Lyudovyk O, Rojas LA, Pang N, Ohmoto A, Amisaki M, Zebboudj A, Odgerel Z, Bruno EM, Zhang SL, Cheng C, Elhanati Y, Derhovanessian E, Manning L, Müller F, Rhee I, Yadav M, Merghoub T, Wolchok JD, Basturk O, Gönen M, Epstein AS, Momtaz P, Park W, Sugarman R, Varghese AM, Won E, Desai A, Wei AC, D'Angelica MI, Kingham TP, Soares KC, Jarnagin WR, Drebin J, O'Reilly EM, Mellman I, Sahin U, Türeci Ö, Greenbaum BD, Balachandran VP.Nature. 2025 Feb 19. doi: 10.1038/s41586-024-08508-4. Online ahead of print.PMID: 39972124

Disease diagnostics using machine learning of B cell and T cell receptor sequences.

Zaslavsky ME, Craig E, Michuda JK, Sehgal N, Ram-Mohan N, Lee JY, Nguyen KD, Hoh RA, Pham TD, Röltgen K, Lam B, Parsons ES, Macwana SR, DeJager W, Drapeau EM, Roskin KM, Cunningham-Rundles C, Moody MA, Haynes BF, Goldman JD, Heath JR, Chinthrajah RS, Nadeau KC, Pinsky BA, Blish CA, Hensley SE, Jensen K, Meyer E, Balboni I, Utz PJ, Merrill JT, Guthridge JM, James JA, Yang S, Tibshirani R, Kundaje A, Boyd SD.Science. 2025 Feb 21;387(6736):eadp2407. doi: 10.1126/science.adp2407. Epub 2025 Feb 21.PMID: 39977494

Dengue Tetravalent Vaccine, Live.

[No authors listed]2025 Feb 15. Drugs and Lactation Database (LactMed®) [Internet]. Bethesda (MD): National Institute of Child Health and Human Development; 2006–.PMID: 31369221

Molecular mechanisms of Japanese encephalitis virus infection and advances in vaccine research.

Gong J, Duan X, Ge Z.Microb Pathog. 2025 Apr;201:107397. doi: 10.1016/j.micpath.2025.107397. Epub 2025 Feb 19.PMID: 39983879

How to Prevent Rubella Epidemics and Congenital Rubella Syndrome: Lessons From 42 Years of Longitudinal Epidemiology in Osaka Prefecture, Japan (1982-2023).

Kanbayashi D, Kurata T, Kaida Y, Miyoshi T, Okayama F, Kase T, Komano J, Takahashi K, Ikuta K, Motomura K.J Infect Dis. 2025 Feb 20;231(2):440-450. doi: 10.1093/infdis/jiae402.PMID: 39141594

Organoid Models to Study Human Infectious Diseases.

Zhu S, Chen D, Yang X, Yang L, Han Y.Cell Prolif. 2025 Feb 20:e70004. doi: 10.1111/cpr.70004. Online ahead of print.PMID: 39973397

Infectious mononucleosis is a more realistic target for preventing multiple sclerosis.

Giovannoni G, Hawkes CH, Lechner-Scott J, Yeh EA, Levy M.Mult Scler Relat Disord. 2025 Feb 17;95:106337. doi: 10.1016/j.msard.2025.106337. Online ahead of print.PMID: 39986138

RNA vaccines: The dawn of a new age for tuberculosis?

Li J, Liu D, Li X, Wei J, Du W, Zhao A, Xu M.Hum Vaccin Immunother. 2025 Dec;21(1):2469333. doi: 10.1080/21645515.2025.2469333. Epub 2025 Feb 27.PMID: 40013818

The origin of vaccine nationalism.

Shao Q.Vaccine. 2025 Feb 18;51:126897. doi: 10.1016/j.vaccine.2025.126897. Online ahead of print.PMID: 39970595

Interim Estimates of 2024-2025 Seasonal Influenza Vaccine Effectiveness - Four Vaccine Effectiveness Networks, United States, October 2024-February 2025.

Frutos AM, Cleary S, Reeves EL, Ahmad HM, Price AM, Self WH, Zhu Y, Safdar B, Peltan ID, Gibbs KW, Exline MC, Lauring AS, Ball SW, DeSilva M, Tartof SY, Dascomb K, Irving SA, Klein NP, Dixon BE, Ong TC, Vaughn IA, House SL, Faryar KA, Nowalk MP, Gaglani M, Wernli KJ, Murugan V, Williams OL, Selvarangan R, Weinberg GA, Staat MA, Halasa NB, Sahni LC, Michaels MG, Englund JA, Kirby MK, Surie D, Dawood FS, Clopper BR, Moline HL, Link-Gelles R, Payne AB, Harker E, Wielgosz K, Weber ZA, Yang DH, Lewis NM, DeCuir J, Olson SM, Chung JR, Flannery B, Grohskopf LA, Reed C, Garg S, Ellington S; CDC Influenza Vaccine Effectiveness Collaborators.MMWR Morb Mortal Wkly Rep. 2025 Feb 27;74(6):83-90. doi: 10.15585/mmwr.mm7406a2.PMID: 40014791

Interim Estimates of 2024-2025 COVID-19 Vaccine Effectiveness Among Adults Aged 18 Years - VISION and IVY Networks, September 2024-January 2025.

Link-Gelles R, Chickery S, Webber A, Ong TC, Rowley EAK, DeSilva MB, Dascomb K, Irving SA, Klein NP, Grannis SJ, Barron MA, Reese SE, McEvoy C, Sheffield T, Naleway AL, Zerbo O, Rogerson C, Self WH, Zhu Y, Lauring AS, Martin ET, Peltan ID, Ginde AA, Mohr NM, Gibbs KW, Hager DN, Prekker ME, Mohamed A, Johnson N, Steingrub JS, Khan A, Felzer JR, Duggal A, Wilson JG, Qadir N, Mallow C, Kwon JH, Columbus C, Vaughn IA, Safdar B, Mosier JM, Harris ES, Chappell JD, Halasa N, Johnson C, Natarajan K, Lewis NM, Ellington S, Reeves EL, DeCuir J, McMorrow M, Paden CR, Payne AB, Dawood FS, Surie D; CDC COVID-19 Vaccine Effectiveness Collaborators.MMWR Morb Mortal Wkly Rep. 2025 Feb 27;74(6):73-82. doi: 10.15585/mmwr.mm7406a1.PMID: 40014628

Offspring Education and Parents' COVID-19 Vaccination.

Applegate J, Yahirun J.Res Aging. 2025 Feb 19:1640275251319325. doi: 10.1177/01640275251319325. Online ahead of print.PMID: 39970323

Threats of Emergent and Resurgent Vector-Borne Infectious Diseases: Vector-borne Infections.

Goetzl LM, Goetzl EJ.Am J Med. 2025 Feb 15:S0002-9343(25)00087-7. doi: 10.1016/j.amjmed.2025.01.037. Online ahead of print.PMID: 39961544

Varicella: is it time for a global vaccination programme?

Wooding EL, Kadambari S, Warris A.Arch Dis Child. 2025 Feb 20:archdischild-2024-327593. doi: 10.1136/archdischild-2024-327593. Online ahead of print.PMID: 39978864

Update on Vaccination Recommendations for Adults with HIV.

Gispen F, Marks KM.Curr HIV/AIDS Rep. 2025 Feb 20;22(1):17. doi: 10.1007/s11904-025-00731-6.PMID: 39976870

Role of non-coding RNAs in the pathogenesis of viral myocarditis.

Kang Z, Zhang L, Yang Z.Virulence. 2025 Dec;16(1):2466480. doi: 10.1080/21505594.2025.2466480. Epub 2025 Feb 20.PMID: 39950847

IL-7 Immunotherapies: Current Applications and Engineering Opportunities.

Ariail E, Biggs B, O'Flanagan R, Schneck JP.Immunol Invest. 2025 Feb 21:1-19. doi: 10.1080/08820139.2025.2464055. Online ahead of print.PMID: 39981682

Cancer vaccines: current status and future directions.

Zhou Y, Wei Y, Tian X, Wei X.J Hematol Oncol. 2025 Feb 17;18(1):18. doi: 10.1186/s13045-025-01670-w.PMID: 39962549

Design and evaluation of potent multiepitope broad spectrum DNA and protein vaccine candidates against Leptospirosis.

Chauhan A, Jhala D, Thumar R, Kapoor K, Joshi A, Gajjar D, Seshadri S, Shekh S, Joshi C, Patel A.Microb Pathog. 2025 Feb 27:107418. doi: 10.1016/j.micpath.2025.107418. Online ahead of print.PMID: 40023457

Achievement and Challenges in Orthohantavirus Vaccines.

Chai S, Wang L, Du H, Jiang H.Vaccines (Basel). 2025 Feb 17;13(2):198. doi: 10.3390/vaccines13020198.PMID: 40006744

Virulence factors and therapeutic methods of *Trueperella pyogenes*: A review.

Wen X, Cheng J, Liu M.Virulence. 2025 Dec;16(1):2467161. doi: 10.1080/21505594.2025.2467161. Epub 2025 Feb 21.PMID: 39983010

The Past, Present, and Future of Cervical Cancer Vaccines.

Lien AC, Johnson GS, Guan T, Burns CP, Parker JM, Dong L, Wakefield MR, Fang Y.Vaccines (Basel). 2025 Feb 17;13(2):201. doi: 10.3390/vaccines13020201.PMID: 40006746

Advances and Challenges in Aeromonas hydrophila Vaccine Development: Immunological Insights and Future Perspectives.

Miryala KR, Swain B.Vaccines (Basel). 2025 Feb 18;13(2):202. doi: 10.3390/vaccines13020202.PMID: 40006748

Corrigendum to The origin of vaccine nationalism [Vaccine 51 (2025) 126897].

Shao Q.Vaccine. 2025 Feb 28;53:126935. doi: 10.1016/j.vaccine.2025.126935. Online ahead of print.PMID: 40023903

The Germline Targeting Vaccine Concept: Overview and Updates from HIV Pre-Clinical and Clinical Trials.

Stamatatos L.Curr HIV Res. 2025 Feb 21. doi: 10.2174/011570162X358302250206074255. Online ahead of print.PMID: 39988778

A comprehensive review of the childhood vaccination landscape in Malaysia.

Kamaruzaman NK, Rizzi M, Attwell K.Epidemiol Infect. 2025 Feb 20;153:e41. doi: 10.1017/S095026882500024X.PMID: 39973372

Flow virometry: recent advancements, best practices, and future frontiers.

Fernandes C, Persaud AT, Chaphekhar D, Burnie J, Belanger C, Tang VA, Guzzo C.J Virol. 2025 Feb 25;99(2):e0171724. doi: 10.1128/jvi.01717-24. Epub 2025 Jan 27.PMID: 39868829

Recombinant infectious bronchitis virus containing mutations in non-structural proteins 10, 14, 15, and 16 and within the macrodomain provides complete protection against homologous challenge.

Keep S, Foldes K, Dowgier G, Freimanis G, Tennakoon C, Chowdhury S, Rayment A, Kirk J, Bakshi T, Stevenson-Leggett P, Chen Y, Britton P, Bickerton E.J Virol. 2025 Feb 27:e0166324. doi: 10.1128/jvi.01663-24. Online ahead of print.PMID: 40013770

Dementia and influenza vaccination: Time trends and predictors of vaccine uptake among older adults.

Appel AM, Janbek J, Laursen TM, Gasse C, Waldemar G, Jensen-Dahm C.Vaccine. 2025 Feb 16;51:126864. doi: 10.1016/j.vaccine.2025.126864. Online ahead of print.PMID: 39961204

Recommendations for dengue vaccine implementation in the elderly population.

Giang NNT, Taylor-Robinson AW.Ther Adv Vaccines Immunother. 2025 Feb 17;13:25151355251321718. doi: 10.1177/25151355251321718. eCollection 2025.PMID: 39963378

Examining homology between MPXV and immunogenic VACV-derived peptides.

Teodoro LI, Ovsyannikova IG, Poland GA, Kennedy RB.Vaccine. 2025 Feb 27;48:126708. doi: 10.1016/j.vaccine.2025.126708. Epub 2025 Jan 13.PMID: 39809088

Malaria vaccine introduction in Africa: progress and challenges.

Impouma B, Adidja A, Mboussou F, Cabore J, Moeti M.Lancet. 2025 Feb 15;405(10478):521-524. doi: 10.1016/S0140-6736(24)02841-1. Epub 2025 Jan 21.PMID: 39855236

Advances in molecular epidemiology and detection methods of pseudorabies virus.

Zhuang L, Gong J, Shen J, Zhao Y, Yang J, Liu Q, Zhang Y, Shen Q.Discov Nano. 2025 Feb 24;20(1):45. doi: 10.1186/s11671-025-04217-7.PMID: 39992589

Active vaccine safety surveillance in low- and middle-income countries: Challenges for vaccine manufacturers from emerging countries.

de Oliveira PMN, Hartmann K, Bhamare C, Lucchesi MBB; DCVMN PV Working Group.Vaccine. 2025 Feb 27;48:126727. doi: 10.1016/j.vaccine.2025.126727. Epub 2025 Jan 14.PMID: 39813974

mRNA Galsomes Vaccine Protects Budgerigars Against Virulent Chlamydia psittaci Challenge.

De Meyst A, Van Mieghem J, Chiers K, Raemdonck K, Verbeke R, Lentacker I, Vanrompay D.Vaccines (Basel). 2025 Feb 19;13(2):206. doi: 10.3390/vaccines13020206.PMID: 40006752

Molecular Farming for Immunization: Current Advances and Future Prospects in Plant-Produced Vaccines.

Vo DK, Trinh KTL.Vaccines (Basel). 2025 Feb 15;13(2):191. doi: 10.3390/vaccines13020191.PMID: 40006737

Beyond Tuberculosis: The Surprising Immunological Benefits of the Bacillus Calmette-Guerin (BCG) Vaccine in Infectious, Auto-Immune, and Inflammatory Diseases.

Jurczak M, Druszczynska M.Pathogens. 2025 Feb 15;14(2):196. doi: 10.3390/pathogens14020196.PMID: 40005571

Advancing vaccine development in genomic era: a paradigm shift in vaccine discovery.

Din MU, Liu X, Jiang H, Ahmad S, Xiangdong L, Wang X.Prog Biomed Eng (Bristol). 2025 Feb 20;7(2). doi: 10.1088/2516-1091/adb2c8.PMID: 39908664

Product and trial design considerations on the path towards a vaccine to combat opioid overdose.

Angelidou A, Koster JA, Sherman AC, McLoughlin C, Lalwani P, Kelly A, Saeed A, McEnaney K, Baden LR, Brogna M, Weitzman ER, Levy S, Dowling DJ, Levy O.NPJ Vaccines. 2025 Feb 19;10(1):35. doi: 10.1038/s41541-025-01083-3.PMID: 39971929

Tackling cutaneous herpes simplex virus disease with topical immunomodulators-a call to action.

Duarte LF, Carbone-Schellman J, Bueno SM, Kalergis AM, Riedel CA, González PA.Clin Microbiol Rev. 2025 Feb 21:e0014724. doi: 10.1128/cmr.00147-24. Online ahead of print.PMID: 39982077

Is informed consent correctly obtained for vaccinations?

Jagadish D, Mamo N, Pasadyn F, Caplan A.Hum Vaccin Immunother. 2025 Dec;21(1):2465116. doi: 10.1080/21645515.2025.2465116. Epub 2025 Feb 16.PMID: 39956634

Oropharyngeal Cancer and the HPV Vaccine: Analysis of Social Media Content.

Matthews MR, Abdulbaki H, Ryan WR, Hackman TG, Farzal Z.Laryngoscope. 2025 Feb 17. doi: 10.1002/lary.32076. Online ahead of print.PMID: 39960222

Addressing Global Disparities in Cervical Cancer Burden: A Narrative Review of Emerging Strategies.

Gopalkrishnan K, Karim R.Curr HIV/AIDS Rep. 2025 Feb 21;22(1):18. doi: 10.1007/s11904-025-00727-2.PMID: 39979520

Lessons for Medical Countermeasure Development from Unforeseen Outbreaks.

Mura M, Trignol A, Le Dault E, Tournier JN.Emerg Microbes Infect. 2025 Feb 20:2471035. doi: 10.1080/22221751.2025.2471035. Online ahead of print.PMID: 39976365

A VSV-based oral rabies vaccine was sentineled by Peyer's patches and induced a timely and durable immune response.

Wang S, Wang Z, Wang W, Sun H, Feng N, Zhao Y, Wang J, Wang T, Xia X, Yan F.Mol Ther. 2025 Feb 27:S1525-0016(25)00128-5. doi: 10.1016/j.ymthe.2025.02.038. Online ahead of print.PMID: 40022445

Development and validation of a quantitative Orthopoxvirus immunoassay to evaluate and differentiate serological responses to Mpox infection and vaccination.

Byrne J, Saini G, Garcia-Leon A, Alalwan D, Doran P, Landay A, Luong Nguyen LB, O'Broin C, Savinelli S, O'Halloran JA, Cotter A, Horgan M, Kelly C, Sadlier C, de Barra E, Gautier V, Mallon PWG, Feeney ER; All Ireland Infectious Diseases Cohort Study.EBioMedicine. 2025 Feb 22;113:105622. doi: 10.1016/j.ebiom.2025.105622. Online ahead of print.PMID: 39987746

Real-world evidence of yellow Fever vaccination data-driven study.

Farnsworth MG, Khanipov K, Botnar K, Weaver SC, Barrett ADT, Golovko G.Vaccine. 2025 Feb 27;48:126758. doi: 10.1016/j.vaccine.2025.126758. Epub 2025 Jan 22.PMID: 39848130

Alternative theories of COVID-19: social dimensions and information sources.

Shrum W, Miller P, Asiamah NO, Zou F.J Public Health Policy. 2025 Feb 19. doi: 10.1057/s41271-025-00560-2. Online ahead of print.PMID: 39972218

An LNP-mRNA vaccine modulates innate cell trafficking and promotes polyfunctional Th1 CD4(+) T cell responses to enhance BCG-induced protective immunity against Mycobacterium tuberculosis.

Lukeman H, Al-Wassiti H, Fabb SA, Lim L, Wang T, Britton WJ, Steain M, Pouton CW, Triccas JA, Counoupas C.EBioMedicine. 2025 Feb 15;113:105599. doi: 10.1016/j.ebiom.2025.105599. Online ahead of print.PMID: 39955975

Epitope-focused vaccine immunogens design using tailored horseshoe-shaped scaffold.

Zhao F, Zhang Y, Zhang Z, Chen Z, Wang X, Wang S, Li R, Li Y, Zhang Z, Zheng W, Wang Y, Zhang Z, Wu S, Yang Y, Zhang J, Zai X, Xu J, Chen W.J Nanobiotechnology. 2025 Feb 18;23(1):119. doi: 10.1186/s12951-025-03200-9.PMID: 39966941

Neutralizing antibodies against KP.2 and KP.3: why the current vaccine needs an update.

Gillot C, David C, Dogné JM, Cabo J, Douxfils J, Favresse J.Clin Chem Lab Med. 2024 Aug 16;63(3):e82-e85. doi: 10.1515/cclm-2024-0919. Print 2025 Feb 25.PMID: 39147380

Virus-like particle vaccine with authentic quaternary epitopes protects against Zika virus-induced viremia and testicular damage.

Abbo SR, Yan K, Geertsema C, Hick TAH, Altenburg JJ, Nowee G, van Toor C, van Lent JW, Nakayama E, Tang B, Metz SW, Bhowmik R, de Silva AM, Prow NA, Correia R, Alves PM, Roldão A, Martens DE, van Oers MM, Suhrbier A, Pijlman GP.J Virol. 2025 Feb 27:e0232224. doi: 10.1128/jvi.02322-24. Online ahead of print.PMID: 40013767

COVID-19 and influenza hospitalizations and the role of COVID-19 vaccination in the post-pandemic period: A cross-sectional study from Saudi Arabia.

Sheerah HA, Al-Jedai AH, Al-Jerian NA, Al-Otaiby MA, Al-Seraihi AF, Al-Huzami SA, Al-Qahtani SA, Zaatari ES.Vaccine. 2025 Feb 26;52:126937. doi: 10.1016/j.vaccine.2025.126937. Online ahead of print.PMID: 40014982

Oral DNA Vaccine Utilizing the Yeast Cell Wall for Dectin-1 Receptor-Mediated Enhancement of Mucosal Immunity.

Liu Y, Meng F, Feng W, Chen Z, Xing H, Zheng A.Mol Pharm. 2025 Mar 3;22(3):1241-1252. doi: 10.1021/acs.molpharmaceut.4c00943. Epub 2025 Feb 17.PMID: 39960883

A population-based measles serosurvey in Mexico: Implications for re-emergence.

Carnalla M, Gaspar-Castillo C, Dimas-González J, Aparicio-Antonio R, Justo-Berrueta PS, López-Martínez I, Shamah-Levy T, Lazcano-Ponce E, Barrientos-Gutiérrez T, Alpuche-Aranda CM, Martínez-Barnetche J.Vaccine. 2025 Feb 18;51:126886. doi: 10.1016/j.vaccine.2025.126886. Online ahead of print.PMID: 39970596

US consumer and healthcare professional preferences for combination COVID-19 and influenza vaccines.

Poulos C, Buck PO, Ghaswalla P, Rudin D, Kent C, Mehta D.J Med Econ. 2025 Dec;28(1):279-290. doi: 10.1080/13696998.2025.2462412. Epub 2025 Feb 20.PMID: 39976591

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 Feb 27;48:126757. doi: 10.1016/j.vaccine.2025.126757. Epub 2025 Jan 20.PMID: 39837002

Glycoproteins gM and gN are indispensable factors for rhesus macaque rhadinovirus replication and spread but can be reconstituted by KSHV chimeras.

Golas G, Park BS, Wong SW.J Virol. 2025 Feb 25:e0192224. doi: 10.1128/jvi.01922-24. Online ahead of print.PMID: 39998253

Dynamics of global emergency vaccine stockpiles: A systems analysis and application to cholera.

Guttieres D, Van Riet C, Vandaele N, Decouttere C.Vaccine. 2025 Feb 26;52:126889. doi: 10.1016/j.vaccine.2025.126889. Online ahead of print.PMID: 40014984

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

Pereira IL, Hartwig DD.Infect Immun. 2025 Feb 18;93(2):e0034824. doi: 10.1128/iai.00348-24. Epub 2025 Jan 8.PMID: 39772848

Post-COVID-19 pandemic immunization coverage in Algerian children: A cross-sectional study.

Ghazy RM, Abadi AM, Salah A, Ismail EAA, Youssef N, Saleeb M, Abonazel MR, Gebreal A, Elrewany E, Moustafa N, Hussein M, Fadl N.Medicine (Baltimore). 2025 Feb 21;104(8):e41494. doi: 10.1097/MD.0000000000041494.PMID: 39993066

Estimating the time required to reach HPV vaccination targets across Europe.

Gountas I, Aman M, Alexander D, Hughes R, Weston G, Sabale U.Expert Rev Vaccines. 2025 Dec;24(1):165-172. doi: 10.1080/14760584.2024.2402535. Epub 2025 Feb 20.PMID: 39269212

A Universal Viral Capsid Protein Based One Step RNA Synthesis and Packaging System for Rapid and Efficient mRNA Vaccine Development.

Su J, Zhang J, Feng X, Liu J, Gao S, Liu X, Yang M, Chen Z.Mol Ther. 2025 Feb 27:S1525-0016(25)00127-3. doi: 10.1016/j.ymthe.2025.02.037. Online ahead of print.PMID: 40022448

Immunogenicity of virus-like particle vaccine candidates against SARS-CoV-2 infection.

Nguyen HT, Garg R, Kroeker A, Gerdts V, Falzarano D, Liu Q.Access Microbiol. 2025 Feb 17;7(2):000925.v3. doi: 10.1099/acmi.0.000925.v3. eCollection 2025.PMID: 39967742

Adjuvant-dependent impacts on vaccine-induced humoral responses and protection in preclinical models of nasal and genital colonization by pathogenic Neisseria.

Islam EA, Fegan JE, Zeppa JJ, Ahn SK, Ng D, Currie EG, Lam J, Moraes TF, Gray-Owen SD.Vaccine. 2025 Feb 27;48:126709. doi: 10.1016/j.vaccine.2025.126709. Epub 2025 Jan 15.PMID: 39817984

Clonal driver neoantigen loss under EGFR TKI and immune selection pressures.

Al Bakir M, Reading JL, Gamble S, Rosenthal R, Uddin I, Rowan A, Przewrocka J, Rogers A, Wong YNS, Bentzen AK, Veeriah S, Ward S, Garnett AT, Kalavakur P, Martínez-Ruiz C, Puttick C, Huebner A, Cook DE, Moore DA, Abbosh C, Hiley CT, Naceur-Lombardelli C, Watkins TBK, Petkovic M, Schwarz RF, Gálvez-Cancino F, Litchfield K, Meldgaard P, Sorensen BS, Madsen LB, Jäger D, Forster MD, Arkenau T, Domingo-Vila C, Tree TIM, Kadivar M, Hadrup SR, Chain B, Quezada SA, McGranahan N, Swanton C.Nature. 2025 Feb 19. doi: 10.1038/s41586-025-08586-y. Online ahead of print.PMID: 39972134

Insights into pathologic mechanisms occurring during serious adverse events following live zoster vaccination.

Kennedy PGE, Grose C.J Virol. 2025 Feb 25;99(2):e0181624. doi: 10.1128/jvi.01816-24. Epub 2025 Jan 17.PMID: 39818965

Global production capacity of seasonal and pandemic influenza vaccines in 2023.

Taaffe J, Goldin S, Lambach P, Sparrow E.Vaccine. 2025 Feb 18;51:126839. doi: 10.1016/j.vaccine.2025.126839. Online ahead of print.PMID: 39970592

Nano-interventions for dengue: a comprehensive review of control, detection and treatment strategies.

Shaikh S, Chary PS, Mehra NK.Inflammopharmacology. 2025 Feb 20. doi: 10.1007/s10787-025-01655-8. Online ahead of print.PMID: 39976669

Analysis of the BadR regulon in Borrelia burgdorferi.

George S, Ouyang Z.BMC Microbiol. 2025 Feb 26;25(1):94. doi: 10.1186/s12866-025-03797-9.PMID: 40011802

sa-mRNA influenza vaccine raises a higher and more durable immune response than mRNA vaccine in preclinical models.

Chang C, Patel H, Ferrari A, Scalzo T, Petkov D, Xu H, Rossignol E, Palladino G, Wen Y.Vaccine. 2025 Feb 15;51:126883. doi: 10.1016/j.vaccine.2025.126883. Online ahead of print.PMID: 39956088

Gut Microbiota and Postbiotic Metabolites: Biotic Intervention for Enhancing Vaccine Responses and Personalized Medicine for Disease Prevention.

Mojgani N, Ashique S, Moradi M, Bagheri M, Garg A, Kaushik M, Hussain MS, Yasmin S, Ansari MY.Probiotics Antimicrob Proteins. 2025 Feb 18. doi: 10.1007/s12602-025-10477-7. Online ahead of print.PMID: 39964413

Knowledge, Attitudes, and Practices Regarding Meningococcal B Vaccination Since the 2015 Recommendation: A Review.

Herrera-Restrepo O, Clements DE, Olaiya T, Marshall GS.J Adolesc Health. 2025 Feb 19:S1054-139X(24)00804-8. doi: 10.1016/j.jadohealth.2024.11.248. Online ahead of print.PMID: 39969465

Low-Dose Yellow Fever Vaccine in Adults in Africa.

Kimathi D, Juan-Giner A, Bob NS, Orindi B, Namulwana ML, Diatta A, Cheruiyot S, Fall G, Dia M, Hamaluba MM, Nyehangane D, Karanja HK, Gitonga JN, Mugo D, Omuoyo DO, Hussein M, Oloo E, Kamau N, Wafula J, Bendera J, Silvester N, Mwavita J, Joshua M, Mwendwa J, Agababyona C, Ngetsa C, Aisha N, Moki F, Buluku T, Munene M, Mwanga-Amumpaire J, Lutwama J, Kayiwa J, Kamaara E, Barrett AD, Kaleebu P, Bejon P, Sall AA, Grais RF, Warimwe GM; NIFTY Investigators.N Engl J Med. 2025 Feb 20;392(8):788-797. doi: 10.1056/NEJMoa2407293.PMID: 39970397

Pregnant women's choices for preventing respiratory syncytial virus (RSV).

Wang B, Lassi Z, Andraweera P, Chen G, Ong JJ, McMillian M, Marshall H.Vaccine. 2025 Feb 27;48:126790. doi: 10.1016/j.vaccine.2025.126790. Epub 2025 Jan 29.PMID: 39884912

Determinants of seasonal influenza vaccination uptake, intention and recommendations among Lebanese physicians.

Farah Z, Bazant ES, Basha I, Saleh N, Moen A, Ghosn N, Maison P.Vaccine. 2025 Feb 21;52:126890. doi: 10.1016/j.vaccine.2025.126890. Online ahead of print.PMID: 39985969

Pfs16: A Key Parasitophorous Vacuole Membrane Protein Crucial for Malaria Parasite Development and Transmission.

Shabani S, Serbus LR.Protein J. 2025 Feb 20. doi: 10.1007/s10930-025-10260-1. Online ahead of print.PMID: 39979562

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

Zhang S, Liu G, Wang C, Guo A, Chen Y.Vaccine. 2025 Feb 15;47:126704. doi: 10.1016/j.vaccine.2025.126704. Epub 2025 Jan 7.PMID: 39778477

Musculoskeletal diseases, infections and vaccines: state of the art, research perspectives and educational needs.

Ecarnot F, Thiyagarajan JA, Barbagallo M, Barratt J, Constantinescu S, Elkayam O, Ferrucci L, Hiligsmann M, Kapetanovic M, Macchia F, Michel JP, Migliore A, Pilotto A, Sieber C, Strangfeld A, Veronese N, Vetrano DL, Maggi S, Rizzoli R.Aging Clin Exp Res. 2025 Feb 22;37(1):46. doi: 10.1007/s40520-025-02940-w.PMID: 39985736

Utility of mobile applications in the management of hepatitis B: A systematic review.

Romero-Vico J, Vargas-Accarino E, Palom A, Fabrellas N, Buti M.Gastroenterol Hepatol. 2025 Feb 19:502395. doi: 10.1016/j.gastrohep.2025.502395. Online ahead of print.PMID: 39983899

Stability of Anti-Drug Antibodies Against Antibody Therapeutics.

Sirohi P, Hainline K, Bullock H, Wang S, Konrad RJ, Wen Y.AAPS J. 2025 Feb 15;27(1):45. doi: 10.1208/s12248-025-01030-z.PMID: 39953303

Intranasal recombinant protein subunit vaccine targeting TLR3 induces respiratory tract IgA and CD8 T cell responses and protects against respiratory virus infection.

Wørzner K, Schmidt ST, Zimmermann J, Tami A, Polacek C, Fernandez-Antunez C, Hartmann KT, Jensen RF, Hansen JS, Illigen K, Isling LK, Erbs G, Jungersen G, Rosenkrands I, Offersgaard A, Gottwein J, Holmbeck K, Jensen HE, Ramirez S, Follmann F, Bukh J, Pedersen GK.EBioMedicine. 2025 Feb 20;113:105615. doi: 10.1016/j.ebiom.2025.105615. Online ahead of print.PMID: 39983329

Costing approaches for vaccine-preventable disease surveillance: Lessons from Ethiopia and Nepal.

Darwar R, Huang X, Abayeneh A, Alemayehu Beshah S, Patel MK, Dagnachew Zeleke E, Wossen M, Alayu M, Lisanwork L, Dahl BA, Wassie Asemahaegne E, Wang SH, Pallas SW, Abate E, Mwenda JM, Bose AS, Mejia N.Vaccine. 2025 Mar 19;50:126776. doi: 10.1016/j.vaccine.2025.126776. Epub 2025 Feb 17.PMID: 39965299

Understanding the vaccine hesitancy of COVID-19 in Benin.

Abdoulaye Alfa D, Le Hesran JY, Boko I, Agossou A, Atchadé A, Fiogbé M, Yovo E, Hounsa S, Massougbodji A, Cottrell G.PLOS Glob Public Health. 2025 Feb 25;5(2):e0004267. doi: 10.1371/journal.pgph.0004267. eCollection 2025.PMID: 39999095

Evaluating geographic accessibility to COVID-19 vaccination across 54 countries/regions.

Cao Y, Li T, Chen H, Zhao Q, Sun J, Grépin KA, Kang JY.BMJ Glob Health. 2025 Feb 19;10(2):e017761. doi: 10.1136/bmjgh-2024-017761.PMID: 39971583

Recent Advances on the Prevention and Management of Rheumatic Heart Disease.

