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

- Noticias más recientes en la Web sobre vacunas.
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- Patentes más recientes en Patentscope sobre vacunas.

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Children's health, a priority for the Cuban state

Oct 16. Cuban foreign minister Bruno Rodriguez said today that children's health is a priority for the Cuban state, as he highlighted the beginning of another stage of the anti-pneumococcal vaccination strategy for children.

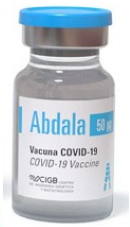
On X, Cuban diplomat pointed out that the campaign, whose second phase began on Monday, is carried out with the Cuban vaccine Quimi-Vio, developed by the Finlay Vaccine Institute (IFV).

According to information from the Ministry of Public Health (Minsap), it is a multivalent vaccine that prevents against seven of the most infectious and highly prevalent serotypes of the pneumococcus bacteria (*Streptococcus pneumoniae*), which can cause invasive pneumococcal disease, mainly severe cases of acute meningitis, pneumonia or sepsis.

Dr. Lena Lopez Ambron, director of the National Immunization Program of Minsap, explained that this disease is transmitted from person to person, through respiratory droplets and secretions (when coughing or sneezing), and in a large part of the population, especially in children. From October 14 to December 31 this year, a single dose of Quimi-Vio will be administered to two-year-old children throughout the country.

Fuente: ACN Cuban News Agency. Disponible en https://acortar.link/enUiPK

Incluyen la vacuna cubana Abdala en campaña nacional de vacunación de México



16 oct. México inició ayer la campaña nacional de vacunación contra el virus SARS-CoV-2 causante de la COVID-19, en la que se administrarán las vacunas Abdala, de Cuba, y la rusa Sputnik.

Según Prensa Latina, el secretario de Salud de México, David Kershenobich, en un acto realizado en el Instituto Nacional de Geriatría, explicó que las vacunas, que se aplicarán durante la temporada invernal 2024-2025 en el sector público, son seguras, eficaces y de calidad, y se prevé que en diciembre también se administre la vacuna mexicana Patria.

Añadió que, aunque las cepas del coronavirus han estado cambiando, la comunidad científica y la Organización Mundial de la Salud (OMS) recomiendan la utilización de biológicos, incluidos los de la primera generación desarrollados durante la pandemia, que inició en 2020.

Kershenobich subrayó que se eligió este instituto para resaltar la importancia de que los adultos mayores reciban las vacunas, ya que son uno de los principales grupos prioritarios por el elevado riesgo que tienen de presentar complicaciones graves, necesitar hospitalización e incluso perder la vida.

Para este periodo se administrarán las vacunas cubana Abdala y la rusa Sputnik. También se prevé que en diciembre también haya la vacuna mexicana Patria.

Fuente: Vanguardia. Disponible en https://acortar.link/byImGz

CAPVAXIVE™: Nueva alternativa para adultos en riesgo de enfermedad neumocócica

16 oct. Merck ha dado a conocer los prometedores resultados de su más reciente ensayo clínico, STRIDE-8, que evalúa la eficacia de la vacuna neumocócica conjugada 21-valente, CAPVAXIVE™, en adultos de entre 18 y 64 años con afecciones crónicas.

Estos resultados, presentados en la conferencia IDWeek 2024, destacan la capacidad de la vacuna para inducir respuestas inmunes robustas y mejorar la protección contra la enfermedad neumocócica invasiva, una de las principales amenazas para la salud de adultos con enfermedades crónicas como la diabetes y afecciones renales.

Según el Dr. Walter Orenstein, profesor emérito de la Universidad de Emory, "estos datos demuestran que la cobertura amplia de CAPVAXIVE puede ayudar a prevenir la enfermedad invasiva en los adultos más vulnerables".

El estudio mostró que CAPVAXIVE fue eficaz para los 21 serotipos incluidos, cubriendo un 84% de los casos de enfermedad neumocócica invasiva en adultos mayores de 50 años.

Protección ampliada contra serotipos claves

El ensayo también reveló que las respuestas inmunitarias provocadas por CAPVAXIVE fueron superiores para ocho serotipos específicos en comparación con otras vacunas disponibles en el mercado, como PCV15 y PPSV23.

Esto refuerza su potencial para proteger a adultos en riesgo elevado, ya que la enfermedad neumocócica puede provocar complicaciones graves e incluso la muerte, especialmente en personas mayores y con condiciones de salud subyacentes.

Menos efectos adversos

Otro hallazgo clave de STRIDE-8 fue que los participantes que recibieron CAPVAXIVE mostraron menos efectos adversos relacionados con la vacuna en comparación con aquellos que recibieron la combinación de PCV15 y PPSV23. Este es un factor crucial para garantizar una mayor adherencia a la vacunación en poblaciones de alto riesgo.

Además de los resultados inmunológicos, Merck presentó un estudio que evalúa la carga clínica y económica de la enfermedad neumocócica en Estados Unidos. Este estudio reveló que las poblaciones más afectadas por la enfermedad neumocócica, como los adultos de raza negra y aquellos en áreas rurales, tienen tasas de vacunación más bajas y enfrentan un mayor riesgo de enfermedad grave.

"Nuestro compromiso es seguir priorizando avances que beneficien a las poblaciones más vulnerables", afirmó el Dr. Macaya Douoguih, jefe del área de investigación clínica de vacunas de Merck.

Un avance significativo en la lucha contra la enfermedad neumocócica

Con la introducción de CAPVAXIVE, Merck espera reducir significativamente la incidencia de la enfermedad neumocócica invasiva en Estados Unidos. Un estudio de modelización presentado durante IDWeek estimó que el uso de esta vacuna podría reducir en un 33,9% los casos de esta enfermedad en la próxima década, lo que se traduce en 14,000 casos menos comparado con las opciones actuales.

En definitiva, CAPVAXIVE se perfila como un avance importante para mejorar la protección de los adultos contra la enfermedad neumocócica, proporcionando una cobertura amplia y una respuesta inmune robusta en quienes más lo necesitan.

Fuente: Medicina y Salud Pública. Disponible en https://acortar.link/7nTDmu

Merck anuncia la presentación de resultados positivos del ensayo clínico de fase 2B/3 (Mk-1654-004) que evalúa el clesrovimab

18 oct. Merck ha anunciado la presentación de los resultados positivos del ensayo clínico de fase 2b/3 (MK-1654-004) que evalúa el clesrovimab, el anticuerpo monoclonal profiláctico en investigación de la compañía diseñado para proteger a los lactantes de la enfermedad por el virus respiratorio sincitial (VRS) durante su primera temporada de VRS. Los resultados, junto con las conclusiones provisionales del ensayo de fase 3 en curso (MK-1654-007) de clesrovimab, se presentaron durante la IDWeek 2024, celebrada del 16 al 19 de octubre en Los Ángeles, California. Los resultados del MK-1654-004, un ensayo pivotal de fase 2b/3 controlado con placebo que evalúa una dosis única de clesrovimab administrada a recién nacidos sanos prematuros y a término (desde el nacimiento hasta el año de edad) cumplieron todos los criterios de valoración preespecificados, con resultados consistentes tanto a los 5 meses como a los 6 meses.

La incidencia de acontecimientos adversos (AA) y AA graves fue comparable entre los grupos de clesrovimab y placebo, y no se produjeron muertes relacionadas con el tratamiento o el VRS durante el estudio. El criterio principal de valoración de la eficacia del ensayo, la reducción de la incidencia de infecciones de las vías respiratorias bajas (IRVB) con asistencia médica asociadas al VRS que requieren = 1 indicador de infección de las vías respiratorias bajas (IRVB) o gravedad en comparación con el placebo hasta el día 150 (5 meses) tras la dosis, fue del 60,4% (IC del 95%: 44,1, 71,9; p < 0,001). Clesrovimab también redujo las hospitalizaciones asociadas al VRS (criterio de valoración secundario) y las hospitalizaciones por LRI asociadas al VRS (criterio de valoración terciario) hasta el día 150 (5 meses) en comparación con placebo en un 84,2% (IC del 95%: 66,6; 92,6; p < 0,001) y un 90,9% (IC del 95%: 76,2; 96,5), respectivamente.

Clesrovimab redujo la incidencia de MALRI grave (criterio de valoración terciario) en un 91,7% (IC del 95%: 62,9, 98,1). Además, en un análisis post hoc, la reducción de la incidencia de MALRI que requiere = 2 indicadores de LRI y gravedad (un criterio de valoración de MALRI más grave que el criterio de valoración primario de MALRI), fue del 88,0% (IC del 95%: 76,1, 94,0) hasta el día 150 (5 meses). Merck también anunció datos de un análisis provisional previsto del ensayo MK-1654-007, un ensayo de fase 3 que evalúa la seguridad y eficacia de clesrovimab frente a palivizumab en lactantes y niños con mayor riesgo de enfermedad grave por VRS.

El criterio de valoración principal del estudio es la seguridad y tolerabilidad del clesrovimab en lactantes que entran en su primera temporada de VRS. Los resultados provisionales mostraron que el clesrovimab tenía un perfil de seguridad comparable al del palivizumab, y hasta la fecha no se ha notificado ningún EA grave relacionado con el fármaco. Las tasas de incidencia de MALRI asociado al VRS que requiere = 1 indicador de LRI o gravedad y de hospitalizaciones asociadas al VRS (criterios de valoración secundarios) también fueron comparables entre el clesrovimab (3,6% y 1,3%, respectivamente) y el palivizumab (3,0% y 1,5%, respectivamente) hasta el día 150 (5 meses).

Fuente: Market Screener. Disponible en https://acortar.link/xdYz6Q

La vacuna contra el VRS para adultos mayores, "sumamente eficaz" contra la enfermedad grave

18 oct. Un estudio multiestatal, publicado en 'The Lancet' , se ha convertido en uno de los primeros análisis de datos del mundo real sobre la eficacia de la vacuna contra el virus respiratorio sincitial (VRS). Los investigadores de VISION Network de los CDC (Centros para el Control y la Prevención de Enfermedades) informan que, en general, estas vacunas fueron muy eficaces en adultos mayores, incluso en aquellos con afecciones inmunodeprimidas, durante la temporada de enfermedades respiratorias 2023-24, la primera temporada después de la aprobación de la vacuna contra el VRS en los EEUU.

Pese a que normalmente el foco se pone en el impacto que el virus respiratorio sincitial tiene en los más pequeños, en los que es la principal causa de bronquiolitis y neumonías, lo cierto es que también los más mayores resultan ser vulnerables a esta infección. La tasa de cuidados intensivos que reciben estos pacientes hospitalizados varía del 10 al 31% y entre el 3 y el 17% precisarán oxígeno suplementario, es decir, que estos pacientes tienen entre dos a tres veces más probabilidad de complicaciones y precisar atención intensiva que aquellos hospitalizados por Covid-19 o gripe.

En los años anteriores a la disponibilidad de una vacuna contra el VSR, se estima que se producían anualmente entre 60.000 y 160.000 hospitalizaciones y entre 6.000 y 10.000 muertes asociadas al VRS entre los adultos estadounidenses de 65 años o más, según los CDC. Las comorbilidades asociadas a la edad así como la inmunosenescencia, por la que el sistema inmunitario se debilita, son las principales causas detrás de estos datos.

La vacunación contra el VRS proporcionó aproximadamente un 80% de protección contra la enfermedad grave y la hospitalización

En este contexto, la vacuna había demostrado en ensayos clínicos suponer una de las principales herramientas preventivas contra la infección grave y las complicaciones derivadas. Aprobada el año pasado por la Administración de Alimentos y Medicamentos estadounidense (FDA por sus siglas en inglés) y

posteriormente por la Agencia Europea de Medicamentos (EMA por sus siglas en inglés), el estudio publicado en 'The Lancet' con los datos de la campaña 2023-2024 de EE.UU. confirman esta eficacia.

Como señala el estudio, la vacunación contra el VRS proporcionó aproximadamente un 80 % de protección contra la enfermedad grave y la hospitalización, el ingreso en la unidad de cuidados intensivos y la muerte debido a una infección respiratoria, así como una protección similar contra la enfermedad menos grave en adultos de 60 años o más que visitaron un departamento de emergencias pero no requirieron hospitalización. De esta población, los mayores de 75 años tenían el mayor riesgo de enfermedad grave y eran los más propensos a ser hospitalizados.

EFICACIA REAL DE LA VACUNA

"A diferencia de este estudio de datos, los ensayos clínicos de la vacuna contra el VRS no tenían la potencia suficiente para evaluar la eficacia de las vacunas contra la enfermedad grave que requiere hospitalización. Al abordar esta brecha en la evidencia, pudimos usar el poder de los macrodatos para determinar la eficacia de la vacuna contra el VRS, información necesaria para fundamentar la política de vacunación", menciona el coautor del estudio Shaun Grannis.

El también vicepresidente de datos y análisis en el Instituto Regenstrief y profesor de medicina familiar en la Facultad de Medicina de la Universidad de Indiana. señala que, como científico de datos y médico de familia, "aliento a los adultos mayores a seguir las recomendaciones de los CDC y vacunarse contra el VRS a medida que ingresamos en la temporada de enfermedades respiratorias de este año y de todos los años".

"Esta tasa de efectividad es bastante impresionante y más alta que la que vemos, por ejemplo, con la vacuna contra la gripe"

"Ninguna vacuna es 100 % efectiva. Una tasa de efectividad de la vacuna del 80 % es bastante impresionante y más alta que la que vemos, por ejemplo, con la vacuna contra la gripe", insiste el coautor del estudio Brian Dixon, director interino y científico investigador del Centro Clem McDonald de Informática Biomédica en el Instituto Regenstrief y profesor en la Facultad de Salud Pública de Indianapolis Fairbanks de la Universidad de Indiana. Y concluye: "Al usar datos del mundo real de registros médicos electrónicos que se capturan de manera rutinaria en la atención a personas de diversos ámbitos de la vida, descubrimos que recibir la vacuna brindaba una alta protección contra la hospitalización, la enfermedad grave y la muerte".

Fuente: ConSalud. Disponible en https://acortar.link/tdlaPD

Cofepris aprueba vacuna actualizada de Pfizer contra Covid-19; aseguran calidad y eficacia

18 oct. La Comisión Federal para la Protección contra Riesgos Sanitarios (Cofepris), aprobó la nueva vacuna actualizada contra COVID-19 de la marca Pfizer para la siguiente temporada invernal.

"La farmacéutica destacó la seguridad, calidad y eficacia de la vacuna en un contexto donde el país enfrenta un incremento por casos de coronavirus."

Esta nueva versión fue elegida y recomendada para el linaje JN.1, de acuerdo con el consenso establecido por el Comité Asesor sobre Vacunas y Productos Biológicos Relacionados de la *Food and Drugs Administration* (FDA) de Estados Unidos, el pasado mes de junio.

La farmacéutica destacó que dicha autorización respalda la seguridad, calidad y

eficacia de la vacuna en un contexto donde el país enfrenta un incremento por casos de COVID-19.

"Refleja el compromiso continuo de la empresa en desarrollar soluciones innovadoras para mejorar la salud de la población desde el inicio de la pandemia", recalcó Pfizer.

Fuente: EL UNIVERSAL. Disponible en https://acortar.link/bz3DQO

Global Cholera Vaccine Stockpile is Depleted

Oct 19. According to the World Health Organization (WHO), the global Oral Cholera Vaccine (OCV) stockpile is depleted, with no remaining doses available.

The WHO's External Situation Report #19 says this shortage poses significant challenges to Cholera outbreak response efforts for the rest of 2024 and early 2025.

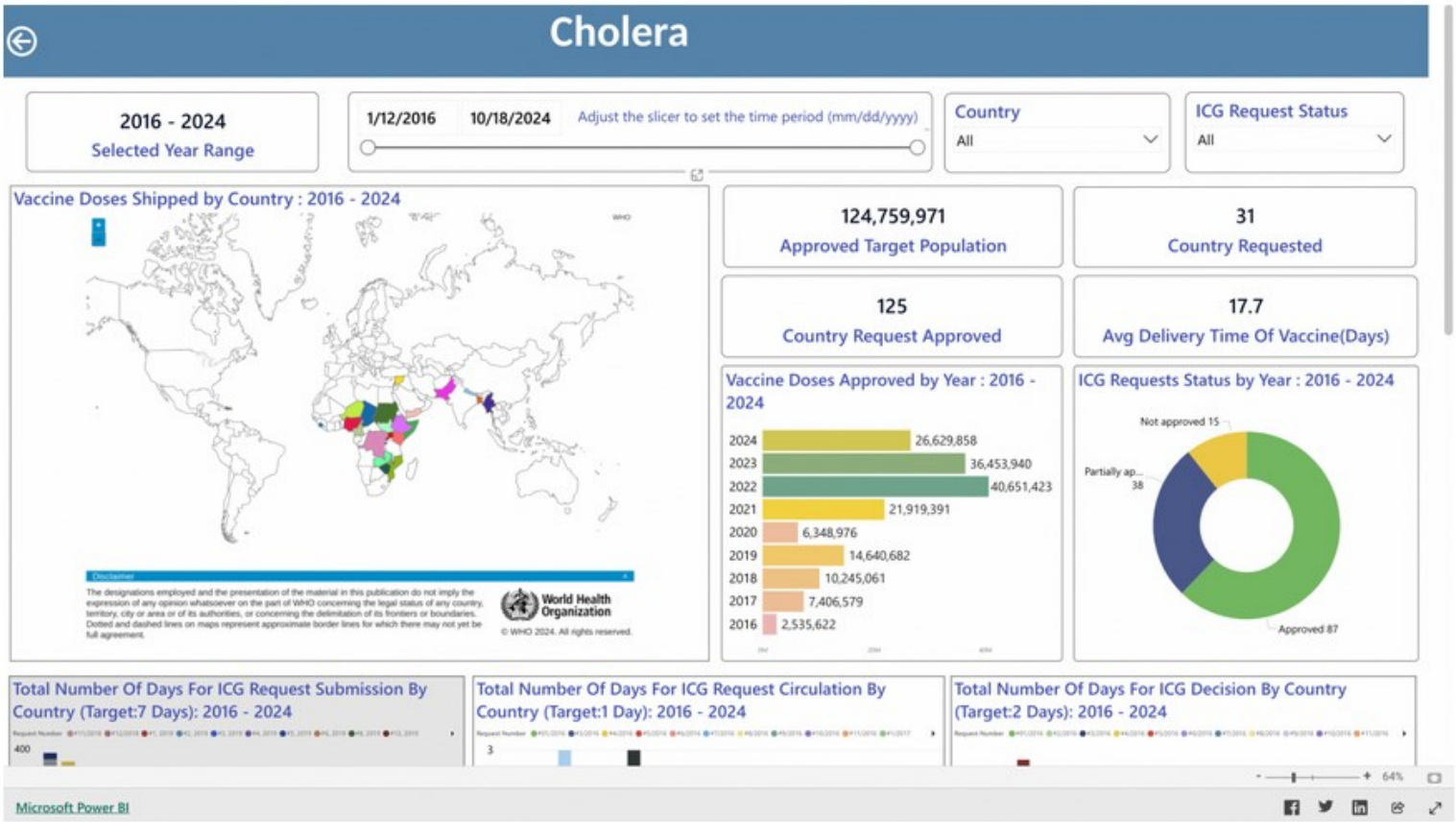
This news is concerning since around 1.3 billion people are at risk of cholera worldwide.

The International Coordinating Group (ICG) for OCVs was created in 1997 to manage the global stockpile. Since its establishment, the WHO, UNICEF, and Médecins sans Frontières have facilitated about 73 million doses of OCV for 23 countries.