Zhang J, Jia S, Chen Y, Han J, Zhang H, Jiang W.Glob Heart. 2025 Feb 21;20(1):17. doi: 10.5334/gh.1402. eCollection 2025.PMID: 39991593

Perceptions and attitudes of kidney transplant recipients towards SARS-CoV-2 vaccination: a single-centre study.

Tan JS, Vathsala A, Sran HK, D'Costa MR, Chang ZY, Wong ETY.Singapore Med J. 2025 Feb 18. doi: 10.4103/singaporemedj.SMJ-2024-107. Online ahead of print.PMID: 39963766

COVID-19 and influenza vaccine Hesitancy among adults hospitalized in the United States, 2019-2022.

Khan A, Zhu Y, Babcock HM, Busse LW, Duggal A, Exline MC, Gaglani M, Gibbs KW, Gong MN, Ginde AA, Hager DN, Hope AA, Hyde J, Johnson NJ, Kwon JH, Mohr NM, O'Rourke M, Peltan ID, Mallow C, Qadir N, Reddy R, Safdar B, Shapiro NI, Sohn I, Steingrub JS, Wilson JG, Baughman A, Womack KN, Rhoads JP, Self WH, Stubblefield WB; Investigating Respiratory Viruses in the Acutely Ill (IVY) Network.Vaccine. 2025 Feb 27;48:126806. doi: 10.1016/j.vaccine.2025.126806. Epub 2025 Jan 30.PMID: 39884913

Mini-review on the therapeutic vaccines targeting chronic infectious diseases: Evaluation system of therapeutic vaccines targeting HPV and EBV-related cancers.

Woo S, Park PG, An T, Fatima M, Moon YE, Lee SY, Youn H, Hong KJ.Hum Vaccin Immunother. 2025 Dec;21(1):2457187. doi: 10.1080/21645515.2025.2457187. Epub 2025 Feb 16.PMID: 39957237

MERS-CoV spike vaccine-induced N-terminal domain-specific antibodies are more protective than receptor binding domain-specific antibodies.

Abiona OM, Wang N, Leist SR, Schäfer A, Cockrell AS, Wang L, Bangaru S, Stevens L, Graham RL, Kocher JF, Tsybovsky Y, Kanekiyo M, Kumar A, Morabito KM, Rosen O, Shi W, Werner A, Zhang Y, Ziwawo C, Dzuvor CKO, Palandjian C, Eastman C, Matthews HR, Joseph J, Chappell JD, Kong WP, Mascola JR, Ward AB, Denison MR, Baric R, McLellan JS, Graham BS, Corbett-Helaire KS.iScience. 2024 Dec 18;28(2):111632. doi: 10.1016/j.isci.2024.111632. eCollection 2025 Feb 21.PMID: 39898019

Development and validation of BCG vaccine-induced novel granulomatous liver injury preclinical animal model.

Sharma S, Moudgil A, Grewal J, Khatri P, Sharma V, Premkumar M, Bal A, Banerjee D, Patil AN.Animal Model Exp Med. 2025 Feb 19. doi: 10.1002/ame2.12559. Online ahead of print.PMID: 39968771

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

Vittrup DM, Charabi S, Jensen A, Stensballe LG.Vaccine. 2025 Feb 15;47:126687. doi: 10.1016/j.vaccine.2024.126687. Epub 2025 Jan 11.PMID: 39799850

Structural basis of receptor-binding adaptation of human-infecting H3N8 influenza A virus.

Hao T, Xie Y, Chai Y, Zhang W, Zhang D, Qi J, Shi Y, Song H, Gao GF.J Virol. 2025 Feb 24:e0106524. doi: 10.1128/jvi.01065-24. Online ahead of print.PMID: 39992139

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

Le N, McMann TJ, Wenzel C, Li Z, Xu Q, Cuomo RE, Yang J, Mackey TK.Vaccine. 2025 Feb 15;47:126688. doi: 10.1016/j.vaccine.2024.126688. Epub 2025 Jan 8.PMID: 39787796

New BODIPY-Labeled Antibody for Detection of Foot-and-Mouth Disease Virus.

Wei T, Zhang Y, Liu C, Wang Y, Mu S, Bai M, Wu J, Dong H, Zhou J, Sun S, Qin W, Guo H.Anal Chem. 2025 Feb 25;97(7):3804-3809. doi: 10.1021/acs.analchem.4c05954. Epub 2025 Feb 12.PMID: 39936543

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

Frey SE, Brady R, Jackson L, Goepfert P, El Sahly HM, Atmar RL, Rupp R, Creech CB, Abate G, Paulsen G, Weiss J, Wegel A, Roberts PC.Vaccine. 2025 Feb 15;47:126702. doi: 10.1016/j.vaccine.2024.126702. Epub 2025 Jan 10.PMID: 39798434

An epitope-directed mRNA vaccine inhibits tumor metastasis through the blockade of MICA/B alpha1/2 shedding.

Wang R, Wu J, Lin Y, Xiao Y, Yang B, Yao S, Pan T, Fu Z, Li S, Wang C, Zhu Y.Cell Rep Med. 2025 Feb 17:101981. doi: 10.1016/j.xcrm.2025.101981. Online ahead of print.PMID: 39999840

Virus-like particle-based vaccines targeting the *Anopheles* mosquito salivary protein TRIO.

Francian A, Flores-Garcia Y, Powell JR, Petrovsky N, Zavala F, Chackerian B.mSphere. 2025 Feb 25;10(2):e0079824. doi: 10.1128/msphere.00798-24. Epub 2025 Jan 29.PMID: 39878467

Joint analysis of time-varying effect of vaccine and antiviral drug for preventing severe complications and mortality.

Jiang J, Lam KF, Lau EHY, Yin G, Lin Y, Cowling BJ.Sci Rep. 2025 Feb 15;15(1):5640. doi: 10.1038/s41598-025-89043-8.PMID: 39955370

Mechanistic insight into the induction of liver tissue-resident memory CD8$^+$ T cells by glycolipid-peptide vaccination.

Chua YC, Draper SL, Le S, de Menezes MN, Ganley M, Ge Z, Lee A, Phabmixay T, Hirschmann D, Robinson SA, Tan PS, Tullett KM, Anderson RJ, Jayasinghe D, Cozijnsen A, Lahoud MH, Caminschi I, Beattie L, McFadden GI, Larsen DS, Kaisho T, Gras S, Hermans IF, Compton BJ, Heath WR, Painter GF, Holz LE.Cell Rep. 2025 Feb 25;44(2):115295. doi: 10.1016/j.celrep.2025.115295. Epub 2025 Feb 12.PMID: 39946236

Update on Pediatric Hepatitis C Infection.

Ferreira J, Sheflin-Findling S.Curr Gastroenterol Rep. 2025 Feb 28;27(1):18. doi: 10.1007/s11894-024-00955-3.PMID: 40019674

[Erratum. Editorial: Diphtheria-tetanus-pertussis vaccine mortality].

staff at Ugeskrift for Læger.Ugeskr Laeger. 2025 Feb 24;187(8):V205204. doi: 10.61409/V205204.PMID: 40025878

Utilitarian psychology and influenza vaccine acceptance in the United Arab Emirates: implications for moral education and public policy.

Andrade G, Abdelmonem KYA, Teir HJ, Alqaderi N, Elamin ABA, Bedewy D.BMC Psychol. 2025 Feb 19;13(1):138. doi: 10.1186/s40359-025-02456-y.PMID: 39972498

On-patient medical record and mRNA therapeutics using intradermal microneedles.

Han J, Kanelli M, Liu Y, Daristotle JL, Pardeshi A, Forster TA, Karchin A, Folk B, Murmann L, Tostanoski LH, Carrasco SE, Alsaiari SK, Wang EY, Tran K, Zhang L, Eshaghi B, Levy L, Pyon S, Sloane C, Lin SQ, Lau A, Perkinson CF, Bawendi MG, Barouch DH, Durand F, Langer R, Jaklenec A.Nat Mater. 2025 Feb 24. doi: 10.1038/s41563-024-02115-4. Online ahead of print.PMID: 39994390

Potency of two chimeric vaccine candidates derived from the classical swine fever GPE(-) vaccine strain against a circulating virus strain isolated in Japan.

Nishi T, Huynh LT, Kato T, Ikezawa M, Yamamoto T, Sakoda Y, Fukai K.Vet Microbiol. 2025 Feb 20;303:110438. doi: 10.1016/j.vetmic.2025.110438. Online ahead of print.PMID: 40015118

Multilayer Adjuvanted Influenza Protein Nanoparticles Improve Intranasal Delivery and Antigen-Specific Immunity.

Park J, Pho T, Bhatnagar N, Mai LD, Rodriguez-Otero MR, Pal SS, Le CTT, Jenison SE, Li C, May GA, Arioka M, Kang SM, Champion JA.ACS Nano. 2025 Feb 25;19(7):7005-7025. doi: 10.1021/acsnano.4c14735. Epub 2025 Feb 15.PMID: 39954231

[Pneumococcal sepsis 2015-2022: considerations on vaccination strategies].

Hof H, Singer S, Steiner I, Bertsch D, Kirstahler M, Oberdorfer K, Imöhl M, van der Linden M.Dtsch Med Wochenschr. 2025 Feb 21. doi: 10.1055/a-2506-4928. Online ahead of print.PMID: 39983767

Natural Boosting and the Immunogenicity of the XBB.1.5 Monovalent Vaccine in the Coronavirus Disease 2019 Endemic Era: A Longitudinal Observational Study.

Kang HM, Kim HJ, Jung J, Ahn JY, Song KH, Baek JY, Choi JY, Lee YJ, Jeong H, Kim SH, Park S, Jang HM, Rhie GE, Kim ES, Choi JY, Kim SH, Kang ES, Peck KR, Jeong HW, Ko JH.J Infect Dis. 2025 Feb 20;231(2):392-402. doi: 10.1093/infdis/jiae536.PMID: 39612911

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

Montroy J, Yan C, Khan F, Forbes N, Krishnan R, Tunis M, Salvadori MI.Vaccine. 2025 Feb 15;47:126706. doi: 10.1016/j.vaccine.2025.126706. Epub 2025 Jan 8.PMID: 39787800

Australian National Enterovirus Reference Laboratory annual report, 2023.

Kaye MB, Hobday LK, Ibrahim A, Brugink L, Thorley BR.Commun Dis Intell (2018). 2025 Feb 19;49. doi: 10.33321/cdi.2025.49.013.PMID: 39965610

An Overview of Microneedles as a Drug Delivery System.

Ricci-Junior E, Lopes Gama E Silva G.Curr Pharm Des. 2025 Feb 17. doi: 10.2174/0113816128370255250213051125. Online ahead of print.PMID: 39966371

Attitudes of California school personnel on potential COVID-19 vaccine mandates and state law SB277 to remove nonmedical vaccine exemptions.

Dudley MZ, Zapf AJ, Delamater P, Proveaux TM, Schuh HB, Buttenheim AM, Schwartz JL, Klein NP, Goddard K, Patel KM, Omer SB, Salmon DA.Vaccine. 2025 Feb 21;52:126888. doi: 10.1016/j.vaccine.2025.126888. Online ahead of print.PMID: 39985971

Frosted branch angiitis post COVID vaccine: A presumptive association with Behcet's disease.

Alegre-Ituarte V, Bodaghi B, Touhami S.Eur J Ophthalmol. 2025 Feb 19:11206721251321537. doi: 10.1177/11206721251321537. Online ahead of print.PMID: 39973165

Flexible deformation and special interface structure in nanoparticle-stabilized Pickering bubbles strengthen the immunological response as adjuvant.

Chen Q, Teng J, Zhu C, Du J, Wang G, Wu J.J Mater Chem B. 2025 Feb 19;13(8):2725-2736. doi: 10.1039/d4tb01763c.PMID: 39851034

SARS-CoV-2 seroreversion and all-cause mortality in nursing home residents and staff post-primary course vaccination in Belgium between February and December 2021.

Meyers E, De Rop L, Deschepper E, Duysburgh E, De Burghgraeve T, Van Ngoc P, Digregorio M, Coen A, De Clercq N, Wallaert S, Buret L, Coenen S, De Sutter A, Scholtes B, Verbakel JY, Cools P, Heytens S.Vaccine. 2025 Feb 20;51:126865. doi: 10.1016/j.vaccine.2025.126865. Online ahead of print.PMID: 39983537

Functionality and translation fidelity characterization of mRNA vaccines using platform based mass spectrometry detection.

Stiving AQ, Roose BW, Tubbs C, Haverick M, Gruber A, Rustandi RR, Kuiper J, Schombs M, Schuessler H, Li X.NPJ Vaccines. 2025 Feb 23;10(1):38. doi: 10.1038/s41541-025-01082-4.PMID: 39988579

Stability study of recombinant 9-valent human papillomavirus vaccine based on Escherichia coli expression system.

Liu Y, Chen D, Zhao L, Zhang H, Wu S, Chen X, Shen E, Li L, Yang Z, Wang Y, Yin F, Zhang Y, Shi Y, Zhou S, Li S, Du X, Guo J, Wang D, Wang H, Liu S, Jin G, Zhang H, Yu X, Chen X, Shang L, Liu Y, Liu Y.Hum Vaccin Immunother. 2025 Dec;21(1):2455807. doi: 10.1080/21645515.2025.2455807. Epub 2025 Feb 20.PMID: 39973250

Effectiveness of BNT162b2 XBB.1.5 vaccine in immunocompetent adults using tokenization in two U.S. states.

Andersen KM, Allen KE, Nepal RM, Mateus JS, Yu T, Zhou A, Porter TM, Lopez SMC, Puzniak L, McLaughlin JM, McGrath LJ.Vaccine. 2025 Feb 22;52:126881. doi: 10.1016/j.vaccine.2025.126881. Online ahead of print.PMID: 39987879

Challenges to promoting maternal respiratory syncytial virus vaccination in Japan.

Oka E, Ueda Y, Yagi A, Machida M, Furuse Y, Tabuchi T.Vaccine. 2025 Feb 27;48:126767. doi: 10.1016/j.vaccine.2025.126767. Epub 2025 Jan 22.PMID: 39848132

Immunity to Non-Dengue Flaviviruses Impacts Dengue Virus Immunoglobulin G Enzyme-Linked Immunosorbent Assay Specificity in Cambodia.

Odio CD, Yek C, Hasund CM, Man S, Ly P, Nhek S, Chea S, Lon C, Voirin C, Huy R, Leang R, Huch C, Lamirande EW, Whitehead SS, Oliveira F, Manning JE, Katzelnick LC.J Infect Dis. 2025 Feb 20;231(2):e337-e344. doi: 10.1093/infdis/jiae422.PMID: 39297691

Meningococcal Vaccination in the United States: Past, Present, And Future.

Schillie S, McNamara LA.Paediatr Drugs. 2025 Feb 20. doi: 10.1007/s40272-024-00666-2. Online ahead of print.PMID: 39979767

Predictive signatures of immune response to vaccination and implications of the immune setpoint remodeling.

Ramos I.mSphere. 2025 Feb 25;10(2):e0050224. doi: 10.1128/msphere.00502-24. Epub 2025 Jan 24.PMID: 39853092

Innate Sensing of Viral Nucleic Acids and Their Use in Antiviral Vaccine Development.

Enya T, Ross SR.Vaccines (Basel). 2025 Feb 16;13(2):193. doi: 10.3390/vaccines13020193.PMID: 40006739

Protection afforded by post-infection SARS-CoV-2 vaccine doses: A cohort study in Shanghai.

Zheng B, Gonçalves BP, Deng P, Wang W, Tian J, Liang X, Yao Y, Xue C.Elife. 2025 Feb 17;13:RP94990. doi: 10.7554/eLife.94990.PMID: 39960759

Predictors of willingness of HPV vaccine uptake across Eight States in Nigeria.

Okagbue HI, Erekosima G, Sampson S, Atuhaire B, Samuel O, Chimezie B, Dauda M, Jimoh A, Ogbu G, Ayuba J, Shinshima I.BMC Public Health. 2025 Feb 24;25(1):745. doi: 10.1186/s12889-025-22000-2.PMID: 39994628

VaxBot-HPV: a GPT-based chatbot for answering HPV vaccine-related questions.

Li Y, Li J, Li M, Yu E, Rhee D, Amith M, Tang L, Savas LS, Cui L, Tao C.JAMIA Open. 2025 Feb 19;8(1):ooaf005. doi: 10.1093/jamiaopen/ooaf005. eCollection 2025 Feb.PMID: 39975811

Perceptions and predictors of COVID-19 vaccine hesitancy among healthcare providers across five countries in sub-Saharan Africa.

Madzorera I, Abokyi LN, Apraku E, Azemraw T, Boudo V, James C, Wang D, Mapendo F, Millogo O, Assefa N, Chukwu A, Workneh F, Lankoande B, Hemler EC, Ismail A, Abubakari S, Asante KP, Berhane Y, Killewo J, Oduola A, Sie A, Soura A, Mwanyika-Sando M, Vuai S, Smith E, Baernighausen T, Tajudeen R, Fawzi WW.PLOS Glob Public Health. 2025 Feb 21;5(2):e0003956. doi: 10.1371/journal.pgph.0003956. eCollection 2025.PMID: 39982973

Reactive Axillary Lymphadenopathy Among Different COVID-19 Vaccines: A Retrospective Study in Breast Sonography.

Huang PC, Chen CH, Chien CH, Chen CH, Chen CY.Int J Breast Cancer. 2025 Feb 15;2025:8126974. doi: 10.1155/ijbc/8126974. eCollection 2025.PMID: 39991115

Hemagglutination-Inhibition Antibodies and Protection against Influenza Elicited by Inactivated and Live Attenuated Vaccines in Children.

Yegorov S, Brewer A, Cyr L, Ward BJ, Pullenayegum E, Miller MS, Loeb M.J Infect Dis. 2025 Feb 20;231(2):e308-e316. doi: 10.1093/infdis/jiae489.PMID: 39504434

Biomimetic Nanoparticle Based Targeted mRNA Vaccine Delivery as a Novel Therapy for Glioblastoma Multiforme.

Ahmed T, Alam KT.AAPS PharmSciTech. 2025 Feb 21;26(3):68. doi: 10.1208/s12249-025-03065-z.PMID: 39984771

Corrigendum to "General vaccination willingness and current vaccination status in relation to clinical and psychological variables in patients with multiple sclerosis" [Vaccine 40 (23) (2022 May 20) 3236-3243].

Streckenbach B, Baldt J, Heidler F, Frahm N, Langhorst SE, Mashhadiakbar P, Burian K, Zettl UK, Richter J.Vaccine. 2025 Feb 27;48:126741. doi: 10.1016/j.vaccine.2025.126741. Epub 2025 Jan 29.PMID: 39883980

Severe Cutaneous Adverse Reactions Following Vaccination: A Systematic Review and Meta-analysis.

Sheng-Kai Ma K, Shen CH, Chiang MH, Blumenthal KG, Chen ST.J Allergy Clin Immunol Pract. 2025 Feb 18:S2213-2198(25)00169-2. doi: 10.1016/j.jaip.2025.02.006. Online ahead of print.PMID: 39978545

Lung-resident memory Th2 cells regulate pulmonary cryptococcosis by inducing type-II granuloma formation.

Ueno K, Nagamori A, Honkyu NO, Kwon-Chung KJ, Miyazaki Y.Mucosal Immunol. 2025 Feb 19:S1933-0219(25)00022-4. doi: 10.1016/j.mucimm.2025.02.004. Online ahead of print.PMID: 39984054

Paediatric varicella epidemiology in urban Beijing, China, 2014-2023.

Yu D, Su W, Fan M, Lu L, Wang X, Zhang S, Du Q, Ma L, Liu Y, Yao K.Emerg Microbes Infect. 2025 Dec;14(1):2467773. doi: 10.1080/22221751.2025.2467773. Epub 2025 Feb 28.PMID: 39945758

A detailed examination of Coronavirus disease 2019 (COVID-19): covering past and future perspectives.

Yasmin S, Ansari MY.Microb Pathog. 2025 Feb 20:107398. doi: 10.1016/j.micpath.2025.107398. Online ahead of print.PMID: 39986548

Persistence and decay of neutralizing antibody responses elicited by SARS-CoV-2 infection and hybrid immunity in a Canadian cohort.

Nouanesengsy A, Semesi A, Quach K, Ivanochko D, Byrne W, Hwang M, La Neve M-R, Leon-Ponte M, Litosh A, Wisener N, Adeli K, Campigotto A, Grunebaum E, McGeer A, Moraes TJ, Sepiashvili L, Upton J,

Julien J-P, Allen U.Microbiol Spectr. 2025 Feb 19:e0133324. doi: 10.1128/spectrum.01333-24. Online ahead of print.PMID: 39969224

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

Osei I, Schmidt-Chanasit J, Licciardi PV, Secka O, D'Alessandro U, Salaudeen R, Sarwar G, Clarke E, Mohammed NI, Nguyen C, Greenwood B, Jansen S, Mackenzie GA.Vaccine. 2025 Feb 15;47:126712. doi: 10.1016/j.vaccine.2025.126712. Epub 2025 Jan 10.PMID: 39798436

An mRNA vaccine candidate encoding cholera toxin subunit B and conserved antigens of influenza viruses confers cross-protection against influenza a viruses in adult and aged mice.

Xu L, Yu Z, Xu Y, Wang Q, Wang G, Li B, Weng Q, Yi Y, Li J.Hum Vaccin Immunother. 2025 Dec;21(1):2453304. doi: 10.1080/21645515.2025.2453304. Epub 2025 Feb 16.PMID: 39957235

LC16m8 for Pre-exposure Prophylaxis against Mpox in a High-Risk Population: An Open-Label Randomized Trial.

Okumura N, Morino E, Nomoto H, Yanagi M, Takahashi K, Iwasaki H, Uemura Y, Shimizu Y, Mizushima D, Fukushima K, Kinai E, Shiojiri D, Itoda I, Onoe Y, Kobori Y, Nakamura F, Tokita D, Sugiura W, Ueno S, Ainai A, Mine S, Suzuki T, Ohmagari N, Ujiie M.Clin Infect Dis. 2025 Feb 21:ciaf074. doi: 10.1093/cid/ciaf074. Online ahead of print.PMID: 39982831

Heterologous Immunization with Improved HIV-1 Subtype C Vaccines Elicit Autologous Tier 2 Neutralizing Antibodies with Rapid Viral Replication Control After SHIV Challenge.

Chege GK, Chapman RE, Keyser AT, Adams CH, Benn K, van Diepen MT, Douglass N, Lambson B, Hermanus T, Moore PL, Williamson AL.Viruses. 2025 Feb 17;17(2):277. doi: 10.3390/v17020277.PMID: 40007032

HeterologousPrime-Boost immunizationwithAdenoviral vector and recombinant subunit vaccines strategies against dengue virus type2.

Shoushtari M, Salehi-Vaziri M, Kadkhodazadeh M, Teimoori A, Arashkia A, Roohvand F, Teimoori-Toolabi L, Pouriayevali MH, Azadmanesh K.Int Immunopharmacol. 2025 Feb 20;148:114032. doi: 10.1016/j.intimp.2025.114032. Epub 2025 Jan 19.PMID: 39832457

Isolation, Genomic Characterization, and Immunogenicity Evaluation of a G9P[23] Porcine Rotavirus Strain.

Wang Z, Huang W, Yan G, Tian Y, Wang C, Mao X, Sun M, Zhou L, Yu C, Xia H.Vet Sci. 2025 Feb 18;12(2):180. doi: 10.3390/vetsci12020180.PMID: 40005940

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 Feb 22;1743:465685. doi: 10.1016/j.chroma.2025.465685. Epub 2025 Jan 17.PMID: 39842145

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

Emerson LE, Bhimani S, Rainey AL, Maurelli AT, Ferraro MJ.Infect Immun. 2025 Feb 18;93(2):e0048524. doi: 10.1128/iai.00485-24. Epub 2025 Jan 13.PMID: 39804074

Early and Late Influenza Vaccine Effectiveness in South Korea During the 2023-2024 Season.

Choi YJ, Song JY, Wie SH, Lee J, Lee JS, Jeong HW, Eom JS, Sohn JW, Choi WS, Nham E, Yoon JG, Noh JY, Cheong HJ, Kim WJ.Vaccines (Basel). 2025 Feb 17;13(2):197. doi: 10.3390/vaccines13020197.PMID: 40006743

Impact of SARS-CoV-2 inactivated vaccine on symptoms following omicron variant breakthrough infection.

Zhang Y, Li X, Yang Y, Yin Y, Zhong Y, Xu Q, Tu J, Deng J, Liang H, Shen T.Vaccine. 2025 Feb 27;48:126722. doi: 10.1016/j.vaccine.2025.126722. Epub 2025 Jan 14.PMID: 39813973

Cold Exposure Therapy Enhances Single-Atom Nanozyme-Mediated Cancer Vaccine Therapy.

Ye J, Wang H, Zheng J, Ning S, Zhu D, Shi J, Shi R.ACS Appl Mater Interfaces. 2025 Feb 26;17(8):11752-11763. doi: 10.1021/acsami.4c20487. Epub 2025 Feb 13.PMID: 39945542

Comment on "Ovarian function after COVID-19: long-term effects and vaccine safety in ART patients".

Daungsupawong H, Wiwanitkit V.J Assist Reprod Genet. 2025 Feb 22. doi: 10.1007/s10815-025-03433-5. Online ahead of print.PMID: 39985633

A phase 2/3 trial to investigate the safety and immunogenicity of monovalent Omicron JN.1-adapted BNT162b2 COVID-19 vaccine in adults 18 years old.

Diya O, Gayed J, Lowry FS, Ma H, Bangad V, Mensa F, Zou J, Xie X, Hu Y, Cutler M, Belanger T, Cooper D, Xu X, Koury K, Türeci Ö, Şahin U, Swanson KA, Modjarrad K, Anderson AS, Gurtman A, Kitchin N.Vaccine. 2025 Feb 24;52:126869. doi: 10.1016/j.vaccine.2025.126869. Online ahead of print.PMID: 39999538

Effectiveness of monovalent rotavirus vaccine against hospital-attended rotavirus gastroenteritis among children in Uganda.

Aanyu HT, Nalunkuma C, Kaudha E, Nalumansi E, Gyagenda S, Nakiragga G, Mugisha D, Mulindwa A, Kisakye A, Chavers T, Weldegebriel GG, Mwenda JM, Katsande R, Shaba K, Parashar UD, Tate JE, Gastañaduy PA.Vaccine. 2025 Feb 27;48:126726. doi: 10.1016/j.vaccine.2025.126726. Epub 2025 Jan 14.PMID: 39813975

Octahedral small virus-like particles of dengue virus type 2.

Johnson A, Dodes Traian M, Walsh RM Jr, Jenni S, Harrison SC.J Virol. 2025 Feb 25;99(2):e0180924. doi: 10.1128/jvi.01809-24. Epub 2024 Dec 31.PMID: 39745459

Evaluation of the safety and immune protection of OMPAC, PAPF, and EBPSs recombinant subunit vaccines Developed for Escherichia coli, Staphylococcus aureus, and Streptococcus agalactiae in mice.

Xu Z, Zhang Y, Wang Y, Wu A, Meng C, Li W, Yi J, Chen C.Int Immunopharmacol. 2025 Feb 20;148:114151. doi: 10.1016/j.intimp.2025.114151. Epub 2025 Jan 27.PMID: 39874844

Tumor-Targeted Delivery of PD-1-Displaying Bacteriophages by *Escherichia coli* for Adjuvant Treatment of Colorectal Cancer.

Li HR, Zhou Y, Ye BC.ACS Synth Biol. 2025 Feb 21;14(2):407-419. doi: 10.1021/acssynbio.4c00570. Epub 2025 Feb 10.PMID: 39929739

Expanding the cryoprotectant toolbox in biomedicine by multifunctional antifreeze peptides.

Hemmati S.Biotechnol Adv. 2025 Feb 27:108545. doi: 10.1016/j.biotechadv.2025.108545. Online ahead of print.PMID: 40023203

Host-specific targets of Histomonas meleagridis antigens revealed by immunoprecipitation.

de Jesus Ramires M, Hummel K, Hatfaludi T, Hess M, Bilic I.Sci Rep. 2025 Feb 17;15(1):5800. doi: 10.1038/s41598-025-88855-y.PMID: 39962091

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, Avanceña ALV, Kim DeLuca E, Hutton DW.Vaccine. 2025 Feb 27;48:126725. doi: 10.1016/j.vaccine.2025.126725. Epub 2025 Jan 21.PMID: 39842151

Structure of endogenous Pfs230:Pfs48/45 in complex with potent malaria transmission-blocking antibodies.

Bekkering ET, Yoo R, Hailemariam S, Heide F, Ivanochko D, Jackman M, Proellochs NI, Stoter R, Wanders OT, van Daalen RC, Inklaar MR, Andrade CM, Jansen PWTC, Vermeulen M, Bousema T, Rubinstein JL, Kooij TWA, Jore MM, Julien JP.bioRxiv [Preprint]. 2025 Feb 15:2025.02.14.638310. doi: 10.1101/2025.02.14.638310.PMID: 39990443

The immunogenicity, reactogenicity, and safety of a bivalent mRNA or protein COVID-19 vaccine given as a fourth dose.

Mazarakis N, Toh ZQ, Neal E, Bright K, Luu S, Quah L, Ng YY, Nguyen C, Hart J, Do LAH, Rudel A, Dassanayake S, Higgins RA, Ong DS, Justice F, Moore KA, Watts E, Mahanty S, Subbarao K, Mulholland K, von Mollendorf C, Licciardi PV.J Infect. 2025 Feb 18;90(3):106447. doi: 10.1016/j.jinf.2025.106447. Online ahead of print.PMID: 39978439

Enhanced immunogenicity of a Clostridioides difficile TcdB vaccine adjuvanted with a synthetic dual-TLR ligand adjuvant.

Naz F, Hagspiel N, Xu F, Thompson B, Brett Moreau G, Young M, Herbein J, Fox CB, Petri WA, Abhyankar MM.NPJ Vaccines. 2025 Feb 18;10(1):33. doi: 10.1038/s41541-025-01075-3.PMID: 39966390

Structure-guided design of a prefusion GPC trimer induces neutralizing responses against LASV.

Wang S, Li R, Pan X, Wang M, Wu Y, Li Y, Huang X, Zhu R, Wang X, Zhang Y, Yang Y, Zhang J, Xiao G, Zai X, Xu J, Chen W.NPJ Vaccines. 2025 Feb 22;10(1):37. doi: 10.1038/s41541-025-01090-4.PMID: 39987102

Validation of a questionnaire for evaluating vaccine literacy in adulthood vaccination: A pilot study from Zhejiang province, China.

Luo X, Shen J, Lv H, Hu Y.Hum Vaccin Immunother. 2025 Dec;21(1):2466981. doi: 10.1080/21645515.2025.2466981. Epub 2025 Feb 19.PMID: 39971486

Assessment of Human Papillomavirus Vaccine Knowledge and Attitudes Among Adolescent School Girls in Debre Berhan City, Ethiopia: A Community-Based Cross-Sectional Study.

Ayele SG, Tsige AW.Health Sci Rep. 2025 Feb 24;8(2):e70506. doi: 10.1002/hsr2.70506. eCollection 2025 Feb.PMID: 39995791

A real-world pharmacovigilance analysis of hepatitis B vaccine using the U.S. Vaccine Adverse Event Reporting System (VAERS) database.

Zhou H, Yang J, Zhang J, Liu P, Yao D.Sci Rep. 2025 Feb 19;15(1):6022. doi: 10.1038/s41598-025-90135-8.PMID: 39972053

Serum sickness-like reactions in children - is lifelong avoidance indicated?

Norton AE, Risma K, Ben-Shoshan M.J Allergy Clin Immunol Pract. 2025 Feb 18:S2213-2198(25)00168-0. doi: 10.1016/j.jaip.2025.01.041. Online ahead of print.PMID: 39978544

Global perspectives on COVID-19 vaccination: Impacts on well-being and inequality.

Leblang D, Smith MD, Wesselbaum D.Vaccine. 2025 Feb 22;52:126906. doi: 10.1016/j.vaccine.2025.126906. Online ahead of print.PMID: 39987880

COVID-19 vaccine initiation in pregnancy and risk for adverse neonatal outcomes among United States military service members, January-December 2021.

Hall C, Lanning J, Romano CJ, Bukowinski AT, Gumbs GR, Conlin AMS.Vaccine. 2025 Feb 18;51:126894. doi: 10.1016/j.vaccine.2025.126894. Online ahead of print.PMID: 39970594

Human Factor H and anti-Neisserial surface protein A (NspA) antibodies compete for overlapping binding sites on meningococcal NspA.