As of October 14, 2024, the ICG dashboard indicates the global production capacity for this year is 37-50 million doses, with about 26 million approved for distribution.

Over the past month, the ICG received six requests for OCV from five countries: Bangladesh, Sudan, Niger, Ethiopia, and Myanmar. Due to limited vaccine availability, only 7.6 million doses could be shipped to these countries.

Recently, the Republic of Nigeria received about 900,000 OCV doses.



International Coordinating Group OCV dashboard October 18, 2024

The WHO wrote on October 18, 2024, 'The shortfall in supply highlights the ongoing challenges in meeting global demand, especially as cholera outbreaks continue to rise across multiple regions. Efforts to scale production are underway, but immediate vaccine access remains constrained.'

"According to a Global Task Force on Cholera Control, the true impact of cholera is underestimated. Although global reports indicate between 100,000 and 1.2 million cases annually in the past two decades, cholera's prevalence is likely much higher due to gaps in surveillance, social stigma, and concerns about economic repercussions," said Duellyn Pandis, DNP, APRN, FNP-C.

"Currently, the changing climate elevates the risk of its spread to new regions," added Padnis, President & CEO of Passport Health of Tampa Bay.

OCVs such as Dukoral and Euvichol-Plus/Euvichol have been approved by the WHO, but they are unavailable in the U.S.

Cholera is spread through water and food contaminated with cholera bacteria. It can cause life-threatening watery diarrhea and vomiting.

During 2024, a cumulative total of 439,724 cholera cases and 3,432 deaths were reported globally across five WHO regions. The 126% spike in deaths is deeply concerning, says the WHO.

In the United States, the single-dose Vaxchora is the only OCV approved for use by people ages 2 to 64 who are traveling to an area where cholera is present.

The U.S. CDC recommends future travelers to cholera-endemic areas speak with a vaccine expert about immunization options at least ten days before traveling abroad.

As of late October 2024, travel vaccine clinics and pharmacies in the U.S. generally have OCVs available.

Fuente: Precision Vaccinations. Disponible en https://acortar.link/LHRr5h

Understanding the Nuances of the RSV Maternal Vaccine and Monoclonal Antibody for the Pediatric Population

Oct 20. development in this area. And currently, there is 1 monoclonal antibody (nirsevimab-alip (Beyfortus), SNeonates are greatly susceptible to contracting RSV and developing severe disease in the earliest stages of life.

"With the approval of newer products, clinicians have tools to prevent the respiratory virus in the most vulnerable population. Helen Chu, MD, MPH, offers some insights on their efficacy and the nuances of the delivery of the 2 immunizations. "

“They get bronchiolitis, they get pneumonia, and they're hospitalized when they have trouble breathing and they need oxygen support,” said Helen Chu, MD, MPH, professor of Medicine, Epidemiology, and Global Health at the University of Washington. “For the last several decades, the number 1 cause of hospitalizations of infants in the United States was RSV infection. So it is a significant burden, both on the parents and the caregivers of these infants, and also on the healthcare system.”

At ID Week 2024, Chu participated in a symposium, A Whole New World? Respiratory Syncytial Virus in the Vaccine and Monoclonal Antibody Era.

Later that same day, she sat down with Contagion to discuss some of the nuances between the maternal vaccine and monoclonal antibody.

In the last few years, there has been significant anofi/Astra Zeneca) and 1 maternal RSV vaccine (Abrysvo, Pfizer) that are both FDA approved to prevent lower respiratory tract disease in neonates.

"Both the maternal vaccine and the monoclonal antibody are designed to protect the infant in the first few months of life, specifically protecting against severe disease that requires hospitalization, and they are both highly effective in doing that," Chu said. "In the clinical trials of the maternal vaccine, the efficacy against RSV hospitalization was around 60% to 70%. That number was very similar for the monoclonal antibody that's given at birth to infants, also 60 to 70%, in the clinical trials. We now actually have more data from this first season, because both products are out, and it seems as though the monoclonal antibody is still looking like that out in the community. In studies from Europe, the effectiveness of the monoclonal antibody is 70% against hospitalization. So, if you think about that, it's really the number of hospitalizations of infants in Europe has gone down dramatically because of receipt of nirsevimab."

While there is great protection afforded both immunizations, she points out to some of the nuances between the 2 for delivery.

"The maternal vaccine is given during pregnancy. Right now, the recommendation in the United States is to give it between 32 and 36 weeks gestation, and the idea is then it protects the baby through antibody that's transferred across the placenta, and then the antibody stays in the baby system for the first 4 to 6 months after birth," Chu said. "This is different from the monoclonal antibody, nirsevimab, which is given when the baby is born, and then directly administered to the baby, and it also lasts 4 to 6 months."

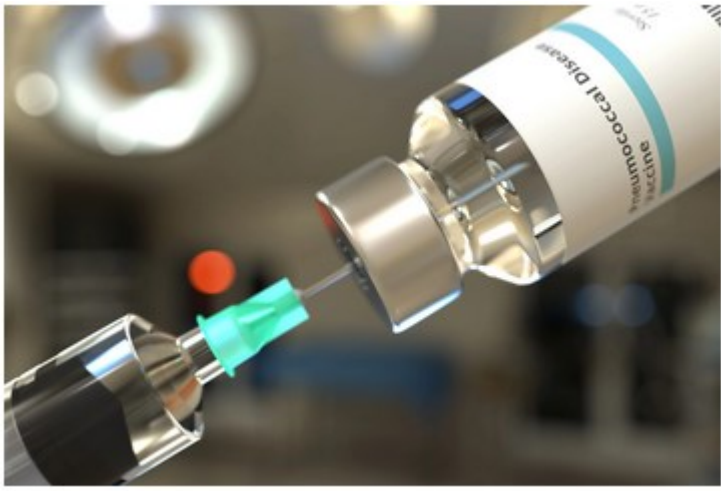
"In terms of logistics, I think there's a couple of things that are challenging. First of all, the maternal vaccine has to be given during this very narrow gestational window—32 to 36 weeks in your OB's office. So that is hard to do. Uptake was quite low—below 20% for nirsivimab. There have also been a lot of challenges, mostly related to the fact that you really need to give it very early in life to protect the infant, because they get very sick at a very young age, and being able to get it during the birth of the infant before they get discharged would be the best way to do that, but it's a very expensive product, and right now, the reimbursement isn't worked out."

Fuente: Contagion Live. Disponible en https://acortar.link/VYUKZg

Pneumococcal 21-Valent Conjugate Vaccine Generates Positive Response in Adults at Increased Risk of Disease

Oct 21. New results from STRIDE-8 (NCT05696080), a phase 3 trial evaluating the pneumococcal 21-valent conjugate vaccine (PCV21; Capvaxive), were presented at IDWeek 2024, demonstrating the efficacy of the vaccine in adults 18 to 64 years of age with heightened risk of pneumococcal disease who had not previously received a pneumococcal vaccine.

The positive results, announced last week in a news release from Merck, further highlight the robust immunogenic properties of the vaccine. In the trial, PCV21 was immunogenic for all 21 strains included at day 30. Further, the immune responses were comparable to those generated by the combination of pneumococcal 15-valent conjugate vaccine (PCV15) and pneumococcal 23-valent polysaccharide vaccine (PPSV23).



"Adults with chronic medical conditions, such as kidney disease or diabetes, are particularly vulnerable to invasive pneumococcal disease, which may increase their risk of severe illness," Walter Orenstein, MD, member of Merck's Scientific Advisory Committee, noted in the news release. "These data further demonstrate that the broad serotype coverage Capvaxive provides can help prevent invasive disease among vulnerable adults."

In June, the FDA granted regulatory approval to the vaccine for the prevention of pneumococcal disease and pneumonia in those 18 years and older. Serotypes covered in the vaccination include 3, 6A, 7F, 8, 9N, 10A, 11A, 12F, 15A, 15B, 15C, 16F, 17F, 19A, 20A, 22F, 23A, 23B, 24F, 31, 33F and 35B for the invasive disease indication.

Following its approval in the United States, the CDC's Advisory Committee on Immunization Practices (ACIP) voted unanimously to recommend the vaccine for appropriate adults 65 years and older who had not previously received a vaccine or whose vaccination history is unknown. In addition, they recommended that adults 19 to 64 years of age with certain risk factors receive the vaccine.

Researchers in the STRIDE-8 trial also garnered important safety data, with a lower proportion of patients that received PCV21 experiencing adverse events (AEs) compared with the patients that received PCV15 and PPSV23. These included injection site, systemic, and vaccine-related AEs.

During the IDWeek presentation, investigators also showcased important results from a targeted literature review of the clinical and economic burden of pneumococcal disease in adults throughout the country. According to the review, Black adults and adults in rural areas with low levels of education face lower rates of pneumococcal vaccination and increased disease burden.

Results from a modeling study were also highlighted, in which PCV21 was compared with pneumococcal 20-valent conjugate vaccine (PCV20) regarding their health impact in US adults. According to the data, the use of PCV21 led to fewer overall cases of pneumococcal disease than PCV20 after a decade, with a 33.9% reduction across all ages compared with a 28.9% reduction for PCV20. This reduction equates to 14,000 fewer cases of pneumococcal disease.

"The data presented during IDWeek build on the robust clinical profile of Capvaxive and illustrate the importance of improving equitable access for those at high risk for invasive pneumococcal disease," Macaya Douoguih, MD, therapeutic area head of vaccines clinical research at Merck, said in the news release.

Fuente: Pharmacy Times. Disponible en https://acortar.link/moLtGL

MenACYW Vaccine Elicits Favorable Outcomes in Infants Aged 6 to 23 Months

Oct 21. A 2-dose schedule of MenQuadfi®, a quadrivalent meningococcal conjugate vaccine (MenACYW), is immunogenic among infants aged 6 to 23 months and has an acceptable safety profile, according to study results presented at IDWeek 2024, held from October 16 to 19, in Los Angeles, California.

Researchers performed a phase 3, double-blinded, multicenter, randomized controlled trial (ClinicalTrials.gov

Identifier: NCT03691610) to evaluate the immunogenicity and safety of a 2-dose schedule of MenACYW among infants (age, 6-23 months) when administered concomitantly with routine pediatric vaccines. The analysis comprised 950 infants who were divided into 4 groups. Patients in Group 1 (n=370) and Group 2 (n=361) received 2 doses of MenACYW and Menveo® (serogroups A, C, Y, and W-135), respectively, at 6 to 7 and 12 to 13 months of age. Patients in Group 3 (n=96) and Group 4 (n=103) received 2 doses of MenACYW and Menactra® (serogroups A, C, Y, and W-135), respectively, at 17 to 19 and 20 to 23 months of age. The primary outcome was noninferiority between seroresponses elicited by MenACYW and Menveo for serogroups A, C, W, and Y. Seroresponse was measured via serum bactericidal assay.

"The quadrivalent meningococcal conjugate vaccine MenACYW may be appropriate for invasive meningococcal disease prevention in infants as young as 6 months."

Among infants included across all 4 groups, 47.6% were girls, 16.8% were Black or African American, 1.6% were Asian, and 41.7% were Hispanic or Latino.

The percentage of patients who achieved a seroresponse to all 4 meningococcal serogroups was similar between those in Group 1 and Group 2 (range, 89.4%-99.3% and 82.9%-97.7%, respectively), indicating MenACYW as noninferior to Menveo.

Analysis between infants Groups 1 vs 2 indicated comparable safety profiles for the MenACYW and Menveo vaccines throughout the study period. The researchers observed similar rates of adverse events (AEs) of special interest (0.3% vs 0.6%), severe AEs, (1.6% vs 3.3%) and medically attended AEs (68.1% vs 69.0%).

Further analysis among infants in Groups 3 and 4 who were vaccinated at an older age also indicated comparable safety profiles for the MenACYW and Menactra vaccines.

According to the researchers, "MenACYW conjugate vaccine is immunogenic and demonstrates an acceptable safety profile when administered to infants 6 through 23 months of age as a 2-dose schedule with a minimum interval of 3 months."

Fuente: Dermatology Advisor. Disponible en https://goo.su/o4Xk8s

Vaccine expert calls for preventive, innovative solutions vs. dengue

Oct 22. Immunization against dengue prevents severe cases and offers broader protection, an expert said Tuesday. In a news release, Vaccine Expert Panel head Nina Gloriani said sustained preventive efforts and innovative solutions are important in combating the mosquito-borne disease.

Department of Health (DOH) latest data showed that the number of dengue cases recorded from Jan. 1 to Oct. 4 is 82 percent higher than during the same period last year. There are 269,467 confirmed infections as compared to 147,678 cases last year. School-aged children, particularly those up to 9 years and between 9 to 16 years, remain the most vulnerable to dengue.

While the DOH's 4S strategy is essential, Gloriani noted that it is not consistently implemented across the nation. The 4S strategy means search and destroy mosquito-breeding sites; self-protection; seeking early consultation; and support fogging and spraying in hotspot areas.

"Complacency is a problem we're seeing not just in communities but perhaps among authorities as well," she

said.

"There are at least two new dengue vaccines currently in development. The goal is to prevent severe cases and offer broader protection."

First, second generations

The introduction of second-generation dengue vaccines offer hope for more effective prevention vs the first generation.

First-generation vaccines can be given to people who already had dengue infection. Anyone who wants to get this jab must first undergo screening.

The second-generation vaccines may be given to population groups with or without a history of dengue infection.

They use the dengue virus 2 imitating the dengue infection and engaging the body's natural defenses.

They also focus on targeting dengue's four serotypes and include components that address the non-structural protein 1, which is associated with severe dengue.

Gloriani said first-generation vaccines pose challenges on accessibility and convenience due to the testing requirement while the second-generation ones allow wider use and provide expanded coverage.

The World Health Organization has recommended the use of second-generation vaccine among children aged 6 to 16 years in areas with high dengue burden and high transmission intensity.

Other Southeast Asian countries like Indonesia, Thailand, Malaysia and Vietnam are already introducing the next generation vaccines.

On the other hand, the Philippines is taking a more cautious approach to ensure sufficient public education on vaccination.

In 2024, more than six million cases of dengue were recorded in Brazil, peaking during the summer between the months of January and March.

"Brazil has faced significant outbreaks and tried mass immunization with the vaccine. However, vaccinating a large portion of the population requires more resources, which is not always feasible," Gloriani said. "The goal is to vaccinate a large enough segment of the population to achieve herd immunity."

She added dengue cases can be managed, especially in countries like the Philippines where the disease remains endemic, with integrated approach to dengue prevention and control, including vaccination and public education.

Fuente: Philippine News Agency. Disponible en https://acortar.link/lQw9qZ

Pfizer suministra mil millones de dosis de vacuna antineumocócica conjugada para niños en países de bajos ingresos

23 oct. Pfizer ha anunciado que ha suministrado su vacuna antineumocócica conjugada (PCV) número 1.000 millones en países de bajos ingresos a través de su colaboración con Gavi, la Alianza para las Vacunas.

Así, la milmillonésima dosis ha sido entregada a Etiopía para su uso en su programa nacional de inmunización con el objetivo de ayudar a proteger a los niños de la enfermedad neumocócica.

La neumonía es la principal causa infecciosa de mortalidad infantil en todo el mundo. Gavi, la Alianza para las Vacunas, es una asociación público-privada que reúne a gobiernos, organizaciones sanitarias mundiales, la industria de las vacunas y otros sectores para aumentar el acceso equitativo y sostenible a las vacunas frente a algunas de las enfermedades más mortales del mundo, como la neumonía.

En 2009, Gavi estableció el Compromiso Anticipado de Mercado para la Vacunación Neumocócica (CMA, por sus siglas en inglés), un mecanismo de financiación de la salud público-privado diseñado para crear un mercado sostenible, que permita la inversión en el desarrollo y la fabricación y proporcione un suministro asequible y estable de vacunas a un precio altamente subvencionado para su suministro a niños en países de ingresos bajos y medianos bajos que reúnen los requisitos para participar en el CMA.

Pfizer fue uno de los primeros fabricantes en participar en el CMA. Hasta la fecha, sus vacunas han llegado a 57 países que reúnen los requisitos para participar en el CMA y se estima que han ayudado a proteger a más de 300 millones de niños de la enfermedad neumocócica.

"El éxito de Gavi en la inmunización de más de mil millones de niños desde el año 2000 se basa en su modelo único de múltiples partes interesadas. Los fabricantes de vacunas desempeñan un papel fundamental en esta asociación, ayudándonos a crear mercados saludables y asequibles para las vacunas y a ofrecer nuevas soluciones innovadoras. Estamos orgullosos de haber alcanzado este importante hito junto con Pfizer y esperamos una colaboración de gran impacto en el futuro", ha señalado la directora ejecutiva de Gavi, la Alianza para las Vacunas, Sania Nishtar.

MÁS DE 40.000 NIÑOS MUEREN DE NEUMONÍA CADA AÑO EN ETIOPÍA

En Etiopía, más de 40.000 niños menores de cinco años mueren cada año de neumonía. Se trata de una de las principales causas de muerte durante el período posnatal y representa el 20 por ciento de las muertes en este grupo de edad cada año. Desde 2020, Pfizer ha suministrado más de 40 millones de vacunas antineumocócicas para apoyar las iniciativas de vacunación del país.

"Las vacunas antineumocócicas pediátricas son fundamentales en nuestra lucha contra uno de los problemas de salud pública más urgentes de nuestro país. Con el apoyo de Gavi, hemos podido brindar acceso a estas vacunas para ayudar a proteger a nuestros ciudadanos más vulnerables. La dosis número mil millones es un hito emocionante y un testimonio del compromiso y la cooperación de Pfizer, Gavi y otros socios para ayudar a los niños de Etiopía y de todo el mundo a tener un comienzo más saludable en la vida", ha afirmado el jefe de Inmunización del Ministerio Federal de Salud de Etiopía, Melkamu Ayalew.

En la actualidad, más del 50 por ciento de las vacunas neumocócicas de Pfizer fabricadas se suministran para apoyar el acceso en países de ingresos bajos y medianos bajos sin fines de lucro a través de su colaboración con Gavi.

"Estamos encantados de haber alcanzado un hito tan increíble a través de nuestra colaboración continua con Gavi para garantizar que los niños de todo el mundo tengan la oportunidad de vivir vidas más largas y saludables, pero nuestro trabajo no termina aquí", ha apuntado el director médico de Pfizer en España, Jose Chaves.

"A través de colaboraciones como esta y de nuestra iniciativa 'Accord for a Healthier World', que trabaja para

ampliar el acceso a todos los medicamentos y vacunas para los que tenemos derechos globales en 45 países de bajos ingresos, continuaremos colaborando con organizaciones de salud globales, gobiernos y otros para permitir un acceso sostenido y sin fines de lucro a medicamentos y vacunas innovadores y para ayudar a cerrar la brecha de equidad en salud para los más vulnerables", ha añadido.

LA COBERTURA MUNDIAL DE PCV SE HA MULTIPLICADO POR SEIS

Desde que se creó el CMA, se han logrado avances importantes en la lucha para proteger a los niños contra la enfermedad neumocócica. La cobertura mundial de vacuna antineumocócica conjugada (PCV) se ha multiplicado por seis, pasando del 10 por ciento en 2010 al 65 por ciento en 2023. Sin embargo, esta cifra no alcanza el objetivo de la Agenda de Inmunización 2030 del 90 por ciento, lo que indica que aún queda mucho por hacer.

Para Pfizer, garantizar que más niños sean vacunados contra enfermedades prevenibles mediante vacunación, como la enfermedad neumocócica, va más allá de brindar a las personas protección contra enfermedades graves y la muerte. Puede ayudar a mejorar las comunidades y los países al promover la equidad sanitaria, aumentar la productividad económica y reducir la carga de costes sobre los sistemas de atención de la salud.

La colaboración de Pfizer con Gavi, la Alianza para las Vacunas, forma parte del compromiso de la empresa de ayudar a abordar las brechas de equidad en materia de salud en todo el mundo y permitir un acceso acelerado a medicamentos y vacunas. La iniciativa 'Accord for a Healthier World' de Pfizer es un esfuerzo para aumentar el acceso de 1.200 millones de personas que viven en 45 países de bajos ingresos en todo el mundo.

A través del proyecto 'Accord', Pfizer se ha comprometido a brindar acceso a la cartera completa de medicamentos y vacunas para los que tiene derechos globales sin fines de lucro a los países elegibles, al tiempo que colabora con los gobiernos y otros para abordar las barreras a nivel de sistema que pueden impedir el acceso a estos productos a las personas que los necesitan.

Fuente: Infosalus. Disponible en https://acortar.link/zW1Cki

Reducen a 50 años la edad para recibir la primera vacuna antineumocócica en EE.UU: cuáles son los motivos

25 oct. Con el respaldo casi unánime del panel asesor de los Centros para el Control y Prevención de Enfermedades, se redefine la estrategia de vacunación contra la bacteria que causa neumonía, meningitis, entre otras enfermedades. Antes se recomendaba para mayores de 65.

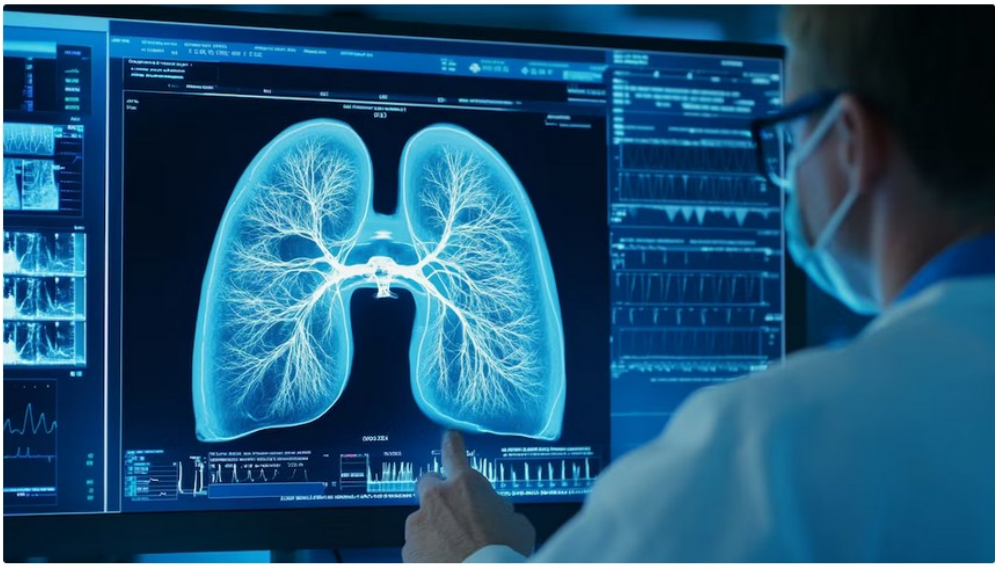
La primera edad recomendada a la que los estadounidenses deben recibir la vacuna antineumocócica se ha reducido de 65 a 50 años, anunciaron el miércoles los Centros para el Control y la Prevención de Enfermedades (CDC) de EE. UU.

“Reducir la edad para la vacunación antineumocócica ofrece a más adultos la oportunidad de protegerse de la enfermedad neumocócica a la edad en que el riesgo de infección aumenta sustancialmente”, dijo la directora de los CDC, la Dra. Mandy Cohen, en un comunicado de la agencia.

“Las bacterias neumocócicas pueden causar enfermedades graves, como neumonía, meningitis e infecciones del torrente sanguíneo, y los adultos mayores tienen un mayor riesgo de enfermedad neumocócica”, explicó.

Ayer temprano, el panel asesor de los CDC había votado previamente 14 a 1 para reducir la edad de vacunación, y Cohen aprobó la medida poco después.

Las recomendaciones anteriores habían aconsejado la vacuna antineumocócica para dos grupos de edad vulnerables: los niños menores de 5 años y las personas mayores de 65 años. También se aconseja a las personas de otras edades con ciertas condiciones de salud que se vacunen.



La nueva recomendación busca ofrecer protección a los adultos, cuya exposición a infecciones es significativa (Imagen Ilustrativa Infobae)

La enfermedad neumocócica es causada por Streptococcus pneumoniae y formas relacionadas de bacterias neumocócicas.

"Se estima que anualmente ocurren más de 150.000 hospitalizaciones por neumonía neumocócica en los Estados Unidos y se ha demostrado que complica la infección por influenza", según los CDC.

"Los neumococos son la causa bacteriana más común de neumonía infantil, sobre todo en los niños menores de 5 años", anotó la agencia. "En los adultos, los neumococos representan entre el 10% y el 30% de la neumonía adulta adquirida en la comunidad".

La primera vacuna antineumocócica fue autorizada en los Estados Unidos en 1977. Según Associated Press, hay cuatro tipos de vacuna antineumocócica disponibles para los estadounidenses, incluida Capvaxive, fabricada por Merck, que puede costar alrededor de 300 dólares por dosis y protege contra 21 tipos de neumococo, ocho más que otras vacunas.

El panel asesor de los CDC anotó que la enfermedad neumocócica tiende a aparecer antes en los afroamericanos (entre los 55 y los 59 años de edad), en comparación con los blancos. Eso fue parte del razonamiento de los expertos de que se debería reducir la edad de la primera vacunación, reportó AP.

Es posible que se requieran dosis de refuerzo de la vacuna unos 15 años después de la primera inyección.

Fuente: infobae. Disponible en https://acortar.link/WKODKE

La Comunidad de Madrid adquiere vacunas contra el neumococo para las campañas de inmunización de 2024 y 2025

26 oct. El Consejo de Gobierno ha aprobado este miércoles la adjudicación por 10,8 millones de euros del contrato para la adquisición de 270.000 dosis de la vacuna neumocócica conjugada veintevalente. Esta compra por parte de la sanidad pública regional garantiza la protección frente al neumococo para las dos próximas campañas de vacunación de 2024 y 2025.

Esta inmunización está indicada para personas mayores de 60 años y resto de adultos menores de esa edad que tengan factores de riesgo. Desde el pasado año, la Administración autonómica la utiliza para prevenir hasta 20 variantes de esta bacteria, las que se detectan con más frecuencia en la Comunidad de Madrid.

De esta manera el Ejecutivo madrileño cumple también con las recomendaciones de los países de nuestro entorno para proteger a la población diana. Su administración se lleva a cabo en otoño en los centros de salud de Atención Primaria y otros puntos autorizados, previa indicación del médico de familia.

Hace 20 años la Consejería de Sanidad comenzó a impulsar la importancia de la vacunación frente a las enfermedades provocadas por el neumococo, que van desde procesos comunes de vías altas, como otitis o sinusitis, a formas más agudas de neumonía, sepsis o meningitis, afectando especialmente a los grupos de edad más avanzada.

La Comunidad de Madrid recuerda que, si el afectado padece alguna patología crónica de base, estas tienen mayor gravedad, lo que puede provocar hospitalizaciones, prolongadas en muchas ocasiones, y un mayor seguimiento facultativo tras recibir el paciente el alta, lo que repercute de forma negativa también en su calidad de vida.

Fuente: Comunidad de Madrid. Disponible en https://acortar.link/3vv3V3

Estudio del Reino Unido muestra que la vacuna contra el COVID-19 reduce el riesgo de complicaciones cardiovasculares

28 oct. Casi tan pronto como comenzó la pandemia de COVID-19, la clase dominante emprendió una campaña vigorosa contra cualquier medida que, al combatir el virus, pudiera interferir con su capacidad para acumular ganancias.

Los gobiernos del mundo decidieron pronto una estrategia basada únicamente en la vacuna, descartando otras medidas de salud pública. Esto ahora ha sido reemplazado en gran medida por una política de "dejarlo correr", ya que incluso las vacunas se han vuelto más difíciles de acceder, para aquellas poblaciones que alguna vez tuvieron acceso a ellas en cantidades significativas.

Para justificar este curso de acción destructivo, se ha ocultado o tergiversado la información sobre el virus y se han hecho varias afirmaciones seudocientíficas para restar importancia a la gravedad de la enfermedad. Esto ha creado un ambiente fértil para concepciones antivacunas retrógradas y teorías de conspiración,

abiertamente apoyadas por algunas de las secciones más desquiciadas de la clase dominante.

Uno de los argumentos citados con más frecuencia por los "antivacunas" es la existencia de algunos casos de personas que desarrollan complicaciones cardiovasculares tras la vacunación, un número ínfimo de los cuales resultó en muertes trágicas de individuos vacunados. Argumentan que la posibilidad de dichas complicaciones justifica el rechazo de la vacuna, minimizando o negando los beneficios de la misma en la prevención del COVID-19, una enfermedad grave con una tasa de mortalidad significativa y consecuencias a largo plazo bien documentadas que alteran la vida.

Un estudio publicado en la revista Nature Communications desmiente esta afirmación al analizar la incidencia de complicaciones cardiovasculares en una población muy grande de individuos vacunados.

Investigación liderada por las universidades de Cambridge, Bristol y Edimburgo, y posibilitada por el Centro de Ciencia de Datos de la Fundación Británica del Corazón (BHF) en el Health Data Research UK, analizó los registros de salud desidentificados de 46 millones de adultos en Inglaterra entre el 8 de diciembre de 2020 y el 23 de enero de 2022.

Los científicos de datos compararon la incidencia de enfermedades cardiovasculares después de la vacunación con la incidencia antes o sin vacunación, durante los dos primeros años del programa de vacunación. Evaluaron específicamente la incidencia de eventos cardiovasculares y trombóticos después de la primera, segunda y dosis de refuerzo de las vacunas COVID-19 desde diciembre de 2020 hasta enero de 2022. Las vacunas estudiadas incluyen las vacunas de ARNm (BNT-162b2 de Pfizer y mRNA-1273 de Moderna) y la vacuna basada en adenovirus ChAdOx1 (AstraZeneca).

El estudio empleó modelos de regresión de Cox para calcular los ratios de riesgo ajustados (aHR), que comparan el riesgo de eventos cardiovasculares después de la vacunación con el riesgo antes o en ausencia de vacunación. En todas las dosis y tipos de vacunas, la incidencia de eventos trombóticos (por ejemplo, coágulos sanguíneos) fue menor después de la vacunación, tanto para eventos arteriales como venosos. La reducción fue evidente ya después de la primera dosis, con un 10 por ciento de menor riesgo para eventos trombóticos arteriales tras la administración de la primera dosis de la vacuna de Pfizer.

Se observó una reducción aún más sustancial en eventos cardiovasculares después de la segunda dosis en todas las marcas de vacunas. Por ejemplo, hubo un 27 por ciento de riesgo reducido para eventos trombóticos arteriales tras la segunda dosis de la vacuna ChAdOx1 de AstraZeneca. Los aHR para otras condiciones como embolia pulmonar y trombosis venosa profunda también fueron más bajos.

Se observaron tendencias similares para las dosis de refuerzo, que ayudaron a mantener tasas más bajas de eventos en comparación con los niveles previos a la vacunación. El estudio observó que la reducción en eventos cardiovasculares fue más pronunciada en las semanas inmediatamente posteriores a la vacunación.

Tanto las vacunas de ARNm (Pfizer y Moderna) como la vacuna basada en adenovirus de AstraZeneca mostraron reducciones en eventos arteriales y venosos. Sin embargo, la magnitud de la reducción del riesgo variaba ligeramente según la marca y la dosis, con las vacunas de ARNm mostrando aHR ligeramente más bajos en general, particularmente después de las dosis de refuerzo.

Aunque las reducciones seguían siendo evidentes hasta 24 semanas después de la vacunación, el grado de reducción disminuía con el tiempo.

Investigaciones previas encontraron que la incidencia de complicaciones cardiovasculares raras es más

alta después de algunas vacunas COVID-19. Este estudio respalda estos hallazgos, pero lo importante es que no identificó nuevas condiciones cardiovasculares adversas asociadas con la vacunación COVID-19 y ofrece una mayor tranquilidad de que los beneficios de la vacunación superan los riesgos.

Estas complicaciones poco comunes se dividen en dos categorías: Trombocitopenia Trombótica Inducida por la Vacuna (VITT) con la vacuna de AstraZeneca, y miocarditis y pericarditis con las vacunas de ARNm (Pfizer y Moderna).

La VITT es una condición rara caracterizada por coágulos de sangre acompañados de bajas cuentas de plaquetas. Puede llevar a complicaciones graves, como trombosis venosa intracraneal (IVCT), que afecta los vasos sanguíneos en el cerebro. El estudio encontró una incidencia más alta de lo normal de VITT después de la primera dosis de la vacuna de AstraZeneca, con el mayor riesgo apareciendo dentro de las primeras dos semanas posteriores a la vacunación.

No se observó un mayor riesgo de VITT tras la segunda dosis de ChAdOx1 o después de cualquier dosis de las vacunas de ARNm, lo que indica que el riesgo se asocia predominantemente con la primera dosis de la vacuna de AstraZeneca.

La miocarditis es una inflamación del músculo cardíaco, mientras que la pericarditis es una inflamación del revestimiento que rodea el corazón. Ambas condiciones pueden causar dolor en el pecho, fatiga y otros síntomas cardíacos, pero a menudo son leves y se resuelven por sí solas. El riesgo elevado tanto para miocarditis como para pericarditis fue mayor en la primera semana después de la vacunación para las vacunas de Pfizer y Moderna, con el riesgo regresando generalmente a los niveles basales dentro de las cuatro semanas posteriores a la vacunación.

Aunque se asociaron complicaciones raras con las vacunas COVID-19, estuvieron principalmente vinculadas a la primera dosis y generalmente ocurrieron dentro de las semanas iniciales posteriores a la vacunación. El estudio enfatiza que estos riesgos, aunque presentes, son superados por los beneficios de protección más amplios de la vacunación contra el COVID-19 y sus riesgos cardiovasculares asociados.

Una gran fortaleza del estudio es el número significativo de personas examinadas, lo que permitió a los investigadores evaluar los efectos de las vacunas en una amplia variedad de demografías y subgrupos clínicos, como edad, sexo, etnicidad y condiciones de salud previas. La reducción general en eventos trombóticos se observó en todos los subgrupos, reforzando el valor de las vacunas en la prevención de complicaciones cardiovasculares relacionadas con el COVID-19.

Los efectos de las vacunas fueron particularmente efectivos para adultos mayores (mayores de 40 años), para quienes el riesgo de complicaciones raras como la miocarditis fue notablemente menor, mientras que los beneficios en términos de reducción de eventos cardiovasculares fueron aún más pronunciados.

La coautora principal, la Dra. Samantha Ip, investigadora asociada del Departamento de Salud Pública y Atención Primaria de la Universidad de Cambridge, declaró a Health Data Research UK: “Esta investigación apoya aún más el gran cuerpo de evidencia sobre la seguridad del programa de vacunación COVID-19, que ha demostrado proporcionar protección contra COVID-19 severo y salvar millones de vidas en todo el mundo”.

El profesor William Whiteley, director asociado del Centro de Ciencia de Datos de la BHF y profesor de neurología y epidemiología en la Universidad de Edimburgo, añadió que el estudio “demuestra que los beneficios de las segundas dosis y refuerzos, con menos eventos cardiovasculares comunes incluyendo

ataques cardíacos y accidentes cerebrovasculares después de la vacunación, superan a las muy raras complicaciones cardiovasculares".

Los resultados muestran el enorme potencial de las fuerzas creativas y productivas de la sociedad. Sin embargo, aunque las vacunas son una herramienta importante en la lucha contra la pandemia, no son suficientes por sí solas. Sin una política de eliminación completa del virus a través de un régimen integral de pruebas, rastreo y cuarentena, un programa de vacunación no es más que un cuidado paliativo.

Esto se puede ver actualmente con la campaña de refuerzo de vacunas de otoño del Reino Unido. En primer lugar, la gran mayoría de las personas ya no son elegibles para una vacuna gratuita a través del Servicio Nacional de Salud y deben pagar de manera privada por una. Si bien el NHS está ofreciendo vacunas gratuitas a personas mayores y clínicamente vulnerables, las disponibles fueron diseñadas para la variante KP o incluso variantes más antiguas del virus.

Se espera que la variante XEC, que actualmente lidera un nuevo aumento de infecciones, se convierta en dominante. No está claro exactamente cuán efectivas son las vacunas actuales contra ella, pero la experiencia indica que no serán tan efectivas como contra la variante para la cual fueron diseñadas. La capacidad del virus para mutar y eludir la protección conferida por vacunas o infecciones previas se ve enormemente facilitada por el hecho de que se ha permitido al COVID-19 deambular sin trabas por la sociedad después de que se levantaron las principales medidas de mitigación tanto tiempo atrás como marzo de 2022.

Fuente: World Socialist Web Site. Disponible en https://acortar.link/gWRJZI

Access barriers drive low kids' vaccination for third year

29 oct. As national child vaccination coverage shows no sign of increase, GP experts renew calls to combat access issues and vaccine inequity.

For the third consecutive year, Australian childhood vaccination rates continue to drop for all standard age assessment milestones.

The National Centre for Immunisation Research and Surveillance (NCIRS) has released its Annual Immunisation Coverage Report 2023, revealing less-than-ideal coverage rates for the past year and setting a reminder to 'not be complacent'.

In 2023, fully vaccinated coverage rates for children overall decreased at all three standard age assessment milestones:

- 12 months – decreased to 92.8%, from 93.3% in 2022 and 94.8% in 2020
- 24 months – decreased to 90.8%, from 91.0% in 2022 and 92.1% in 2020
- 60 months – decreased to 93.3%, from 93.4% in 2022 and 94.8% in 2020

These figures follow the 2022 report displaying that coverage also fell for each of the age milestones from 2021 to 2022.

This ongoing decreasing trend comes after eight years of steadily increasing coverage prior to the onset of the COVID-19 pandemic.

Dr Tim Jones is a Tasmanian GP and Chair of RACGP Specific Interest Child and Young Person's Health. He told newsGP access and inequity remain the biggest challenges for vaccination coverage.

'The number of people I'm seeing who just can't get into a GP is still significant,' he said.

'We need to be looking within general practice at what we can do to try and prioritise getting kids in in the first year of life, and getting these lifesaving treatments into them, that's very important.'

With vaccinations part of GPs' bread and butter, Dr Jones said there is also a role for audits of populations within general practices to 'look at who is slipping through the net'.

'There's a number of people who have come in to see me as a GP where they've just been busy and stressed as a family and a [vaccination] reminder hasn't been adequately placed in a way they could recognise it,' he said.

'And so it wasn't until they got a note from Centrelink to say that childcare subsidies were ending that they knew something had been missed.'

For the report, Australian Immunisation Register data as of 4 February 2024 was analysed – predominantly for vaccines funded under the National Immunisation Program (NIP) for children, adolescents and adults, with a focus on changes in vaccination coverage since the previous report.

Decreases in full vaccination coverage were slightly more in children overall than among Aboriginal and Torres Strait Islander children, with decreases in coverage greater in the latter cohort of children since the onset of the pandemic:

- 12 months – 89.7% compared to 90% in 2022
- 24 months – 87.8% compared to 87.9% in 2022

However, coverage at 60 months of age remains higher in Aboriginal and Torres Strait Islander children (95.0%) than in children overall (93.3%).