Raghunathan D, Lim SS, Moe GR, Beernink PT.Infect Immun. 2025 Feb 24:e0033924. doi: 10.1128/iai.00339-24. Online ahead of print.PMID: 39992115

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 Feb 15;47:126694. doi: 10.1016/j.vaccine.2024.126694. Epub 2025 Jan 20.PMID: 39837102

Therapeutic potential of Inonotus obliquus polysaccharide-induced tolerogenic bone marrow-derived dendritic cells via regulation of CD4⁺ T cell differentiation in a colitis mouse model.

Chen YF, Li JW, Li FF, Bo L, Xiao Y, Jin QX, Jin GH, Meng FP, Huang XZ, Jin D.Int J Biol Macromol. 2025 Feb 25:141505. doi: 10.1016/j.ijbiomac.2025.141505. Online ahead of print.PMID: 40015397

Genetic diversity and impact of vaccination on influenza A (H1N1)pdm09 in Mar del Plata, Argentina: a 2015-2020 molecular epidemiological study.

Uez O, Culasso A, Lerman A, Cimmino C, Campos R, Marcone DN.Infect Dis (Lond). 2025 Feb 21:1-14. doi: 10.1080/23744235.2025.2466118. Online ahead of print.PMID: 39982428

Identification of a protective antigen reveals the trade-off between iron acquisition and antigen exposure in a global fungal pathogen.

Li Y, Pham T, Hipsher K, Lee CWJ, Jiao J, Penninger JM, Kronstad JW, Fan Y, Zhao Y, Ambati S, Meagher RB, Xie X, Lin X.Proc Natl Acad Sci U S A. 2025 Feb 18;122(7):e2420898122. doi: 10.1073/pnas.2420898122. Epub 2025 Feb 13.PMID: 39946532

Safety and immunogenicity of hepatitis E vaccine in compensated liver cirrhosis with chronic hepatitis B.

Liao X, Li D, Su Y, Wang X, Wu S, Chen Y, Li Z, Tang Q, Ma Z, Wan X, Dong J, Zhang L, Lai C, Wang H, He Q, Zhang J, Wang F, Zhang Z.Clin Microbiol Infect. 2025 Feb 28:S1198-743X(25)00088-6. doi:

Correction: Determinants of the COVID-19 vaccine hesitancy spectrum.

PLOS ONE Staff.PLoS One. 2025 Feb 21;20(2):e0315702. doi: 10.1371/journal.pone.0315702. eCollection 2025.PMID: 39982903

Assessment of the prevalence of respiratory pathogens and the level of immunity to respiratory viruses in soldiers and civilian military employees in Poland.

Nakonieczna A, Kwiatek M, Abramowicz K, Zawadzka M, Bany I, Głowacka P, Skuza K, Lepionka T, Szymański P.Respir Res. 2025 Feb 21;26(1):62. doi: 10.1186/s12931-025-03142-8.PMID: 39985005

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

Li W, Li YA, Wang S, Shi H.Vaccine. 2025 Feb 15;47:126700. doi: 10.1016/j.vaccine.2024.126700. Epub 2025 Jan 7.PMID: 39778475

Enhancing host defense against Brucella: The immune effect exerted by anti-OMP16 monoclonal antibody.

Zhai Y, Wang H, Sun K, Yuan Y, Yin S, Fang J, Zheng W, Wudong G, Liu X, Yang Y, Zhou D, Liu W, Jin Y, Wang A.Int Immunopharmacol. 2025 Feb 20;148:114142. doi: 10.1016/j.intimp.2025.114142. Epub 2025 Jan 27.PMID: 39930647

Nanoparticles encapsulating antigenic peptides induce tolerogenic dendritic cells in situ for treating systemic lupus erythematosus.

Qin X, Zhang M, Liang J, Xu S, Fu X, Liu Z, Tian T, Song J, Lin Y.J Control Release. 2025 Feb 21;380:943-956. doi: 10.1016/j.jconrel.2025.02.049. Online ahead of print.PMID: 39983922

Reverse vaccinology: A strategy also used for identifying potential vaccine antigens in poultry.

Gloanec N, Guyard-Nicodème M, Chemaly M, Dory D.Vaccine. 2025 Feb 27;48:126756. doi: 10.1016/j.vaccine.2025.126756. Epub 2025 Jan 23.PMID: 39855107

Assessing the effectiveness of the varicella vaccine in primary and secondary school students in Qingdao, China: A matched case-control study.

Zhang Z, Ren Z, Hu P, Li X, Liu S, Wang P, Yang F.Infect Dis Now. 2025 Feb 27:105049. doi: 10.1016/j.idnow.2025.105049. Online ahead of print.PMID: 40023501

Measles in Canada: modelling outbreaks with variable vaccine coverage and interventions.

McNichol J, Valizadeh J, Chaudhury S, Colijn C.BMC Infect Dis. 2025 Feb 19;25(1):236. doi: 10.1186/s12879-025-10564-8.PMID: 39972251

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 Feb 27;48:126738. doi: 10.1016/j.vaccine.2025.126738. Epub 2025 Jan 18.PMID: 39827599

Combined immunoinformatic approaches with computational biochemistry for development of subunit-based vaccine against Lawsonia intracellularis.

Khatooni Z, Broderick G, Anand SK, Wilson HL.PLoS One. 2025 Feb 24;20(2):e0314254. doi: 10.1371/journal.pone.0314254. eCollection 2025.PMID: 39992906

Effectiveness and safety of the recombinant zoster vaccine in individuals 50 years of age with rheumatoid arthritis: a matched cohort and self-controlled case series study.

Rayens E, Sy LS, Qian L, Wu J, Ackerson BK, Luo Y, Cheng Y, Lin AT, Solano Z, De Jesus J, Amundsen B, Florea A, Ku JH, Chmielewski-Yee E, Oraichi D, Seifert H, Yun H, Tseng HF.Ann Rheum Dis. 2025 Feb 19:S0003-4967(25)00199-2. doi: 10.1016/j.ard.2025.01.045. Online ahead of print.PMID: 39979209

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 Feb 25;99(2):e0153924. doi: 10.1128/jvi.01539-24. Epub 2025 Jan 23.PMID: 39846742

Effectiveness of COVID-19 vaccines against SARS-CoV-2 infection and severe outcomes in adults: a systematic review and meta-analysis of European studies published up to 22 January 2024.

Zhou G, Dael N, Verweij S, Balafas S, Mubarik S, Oude Rengerink K, Pasmooij AMG, van Baarle D, Mol PGM, de Bock GH, Hak E.Eur Respir Rev. 2025 Feb 19;34(175):240222. doi: 10.1183/16000617.0222-2024. Print 2025 Jan.PMID: 39971395

Role of Individual, Social and Health Factors as Determinants of COVID-19 Vaccine Hesitancy: Results from the Second Phase of the Italian EPICOVID19 Web-Based Survey.

Adorni F, Cavigli C, Jesuthasan N, Cori L, Sojic A, Bianchi F, Curzio O, Prinelli F; EPICOVID19 Working Group.Int J Environ Res Public Health. 2025 Feb 19;22(2):314. doi: 10.3390/ijerph22020314.PMID: 40003539

Prevention of tuberculosis in cynomolgus macaques by an attenuated Mycobacterium tuberculosis vaccine candidate.

Singh DK, Ahmed M, Akter S, Shivanna V, Bucşan AN, Mishra A, Golden NA, Didier PJ, Doyle LA, Hall-Ursone S, Roy CJ, Arora G, Dick EJ Jr, Jagannath C, Mehra S, Khader SA, Kaushal D.Nat Commun. 2025 Feb 25;16(1):1957. doi: 10.1038/s41467-025-57090-4.PMID: 40000643

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 Feb 27;48:126728. doi: 10.1016/j.vaccine.2025.126728. Epub 2025 Jan 16.PMID: 39823847

Prevalence of Human Papillomavirus Genotypes in Unvaccinated 16-20-Year-Old Males in Quebec, Canada.

Wolfe C, Ionescu IG, Mayrand MH, Coutlée F, Sauvageau C.J Infect Dis. 2025 Feb 21:jiaf094. doi: 10.1093/infdis/jiaf094. Online ahead of print.PMID: 39982898

Effectiveness of the Original Monovalent Messenger RNA Coronavirus Disease 2019 (COVID-19) Vaccination Series Against Hospitalization for COVID-19-Associated Venous Thromboembolism.

Hager DN, Zhu Y, Sohn I, Stubblefield WB, Streiff MB, Gaglani M, Steingrub JS, Duggal A, Felzer JR, O'Rourke M, Peltan ID, Mohamed A, Stiller R, Wilson JG, Qadir N, Ginde AA, Zepeski AE, Mallow C, Lauring AS, Johnson NJ, Gibbs KW, Kwon JH, Self WH; Investigating Respiratory Viruses in the Acutely Ill (IVY) Network.J Infect Dis. 2025 Feb 20;231(2):378-385. doi: 10.1093/infdis/jiae502.PMID: 39405261

ROS-responsive poly(beta-amino ester) nanoparticles enable targeted delivery of mRNA vaccine to splenic antigen-presenting cells.

Jiang M, Yan L, Zeng L, Tang Y, Zhang Z, Chen B, Qiu M, Chen J.Chem Commun (Camb). 2025 Feb 18;61(16):3371-3374. doi: 10.1039/d4cc06064d.PMID: 39887154

Basal T cell activation predicts yellow fever vaccine response independently of cytomegalovirus infection and sex-related immune variations.

Santos-Peral A, Zaucha M, Nikolova E, Yaman E, Puzek B, Winheim E, Goresch S, Scheck MK, Lehmann L, Dahlstroem F, Karimzadeh H, Thorn-Seshold J, Jia S, Luppa F, Pritsch M, Butt J, Metz-Zumaran C, Barba-Spaeth G, Endres S, Kim-Hellmuth S, Waterboer T, Krug AB, Rothenfusser S.Cell Rep Med. 2025 Feb 18;6(2):101946. doi: 10.1016/j.xcrm.2025.101946. Epub 2025 Feb 11.PMID: 39938525

Influence of maternal risk perception and vaccination knowledge on childhood vaccination intentions.

Md Suhaimi TM, Ismail A, Ismail R, Rasudin NS, Mohd Noor N, Jayapalan A, Suli Z, Mohd Nazori MN.BMC Public Health. 2025 Feb 18;25(1):671. doi: 10.1186/s12889-025-21815-3.PMID: 39966911

Quantification of mRNA Using ^{31}P NMR Spectroscopy and CRAFT.

Khirich G, Noreika VA, Catlin KD, Napolitano JG, Russell DJ, Birkholz O, Schumacher J, Haas H, Skidmore K.Magn Reson Chem. 2025 Feb 20. doi: 10.1002/mrc.5516. Online ahead of print.PMID: 39979236

Impact of genotypic variability of measles virus T-cell epitopes on vaccine-induced T-cell immunity.

Emmelot ME, Bodewes R, Maissan C, Vos M, de Swart RL, van Els CACM, Kaaijk P.NPJ Vaccines. 2025 Feb 20;10(1):36. doi: 10.1038/s41541-025-01088-y.PMID: 39979288

Mathematical modelling for vaccine efficacy trials during the future epidemics of emerging respiratory infections.

Kim S, Park SH, Choi S, Lee W, Choi S, Han S, Han S, Lee DG.Hum Vaccin Immunother. 2025 Dec;21(1):2467554. doi: 10.1080/21645515.2025.2467554. Epub 2025 Feb 19.PMID: 39968889

Structural characterization of influenza group 1 chimeric hemagglutinins as broad vaccine immunogens.

Nguyen YTK, Zhu X, Han J, Rodriguez AJ, Sun W, Yu W, Palese P, Krammer F, Ward AB, Wilson IA.Proc Natl Acad Sci U S A. 2025 Feb 18;122(7):e2416628122. doi: 10.1073/pnas.2416628122. Epub 2025 Feb 12.PMID: 39937865

A single residue in domain II of envelope protein of yellow fever virus is critical for neutralization sensitivity.

Lou Y-N, Sun M-X, Li K, Xiong X-C, Zhou C, Cao T-S, Li X-F, Qin C-F.J Virol. 2025 Feb 28:e0177024. doi: 10.1128/jvi.01770-24. Online ahead of print.PMID: 40019254

RSV immunization uptake among infants and pregnant persons - Wisconsin, October 1, 2023-March 31, 2024.

Kemp M, Capriola A, Schauer S.Vaccine. 2025 Feb 15;47:126674. doi: 10.1016/j.vaccine.2024.126674. Epub 2025 Jan 4.PMID: 39756214

Evaluating the Effectiveness of Probiotic and Multivalent Vaccination Strategies in Mitigating Bacterial Chondronecrosis with Osteomyelitis Lameness Using a Hybrid Challenge Model.

Anthney A, Alharbi K, Perera R, Do ADT, Asnayanti A, Onyema R, Reichelt S, Meuter A, Jesudhasan PRR, Alrubaye AAK.Animals (Basel). 2025 Feb 16;15(4):570. doi: 10.3390/ani15040570.PMID: 40003050

A counterfactual analysis quantifying the COVID-19 vaccination impact in Sweden.

Bergström F, Günther F, Britton T.Vaccine. 2025 Feb 20;52:126870. doi: 10.1016/j.vaccine.2025.126870. Online ahead of print.PMID: 39983319

Early influenza virus exposure shapes the B cell response to influenza vaccination in individuals 50 years later.

Spangler A, Shimberg GD, Mantus GE, Malek R, Cominsky LY, Tsybovsky Y, Li N, Gillespie RA, Ravichandran M, Creanga A, Raab JE, Gajjala SR, Mendoza F, Houser KV, Dropulic L, McDermott AB, Kanekiyo M, Andrews SF.Immunity. 2025 Feb 25:S1074-7613(25)00071-8. doi: 10.1016/j.immuni.2025.02.004. Online ahead of print.PMID: 40023164

Childhood opportunity index and vaccine uptake in pediatric COVID-19 hospitalizations.

Shah RM, Parzen-Johnson S, Sun S, Patel SJ.Vaccine. 2025 Feb 27;48:126734. doi: 10.1016/j.vaccine.2025.126734. Epub 2025 Jan 16.PMID: 39823851

Preferences of nurses in the United Kingdom for attributes of pediatric hexavalent vaccines: a discrete-choice experiment.

Poulos C, Marcek T, Chintakayala P, Boeri M, Francis A, Langevin E, Petigara T, O'Connor J, Samant S.Expert Rev Pharmacoecon Outcomes Res. 2025 Feb 28:1-8. doi: 10.1080/14737167.2025.2450352. Online ahead of print.PMID: 39876705

Global distribution and characteristics of pneumococcal serotypes in adults.

Maeda H, Morimoto K.Hum Vaccin Immunother. 2025 Dec;21(1):2469424. doi: 10.1080/21645515.2025.2469424. Epub 2025 Feb 27.PMID: 40015240

New mouse model for inducible hACE2 expression enables to dissect SARS-CoV-2 pathology beyond the respiratory system.

Gambini F, Arbon D, Nickl P, Zatecka V, Fedosieieva O, Labaj J, Novosadova V, Trylcova J, Weber J, Prochazka J, Balounova J, Sedlacek R.Mamm Genome. 2025 Feb 22. doi: 10.1007/s00335-025-10115-1. Online ahead of print.PMID: 39985688

Unveiling the multi-characteristic potential of hyper-productive suspension MDCK cells for advanced influenza A virus propagation.

Ye Q, Xiao Z, Bai C, Yao H, Zhao L, Tan WS.Vaccine. 2025 Feb 21;52:126900. doi: 10.1016/j.vaccine.2025.126900. Online ahead of print.PMID: 39985968

Estimating neutralising antibody responses against emerging SARS-CoV-2 variants utilising convalescent sera before the roll-out of XBB-lineage vaccines.

Atti A, England A, Sung J, Foulkes S, Islam J, Otter A, Thomas K, Hallis B, Hopkins S, Charlton S, Hall V.Vaccine. 2025 Feb 20;51:126898. doi: 10.1016/j.vaccine.2025.126898. Online ahead of print.PMID: 39983539

Development of invasive non-typhoidal Salmonella conjugate vaccines and their evaluation in a trivalent formulation with typhoid conjugate vaccine.

An SJ, Yang JS, Chae MH, Woo JS, Kang YE, Ganapathy R, Pansuriya RK, Choi JA, Yoon YK, Lee E, Lee SB, Pandey G, Lee JW, Lee JS, Bae SH, Kweon SW, Kim SJ, Seon SH, Kim JH, Song M.Vaccine. 2025 Feb 27;52:126913. doi: 10.1016/j.vaccine.2025.126913. Online ahead of print.PMID: 40020336

Enhancing Influenza Vaccination for Adults Aged 50-64: Addressing Moderate Vaccine Efficacy.

Davido B, Kharkhordine M.Clin Infect Dis. 2025 Feb 20:ciaf070. doi: 10.1093/cid/ciaf070. Online ahead of print.PMID: 39976116

Low-Frequency, Sustained CD4 T-Cell Responses Chlamydia trachomatis in Women: Predominant Targeting of Chlamydial Proteaselike Activity Factor (CPAF).

Li Y, Warren JA, Poston TB, Clutton G, Shaw FR, Conrad SZ, Xu Y, Zheng X, Yount KS, O'Connell CM, Wiesenfeld HC, Darville T, Goonetilleke N.J Infect Dis. 2025 Feb 20;231(2):e385-e395. doi: 10.1093/infdis/jiae443.PMID: 39250505

Having your cake and eating it too - a new target for sporozoite-neutralising mAbs.

Kaczmarski JA, Jackson CJ, Cockburn IA.Trends Parasitol. 2025 Feb 21:S1471-4922(25)00037-6. doi: 10.1016/j.pt.2025.02.002. Online ahead of print.PMID: 39984355

Urgent need for scaling up vaccine research on WHO priority fungal pathogens, authors' reply.

Hasso-Agopsowicz M, Hwang A, Hollm-Delgado MG, Umbelino-Walker I, Karron RA, Rao R, Asante KP, Sheel M, Sparrow E, Giersing B.EBioMedicine. 2025 Feb 19;113:105621. doi: 10.1016/j.ebiom.2025.105621. Online ahead of print.PMID: 39978267

Vaccine effectiveness against influenza B/Victoria-associated medically attended influenza-like illness: Beijing, China, 2021-2022 influenza season.

Ma C, Sun Y, Zhang L, Zhang J, Duan W, Li J, Ma J, Zhang L, Wang Y, Zhang D, Wang Q.Hum Vaccin Immunother. 2025 Dec;21(1):2460859. doi: 10.1080/21645515.2025.2460859. Epub 2025 Feb 19.PMID: 39971488

A real-world based study for immunogenicity and safety for three immunization schedules of polio vaccine.

Sun L, Wang SF, Zhu YQ, Wang YF, Zhang JM, Wang JH, Cong YL, Li J, Liu XQ, Han SS, Guo Y, Li Q.Sci Rep. 2025 Feb 20;15(1):6185. doi: 10.1038/s41598-025-89852-x.PMID: 39979345

SARS-CoV-2 neutralizing antibody determination after vaccination using spectrophotometric measurement of lateral flow immunochromatography.

Ma J, Kaniper S, Vabishchevich Y, Nyantakyi N, Lynch D, Chun F, Dai HL, Gerhard GS.Sci Rep. 2025 Feb 24;15(1):6577. doi: 10.1038/s41598-025-90730-9.PMID: 39994387

Trends in Cervical Precancers Identified Through Population-Based Surveillance - Human Papillomavirus Vaccine Impact Monitoring Project, Five Sites, United States, 2008-2022.

Gargano JW, Stefanos R, Dahl RM, Castilho JL, Bostick EA, Niccolai LM, Park IU, Blankenship S, Brackney MM, Chan K, Delikat EL, Ehlers S, Barrera KG, Kurtz R, Meek JI, Whitney E, Vigar M, Unger ER, Markowitz LE; HPV-IMPACT Working Group.MMWR Morb Mortal Wkly Rep. 2025 Feb 27;74(6):96-101. doi: 10.15585/mmwr.mm7406a4.PMID: 40014651

Therapeutic potential of Inonotus obliquus polysaccharide-induced tolerogenic bone marrow-derived dendritic cells via regulation of CD4⁺ T cell differentiation in a colitis mouse model.

Chen YF, Li JW, Li FF, Bo L, Xiao Y, Jin QX, Jin GH, Meng FP, Huang XZ, Jin D.Int J Biol Macromol. 2025 Feb 25:141505. doi: 10.1016/j.ijbiomac.2025.141505. Online ahead of print.PMID: 40015397

Oral DNA Vaccine Utilizing the Yeast Cell Wall for Dectin-1 Receptor-Mediated Enhancement of Mucosal Immunity.

Liu Y, Meng F, Feng W, Chen Z, Xing H, Zheng A.Mol Pharm. 2025 Mar 3;22(3):1241-1252. doi: 10.1021/acs.molpharmaceut.4c00943. Epub 2025 Feb 17.PMID: 39960883

A Sociocultural Perspective of HPV Vaccine-Related Decision Making Among Immigrant Mothers in the United States.

Aliche O, Lustria MLA, Gerend MA.J Adolesc Health. 2025 Feb 20:S1054-139X(25)00041-2. doi: 10.1016/j.jadohealth.2025.01.011. Online ahead of print.PMID: 39985532

Development and evaluation of mosaic VLPs vaccine for enhanced broad-Spectrum immunity against influenza B virus lineages in mice.

Zhao T, Liu X, Huang X, Wang L, Lei Y, Luo C, Liu J, Fang S, Zou X, Yan H, Sun C, Shu Y.Vaccine. 2025 Feb 18;51:126882. doi: 10.1016/j.vaccine.2025.126882. Online ahead of print.PMID: 39970593

A single mutation at position 214 of influenza B hemagglutinin enhances cross-neutralization.

Cheng Z, Sun Y, Shen Y, Wu X, Pan L, Wu H, Bai Y, Zhao C, Ma J, Huang W.Emerg Microbes Infect. 2025 Dec;14(1):2467770. doi: 10.1080/22221751.2025.2467770. Epub 2025 Feb 21.PMID: 39960410

Estimates of SARS-CoV-2 Infections and Population Immunity After the COVID-19 Pandemic in Austria: Analysis of National Wastewater Data.

Riedmann U, Chalupka A, Richter L, Sprenger M, Rauch W, Schenk H, Krause R, Willeit P, Oberacher H, Høeg TB, Ioannidis JPA, Pilz S.J Infect Dis. 2025 Feb 18:jiaf054. doi: 10.1093/infdis/jiaf054. Online ahead of print.PMID: 39964838

Corrigendum to "Immunogenicity, safety and inter-lot consistency of a meningococcal conjugate vaccine (MenACYW-TT) in adolescents and adults: A Phase III randomized study" [Vaccine (38) (2020) 5194-5201].

Dhingra MS, Peterson J, Hedrick J, Pan J, Neveu D, Jordanov E.Vaccine. 2025 Feb 24;52:126912. doi: 10.1016/j.vaccine.2025.126912. Online ahead of print.PMID: 39999539

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

Shields T, King KD, Cripps S, Edwards SA, Kwong JC, Mecredy G, Chaurasia A, Douglas O, Cooke M.Vaccine. 2025 Feb 15;47:126665. doi: 10.1016/j.vaccine.2024.126665. Epub 2025 Jan 9.PMID: 39793536

Being Out: Impact of Disclosure on Sexual and Reproductive Healthcare Receipt in a Sample of Sexual Minority Women and Gender Diverse Youth.

Makrides J, Galai N, Lopez A, Trexler C, McCree D, Matson PA, Trent M, Marcell AV, Arrington-Sanders R.J Adolesc Health. 2025 Feb 18:S1054-139X(24)00829-2. doi: 10.1016/j.jadohealth.2024.12.007. Online ahead of print.PMID: 39969472

Australia's rotavirus immunisation program: Impact on acute gastroenteritis and intussusception hospitalisations over 13 years.

Dey A, Jackson J, Wang H, Lambert SB, McIntyre P, Macartney K, Beard F.Vaccine. 2025 Feb 21;52:126789. doi: 10.1016/j.vaccine.2025.126789. Online ahead of print.PMID: 39985966

Development of a two-probe competitive enzyme-linked immunosorbent assay for porcine epidemic diarrhea virus based on magnetic nanoparticles.

Sun J, Zhu R, Wang M, Song J, Zhou L, Sun Z, Li Y, Jiao L, Xia L, He H, Zhang G, Wu Y.Int J Biol Macromol. 2025 Feb 17;305(Pt 2):141036. doi: 10.1016/j.ijbiomac.2025.141036. Online ahead of print.PMID: 39971032

Sex, Age, and Previous Herpes Zoster Infection Role on Adverse Events Following Immunization with Adjuvanted Recombinant Vaccine.

Costantino M, Giudice V, Moccia G, Ragozzino M, Calabrese S, Caiazzo F, Beatrice M, Longanella W, Caruccio S, Iacuzzo C, Giugliano C, Marongiu MB, Genovese G, Serio B, Vozzella EA, Filippelli A, De Caro F.Pathogens. 2025 Feb 15;14(2):195. doi: 10.3390/pathogens14020195.PMID: 40005570

Contagious ecthyma in small ruminants: from etiology to vaccine challenges - a review.

Reichen C, Beirão BCB, Monteiro ALG.Vet Res Commun. 2025 Feb 24;49(2):115. doi: 10.1007/s11259-025-10677-0.PMID: 39992468

Competition propels, rather than limits, the success of low-affinity B cells in the germinal center response.

Li R, Bao K, Liu C, Ma X, Hua Z, Zhu P, Hou B.Cell Rep. 2025 Feb 25;44(2):115334. doi: 10.1016/j.celrep.2025.115334. Epub 2025 Feb 15.PMID: 39955776

Natural Carriage of Streptococcus pneumoniae Is Associated With Increased Experimental Pneumococcal Carriage but Reduced Conjugate Vaccine Efficacy in a Human Challenge Model.

Galafa B, Chikaonda T, Kudowa E, Sichone S, Sibale L, Thole F, Mkandawire C, Dula D, Nsomba E, Tembo G, Chaponda M, Chirwa AE, Nkhoma V, Ngoliwa C, Kamng'ona R, Toto N, Makhaza L, Muyaya A, Howard A, Nyazika TK, Ndaferankhande J, Chimgoneko L, Banda NPK, Chiwala G, Rylance J, Ferreira D, Jambo KC, Morton B, Henrion MYR, Gordon SB.J Infect Dis. 2025 Feb 20;231(2):334-343. doi: 10.1093/infdis/jiae341.PMID: 38984706

A Broad Survey and Functional Analysis of Immunoglobulin Loci Variation in Rhesus Macaques.

Peres A, Upadhyay AA, Klein V, Saha S, Rodriguez OL, Vanwinkle ZM, Karunakaran K, Metz A, Lauer W, Lin MC, Melton T, Granholm L, Polak P, Peterson SM, Peterson EJ, Raju N, Shields K, Schultze S, Ton T, Ericsen A, Lapp SA, Villinger F, Ohlin M, Cottrell CA, Amara RR, Derdeyn CA, Crotty S, Schief WR, Karlsson Hedestam GB, Smith ML, Lees W, Watson CT, Yaari G, Bosinger SE.bioRxiv [Preprint]. 2025 Feb 17:2025.01.07.631319. doi: 10.1101/2025.01.07.631319.PMID: 39829807

iDC-targeting PfCSP mRNA vaccine confers superior protection against Plasmodium compared to conventional mRNA.

Yanik S, Venkatesh V, Gordy JT, Alameh MG, Meza J, Li Y, Glass E, Flores-Garcia Y, Tam Y, Chaiyawong N, Sarkar D, Weissman D, Markham R, Srinivasan P.NPJ Vaccines. 2025 Feb 19;10(1):34. doi: 10.1038/s41541-025-01089-x.PMID: 39971939

A composite subunit vaccine confers full protection against Buruli ulcer disease in the mouse footpad model of Mycobacterium ulcerans infection.

Boakye-Appiah JK, Tran AC, Paul MJ, Hart P, Phillips RO, Harrison TS, Wansbrough-Jones M, Reljic R.PLoS Negl Trop Dis. 2025 Feb 21;19(2):e0012710. doi: 10.1371/journal.pntd.0012710. Online ahead of print.PMID: 39982950

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

Gendler Y, Ofri L, Videl H.Vaccine. 2025 Feb 15;47:126711. doi: 10.1016/j.vaccine.2025.126711. Epub 2025 Jan 9.PMID: 39793538

Immunogenicity of second booster-dose COVID-19 mRNA vaccine among older adults in Taiwan.

Lee HY, Chuang CH, Huang CG, Chuang TC, Kung YA, Chiu CH.Biomed J. 2025 Feb 15:100834. doi: 10.1016/j.bj.2025.100834. Online ahead of print.PMID: 39961391

Improving the immunogenicity of the pneumococcal conjugate vaccine using a synthetic carbohydrate fatty acid monosulphate squalane-in-water adjuvant.

van Beek LF, van der Gaast-de Jongh C, Platenburg PP, Hilgers L, de Jonge MI.Vaccine. 2025 Feb 20;51:126893. doi: 10.1016/j.vaccine.2025.126893. Online ahead of print.PMID: 39983540

Optimization and analytical validation of the Allplex HPV28 genotyping assay for use in first-void urine samples.

Bell M, Baussano I, Rol M, Tenet V, Heideman DAM, Gheit T, Van Caesbroeck A, Vorsters A, Clifford G.J Clin Microbiol. 2025 Feb 19;63(2):e0140424. doi: 10.1128/jcm.01404-24. Epub 2024 Dec 26.PMID: 39723836

The RNA Landscape of In Vivo-Assembled MS2 Virus-Like Particles as mRNA Carriers Reveals RNA Contamination from Host Viruses.

Ma C, Yang M, Zhou W, Guo S, Zhang H, Gong J, Zhang XE, Li F.Nano Lett. 2025 Feb 26;25(8):3038-3044. doi: 10.1021/acs.nanolett.4c04541. Epub 2025 Feb 11.PMID: 39932477

Antigen-presenting innate lymphoid cells induced by BCG vaccination promote a respiratory antiviral immune response through the skin–lung axis.

Yu D, Gao X, Shao F, Liu Z, Liu A, Zhao M, Tang Z, Guan Y, Wang S.Cell Mol Immunol. 2025 Feb 17. doi: 10.1038/s41423-025-01267-w. Online ahead of print.PMID: 39962263

Alterations in menstrual characteristics and associated factors in Chinese women post SARS-CoV-2 infection: a cross-sectional study.

Jiang Y, Li Y, Huang Y.BMC Womens Health. 2025 Feb 18;25(1):69. doi: 10.1186/s12905-025-03592-8.PMID: 39966921

Racial and Ethnic Disparities in Routine and Recommended Adult Vaccination Rates Among US Adults, National Health Interview Survey 2018.

Jamal A, Jamal S.J Racial Ethn Health Disparities. 2025 Feb 20. doi: 10.1007/s40615-025-02312-0. Online ahead of print.PMID: 39979696

Multivalent Inactivated Vaccine Protects Chickens from Distinct Clades of Highly Pathogenic Avian Influenza Subtypes H5N1 and H5N8.

Kilany WH, Safwat M, Zain El-Abideen MA, Hisham I, Moussa Y, Ali A, Elkady MF.Vaccines (Basel). 2025 Feb 19;13(2):204. doi: 10.3390/vaccines13020204.PMID: 40006750

Dissecting the properties of circulating IgG against streptococcal pathogens through a combined systems antigenomics-serology workflow.

Gomez Toledo A, Chowdhury S, Hjortswang E, Sorrentino JT, Lewis NE, Bläckberg A, Ekström S, Kjellström S, Izadi A, Olofsson B, Nordenfelt P, Malmström L, Rasmussen M, Malmström J.Nat Commun. 2025 Feb 24;16(1):1942. doi: 10.1038/s41467-025-57170-5.PMID: 39994218

Molecular dynamics simulation shows enhanced stability in scaffold-based macromolecule, designed by protein engineering: a novel methodology adapted for converting Mtb Ag85A to a multi-epitope vaccine.

Hazra D, Rahman S, Ganguly M, Das AK, Roychowdhury A.J Mol Model. 2025 Feb 15;31(3):84. doi: 10.1007/s00894-025-06301-2.PMID: 39954152

Progress of extracellular vesicles-based system for tumor therapy.

Wang F, Yin L, Hu Y.J Control Release. 2025 Feb 22:S0168-3659(25)00179-8. doi: 10.1016/j.jconrel.2025.02.066. Online ahead of print.PMID: 39993635

Mass spectrometry-based mRNA sequence mapping *via* complementary RNase digests and bespoke visualisation tools.

Welbourne EN, Copley RJ, Owen GR, Evans CA, Isoko K, Cook K, Cordiner J, Kis Z, Moghadam PZ, Dickman MJ.Analyst. 2025 Feb 24;150(5):1012-1021. doi: 10.1039/d5an00033e.PMID: 39928146

A personalized vaccine for kidney cancer.