Overall, fully vaccinated coverage in Australian children was 0.1–0.5 of a percentage point lower than in the 2022 report at all three age assessment milestones.

This follows the 1.1–1.5 percentage points decrease at these three milestones between the 2020 and 2022 reports, which came after approximately eight years of generally increasing coverage

NCIRS Associate Director, Associate Professor Frank Beard, said while 'relatively modest', the decline in vaccination rates is concerning.

While the report notes that factors contributing to these declines include a combination of acceptance and access issues, it states that a 'deeper understanding is needed of the reasons for partial and under-vaccination' in Australia.

'Regular monitoring of vaccination coverage is important, but it doesn't tell us why vaccination uptake is low or declining', Associate Professor Beard said.

'It is therefore critical to identify the barriers to vaccination uptake and implement evidence-based approaches to address them.'

Dr Jones added that vaccine hesitancy – once a significant challenge in the wake of the pandemic –has reduced.

'If we look at something like RSV, and preventive immunisation, there's a tremendous level of interest in our community about that, and these are new vaccines as well too,' he said.

'So I don't see that hesitancy as a problem anymore. I see it purely as an access challenge.'

A nationwide, fully funded meningococcal B vaccine for all infants aged under two is also something Dr Jones is calling for, with the vaccine only currently funded by the NIP for those who meet certain criteria and in some states.

'We do really need to see that happen,' Dr Jones said.

'It remains the best example of vaccine inequity in our community that we've got so many families who need it, so many families who want it, but cost is a barrier, and we know that we would save money to our health system if we immunised everyone just to prevent the hospitalisations from that disease.'

Also released earlier this month is the Australia-first National Vaccination Insights project, revealing insights on vaccination barriers and drivers to inform future strategies to drive uptake.

It confirms that cost and a lack of appointment availability are key barriers to accessing vaccinations, rather than hesitancy or scepticism.

Dr Jones finds this 'very challenging' as a GP, and says while his practice bulk bills all vaccination appointments, he understands not all are in the same position.

'It's important for practices to do what they have to do, but I think we also need to consider that this is universal primary and preventive care, and that if families can't access it for reasons of cost, we need to look at any and all strategies that improve the equity of access for those families,' he said.

'At a practice level, we can look at what percentage of our population is in these key vaccine age ranges and have a look at our data to see who's missing out.

'And we've got a tremendous resource in our practice, nurses who I know do so much of the lifting work for our clinics to achieve this.'

Fuente: News GP. Disponible en https://acortar.link/E307P1

Trust matters but we also need these 3 things to boost vaccine coverage

Oct 31. Australia's COVID vaccine roll-out started slowly, with supply shortages and logistical shortcomings. Once it got going, we immunised more than 95% of the population.

This week's COVID inquiry report contains a number of recommendations to improve Australia's vaccine preparedness the next time we face a pandemic or health emergency.

While the inquiry gets most things right, as vaccine experts, we argue the government response should be broadened in three areas:

expanding compensation programs for people who suffer any type of vaccine injury

better understanding why people aren't up-to-date with their vaccinations

equipping community helpers in marginalised communities to deliver information about vaccines and combat misinformation.

Australians should be compensated after vaccine injuries – not just during pandemics

The inquiry recommends reviewing Australia's COVID vaccine claims scheme in the next 12 to 18 months, to inform future schemes in national health emergencies.

Early in the pandemic, vaccine experts called on the Australian government to establish a COVID vaccine injury compensation scheme.

This meant people who were injured after suffering a rare but serious injury, or the families of those who died, would receive compensation when there had been no fault in the manufacturing or administration of the vaccine.

Vaccine experts recommended the creation of such a scheme based on the principle of reciprocity. The Australian public was asked to accept the recommended COVID vaccines in good faith for their health benefit and the benefit of the community. So they should be compensated if something went wrong.

In 2021, the Australian government announced the COVID-19 Vaccine Claims Scheme. Australia had no such scheme before this, in stark contrast to 25 other countries including the United States, United Kingdom and New Zealand.

Australia's scheme closed on September 30 2024.

The inquiry report recommends reviewing:

the complexity of the claims process

delayed or denied payments

any links between the scheme and vaccine hesitancy.

However, this is currently framed only within the scope of the scheme being used for future epidemic or pandemic responses.

Instead, we need a permanent, ongoing vaccine compensation scheme for all routine vaccines available on the National Immunisation Program.

As we've learnt from similar schemes in other countries, this would contribute to the trust and confidence needed to improve the uptake of vaccines currently on the program, and new ones added in the future. It is also right and fair to look after those injured by vaccines in rare instances.

Not getting vaccinated isn't just about a lack of trust

The COVID inquiry recommends developing a national strategy to rebuild community trust in vaccines and improve vaccination rates, including childhood (non-COVID) vaccine rates, which are currently declining.

The COVID vaccine program has affected trust in routine vaccines. Childhood vaccine coverage has declined 1–2%. And there is a persistent issue around timeliness – kids not getting their vaccines within 30 days of the recommended time point.

The national Vaxinsights project examined the social and behavioural drivers of under-vaccination among parents of children under five years. It found access issues were the main barriers to partially vaccinated children. Cost, difficulty making an appointment and the ability to prioritise appointments due to other conflicting needs were other barriers. Trust was not a major barrier for this group.

However for unvaccinated children, vaccine safety and effectiveness concerns, and trust in information from the health-care provider, were the leading issues, rather than access barriers.

To improve childhood vaccination rates, governments need to monitor the social and behavioural drivers of vaccination over time to track changes in vaccine acceptance. They also need to address barriers to accessing immunisation services, including affordability and clinic opening hours.

It is also imperative we learn from the lessons during COVID and better engage communities and priority populations, such as First Nations communities, people with disabilities and those from different cultural groups, to build trust and improve access through community drop-in and outreach vaccine programs.

To address the decline in adult COVID vaccination we need to focus on perceptions of need, risk and value, rather than just focusing on trust. If adults don't think they are at risk, they won't get the vaccine. Unfortunately, when it comes to COVID, people have moved on and few people believe they need boosters.

Variant changes or enhancements to the vaccine (such as combined vaccines to protect against COVID and flu, or RSV or vaccines with long last protection) may encourage people to get vaccinated in the future. In the meantime, we agree with the inquiry that we should focus on those most at risk of severe outcomes, including residents in aged care and those with chronic health conditions.

Invest in community-led strategies to improve uptake

The COVID inquiry recommends developing a communication strategy for health emergencies to ensure all Australians, including those in priority populations, families and industries, have the information they need.

While these are not strictly focused on the promotion of vaccination, the suggestions – including the need to work closely with and fund community and representative organisations – are aligned with what our COVID research showed.

However, the government should go one step further. Communication about vaccines must be tailored, translated for different cultural groups, and easy to understand.

In some settings, messages about the vaccines will have the most impact if they come from a health-care worker. But this is not always the case. Some people prefer to hear from trusted voices from their own communities. In First Nations communities, these roles are often combined in the form of Aboriginal Health Workers.

We must support these voices in future health emergencies.

During COVID, there was insufficient support and training for community helpers – such as community leaders, faith leaders, bilingual community workers, and other trusted voices – to support their vaccine communication efforts.

The government should consider implementing a national training program to support those tasked (or volunteering) to pass on information about vaccines during health emergencies. This would provide them with the information and confidence they need to undertake this role, as well as equipping them to address misinformation.

Fuente: THE CONVERSATION. Disponible en https://acortar.link/FOWnd0

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Pneumococcal serotype prevalence and antibiotic resistance in children in South and Southeast Asia, 2012-2024.

Lin TY, Chiu CH, Woo PC, Razak Muttalif A, Dhar R, Choon Kit L, Morales G, Ozbilgili E.Hum Vaccin Immunother. 2024 Dec 31;20(1):2417554. doi: 10.1080/21645515.2024.2417554. Epub 2024 Oct 30.PMID: 39478351

Advanced technologies for the development of infectious disease vaccines.

Gupta A, Rudra A, Reed K, Langer R, Anderson DG.Nat Rev Drug Discov. 2024 Oct 21. doi: 10.1038/s41573-024-01041-z. Online ahead of print.PMID: 39433939

Chikungunya vaccine development, challenges, and pathway toward public health impact.

Maure C, Khazhidinov K, Kang H, Auzenbergs M, Moyersoen P, Abbas K, Santos GML, Medina LMH, Wartel TA, Kim JH, Clemens J, Sahastrabuddhe S.Vaccine. 2024 Oct 27;42(26):126483. doi: 10.1016/j.vaccine.2024.126483. Online ahead of print.PMID: 39467413

Vaccine development using artificial intelligence and machine learning: A review.

Asediya VS, Anjaria PA, Mathakiya RA, Koringa PG, Nayak JB, Bisht D, Fulmali D, Patel VA, Desai DN.Int J Biol Macromol. 2024 Oct 17:136643. doi: 10.1016/j.ijbiomac.2024.136643. Online ahead of print.PMID: 39426778

Urgent Need to Understand and Prevent Gonococcal Infection: From the Laboratory to Real-World Context.

Ruiz García Y, Marrazzo J, Martinón-Torres F, Workowski K, Giordano G, Pizza M, Sohn WY.J Infect Dis. 2024 Oct 16;230(4):e758-e767. doi: 10.1093/infdis/jiae289.PMID: 38819303

Microparticle and nanoparticle-based influenza vaccines.

Ontiveros-Padilla L, Bachelder EM, Ainslie KM.J Control Release. 2024 Oct 18:S0168-3659(24)00704-1. doi: 10.1016/j.jconrel.2024.10.031. Online ahead of print.PMID: 39427775

Myocarditis Associated with COVID-19 Vaccination.

Florek K, Sokolski M.Vaccines (Basel). 2024 Oct 19;12(10):1193. doi: 10.3390/vaccines12101193.PMID: 39460358

Does a correlation exist between delayed vaccination and a decreased vaccine confidence?

Reverte V, Zornoza-Moreno M, Molina-Salas YE, Romera-Guirado FJ, Celdrán-Navarro MDC, Pérez-Martín JJ.Hum Vaccin Immunother. 2024 Dec 31;20(1):2419750. doi: 10.1080/21645515.2024.2419750. Epub 2024 Oct 27.PMID: 39462522

Respiratory syncytial virus (RSV) vaccine effectiveness against RSV-associated hospitalisations and emergency department encounters among adults aged 60 years and older in the USA, October, 2023, to March, 2024: a test-negative design analysis.

Payne AB, Watts JA, Mitchell PK, Dascomb K, Irving SA, Klein NP, Grannis SJ, Ong TC, Ball SW, DeSilva MB, Natarajan K, Sheffield T, Bride D, Arndorfer J, Naleway AL, Koppolu P, Fireman B, Zerbo O, Timbol J, Goddard K, Dixon BE, Fadel WF, Rogerson C, Allen KS, Rao S, Mayer D, Barron M, Reese SE, Rowley EAK, Najdowski M, Ciesla AA, Mak J, Reeves EL, Akinsete OO, McEvoy CE, Essien IJ, Tenforde MW, Fleming-Dutra KE, Link-Gelles R.Lancet. 2024 Oct 19;404(10462):1547-1559. doi: 10.1016/S0140-6736(24)01738-0.PMID: 39426837

COVID-19 vaccine booster willingness among Asian Americans: Influence of racial discrimination and social determinants.

Li Q, Subica AM.Hum Vaccin Immunother. 2024 Dec 31;20(1):2417520. doi: 10.1080/21645515.2024.2417520. Epub 2024 Oct 27.PMID: 39462523

Cost-effectiveness of vaccinating adults aged 60 years and older against respiratory syncytial virus.

Hutton DW, Prosser LA, Rose AM, Mercon K, Ortega-Sanchez IR, Leidner AJ, Havers FP, Prill MM, Whitaker M, Roper LE, Pike J, Britton A, Melgar M.Vaccine. 2024 Oct 24;42(24):126294. doi: 10.1016/j.vaccine.2024.126294. Epub 2024 Sep 5.PMID: 39241353

Global burden of vaccine-associated Guillain-Barre syndrome over 170 countries from 1967 to 2023.

Jeong YD, Park S, Lee S, Jang W, Park J, Lee K, Lee J, Kang J, Udeh R, Rahmati M, Yeo SG, Smith L, Lee H, Yon DK.Sci Rep. 2024 Oct 19;14(1):24561. doi: 10.1038/s41598-024-74729-2.PMID: 39427003

Efficacy evaluation of a bivalent subunit vaccine against epidemic PEDV heterologous strains with low cross-protection.

Song X, Li Y, Wang C, Zhao Y, Yang S, Guo R, Hu M, Sun M, Zhang G, Li Y, Wang Y, Liu S, Shen Y, Li C, Zhang X, Li J, Fan B, Li B.J Virol. 2024 Oct 22;98(10):e0130924. doi: 10.1128/jvi.01309-24. Epub 2024 Sep 10.PMID: 39254314

Institutional trust, conspiracy beliefs and Covid-19 vaccine uptake and hesitancy among adults in Ghana.

Achore M, Braimah JA, Dowou RK, Kuuire V, Ayanore MA, Bisung E.PLOS Glob Public Health. 2024 Oct 16;4(10):e0003852. doi: 10.1371/journal.pgph.0003852. eCollection 2024.PMID: 39413141

Knowledge and acceptability of the human papillomavirus vaccine and associated factors among adolescent girls in public primary schools in Dessie Town, South Wollo, Northeast Ethiopia, 2020: A cross-sectional study.

Negesse Simegn Y, Wossen Samuel A, Gebresilasie Kelelew R, Mohammed LA, Liyew AD, Abate Belay M.BMJ Open. 2024 Oct 29;14(10):e083397. doi: 10.1136/bmjopen-2023-083397.PMID: 39477255

COVID-19 vaccine immunogenicity and safety surrounding fourth and subsequent vaccine doses in patients with hematologic malignancies.

Bhella S, Wilkin AM, Hueniken K, Vijenthira A, Sebag M, Wang P, Hicks LK, Hay AE, Assouline S, Fraser G, Balitsky A, Mangel J, Owen C, Reiman A, Sehn L, Sutherland H, Zhang T, Arnold C, Leite T, McCarthy E, Cooper C, Langlois MA, Arianne Buchan C; VIP Study Investigators.Vaccine. 2024 Oct 24;42(24):126074. doi: 10.1016/j.vaccine.2024.06.041. Epub 2024 Jun 28.PMID: 38944577

Infodemics and Vaccine Confidence: Protocol for Social Listening and Insight Generation to Inform Action.

Kolis J, Brookmeyer K, Chuvileva Y, Voegeli C, Juma S, Ishizumi A, Renfro K, Wilhelm E, Tice H, Fogarty H, Kocer I, Helms J, Verma A.JMIR Public Health Surveill. 2024 Oct 24;10:e51909. doi: 10.2196/51909.PMID: 39447166

Seasonal variation in BCG-induced trained immunity.

Kilic G, Debisarun PA, Alaswad A, Baltissen MP, Lamers LA, de Bree LCJ, Benn CS, Aaby P, Dijkstra H, Lemmers H, Martens JHA, Domínguez-Andrés J, van Crevel R, Li Y, Xu CJ, Netea MG.Vaccine. 2024 Oct 24;42(24):126109. doi: 10.1016/j.vaccine.2024.07.010. Epub 2024 Jul 8.PMID: 38981740

Development of KSHV vaccine platforms and chimeric MHV68-K-K8.1 glycoprotein for evaluating the in vivo immunogenicity and efficacy of KSHV vaccine candidates.

Yang W-S, Kim D, Kang S, Lai C-J, Cha I, Chang P-C, Jung JU.mBio. 2024 Oct 30:e0291324. doi: 10.1128/mbio.02913-24. Online ahead of print.PMID: 39475238

Navigating vaccine procurement and financing challenges in Cameroon: Insights and recommendations from a mixed-methods study (2015-2020).

Saidu Y, Ngenge BM, Nchinjoh SC, Amani A, Edwidge NN, Muteh NJ, Vouking MZ, Mbanga C, Agbor VN, Ousmane D, Njoh AA, Wiwa O, Montomoli E, Clemens SAC, Clemens R.Public Health. 2024 Oct 26;237:261-269. doi: 10.1016/j.puhe.2024.10.001. Online ahead of print.PMID: 39467370

Neutralization of Rubella Vaccine Virus and Immunodeficiency-Related Vaccine-Derived Rubella Viruses by Intravenous Immunoglobulins.

Chen MH, Perelygina L, Hao L, Beard RS, Lackner C, Farcet MR, Karbiener M, Icenogle J, Kreil TR.J Infect Dis. 2024 Oct 16;230(4):e938-e942. doi: 10.1093/infdis/jiae182.PMID: 38592952

Vaccine hesitancy in patients with solid tumors: a cross-sectional single-center survey.

Lasagna A, Alessio N, Gambini G, Klersy C, Monaco T, Corallo S, Cicognini D, Pedrazzoli P.BMC Public Health. 2024 Oct 29;24(1):2998. doi: 10.1186/s12889-024-20468-y.PMID: 39472822

Immune correlates of protection as a game changer in tuberculosis vaccine development.

Wang J, Fan XY, Hu Z.NPJ Vaccines. 2024 Oct 30;9(1):208. doi: 10.1038/s41541-024-01004-w.PMID: 39478007

Respiratory Syncytial Virus Prefusion F Vaccination: Antibody Persistence and Revaccination.

Walsh EE, Falsey AR, Zareba AM, Jiang Q, Gurtman A, Radley D, Gomme E, Cooper D, Jansen KU, Gruber WC, Swanson KA, Schmoele-Thoma B.J Infect Dis. 2024 Oct 16;230(4):e905-e916. doi: 10.1093/infdis/jiae185.PMID: 38606958

COVID-19 vaccine hesitancy in Ethiopia: a latent class analysis.

Anteneh A, Getachew A, Kenera M, Salim A, Kedir F, Belayihun B, Felker-Kantor E.BMC Public Health. 2024 Oct 21;24(1):2894. doi: 10.1186/s12889-024-20359-2.PMID: 39434006

Human PapillomaVirus Vaccine Uptake: Attitudes and Practices Among Moroccan Physicians.

Yacouti A, Baddou R, Bourissi H, Ez-Zaouy S, Amayou H, Elmalki K, Got AE, Benider A, Assoumou SZ, Mouallif M.J Cancer Educ. 2024 Oct 17. doi: 10.1007/s13187-024-02505-x. Online ahead of print.PMID: 39414743

The characteristics of TCR CDR3 repertoire in COVID-19 patients and SARS-CoV-2 vaccine recipients.

Zhou D, Luo Y, Ma Q, Xu Y, Yao X.Virulence. 2024 Oct 28:2421987. doi: 10.1080/21505594.2024.2421987. Online ahead of print.PMID: 39468707

Typhoid conjugate vaccine perceptions and coverage among children and adults: Findings from a post-campaign coverage survey - Harare, Zimbabwe, 2019.

Gharpure R, Longley AT, Takamiya M, Hidle A, Munyanyi M, Chawurura T, Maxwell L, Mamire G, Chaora G, Chakauya J, Rupfutse M, Poncin M, Gasasira A, Date K, Manangazira P, Sreenivasan N.Vaccine. 2024 Oct 24;42(24):126086. doi: 10.1016/j.vaccine.2024.06.053. Epub 2024 Jul 10.PMID: 38991917

Vaccine Beliefs Among Uninsured People Receiving Care at Free Clinics.

C Liu C, A Siliezar J, Alzayat O, A Robinson C, Do T, I J Carter A, N Pons C, Patel O, S Wilkes M.J Community Health. 2024 Oct 22. doi: 10.1007/s10900-024-01416-8. Online ahead of print.PMID: 39438397

Preferences for a Clostridioides difficile vaccine among adults in the United States.

Vietri J, Maculaitis MC, Cappelleri JC, Yu H, Kopenhafer L, Beusterien K.Vaccine. 2024 Oct 24;42(24):126261. doi: 10.1016/j.vaccine.2024.126261. Epub 2024 Aug 31.PMID: 39217776

Outpatient Visits and Antibiotic Use Due to Higher-Valency Pneumococcal Vaccine Serotypes.

King LM, Andrejko KL, Kabbani S, Tartof SY, Hicks LA, Cohen AL, Kobayashi M, Lewnard JA.J Infect Dis. 2024 Oct 16;230(4):821-831. doi: 10.1093/infdis/jiae142.PMID: 38498565

The Partnership for International Vaccine Initiatives (PIVI): The importance and opportunity to develop influenza vaccination programs in low- and middle-income countries.

Bresee JS, Lafond KE.Vaccine. 2024 Oct 24;42 Suppl 4:126255. doi: 10.1016/j.vaccine.2024.126255. Epub 2024 Aug 29.PMID: 39214784

Advances and challenges in the development of periodontitis vaccines: A comprehensive review.

Liao L, Wang Q, Feng Y, Li G, Lai R, Jameela F, Zhan X, Liu B.Int Immunopharmacol. 2024 Oct 25;140:112650. doi: 10.1016/j.intimp.2024.112650. Epub 2024 Jul 29.PMID: 39079346

Facilitators and barriers to maternal immunization and strategies to improve uptake in low-income and lower-middle income countries: A systematic review.

Khan T, Malik S, Rafeekh L, Halder S, Desai S, Das Bhattacharya S.Hum Vaccin Immunother. 2024 Dec 31;20(1):2411823. doi: 10.1080/21645515.2024.2411823. Epub 2024 Oct 29.PMID: 39473171

Basic Properties and Development Status of Aluminum Adjuvants Used for Vaccines.

Lan J, Feng D, He X, Zhang Q, Zhang R.Vaccines (Basel). 2024 Oct 18;12(10):1187. doi: 10.3390/vaccines12101187.PMID: 39460352

The TB vaccine clinical trial centre directory: An inventory of clinical trial centres in Sub-Saharan Africa.

Pelzer PT, Holleman M, Helinski MEH, Weinberg AL, Buis J, Beattie P, Nyirenda T, van Rest J, Voss G.PLoS One. 2024 Oct 28;19(10):e0292981. doi: 10.1371/journal.pone.0292981. eCollection 2024.PMID: 39466768

Large Clostridial Toxins: A Brief Review and Insights into Antigen Design for Veterinary Vaccine Development.

Rodrigues Rodrigues R, Alves MLF, Bilhalva MA, Kremer FS, Junior CM, Ferreira MRA, Galvão CC, Quatrin PHDN, Conceição FR.Mol Biotechnol. 2024 Oct 29. doi: 10.1007/s12033-024-01303-6. Online ahead of print.PMID: 39472390

Knowledge, attitudes, and practices (KAP) towards seasonal influenza and influenza vaccine among pregnant women in Kyrgyzstan: A cross-sectional study.

Akmatova R, Dzhangaziev B, Ebama MS, Otorbaeva D.Vaccine. 2024 Oct 24;42 Suppl 4:125510. doi: 10.1016/j.vaccine.2023.12.020. Epub 2023 Dec 9.PMID: 38072755

Understanding the barriers and enablers to participation in vaccine trials in a pregnant population from diverse ethnic background in an inner-city UK hospital.

Youssef E, Calvert A, Greening V, Pearce D, Wright S, Eccleston E, Oshodi L, Heath P, Vandrevala T.PLoS One. 2024 Oct 30;19(10):e0312799. doi: 10.1371/journal.pone.0312799. eCollection 2024.PMID: 39475877

Oral paratuberculosis vaccine efficacy and mucosal immunity in cattle.

Eshraghisamani R, Facciuolo A, De Buck J.Vaccine. 2024 Oct 17;42(26):126447. doi: 10.1016/j.vaccine.2024.126447. Online ahead of print.PMID: 39423453

Attitudes of healthcare professionals regarding vaccines and influencing factors: A cross-sectional study.

Duran R, Çalbayram N.J Pediatr Nurs. 2024 Oct 21:S0882-5963(24)00374-9. doi: 10.1016/j.pedn.2024.10.013. Online ahead of print.PMID: 39438156

COVID-19 update: Novavax vaccine for 2024-2025.

[No authors listed]Med Lett Drugs Ther. 2024 Oct 28;66(1714):175-176. doi: 10.58347/tml.2024.1714d.PMID: 39466309

COVID-19 vaccine hesitancy and intentions among parents of children with mental and behavioral disorders.

Khoodoruth MAS, Ouanes S, Somintac K, Gulistan S, Dehwari A, Chut-Kai Khoodoruth WN, Alamri MN, Alabdulla M, Khan YS.Hum Vaccin Immunother. 2024 Dec 31;20(1):2412385. doi: 10.1080/21645515.2024.2412385. Epub 2024 Oct 16.PMID: 39410905

COVID-19 and the vaccine tax: an egalitarian, market-based approach to the global vaccine inequality.

Albertsen A.J Med Ethics. 2024 Oct 22;50(11):772-773. doi: 10.1136/jme-2024-110109.PMID: 38825362

Anti-RBD IgG dynamics following infection or vaccination.

Harrache A, Saker K, Mokdad B, Generenaz L, Saade C, Pons S, Fassier JB; COVID-SER Study group; Bal A, Trabaud MA, Rabilloud M, Abichou-Klich A, Trouillet-Assant S.Vaccine. 2024 Oct 20;42(26):126464. doi: 10.1016/j.vaccine.2024.126464. Online ahead of print.PMID: 39432992

The challenges and clinical landscape of glioblastoma immunotherapy.

Ng AT, Steve T, Jamouss KT, Arham A, Kawtharani S, Assi HI.CNS Oncol. 2024 Dec 31;13(1):2415878. doi: 10.1080/20450907.2024.2415878. Epub 2024 Oct 29.PMID: 39469854

COVID-19 vaccine implementation at a syringe services program: experiences of frontline staff.

Plesons M, Soto Sugar SE, Chimbaru R, McDonald G, Friedman L, Thompson E Jr, Bazzi AR, Tookes HE, Bartholomew TS.BMC Health Serv Res. 2024 Oct 19;24(1):1260. doi: 10.1186/s12913-024-11691-9.PMID: 39427164

A recombinant N2 neuraminidase-based CpG 1018 adjuvanted vaccine provides protection against challenge with heterologous influenza viruses in mice and hamsters.

Hoxie I, Vasilev K, Clark JJ, Bushfield K, Francis B, Loganathan M, Campbell JD, Yu D, Guan L, Gu C, Fan S, Tompkins SM, Neumann G, Kawaoka Y, Krammer F.Vaccine. 2024 Oct 24;42(24):126269. doi: 10.1016/j.vaccine.2024.126269. Epub 2024 Sep 5.PMID: 39241354

The potential clinical impact and cost-effectiveness of the updated COVID-19 mRNA autumn 2024 vaccines in the United Kingdom.

Kohli MA, Maschio M, Lee A, Joshi K, Carroll S, Balogh O, van de Velde N, Beck E.J Med Econ. 2024 Oct 31:1-24. doi: 10.1080/13696998.2024.2413288. Online ahead of print.PMID: 39479770

ASFV subunit vaccines: Strategies and prospects for future development.

Zhang Y, Mei X, Zhang C, Wang H, Xie X, Zhang Z, Feng Z.Microb Pathog. 2024 Oct 21;197:107063. doi: 10.1016/j.micpath.2024.107063. Online ahead of print.PMID: 39442810

Novel dual-pathogen multi-epitope mRNA vaccine development for Brucella melitensis and Mycobacterium tuberculosis in silico approach.

Zhu Y, Shi J, Wang Q, Zhu Y, Li M, Tian T, Shi H, Shang K, Yin Z, Zhang F.PLoS One. 2024 Oct 28;19(10):e0309560. doi: 10.1371/journal.pone.0309560. eCollection 2024.PMID: 39466745

Emerging global patterns of COVID-19 vaccine information fatigue in 23 countries in 2023.

White TM, Lazarus JV, Rabin KH, Ratzan SC, El-Mohandes A.Vaccine. 2024 Oct 29;42(26):126475. doi: 10.1016/j.vaccine.2024.126475. Online ahead of print.PMID: 39476474

Intent to receive flu vaccine and influenza vaccination coverage among health professionals during 2019, 2020 and 2021 campaigns in Cote d'Ivoire.

Coulibaly D, Douba A, N'Guessan K, N'Gattia AK, Kadjo H, Ebama MS, McCarron M, Bresee J.Vaccine. 2024 Oct 24;42 Suppl 4(Suppl 4):126076. doi: 10.1016/j.vaccine.2024.06.043. Epub 2024 Jun 25.PMID: 38926071

Tobacco Use and Uptake of COVID-19 Vaccinations in Finland: A Population-Based Study.

Peña S, Zhou Z, Kestilä L, Galanti MR, Shaaban AN, Caspersen IH, Magnus P, Geraldo P, Rojas-Saunero P, Parikka S, Nohynek H, Karvonen S.Nicotine Tob Res. 2024 Oct 22;26(11):1553-1562. doi: 10.1093/ntr/ntad234.PMID: 38196092

Paratransgenic quantum vaccinology.

Contreras M, Sobrino I, de la Fuente J.Trends Parasitol. 2024 Oct 26:S1471-4922(24)00295-2. doi: 10.1016/j.pt.2024.10.006. Online ahead of print.PMID: 39462754

Pediatric COVID-19 vaccine hesitancy among pregnant and post-partum women: A mixed-method study.

Nuzhath T, Colwell B, Callaghan T, Hotez P, Mousum S, Masud UW, Regan AK.Vaccine. 2024 Oct 16;42(26):126420. doi: 10.1016/j.vaccine.2024.126420. Online ahead of print.PMID: 39418689

Cost-effectiveness of nonavalent vs bivalent HPV vaccine in Polish setting.

Jakubczyk M, Bieganska J, Kowalczuk K, Jaworski R, Czech M, Pavelyev A, Daniels V, Niewada M.Ginekol Pol. 2024 Oct 16. doi: 10.5603/gpl.101325. Online ahead of print.PMID: 39411820

Impact of COVID-19 Vaccination on Female Fertility.

Wenzel E, De Paula GG, Jaeger ACS, Müller AK, Benati IF, Da Costa Linn TB, Da Rosa TS, Bouvier VDA, da Rosa RL, Cunha-Filho JS.Reprod Sci. 2024 Oct 17. doi: 10.1007/s43032-024-01717-2. Online ahead of print.PMID: 39419928

Bibliometrics analysis and knowledge mapping of pertussis vaccine research: trends from 1994 to 2023.

Tan C, Xiao Y, Chen S, Liu T, Zhou J, Zhang S, Hu Y, Zhou J, She Z, Tian B, Wu A, Li C.Infection. 2024 Oct 17. doi: 10.1007/s15010-024-02414-7. Online ahead of print.PMID: 39417957

Mechanisms and implications of IgG4 responses to SARS-CoV-2 and other repeatedly administered vaccines.

Marchese AM, Fries L, Beyhaghi H, Vadivale M, Zhu M, Cloney-Clark S, Plested JS, Chung AW, Dunkle LM, Kalkeri R.J Infect. 2024 Oct 16;89(6):106317. doi: 10.1016/j.jinf.2024.106317. Online ahead of print.PMID: 39419185

Polysaccharide, Conjugate, and mRNA-based Vaccines are Immunogenic in Patients with Netherton Syndrome.

Nouwen AEM, Zaeck LM, Schappin R, Geers D, Gommers L, Bogers S, Dik WA, Pasmans SGMA, GeurtsvanKessel CH, de Vries RD, Dalm VASH.J Clin Immunol. 2024 Oct 30;45(1):36. doi: 10.1007/s10875-024-01828-0.PMID: 39476295

Iontophoresis and electroporation-assisted microneedles: advancements and therapeutic potentials in transdermal drug delivery.

Abbasi M, Heath B.Drug Deliv Transl Res. 2024 Oct 21. doi: 10.1007/s13346-024-01722-7. Online ahead of print.PMID: 39433696

Comment on "Prevalence and Correlates of SARS-CoV-2 Vaccine Uptake and Hesitancy Among People With HIV Across the United States".

Daungsupawong H, Wiwanitkit V.J Acquir Immune Defic Syndr. 2024 Oct 30. doi: 10.1097/QAI.0000000000003554. Online ahead of print.PMID: 39472306

Current and future directions in bacteriophage research for developing therapeutic innovations.

Cui L, Kiga K, Kondabagil K, Węgrzyn A.Sci Rep. 2024 Oct 17;14(1):24404. doi: 10.1038/s41598-024-76427-5.PMID: 39420115

Healthcare personnel acceptance and recommendations for influenza vaccine in twelve low- and middle-income countries: A pooled analysis from 2018 to 2020.

McCarron M, Marcenac P, Yau TS, Lafond KE, Ebama MS, Duca LM, Sahakyan G, Bino S, Coulibaly D, Emukule G, Khanthamaly V, Zaraket H, Cherkaoui I, Otorbaeva D, Stravidis K, Safarov A, Bettaieb J, Igboh LS, Azziz-Baumgartner E, Vanyan A, Manukyan A, Nelaj E, Preza I, Douba A, N'Gattia A, Tengbriacheu C, Pathammavong C, Alame M, Alj L, Ben Salah A, Lambach P, Bresee JS.Vaccine. 2024 Oct 24;42 Suppl 4(Suppl 4):125670. doi: 10.1016/j.vaccine.2024.01.095. Epub 2024 Aug 2.PMID: 39198045

MINCLE and TLR9 agonists synergize to induce Th1/Th17 vaccine memory and mucosal recall in mice and non-human primates.

Woodworth JS, Contreras V, Christensen D, Naninck T, Kahlaoui N, Gallouët AS, Langlois S, Burban E, Joly C, Gros W, Dereuddre-Bosquet N, Morin J, Liu Olsen M, Rosenkrands I, Stein AK, Krøyer Wood G, Follmann F, Lindenstrøm T, Hu T, Le Grand R, Pedersen GK, Mortensen R.Nat Commun. 2024 Oct 17;15(1):8959. doi: 10.1038/s41467-024-52863-9.PMID: 39420177

Risk factors and control strategies for Brucella spp. and RB51 vaccine shedding in buffalo milk: A cross-sectional study.

Dadar M, Bahreinipour A, Abnaroodheleh F, Ansari F, Mousavi Khaneghah A.Acta Trop. 2024 Oct 18;260:107436. doi: 10.1016/j.actatropica.2024.107436. Online ahead of print.PMID: 39426472

Syncope after live attenuated influenza vaccine: Reports to the Vaccine Adverse Event Reporting System (2003-2024).

Woo EJ, Miller ER, Stroud E.Vaccine. 2024 Oct 24;42(24):126290. doi: 10.1016/j.vaccine.2024.126290. Epub 2024 Sep 6.PMID: 39241357

Adherence to COVID-19 vaccination recommendations and vaccine hesitancy in US blood donors.

Avelino-Silva VI, Bruhn R, Zurita KG, Grebe E, Stone M, Busch MP, Custer B.Transfusion. 2024 Oct 21. doi: 10.1111/trf.18051. Online ahead of print.PMID: 39429020

COVID-19 vaccine effectiveness and uptake in a national cohort of English children and young people with life-limiting neurodisability.

Cruz J, Harwood R, Kenny S, Clark M, Davis PJ, Draper ES, Hargreaves D, Ladhani SN, Luyt K, Turner SW, Whittaker E, Hardelid P, Fraser LK, Viner RM, Ward JL.Arch Dis Child. 2024 Oct 21:archdischild-2024-327293. doi: 10.1136/archdischild-2024-327293. Online ahead of print.PMID: 39406462

Ad5-nCoV boosted vaccine and reinfection-induced memory T/B cell responses and humoral immunity to SARS-CoV-2: based on two prospective cohorts.

Simayi A, Chen Y, Chu J, Yu H, Zhang S, Bao C, Zhu F, Jin H, Qin Y, Zhen Q, Liu Y, Zhu L.Emerg Microbes Infect. 2024 Dec;13(1):2412619. doi: 10.1080/22221751.2024.2412619. Epub 2024 Oct 28.PMID: 39360715

Assessing Vaccine Intentions, Knowledge, Self-Efficacy, and Trust: A Cross-Sectional Study on Perceptions of Monkeypox Vaccination and Public Health Risk Awareness in Makurdi, Benue State, Nigeria.

Lawrence A.Cureus. 2024 Oct 22;16(10):e72131. doi: 10.7759/cureus.72131. eCollection 2024 Oct.PMID: 39440166

[Vaccination against RSV infections - update and perspective].

Koch T, Kobbe R.Dtsch Med Wochenschr. 2024 Nov;149(22):1341-1347. doi: 10.1055/a-2254-5730. Epub 2024 Oct 22.PMID: 39437826

A whole-cell pertussis vaccine engineered to elicit reduced reactogenicity protects baboons against pertussis challenge.

Kapil P, Wang Y, Gregg K, Zimmerman L, Molano D, Maldonado Villeda J, Sebo P, Merkel TJ.mSphere. 2024 Oct 23:e0064724. doi: 10.1128/msphere.00647-24. Online ahead of print.PMID: 39441011

COVID-19 vaccine hesitancy: Meaning relations between responses in an epidemiological study and twitter messages.

Ferreira-Silva SN, Soares MEM, Vasconcelos R, Barbieri C, Junior LF, Medeiros T, de Souza Amorim Matos CC, Couto MT, Avelino-Silva VI.Vaccine. 2024 Oct 24;42(24):126247. doi: 10.1016/j.vaccine.2024.126247. Epub 2024 Aug 27.PMID: 39197220

Health Facility Capacity and Health-care Worker Knowledge, Attitudes, and Practices of Hepatitis B Vaccine Birth-dose and Maternal Tetanus-Diphtheria Vaccine Administration in Nigeria: A Baseline Assessment.

Uba BV, Mohammed Y, Nwokoro UU, Fadahunsi R, Adewole A, Ugbenyo G, Simple E, Wisdom MO, Waziri NE, Michael CA, Okeke LA, Kanu F, Ikwe H, Sandhu HS, Asekun A, Tohme RA, Freeland C, Minta A, Bashir SS, Isa A, Vasumu JJ, Bahuli AU, Ugwu GO, Obi EI, Ismail BA, Okposen BB, Bolu OO, Shuaib F.Ann Afr Med. 2024 Oct 23. doi: 10.4103/aam.aam_28_24. Online ahead of print.PMID: 39440555

Child COVID-19 vaccine uptake among participants of the 2015 Pelotas (Brazil) Birth Cohort Study.

Sartori AL, Buffarini R, Machado da Silva A, Amaral de Andrade Leão O, Ramos Flores T, Dâmaso Bertoldi A, Curi Hallal P, Freitas da Silveira M.Vaccine. 2024 Oct 24;42(24):126105. doi: 10.1016/j.vaccine.2024.07.006. Epub 2024 Jul 11.PMID: 38991916

Attitudes and beliefs of healthcare providers toward vaccination in the United States: A cross-sectional online survey.

Eiden AL, Drakeley S, Modi K, Mackie D, Bhatti A, DiFranzo A.Vaccine. 2024 Oct 16;42(26):126437. doi: 10.1016/j.vaccine.2024.126437. Online ahead of print.PMID: 39418687

A self-adjuvanted VLPs-based Covid-19 vaccine proven versatile, safe, and highly protective.