Allison SJ.Nat Rev Nephrol. 2025 Feb 25. doi: 10.1038/s41581-025-00941-6. Online ahead of print.PMID: 40000914

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

Chiu CY, Sampathkumar P, Brumble LM, Vikram HR, Watt KD, Beam E.Vaccine. 2025 Feb 15;47:126705. doi: 10.1016/j.vaccine.2025.126705. Epub 2025 Jan 9.PMID: 39793537

Inflammasome mediated in situ cancer vaccine activated by schottky heterojunction for augmented immunotherapy.

Li C, Zhang N, Xu Z, Rong Z, Song C, Zhang Y, Hua Y, Hu H, He Q, Shmanaid VV, Xia M, Zhang H, Zhao M, Jiao J, Zheng R.J Control Release. 2025 Feb 21;380:1184-1197. doi: 10.1016/j.jconrel.2025.02.059. Online ahead of print.PMID: 39988306

Trends in costs of routinely recommended vaccines in the United States, 2001-2023.

Kaul R, Leidner AJ, Chesson HW.Vaccine. 2025 Feb 15;47:126667. doi: 10.1016/j.vaccine.2024.126667. Epub 2025 Jan 3.PMID: 39754832

Systems immunology analysis of human immune organoids identifies host-specific correlates of protection to different influenza vaccines.

Wagoner ZW, Yates TB, Hernandez-Davies JE, Sureshchandra S, Joloya EM, Jain A, de Assis R, Kastenschmidt JM, Sorn AM, Mitul MT, Tamburini I, Ahuja G, Zhong Q, Trask D, Seldin M, Davies DH, Wagar LE.Cell Stem Cell. 2025 Feb 15:S1934-5909(25)00014-1. doi: 10.1016/j.stem.2025.01.014. Online ahead of print.PMID: 39986275

Hydrotalcites-Induced Pyroptosis Combined with Toll-Like Receptor Activation Elicited Dual Stimulation of Innate and Adaptive Immunity.

Wu J, Liu Z, Wang L, Pei Z, Han Z, Cui X, Pan X, Cao J, Huang Y, Sun S, Wang J, Cheng C, Cheng L.ACS Nano. 2025 Feb 18. doi: 10.1021/acsnano.4c16281. Online ahead of print.PMID: 39964224

Immunological responses and clinical outcomes in pet dogs with osteosarcoma receiving standard of care therapy and a recombinant Listeria vaccine expressing HER2/neu.

Mason NJ, Selmic L, Ruple A, London CA, Barber L, Weishaar K, Perry JA, Mahoney J, Flesner B, Bryan JN, Willcox JL, Burton JH, Vail DM, Kisseberth WC, Balkman CE, McCleary-Wheeler AL, Curran KM, Leeper H, Woods JP, Mutsaers AJ, Higginbotham ML, Wouda RM, Wilson-Robles H, Dervisis N, Saba C, MacDonald-Dickinson VS, Hess PR, Cherukuri A, Rotolo A, Beck JA, Patkar S, Mazcko C, LeBlanc AK.Mol Ther. 2025 Feb 15:S1525-0016(25)00113-3. doi: 10.1016/j.ymthe.2025.02.023. Online ahead of print.PMID: 39955616

A single dose of inactivated influenza virus vaccine expressing COBRA hemagglutinin elicits broadly-reactive and long-lasting protection.

Shi H, Zhang X, Ross TM.PLoS One. 2025 Feb 21;20(2):e0308680. doi: 10.1371/journal.pone.0308680. eCollection 2025.PMID: 39982912

Transcriptome profiling in an in vitro peripheral blood mononuclear cell - Mycobacterium tuberculosis infection model reveals breed-specific immune gene signatures potentially associated with tuberculosis susceptibility in cattle.

Kumar R, Gandham S, Maity HK, Sarkar U, Dey B.Int J Biol Macromol. 2025 Feb 20;306(Pt 1):141282. doi: 10.1016/j.ijbiomac.2025.141282. Online ahead of print.PMID: 39986503

A Systematic Review of Vaccine-Induced Sarcoidosis Suggests Increased Risk of Sarcoidosis Following COVID-19 mRNA Vaccine.

Branyiczky MK, Mehta S, Metko D, McMullen E, Mainville L, Piguet V.J Cutan Med Surg. 2025 Feb 15:12034754251320054. doi: 10.1177/12034754251320054. Online ahead of print.PMID: 39953893

Comparative longitudinal analysis of T lymphocyte subpopulations in calves vaccinated with different doses of BCG-Phipps or with culture filtrate protein extract of Mycobacterium bovis in a natural transmission setting.

Díaz-Otero F, Jaramillo-Meza L, Manzo-Sandoval A, Olguín-Alor R, Diosdado-Vargas F.BMC Vet Res. 2025 Feb 19;21(1):78. doi: 10.1186/s12917-025-04572-8.PMID: 39972321

Boost your health (Refuerza tu Salud): Design of a randomized controlled trial of a community health worker intervention to reduce inequities in COVID-19 and influenza vaccinations.

Meredith LS, Tobin JN, Cassells A, Howell K, Hernandez H, Gidengil C, Williamson S, Dong L, Timmins G, Alvarado G, Holder T, Lin TJ, Lara M.Contemp Clin Trials. 2025 Feb 16:107848. doi: 10.1016/j.cct.2025.107848. Online ahead of print.PMID: 39965727

Comparative analysis of immunogenicity for viral hemorrhagic septicemia virus (VHSV) vaccines inactivated by different methods.

Kim JY, Kim WS, Shin SM, Kim T, Jung SJ.Fish Shellfish Immunol. 2025 Feb 20;160:110217. doi: 10.1016/j.fsi.2025.110217. Online ahead of print.PMID: 39986583

Immunogenicity of monkeypox virus surface proteins and cross-reactive antibody responses in vaccinated and infected individuals: implications for vaccine and therapeutic development.

Liu J, Wang X, Zhang Y, Liu C, Zhang M, Li C, Liu P, Li S, Wei K, Cai Y, Yu H, Hu Z, Wang P, Zhang Y.Infect Dis Poverty. 2025 Feb 25;14(1):12. doi: 10.1186/s40249-025-01280-1.PMID: 39994775

Prevalence of chronic hepatitis B virus infection among children in Uzbekistan: Impact of vaccination.

Khetsuriani N, Tursunova D, Kasimova R, Sharapov S, Stewart B, Matyakubov M, Latipov R, Mosina L, Yusupaliyev B, Musabaev E.Vaccine. 2025 Feb 27;48:126743. doi: 10.1016/j.vaccine.2025.126743. Epub 2025 Jan 24.PMID: 39862544

Impact of immunosuppressive regimens on antibody response after COVID-19 vaccination among Thai kidney transplant recipients.

Larpparisuth N, Pongsakornkullachart K, Ratchawang N, Vongwiwatana A, Skulratanasak P.Heliyon. 2025 Jan 25;11(3):e42291. doi: 10.1016/j.heliyon.2025.e42291. eCollection 2025 Feb 15.PMID: 39931482

Monitoring and active surveillance of adverse events following the booster dose of AZD1222 vaccine in people vaccinated with Sinopharm BBIBP-CorV: a cohort study.

Soltani S, Moradinazar M, Karamimatin B, Gouya MM, Zahraei SM, Moradi G, Chehri O, Soofi M, Shadmani FK, Kalantari M, Najafi F.BMC Public Health. 2025 Feb 17;25(1):650. doi: 10.1186/s12889-025-21805-5.PMID: 39962455

Implementation of mid-adult HPV vaccination guidelines into clinical practice.

Thompson EL, Akpan IN, Alkhatib S, Grace J, Zimet GD, Daley EM, Luningham J, Wheldon CW.Vaccine. 2025 Feb 15;51:126867. doi: 10.1016/j.vaccine.2025.126867. Online ahead of print.PMID: 39956086

Immunisation health workforce capacity building in Southeast Asia: reflections from training programme implementation in Cambodia and Lao PDR.

Saravanos G, Teo AKJ, Yam ELY, Chou SC, Chanlivong N, Chanthorn P, Thy C, Sayavong S, Leask J, Yi S, Danchin M, Morgan C, Jenkins K, Kirk M, Macartney K, Coghlan B, Apostol M, Arora D, Gray D, Smart T, Sheel M.BMJ Glob Health. 2025 Feb 19;10(2):e018007. doi: 10.1136/bmjgh-2024-018007.PMID: 39971585

A VLP vaccine platform comprising the core protein of hepatitis B virus with N-terminal antigen capture.

Fatema K, Snowden JS, Watson A, Sherry L, Ranson NA, Stonehouse NJ, Rowlands DJ.Int J Biol Macromol. 2025 Feb 15;305(Pt 2):141152. doi: 10.1016/j.ijbiomac.2025.141152. Online ahead of print.PMID: 39961558

Barriers and strategies to improve vaccine adverse events reporting: views from health workers and managers in Northern Ghana.

Ansah NA, Weibel D, Chatio ST, Oladokun ST, Duah E, Ansah P, Oduro A, Hollestelle M, Sturkenboom M.BMJ Public Health. 2025 Feb 26;3(1):e001464. doi: 10.1136/bmjph-2024-001464. eCollection 2025 Jan.PMID: 40017916

Deep profiling of B cells responding to various pathogens uncovers compartments in IgG memory B cell and antibody-secreting lineages.

Claireaux M, Elias G, Kerster G, Kuijper LH, Duurland MC, Paul AGA, Burger JA, Poniman M, Olijhoek W, de Jong N, de Jongh R, Wynberg E, van Willigen HDG, Prins M, De Bree GJ, de Jong MD, Kuijpers TW, Eftimov F, van der Schoot CE, Rispens T, Garcia-Vallejo JJ, Ten Brinke A, van Gils MJ, van Ham SM.Sci Adv. 2025 Feb 21;11(8):eado1331. doi: 10.1126/sciadv.ado1331. Epub 2025 Feb 19.PMID: 39970201

Evaluation of Nursing Students' Knowledge on Dental Injuries.

Akgül N, Yilmaz E, Akkurt O.Dent Traumatol. 2025 Feb 19. doi: 10.1111/edt.13046. Online ahead of print.PMID: 39973004

siRNA-based Delivery Systems: Technologies, Carriers, Applications, and Approved Products.

Ghasemiyeh P, Mohammadi-Samani S.Eur J Pharmacol. 2025 Feb 27:177441. doi: 10.1016/j.ejphar.2025.177441. Online ahead of print.PMID: 40023357

Methodological approach to identify immunogenic epitopes candidates for vaccines against emerging pathogens tailored to defined HLA populations.

Lalinde-Ruiz N, Martínez-Enriquez LC, Alzate Gutierrez D, Hernandez Nieto H, Niño LF, Parra-López CA.Comput Biol Chem. 2025 Feb 19;116:108389. doi: 10.1016/j.compbiolchem.2025.108389. Online ahead of print.PMID: 39986256

Development of intimin-enriched outer membrane vesicles (OMVs) as a vaccine to control intestinal carriage of Enterohemorrhagic Escherichia coli.

Garling A, Goursat C, Seguy C, Martin P, Goman A, Nougayrède JP, Oswald É, Auvray F, Branchu P.Vaccine. 2025 Feb 21;52:126899. doi: 10.1016/j.vaccine.2025.126899. Online ahead of print.PMID: 39985970

Effectiveness of a hepatitis E vaccine against medically-attended symptomatic infection in HBsAg-positive adults from a test-negative design study.

Zhuang C, Liu X, Huang X, Lu J, Zhu K, Liao M, Chen L, Jiang H, Zang X, Wang Y, Yang C, Liu D, Zheng Z, Zhang X, Huang S, Huang Y, Su Y, Wu T, Zhang J, Xia N.Nat Commun. 2025 Feb 17;16(1):1699. doi: 10.1038/s41467-025-57021-3.PMID: 39962038

Evaluation of Cardiovascular and Hepatic Changes in Myocardial Infarction Patients Post-Covid-19 Vaccination.

Mehanna MG, Eid TM, Maarof BA, Baig MR, Naqvi S, Alabassi FA, El Gayar AES, Omar AMM, Al-Bar OA, Gazi S, Kumar V, Anwar F.Curr Vasc Pharmacol. 2025 Feb 19. doi: 10.2174/0115701611362338250214103331. Online ahead of print.PMID: 39976104

A Universal Viral Capsid Protein Based One Step RNA Synthesis and Packaging System for Rapid and Efficient mRNA Vaccine Development.

Su J, Zhang J, Feng X, Liu J, Gao S, Liu X, Yang M, Chen Z.Mol Ther. 2025 Feb 27:S1525-0016(25)00127-3. doi: 10.1016/j.ymthe.2025.02.037. Online ahead of print.PMID: 40022448

Impact of ionizable groups in star polymer nanoparticles on NLRP3 inflammasome activation.

Malhotra M, Thodur S, Kulkarni A.Biomater Sci. 2025 Feb 18. doi: 10.1039/d4bm01349b. Online ahead of print.PMID: 39964741

A decade of rotavirus vaccination in the World Health Organization African Region: An in-depth analysis of vaccine coverage from 2012 to 2023.

Mwenda JM, Mandomando I, Worwui AK, Gacic-Dobo M, Katsande R, Bwaka AM, Messa A Jr, Kiulia NM, Massora S, Garrine M, Weldegebriel GG, Biey JN, Mitula P, Wiysonge CS, Paluku G, Mumba M, Wanyoike SW, Impouma B.Vaccine. 2025 Feb 27;48:126768. doi: 10.1016/j.vaccine.2025.126768. Epub 2025 Jan 30.PMID: 39890559

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 Feb 27;48:126730. doi: 10.1016/j.vaccine.2025.126730. Epub 2025 Jan 17.PMID: 39826432

Pertussis before, during and after Covid-19.

Locht C.EMBO Mol Med. 2025 Feb 24. doi: 10.1038/s44321-025-00199-2. Online ahead of print.PMID: 39994481

Function and structure of broadly neutralizing antibodies against SARS-CoV-2 Omicron variants isolated from prototype strain infected convalescents.

Li D, Hu C, Su J, Du S, Zhang Y, Ni W, Ren L, Hao Y, Feng Y, Jin C, Wang S, Dai X, Wang Z, Zhu B, Xiao J, Shao Y.J Transl Med. 2025 Feb 21;23(1):212. doi: 10.1186/s12967-025-06162-6.PMID: 39985112

A capless hairpin-protected mRNA vaccine encoding the full-length Influenza A hemagglutinin protects mice against a lethal Influenza A infection.

Solodushko V, Kim JH, Fouty B.Gene Ther. 2025 Feb 23. doi: 10.1038/s41434-025-00521-0. Online ahead of print.PMID: 39988620

Posttransplant HBV Vaccine Compliance, Seroprotection, and Kinetics of Hepatitis B Surface Antibody in Thoracic Organ Transplant Recipients.

Chiu CY, Sampathkumar P, Brumble LM, Vikram HR, Watt KD, Beam E.Transpl Infect Dis. 2025 Feb 24:e70015. doi: 10.1111/tid.70015. Online ahead of print.PMID: 39995014

PRRSV-1 outbreak in a farrowing farm caused by a vaccine derived strain: a case report.

Lebret A, Renson P, Brissonnier M, Chevance C, Normand V, Favrel J, Da-Costa JF, Jeusselin J, Nicolazo T, Blanchard Y, Bourry O, Boulbria G.Porcine Health Manag. 2025 Feb 17;11(1):9. doi: 10.1186/s40813-025-00425-w.PMID: 39962624

Restoring Tumor Cell Immunogenicity Through Ion-Assisted p53 mRNA Domestication for Enhanced In Situ Cancer Vaccination Effect.

Liang Y, Zhang J, Wang J, Yang Y, Tan X, Li S, Guo Z, Zhang Z, Liu J, Shi J, Zhang K.Adv Sci (Weinh). 2025 Feb 18:e2500825. doi: 10.1002/advs.202500825. Online ahead of print.PMID: 39965083

A shark-derived broadly neutralizing nanobody targeting a highly conserved epitope on the S2 domain of sarbecoviruses.

Feng B, Li C, Zhang Z, Huang Y, Liu B, Zhang Z, Luo J, Wang Q, Yin L, Chen S, He P, Xiong X, Zhao J, Niu X, Chen Z, Chen L.J Nanobiotechnology. 2025 Feb 15;23(1):110. doi: 10.1186/s12951-025-03150-2.PMID: 39955548

Long-term antibody trajectories after PPSV23 in elderly: Results from a 4-year follow-up study.

Zhou S, Wang J, Lv M, Lan W, Li J, Bai S, Zhao W, Suo L, Zhang A, Wu J.Vaccine. 2025 Feb 27;48:126737. doi: 10.1016/j.vaccine.2025.126737. Epub 2025 Jan 23.PMID: 39855106

An Engineered SARS-CoV-2 S1 Glycoprotein Produced in Pichia pastoris as a Candidate Vaccine Antigen.

Majidi S, Aghaiypour Kolyani K, Akrami M, Dadar M.Mol Biotechnol. 2025 Feb 22. doi: 10.1007/s12033-025-01409-5. Online ahead of print.PMID: 39987329

Does integration matter? an international cross-sectional study on the relationship between perceived public health and primary care integration and COVID-19 vaccination rates.

Sodhi S, Chamali R, Praveen D, Sharma M, Garcia Dieguez M, Mash R, Goodyear-Smith F, Ponka D.PLoS One. 2025 Feb 21;20(2):e0317970. doi: 10.1371/journal.pone.0317970. eCollection 2025.PMID: 39982934

Experimental efficacy of vaccination of weaned piglets with a modified-live commercial PRRS virus vaccine against the challenge with a Spanish highly virulent PRRSV-1 strain.

Cortey M, Jiménez M, Aguirre L, Sánchez-Carvajal JM, Gómez-Laguna J, Domingo-Carreño I, Clilverd H, Marcos M, Menjon R, Von Berg S, Mateu E.Porcine Health Manag. 2025 Feb 21;11(1):10. doi: 10.1186/s40813-025-00423-y.PMID: 39985097

Streptococcus pneumoniae serotype distribution in low- and middle-income countries of South Asia: Do we need to revisit the pneumococcal vaccine strategy?

Dhawale P, Shah S, Sharma K, Sikriwal D, Kumar V, Bhagawati A, Dhar S, Shetty P, Ahmed S.Hum Vaccin Immunother. 2025 Dec;21(1):2461844. doi: 10.1080/21645515.2025.2461844. Epub 2025 Feb 25.PMID: 39999432

Impact of Pneumococcal Conjugate Vaccines on Otitis Media among American Indian/Alaska Native children in the Southwest United States.

Sergent V, Sutcliffe CG, Yazzie D, Brasinikas G, Brown LB, Christensen L, Clichee D, Damon S, Dixon SL, Grant LR, Harker-Jones M, McAuley JB, Montanez P, Parker Riley D, Reasonover A, Rice A, Romancito E, Salabye C, Simons-Petrusa B, Tenequer VL, Thompson P, Tsingine M, Tso C, Weatherholtz RC, Hammitt LL.J Pediatric Infect Dis Soc. 2025 Feb 17:piaf013. doi: 10.1093/jpids/piaf013. Online ahead of print.PMID: 39957289

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 MBJ, Guimarães RC, Marchevsky RS, de Lima SMB, Ano Bom APD, Pissinatti A, Freire MDS.Vaccine. 2025 Feb 27;48:126721. doi: 10.1016/j.vaccine.2025.126721. Epub 2025 Jan 17.PMID: 39826431

Anti-neuraminidase and anti-hemagglutinin stalk responses to different influenza a(H7N9) vaccine regimens.

El Sahly HM, Anderson EJ, Jackson LA, Neuzil KM, Atmar RL, Bernstein DI, Chen WH, Creech CB, Frey SE, Goepfert P, Meier J, Phadke V, Rouphael N, Rupp R, Stapleton JT, Spearman P, Walter EB, Winokur PL, Yildirim I, Williams TL, Oshinsky J, Coughlan L, Nijhuis H, Pasetti MF, Krammer F, Stadlbauer D, Nachbagauer R, Tsong R, Wegel A, Roberts PC.Vaccine. 2025 Feb 15;47:126689. doi: 10.1016/j.vaccine.2024.126689. Epub 2025 Jan 4.PMID: 39756216

Emergence of new sublineages of serotype O foot-and-mouth disease viruses circulating in Pakistan during 2012-2021.

Jamal SM, Khan S, Rahman HU, Ali Shah SA, Polo N, Wilsden G, Parekh K, Browning C, Wadsworth J, Knowles NJ, Ludi A, King DP, Eschbaumer M, Belsham GJ.Virology. 2025 Feb 15;605:110455. doi: 10.1016/j.virol.2025.110455. Online ahead of print.PMID: 39986259

Development and Efficacy of a Chitosan Nanoparticle-Based Immersion Vaccine Targeting Segment 4 of Tilapia Lake Virus.

Thanapasuk C, Tattiyapong P, Yamkasem J, Kitiyodom S, Setthawong P, Lertwanakarn T, Surachetpong W.J Fish Dis. 2025 Feb 28:e14106. doi: 10.1111/jfd.14106. Online ahead of print.PMID: 40018974

A Potential Platform for Future Vaccine Trials Identifies a High Incidence of Symptomatic and Asymptomatic Influenza Infection Among Children Aged 6 to 23 Months in South Africa.

Cohen C, du Plessis M, Martinson N, Moyes J, Walaza S, Wolter N, Makhasi M, Moosa F, Charles M, Samuels AM, Tempia S, Moloantoa T, Ncwana B, Phalatse L, Buys A, Fry A, Baumgartner EA, von Gottberg A, Kleynhans J.J Infect Dis. 2025 Feb 20;231(2):e328-e336. doi: 10.1093/infdis/jiae550.PMID: 39542652

Addressing unexpected bacterial RNA safety concerns of E. coli produced influenza NP through CpG loaded mutant.

Chen C, Li M, Guo A, Guo P, Zhang W, Gu C, Wen G, Zhou H, Tao P.NPJ Vaccines. 2025 Feb 15;10(1):32. doi: 10.1038/s41541-025-01087-z.PMID: 39955275

Topology-Oriented Lymph Node Drainage of Dendritic Polymer-TLR Agonist Conjugates to Enhance Vaccine Immunogenicity.

Ren L, Wang B, Miao D, Xiang P, Zeng Z, Li Z, Chen X, Xu C, Gong Q, Luo K, Jing J.Adv Mater. 2025 Feb 17:e2417704. doi: 10.1002/adma.202417704. Online ahead of print.PMID: 39962825

Closing the gap on vaccine uptake in developing countries: Is there a role for cash incentives?

Sato R.Vaccine. 2025 Feb 27;48:126763. doi: 10.1016/j.vaccine.2025.126763. Epub 2025 Jan 22.PMID: 39848129

An attenuated African swine fever virus expressing the E2 glycoprotein of classical swine fever virus protects pigs against challenge of both viruses.

Zhang J, Li F, Chen W, Li Y, Zhang Z, Hua R, Liu R, Zhu Y, Sun E, Qiu H, Bu Z, Zhao D.Emerg Microbes Infect. 2025 Feb 18:2469636. doi: 10.1080/22221751.2025.2469636. Online ahead of print.PMID: 39964030

A Transgenic Mouse With a Humanized B-Cell Repertoire Mounts an Antibody Response to Influenza Infection and Vaccination.

Murugaiah V, Watson SJ, Cunliffe RF, Temperton NJ, Reece ST, Kellam P, Tregoning JS.J Infect Dis. 2025 Feb 20;231(2):e299-e307. doi: 10.1093/infdis/jiae472.PMID: 39317662

Humoral and cellular immune responses after 6 months of a heterologous SARS-CoV-2 booster with the protein-based PHH-1V vaccine in a phase IIb trial.

Corominas J, Garriga C, Prenafeta A, Moros A, Cañete M, Barreiro A, González-González L, Madrenas L, Güell I, Clotet B, Izquierdo-Useros N, Raïch-Regué D, Gallemí M, Blanco J, Pradenas E, Trinité B, G Prado J, Pérez-Caballero R, Bernad L, Plana M, Esteban I, Aurrecoechea E, Taleb RA, McSkimming P, Soriano A, Nava J, Anagua JO, Ramos R, Martí Lluch R, Corpes Comes A, Otero Romero S, Martínez-Gómez X, Camacho-Arteaga L, Molto J, Benet S, Bailón L, Arribas JR, Borobia AM, Queiruga Parada J, Navarro-Pérez J, Forner Giner MJ, Lucas RO, Vázquez Jiménez MDM, López Fernández MJ, Alvarez-Mon M, Troncoso D, Arana-Arri E, Meijide S, Imaz-Ayo N, García PM, de la Villa S, Rodríguez Fernández S, Prat T, Torroella È, Ferrer L.Vaccine. 2025 Feb 15;47:126685. doi: 10.1016/j.vaccine.2024.126685. Epub 2025 Jan 13.PMID: 39809095

Barriers to influenza vaccination during pregnancy in France: A national population-based study.

Anselem O, Charlier C, Viaud M, Lelong N, Vaux S, Launay O, Le Ray C; ENP2021 Study Group.Vaccine. 2025 Feb 15;47:126671. doi: 10.1016/j.vaccine.2024.126671. Epub 2025 Jan 3.PMID: 39754833

Updates on Auditory Outcomes of COVID-19 and Vaccine Side Effects: An Umbrella Review.

Jafari Z, Kolb BE, Aiken S, Wilson S.J Speech Lang Hear Res. 2025 Feb 21:1-22. doi: 10.1044/2024_JSLHR-24-00438. Online ahead of print.PMID: 39983040

Morris responds to "Critical analyses concerning COVID-19 vaccines need to be consistently critical, and informed".

Morris JS.Am J Epidemiol. 2025 Feb 20:kwaf015. doi: 10.1093/aje/kwaf015. Online ahead of print.PMID: 39972596

Tropis needle-free injector for fractional-dose IPV administration: A pilot study for integration into routine immunization services in Cuba.

Resik S, Lopez Cavestany R, Tejeda A, Díaz M, García G, Alemañy N, Mesa I, Rivero M, Fonseca M, Hong LH, Morales D, Más I, García D, Mach O.Vaccine. 2025 Feb 22;52:126903. doi: 10.1016/j.vaccine.2025.126903. Online ahead of print.PMID: 39987881

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

Cao Y, da Silva Araujo M, Lorang CG, Dos Santos NAC, Tripathi A, Vinetz J, Kumar N.Vaccine. 2025 Feb 15;47:126696. doi: 10.1016/j.vaccine.2024.126696. Epub 2025 Jan 8.PMID: 39787798

Indirect comparison of the relative vaccine effectiveness of mRNA-1283 vs. BNT162b2 vaccines against symptomatic COVID-19 among US adults.

Beck E, Georgieva M, Wang WJ, Gomez-Lievano A, Wang H, Gao Y, Kopel H, Bausch-Jurken M, Patterson-Lomba O, Mu F, Wu E, VandeVelde N.Curr Med Res Opin. 2025 Feb 20:1-21. doi: 10.1080/03007995.2025.2466726. Online ahead of print.PMID: 39973309

Construction and efficacy of a recombinant QX-like infectious bronchitis virus vaccine strain.

Lin L, Feng K, Shao G, Gong S, Liu T, Chen F, Zhang X, Xie Q.Virus Genes. 2025 Feb 27. doi: 10.1007/s11262-025-02140-8. Online ahead of print.PMID: 40014292

Bifunctional Phage Particles Augment CD40 Activation and Enhance Lymph Node-Targeted Delivery of Personalized Neoantigen Vaccines.

Chen X, Lei L, Yan J, Wang X, Li L, Liu Q, Wang Y, Chen T, Shao J, Yu L, Li Z, Zhu L, Wang L, Liu B.ACS Nano. 2025 Feb 25;19(7):6955-6976. doi: 10.1021/acsnano.4c14513. Epub 2025 Feb 11.PMID: 39933905

Mucosal immunity elicited by a human-Fcgamma 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 Feb 27;48:126729. doi: 10.1016/j.vaccine.2025.126729. Epub 2025 Jan 16.PMID: 39823848

Vaccinia growth factor-dependent modulation of the mTORC1-CAD axis upon nutrient restriction.

Dsouza L, Pant A, Pope B, Yang Z.J Virol. 2025 Feb 25;99(2):e0211024. doi: 10.1128/jvi.02110-24. Epub 2025 Jan 16.PMID: 39817770

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

Su Q, Qiu F, Gao Z, Zhao Y, Ma J, Hao Z, Zhang S, Shen L, Bi S, Wang F, Zhou H.Vaccine. 2025 Feb 15;47:126655. doi: 10.1016/j.vaccine.2024.126655. Epub 2025 Jan 8.PMID: 39787797

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 Feb 25;99(2):e0210824. doi: 10.1128/jvi.02108-24. Epub 2025 Jan 16.PMID: 39817772

Meta-Analysis of Clinical Trial on the Comparative Efficacy and Safety Profiles of Immunotherapeutic Strategies in Cervical Cancer.

Navya VB, Kumar R.Crit Rev Oncol Hematol. 2025 Feb 27:104673. doi: 10.1016/j.critrevonc.2025.104673. Online ahead of print.PMID: 40023464

Two adolescents with frequently relapsing nephrotic syndrome newly diagnosed after SARS-CoV-2 vaccination: case report and literature review.

Nakazawa E, Uchimura T, Ohyama R, Togashi H, Inaba A, Shiga K, Ito S.CEN Case Rep. 2025 Feb 17. doi: 10.1007/s13730-025-00967-6. Online ahead of print.PMID: 39960599

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 Feb 27;48:126723. doi: 10.1016/j.vaccine.2025.126723. Epub 2025 Jan 18.PMID: 39827600

Assessment of knowledge, attitudes, and practices on vaccine usage among large ruminant farmers in the rangpur division of Bangladesh.

Islam MS, Mondal AK, Auwul MR, Islam MS, Mahmud MAA, Ahsan MI.Prev Vet Med. 2025 Feb 19;238:106476. doi: 10.1016/j.prevetmed.2025.106476. Online ahead of print.PMID: 39983380

Subnational tailoring of malaria interventions to prioritize the malaria response in Guinea.

Diallo OO, Diallo A, Toh KB, Diakité N, Dioubaté M, Runge M, Symons T, Diallo EM, Gerardin J, Galatas B, Camara A.Malar J. 2025 Feb 25;24(1):62. doi: 10.1186/s12936-025-05302-z.PMID: 40001183

Coronavirus disease 2019 vaccination and menstrual cycle changes: A cross-sectional study on females of reproductive age in Saudi Arabia.

Eskandar M, Alassim A, Riaz F, Mahmood SE, Alshehri NK, Asim AAA, Almodeer M, Ahmad A.Medicine (Baltimore). 2025 Feb 21;104(8):e41656. doi: 10.1097/MD.0000000000041656.PMID: 39993068

Cost-effectiveness of nirsevimab and maternal RSVpreF for preventing respiratory syncytial virus disease in infants across Canada.

Bugden S, Mital S, Nguyen HV.BMC Med. 2025 Feb 21;23(1):102. doi: 10.1186/s12916-025-03928-z.PMID: 39984979

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

Seo H, Kim BJ, Oh J, Jung S, Lee JY, Kim BJ.Vaccine. 2025 Feb 15;47:126710. doi: 10.1016/j.vaccine.2025.126710. Epub 2025 Jan 8.PMID: 39787795

Factors associated with vaccination against mpox in people under preexposure prophylaxis against HIV in the Community of Madrid.

Gutiérrez Rodríguez MA, Rodríguez Luque C, Sánchez Gómez A, Lasheras Carbajo MD, Cañellas Llabrés S, Lopez Centeno B, Morales Irala D, Vázquez Torres MC, Molina Olivas M.Enferm Infecc Microbiol Clin (Engl Ed). 2025 Feb 28:S2529-993X(25)00044-9. doi: 10.1016/j.eimce.2025.02.003. Online ahead of print.PMID: 40023676

Global Impact of Mass Vaccination Campaigns on Circulating Type 2 Vaccine-Derived Poliovirus Outbreaks: An Interrupted Time-Series Analysis.

Cooper LV, Bandyopadhyay AS, Grassly NC, Gray EJ, Voorman A, Zipursky S, Blake IM.J Infect Dis. 2025 Feb 20;231(2):e446-e455. doi: 10.1093/infdis/jiae614.PMID: 39873524

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

Navarro-Torné A, Anderson A, Panwar K, Ghys E, Benninghoff B, Weynants V, Beddows S, Checchi M.Vaccine. 2025 Feb 15;47:126701. doi: 10.1016/j.vaccine.2024.126701. Epub 2025 Jan 10.PMID: 39798435

Time-varying effects of COVID-19 vaccination on symptomatic and asymptomatic infections in a prospective university cohort in the USA.