Vuitika L, Côrtes N, Malaquias VB, Silva JDQ, Lira A, Prates-Syed WA, Schimke LF, Luz D, Durães-Carvalho R, Balan A, Câmara NOS, Cabral-Marques O, Krieger JE, Hirata MH, Cabral-Miranda G.Sci Rep. 2024 Oct 16;14(1):24228. doi: 10.1038/s41598-024-76163-w.PMID: 39414952

A Strategic Guide to Improve and De-Risk Vaccine Development: CEPI's CMC Framework.

Särnefält A, Eardley-Patel R, Magini D, Sonje V, Guzzi A, Hesselink R, Scotney M, Lazdins A, Chambard V, Vinnemeier C, Kromann I.PDA J Pharm Sci Technol. 2024 Oct 22;78(5):613-623. doi: 10.5731/pdajpst.2023.012912.PMID: 39054065

Supporting National Immunization Technical Advisory Groups (NITAGs) in development of evidence-based vaccine recommendations and NITAG assessments - New tools and approaches.

Hadler SC, Shefer AM, Cavallaro KF, Ebama M, Tencza C, Kennedy ED, Ndiaye S, Shah A, Torre L, Bresee JS.Vaccine. 2024 Oct 24;42 Suppl 4(Suppl 4):125610. doi: 10.1016/j.vaccine.2024.01.035. Epub 2024 Jan 24.PMID: 38267328

Effects of religion, politics and distance to providers on HPV vaccine attitudes and intentions of parents in rural Utah.

Lee AA, Skyles TJ, Jensen JL, Ord B, Davis SC, East MJ, Asay AE, Obray AM, Syndergaard T, Davis T, Nielson BU, Larson RJ, Miner DS, Hinton K, Zentz L, Busacker L, Poole BD.PLoS One. 2024 Oct 23;19(10):e0312549. doi: 10.1371/journal.pone.0312549. eCollection 2024.PMID: 39441874

Biology of human respiratory syncytial virus: Current perspectives in immune response and mechanisms against the virus.

Girma A.Virus Res. 2024 Oct 18;350:199483. doi: 10.1016/j.virusres.2024.199483. Online ahead of print.PMID: 39396572

Stability characterizations of feed-based bivalent vaccine containing inactivated Streptococcus agalactiae and Aeromonas hydrophila against streptococcosis and Aeromonas infections in red hybrid tilapia (Oreochromis sp.).

Ali NSM, Ngalimat MS, Saad MZ, Azmai MNA, Salleh A, Zulperi Z, Yasin ISM.Arch Microbiol. 2024 Oct 23;206(11):444. doi: 10.1007/s00203-024-04166-2.PMID: 39443367

Microbiome and bladder cancer: the role of probiotics in treatment.

Dadgar-Zankbar L, Mokhtaryan M, Bafandeh E, Javanmard Z, Asadollahi P, Darbandi T, Afifirad R, Dashtbin S, Darbandi A, Ghanavati R.Future Microbiol. 2024 Oct 24:1-18. doi: 10.1080/17460913.2024.2414671. Online ahead of print.PMID: 39445447

Vaccine hesitancy: a structured review from a behavioral perspective (2015-2022).

Acharya S, Aechtner T, Dhir S, Venaik S.Psychol Health Med. 2024 Oct 28:1-29. doi: 10.1080/13548506.2024.2417442. Online ahead of print.PMID: 39467817

Preparation of bovine coronavirus virus-like particles and its immunogenicity in mice and cattle.

Yu Q, Zhu Q, Huang X, Wu J, Zhou Q, Chen T, Zhu C, Ding L, Deng G, Wang Y, Zhang Z, Zhang B.Microb Pathog. 2024 Oct 21;197:107062. doi: 10.1016/j.micpath.2024.107062. Online ahead of print.PMID: 39442811

Cross-cultural adaptation and validation of an Urdu version of the Vaccine Attitudes Examination (VAX-U) scale.

Naqvi AA, Islam MA, Jahangir A, Rizvi M, Iffat W, Aftab MT, Martin LR.PLoS One. 2024 Oct 25;19(10):e0312459. doi: 10.1371/journal.pone.0312459. eCollection 2024.PMID: 39453937

Are Repeat-Dose Toxicity Studies Informative for Safety Assessment of Vaccine Candidates? A Survey of Vaccine Developers.

Rohde CM, Destexhe E, van der Laan JW, Gould S, Coe R, Haenen B.Int J Toxicol. 2024 Oct 30:10915818241293371. doi: 10.1177/10915818241293371. Online ahead of print.PMID: 39475677

Trust in Health Institutions Across Racial Groups: Implications for Dual Flu-Coronavirus Vaccine Adoption.

Nkouaga F.J Racial Ethn Health Disparities. 2024 Oct 23. doi: 10.1007/s40615-024-02213-8. Online ahead of print.PMID: 39441523

Multivalent vaccine tackles C. difficile.

Kingwell K.Nat Rev Drug Discov. 2024 Oct 30. doi: 10.1038/d41573-024-00174-5. Online ahead of print.PMID: 39478180

Innate cells and STAT1-dependent signals orchestrate vaccine-induced protection against invasive Cryptococcus infection.

Wang K, Espinosa V, Wang Y, Lemenze A, Kumamoto Y, Xue C, Rivera A.mBio. 2024 Oct 16;15(10):e0194424. doi: 10.1128/mbio.01944-24. Epub 2024 Sep 26.PMID: 39324785

Understanding Viral Haemorrhagic Fevers: Virus Diversity, Vector Ecology, and Public Health Strategies.

Hewson R.Pathogens. 2024 Oct 18;13(10):909. doi: 10.3390/pathogens13100909.PMID: 39452780

Advancing Immunization in Africa: Overcoming Challenges to Achieve the 2030 Global Immunization Targets.

Okesanya OJ, Olatunji G, Olaleke NO, Mercy MO, Ilesanmi AO, Kayode HH, Manirambona E, Ahmed MM, Ukoaka BM, Lucero-Prisno Iii DE.Adolesc Health Med Ther. 2024 Oct 19;15:83-91. doi: 10.2147/AHMT.S494099. eCollection 2024.PMID: 39445054

Knowledge mapping of trained immunity/innate immune memory: Insights from two decades of studies.

He J, Cui H, Jiang G, Fang L, Hao J.Hum Vaccin Immunother. 2024 Dec 31;20(1):2415823. doi: 10.1080/21645515.2024.2415823. Epub 2024 Oct 21.PMID: 39434217

Progress and challenges in glypican-3 targeting for hepatocellular carcinoma therapy.

Couzinet A, Suzuki T, Nakatsura T.Expert Opin Ther Targets. 2024 Oct 20:1-15. doi: 10.1080/14728222.2024.2416975. Online ahead of print.PMID: 39428649

High protection and transmission-blocking immunity elicited by single-cycle SARS-CoV-2 vaccine in hamsters.

Lett MJ, Otte F, Hauser D, Schön J, Kipfer ET, Hoffmann D, Halwe NJ, Breithaupt A, Ulrich L, Britzke T, Kochmann J, Corleis B, Zhang Y, Urda L, Cmiljanovic V, Lang C, Beer M, Mittelholzer C, Klimkait T.NPJ Vaccines. 2024 Oct 30;9(1):206. doi: 10.1038/s41541-024-00992-z.PMID: 39472701

Headless hemagglutinin-containing influenza viral particles direct immune responses toward more conserved epitopes.

Hamele CE, Luo Z, Leonard RA, Spurrier MA, Burke KN, Webb SR, Rountree W, Li Z, Heaton BE, Heaton NS.J Virol. 2024 Oct 22;98(10):e0116624. doi: 10.1128/jvi.01166-24. Epub 2024 Sep 26.PMID: 39324791

Immunogenicity and efficacy of XBB.1.5 rS vaccine against the EG.5.1 variant of SARS-CoV-2 in Syrian hamsters.

Soudani N, Bricker TL, Darling T, Seehra K, Patel N, Guebre-Xabier M, Smith G, Davis-Gardner M, Suthar MS, Ellebedy AH, Boon ACM.J Virol. 2024 Oct 22;98(10):e0052824. doi: 10.1128/jvi.00528-24. Epub 2024 Sep 4.PMID: 39230305

Importance of vaccines against respiratory infections in adults.

Kuronuma K.Respir Investig. 2024 Oct 23;62(6):1202-1203. doi: 10.1016/j.resinv.2024.09.006. Online ahead of print.PMID: 39447447

Duration of post-vaccination immunity to yellow fever in volunteers ten years after a dose-response study - A complementary study.

Vianna CM, Noronha TG, Camacho LAB, Andrade RC, de Souza Brum RC, Dos Santos EM, Aguiar DF, Dos Santos MLB, de Souza Cruz RL, de Lima SMB, de Souza Azevedo Soares A, Schwarcz WD, da Matta de Castro T, Xavier JR, da Conceição DA, Homma A, de Lourdes de Sousa Maia M.Vaccine. 2024 Oct 24;42(24):126083. doi: 10.1016/j.vaccine.2024.06.050. Epub 2024 Jun 25.PMID: 38926068

Prediction of post-PCV13 pneumococcal evolution using invasive disease data enhanced by inverse-invasiveness weighting.

Qiu X, McGee L, Hammitt L, Grant LR, O'Brien KL, Hanage WP, Lipsitch M.mBio. 2024 Oct 16;15(10):e0335523. doi: 10.1128/mbio.03355-23. Epub 2024 Aug 29.PMID: 39207103

Coverage with Selected Vaccines and Exemption Rates Among Children in Kindergarten - United States, 2023-24 School Year.

Seither R, Yusuf OB, Dramann D, Calhoun K, Mugerwa-Kasujja A, Knighton CL, Kriss JL, Miller R, Peacock G.MMWR Morb Mortal Wkly Rep. 2024 Oct 17;73(41):925-932. doi: 10.15585/mmwr.mm7341a3.PMID: 39418212

Short- and long-term outcomes of cardiac adverse events following COVID-19 immunization managed in a Canadian pediatric center.

Pham-Huy A, Bowes J, Russell K, Amira A, Lai L.Vaccine. 2024 Oct 24;42(24):126090. doi: 10.1016/j.vaccine.2024.06.057. Epub 2024 Jul 12.PMID: 39003104

Predictive immunoinformatics reveal promising safety and anti-onchocerciasis protective immune response profiles to vaccine candidates (Ov-RAL-2 and Ov-103) in anticipation of phase I clinical trials.

Nebangwa DN, Shey RA, Shadrack DM, Shintouo CM, Yaah NE, Yengo BN, Efeti MT, Gwei KY, Fomekong DBA, Nchanji GT, Lemoge AA, Ntie-Kang F, Ghogomu SM.PLoS One. 2024 Oct 21;19(10):e0312315. doi: 10.1371/journal.pone.0312315. eCollection 2024.PMID: 39432476

Comparing role of religion in perception of the COVID-19 vaccines in Africa and Asia Pacific.

Jin S, Cook AR, Kanwagi R, Larson HJ, Lin L.Commun Med (Lond). 2024 Oct 24;4(1):212. doi: 10.1038/s43856-024-00628-2.PMID: 39448706

Comparing neoantigen cancer vaccines and immune checkpoint therapy unveils an effective vaccine and anti-TREM2 macrophage-targeting dual therapy.

Keshari S, Shavkunov AS, Miao Q, Saha A, Minowa T, Molgora M, Williams CD, Chaib M, Highsmith AM, Pineda JE, Alekseev S, Alspach E, Hu KH, Colonna M, Pauken KE, Chen K, Gubin MM.Cell Rep. 2024 Oct 23;43(11):114875. doi: 10.1016/j.celrep.2024.114875. Online ahead of print.PMID: 39446585

Advances in human norovirus research: Vaccines, genotype distribution and antiviral strategies.

Chen J, Cheng Z, Chen J, Qian L, Wang H, Liu Y.Virus Res. 2024 Oct 23;350:199486. doi: 10.1016/j.virusres.2024.199486. Online ahead of print.PMID: 39428038

A comparative analysis of knowledge, attitude, and practice (KAP) towards influenza and influenza vaccination among healthcare workers in Kyrgyzstan prior to and during the COVID-19 pandemic.

Akmatova R, Ebama MS, Temirbekov S, Alymkulova V, Otorbaeva D.Vaccine. 2024 Oct 24;42 Suppl 4:125862. doi: 10.1016/j.vaccine.2024.04.008. Epub 2024 Apr 9.PMID: 38594119

The Role of Peptides in Combatting HIV Infection: Applications and Insights.

Helmy NM, Parang K.Molecules. 2024 Oct 19;29(20):4951. doi: 10.3390/molecules29204951.PMID: 39459319

Analysis of Archival Sera From Norovirus-Infected Individuals Demonstrates That Cross-Blocking of Emerging Viruses Is Genotype-Specific.

Pilewski KA, Ford-Siltz LA, Tohma K, Kendra JA, Landivar M, Parra GI.J Infect Dis. 2024 Oct 16;230(4):982-994. doi: 10.1093/infdis/jiae085.PMID: 38382087

Diverse roles of Primary Health Care in COVID-19 vaccination across 28 European countries - Insights from the Eurodata study.

Guisado-Clavero M, Gómez-Bravo R, Gefaell Larrondo I, Ramos Del Rio L, Fitzgerald L, Vinker S, Vaes B, Tsigarovski G, Torzsa P, Ticmane G, Sentker T, Serafini A, Sattler M, Streit S, Petricek G, Petrazzuoli F, Petek D, Perjés Á, Penakacherla N, Senn O, Neves AL, Nessler K, Murauskienė L, Mossong J, Kozlovska L, Segernäs A, Krztoń-Królewiecka A, Kostić M, Kırkoç Üçüncü E, Çimen Korkmaz B, Knežević S, Jandrić-Kočić M, Kastbom L, Shushman I, Ilkov O, Hoffmann K, Heleno B, Hanževački M, Gjorgjievski D, Feldman S, Domeyer PR, Delphin Peña M, Ćosić Divjak A, Busneag IC, Brutskaya-Stempkovskaya E, Bensemmane S, Bayen S, Bakola M, Adler L, Assenova R, Ares-Blanco S, Astier-Peña MP, Lingner H.Eur J Gen Pract. 2024 Dec;30(1):2409240. doi: 10.1080/13814788.2024.2409240. Epub 2024 Oct 22.PMID: 39435869

Vaccine hesitancy and routine revaccination among adult HCT survivors in the United States: A convergent mixed methods analysis.

Wickline MM, Carpenter PA, Harris JR, Iribarren SJ, Reding KW, Pike KC, Lee SJ, Salit RB, Oshima MU, Vo PT, Berry DL.Vaccine. 2024 Oct 21;42(26):126374. doi: 10.1016/j.vaccine.2024.126374. Online ahead of print.PMID: 39437647

Enhancing NA immunogenicity through novel VLP designs.

Guzman Ruiz L, Zollner AM, Hoxie I, Küchler J, Hausjell C, Mesurado T, Krammer F, Jungbauer A, Pereira Aguilar P, Klausberger M, Grabherr R.Vaccine. 2024 Oct 24;42(24):126270. doi: 10.1016/j.vaccine.2024.126270. Epub 2024 Aug 27.PMID: 39197219

From bench to clinic: the development of VLA1553/IXCHIQ, a live-attenuated chikungunya vaccine.

Chen LH, Fritzer A, Hochreiter R, Dubischar K, Meyer S.J Travel Med. 2024 Oct 19;31(7):taae123. doi: 10.1093/jtm/taae123.PMID: 39255380

Safety and immunogenicity of a ChAd155-vectored rabies vaccine compared with inactivated, purified chick embryo cell rabies vaccine in healthy adults.

Phadke VK, Gromer DJ, Rebolledo PA, Graciaa DS, Wiley Z, Sherman AC, Scherer EM, Leary M, Girmay T, McCullough MP, Min JY, Capone S, Sommella A, Vitelli A, Retallick J, Seetahal J, Koller M, Tsong R, Neill-Gubitz H, Mulligan MJ, Rouphael NG.Vaccine. 2024 Oct 16;42(26):126441. doi: 10.1016/j.vaccine.2024.126441. Online ahead of print.PMID: 39418686

Improving the last mile delivery of vaccines through an informed push model: Experiences, opportunities and costs based on an implementation study in a rural district in Uganda.

Bakkabulindi P, Wafula ST, Ssebagereka A, Sekibira R, Mutebi A, Ameny J, Abewe C, Isunju JB.PLOS Glob Public Health. 2024 Oct 28;4(10):e0002647. doi: 10.1371/journal.pgph.0002647. eCollection 2024.PMID: 39466730

Pseudomonas aeruginosa elongation factor-Tu (EF-Tu) is an immunogenic protective protein antigen.

Moustafa DA, Lou E, Schafer-Kestenman ME, Mateu-Borrás M, Doménech-Sanchez A, Albertí S, Goldberg JB.Vaccine. 2024 Oct 29;42(26):126476. doi: 10.1016/j.vaccine.2024.126476. Online ahead of print.PMID: 39476472

Polysorbate 80-containing ionizable lipid nanoparticles for mRNA delivery.

Tang X, Ding S, Yang S, Cheng Y, Liu H, Chen K, Han X.Biomater Sci. 2024 Oct 22;12(21):5573-5581. doi: 10.1039/d4bm00523f.PMID: 39297400

Autism Spectrum Disorder Pathogenesis-A Cross-Sectional Literature Review Emphasizing Molecular Aspects.

Horecka-Lewitowicz A, Lewitowicz W, Wawszczak-Kasza M, Lim H, Lewitowicz P.Int J Mol Sci. 2024 Oct 20;25(20):11283. doi: 10.3390/ijms252011283.PMID: 39457068

Effectiveness of COVID-19 bivalent vaccination against SARS-CoV-2 infection among residents of US nursing homes, November 2022 - March 2023.

Hatfield K, Wiegand R, Reddy S, Patel A, Baggs J, Franceschini T, Gensheimer A, Link-Gelles R, Jernigan J, Wallace M.Vaccine. 2024 Oct 24;42(24):126112. doi: 10.1016/j.vaccine.2024.07.013. Epub 2024 Jul 16.PMID: 39013694

Development and longevity of naturally acquired antibody and memory B cell responses against Plasmodium vivax infection.

Thawornpan P, Kochayoo P, Salsabila ZZ, Chootong P.PLoS Negl Trop Dis. 2024 Oct 24;18(10):e0012600. doi: 10.1371/journal.pntd.0012600. eCollection 2024 Oct.PMID: 39446698

Regulatory reforms will boost African vaccine production and access.

Wairagkar N, Ismail AJ, Abouhussein DMN, Adeyeye MC, Darko DM, Fimbo AM, Rukwata RT, Semete-Makokotlela BT, Sidibe M, Ndembi N.Nat Med. 2024 Oct 29. doi: 10.1038/s41591-024-03314-x. Online ahead of print.PMID: 39472758

Canadian health care providers' and education workers' hesitance to receive original and bivalent COVID-19 vaccines.

Coleman BL, Gutmanis I, Bondy SJ, Harrison R, Langley J, Fischer K, Cooper C, Valiquette L, Muller MP, Powis J, Bowdish D, Katz K, Loeb M, Smieja M, McNeil SA, Mubareka S, Nadarajah J, Arnoldo S, McGeer A.Vaccine. 2024 Oct 24;42(24):126271. doi: 10.1016/j.vaccine.2024.126271. Epub 2024 Sep 2.PMID: 39226785

From COVID-19 to mpox vaccine hoarding - Has the Global North learned its global health lessons?

Schuklenk U.Dev World Bioeth. 2024 Oct 24. doi: 10.1111/dewb.12468. Online ahead of print.PMID: 39445604

Improving Vaccine Clinic Efficiency Through the CANImmunize Platform.

Kuatsidzo A, Wilson K, Ruller S, Daly B, Halil R, Kobewka D.Online J Public Health Inform. 2024 Oct 16;16:e53226. doi: 10.2196/53226.PMID: 39413088

Characterization of bi-segmented and tri-segmented recombinant Pichinde virus particles.

Murphy H, Huang Q, Jensen J, Weber N, Mendonça L, Ly H, Liang Y.J Virol. 2024 Oct 22;98(10):e0079924. doi: 10.1128/jvi.00799-24. Epub 2024 Sep 12.PMID: 39264155

Incidence of ischemic stroke after COVID-19 bivalent booster vaccination in an integrated health system.

Sharff KA, Tandy TK, Lewis PF, Johnson ES.Vaccine. 2024 Oct 22;42(26):126440. doi: 10.1016/j.vaccine.2024.126440. Online ahead of print.PMID: 39442285

Antibody and T-Cell Response to Bivalent Booster SARS-CoV-2 Vaccines in People With Compromised Immune Function: COVERALL-3 Study.

Amstutz A, Chammartin F, Audigé A, Eichenberger AL, Braun DL, Amico P, Stoeckle MP, Hasse B, Papadimitriou-Olivgeris M, Manuel O, Bongard C, Schuurmans MM, Hage R, Damm D, Tamm M, Mueller NJ, Rauch A, Günthard HF, Koller MT, Schönenberger CM, Griessbach A, Labhardt ND, Kouyos RD, Trkola A, Kusejko K, Bucher HC, Abela IA, Briel M, Speich B; Swiss HIV Cohort Study; Swiss Transplant Cohort.J Infect Dis. 2024 Oct 16;230(4):e847-e859. doi: 10.1093/infdis/jiae291.PMID: 38848312

Quantifying and Adjusting for Confounding From Health-Seeking Behavior and Health Care Access in Observational Research.

Graham S, Walker JL, Andrews N, Hulme WJ, Nitsch D, Parker EPK, McDonald HI.Open Forum Infect Dis. 2024 Oct 23;11(10):ofae598. doi: 10.1093/ofid/ofae598. eCollection 2024 Oct.PMID: 39474443

Toxoplasma WH3 deltarop18 acts as a live attenuated vaccine against acute and chronic toxoplasmosis.

Wang C, Fu S, Yu X, Zhou H, Zhang F, Song L, Zhao J, Yang Y, Du J, Luo Q, Shen J, Yu L.NPJ Vaccines. 2024 Oct 23;9(1):197. doi: 10.1038/s41541-024-00996-9.PMID: 39443531

A review on the development of bacterial multi-epitope recombinant protein vaccines via reverse vaccinology.

Li Y, Farhan MHR, Yang X, Guo Y, Sui Y, Chu J, Huang L, Cheng G.Int J Biol Macromol. 2024 Oct 28:136827. doi: 10.1016/j.ijbiomac.2024.136827. Online ahead of print.PMID: 39476887

[Update on HPV-associated head and neck cancers-highlights of the 2024 ASCO Annual Meeting].

Sharma SJ, Klussmann JP, Döscher J, Hoffmann TK, Laban S.HNO. 2024 Oct 25. doi: 10.1007/s00106-024-01525-9. Online ahead of print.PMID: 39453449

Neoantigen sequestrated autophagosomes as therapeutic cancer vaccines.

Zhang J, Cao J, Wang L, Li S, Meng F, Liang X, Jiang H, Luo R, Zhu D, Zhang F, Zhang L, Zhang X, Mei L.J Control Release. 2024 Oct 19;376:369-381. doi: 10.1016/j.jconrel.2024.10.019. Online ahead of print.PMID: 39413847

Knowledge, attitudes, and practices associated with influenza vaccine uptake among healthcare personnel in Israel during three influenza seasons, 2016-2019.

Yoo YM, Katz MA, Greenberg D, Marcenac P, Newes-Adeyi G, Fowlkes A, Hirsch A, Martin E, Monto A, Thompson M, Azziz-Baumgartner E, Duca LM, Peretz A.Vaccine. 2024 Oct 24;42 Suppl 4:126064. doi: 10.1016/j.vaccine.2024.06.031. Epub 2024 Jun 25.PMID: 38926070

The impact of COVID-19 status and vaccine type following the first dose on acute heart disease: A nationwide retrospective cohort study in South Korea.

Yun C, Lee Y, Heo SJ, Kim N, Jung I.Epidemiol Infect. 2024 Oct 24;152:e134. doi: 10.1017/S0950268824001213.PMID: 39444354

Update on Vaccine-Derived Poliovirus Outbreaks - Worldwide, January 2023-June 2024.

Namageyo-Funa A, Greene SA, Henderson E, Traoré MA, Shaukat S, Bigouette JP, Jorba J, Wiesen E, Bolu O, Diop OM, Burns CC, Wassilak SGF.MMWR Morb Mortal Wkly Rep. 2024 Oct 17;73(41):909-916. doi: 10.15585/mmwr.mm7341a1.PMID: 39418214

Meeting People Where They Are in the Fight Against COVID-19 and Its Complications.

Nichols ML, Gibson J.Am J Public Health. 2024 Oct 16:e1-e4. doi: 10.2105/AJPH.2024.307768. Online ahead of print.PMID: 39413350

Drivers of COVID-19 vaccine uptake among rural populations in Madagascar: a cross-sectional study.

Kislaya I, Andrianarimanana DK, Marchese V, Hosay L, Rivomalala R, Holinirina R, Rasamoelina T, Zafinimampera AOT, Ratefiarisoa S, Totofotsy O, Rakotomalala R, Rausche P, Doumbia CO, Guth A, Pavoncello V, Veilleux S, Randriamanantany ZA, May J, Puradiredja DI, Rakotoarivelo RA, Fusco D.BMC Public Health. 2024 Oct 17;24(1):2868. doi: 10.1186/s12889-024-20414-y.PMID: 39420305

Epidemiological and Genetic Insights of the Circulating Foot-and-Mouth Disease Virus Serotypes in Egypt.

Hassanein RT, Abdelmegeed HK, Abdelwahed DA, Zaki AG, Saad AS, Shahein MA, Afify AF, Rohaim MA.Curr Microbiol. 2024 Oct 30;81(12):435. doi: 10.1007/s00284-024-03944-x.PMID: 39477883

Antibody-mediated immunological memory correlates with long-term Lyme veterinary vaccine protection in mice.

Gutierrez MP, Huckaby AB, Yang E, Weaver KL, Hall JM, Hudson M, Dublin SR, Sen-Kilic E, Rocuskie-Marker CM, Miller SJ, Pritchett CL, Mummadisetti MP, Zhang Y, Driscoll T, Barbier M.Vaccine. 2024 Oct 24;42(24):126084. doi: 10.1016/j.vaccine.2024.06.051. Epub 2024 Jun 26.PMID: 38937181

Comparing COVID-19 booster vaccine acceptance in the United Kingdom, Germany, Austria, and Jordan: The role of protection motivation theory, conspiracy beliefs, social media use and religiosity.

Eberhardt J, Al-Qerem W, Ling J.Vaccine. 2024 Oct 28;42(26):126474. doi: 10.1016/j.vaccine.2024.126474. Online ahead of print.PMID: 39471723

An ionic liquid-based adjuvant for modulating cellular and humoral immune responses.

Goetz MJ, Park KS, Joshi M, Gottlieb AP, Dowling DJ, Mitragotri S.J Control Release. 2024 Oct 25;376:632-645. doi: 10.1016/j.jconrel.2024.10.038. Online ahead of print.PMID: 39437967

Analyzing the 7C psychological antecedents of vaccine acceptance throughout the COVID-19 pandemic among healthcare sector workers in France: A repeated cross-sectional study (CappVac-Cov).

Araujo-Chaveron L, Olivier C, Pellissier G, Bouvet E, Mueller JE.Vaccine. 2024 Oct 24;42(24):126103. doi: 10.1016/j.vaccine.2024.07.004. Epub 2024 Jul 6.PMID: 38972764

Antitumor activity of PAbs generated by immunization with a novel HER3-targeting protein-based vaccine candidate in preclinical models.

Bermúdez-Abreut E, Bergado Báez G, Martínez Pestano M, Attanasio G, Gonzales Castillo CY, Hernández Fernández DR, Alvarez-Arzola R, Alimonti A, Sánchez-Ramírez B.Front Oncol. 2024 Oct 16;14:1472607. doi: 10.3389/fonc.2024.1472607. eCollection 2024.PMID: 39479017

Need for strategic communications and stakeholder engagement to advance acceptability of an overdose preventing vaccine targeting fentanyl.

Weitzman ER, Pierce SE, Blakemore LM, Murdock A, Angelidou A, Dowling DJ, Levy O, Levy S.Vaccine. 2024 Oct 24;42(24):126082. doi: 10.1016/j.vaccine.2024.06.049. Epub 2024 Jul 10.PMID: 38991914

Immunogenicity of a booster dose of a bivalent (Asp614Gly and omicron BA.4/5 variant) self-amplifying mRNA SARS-CoV-2 booster vaccine versus the BNT162b2 omicron BA.4/5 mRNA vaccine: a randomised phase 3 trial.

Okada Y, Kumagai Y, Okura I, Otsuki M, Ishida N, Iwama Y, Minamida T, Yagi Y, Kurosawa T, van Boxmeer J, Zhang Y, Smolenov I, Walson JL.Lancet Infect Dis. 2024 Oct 23:S1473-3099(24)00565-6. doi: 10.1016/S1473-3099(24)00565-6. Online ahead of print.PMID: 39461355

Development and Validation of Multiplex Assays for Mouse and Human IgG and IgA to Neisseria gonorrhoeae Antigens.

Stover EL, Little MB, Connolly KL, Li L, Nicholas RA, Sikora AE, Jerse AE, Hobbs MM, Duncan JA, Macintyre AN.J Infect Dis. 2024 Oct 16;230(4):852-856. doi: 10.1093/infdis/jiae153.PMID: 38526341

Assessments of effectiveness of technologies utilizations in VIHSCM among selected health facilities in Tanzania mainland.

Mollel HA, Mushi LD, Nkwera RV.PLOS Glob Public Health. 2024 Oct 17;4(10):e0002635. doi: 10.1371/journal.pgph.0002635. eCollection 2024.PMID: 39418255

Insights into Genetic and Antigenic Characteristics of Influenza A(H1N1)pdm09 Viruses Circulating in Sicily During the Surveillance Season 2023-2024: The Potential Effect on the Seasonal Vaccine Effectiveness.

Tramuto F, Maida CM, Randazzo G, Previti A, Sferlazza G, Graziano G, Costantino C, Mazzucco W, Vitale F.Viruses. 2024 Oct 21;16(10):1644. doi: 10.3390/v16101644.PMID: 39459976

COVID-19 vaccine uptake and associated risk factors among first antenatal care attendees in Zambia, 2021-2022: A repeated cross-sectional study.

Tembo T, Somwe P, Bosomprah S, Heilmann E, Kalenga K, Moyo N, Kabamba B, Seffren V, Fwoloshi S, Rutagwera MR, Musunse M, Mwiinga L, Gutman JR, Hines JZ, Sikazwe I.PLOS Glob Public Health. 2024 Oct 24;4(10):e0003028. doi: 10.1371/journal.pgph.0003028. eCollection 2024.PMID: 39446709

Erratum: Protection and antibody levels 35 years after primary series with hepatitis B vaccine and response to a booster dose.

[No authors listed]Hepatology. 2024 Nov 1;80(5):E90. doi: 10.1097/HEP.0000000000000982. Epub 2024 Oct 17.PMID: 39436230

Rational design of novel peptide-based vaccine against the emerging OZ virus.

Arshad F, Sarfraz A, Rubab A, Shehroz M, Moura AA, Sheheryar S, Ullah R, Shahat AA, Ibrahim MA, Nishan U, Shah M.Hum Immunol. 2024 Oct 23;85(6):111162. doi: 10.1016/j.humimm.2024.111162. Online ahead of print.PMID: 39447523

Safety and Immunogenicity of an Adjuvanted Clostridioides difficile Vaccine Candidate in Healthy Adults: A Randomized Placebo-Controlled Phase 1 Study.

Leroux-Roels I, Alhatemi A, Caubet M, De Boever F, de Wergifosse B, El Idrissi M, Ferreira GS, Jacobs B, Lambert A, Morel S, Servais C, Yarzabal JP.J Infect Dis. 2024 Oct 24:jiae466. doi: 10.1093/infdis/jiae466. Online ahead of print.PMID: 39447053

Modelling the epidemiological impact of maternal respiratory syncytial virus (RSV) vaccination in Australia.

Nazareno AL, Newall AT, Muscatello DJ, Hogan AB, Wood JG.Vaccine. 2024 Oct 17;42(26):126418. doi: 10.1016/j.vaccine.2024.126418. Online ahead of print.PMID: 39423452

A comprehensive investigation of Glycoprotein-based nucleic acid vaccines for Hantaan Virus.

Zhang J, Zhang J, Wang Y, Sun Y, Wang Y, Wang Y, Yang D, Qiao X, Liu X, Ding J, Zhang X, Zhang W, Wang Z, Hu C, Han C, Liu T, Yang S, Sun Y, Cheng L, Jiang D, Yang K.NPJ Vaccines. 2024 Oct 23;9(1):196. doi: 10.1038/s41541-024-00991-0.PMID: 39443512

Shedding reduction and immunity modulation in piglets with an inactivated Mycoplasma hyopneumoniae vaccine encapsulated in nanostructured SBA-15 silica.

Petri FAM, Malcher CS, Mechler-Dreibi ML, Panneitz AK, Braga ER, Aguiar GA, Toledo LT, Martins TS, Cides-da-Silva LC, Fantini MCA, Sant'Anna OA, Montassier HJ, Oliveira LG.Vaccine. 2024 Oct 24;42(24):126268. doi: 10.1016/j.vaccine.2024.126268. Epub 2024 Aug 28.PMID: 39208565

Zika virus T-cell based 704/DNA vaccine promotes protection from Zika virus infection in the absence of neutralizing antibodies.

Roth C, Pitard B, Levillayer L, Lay S, Vo HTM, Cantaert T, Sakuntabhai A.PLoS Negl Trop Dis. 2024 Oct 17;18(10):e0012601. doi: 10.1371/journal.pntd.0012601. eCollection 2024 Oct.PMID: 39418312

CpG-adjuvanted virus-like particle vaccine induces protective immunity against Leishmania donovani infection.

Yoon KW, Chu KB, Eom GD, Mao J, Moon EK, Kim SS, Quan FS.J Infect Dis. 2024 Oct 24:jiae526. doi: 10.1093/infdis/jiae526. Online ahead of print.PMID: 39447003

The 2020 immunization programme landscape: Piloting an assessment metric to evaluate the maturity of national immunization programmes across the life course.

Goldin S, Moen A, Moss WJ, Nuzzo J.Vaccine. 2024 Oct 24;42 Suppl 4:125541. doi: 10.1016/j.vaccine.2023.12.051. Epub 2024 Jan 10.PMID: 38212202

COVID-19 and COVID-19 Vaccine-Related Skin Ulcerations in the Lower Extremities: A Case Report and Literature Review.

Beaineh P, El-Bsat A, Hafez B, Bizri AR, Kibbi AG, Merashli M, Haddad F.Int J Low Extrem Wounds. 2024 Oct 29:15347346241275785. doi: 10.1177/15347346241275785. Online ahead of print.PMID: 39471824

A multiantigenic Orf virus-based vaccine efficiently protects hamsters and nonhuman primates against SARS-CoV-2.

Reguzova A, Müller M, Pagallies F, Burri D, Salomon F, Rziha HJ, Bittner-Schrader Z, Verstrepen BE, Böszörményi KP, Verschoor EJ, Gerhauser I, Elbers K, Esen M, Manenti A, Monti M, Rammensee HG, Derouazi M, Löffler MW, Amann R.NPJ Vaccines. 2024 Oct 16;9(1):191. doi: 10.1038/s41541-024-00981-2.PMID: 39414789

Evaluation of the Protective Efficacy of Different Doses of a Chlamydia abortus Subcellular Vaccine in a Pregnant Sheep Challenge Model for Ovine Enzootic Abortion.

Livingstone M, Aitchison K, Palarea-Albaladejo J, Chianini F, Rocchi MS, Caspe SG, Underwood C, Flockhart A, Wheelhouse N, Entrican G, Wattegedera SR, Longbottom D.Animals (Basel). 2024 Oct 17;14(20):3004. doi: 10.3390/ani14203004.PMID: 39457934

Vaccine-Elicited Antibodies Restrict Glucose Availability to Control Brucella Infection.

Ponzilacqua-Silva B, Dadelahi AS, Abushahba MFN, Moley CR, Skyberg JA.J Infect Dis. 2024 Oct 16;230(4):e818-e823. doi: 10.1093/infdis/jiae172.PMID: 38586904

A randomized, placebo-controlled, blinded phase 1 study investigating a novel inactivated, Vero cell-culture derived Zika virus vaccine.

Wressnigg NV, Hochreiter R, Schneider M, Obersriebnig MJ, Bézay NI, Lingnau K, Ramljak IČ, Dubischar KL, Eder-Lingelbach S.J Travel Med. 2024 Oct 19;31(7):taac127. doi: 10.1093/jtm/taac127.PMID: 36377643

Perceptions of childhood immunization in São Paulo: quantitative-qualitative cross-sectional study.

Costa LB, França CN, Nali LHDS, Colombo-Souza P, Novo NF, Juliano Y.Sao Paulo Med J. 2024 Oct 21;142(6):e2023447. doi: 10.1590/1516-3180.2023.0447.R1.05062024. eCollection 2024.PMID: 39442092

Single-chain A35R-M1R-B6R trivalent mRNA vaccines protect mice against both mpox virus and vaccinia virus.

Kong T, Du P, Ma R, Wang H, Ma X, Lu J, Gao Z, Qi H, Li R, Zhang H, Xia F, Liu Y, Wang R, Duan K, Wang Z, Wang Q, Gao GF.EBioMedicine. 2024 Oct 17;109:105392. doi: 10.1016/j.ebiom.2024.105392. Online ahead of print.PMID: 39423738

A novel outer membrane vesicle adjuvant improves vaccine protection against Bordetella pertussis.

Galeas-Pena M, Hirsch A, Kuang E, Hoffmann J, Gellings P, Brown JB, Limbert VM, Callahan CL, McLachlan JB, Morici LA.NPJ Vaccines. 2024 Oct 16;9(1):190. doi: 10.1038/s41541-024-00990-1.PMID: 39406780

Durable Immune Response and Long-term Efficacy of COVID-19 Vaccination in Children With Inflammatory Bowel Disease.

Kastl AJ, Brenner EJ, Weaver KN, Zhang X, Strople JA, Adler J, Dubinsky MC, Bousvaros A, Watkins R, Dai X, Chen W, Cross RK, Higgins PDR, Ungaro RC, Bewtra M, Bellaguarda EA, Farraye FA, Chun KY, Zikry M, Bastidas M, Firestine AM, Craig RG, Boccieri ME, Long MD, Kappelman MD.Inflamm Bowel Dis. 2024 Oct 16:izae225. doi: 10.1093/ibd/izae225. Online ahead of print.PMID: 39412147

Watchful, skeptics, and system distrusters: Characteristics associated with different types of COVID-19 vaccine hesitancy among U.S. working-age adults.