Robinson L, Feting A, Isozaki I, Seyfert-Morgolis V, Jay M, Kim E, Cairns C.BMJ Open. 2025 Feb 22;15(2):e084408. doi: 10.1136/bmjopen-2024-084408.PMID: 39987006

Changes in the dynamic characteristics of G-protein can alter the immune-protection efficacy of rabies virus vaccine.

Chen C-x, Wang X, Su W, Tian Y, Gao Y, Liu D-l, Xiang H, Liu B-c, Shi J-l, Zhang Y, Shen D, He W-z, Yang L, Hong C, Wu F, Shi L-t, Cun Y-n, Zhou J.J Virol. 2025 Feb 21:e0195424. doi: 10.1128/jvi.01954-24. Online ahead of print.PMID: 39982033

Etiological Spectrum of Acute Respiratory Infections in Bulgaria During the 2023-2024 Season and Genetic Diversity of Circulating Influenza Viruses.

Korsun N, Trifonova I, Pavlova D, Uzunova Y, Ivanov I, Ivanov D, Velikov P, Voleva S, Tcherveniakova T, Christova I.Viruses. 2025 Feb 16;17(2):270. doi: 10.3390/v17020270.PMID: 40007025

Predictors of COVID-19 Vaccination Intention and Behavior Among Young People in a European Union Country With Low COVID-19 Vaccination Rates: Cross-Sectional Study.

Atanasova S, Kamin T, Perger N.JMIR Public Health Surveill. 2025 Feb 21;11:e64653. doi: 10.2196/64653.PMID: 39983109

Real-world effectiveness of influenza vaccination in preventing influenza and influenza-like illness in children.

Rigamonti V, Torri V, Morris SK, Ieva F, Giaquinto C, Donà D, Di Chiara C, Cantarutti A; CARICE study group.Vaccine. 2025 Feb 28;53:126946. doi: 10.1016/j.vaccine.2025.126946. Online ahead of print.PMID: 40023131

An 'arsenal for the supply of ammunition for the defence of vaccination': the Jenner Society and anti-anti-vaccinationism in England, 1896-1906.

Newsom Kerr ML.Med Hist. 2025 Feb 21:1-23. doi: 10.1017/mdh.2024.28. Online ahead of print.PMID: 39980375

Emerging of non-vaccine Streptococcus pneumoniae serotypes colonizing the nasopharynx of children under the age of five years in the 13-vallent 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 Feb 27;48:126724. doi: 10.1016/j.vaccine.2025.126724. Epub 2025 Jan 21.PMID: 39842150

Rotavirus vaccine effectiveness and coverage among children younger than 5 years old in Shanghai, China: A test-negative case control study.

Gong X, Huang Z, Zheng Y, Xiao W, Liu J, Lin S, Pan H, Chen J, Wu H, Wang W.Vaccine. 2025 Feb 27;48:126731. doi: 10.1016/j.vaccine.2025.126731. Epub 2025 Jan 13.PMID: 39809089

Porvac() Subunit Vaccine Protects Against Three Field Isolates of Classical Swine Fever Virus.

Sordo-Puga Y, Rodríguez-Moltó MP, Pérez-Pérez D, Naranjo-Valdés P, Sardina-González T, Méndez-Orta MK, Santana-Rodríguez E, Vargas-Hernández M, Laura Perera C, Duarte CA, Suárez-Pedroso M.Vaccines (Basel). 2025 Feb 17;13(2):196. doi: 10.3390/vaccines13020196.PMID: 40006741

Exploratory algorithms to devise multi-epitope subunit vaccine by examining HIV-1 envelope glycoprotein: An immunoinformatics and viroinformatics approach.

Mishra SK, Senathilake KS, Kumar N, Patel CN, Uddin MB, Alqahtani T, Alqahtani A, Alharbi HM, Georrge JJ.PLoS One. 2025 Feb 27;20(2):e0318523. doi: 10.1371/journal.pone.0318523. eCollection 2025.PMID: 40014623

Kinetics of NS1 and anti-NS1 IgG following dengue infection reveals likely early formation of immune complexes in secondary infected patients.

Muller DA, Choo JJY, McElnea C, Duyen HTL, Wills B, Young PR.Sci Rep. 2025 Feb 25;15(1):6684. doi: 10.1038/s41598-025-91099-5.PMID: 39994315

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

Honda-Okubo Y, Vaghasiya U, Petrovsky N.Vaccine. 2025 Feb 15;47:126707. doi: 10.1016/j.vaccine.2025.126707. Epub 2025 Jan 10.PMID: 39798433

Combining machine learning models and rule engines in clinical decision systems: Exploring optimal aggregation methods for vaccine hesitancy prediction.

Kierner S, Kierner P, Kucharski J.Comput Biol Med. 2025 Feb 20;188:109749. doi: 10.1016/j.compbiomed.2025.109749. Online ahead of print.PMID: 39983355

Enzymes involved in trehalose-chitin synthesis in Haemonchus contortus could be vaccine candidates for goats.

Wen Z, Amu J, Aimulajiang K, Feng J, Chen C, Xu Y, Lu M, Xu L, Song X, Li X, Yan R.Parasit Vectors. 2025 Feb 20;18(1):61. doi: 10.1186/s13071-025-06703-4.PMID: 39980073

Correction to "Recombinant Spike protein vaccines coupled with adjuvants that have different modes of action induce protective immunity against SARS-CoV-2" [Vaccine 2023 Sep 22 41(41) 6025-6035. Doi: 10.1016/j.vaccine.2023.08.054].

Chiba S, Halfmann PJ, Iida S, Hirata Y, Sato Y, Kuroda M, Armbrust T, Spyra S, Suzuki T, Kawaoka Y.Vaccine. 2025 Feb 21;52:126880. doi: 10.1016/j.vaccine.2025.126880. Online ahead of print.PMID: 39985967

Developing a practical tool for measuring parental vaccine hesitancy: A people-centered validation approach in Dutch.

Bussink-Voorend D, Hautvast JLA, Wiersma T, Akkermans R, Hulscher MEJL.Hum Vaccin Immunother. 2025 Dec;21(1):2466303. doi: 10.1080/21645515.2025.2466303. Epub 2025 Feb 17.PMID: 39957364

Decoding SARS-CoV-2 variants: Mutations, viral stability, and breakthroughs in vaccines and therapies.

Abduljaleel Z.Biophys Chem. 2025 Feb 20;320-321:107413. doi: 10.1016/j.bpc.2025.107413. Online ahead of print.PMID: 39987705

Vaccine microarray patch self-administration: A preliminary study in adults 50 years of age and over.

Davies C, Baker B, Berger MN, Knox SL, Mowbray E, Stewart BG, Booy R, Hacker E, Marmol A, Ross C, Muller DA, Mortimore AM, Siller G, Forster AH, Skinner SR.Vaccine. 2025 Feb 27;48:126699. doi: 10.1016/j.vaccine.2024.126699. Epub 2025 Jan 30.PMID: 39890558

Improving HPV-related health literacy in the Austrian population - A participatory research approach.

Meikl M, Karl T, Schuster A, Oostingh GJ.Hum Vaccin Immunother. 2025 Dec;21(1):2469334. doi: 10.1080/21645515.2025.2469334. Epub 2025 Feb 25.PMID: 40001350

The combined immunization of cervical cancer therapeutic vaccine based on Listeria balanced lethal system has a significant therapeutic effect on tumor model mice.

Ou Q, Tang J, Zhang Y, Gan S, Chen Z, Wang C.Int Immunopharmacol. 2025 Feb 20;148:114124. doi: 10.1016/j.intimp.2025.114124. Epub 2025 Jan 26.PMID: 39870008

Evaluation of an N1 NA antibody-specific enzyme-linked lectin assay for detection of H5N1 highly pathogenic avian influenza virus infection in vaccinated birds.

Ibrahim S, Spackman E, Suarez DL, Goraichuk IV, Lee CW.J Virol Methods. 2025 Feb 15;334:115127. doi: 10.1016/j.jviromet.2025.115127. Online ahead of print.PMID: 39956396

A phase 2/3 trial to investigate the safety and immunogenicity of monovalent Omicron JN.1-adapted BNT162b2 COVID-19 vaccine in adults 18 years old.

Diya O, Gayed J, Lowry FS, Ma H, Bangad V, Mensa F, Zou J, Xie X, Hu Y, Cutler M, Belanger T, Cooper D, Xu X, Koury K, Türeci Ö, Şahin U, Swanson KA, Modjarrad K, Anderson AS, Gurtman A, Kitchin N.Vaccine. 2025 Feb 24;52:126869. doi: 10.1016/j.vaccine.2025.126869. Online ahead of print.PMID: 39999538

An mRNA vaccine encoding proteasome-targeted antigen enhances CD8(+) T cell immunity.

Ling J, Chen H, Huang M, Wang J, Du X.J Control Release. 2025 Feb 25;381:113578. doi: 10.1016/j.jconrel.2025.02.074. Online ahead of print.PMID: 40015339

In-silico development of a novel TLR2-mediating multi-epitope vaccine against Mycobacterium tuberculosis.

Singh S, Verma P, Gaur M, Bhati L, Madan R, Sharma PP, Rawat A, Rathi B, Singh M.In Silico Pharmacol. 2025 Feb 25;13(1):34. doi: 10.1007/s40203-025-00322-8. eCollection 2025.PMID: 40018380

Functional characterization of MMAR_1296 in Mycobacterium marinum and its potential as a vaccine candidate.

Xie W, Luo D, Soni V, Wang Z.Vaccine. 2025 Feb 27;48:126720. doi: 10.1016/j.vaccine.2025.126720. Epub 2025 Jan 13.PMID: 39809090

A Double Machine Learning Approach for the Evaluation of COVID-19 Vaccine Effectiveness Under the Test-Negative Design: Analysis of Quebec Administrative Data.

Jiang C, Talbot D, Carazo S, Schnitzer ME.Stat Med. 2025 Feb 28;44(5):e70025. doi: 10.1002/sim.70025.PMID: 39985144

A scientific case for revisiting the embryonic chicken model in biomedical research.

McGrew MJ, Holmes T, Davey MG.Dev Biol. 2025 Feb 25:S0012-1606(25)00051-X. doi: 10.1016/j.ydbio.2025.02.013. Online ahead of print.PMID: 40015500

Combination Seasonal Vaccines for Influenza, Respiratory Syncytial Virus, Severe Acute Respiratory Syndrome Coronavirus 2, and Other Pathogens.

Dobrzynski D, Branche AR, Falsey AR.J Infect Dis. 2025 Feb 20;231(2):291-293. doi: 10.1093/infdis/jiae507.PMID: 39401794

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 Feb 25;99(2):e0216424. doi: 10.1128/jvi.02164-24. Epub 2025 Jan 22.PMID: 39840971

High IgG titers against EBV glycoprotein 42 correlate with lower risk of nasopharyngeal carcinoma.

Warner BE, Shair KH.J Clin Invest. 2025 Feb 17;135(4):e189207. doi: 10.1172/JCI189207.PMID: 39959976

Effect of a school-based tutorial about the HPV vaccine for female middle school students on the HPV vaccination rate in Japan: A prospective cohort study.

Murata Y, Saito Y, Obonai T.J Infect Chemother. 2025 Feb 26:102671. doi: 10.1016/j.jiac.2025.102671. Online ahead of print.PMID: 40021003

Structure-based design of an immunogenic, conformationally stabilized FimH antigen for a urinary tract infection vaccine.

Silmon de Monerri NC, Che Y, Lees JA, Jasti J, Wu H, Griffor MC, Kodali S, Hawkins JC, Lypowy J, Ponce C, Curley K, Esadze A, Carcamo J, McLellan T, Keeney D, Illenberger A, Matsuka YV, Shanker S, Chorro L, Gribenko AV, Han S, Anderson AS, Donald RGK.PLoS Pathog. 2025 Feb 19;21(2):e1012325. doi: 10.1371/journal.ppat.1012325. Online ahead of print.PMID: 39970181

Retraction Notice: "Adverse events after first and second doses of COVID-19 vaccination in England: a national vaccine surveillance platform self-controlled case series study".

[No authors listed]J R Soc Med. 2025 Feb 18:14107682513167 50. doi: 10.1177/01410768251316750. Online ahead of print.PMID: 39964160

Polyethyleneimine/fucoidan polyplexes as vaccine carriers for enhanced antigen loading and dendritic cell activation.

Chiang JY, Lin TH, Cheng JX, Pan WY.Int J Biol Macromol. 2025 Feb 20;306(Pt 1):141336. doi: 10.1016/j.ijbiomac.2025.141336. Online ahead of print.PMID: 39986515

A multi-antigen Campylobacter vaccine enhances antibody responses in layer breeders and sustains elevated maternal antibody levels in their offspring.

Naguib M, Sharma S, Schneider A, Bragg AJ, Abdelaziz K.Poult Sci. 2025 Feb 17;104(4):104898. doi: 10.1016/j.psj.2025.104898. Online ahead of print.PMID: 39985894

A review of the carcinogenic potential of human papillomavirus (HPV) in urological cancers.

Zolfi E, Khaleghi Mehr F, Emtiazi N, Moradi Y.Virol J. 2025 Feb 28;22(1):53. doi: 10.1186/s12985-025-02682-1.PMID: 40022189

Just a smidgen of yellow-fever vaccine is enough.

[No authors listed]Nature. 2025 Feb 28. doi: 10.1038/d41586-025-00580-8. Online ahead of print.PMID: 40021796

Incidence of Pertussis in Older Children Underestimated in the Whole-Cell Vaccine Era: A Cross-Sectional Seroprevalence Study.

Du QQ, Meng QH, Shi W, Yao KH.Vaccines (Basel). 2025 Feb 17;13(2):200. doi: 10.3390/vaccines13020200.PMID: 40006747

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 Feb 25;99(2):e0161924. doi: 10.1128/jvi.01619-24. Epub 2025 Jan 23.PMID: 39846739

Contribution of the type 3 secretion system to adaptive and innate immunity induced by a live Yersinia pseudotuberculosis plague vaccine.

Derbise A, Guillas C, Echenique-Rivera H, Carniel E, Gerke C, Pizarro-Cerdá J, Demeure CE.Vaccine. 2025 Feb 19;51:126887. doi: 10.1016/j.vaccine.2025.126887. Online ahead of print.PMID: 39978224

Unveiling the silent threat: A comprehensive review of Riemerella anatipestifer - From pathogenesis to drug resistance.

Hao J, Zhang J, He X, Wang Y, Su J, Long J, Zhang L, Guo Z, Zheng Y, Wang M, Sun Y.Poult Sci. 2025 Feb 22;104(4):104915. doi: 10.1016/j.psj.2025.104915. Online ahead of print.PMID: 40020410

Immunoinformatic evaluation for the development of a potent multi-epitope vaccine against bacterial vaginosis caused by Gardnerella vaginalis.

Motamedi H, Shoja S, Abbasi M.PLoS One. 2025 Feb 27;20(2):e0316699. doi: 10.1371/journal.pone.0316699. eCollection 2025.PMID: 40014550

A locally administered single-cycle influenza vaccine expressing a non-fusogenic stabilized hemagglutinin stimulates strong T-cell and neutralizing antibody immunity.

Sadler HL, Rijal P, Tan TK, Townsend ARM.J Virol. 2025 Feb 25;99(2):e0033124. doi: 10.1128/jvi.00331-24. Epub 2025 Jan 27.PMID: 39868800

Evaluation of Immunopharmacological efficacy of live Leishmania donovani overexpressing Ld $\zeta 1_{domain}$ for protection against experimental human visceral Leishmaniasis.

Bansal R, Shafi S, Garg P, Srivastava A, Garg S, Jha N, Singhal J, Peer GDG, Pandey RP, Basu S, Singh S.Int Immunopharmacol. 2025 Feb 20;151:114295. doi: 10.1016/j.intimp.2025.114295. Online ahead of print.PMID: 39983418

Pathogenic variants in chromatin-related genes: Linking immune dysregulation to neuroregression and acute neuropsychiatric disorders.

Dale RC, Mohammad S, Han VX, Nishida H, Goel H, Tangye SG, Hollway G, Tantsis E, Gill D, Patel S; Chromatin Immune-Brain Group.Dev Med Child Neurol. 2025 Feb 22. doi: 10.1111/dmcn.16276. Online ahead of print.PMID: 39985218

Pan-Variant SARS-CoV-2 Vaccines Induce Protective Immunity by Targeting Conserved Epitopes.

Shah M, Moon SU, Shin JY, Choi JH, Kim D, Woo HG.Adv Sci (Weinh). 2025 Feb 27:e2409919. doi: 10.1002/advs.202409919. Online ahead of print.PMID: 40014015

CircITSN2-miR-17-5p/20a-5p/20b-5p-*PD-L1* regulatory network is a potential molecular mechanism of *PD-L1* gene involving in immune response to IBDV.

Jiang Y, Tian Y, Han J, Wang X, Zhang R, Xu X, Ma X, Zhang W, Man C.Avian Pathol. 2025 Feb 21:1-29. doi: 10.1080/03079457.2025.2470754. Online ahead of print.PMID: 39980444

What three years of COVID-19 vaccine administration reveals about the incidence of shoulder injury related to vaccine administration (SIRVA).

Mackenzie LJ, Bousie JA, Newman P, Cunningham J, Woodward AP, Silk-Jones J, Nguyen C, Bushell MA.Vaccine. 2025 Feb 20;51:126892. doi: 10.1016/j.vaccine.2025.126892. Online ahead of print.PMID: 39983541

The Omicron variant BA.2.86.1 of SARS- CoV-2 demonstrates an altered interaction network and dynamic features to enhance the interaction with the hACE2.

Khan T, Shahab M, Alharbi AM, Waqas M, Zakirullah, Zheng G.Sci Rep. 2025 Feb 22;15(1):6482. doi: 10.1038/s41598-025-89548-2.PMID: 39987216

Sex and Age-Based Differences in Immune Responses to a Peptide Vaccine for Melanoma in Two Clinical Trials.

Vilasi SM, Slingluff CL Jr.Vaccines (Basel). 2025 Feb 16;13(2):194. doi: 10.3390/vaccines13020194.PMID: 40006740

Antibody persistence in Chinese toddlers at 1 year and 2 years after two different 4-dose schedules of a novel 13-valent pneumococcal conjugate vaccine (PCV13-TT).

Ye Q, Li H, Xie Z, Gao X, Yuan L, Chen J, Fan H, Yan X, Tao S, Yang Y, Yue J, Shi J, Lin J, Jiang Z, Hu R, Shi L, Huang Z.Vaccine. 2025 Mar 7;49:126815. doi: 10.1016/j.vaccine.2025.126815. Epub 2025 Feb 15.PMID: 39956719

Decoding Codon Usage Patterns in High-Risk Human Papillomavirus Genomes: A Comprehensive Analysis.

Ren J, Li Q, Shen W, Tan X.Curr Microbiol. 2025 Feb 22;82(4):148. doi: 10.1007/s00284-025-04131-2.PMID: 39987223

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 Feb 27;48:126742. doi: 10.1016/j.vaccine.2025.126742. Epub 2025 Jan 17.PMID: 39826430

Isolation and characterization of a protective monoclonal antibody targeting outer membrane protein (OmpA) against tuberculosis.

Li H, Ji J, Qu M, Ma X, Zuo Y, Tang M, Zeng L, Li H.Microbiol Spectr. 2025 Feb 18:e0294224. doi: 10.1128/spectrum.02942-24. Online ahead of print.PMID: 39964152

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, Banniettis N, Musey L, Bickham K, Kaminski J; V114-025 PNEU-PED-EU-1 study group.Vaccine. 2025 Feb 27;48:126628. doi: 10.1016/j.vaccine.2024.126628. Epub 2025 Jan 20.PMID: 39837003

Self-assembled Palmitic Acid-modified Thymopentin Functions as a Delivery System of Nanovaccine for Cancer Immunotherapy.

Chen D, Ye X, Xu R, Li W, Xiao Y, Niu X, Yang X, Wang M, Su Y, Zeng W, Luo F, Gao Y.Chembiochem. 2025 Feb 16;26(4):e202400857. doi: 10.1002/cbic.202400857. Epub 2025 Feb 4.PMID: 39814680

Optimal Annual COVID-19 Vaccine Boosting Dates Following Previous Booster Vaccination or Breakthrough Infection.

Townsend JP, Hassler HB, Dornburg A.Clin Infect Dis. 2025 Feb 24;80(2):316-322. doi: 10.1093/cid/ciae559.PMID: 39589144

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

Kahn R, Moiane B, Lessa FC, Massora S, Mabombo V, Chauque A, Tembe N, Mucavele H, Whitney CG, Sacoor C, Matsinhe G, Pimenta FC, da Gloria Carvalho M, Sigauque B, Verani J.Vaccine. 2025 Feb 15;47:126691. doi: 10.1016/j.vaccine.2024.126691. Epub 2025 Jan 8.PMID: 39787794

PAPreC: A Pipeline for Antigenicity Prediction Comparison Methods across Bacteria.

Martins YC, Cerqueira E Costa MO, Palumbo MC, F Do Porto D, Custódio FL, Trevizani R, Nicolás MF.ACS Omega. 2025 Feb 3;10(6):5415-5429. doi: 10.1021/acsomega.4c07147. eCollection 2025 Feb 18.PMID: 39989760

Subunit antigen delivery: emulsion and liposomal adjuvants for next-generation vaccines.

Khalifa AZ, Perrie Y, Shahiwala A.Expert Opin Drug Deliv. 2025 Feb 28. doi: 10.1080/17425247.2025.2474088. Online ahead of print.PMID: 40021342

Phylogenetic Analysis of Varicella-Zoster Virus in Cerebrospinal Fluid from Individuals with Acute Central Nervous System Infection: An Exploratory Study.

Paião HGO, da Costa AC, Ferreira NE, Honorato L, Santos BMD, de Matos MLM, Domingues RB, Senne CA, Lopes AO, de Paula VS, Witkin SS, Tozetto-Mendoza TR, Mendes-Correa MC.Viruses. 2025 Feb 19;17(2):286. doi: 10.3390/v17020286.PMID: 40007041

Association of infection-induced antibody levels with risk of subsequent SARS-COV-2 reinfection among healthcare professionals, Rhode Island, 1 March 2020-17 February 2021.

Shi J, Gabriel MG, Epperson M, Chan PA, Jones JM, Petersen LR, Briggs Hagen M, Thornburg NJ, Saydah S, Midgley CM.Microbiol Spectr. 2025 Feb 25:e0208624. doi: 10.1128/spectrum.02086-24. Online ahead of print.PMID: 39998388

Engineering human/simian rotavirus VP7 reassortants in the absence of UTR sequence information.

Valusenko-Mehrkens R, Johne R, Falkenhagen A.Appl Microbiol Biotechnol. 2025 Feb 27;109(1):52. doi: 10.1007/s00253-025-13435-z.PMID: 40014110

Development of a culturally competent training curriculum for healthcare professionals to promote vaccination and tackle vaccine hesitancy: A Delphi study.

Rousou E, Velonaki VS, Apostolara P, Dudau V, Nikolaidou E, Kardari A, López-Liria R, Rocamora-Pérez P, Charitou P, Tsitsi T, Ellina P, Kalokairinou A.Nurse Educ Today. 2025 Feb 20;148:106644. doi: 10.1016/j.nedt.2025.106644. Online ahead of print.PMID: 39987673

Association between underlying conditions, multimorbidity, and COVID-19 vaccination status of adults aged ≥80 years old in Beijing, China.

Duan Y, Suo L, Li X, Bai C, Xu M, Wu J, Xu Z, Wang Q, Jiang B, Jiang M, Cao Y, Sun Y, Yang W, Li J, Feng L.Vaccine. 2025 Feb 15;47:126677. doi: 10.1016/j.vaccine.2024.126677. Epub 2025 Jan 4.PMID: 39756213

Progress in Access and Oral Polio Vaccine Coverage Among Children Aged <5 Years in Polio Campaigns After the Political Change in Afghanistan.

Sabawoon W, Seino S, Pason BM, Momin NWS, Kanamori S, Bender C, Takemura K.J Infect Dis. 2025 Feb 20;231(2):e438-e445. doi: 10.1093/infdis/jiae129.PMID: 38597896

Robert F Kennedy cancels flu vaccination ad campaign and key vaccine policy meeting.

Dyer O.BMJ. 2025 Feb 25;388:r389. doi: 10.1136/bmj.r389.PMID: 40000068

Outbreak report of rotavirus gastroenteritis among remotely vaccinated travelers: A potential implication of booster vaccine for travelers to endemic countries.

Onaka M, Kitano T, Yoshida S.Hum Vaccin Immunother. 2025 Dec;21(1):2467475. doi: 10.1080/21645515.2025.2467475. Epub 2025 Feb 26.PMID: 40008469

Association between Perceived Ethnic Discrimination and Receipt of COVID-19 Vaccine in Pregnancy or Postpartum.

Jaeke E, Anguzu R, Greenberg R, Palatnik A.J Racial Ethn Health Disparities. 2025 Feb 20. doi: 10.1007/s40615-024-02147-1. Online ahead of print.PMID: 39979695

Research progress of metal-CpG composite nanoadjuvants in tumor immunotherapy.

Chen Y, Feng D, Cheng Y, Jiang X, Qiu L, Zhang L, Shi D, Wang J.Biomater Sci. 2025 Feb 25. doi: 10.1039/d4bm01399a. Online ahead of print.PMID: 39998438

Charting a novel path towards Ebola virus disease preparedness: Considerations for preventive vaccination.

Guttieres D, Diepvens C, Grais RF, Kiarie J, Vandaele N, Decouttere C.PLoS Med. 2025 Feb 24;22(2):e1004543. doi: 10.1371/journal.pmed.1004543. eCollection 2025 Feb.PMID: 39992920

Development of a Cascade-Targeting Oral Vaccine via Glycoprotein 2 on Intestinal Microfold Cells for Cancer Immunotherapy.

Li W, Yang X, Wang M, Hu Z, Chen S, Sui X, Chen D, Niu X, Liu J, Xiao Y, Zhou X, Chen G, Gao Y.Nano Lett. 2025 Feb 24. doi: 10.1021/acs.nanolett.4c06123. Online ahead of print.PMID: 39993319

Diversity in Naturally Acquired Immunity to Group B Streptococcus: A Comparative Study of Women From Bangladesh, Malawi, and the United Kingdom.

Khandaker S, Sharma S, Hall T, Lim S, Lehtonen J, Leung S, Ahmed ZB, Gorringe A, Saha SK, Marchant A, Le Doare K, Kadioglu A, French N.J Infect Dis. 2025 Feb 20;231(2):e456-e467. doi: 10.1093/infdis/jiae607.PMID: 39692506

Immunogenicity and safety of 1 versus 2 doses of quadrivalent-inactivated influenza vaccine in children aged 3-8 years with or without previous influenza vaccination histories.

Wen F, Liu S, Zhou L, Zhu Y, Wang W, Wei M, Xu X, Liu Y, Shuai Q, Yu J, Jing P, Li J, Zhu F.Hum Vaccin Immunother. 2025 Dec;21(1):2468074. doi: 10.1080/21645515.2025.2468074. Epub 2025 Feb 24.PMID: 39993940

Characterization of immunopathological changes in the feather pulp of CVI988-vaccinated pullets challenged with a very virulent plus Marek's disease virus strain.

Bonorino FC, Marin JFG, Fares A, Khaled N, Emmanuel D, Kulkarni RR, Gimeno I.Avian Pathol. 2025 Feb 28:1-39. doi: 10.1080/03079457.2025.2472838. Online ahead of print.PMID: 40017374

COVID-19 vaccination integration, innovations and key populations: Results from a global survey.

Mathur I, Ruisch A, Conlin M, Oyatoye I, Griffiths U, Walker DG, Suharlim C.Vaccine. 2025 Feb 25;52:126863. doi: 10.1016/j.vaccine.2025.126863. Online ahead of print.PMID: 40014981

Intention and potential determinants of COVID-19 vaccination among healthcare workers at a single university hospital in Japan, 2024-2025 pre-season.

Hagiya H, Fujita Y, Kiguchi T, Manabe Y.J Infect Chemother. 2025 Feb 15;31(3):102660. doi: 10.1016/j.jiac.2025.102660. Online ahead of print.PMID: 39956368

Glomerulonephritis with Positive Anti-Glomerular Basement Membrane Antibodies following COVID-19 Vaccine.

Fahy Y, White E, Lappin D.Ir Med J. 2025 Feb 20;118(2):27.PMID: 40008562

Uganda launches vaccine trial for Sudan virus disease.

Adepoju P.Lancet Microbe. 2025 Feb 19:101110. doi: 10.1016/j.lanmic.2025.101110. Online ahead of print.PMID: 39986291

Evaluation of the immunogenicity of elephant endotheliotropic herpesvirus glycoprotein B (EEHV-gB) subunit vaccines in a mouse model.

Sittisak T, Guntawang T, Srivorakul S, Photichai K, Muenthaisong A, Rittipornlertrak A, Kochagul V, Khamluang N, Sthitmatee N, Chuammitri P, Thitaram C, Hsu WL, Pringproa K.Acta Trop. 2025 Feb 25:107571. doi: 10.1016/j.actatropica.2025.107571. Online ahead of print.PMID: 40015422

Reconstruction of a resilient and secure community and medical care system in the coronavirus era - English translation of the Japanese opinion released from the Science Council of Japan.

Iijima K, Akishita M, Endo T, Ichikawa T, Ozaki N, Ogasawara K, Kihara Y, Kuzuya M, Komatsu H, Terasaki H, Doki Y, Noguchi H, Nishi K, Nishimura Y, Haga N, Miyachi M, Yasumura S, Wake J, Arai H.Geriatr Gerontol Int. 2025 Feb 19. doi: 10.1111/ggi.15073. Online ahead of print.PMID: 39970940

Human Papilloma Virus Circulating Cell-Free DNA Kinetics in Patients with Cervical Cancer Undergoing Definitive Chemoradiation.

Seo A, Xiao W, Gjyshi O, Yoshida-Court K, Wei P, Swanson D, Cisneros Napravnik T, Grippin A, Venkatesan AM, Jacobsen MC, Fuentes DT, Lynn E, Sammouri J, Jhingran A, Joyner M, Lin LL, Colbert LE, Gillison ML, Klopp AH.Clin Cancer Res. 2025 Feb 17;31(4):697-706. doi: 10.1158/1078-0432.CCR-24-2343.PMID: 39680029

Antibodies targeting Crimean-Congo hemorrhagic fever virus GP38 limit vascular leak and viral spread.

Pahmeier F, Monticelli SR, Feng X, Hjorth CK, Wang A, Kuehne AI, Bakken RR, Batchelor TG, Lee SE, Middlecamp M, Stuart L, Duarte-Neto AN, Abelson DM, McLellan JS, Biering SB, Herbert AS, Chandran K, Harris E.Sci Transl Med. 2025 Feb 19;17(786):eadq5928. doi: 10.1126/scitranslmed.adq5928. Epub 2025 Feb 19.PMID: 39970234

Effectiveness of Text Messaging Nudging to Increase Coverage of Influenza Vaccination Among Older Adults in Norway (InfluSMS Study): Protocol for a Randomized Controlled Trial.

Hansen BT, Klungsøyr O, Labberton AS, Sääksvuori L, Rydland KM, Ødeskaug LE, Wisløff T, Meijerink H.JMIR Res Protoc. 2025 Feb 25;14:e63938. doi: 10.2196/63938.PMID: 39998878

Immunostimulatory effects of Hsp70 fragments-modified DCs: A computational and experimental study in HIV vaccine design.

Akbari E, Milani A, Moradi Pordanjani P, Seyedinkhorasani M, Agi E, Bolhassani A.Microbes Infect. 2025 Feb 15:105480. doi: 10.1016/j.micinf.2025.105480. Online ahead of print.PMID: 39956447

Correction to: Natural Boosting and the Immunogenicity of the XBB.1.5 Monovalent Vaccine in the Coronavirus Disease 2019 Endemic Era: A Longitudinal Observational Study.

[No authors listed]J Infect Dis. 2025 Feb 17:jiaf073. doi: 10.1093/infdis/jiaf073. Online ahead of print.PMID: 39960372

An Injectable Chitosan Hydrochloride-Sodium Alginate Hydrogel Adjuvant Capable of Eliciting Potent Humoral and Cellular Immunity.

Lai Y, Wang S, Shen X, Qi R, Liu T, Du F, YuHe Y, Miao B, Zhai J, Zhang Y, Liu S, Chen Z.ACS Appl Mater Interfaces. 2025 Feb 19. doi: 10.1021/acsami.4c15189. Online ahead of print.PMID: 39970265

Nanoscale Biodegradable Printing for Designed Tuneability of Vaccine Delivery Kinetics.

Peeler DJ, Sun R, Kütahya C, Peschke P, Zhou K, Brachi G, Yeow J, Rifaie-Graham O, Wojciechowski JP, Fernandez Debets TFF, LaLone V, Song X, Polra K, McKay PF, Tregoning JS, Shattock RJ, Stevens MM.Adv Mater. 2025 Feb 28:e2417290. doi: 10.1002/adma.202417290. Online ahead of print.PMID: 40018867

Interventions in primary care to increase uptake of adult vaccines: a systematic review.

Wheeler SG, Beste LA, Overland MK, Wander PL.J Public Health (Oxf). 2025 Feb 20:fdaf008. doi: 10.1093/pubmed/fdaf008. Online ahead of print.PMID: 39972555

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

American Society for Microbiology.Infect Immun. 2025 Feb 18;93(2):e0054424. doi: 10.1128/iai.00544-24. Epub 2025 Jan 13.PMID: 39804089

Cross-neutralizing activity of the chikungunya vaccine VLA1553 against three prevalent chikungunya lineages.

Kosulin K, Brasel TL, Smith J, Torres M, Bitzer A, Dubischar K, Buerger V, Mader R, Weaver SC, Beasley DWC, Hochreiter R.Emerg Microbes Infect. 2025 Feb 25:2469653. doi: 10.1080/22221751.2025.2469653. Online ahead of print.PMID: 39998495

The response of the benchmark healthcare index of India to COVID-19 pandemic: a return volatility approach.

Bangur P.Int J Health Care Qual Assur. 2025 Feb 17;38(1):39-50. doi: 10.1108/IJHCQA-01-2023-0005.PMID: 39704011

Duration of the antibody response following intradermal administration of a quarter-dose oil adjuvant foot-and-mouth disease vaccine in sheep.

Türkoğlu T, Parlak Ü, Tuncer-Göktuna P, Aras-Uzun E, İnel-Turgut S, Asar E, Kürkçü A, Çokçalışkan C.Vet Res Commun. 2025 Feb 26;49(2):119. doi: 10.1007/s11259-025-10686-z.PMID: 40009272

Assessing the effectiveness of the varicella vaccine in primary and secondary school students in Qingdao, China: A matched case-control study.

Zhang Z, Ren Z, Hu P, Li X, Liu S, Wang P, Yang F.Infect Dis Now. 2025 Feb 27:105049. doi: 10.1016/j.idnow.2025.105049. Online ahead of print.PMID: 40023501

Human papillomavirus vaccination uptake among men who have sex with men living with HIV.

Moran C, Garcia-Iglesias J, Kerr C.Sex Transm Infect. 2025 Feb 27:sextrans-2024-056361. doi: 10.1136/sextrans-2024-056361. Online ahead of print.PMID: 40015961

Uptake, scale up, integration of caccine, immunization, and health supply chain management technologies and innovation into policy: experience from Tanzania.

Mollel HA, Mushi LD, Nkwera RV.BMC Health Serv Res. 2025 Feb 25;25(1):306. doi: 10.1186/s12913-025-12383-8.PMID: 40001103

T-cell activation of Toxoplasma gondii positive donors by maltodextrin nanoparticles formulated with killed Toxoplasma gondii.

Vargas-Montes M, Fasquelle F, Cardona NI, Gómez-Marín JE, Betbeder D.BMC Infect Dis. 2025 Feb 26;25(1):279. doi: 10.1186/s12879-025-10656-5.PMID: 40011842

High Risk, High Reward: By selecting Tsg101, a protein that sorts the trash, as our personal ESCRT, both HIV and I were able to bud.

Carter CA.J Mol Biol. 2025 Feb 28:169053. doi: 10.1016/j.jmb.2025.169053. Online ahead of print.PMID: 40024433

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

Naghibosadat 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 Feb 25;99(2):e0139024. doi: 10.1128/jvi.01390-24. Epub 2025 Jan 16.PMID: 39817773

Fostering Global Research Collaborations: An Update on Duke-NUS Medical School, the Duke University and National University of Singapore Partnership.

Yeo MM, Casey PJ, Williams RS, Vogel S, James ML.Acad Med. 2025 Feb 26. doi: 10.1097/ACM.0000000000006006. Online ahead of print.PMID: 40009795

Antibodies with specificity to glycan motifs that decorate OMV cargo proteins.

Kim HY, Rothenberger CM, Davey ME, Yu M.mSphere. 2025 Feb 26:e0090724. doi: 10.1128/msphere.00907-24. Online ahead of print.PMID: 40008882

Genetic polymorphisms of Plasmodium vivax transmission-blocking vaccine candidates Pvs48/45 and Pvs47 in Thailand.

Kuesap J, Suphakhonchuwong N, Eksonthi B, Huaihongthong S.Malar J. 2025 Feb 27;24(1):63. doi: 10.1186/s12936-025-05305-w.PMID: 40016697

From Adhesion to Invasion: The Multifaceted Roles of *Mycobacterium tuberculosis* Lipoproteins.

Li M, Zhang Q, Wang Y, Xie J, Liang T, Liu Z, Xiang X, Zhou Q, Gong Z.J Drug Target. 2025 Feb 24:1-18. doi: 10.1080/1061186X.2025.2472208. Online ahead of print.PMID: 39993287

Safety, Tolerability, and Immunogenicity of the Pneumococcal Vaccines PPSV23 or PCV15 Co-Administered with a Booster Dose of mRNA-1273 SARS-CoV-2 Vaccine in Healthy Adults 50 Years of Age.

Omole T, Pelayo E, Weinberg AS, Chalkias S, Endale Z, Tamms G, Sterling TM, Good L, Shekar T, Johnson M, Banniettis N, Buchwald UK, Esteves-Jaramillo A.Vaccines (Basel). 2025 Feb 15;13(2):192. doi: 10.3390/vaccines13020192.PMID: 40006738

Perspectives of primary care nurses on the organization of the COVID-19 vaccine rollout: a qualitative study.

Lyons R, Mathews M, Hedden L, Lukewich J, Marshall EG, Isenor JE, Wickett J, Dufour E, Meredith L, Ryan D, Spencer S, Vaughan C, Cusack C.BMC Prim Care. 2025 Feb 25;26(1):53. doi: 10.1186/s12875-025-02747-8.PMID: 40001003

Preparation and epitope identification of a novel monoclonal antibody against 3A protein of Senecavirus A.

Ling XH, Zhang B, Ren HJ, Li MY, Liu SD, Luo MR, Guo KW, Han SC, He WR, Zhang GP, Zhang YH, Wan B.Vet Microbiol. 2025 Feb 25;303:110442. doi: 10.1016/j.vetmic.2025.110442. Online ahead of print.PMID: 40023895

Vaccine Development T-cell (MHC-I) Epitopes Identification Against the Indian HCV Genotype: An Approach Based on Immunoinformatic.

Iyyanar S, Ravi SN.Mol Biotechnol. 2025 Feb 24. doi: 10.1007/s12033-025-01398-5. Online ahead of print.PMID: 39994132

Synergistic Effects of Polycationic and Polyfluorinated Functionalities for Efficient Intracellular Protein Delivery.

Liu B, Gong S, Qiu J, Ejaz W, Thayumanavan S.Biomacromolecules. 2025 Feb 28. doi: 10.1021/acs.biomac.4c01795. Online ahead of print.PMID: 40020198

Similar risk of hospitalization and lethality from COVID-19 in transplant recipients and waitlisted patients: A comparative analysis.

Fernández Chávez AC, Ordoñez León GY, Álvarez León EE, Moreno Núñez P, Porto Tomás J, Aranaz Andrés JM.Enferm Infecc Microbiol Clin (Engl Ed). 2025 Feb 28:S2529-993X(25)00046-2. doi: 10.1016/j.eimce.2025.02.005. Online ahead of print.PMID: 40023674

Francisco Oller y Ferrer (1758-1831). The surgeon who performed the first smallpox vaccination in a Hispanic American territory.

Pérez-Pérez A, Vallejo JR.Vaccine. 2025 Feb 24;51:126875. doi: 10.1016/j.vaccine.2025.126875. Online ahead of print.PMID: 39999681

Pediatric Post-Vaccine Aluminum Granuloma: Morin Stain as a Diagnostic Aid.

Chang JR, Wong A, Diaz-Perez JA, Cai C, Mochel MC.J Cutan Pathol. 2025 Feb 24. doi: 10.1111/cup.14797. Online ahead of print.PMID: 39994837

Quantitative and qualitative evaluation of anti-pneumococcal specific antibodies in children with recurrent acute otitis media.

Kono M, Kuroda E, Iyo T, Umar NK, Hirayama A, Takeda S, Murakami D, Hamaguchi S, Hotomi M.Acta Otolaryngol. 2025 Feb 27:1-8. doi: 10.1080/00016489.2025.2468397. Online ahead of print.PMID: 40013755

Ultra-high performance liquid chromatography with tandem mass spectrometry (UPLC-MS/MS) for simultaneous estimation of residual glyphosate and its metabolite (amino methyl phosphonic acid - AMPA) in various vaccines.

Shinde B, Patil D, Kadam N, Gautam M, Banerjee K, Gairola S, Doshi P.Biologicals. 2025 Feb 24;90:101822. doi: 10.1016/j.biologicals.2025.101822. Online ahead of print.PMID: 40007352

Influenza and COVID-19 vaccination in Canadian blood donors: A comparison across pre- and post-pandemic periods.

O'Brien SF, Osmond L, Goldman M, Drews SJ.Vox Sang. 2025 Feb 27. doi: 10.1111/vox.70006. Online ahead of print.PMID: 40015315

Phase II Study of Responses to Vaccination in Pediatric Cancer Survivors Following Standard-of-Care Non-HSCT Chemotherapy.

Junak S, Steinherz PG, Trippett T, Ruggiero J, Zakak N, Khakoo Y, Shukla N, Dunkel IJ, Kernan NA.Pediatr Blood Cancer. 2025 Feb 25:e31611. doi: 10.1002/pbc.31611. Online ahead of print.PMID: 40000399

Advancing personalized immunotherapy for melanoma: Integrating immunoinformatics in multi-epitope vaccine development, neoantigen identification via NGS, and immune simulation evaluation.

Kamali MJ, Salehi M, Fath MK.Comput Biol Med. 2025 Feb 25;188:109885. doi: 10.1016/j.compbiomed.2025.109885. Online ahead of print.PMID: 40010174

Differences in extraction methods influence the physicochemical properties, antiradical, and anti-inflammatory effects of porphyran from Pyropia dentata.

Hong SJ, Lim HJ, Park BR, Lee HN, Kim YM.Int J Biol Macromol. 2025 Feb 20;306(Pt 1):141258. doi: 10.1016/j.ijbiomac.2025.141258. Online ahead of print.PMID: 39986519

Advances in the Epidemiology, Pathogenesis, Diagnostic Methods, and Vaccine Development of Dengue Fever: A Comprehensive Review.

Dong B, Feng S, Feng X.Viral Immunol. 2025 Feb 25. doi: 10.1089/vim.2024.0087. Online ahead of print.PMID: 39995247

HIF regulates multiple translated endogenous retroviruses: Implications for cancer immunotherapy.

Jiang Q, Braun DA, Clauser KR, Ramesh V, Shirole NH, Duke-Cohan JE, Nabilsi N, Kramer NJ, Forman C, Lippincott IE, Klaeger S, Phulphagar KM, Chea V, Kim N, Vanasse AP, Saad E, Parsons T, Carr-Reynolds M, Carulli I, Pinjusic K, Jiang Y, Li R, Syamala S, Rachimi S, Verzani EK, Stevens JD, Lane WJ, Camp SY, Meli K, Pappalardi MB, Herbert ZT, Qiu X, Cejas P, Long HW, Shukla SA, Van Allen EM, Choueiri TK, Churchman LS, Abelin JG, Gurer C, MacBeath G, Childs RW, Carr SA, Keskin DB, Wu CJ, Kaelin WG Jr.Cell. 2025 Feb 25:S0092-8674(25)00156-4. doi: 10.1016/j.cell.2025.01.046. Online ahead of print.PMID: 40023154

Development of a scalable semi-synthetic medium for high-yield diphtheria toxin production using a definitive screening design an innovative statistical optimization method.

Chawla PR, Addepally U.Prep Biochem Biotechnol. 2025 Feb 21:1-8. doi: 10.1080/10826068.2025.2465991. Online ahead of print.PMID: 39981911

Utilizing NF-kappaB Signaling in Porcine Epithelial Cells to Identify a Plant-Based Additive for the Development of a Porcine Epidemic Diarrhea Virus Vaccine.

Hoa NT, Afzal H, Doan TD, Murtaza A, Yen CH, Chung YC.Vet Sci. 2025 Feb 18;12(2):181. doi: 10.3390/vetsci12020181.PMID: 40005942

Parental status and gender are associated with differences in Tdap vaccination rates among United States adults.

Griffin LB, Polnaszek BE, Shin J, Clark MA, Lewkowitz AK, Amanullah S, Gjelsvik A.Vaccine. 2025 Feb 24;52:126901. doi: 10.1016/j.vaccine.2025.126901. Online ahead of print.PMID: 39999541

Generation of frameshift-mutated TGFbetaR2-specific T cells in healthy subjects following administration with cancer vaccine candidate FMPV-1/GM-CSF in a phase 1 study.

Inderberg EM, Singh N, Miller R, Arbe-Barnes S, Eriksen HK, Lversen B, Juul HV, Eriksen JA, Handeland KR.Cancer Immunol Immunother. 2025 Feb 25;74(4):115. doi: 10.1007/s00262-025-03969-6.PMID: 39998682

Utility of edible plant-derived exosome-like nanovesicles as a novel delivery platform for vaccine antigen delivery.

Kim HJ, Lee SH, Park YS, Seo DW, Seo KW, Kim DK, Jang YH, Lim JH, Cho YE.Vaccine. 2025 Feb 26;52:126902. doi: 10.1016/j.vaccine.2025.126902. Online ahead of print.PMID: 40014983

Brucella suis S2 strain inhibits IRE1/caspase-12/caspase-3 pathway-mediated apoptosis of microglia HMC3 by affecting the ubiquitination of CALR.

Wang Z, Wang Y, Yang S, Wang Z, Yang Q.mSphere. 2025 Feb 28:e0094124. doi: 10.1128/msphere.00941-24. Online ahead of print.PMID: 40019270

Pre-existing IgG antibodies to HCoVs NL63 and OC43 Spike increased during the pandemic and after COVID-19 vaccination.

Hasan Z, Masood KI, Veldhoen M, Qaiser S, Alenquer M, Akhtar M, Balouch S, Iqbal J, Wassan Y, Hussain S, Feroz K, Muhammad S, Habib A, Kanji A, Khan E, Mian AA, Hussain R, Amorim MJ, Bhutta ZA.Heliyon. 2025 Jan 22;11(3):e42171. doi: 10.1016/j.heliyon.2025.e42171. eCollection 2025 Feb 15.PMID: 39916832

Application of methodological strategies to address unmeasured confounding in real-world vaccine safety and effectiveness study: a systematic review.

Guo J, Wang T, Cao H, Ma Q, Tang Y, Li T, Wang L, Xu Y, Zhan S.J Clin Epidemiol. 2025 Feb 25:111737. doi: 10.1016/j.jclinepi.2025.111737. Online ahead of print.PMID: 40015486

Danish parents' vaccination readiness is associated with their children's officially registered vaccination history.

Santana AP, Søborg B, Jacobsen SU, Zettler I, Böhm R.Vaccine. 2025 Feb 15;47:126693. doi: 10.1016/j.vaccine.2024.126693. Epub 2025 Jan 16.PMID: 39823752

Association of herpes zoster vaccination and cardiovascular risk in patients with diabetes: long-term insights from a retrospective cohort study.

Kornelius E, Lo SC, Huang CN, Wang CC, Wang YH, Yang YS.BMJ Open. 2025 Feb 18;15(2):e090428. doi: 10.1136/bmjopen-2024-090428.PMID: 39965942

Diminished returns of maternal education on children's vaccination status for indigenous women in Peru.

Al-Kassab-Córdova A, Mezones-Holguin E, Kaufman JS.Soc Sci Med. 2025 Feb 20;370:117862. doi: 10.1016/j.socscimed.2025.117862. Online ahead of print.PMID: 40015143

High-risk human papillomavirus prevalence and serostatus in a cohort of cisgender women and people with a cervix living with perinatally acquired HIV.

Henderson M, Lyons D, Beddows S, Cowen M, Panwar K, Wright C, Ujetz J, Crook E, Patel H, Smith D, Foster C, Fidler S, Elliott T.HIV Med. 2025 Feb 25. doi: 10.1111/hiv.70001. Online ahead of print.PMID: 39999769

Implementing SARS-CoV-2 routine surveillance in antenatal care in Zambia, 2021-2022: best practices and lessons learned.

Tembo T, Heilmann E, Kabamba BM, Fwoloshi S, Kalenga K, Chilambe F, Siwinga M, Rutagwera MR, Musunse M, Kangale C, Yingst S, Yadav R, Savory T, Gutman JR, Sikazwe I, Mulenga LB, Moore CB, Hines JZ.BMC Public Health. 2025 Feb 28;25(1):813. doi: 10.1186/s12889-025-21918-x.PMID: 40021963

Evaluating the safety profile of the CoronaVac in adult and older adult populations: A phase IV prospective observational study in Brazil.

Infante V, Cintra MACT, Fernandes EG, Loch AP, Ragiotto L, Braga PE, Salomão MDG, Lucchesi MBB, de Oliveira MMM, Gattás VL, da Silva AS, Boas PJFV, Lopes MH, Moreira J, Boulos FC; CFV-01-IB study group.PLOS Glob Public Health. 2025 Feb 25;5(2):e0004069. doi: 10.1371/journal.pgph.0004069. eCollection 2025.PMID: 39999100

The African swine fever virus gene MGF_360-4L inhibits interferon signaling by recruiting mitochondrial selective autophagy receptor SQSTM1 degrading MDA5 antagonizing innate immune responses.

Sun H, Yang J, Zhang Z, Wu M, Tian Z, Liu Y, Zhang X, Zhong J, Yang S, Chen Y, Luo J, Guan G, Yin H, Niu Q.mBio. 2025 Feb 25:e0267724. doi: 10.1128/mbio.02677-24. Online ahead of print.PMID: 39998221

Recurrent respiratory papillomatosis: role of bevacizumab and HPV vaccination. A literature review with case presentations.

Sporeni S, Rifaldi F, Lanzetta I, Imarisio I, Montagna B, Serra F, Agustoni F, Pedrazzoli P, Benazzo M, Bertino G.Radiol Oncol. 2025 Feb 27;59(1):23-30. doi: 10.2478/raon-2025-0010. eCollection 2025 Mar 1.PMID: 40014785

Legal residency status and its relationship with health indicators among Syrian refugees in Lebanon: a nested cross-sectional study.

Ragi ME, Ghattas H, Abi Zeid B, Shamas H, El Salibi NJ, Abdulrahim S, DeJong J, McCall SJ, Caep Study Group T.BMJ Glob Health. 2025 Feb 20;10(2):e017767. doi: 10.1136/bmjgh-2024-017767.PMID: 39979019

Major membrane protein of Mycobacterium avium subp. paratuberculosis activates immune and autophagic pathways in bovine monocyte-derived macrophages.

Kim JH, Lee D, Hall K, Jo H, Bannantine JP, Davis WC, de Souza C.Vet Immunol Immunopathol. 2025 Feb 21;282:110901. doi: 10.1016/j.vetimm.2025.110901. Online ahead of print.PMID: 40015107

Age-based host response to Turkey arthritis reovirus in commercial Turkeys in the presence of maternally derived antibodies.

Khatiwada S, Ngunjiri J, Boley PA, Yadav KK, Ghorbani A, Abundo M, Lee CM, Poelstra JW, Lee CW, Gharaibeh S, Rajashekara G, Kenney SP.BMC Vet Res. 2025 Feb 25;21(1):96. doi: 10.1186/s12917-025-04525-1.PMID: 39994714

Unique T cell signatures associated with reduced Chlamydia trachomatis reinfection in a highly exposed cohort.

Yount KS, Chen CJ, Kollipara A, Liu C, Mokashi NV, Zheng X, Bagwell CB, Poston TB, Wiesenfeld HC, Hillier SL, O'Connell CM, Stanley N, Darville T.JCI Insight. 2025 Feb 27:e189388. doi: 10.1172/jci.insight.189388. Online ahead of print.PMID: 40014387

Passage-attenuated Powassan virus LI9P protects mice from lethal LI9 challenge and links envelope residue D308 to neurovirulence.

Himmler GE, Mladinich MC, Conde JN, Gorbunova EE, Lindner MR, Kim HK, Mackow ER.mBio. 2025 Feb 25:e0006525. doi: 10.1128/mbio.00065-25. Online ahead of print.PMID: 39998203

Trust in official information as a key predictor of COVID-19 vaccine acceptance: evidence from a Czech longitudinal survey study.

Grygarová D, Kožený J, Tišanská L, Havlík M, Horáček J.BMC Public Health. 2025 Feb 25;25(1):770. doi: 10.1186/s12889-025-21988-x.PMID: 40001023

In silico comparative analysis of genetic diversity and natural selection of Plasmodium knowlesi and Plasmodium vivax etramp11.2 gene.

Saif A, Baruah P, Wazid SW, Panigrahi A, Han JH, Ahmed MA, Quan FS.Infect Genet Evol. 2025 Feb 27:105733. doi: 10.1016/j.meegid.2025.105733. Online ahead of print.PMID: 40023377

Evaluation of the immunogenic potential of recombinant Mycobacterium bovis BCG expressing the ASP-2 and TC24 proteins from Trypanosoma cruzi.

Senna Dos Santos G, Fonseca BDR, Sousa FSS, Seixas FK, Borsuk S.Acta Trop. 2025 Feb 24:107569. doi: 10.1016/j.actatropica.2025.107569. Online ahead of print.PMID: 40010681

A phase 3 clinical trial on the immunogenicity and safety of booster vaccination after Zagreb or Essen regimens.

Lv HK, Chen X, Xing B, Hu XS, Zhang XP, Shen YG, Wang Y, Liu MM, Chen YP, Liang ZZ, Mao Y.Sci Rep. 2025 Feb 27;15(1):7079. doi: 10.1038/s41598-025-88361-1.PMID: 40016280

DNA nanovaccines derived from ferritin-modified glycogens for targeted delivery to immature dendritic cells and for promotion of Th1 cell differentiation.

Wu J, Liang J, Li S, Lu J, Zhou J, Gao M, Zhang Y, Chen J.Acta Biomater. 2025 Feb 27:S1742-7061(25)00153-9. doi: 10.1016/j.actbio.2025.02.057. Online ahead of print.PMID: 40023466

High correlation between detection of dengue IgG from dried blood spots and serum using an indirect IgG ELISA assay: A validation study in Fortaleza, Brazil.

Zahreddine M, Parra B, Pierce L, de Oliveira DF, Carabali M, Charland K, Abreu K, Ridde V, Lima DM, Zinszer K.PLoS Negl Trop Dis. 2025 Feb 28;19(2):e0012880. doi: 10.1371/journal.pntd.0012880. Online ahead of print.PMID: 40019871

A strain-transcending anti-AMA1 human monoclonal antibody neutralizes malaria parasites independent of direct RON2L receptor blockade.

Patel PN, Diouf A, Dickey TH, Tang WK, Hopp CS, Traore B, Long CA, Miura K, Crompton PD, Tolia NH.Cell Rep Med. 2025 Feb 20:101985. doi: 10.1016/j.xcrm.2025.101985. Online ahead of print.PMID: 40020675

Development of antiviral drugs for COVID-19 in 2025: unmet needs and future challenges.

Focosi D, Sullivan DJ, Franchini M.Expert Rev Anti Infect Ther. 2025 Feb 25. doi: 10.1080/14787210.2025.2473044. Online ahead of print.PMID: 40007187

[Varicella zoster infection as a risk factor for dementia: a scoping review].

Mori Y, Ono Y, Shimohata T.Rinsho Shinkeigaku. 2025 Feb 22. doi: 10.5692/clinicalneurol.cn-002047. Online ahead of print.PMID: 39993773

A recombinant protein vaccine induces protective immunity against SARS-CoV-2 JN.1 and XBB-lineage subvariants.

Yang J, Hong W, Shi H, Wang Z, He C, Lei H, Yan H, Alu A, Ao D, Chen Z, Zhou Y, Yang H, Yang Y, Yu W, Tang C, Wang J, Li B, Huang Q, Hu H, Cheng W, Dong H, Lei J, Chen L, Zhou X, Yang L, Wang W, Shen G, Yang J, Zhao Z, Song X, Sun Q, Wang Y, Lu S, Li J, Lu G, Li W, Wei Y, Wei X.Signal Transduct Target Ther. 2025 Feb 26;10(1):58. doi: 10.1038/s41392-025-02154-6.PMID: 40000611

Need for closure moderates the relationship between social circle's and own influenza vaccination behavior in a two-wave survey of U.S. adults.

Dimoff JD, Del Pesco A, DiLuzio GM, Perkins D, Keefe A, Folio FN.Health Psychol. 2025 Feb 17. doi: 10.1037/hea0001467. Online ahead of print.PMID: 39964434

Healthcare at Risk: Why Do Sudan's Healthcare Workers Face Gaps in Hepatitis B Virus Protection?

Abdelrahim MA, Abdalla M, Yousif E, Abdallah R, Elsayed AA.Cureus. 2025 Feb 27;17(2):e79745. doi: 10.7759/cureus.79745. eCollection 2025 Feb.PMID: 40017581

[Pneumococcal vaccination in people aged 60 and over: relationships between vaccination intention, knowledge, and psychological reasons for the vaccination decision].

Nordmann H, Uthoff SAK, Zinkevich A, Iwen J, Biedermann M, Ansmann L.Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz. 2025 Feb 27. doi: 10.1007/s00103-025-04012-w. Online ahead of print.PMID: 40014088

SARS-CoV-2 infection primes cross-protective respiratory IgA in a MyD88- and MAVS-dependent manner.

Kobayashi M, Kobayashi N, Deguchi K, Omori S, Ichinohe T.NPJ Vaccines. 2025 Feb 27;10(1):40. doi: 10.1038/s41541-025-01095-z.PMID: 40016252

Corrigendum to "The potential impact of increased recombinant zoster vaccine coverage on the burden of herpes zoster among adults aged 50-59 years" [Vaccine 41 (37) (23 August 2023) 5360-5367].

Singer D, Salem A, Stempniewicz N, Ma S, Poston S, Curran D.Vaccine. 2025 Feb 26;52:126805. doi: 10.1016/j.vaccine.2025.126805. Online ahead of print.PMID: 40014980

Secondary structure of the SARS-CoV-2 genome is predictive of nucleotide substitution frequency.

Hensel Z.Elife. 2025 Feb 28;13:RP98102. doi: 10.7554/eLife.98102.PMID: 40019136

Liver stage P. falciparum antigens highly targeted by CD4+ T cells in malaria-exposed Ugandan children.

Acevedo GR, Samiee SS, Ilala M, Levan J, Olive ME, Hunter RD, Prahl M, Rajalingam R, Rek J, Dorsey G, Feeney ME.PLoS Pathog. 2025 Feb 24;21(2):e1012943. doi: 10.1371/journal.ppat.1012943. Online ahead of print.PMID: 39993000

Folding of mRNA-DNA Origami for Controlled Translation and Viral Vector Packaging.

Seitz I, Saarinen S, Wierzchowiecka J, Kumpula EP, Shen B, Cornelissen JJLM, Linko V, Huiskonen JT, Kostiainen MA.Adv Mater. 2025 Feb 27:e2417642. doi: 10.1002/adma.202417642. Online ahead of print.PMID: 40012449

Evaluation of a hydrogel platform for encapsulated multivalent Vibrio antigen delivery to enhance immune responses and disease protection against vibriosis in Asian seabass (Lates calcarifer).

Uchuwittayakul A, Thompson KD, Thangsunan P, Phaksopa J, Buncharoen W, Saenphet K, Kumwan B, Meachasompop P, Saenphet S, Wiratama N, Mahatnirunkul T, Kantha P, Suree N, Thangsunan P, Srisapoome P.Fish Shellfish Immunol. 2025 Feb 25;160:110230. doi: 10.1016/j.fsi.2025.110230. Online ahead of print.PMID: 40015493

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 Feb 27;48:126732. doi: 10.1016/j.vaccine.2025.126732. Epub 2025 Jan 22.PMID: 39848128

Long-Term Protection in Atlantic Salmon (*Salmo salar*) to Pancreas Disease (PD) Can Be Achieved Through Immunization with Genetically Modified, Live Attenuated Salmonid Alphavirus 3.

Braaen S, Wessel Ø, Bjørgen H, Rimstad E.Vaccines (Basel). 2025 Feb 15;13(2):190. doi: 10.3390/vaccines13020190.PMID: 40006736

Corrigendum to "Correlation between systemic allergen desensitisation and long-term asthma protection in mice following intravenous administration of the live tuberculosis vaccine MTBVAC" [EBioMedicine 107(2024)105272] DOI: https://doi.org/10.1016/j.ebiom.2024.105272.

Calvo S, Rodrigo-Muñoz JM, Tarancón R, Uranga S, Martín C, Pozo VD, Aguiló N.EBioMedicine. 2025 Feb 26;113:105637. doi: 10.1016/j.ebiom.2025.105637. Online ahead of print.PMID: 40015173

Effects of oral immunization with Bacillus subtilis displaying Vibrio harveyi FlgE protein on the intestinal structure and gut microbiota of grouper.

Hou X, Li W, Yang S, Huang Y, Jian J, Cai S.Fish Shellfish Immunol. 2025 Feb 24;160:110234. doi: 10.1016/j.fsi.2025.110234. Online ahead of print.PMID: 40010618

Corrigendum to "The effect of Helfer skin tap technique on hepatitis B vaccine intramuscular injection pain in neonates: A randomized controlled trial" [EXPLORE, 19 (2023) 238-242].

Güven ŞD, Çalbayram NÇ.Explore (NY). 2025 Feb 18;21(2):103135. doi: 10.1016/j.explore.2025.103135. Online ahead of print.PMID: 39978131

Host-specific targets of Histomonas meleagridis antigens revealed by immunoprecipitation.

de Jesus Ramires M, Hummel K, Hatfaludi T, Hess M, Bilic I.Sci Rep. 2025 Feb 17;15(1):5800. doi: 10.1038/s41598-025-88855-y.PMID: 39962091

Estimating per-infection cost and burden for dengue and Zika as a function of antibody-dependent enhancement.

Kribs CM.PLoS Negl Trop Dis. 2025 Feb 27;19(2):e0012876. doi: 10.1371/journal.pntd.0012876. Online ahead of print.PMID: 40014622

Mastitis-related Staphylococcus aureus-derived extracellular vesicles induce a pro-inflammatory response in bovine monocyte-derived macrophages.

Saenz-de-Juano MD, Silvestrelli G, Buri S, Zinsli LV, Schmelcher M, Ulbrich SE.Sci Rep. 2025 Feb 19;15(1):6059. doi: 10.1038/s41598-025-90466-6.PMID: 39972051

Generating Self-Adjuvated Nanofiber Vaccines by Coating Bacterial Flagella with Antigens.

Fu Z, Lin S, Chen H, Guo H, Li J, Chen Y, Lu Y, Liu J, Huang W, Pang Y.Adv Mater. 2025 Feb 21:e2415887. doi: 10.1002/adma.202415887. Online ahead of print.PMID: 39981905

Properties of Monocyte-Derived Dendritic Cells Loaded With Lysates of Cancer Cells Exposed to Cytotoxic Peptides.

Khranovska N, Skachkova O, Gorbach O, Semchuk I, Shymon D, Ripa O, Lutsii O, Shvets Y, Horbatok K, Afonin S, Komarov I.Exp Oncol. 2025 Feb 20;46(4):375-386. doi: 10.15407/exp-oncology.2024.04.375.PMID: 39985347

Enhanced mucosal immune response through nanoparticle delivery system based on chitosan-catechol and a recombinant antigen targeted towards M cells.

Wan H, Yang Y, Tu Z, Tang M, Jing B, Feng Y, Xie J, Gao H, Song X, Zhao X.Int J Biol Macromol. 2025 Feb 24:141345. doi: 10.1016/j.ijbiomac.2025.141345. Online ahead of print.PMID: 40010449

Phenotypes of porcine blood CD8β T cells and their capacity for IFN gamma production in the context of PRV vaccination.

Álvarez B, Revilla C, Ezquerra Á, Domínguez J.Dev Comp Immunol. 2025 Feb 21;165:105347. doi: 10.1016/j.dci.2025.105347. Online ahead of print.PMID: 39988100

Interventions for Long COVID: A Narrative Review.

Ivlev I, Wagner J, Phillips T, Treadwell JR.J Gen Intern Med. 2025 Feb 21. doi: 10.1007/s11606-024-09254-z. Online ahead of print.PMID: 39984803

Rapid surge of reassortant A(H1N1) influenza viruses in Danish swine and their zoonotic potential.

Ryt-Hansen P, George S, Hjulsager CK, Trebbien R, Krog JS, Ciucani MM, Langerhuus SN, DeBeauchamp J, Crumpton JC, Hibler T, Webby RJ, Larsen LE.Emerg Microbes Infect. 2025 Dec;14(1):2466686. doi: 10.1080/22221751.2025.2466686. Epub 2025 Feb 21.PMID: 39945729

Clinical disease in British sheep infected with an emerging strain of bluetongue virus serotype 3.

Newbrook K, Obishakin E, Jones LA, Waters R, Ashby M, Batten C, Sanders C.Vet Rec. 2025 Feb 15;196(4):e4910. doi: 10.1002/vetr.4910. Epub 2024 Dec 16.PMID: 39679689

Vaccination against Furunculosis and Vibriosis as a model of immunization induces transcript cellular stress response in rainbow trout mucosal surfaces.

Khansari AR, Wallbom N, Sundh H, Sandblom E, Tort L, Jönsson E.Fish Shellfish Immunol. 2025 Feb 24:110231. doi: 10.1016/j.fsi.2025.110231. Online ahead of print.PMID: 40010617

Between intention and action: the paradoxes of female vaccination.

Santos-Requejo L, Torres-González OM.Arch Public Health. 2025 Feb 25;83(1):53. doi: 10.1186/s13690-025-01542-2.PMID: 40001196

Sensitive and modular amplicon sequencing of *Plasmodium falciparum* diversity and resistance for research and public health.

Aranda-Díaz A, Vickers EN, Murie K, Palmer B, Hathaway N, Gerlovina I, Boene S, Garcia-Ulloa M, Cisteró P, Katairo T, Semakuba FD, Nsengimaana B, Gwarinda H, García-Fernández C, Louie W, Esayas E, Silva CD, Datta D, Kiyaga S, Wiringilimaana I, Fekele SM, Bennett A, Smith JL, Gadisa E, Parr JB, Conrad M, Raman J, Tukwasibwe S, Ssewanyana I, Rovira-Vallbona E, Tato CM, Briggs J, Mayor A, Greenhouse B.bioRxiv [Preprint]. 2025 Feb 19:2024.08.22.609145. doi: 10.1101/2024.08.22.609145.PMID: 39229023

Nanoparticles displaying fHbp elicit an enhanced antibody response against meningococcal B isolates compared to low valency fHbp antigens.

McKechnie JL, Kepl E, Louth J, Sun CJ, Lucidarme J, Weatherly SM, Braun R, Feldhaus A, Borrow R, Holtzman D.Vaccine. 2025 Feb 20;51:126885. doi: 10.1016/j.vaccine.2025.126885. Online ahead of print.PMID: 39983538

Rabies exposure in international travellers: Experience from a single travel clinic in Paris, France, 2018-2022.

Hochedez P, Jidar K, Taieb F, Itani O, Benabdelmoumen G, Parize P, Bourhy H, Consigny PH, Poujol P.Travel Med Infect Dis. 2025 Feb 22:102821. doi: 10.1016/j.tmaid.2025.102821. Online ahead of print.PMID: 39993516

Dendritic cell immunotherapy has its antitumor action improved by the LPS in the maturation process.

Lopes AMM, Vieira JF, da Silva SFM, Murta EFC, Michelin MA.Clin Transl Oncol. 2025 Feb 20. doi: 10.1007/s12094-025-03858-5. Online ahead of print.PMID: 39979657

Impairment of Innate Immunity and Depletion of Vaccine-Induced Memory B and T Cells in the Absence of the Spleen.

Bordoni V, Cinicola BL, Piano Mortari E, Castilletti C, Guarracino F, Albano C, Accordini S, Baban A, Di Sabatino A, Rossi CM, Lenti MV, Zicari AM, Cirelli R, Spada M, Forni GL, Quinti I, Algeri M, Casale M, Perrotta S, Locatelli F, Agrati C, Carsetti R.Am J Hematol. 2025 Feb 15. doi: 10.1002/ajh.27634. Online ahead of print.PMID: 39953916

Laminarins and their derivatives affect dendritic cell activation and their crosstalk with T cells.

Christensen MD, Allahgholi L, Dobruchowska JM, Moenaert A, Guðmundsson H, Friðjónsson Ó, Karlsson EN, Hreggviðsson GÓ, Freysdottir J.Int J Biol Macromol. 2025 Feb 19;306(Pt 1):141287. doi: 10.1016/j.ijbiomac.2025.141287. Online ahead of print.PMID: 39984067

High circulation of pertussis in infants and close contacts in Antananarivo, the capital of Madagascar in Africa, and Cambodia in Asia.

Noel G, Harimanana A, Borand L, Campana F, Leng C, Botr C, Rafetrarivony L, Rajabizadeh M, Kerleguer A, Dim B, Randriamoramanana AM, Ait-Ahmed M, Guiso N, Collard JM, Taieb F; PERILIC working group.BMC Infect Dis. 2025 Feb 28;25(1):287. doi: 10.1186/s12879-025-10590-6.PMID: 40016639

Persistent socioeconomic disparities in childhood vaccination coverage in Tanzania: Insights from multiple rounds of demographic and health surveys.

Bendera A, Nakamura K, Tran XMT, Kapologwe NA, Bendera E, Mahamba D, Meshi EB.Vaccine. 2025 Feb 24;52:126904. doi: 10.1016/j.vaccine.2025.126904. Online ahead of print.PMID: 39999540

Drug repurposing of argatroban, glimepiride and ranolazine shows anti-SARS-CoV-2 activity via diverse mechanisms.

El Sobky SA, Fawzy IO, Ahmed MS, Ragheb M, Hamad MHM, Bahaaeldin R, Fahim SA, Saad R, Khalil ZA, Mahmoud SH, Mostafa A, Ali MA, Sadek HA, El-Ekiaby N, Abdelaziz AI.Heliyon. 2025 Jan 10;11(3):e41894. doi: 10.1016/j.heliyon.2025.e41894. eCollection 2025 Feb 15.PMID: 39968139

JN.1 variants circulating in Italy from October 2023 to April 2024: genetic diversity and immune recognition.

Giombini E, Schiavoni I, Ambrosio L, Lo Presti A, Di Martino A, Fiore S, Leone P, Fortunato F, Prato R, Fedele G, Palamara AT, Stefanelli P; Italian Genomic Laboratory Network.BMC Infect Dis. 2025 Feb 28;25(1):291. doi: 10.1186/s12879-025-10685-0.PMID: 40022017

Anti-platelet Factor 4 Antibody-Mediated Disorders: An Updated Narrative Review.

Napolitano A, Spiezia L, Biolo M, Radu CM, Toffanin S, Campello E, Simioni P.Semin Thromb Hemost. 2025 Feb 19. doi: 10.1055/a-2528-5425. Online ahead of print.PMID: 39884292

Human Papillomavirus Prevalence Among Australian Men Aged 18-35 Years in 2015-2018 According to Vaccination Status and Sexual Orientation.

Balgovind P, Aung E, Shilling H, Murray GL, Molano M, Garland SM, Fairley CK, Chen MY, Hocking JS, Ooi C, McNulty A, McCloskey J, McNamee K, Bateson D, Owen L, Tabrizi SN, Machalek DA.J Infect Dis. 2025 Feb 20;231(2):451-461. doi: 10.1093/infdis/jiae412.PMID: 39213380

Spike gene variability in porcine epidemic diarrhea virus as a determinant for virulence.

Li W, Hangalapura BN, van den Elzen P, van den Born E, van Kuppeveld FJM, Rottier PJM, Bosch B-J.J Virol. 2025 Feb 26:e0216524. doi: 10.1128/jvi.02165-24. Online ahead of print.PMID: 40001283

Safety, tolerability, and immunogenicity of pentavalent meningococcal MenABCWY vaccine in healthy infants: A phase 2b randomized clinical trial.

Martinon-Torres F, Lamberth E, Natalini Martinez S, Salamanca de la Cueva I, Zolotas L, Oladipupo I, Maguire JD, Trammel J, O'Neill R, Liberator PA, Peyrani P, Jodar L, Gruber WC, Anderson AS, Beeslaar J.Hum Vaccin Immunother. 2025 Dec;21(1):2463194. doi: 10.1080/21645515.2025.2463194. Epub 2025 Feb 24.PMID: 39993937

EXPRESS: Comparing Different Viral Strains in Identifying Risk Factors for the Development of Venous Thromboembolism in Hospitalized COVID-19 Patients.

Panesar H, Raval R, Chan AW, Tancredi J, Simonian G, O'Connor DJ.J Investig Med. 2025 Feb 20:10815589251320042. doi: 10.1177/10815589251320042. Online ahead of print.PMID: 39980139

Evaluation of the reliability and validity of the health literacy scale for HPV vaccination among parents of girls aged 9-14.

Lu Y, Liang J, Zhang X, Yu S, Zheng S, Wei X.Hum Vaccin Immunother. 2025 Dec;21(1):2465022. doi: 10.1080/21645515.2025.2465022. Epub 2025 Feb 16.PMID: 39956643

Comorbidities and Sociodemographic Factors as Determinants of COVID-19 Outcome in Hospitalized Pregnant Women in Brazil.

Azevedo FM, Rocha ARF, de Morais NS, Ribeiro SAV, Priore SE, Rodrigues JM, Franceschini SDCC.Arch Med Res. 2025 Feb 24;56(4):103184. doi: 10.1016/j.arcmed.2025.103184. Online ahead of print.PMID: 39999617

COVID-19 Policies and Sexually Transmitted Infections in 22 US States, January 2020-December 2021.

Pollack CC, Redd GH, Timm CM, Manabe YC.Am J Public Health. 2025 Feb 21:e1-e10. doi: 10.2105/AJPH.2024.307957. Online ahead of print.PMID: 39982417

Microbiological aetiology of paediatric respiratory tract infections in Kyrgyzstan.

Osmonbaeva N, Bloch J, Erkinbaeva A, Tilebalieva A, Tolobekova R, Zhaparova M, Rogbo-Bengtsson A, Isaeva E, Akylbekov A, Mademilov M, Baltabaeva E, Esengeldieva G, Jensen CS, Nielsen ACY, Kirkby NS, Skov R, Poulsen A, Kjærgaard J, Sooronbaev T, Kurtzhals JAL.BMC Infect Dis. 2025 Feb 26;25(1):280. doi: 10.1186/s12879-025-10668-1.PMID: 40011805

Alterations in the prevalence and serotypes of Streptococcus pneumoniae in elderly patients with community-acquired pneumonia: a meta-analysis and systematic review.

Luo X, Yuan Q, Li J, Wu J, Zhu B, Lv M.Pneumonia (Nathan). 2025 Feb 25;17(1):5. doi: 10.1186/s41479-025-00156-0.PMID: 39994753

Pediatric Pleural Effusion and Pneumococcal Vaccination Trends in the Pre- and Post-COVID Era: A Single-Centre Retrospective Study.

Atanasiu DL, Mitrica M, Petrescu L, Falup-Pecurariu O, Bleotu L, Lixandru RI, Greenberg D, Grecu A.Children (Basel). 2025 Feb 18;12(2):242. doi: 10.3390/children12020242.PMID: 40003346

SARS-CoV-2 Omicron subvariant genomic variation associations with immune evasion in Northern California: A retrospective cohort study.

Nugent JR, Wood MS, Liu L, Bullick T, Schapiro JM, Arunleung P, Gautham G, Getabecha S, Morales C, Amsden LB, Hsiao CA, Wadford DA, Wyman SK, Skarbinski J.PLoS One. 2025 Feb 24;20(2):e0319218. doi: 10.1371/journal.pone.0319218. eCollection 2025.PMID: 39992939

Plasmodium falciparum gametocyte burden in a Tanzanian heterogeneous transmission setting.

Mulamba C, Odufuwa OG, Kweyamba PA, Lazaro LO, Chabo MS, Kamage JJ, Kreppel K, Olotu AI, Williams CL.Malar J. 2025 Feb 21;24(1):54. doi: 10.1186/s12936-025-05270-4.PMID: 39985008

Towards transient space-use dynamics: re-envisioning models of utilization distribution and their applications.

Tao Y, Giunta V, Börger L, Wilber MQ.Mov Ecol. 2025 Feb 28;13(1):12. doi: 10.1186/s40462-025-00538-5.PMID: 40022257

Establishment of a 23S rRNA assay for Brucella and its application in evaluating bacterial growth status.

Wang H, Yang H, Yang J, Liu X, Xie B, Xu M, Wang H, Zhao Y, Liu B, Chen Z.Vet Res Commun. 2025 Feb 21;49(2):110. doi: 10.1007/s11259-025-10676-1.PMID: 39982617

In silico exploration of natural xanthone derivatives as potential inhibitors of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) replication and cellular entry.

Obakachi VA, Nchiozem-Ngnitedem VA, Govender KK, Govender PP.J Comput Aided Mol Des. 2025 Feb 17;39(1):7. doi: 10.1007/s10822-025-00585-5.PMID: 39960606

Low-dose interleukin 2 therapy halts the progression of post-streptococcal autoimmune complications in a rat model of rheumatic heart disease.

Rafeek RAM, Ketheesan N, Good MF, Pandey M, Lepletier A.mBio. 2025 Feb 25:e0382324. doi: 10.1128/mbio.03823-24. Online ahead of print.PMID: 39998162

Changing Epidemiology of Emergency Medical Services Calls for Children in the United States During the COVID-19 Pandemic and Reopening.

Sethuraman AS, Miller BL, Lowe GS.Prehosp Emerg Care. 2025 Feb 21:1-7. doi: 10.1080/10903127.2025.2459201. Online ahead of print.PMID: 39873674

Antigen-specific T cell responses following single and co-administration of tick-borne encephalitis, Japanese encephalitis, and yellow fever virus vaccines: Results from an open-label, non-randomized clinical trial-cohort.

Wullimann D, Sandberg JT, Akber M, Löfling M, Gredmark-Russ S, Michaëlsson J, Buggert M, Blom K, Ljunggren HG.PLoS Negl Trop Dis. 2025 Feb 28;19(2):e0012693. doi: 10.1371/journal.pntd.0012693. Online ahead of print.PMID: 40019865

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 Feb 25;99(2):e0192324. doi: 10.1128/jvi.01923-24. Epub 2025 Jan 21.PMID: 39835812

Association between maternal anemia during pregnancy with low birth weight their infants.

Khezri R, Rezaei F, Jahanfar S, Ebrahimi K.Sci Rep. 2025 Feb 22;15(1):6446. doi: 10.1038/s41598-025-91316-1.PMID: 39987181

Mimicry-based strategy between human and commensal antigens for the development of a new family of immune therapies for cancer.

Talpin A, Maia A, Carpier JM, Kulakowski G, Aubergeon L, Kervevan J, Gaal C, Strozzi F, Billerey C, Amable L, Mersceman T, Garnier A, Oliveira C, Calderon C, Bachrouche D, Ventujol C, Bernard L, Manteau A, Martinez J, Bonnet M, Noguerol J, Laviolette K, Boullerot L, Malfroy M, Chevalier G, Adotevi O, Joffre O, Idbaih A, Vieito M, Ghiringhelli F, Stradella A, Tabatabai G, Burger MC, Mildenberger I, Herrlinger U, Reardon DA, Wick W, Gouttefangeas C, Bonny C, Chene L, Gamelas Magalhaes J.J Immunother Cancer. 2025 Feb 20;13(2):e010192. doi: 10.1136/jitc-2024-010192.PMID: 39979071

Tixagevimab-cilgavimab for the prevention of COVID-19: real-world experience in patients with rheumatic diseases receiving rituximab.

Mok CC, Leung MH, Chan KM, Ying KY, Ho TK, Lao WN, Lee KL, So H, Ng WL, Ho LY, Young KY, To CH.Clin Exp Rheumatol. 2025 Feb 20. doi: 10.55563/clinexprheumatol/rd87jm. Online ahead of print.PMID: 39977029

Cervical cancer screening: comparative study of human papillomavirus detection between cervical cytology and urine samples.

Song J, Wang J.BMC Womens Health. 2025 Feb 19;25(1):71. doi: 10.1186/s12905-025-03575-9.PMID: 39972339

Human papillomavirus type 16 and 18 viral clearance and progression to precancer among women aged 18-25 years enrolled in the Costa Rica HPV prophylactic vaccine trial (CVT).

Sierra MS, Carvajal LJ, Dull P, Herrero R, Schussler J, Hildesheim A, Schiller JT, Ocampo R, Liu D, Kreimer AR, Rodriguez AC, Lowy DR, Porras C; Costa Rica HPV Vaccine Trial (CVT) Group.Vaccine. 2025 Mar 19;50:126841. doi: 10.1016/j.vaccine.2025.126841. Epub 2025 Feb 16.PMID: 39961279

A novel double-antibody sandwich ELISA based on monoclonal antibodies against the viral spike protein detects porcine deltacoronavirus infection.

Bai Y, Yu R, Zhou G, Zhang L, Wang T, Liu Y, Wang D, Zhang Z, Wang Y, Guo H, Pan L, Liu X.Microbiol Spectr. 2025 Feb 27:e0285424. doi: 10.1128/spectrum.02854-24. Online ahead of print.PMID: 40013808

SARS-CoV-2 seroprevalence and associated risk factors in adult outpatients from Western Romania, January to March 2023: a seroepidemiological assessment after three years of COVID-19 pandemic.

Olariu TR, Ursoniu S, Craciun AC, Dumitrascu V, Vlad DC, Olariu AT, Mihu AG, Lupu MA.Infect Dis (Lond). 2025 Feb 18:1-11. doi: 10.1080/23744235.2025.2464864. Online ahead of print.PMID: 39964283

Mcl-1 downregulation enhances BCG treatment efficacy in bladder cancer by promoting macrophage polarization.

Tan C, Li C, Ge R, Zhang W, Wu Z, Wang S, Cui H, Wang X, Zhang L.Cancer Cell Int. 2025 Feb 15;25(1):48. doi: 10.1186/s12935-025-03676-3.PMID: 39955585

Enhanced mucosal immunity and protection against Aeromonas veronii infection in crucian carp via synergistic immunization with Bacillus coagulans and recombinant Lactobacillus casei expressing mshB gene.

Yang YH, Gao HM, Yang YX, Shan XF, Sun WW, Li MH, Li RM.Microb Pathog. 2025 Apr;201:107385. doi: 10.1016/j.micpath.2025.107385. Epub 2025 Feb 18.PMID: 39978488

Adopting tomorrow's therapies today: a perspective review of adoptive cell therapy in lung cancer.

Abodunrin F, Olson DJ, Emehinola O, Bestvina CM.Ther Adv Med Oncol. 2025 Feb 24;17:17588359251320280. doi: 10.1177/17588359251320280. eCollection 2025.PMID: 40012708

Novel Combination Immunotherapy and Clinical Activity in Patients With HPV-Associated Cancers: A Nonrandomized Clinical Trial.

Floudas CS, Goswami M, Donahue RN, Pastor DM, Redman JM, Brownell I, Turkbey EB, Cordes LM, Steinberg SM, Manu M, Francis DC, Lamping E, Marté JL, Kackley M, Krauss E, Manukyan M, Jochems C, Schlom J, Gulley JL, Strauss J.JAMA Oncol. 2025 Feb 20:e246998. doi: 10.1001/jamaoncol.2024.6998. Online ahead of print.PMID: 39976981

Patentes registradas en Patentscope

Estrategia de búqueda: (Vaccine) AND DP:([15.02.2025 TO 28.02.2025]) *as the publication date 63 records.*

1.20250064919A SARS-COV-2 HUMAN PARAINFLUENZA VIRUS TYPE 3-VECTORED VACCINE

US - 27.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18726909Solicitante Board of Regents, The University of Texas SystemInventor/a Alexander Bukreyev

The disclosure is directed to a new human parainfluenza virus (HPIV)/SARS-CoV-2 vaccine or vaccine construct/polynucleotide. Specifically, the HPIV is a Human parainfluenza virus type 3 (HIPV3), and the vaccine construct encoding a SARS-CoV-2 spike protein (S protein), that is a SARS-CoV-2 S protein S1 subunit and/or a SARS-CoV-2 S protein receptor binding domain (RBD), in certain aspects the vaccine or vaccine construct is administered via intranasal administration.

2.WO/2025/035187VACCINE ANTIGEN

WO - 20.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud PCT/AU2024/050878Solicitante MACFARLANE BURNET INSTITUTE FOR MEDICAL RESEARCH AND PUBLIC HEALTH LIMITEDInventor/a DRUMMER, Heidi

The field of the specification relates broadly to coronavirus vaccine (CoV) antigens and methods of using and manufacturing CoV antigens. The invention also relates to vectors vaccines, kits, devices and strips comprising the coronavirus vaccine antigen. The invention also relates broadly to ribonucleic acids encoding a S protein monomer of a coronavirus vaccine (CoV) antigen and methods of using and manufacturing the ribonucleic acid. The invention also relates to vectors, lipid nanoparticles, RNA vaccines, kits, devices and strips comprising the ribonucleic acid.

3.WO/2025/042223METHOD FOR PREDICTING TRANSLATION EFFICIENCY OF MESSENGER RNA VACCINE AND ANALYSIS DEVICE

WO - 27.02.2025

Clasificación Internacional G16B 40/20Nº de solicitud PCT/KR2024/012535Solicitante IUCF-HYU (INDUSTRY-UNIVERSITY COOPERATION FOUNDATION HANYANG UNIVERSITY)Inventor/a NAM, Jin-Wu

A method for predicting translation efficiency of an mRNA vaccine comprises the steps in which: an analysis device receives sequence information of a target mRNA vaccine; the analysis device extracts, from the

sequence information, an input sequence including a 25 nt sequence to which a primer binds in a 5' untranslated region (UTR), a 50 nt sequence of the 5' UTR immediately before a coding sequence (CDS) site, and a 30 nt sequence after a start codon of a coding region; the analysis device calculates secondary structure information for the input sequence; and the analysis device inputs the input sequence and the secondary structure information into a pre-trained deep learning model so as to predict the translation efficiency of the corresponding mRNA vaccine.

4.202500579 43FOWL ADENOVIRUS SUBUNIT VACCINE AND PRODUCTION METHOD THEREOF

US - 20.02.2025

Clasificación Internacional A61K 39/235Nº de solicitud 18726065Solicitante VETERINÄRMEDIZINISCHE UNIVERSITÄT WIENInventor/a MICHAEL HESS

The present invention provides a fowl adenovirus (FAdV) subunit vaccine, comprising at least a chimeric FAdV fiber protein and an adjuvant. This vaccine may be used to ameliorate or prevent adenoviral gizzard erosion (AGE), inclusion body hepatitis (IBH) or hepatitis-hydropericardium syndrome (HHS) in birds. The invention further relates to a method of producing an FAdV subunit vaccine, comprising the steps of expressing a chimeric FAdV fiber protein in an expression system, purifying the fiber protein, and combining the fiber protein with an adjuvant to obtain the FAdV subunit vaccine.

5.202500579 34STABLE EMULSIONS OF ANTIGENS

US - 20.02.2025

Clasificación Internacional A61K 39/135Nº de solicitud 18723268Solicitante INTERVET INC.Inventor/a Martin PIEST

The present invention relates to the field of vaccinology, more specifically of veterinary vaccinology. In particular, the invention relates to an adjuvant composition comprising an emulsion of water, tocopherol or a pharmaceutically acceptable ester thereof, and a polyethoxyethylene cetostearyl ether as an emulsifier. Said adjuvant composition can be used for formulating a vaccine, particularly an emulsion vaccine, comprising a bacterial, parasitic, or viral antigen. The resulting vaccine composition can be used in a method of protecting a human or animal target against infection and/or disease caused by a pathogen, particularly caused by a bacterium, parasite or virus. The invention further relates to methods for the manufacture of such adjuvant compositions and for the manufacture of such vaccine composition.

6.202500579 39FREEZE-DRIED VIRAL COMBINATION VACCINE COMPOSITIONS AND PROCESS FOR PREPARATION THEREOF

US - 20.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18690297Solicitante Serum Institute Of India Private LimitedInventor/a Rajeev Mhalasakant DHERE

The present disclosure relates to field of lyophilized/freeze-dried viral combination composition/formulation and methods for manufacturing and obtaining the composition comprising at least three live attenuated virus selected from a group of Coronavirus, Measles virus and Rubella virus; and stabilizers comprising of at least one carbohydrate, at least one amino acid and at least one hydrolyzed protein. The said lyophilized/freeze-dried viral combination composition/formulation is a vaccine composition that preserves the desired characteristics of each virus, including stability and immunogenicity. The composition can be safely

administered subcutaneously as a combination vaccine composition such that the immunogenicity of each of the measles, rubella and SARS-CoV-2 is not inferior to that observed for each of the three viruses when administered as individual vaccines and is found to be equivalent or improved as compared to immunogenicity of SARS-CoV-2 vaccine given intranasally. The purification process is devoid of chromatography steps.

7.WO/2025/036230PROTEIN, ADENOVIRUS AND VACCINE AGAINST INFECTION OF SUBTYPE OF SARS-COV-2 OMICRON MUTANT STRAIN XBB

WO - 20.02.2025

Clasificación Internacional C07K 19/00Nº de solicitud PCT/CN2024/110575Solicitante WESTVAC BIOPHARMA CO., LTD.Inventor/a WEI, Xiawei

The present invention relates to the field of medicine, and in particular to a protein, adenovirus and vaccine against infection of a subtype of SARS-CoV-2 Omicron mutant strain XBB. In order to solve the problem of lack of effective prevention and treatment drugs against infection of SARS-CoV-2 Omicron mutant strain XBB and a subtype thereof, the present invention provides a protein, adenovirus and vaccine against the infection of the subtype of the SARS-CoV-2 Omicron mutant strain XBB. The vaccine is designed by optimizing the sequences of full-length S proteins of sub-lines XBB.1.16, XBB.1.5, XBB.1.16.6, BA.2.86, EG.5, JN.1, XBB.2.3 and XBB.2 of the SARS-CoV-2 Omicron mutant strain XBB, and RBD and RBD-HR sequences in the S proteins, can help a host to resist coronavirus infection, and in particular has a good prevention and treatment effect on cross infection caused by subtype viruses of the Omicron mutant strain XBB.

8.20250057938STABILISED LIQUID VACCINES OF LIVE VIRUSES

US - 20.02.2025

Clasificación Internacional A61K 39/155Nº de solicitud 18723259Solicitante INTERVET INC.Inventor/a Edwin KETS

The present invention relates to liquid vaccine composition comprising a live virus and a natural deep-eutectic solvent (NADES) as the carrier. The carrier additionally comprises an additive selected from methionine and (hydroxy) ectoine. The additive is able to reduce the loss of virus titre over time, upon storage in a NADES-based liquid vaccine composition having up to 50% w/w of water. Such compositions are less viscous which is favourable for the manufacture of the carrier, and the formulation and use of the liquid vaccine.

9.WO/2025/040174METHOD FOR CHARACTERIZING INHALATION VACCINE PERFORMANCE

WO - 27.02.2025

Clasificación Internacional C12N 15/861Nº de solicitud PCT/CN2024/114309Solicitante CANSINO BIOLOGICS INC.Inventor/a ZHAO, Xiaolong

A method for characterizing inhalation vaccine performance. The method comprises quantitatively linking an NGI cascade impactor, quantitative real-time polymerase chain reaction (QPCR), and droplet digital PCR (ddPCR) to establish a complete performance characterization method for inhalation vaccines. A testing environment with stable results and high repeatability has been obtained by in-depth analysis of the various influencing factors that the NGI cascade impactor has in respect of inhalation vaccine characterization. Meanwhile, the optimal characterization sample dosage has been determined on the basis of multiple

repeated experiments. The present application innovatively proposes combining NGI, QPCR and ddPCR; the method allows for accurate testing that takes little time, and testing of large batch samples can be accomplished, ensuring scalable application in industry.

10.WO/2025/041889RECOMBINANT INFLUENZA VIRUS VECTOR EXPRESSING FOREIGN ANTIGEN AND VACCINE COMPOSITION COMPRISING SAME

WO - 27.02.2025

Clasificación Internacional C12N 15/86Nº de solicitud PCT/KR2023/012567Solicitante SUNGSHIN WOMEN`S UNIVERSITY INDUSTRY-ACADEMIC COOPERATION FOUNDATIONInventor/a SONG, Jae Min

The present invention relates to a recombinant influenza virus vector expressing a foreign antigen and a vaccine composition comprising same. The vector has a partially deleted NS1 gene of the influenza virus vector, resulting in the expression of an NS1 protein with a shortened C-terminal, which attenuates the virus and enables vaccine production. Additionally, the insertion of a foreign gene induces antibodies against the foreign protein (antigen), thereby achieving cross-immunogenicity.

11.20250066771STREAMLINED SELECTION OF NATURALLY CIRCULATING, ANTIGENIC MATCH AND HIGH-YIELD VACCINE VIRUSES FOR SEASONAL INFLUENZA VACCINE PRODUCTION

US - 27.02.2025

Clasificación Internacional C12N 15/10Nº de solicitud 18792336Solicitante The Curators of the University of MissouriInventor/a Xiufeng Henry Wan

A method of predicting preferred candidate viral strains for vaccine production is described herein. A machine learning framework for predicting preferred candidate viral strains is provided that emphasizes antigen-matching and yield predictions that correlate with features of viral proteins.

12.WO/2025/038171A BACTERIAL VESICLE-BASED PNEUMOCOCCAL VACCINE AGAINST INFLUENZA-MEDIATED SECONDARY *STREPTOCOCCUS PNEUMONIAE* PULMONARY INFECTION

WO - 20.02.2025

Clasificación Internacional A61K 39/02Nº de solicitud PCT/US2024/034124Solicitante ALBANY MEDICAL COLLEGEInventor/a SUN, Wei

A *Yersinia pseudotuberculosis* strain (designated as YptbS46) was tailored with an Asd^+ plasmid pSMV92 that can synthesize high amounts of the Spn pneumococcal surface protein A (PspA) antigen and monophosphoryl lipid A as an adjuvant. The recombinant strain produced outer membrane vesicles (OMVs) enclosing a high amount of PspA protein (designated as OMV-PspA). A prime-boost intramuscular immunization with 30 pg of OMV- PspA induced both memory adaptive and innate immune responses in co-infected mice, reduced the viral and bacterial burden, and provided complete protection against secondary Spn infection. Also, the OMV-PspA immunization afforded significant cross-protection against the secondary Spn A66.1 infection and long-term protection against the secondary Spn D39 challenge. An OMV vaccine delivering Spn antigens can thus be a new pneumococcal vaccine candidate.

13.WO/2025/038983INACTIVATED WHOLE VIRION VACCINE AGAINST INFLUENZA AND METHODS OF USE THEREOF

WO - 20.02.2025

Clasificación Internacional C12N 7/06Nº de solicitud PCT/US2024/042824Solicitante COLORADO STATE UNIVERSITY RESEARCH FOUNDATIONInventor/a GOODRICH, Raymond

Provided herein are methods for inactivating an influenza particle, the methods comprising contacting the influenza particle with UV light in the presence of riboflavin such that the integrity of the antigenic proteins of the influenza particle are preserved. Vaccine compositions comprising inactivated influenza particles, and methods of use thereof, are also provided

14.2025200780COMPOSITIONS AND METHODS FOR PERSONALIZED NEOPLASIA VACCINES

AU - 20.02.2025

Clasificación Internacional Nº de solicitud 2025200780Solicitante Dana-Farber Cancer Institute, Inc.Inventor/a Fritsch, Edward F.

The invention provides a method of making a personalized neoplasia vaccine for a subject diagnosed as having a neoplasia, which includes identifying a plurality of mutations in the neoplasia, analyzing the plurality of mutations to identify a subset of at least five neo antigenic mutations predicted to encode neo-antigenic peptides, the neo-antigenic mutations selected from the group consisting of missense mutations, neoORF mutations, and any combination thereof, and producing, based on the identified subset, a personalized neoplasia vaccine.

15.20250057936VACCINE COMPOSITION

US - 20.02.2025

Clasificación Internacional A61K 39/145Nº de solicitud 18910182Solicitante Lionel ScottInventor/a Lionel Scott

Respiratory virus vaccine compositions for nasal administration to a mammal comprising a hygroscopic gel-forming material, at least one isolated bioactive respiratory virus immunogen, and an adjuvant, kits, receptacles, uses therefor, and methods of manufacture thereof.

16.20250057928VACCINE COMPOSITION FOR INDUCING ANTI-IL-23 ANTIBODY

US - 20.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud 18717944Solicitante OSAKA UNIVERSITYInventor/a Hironori NAKAGAMI

The present invention provides a vaccine composition containing a complex of a T cell receptor antigen peptide and a B cell receptor antigen peptide and capable of inducing the production of an antibody against IL-23, wherein the B cell receptor antigen peptide is represented by the following formula (I):

X1-X2-X3-X4-X5-X6-X7-X8 (I)

wherein

-
  - X1 is S, A, G, T, K, or R,
  - X2 is P, A, G, S, T, K, or R,
  - X3 is S, A, G, T, K, or R,
  - X4 is Q, A, G, T, or N,
  - X5 is P, A, G, S, T, Q, or N,
  - X6 is W, A, Y, or E,
  - X7 is Q, A, G, T, or N, and
  - X8 is R, A, G, or K.

17.202500579 42NUCLEIC ACID VACCINE AGAINST THE SARS-COV-2 CORONAVIRUS

US - 20.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18941809Solicitante INSTITUT PASTEURInventor/a Etienne SIMON-LORIERE

The invention relates to an immunogenic or vaccine composition against the 2019 novel coronavirus (SARS-COV-2), comprising a nucleic acid construct encoding a SARS-COV-2 coronavirus Spike(S) protein antigen or a fragment thereof comprising the receptor-binding domain, wherein the nucleic acid construct sequence is codon-optimized for expression in 5 human.

18.4507722UNIVERSELLER INFLUENZAIMPFSTOFF IN NANOEMULSION

EP - 19.02.2025

Clasificación Internacional A61K 39/145Nº de solicitud 23788836Solicitante BLUEWILLOW BIOLOGICS INCInventor/a GANESAN SHYAMALA

The present invention relates to methods for inducing a broadly reactive immune response to multiple strains of influenza in a subject comprising intranasally administering a nanoemulsion vaccine composition comprising a computationally optimized influenza immunogen or protein.

19.WO/2025/042248METHOD OF SELECTING NEOANTIGEN FOR DEVELOPMENT OF PERSONALIZED CANCER VACCINE

WO - 27.02.2025

Clasificación Internacional G16B 40/20Nº de solicitud PCT/KR2024/012654Solicitante LG CHEM, LTD.Inventor/a JEONG, Seihwan

Provided are a method of selecting a tumor-specific neoantigen (immunogenic peptide), and a use of the selected tumor-specific neoantigen for preparing a personalized cancer vaccine.

20.WO/2025/036474RESPIRATORY SYNCYTIAL VIRUS ANTIGENIC POLYPEPTIDE, NUCLEIC ACID, VACCINE, AND USE THEREOF

WO - 20.02.2025

Clasificación Internacional C07K 14/135Nº de solicitud PCT/CN2024/112630Solicitante SHENZHEN RHEGEN BIOTECHNOLOGY CO., LTD.Inventor/a HU, Yong

A respiratory syncytial virus antigenic polypeptide, a nucleic acid, a vaccine, and a use thereof. Provided is a respiratory syncytial virus antigenic polypeptide or an immunogenic fragment thereof. The respiratory syncytial virus antigenic polypeptide has at least 26-th to 470-th or full-length amino acid sequences shown in SEQ ID NO:1, or derivative amino acid sequences formed by replacing, deleting, or adding one or several amino acids on the basis of these amino acid sequences and having equivalent functions. An increase in the pre-F immunogenicity can be achieved and/or an increase in the protein expression level can be facilitated.

21.WO/2025/037284GENETICALLY MODIFIED BACTERIA FOR MULTI-MODAL SECRETION OF A NEOANTIGEN

WO - 20.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/IB2024/058038Solicitante BACCINE LTD.Inventor/a STRAUSSMAN, Ravid

A vaccine and methods of treatment thereof, wherein the vaccine comprises a recombinant Gram-negative bacteria genetically modified to express a first antigen fusion peptide comprising a neoantigen or series thereof, said neoantigen or series thereof associated with a first secretion signal from a double membrane-spanning secretion system and a second antigen fusion peptide comprising a homologous neoantigen or series thereof, associated with a second secretion signal from an outer membrane-spanning secretion system. The Gram-negative bacteria may be further modified for quadmodal transport. Specifically, the fusion peptides include signal peptides are each associated with a Type III (T3SS) and a Type V (T5SS) secretion system.

22.WO/2025/043210VACCINE COMPOSITIONS, COMPONENTS, AND METHODS OF USE

WO - 27.02.2025

Clasificación Internacional A61K 39/08Nº de solicitud PCT/US2024/043720Solicitante THE REGENTS OF THE UNIVERSITY OF MICHIGANInventor/a SUN, Duxin

The present disclosure provides vaccine components and compositions, and methods of use thereof. More specifically, the disclosure provides compositions comprising one or more T cell epitopes(e.g., one or more tumor-associated T cell epitopes and/or one or more T cell epitopes derived from a microorganism), or a nucleic acid encoding thereof, and one or more B cell epitopes, or a nucleic acid encoding thereof. The disclosure also provides RNA molecules (e.g., mRNA molecules) encoding B cell epitopes to mediate B cell antigen presentation, magnetic nanoparticles comprising antigen clusters having B cell and/or T cell epitopes, and compositions and vaccines (e.g., cancer vaccines) thereof.

23.WO/2025/037838METHOD FOR DESIGNING PERSONALIZED CANCER VACCINE USING B CELL-REACTIVE NEOANTIGEN

WO - 20.02.2025

Clasificación Internacional G16B 40/20Nº de solicitud PCT/KR2024/011714Solicitante KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGYInventor/a CHOI, Jung Kyoon

The present disclosure relates to a method for designing a personalized cancer vaccine, using a B cell-reactive neoantigen, the method comprising the steps of: receiving a peptide sequence extracted from cancer tissue and allelic sequence data of B cell receptors; calculating the preferential binding strength between amino acids in the peptide sequence and allelic sequences of B cell receptors; and calculating B cell epitope prediction scores by inputting the preferential binding strength between amino acids to a trained neural network model.

24.4511059STREPTOCOCCUS SUIS IMPFSTOFFZUSAMMENSETZUNG MIT IMMUNOGENEN FUSIONSPOLYPEPTIDEN

EP - 26.02.2025

Clasificación Internacional A61K 39/09Nº de solicitud 23717588Solicitante INTERVACC ABInventor/a FROSTH SARA

The present disclosure relates to immunogenic fusion polypeptides, immunogenic compositions and vaccine compositions comprising said fusion polypeptides and use thereof for immunization of mammals susceptible to *Streptococcus suis* infection. The disclosure also relates to methods for preparing, formulating and administrating such compositions.

25.WO/2025/040802NEW SCHEME OF ADMINISTRATION OF A MULTIVALENT VACCINE AGAINST SWINE INFECTIONS

WO - 27.02.2025

Clasificación Internacional A61K 39/08Nº de solicitud PCT/EP2024/073717Solicitante CEVA SANTE ANIMALEInventor/a FACHINGER, Vicky

The present disclosure relates to a multivalent vaccine composition and its use in the protection against swine infections in a female pig and its progeny with a new scheme of administration.

26.20250057945VACCINE ADJUVANT AGENT CONTAINING POLYACRYLIC ACID POLYMER AND USE OF SAME

US - 20.02.2025

Clasificación Internacional A61K 39/39Nº de solicitud 18721547Solicitante TOKO YAKUHIN KOGYO CO., LTD.Inventor/a Taizou KAMISHITA

The present disclosure provides a vaccine adjuvant agent comprising a polymer in which a constitutional unit is derived from acrylic acid, wherein the polymer has a carboxyl group content of 60.0 to 62.5% by mass.

27.4511492VETERINÄRE IMPFSTOFFE UND VERFAHREN ZUR BEHANDLUNG VON PASTEURELLA MULTOCIDA-INFEKTIONEN BEI TIEREN

EP - 26.02.2025

Clasificación Internacional C12N 15/63Nº de solicitud 23790816Solicitante ENG ANTIGENS INCInventor/a MORAES TREVOR

Disclosed are novel veterinary vaccine compositions comprising a *P. multocida* PmSLP protein or an immunogenically equivalent portion thereof. The vaccine compositions may be used to ameliorate, treat or prevent pathogenic infections of food production animals, such as bovine and porcine animals, caused by *Pasteurella multocida*. Related methods and uses are also disclosed.

28.4511493VETERINÄRE IMPFSTOFFE UND VERFAHREN ZUR BEHANDLUNG VON PASTEURELLA MULTOCIDA-INFEKTIONEN BEI TIEREN

EP - 26.02.2025

Clasificación Internacional C12N 15/63Nº de solicitud 23790817Solicitante ENG ANTIGENS INCInventor/a MORAES TREVOR

Disclosed are novel veterinary vaccine compositions comprising a P. multocida PmSLP protein or an immunogenically equivalent portion thereof. The vaccine compositions may be used to ameliorate, treat or prevent pathogenic infections of food production animals, such as bovine and porcine animals, caused by Pasteurella multocida. Related methods and uses are also disclosed.

29.WO/2025/036985A VACCINE FOR THE TREATMENT OR PREVENTION OF BURKHOLDERIA SPECIES INFECTION IN A SUBJECT.

WO - 20.02.2025

Clasificación Internacional A61K 39/02Nº de solicitud PCT/EP2024/073032Solicitante UNIVERSITY COLLEGE DUBLINInventor/a MCCLEAN, Siobhan

A composition comprising BpPA26 is provided. The composition is for use in vaccine therapy to treat or prevent pathogenic Burkholderia species infection in a mammal, typically a human or an equine mammal. The species include Burkholderia cepacia complex, Burkholderia mallei, and Burkholderia pseudomallei.

30.WO/2025/040792MULTIVALENT VACCINE AGAINST SWINE INFECTIONS

WO - 27.02.2025

Clasificación Internacional A61K 39/02Nº de solicitud PCT/EP2024/073694Solicitante CEVA SANTE ANIMALEInventor/a FACHINGER, Vicky

The present disclosure relates to a multivalent vaccine composition and its use in the protection against *Escherichia coli* (*E.coli*), *Clostridium spp.,* porcine parvovirus and *Erysipelothrix rhusiopathie (E. rhusiopathie)* infections in a pig and its progeny, preferably with a new scheme of administration for passive and active immunization of a pig and its progeny.

31.20250057947USE OF TRIMANGANESE TETRAOXIDE PARTICLES IN PREPARATION OF VACCINE ADJUVANT

US - 20.02.2025

Clasificación Internacional A61K 39/39Nº de solicitud 18763977Solicitante Guangzhou Realbenefitspot Pharmaceutical Co., Ltd.Inventor/a Yaling WANG

Disclosed is a use of trimanganese tetraoxide particles in preparation of a vaccine adjuvant. The adjuvant is a particle adjuvant, the particle adjuvant is trimanganese tetraoxide particles externally wrapped with or

without an excipient, and the particle size of the particle adjuvant is 5 nm to 3000 nm. The trimanganese tetraoxide particle adjuvant provided in the present invention can be effectively combined with a single-stranded nucleotide adjuvant and can effectively carry an immune antigen, and a more excellent immunotherapy effects can be achieved when a fewer antigen dose and a relatively low injection amount are used; immune cells are efficiently activated, and body fluid balance and cellular immunity are achieved.

32.20250057940IMMUNE MEMORY ENHANCED PREPARATIONS AND USES THEREOF

US - 20.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18752524Solicitante TORIGEN PHARMACEUTICALS, INC.Inventor/a Mark Suckow

Formulations and preparations having immune memory enhanced properties are disclosed that provide for enhancing immune response against a tumor growth, cancer, infectious agent, bacteria, virus or other infectious or non-infectious agent. The vaccine formulation includes an immune memory invoking component, such as an antigen of an infectious agent, virus (e.g., Rabies), bacteria, prion, neo-antigen or other moiety antigen, and a targeted antigen (e.g., a harvested tumor tissue (B-cell, T-cell, epitopes)). The vaccine formulation/preparations may comprise a target infectious agent protein/peptide component (such as a SARS-Cov-2 spike protein epitope) mixed with, or fused to (or otherwise conjugated) an immune-memory associated viral antigen (such as Rabies, polio, or other peptide/protein antigen or peptide or fragment thereof).

33.20250064910A MAPS VACCINE TARGETING SALMONELLA ENTERICA SEROVARS

US - 27.02.2025

Clasificación Internacional A61K 39/112Nº de solicitud 18715610Solicitante THE CHILDREN'S MEDICAL CENTER CORPORATIONInventor/a Richard MALLEY

Technologies for the prevention and/or treatment of *Salmonella* infections.

34.20250064915NUCLEIC ACID MOLECULES AND USES THEREOF

US - 27.02.2025

Clasificación Internacional A61K 39/125Nº de solicitud 18940501Solicitante CureVac SEInventor/a Susanne RAUCH

The present invention is directed to an artificial nucleic acid and to polypeptides suitable for use in treatment or prophylaxis of an infection with Norovirus or a disorder related to such an infection. In particular, the present invention concerns a Norovirus vaccine. The present invention is directed to an artificial nucleic acid, polypeptides, compositions and vaccines comprising the artificial nucleic acid or the polypeptides. The invention further concerns a method of treating or preventing a disorder or a disease, first and second medical uses of the artificial nucleic acid, polypeptides, compositions and vaccines. Further, the invention is directed to a kit, particularly to a kit of parts, comprising the artificial nucleic acid, polypeptides, compositions and vaccines.

35.20250057935ADENOVIRAL VECTOR SYSTEM FOR GENE DELIVERY

US - 20.02.2025

Clasificación Internacional A61K 39/145Nº de solicitud 18749120Solicitante Purdue Research FoundationInventor/a Suresh Kumar Mittal

Disclosed herein a unique cell line system to generate a novel bovine adenovirus vector that provides more gene insertion capabilities and better immunogenicity for inserted antigens. The unique cell line is used for generating and growing of the new adenovirus vectors for gene delivery or recombinant vaccine production.

36.4507732PROTEIN-SACCHARID-KONJUGATION MIT NATRIUMCYANOBORHYDRID

EP - 19.02.2025

Clasificación Internacional A61K 47/64Nº de solicitud 23720209Solicitante SANOFI PASTEUR INCInventor/a GINLEY MARYALICE

Methods and uses of conjugating saccharides to protein carriers are disclosed herein. Exemplary conjugates prepared according to those methods and uses are also disclosed. Additionally, methods for quantifying the amount of sodium borohydride in a sodium cyanoborohydride reagent are disclosed herein. Vaccine compositions as well as related methods and uses are also disclosed herein.

37.WO/2025/038868LIPID NANOPARTICLE FORMULATIONS AND USES THEREOF

WO - 20.02.2025

Clasificación Internacional A61K 47/54Nº de solicitud PCT/US2024/042532Solicitante ICAHN SCHOOL OF MEDICINE AT MOUNT SINAIInventor/a DONG, Yizhou

The present disclosure relates to polynucleotide formulations containing lipid nanoparticles and methods of administration, particularly in vaccine formulations.

38.20250059238RECOMBINANT HIV ENV POLYPEPTIDES AND THEIR USES

US - 20.02.2025

Clasificación Internacional C07K 14/005Nº de solicitud 17299062Solicitante Dennis R. BURTONInventor/a Dennis R. BURTON

The present disclosure relates to recombinant HIV Env polypeptides and their use in the treatment and prevention of HIV/AIDS.

39.4512817NEOANTIGENIDENTIFIZIERUNG, HERSTELLUNG UND VERWENDUNG

EP - 26.02.2025

Clasificación Internacional C07K 7/08Nº de solicitud 24205415Solicitante GRITSTONE BIO INCInventor/a BULIK-SULLIVAN BRENDAN

Disclosed herein is a system and methods for determining the alleles, neoantigens, and vaccine composition as determined on the basis of an individual's tumor mutations. Also disclosed are systems and methods for obtaining high quality sequencing data from a tumor. Further, described herein are systems and methods for identifying somatic changes in polymorphic genome data. Further, described herein are systems and methods for selecting a subset of patients for treatment. A utility score indicating an estimated number of neoantigens presented on the surface of tumor cells is determined for each patient based on one or more neoantigen candidates identified for the patient. The subset of patients are selected based on the determined utility

scores. The selected subset of patients can receive treatment, such as neoantigen vaccines or checkpoint inhibitor therapy. Finally, described herein are unique cancer vaccines.

40.4511058ZUSAMMENSETZUNGEN, VORRICHTUNGEN, SYSTEME UND VERFAHREN IM ZUSAMMENHANG MIT IMPFUNG UND STERILEM SCHUTZ GEGEN MALARIA

EP - 26.02.2025

Clasificación Internacional A61K 39/015Nº de solicitud 23935577Solicitante MALARVX INCInventor/a AVRIL MARION

Systems, compositions, devices, methods, etc., provide improved anti-malaria immunological responses comprising making, providing and administering vaccines comprising specific RNA molecules such as self-replicating replicon RNA (repRNA) encoding proteins from Plasmodium such as the *P. yoelii* (Py) CS protein (CSP), including in some embodiments substantially target proteins encoding target antigens, for example a whole or substantially whole CSP in the repRNA. The prime-and-trap intervals for the administration of the vaccine can comprise administration of only a single dose of a repRNA-Non-encapsulating oil-in-water emulsion nanocarriers (e.g., LION™) component followed by administration of as few as 3 or 2 doses, or even just a single dose, of the WO component (e.g., RAS or genetically attenuated WO) at 0 day (same day), or 1, 2, 3, 4, 5, 10, 14, 15 days or 28 days later.

41.WO/2025/042889STABLE SALMONELLA VACCINE FORMULATIONS

WO - 27.02.2025

Clasificación Internacional A61K 39/02Nº de solicitud PCT/US2024/043036Solicitante ELANCO US INC.Inventor/a BUCK, Niklas

The present disclosure provides formulations, kits, and vaccines directed to immunization of animals against Salmonella. Methods of usng the formulations, kits, and vaccines for protection of avians against one or more species of Salmonella are also provided.

42.WO/2025/038896BROAD SPECTRUM CONJUGATE VACCINE TO PREVENT KLEBSIELLA PNEUMONIAE AND PSEUDOMONAS AERUGINOSA INFECTIONS

WO - 20.02.2025

Clasificación Internacional A61K 39/108Nº de solicitud PCT/US2024/042585Solicitante UNIVERSITY OF MARYLAND, BALTIMOREInventor/a CROSS, Alan, S.

The present invention is drawn to conjugates comprising a glycosylated native FlaA flagellin protein of *Pseudomonas* and *Klebsiella* surface polysaccharide antigens, such as *Klebsiella pneumoniae* O polysaccharides from serovars O1, O2a, O2a,c, O3, O4, O5, O7, O8 and O12. The present invention also provides pharmaceutical compositions comprising the same and methods of inducing an immune response in subjects by administering the compositions.

43.20250057949T CELL THERAPY WITH VACCINATION AS A COMBINATION IMMUNOTHERAPY AGAINST CANCER

US - 20.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud 18720347Solicitante The United States of America, as represented by the Secretary, Department of Health and HumanInventor/a Sri Krishna

Disclosed are methods of treating or preventing cancer in a mammal, the method comprising: (a) isolating T cells from a tumor sample from the mammal, wherein the isolated T cells are one or both of exhausted and differentiated, and the isolated T cells have antigenic specificity for a tumor-specific antigen expressed by the tumor sample from the mammal, wherein the tumor-specific antigen is a tumor-specific neoantigen or an antigen with a tumor-specific driver mutation; and optionally expanding the numbers of isolated, tumor antigen-specific T cells; and (b) administering to the mammal (i) the isolated T cells of (a) and (ii) a vaccine which specifically stimulates an immune response against the tumor-specific antigen for which the isolated T cells have antigenic specificity.

44.4230209PHARMACEUTICAL COMPOSITION, PHARMACEUTICAL COMBINED FORMULATION, AND COMBINED FORMULATION KIT FOR PREVENTION OR TREATMENT OF CHRONIC HEPATITIS B, EACH COMPRISING, AS ACTIVE INGREDIENT, ORAL ANTIVIRAL AGENT AND THERAPEUTIC VACCINE INCLUDING LIPOPEPTIDE AND POLY(I:C) ADJUVANT

PL - 24.02.2025

Clasificación Internacional A61K 31/513Nº de solicitud 21894866SolicitanteInventor/a JUNG SUN YUM

45.20250064914NUCLEOSIDE-MODIFIED RNA FOR INDUCING AN ADAPTIVE IMMUNE RESPONSE

US - 27.02.2025

Clasificación Internacional A61K 39/12Nº de solicitud 18925561Solicitante The Trustees of the University of PennsylvaniaInventor/a Drew Weissman

The present invention relates to compositions and methods for inducing an adaptive immune response in a subject. In certain embodiments, the present invention provides a composition comprising a nucleoside-modified nucleic acid molecule encoding an antigen, adjuvant, or a combination thereof. For example, in certain embodiments, the composition comprises a vaccine comprising a nucleoside-modified nucleic acid molecule encoding an antigen, adjuvant, or a combination thereof.

46.4507723SARS-COV-2-IMPFSTOFFZUSAMMENSETZUNGEN

EP - 19.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud 23789109Solicitante MERCIA PHARMA INCInventor/a BLACKBURN PETER

The present disclosure provides compositions of adjuvanted SARS-CoV-2 vaccines and their use to prevent and manage Covid-19 infection, including host hyperinflammatory responses to infection, including long term symptoms associated with Covid infection.

47.20250064920IBV VACCINE WITH HETEROLOGOUS DMV/1639 SPIKE PROTEIN

US - 27.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18790098Solicitante Boehringer Ingelheim Vetmedica GmbHInventor/a Grace Albanese

The present invention relates i.a. to an IBV (infectious bronchitis virus) encoding for a heterologous DMV S (spike) protein or fragment thereof. Further, the present invention relates to an immunogenic composition

comprising said IBV encoding for a heterologous DMV S (spike) protein or fragment thereof. Furthermore, the present invention relates to methods for immunizing a subject comprising administering to such subject the immunogenic composition of the present invention. Moreover, the present invention relates to methods of treating or preventing clinical signs caused by IBV in a subject of need, the method comprising administering to the subject a therapeutically effective amount of an immunogenic composition according to the present invention.

48.4511479BEHANDLUNG VON ENTZÜNDUNGSERKRANKUNGEN

EP - 26.02.2025

Clasificación Internacional C12N 7/04Nº de solicitud 23791796Solicitante CYN K BIO INCInventor/a UENO RYUJI

The present disclosure provides a method for treating an inflammatory condition, especially an age related inflammatory condition in a mammalian subject in need thereof, which comprises an effective amount of a virus like particle comprising a viral structural protein and a galectin-3 antigen, a composition or vaccine comprising for the purpose thereof.

49.20250057941DYSREGULATION OF TRAUMA REGULATION PATHWAY TREATMENT AND MONITORING TECHNIQUES

US - 20.02.2025

Clasificación Internacional A61K 39/215Nº de solicitud 18939064Solicitante GE Precision Healthcare LLCInventor/a Christopher Michael Puleo

The subject matter of the present disclosure generally relates to techniques for addressing or correcting dysregulation of the trauma regulation pathway. The dysregulation may be associated with a physiological condition, such as a SARS-CoV-2 viral infection. In an embodiment, the techniques include treating dysregulation based on a renin-angiotensin pathway molecule or cell and/or a splenic pathway molecule or cell using targeted neuromodulation. In an embodiment, neuromodulation is used to regulate the immune system, e.g., as an energy-based adjuvant for a vaccine.

50.4512477VERBESSERTE LAMPENKONSTRUKTIONEN

EP - 26.02.2025

Clasificación Internacional A61P 35/00Nº de solicitud 24201125Solicitante IMMUNOMIC THERAPEUTICS INCInventor/a HEILAND TERI

The present invention provides improved LAMP Constructs comprising specific fragments of the LAMP lumenal domain to deliver antigens to immune cells for enhanced processing. These LAMP Constructs can be used for the treatment of disease and in particular, allergies, infectious disease, diabetes, hyperproliferative disorders and/or cancer. The improved LAMP Constructs allow for presentation of properly configured three dimensional epitopes for production of an immune response when administered to a subject. The improved LAMP Constructs can be multivalent molecules, and/or can be provided as part of a multivalent vaccine containing two or more LAMP Constructs. The improved LAMP Constructs as described herein can also be used to generate antibodies when administered to a non-human vertebrate.

51.20250066419POLYPEPTIDE FOR DELIVERING ANTIGEN TO IMMUNE CELLS

US - 27.02.2025

Clasificación Internacional C07K 7/06Nº de solicitud 18724235Solicitante JW SHINYAK CORPORATIONInventor/a Yoon Jae JEON

The present invention relates to a polypeptide for delivering an antigen to immune cells and, specifically, to: a novel polypeptide comprising a cell membrane penetrating peptide and a peptide binding to a surface molecule on immune cells; a fusion polypeptide in which an antigen is coupled to the polypeptide; a nucleic acid coding for the polypeptide or the fusion polypeptide; an immune cell sensitized with the fusion polypeptide or the nucleic acid coding therefor; and an immunotherapeutic agent, antitumor or anticancer vaccine, and a composition for treating a tumor or cancer, each comprising the immune cell.

52.WO/2025/043016A UNIVERSAL VACCINE STRATEGY FOR CONFERRING PROTECTION AGAINST DIVERSE PATHOGENS

WO - 27.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud PCT/US2024/043282Solicitante THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITYInventor/a PULENDRAN, Bali

Compositions and methods are provided for immunizing an individual or population of individuals to generate an immune response that protects against pathogen infection in an antigen-agnostic manner. The protective antigen-agnostic immune response is active for a period of time following immunization, from about 7 days, 10 days, 14 days following immunization, and may be active for at least 2 weeks, at least 3 weeks, at least 4 weeks, at least 5 weeks, or more.

53.WO/2025/039937USE OF COMPOUND IN TREATMENT OF LIVER DISEASES

WO - 27.02.2025

Clasificación Internacional A61K 31/519Nº de solicitud PCT/CN2024/111818Solicitante BEIJING SYNTHETIC VACCINE BIOSCIENCES CO., LTD.Inventor/a LIAO, Xuebin

Use of a compound in the treatment of liver diseases. Experimental results show that the compound has a relatively high liver-tissue-targeting property, very low toxicity to liver primary cells and high liver safety, has significant efficacy on liver diseases such as viral hepatitis (e.g., hepatitis B) and liver cancers (including primary liver cancers and metastatic liver cancers), and has relatively good physicochemical properties, metabolic stability, bioavailability and safety, thus having very good drug development prospects.

54.4512420ZUSAMMENSETZUNG ZUR REDUZIERUNG DER GRÖSSE ODER DES VOLUMENS VON ZIELGEWEBE ODER KIT DAMIT

EP - 26.02.2025

Clasificación Internacional A61K 39/12Nº de solicitud 23792262Solicitante SK BIOSCIENCE CO LTDInventor/a KIM EUN-SOM

The present invention provides a pharmaceutical composition for treating obesity, the composition including: one or more viruses selected from the group consisting of yellow fever virus, herpes zoster virus, and rubella virus; or a genetic material coding for a protein derived from these viruses. Preferably, the pharmaceutical

composition is a vaccine composition. The composition provides a reduction in target tissues, preferably tissues containing adipocytes, or an effect that leads to the death of adipocytes.

55.20250066740NOVEL CHIMPANZEE ADENOVIRUS VECTOR, CONSTRUCTION METHOD THEREFOR, AND APPLICATION THEREOF

US - 27.02.2025

Clasificación Internacional C12N 7/00Nº de solicitud 18014647Solicitante JIAXING ANYU BIOTECHNOLOGY CO., LTDInventor/a Ping CHEN

A chimpanzee adenovirus vector from newly discovered and isolated chimpanzee adenovirus with unique HVR sequences and a method of its construction and application thereof, with higher viral titer, and provides a method for determining its viral titer. The chimpanzee adenovirus circular vector is constructed through a shuttle plasmid, and knocks out E1 and E3 to construct a replication-defective chimpanzee adenovirus vector. The chimpanzee adenovirus vector described in this article has no preexisting antibody in the population, and the knockout of E1 and E3 is safe. At the same time, it is significantly different from human adenovirus type 5 E1 in 293 cells, which can greatly avoid recovery mutation (RCA) and make it safer. The novel coronavirus vaccine has strong stability and does not cause mutations after multiple passages, and it can induce strong humoral immunity and cellular response in mouse models.

56.2998014VACCINE FOR USE IN PROTECTING OFFSPRING OF A SOW AGAINST PORCINE ENDEMIC DIARRHEA VIRUS

ES - 18.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud 15762993Solicitante Intervet International B.V.Inventor/a BORN VAN DEN, Erwin

57.4509185VERFAHREN ZUR ERHÖHUNG DER IMMUNOGENITÄT VON SCHWACH IMMUNOGENEN ANTIGENSPEZIFISCHEN IMPFSTOFFEN UNTER VERWENDUNG VON ORALEN HEFE-BETA-GLUCANEN

EP - 19.02.2025

Clasificación Internacional A61P 35/00Nº de solicitud 24223791Solicitante MEMORIAL SLOAN KETTERING CANCER CENTERInventor/a CHEUNG NAI-KONG

The present disclosure provides methods for enhancing the immunogenicity of a poorly immunogenic antigen-specific vaccine as well as methods for promoting diversification of the gut microbiome in a subject in need thereof comprising administering to the subject an effective amount of a beta-glucan extract derived from yeast. Kits for use in practicing the methods are also provided.

58.4511060ENTEROCOCCUS FAECALIS IMPFSTOFF UND VERWENDUNGEN DAVON

EP - 26.02.2025

Clasificación Internacional A61K 39/09Nº de solicitud 23792699Solicitante VAXCYTE INCInventor/a FAIRMAN JEFFERY C

The present disclosure provides immunogenic compositions comprising at least one recombinant polypeptide antigen derived from an *Enterococcus* bacterium (e.g., *E. faecalis, E. faecium*, *E. durans*). The disclosure

further provides methods, and uses of the immunogenic compositions, for protecting or treating a subject from infection by an *Enterococcus* bacterium. Such infections may cause, or worsen, conditions such as root canal failure, endocarditis, bacteremia, urinary tract infections, prostatitis, intraabdominal infection, cellulitis, dysbiotic gastrointestinal tract, prosthetic joint infection, or wound infections.

59.4512419POLYVALENTE PNEUMOKOKKEN-POLYSACCHARID-KONJUGAT-IMPFSTOFFKOMPONENTE UND ANWENDUNG DAVON

EP - 26.02.2025

Clasificación Internacional A61K 39/116Nº de solicitud 23791262Solicitante SHANGHAI REINOVAX BIOLOGICS CO LTDInventor/a ZHU XIANCHAO

The present invention relates to a polyvalent pneumococcal polysaccharide protein conjugate and immunogenicity thereof, and specifically provides an immunogenic composition containing capsular polysaccharides of streptococcus pneumoniae from different serotypes, and a carrier, the serotypes at least comprising 2, 8, 9N, 10A, 11A, 12F, 15B, 17F, 20, 22F and 33F. The immunogenic composition can improve the immunogenicity of polysaccharides of different serotypes, and may prevent invasive infection caused by pneumococci of various different serotypes.

60.3626262VEGFR-2 TARGETING DNA VACCINE FOR COMBINATION THERAPY

PL - 17.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud 19205420SolicitanteInventor/a HEINZ LUBENAU

61.2998010VACCINE FOR USE IN PROTECTING A PIG AGAINST PORCINE ENDEMIC DIARRHEA VIRUS

ES - 18.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud 15762624Solicitante Intervet International B.V.Inventor/a BORN VAN DEN, Erwin

62.20250057933RHINOVIRUS VACCINE

US - 20.02.2025

Clasificación Internacional A61K 39/125Nº de solicitud 18817094Solicitante IP2IPO INNOVATIONS LIMITEDInventor/a Sebastian Johnston

The invention relates to immunogenic compositions, and in particular, to immunogenic compositions for preventing, treating or ameliorating human rhinovirus (RV) infections. The invention is especially concerned with RV VP0 peptides (or proteins) and polynucleotides encoding such peptides, and their use in immunogenic compositions for eliciting an immune response and preventing rhinovirus infections.

63.20250064908MULTICOMPONENT CHEMICAL COMPOSITION OF A PEPTIDE-BASED NEOANTIGEN VACCINE

US - 27.02.2025

Clasificación Internacional A61K 39/00Nº de solicitud 18924824Solicitante AMAZON TECHNOLOGIES, INCInventor/a Frank Wilhelm Schmitz

Provided herein are immunogenic compositions comprising tumor-specific neoantigen long peptides, tumor-specific neoantigen short peptides, and adjuvant, optionally a helper peptide, and optionally a tumor-specific peptide. The disclosure also provides methods of using these immunogenic compositions for treating cancer.

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