Zhang X, Monnat SM.Vaccine. 2024 Oct 24;42(24):126080. doi: 10.1016/j.vaccine.2024.06.047. Epub 2024 Jun 20.PMID: 38902188

A novel DNA vaccine encoding the SRS13 protein administered by electroporation confers protection against chronic toxoplasmosis.

Gül C, Gül A, Karakavuk T, Erkunt Alak S, Karakavuk M, Can H, Değirmenci Döşkaya A, Yavuz İ, Kaplan S, Erel Akbaba G, Şen Karaman D, Akbaba H, Efe Köseoğlu A, Ovayurt T, Yüksel Gürüz A, Ün C, Kantarcı AG, Döşkaya M.Vaccine. 2024 Oct 24;42(24):126065. doi: 10.1016/j.vaccine.2024.06.032. Epub 2024 Jun 16.PMID: 38880692

Factors predicting primary and booster COVID-19 vaccination in a community sample of African American men and women in the United States Midwest.

Kelly JA, Walsh JL, Quinn K, Amirkhanian YA, Plears M.Vaccine. 2024 Oct 24;42(24):126088. doi: 10.1016/j.vaccine.2024.06.055. Epub 2024 Jun 27.PMID: 38937180

A prospective, multicenter study of hepatitis B birth-dose vaccine with or without hepatitis B immunoglobulin in preventing mother-to-child transmission of hepatitis B virus in Ethiopia.

Arefaine M, Johannessen A, Teklehaymanot T, Mihret A, Alemayehu DH, Osman M, Mulu A, Berhe N.Vaccine. 2024 Oct 18;42(26):126461. doi: 10.1016/j.vaccine.2024.126461. Online ahead of print.PMID: 39426287

Disparities in COVID-19 vaccination receipt by race, ethnicity, and social determinants of health among a large patient population in a network of community-based healthcare centers.

Groom HC, Biel FM, Crane B, Sun E, Georgescu JP, Weintraub ES, McNeil MM, Jazwa A, Smith N, Owens-Jasey C, Naleway AL, Schmidt T.Vaccine. 2024 Oct 24;42(24):126288. doi: 10.1016/j.vaccine.2024.126288. Epub 2024 Sep 5.PMID: 39241356

Unlocking Intracellular Protein Delivery by Harnessing Polymersomes Synthesized at Microliter Volumes using Photo-PISA.

Thanapongpibul C, Rifaie-Graham O, Ojansivu M, Najer A, Kim H, Bakker SE, Chami M, Peeler DJ, Liu C, Yeow J, Stevens MM.Adv Mater. 2024 Oct 17:e2408000. doi: 10.1002/adma.202408000. Online ahead of print.PMID: 39417762

Next-Generation SARS-CoV-2 Vaccine Formulations and Alternative Routes of Administration.

Babu TM, Jackson LA, El Sahly HM.J Infect Dis. 2024 Oct 16:jiae504. doi: 10.1093/infdis/jiae504. Online ahead of print.PMID: 39412209

Attitudes, healthcare interactions, and communication preferences for HPV vaccines among hesitant Hispanic/Latinx parents: how does this compare with influenza and COVID-19 vaccines?

Grimaldi CG, Stewart EC, Edwards K, Barajas C, Cunningham-Erves J.Ethn Health. 2024 Oct 22:1-22. doi: 10.1080/13557858.2024.2417382. Online ahead of print.PMID: 39438127

In-silico immunoinformatic vaccine design for Treponema denticola ergothionase.

Rexlin JP, Manickavasagam J, Yadalam PK, Shrivastava D, Srivastava KC, Ronsivalle V, Cicciù M, Minervini G.Minerva Dent Oral Sci. 2024 Oct 29. doi: 10.23736/S2724-6329.24.04915-5. Online ahead of print.PMID: 39470591

Overview of adult immunization in Italy: Successes, lessons learned and the way forward.

Bechini A, Boccalini S, Del Riccio M, Pattyn J, Hendrickx G, Wyndham-Thomas C, Gabutti G, Maggi S, Ricciardi W, Rizzo C, Costantino C, Vezzosi L, Guida A, Morittu C, Van Damme P, Bonanni P.Hum Vaccin Immunother. 2024 Dec 31;20(1):2411821. doi: 10.1080/21645515.2024.2411821. Epub 2024 Oct 21.PMID: 39429151

The Effect of Grasp Reflex Stimulation on Pain During Vaccine Administration.

Koç ES, Kadiroğlu T.J Perinat Neonatal Nurs. 2024 Oct 16. doi: 10.1097/JPN.0000000000000852. Online ahead of print.PMID: 39420477

Factors Associated With Repeat Pediatric Influenza Vaccination Among Inconsistent Vaccinators.

Abraham C, Gilkey MB, Walsh KE, Hickingbotham MR, Galbraith AA.Clin Pediatr (Phila). 2024 Oct 18:99228241286970. doi: 10.1177/00099228241286970. Online ahead of print.PMID: 39422922

Transcutaneous Immunization of 1D Rod-Like Tobacco-Mosaic-Virus-Based Peptide Vaccine via Tip-Loaded Dissolving Microneedles.

Ou J, Xing M, Lu G, Wan C, Li K, Jiang W, Qian W, Liu Y, Xu R, Cheng A, Zhu M, Ju X, Gao Y, Tian Y, Niu Z.Nano Lett. 2024 Oct 23;24(42):13118-13125. doi: 10.1021/acs.nanolett.4c01900. Epub 2024 Oct 4.PMID: 39365010

Confidence and barriers: Analysis of factors associated with timely routine childhood vaccination in Canada during the COVID-19 pandemic.

MacKay H, Gretton JD, Chyderiotis S, Elliott S, Howarth A, Guo C, Mastroianni A, Kormos C, Leifer J, Conway L, Morrissey MD.Vaccine. 2024 Oct 24;42(24):126236. doi: 10.1016/j.vaccine.2024.126236. Epub 2024 Aug 31.PMID: 39217774

Safety and Immunogenicity of a 4-Component Generalized Modules for Membrane Antigens Shigella Vaccine in Healthy European Adults: Randomized, Phase 1/2 Study.

Leroux-Roels I, Maes C, Mancini F, Jacobs B, Sarakinou E, Alhatemi A, Joye J, Grappi S, Cilio GL, Serry-Bangura A, Vitali CG, Ferruzzi P, Marchetti E, Necchi F, Rappuoli R, De Ryck I, Auerbach J, Colucci AM, Rossi O, Conti V, Scorza FB, Arora AK, Micoli F, Podda A, Nakakana UN; Shigella Project Team.J Infect Dis. 2024 Oct 16;230(4):e971-e984. doi: 10.1093/infdis/jiae273.PMID: 38853614

Influenza Vaccine in High-Risk Cardiovascular Diseases-Define the Target.

Donzelli A.JAMA Cardiol. 2024 Oct 16. doi: 10.1001/jamacardio.2024.3466. Online ahead of print.PMID: 39412761

Influenza Vaccine in High-Risk Cardiovascular Diseases-Define the Target-Reply.

Peikert A, Solomon SD, Vardeny O.JAMA Cardiol. 2024 Oct 16. doi: 10.1001/jamacardio.2024.3463. Online ahead of print.PMID: 39412790

Comparing the distribution of common human papillomavirus genotypes among the population of Fars province in southwest Iran with the genotypes included in the available HPV vaccines.

Kalani M, Mirzaei F, Keyghobadi H, Keighobadi G, Raoofat A, Kalani M, Moravej A.Mol Biol Rep. 2024 Oct 21;51(1):1083. doi: 10.1007/s11033-024-10017-6.PMID: 39432133

Estimating averted illnesses from influenza vaccination for children and pregnant women - El Salvador, Panama, and Peru, 2011-2018.

Chard AN, Machingaidze C, Loayza S, Gharpure R, Nogareda F, González R, Domínguez R, Tinoco YO, Dawood FS, Carreon JD, Lafond KE, Jara J, Azziz-Baumgartner E, Cozza V, Couto P, Rolfes MA, Tempia S.Vaccine. 2024 Oct 24;42 Suppl 4(Suppl 4):125861. doi: 10.1016/j.vaccine.2024.04.007. Epub 2024 Apr 6.PMID: 38584055

Overview of Recombinant Tick Vaccines and Perspectives on the Use of Plant-Made Vaccines to Control Ticks of Veterinary Importance.

Trujillo E, Ramos-Vega A, Monreal-Escalante E, Almazán C, Angulo C.Vaccines (Basel). 2024 Oct 17;12(10):1178. doi: 10.3390/vaccines12101178.PMID: 39460344

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

Tyagi A, Bajaj SS, Nayeu EN, Stanford FC.Vaccine. 2024 Oct 16:126446. doi: 10.1016/j.vaccine.2024.126446. Online ahead of print.PMID: 39419730

Autochthonous dengue outbreak in Rome, Italy, in 2023.

Salvo PF, Baldin G, Raffaelli F, Ciccullo A, Borghetti A, Tamburrini E, Ricci R, Di Donato M, Di Giambenedetto S, Torti C.J Travel Med. 2024 Oct 19;31(7):taae111. doi: 10.1093/jtm/taae111.PMID: 39180338

Do current economic evaluations fully capture vaccine value: a review of evidence from India.

Kaur N, Mathew JL, Gupta M, John J, Prinja S.Expert Rev Pharmacoecon Outcomes Res. 2024 Oct 18:1-12. doi: 10.1080/14737167.2024.2417767. Online ahead of print.PMID: 39412951

The 3 I's of immunity and aging: immunosenescence, inflammaging, and immune resilience.

Wrona MV, Ghosh R, Coll K, Chun C, Yousefzadeh MJ.Front Aging. 2024 Oct 16;5:1490302. doi: 10.3389/fragi.2024.1490302. eCollection 2024.PMID: 39478807

A vaccine candidate based on baculovirus displaying chikungunya virus E1-E2 envelope confers protection against challenge in mice.

Caillava AJ, Alfonso V, Tejerina Cibello M, Demaria MA, Coria LM, Cassataro J, Taboga OA, Alvarez DE.J Virol. 2024 Oct 23:e0101724. doi: 10.1128/jvi.01017-24. Online ahead of print.PMID: 39440961

Provider and community perceptions of integrated COVID-19 and routine childhood immunisation programmes in Nigeria: a qualitative exploratory study.

Bakare AA, Akinsola KO, King C, Sogbesan AA, Bakare OR, Fadahunsi OY, Salako J, Falade AG, Herzig van Wees S.BMC Health Serv Res. 2024 Oct 21;24(1):1262. doi: 10.1186/s12913-024-11623-7.PMID: 39434115

Development of novel multi-protein chimeric immunogens that protect against infection with the Lyme disease agent, *Borreliella burgdorferi*.

O'Bier NS, Camire AC, Patel DT, Billingsley JS, Hodges KR, Marconi RT.mBio. 2024 Oct 16;15(10):e0215924. doi: 10.1128/mbio.02159-24. Epub 2024 Sep 17.PMID: 39287439

Enhancing HPV vaccine uptake in girls and boys - A qualitative analysis of Canadian school-based vaccination programs.

Dubé E, Gagnon D, Pelletier C, Comeau JL, Steenbeek A, MacDonald N, Kervin M, MacDonald SE, Mitchell H, Bettinger JA.Vaccine. 2024 Oct 17;42(26):126425. doi: 10.1016/j.vaccine.2024.126425. Online ahead of print.PMID: 39423449

Vaccine Hesitancy and COVID-19 Risk Behaviors Associated with Social Media Use in Japan.

Takahashi S, Takahashi N, Nohara M, Kawachi I.Health Syst Reform. 2024 Dec 17;10(2):2377070. doi: 10.1080/23288604.2024.2377070. Epub 2024 Oct 22.PMID: 39437242

A safer cell-based yellow fever live attenuated vaccine protects mice against YFV infection.

Guo W, Jiang T, Rao J, Zhang Z, Zhang X, Su J, Yin C, Lu M, Hu X, Shan C.iScience. 2024 Sep 17;27(10):110972. doi: 10.1016/j.isci.2024.110972. eCollection 2024 Oct 18.PMID: 39398246

Designing novel multiepitope mRNA vaccine targeting Hendra virus (HeV): An integrative approach utilizing immunoinformatics, reverse vaccinology, and molecular dynamics simulation.

Mahdeen AA, Hossain I, Masum MHU, Islam S, Rabbi TMF.PLoS One. 2024 Oct 23;19(10):e0312239. doi: 10.1371/journal.pone.0312239. eCollection 2024.PMID: 39441880

Leveraging seasonal influenza health worker vaccination programmes for COVID-19 vaccine Introduction: A global qualitative analysis.

Volkmann AM, Goldin S, McMurren B, Gapare C, Anne Pratt B, Frost L, Desai S.Vaccine. 2024 Oct 24;42 Suppl 4:125534. doi: 10.1016/j.vaccine.2023.12.044. Epub 2024 Mar 25.PMID: 38531724

Risk of heavy menstrual bleeding following COVID-19 vaccination: A nationwide case-control study.

Botton J, Bertrand M, Jabagi MJ, Duranteau L, Bouillon K, Drouin J, Semenzato L, Le Vu S, Weill A, Zureik M, Dray-Spira R.Vaccine. 2024 Oct 24;42(24):126252. doi: 10.1016/j.vaccine.2024.126252. Epub 2024 Sep 2.PMID: 39226788

An evaluation of the surveillance system for monitoring and reporting adverse events following immunization in Kebbi State, Northern Nigeria: a mixed method approach.

Omoleke SA, de Kiev LC.BMC Public Health. 2024 Oct 21;24(1):2906. doi: 10.1186/s12889-024-20356-5.PMID: 39434046

The cost of COVID-19 vaccine delivery in Bangladesh.

Yesmin A, Moi F, Hossain T, Archer RA, Islam M, Boonstoppel L.Hum Vaccin Immunother. 2024 Dec 31;20(1):2411820. doi: 10.1080/21645515.2024.2411820. Epub 2024 Oct 18.PMID: 39422276

Relationship between parental acceptance of the COVID-19 vaccine and attitudes towards measles vaccination for children: A cross-sectional study.

Jiang X, Wang J, Li C, Yeoh EK, Guo Z, Lin G, Wei Y, Chong KC.Vaccine. 2024 Oct 24;42(24):126068. doi: 10.1016/j.vaccine.2024.06.035. Epub 2024 Jun 16.PMID: 38880690

A second-generation recombinant BCG strain combines protection against murine tuberculosis with an enhanced safety profile in immunocompromised hosts.

Valencia-Hernandez AM, Zhao G, Miranda-Hernandez S, Segura-Cerda CA, Pedroza-Roldan C, Seifert J, Aceves-Sanchez MJ, Burciaga-Flores M, Gutierrez-Ortega A, Del Pozo-Ramos L, Flores-Valdez MA, Kupz A.Vaccine. 2024 Oct 24;42(24):126291. doi: 10.1016/j.vaccine.2024.126291. Epub 2024 Sep 5.PMID: 39241355

Evaluation of test-negative design estimates of influenza vaccine effectiveness in the context of multiple, co-circulating, vaccine preventable respiratory viruses.

Leis AM, Wagner A, Flannery B, Chung JR, Monto AS, Martin ET.Vaccine. 2024 Oct 29;42(26):126493. doi: 10.1016/j.vaccine.2024.126493. Online ahead of print.PMID: 39476473

The acceptance of COVID-19 vaccines in Rwanda: a cross-sectional study.

Mbonigaba E, Yu F, Reñosa MDC, Mwikarago IE, Cho FN, Elad PCK, Metzger W, Muhindo R, Chen Q, Denkinger CM, McMahon SA, Chen S.BMC Public Health. 2024 Oct 18;24(1):2875. doi: 10.1186/s12889-024-20417-9.PMID: 39425074

Effect of 10-valent pneumococcal conjugate vaccine on trends of pneumococcal meningitis in children under five years, Uganda, 2003-2022.

Nuwamanya Y, Ampeire I, Baganizi M, Atugonza R, Nsubuga F, Kwesiga B, Migisha R, Bulage L, Kadobera D, Ario AR, Kisakye A.BMC Infect Dis. 2024 Oct 21;24(1):1187. doi: 10.1186/s12879-024-10075-y.PMID: 39434021

Machine Learning and Hyperspectral Imaging for Analysis of Human Papillomaviruses (HPV) Vaccine Self-Healing Particles.

Ralbovsky NM, Zhang Y, Williams DM, McKelvey CA, Smith JP.Anal Chem. 2024 Oct 29;96(43):17118-17127. doi: 10.1021/acs.analchem.4c02327. Epub 2024 Oct 16.PMID: 39413009

COVID-19 Vaccine Preferences in General Populations in Canada, Germany, the United Kingdom, and the United States: Discrete Choice Experiment.

Salisbury D, Lazarus JV, Waite N, Lehmann C, Sri Bhashyam S, de la Cruz M, Hahn B, Rousculp MD, Bonanni P.JMIR Public Health Surveill. 2024 Oct 16;10:e57242. doi: 10.2196/57242.PMID: 39412841

Homonymous hemianopia following yellow fever vaccination: a case of acute disseminated encephalomyelitis.

Hensel CA, Jackson JD.J Travel Med. 2024 Oct 19;31(7):taae108. doi: 10.1093/jtm/taae108.PMID: 39126372

CDC Recommends Mpox Vaccine for Travelers to Central and Eastern Africa.

Anderer S.JAMA. 2024 Oct 18. doi: 10.1001/jama.2024.21298. Online ahead of print.PMID: 39422921

Klebsiella pneumoniae Lipopolysaccharide as a Vaccine Target and the Role of Antibodies in Protection from Disease.

Miller JC, Cross AS, Tennant SM, Baliban SM.Vaccines (Basel). 2024 Oct 17;12(10):1177. doi: 10.3390/vaccines12101177.PMID: 39460343

Molecular characterization of reassortant infectious bursal disease virus (IBDV) strains of genogroup A3B1 detected in some areas of Britain between 2020 and 2021.

Reddy VRAP, Bianco C, Poulos C, Egana-Labrin SC, Brodrick AJ, Nazki S, Schock A, Broadbent AJ.Virology. 2024 Oct 18;600:110269. doi: 10.1016/j.virol.2024.110269. Online ahead of print.PMID: 39437533

Why does COVID-19 vaccine protection quickly wane?

Cohen J.Science. 2024 Oct 18;386(6719):255-256. doi: 10.1126/science.adt9019. Epub 2024 Oct 17.PMID: 39418356

Enhancing Vaccine Efficacy with Polyethylenimine-Modified Lovastatin-Loaded Nanoparticle Pickering Emulsion Adjuvant.

Miao W, Song Z, Jiao L, Yu R, Wang D, Jin L, Ge X, Zhou Y, Wang Z, Han L, He J, Sun H, Sun X, Zhang A, Zhang L, Liu Z.Mol Pharm. 2024 Oct 21. doi: 10.1021/acs.molpharmaceut.4c00828. Online ahead of print.PMID: 39432317

Global burden of vaccine-associated uveitis and their related vaccines, 1967-2023.

Oh J, Park S, Park J, Jo H, Lee H, Udeh R, Rahmati M, Yang JM, Lee JY, Yon DK.Br J Ophthalmol. 2024 Oct 18:bjo-2024-325985. doi: 10.1136/bjo-2024-325985. Online ahead of print.PMID: 39424330

Immunogenicity to Herpes Zoster recombinant subunit vaccine in immune-mediated rheumatic patients under treatment with JAK inhibitors.

Sieiro-Santos C, Herrero JG, Ordas Martínez J, Álvarez Castro C, López Robles A, Colindres R, Martín ER, Sahagun AM, Ruiz de Morales JG.Rheumatology (Oxford). 2024 Oct 24:keae584. doi: 10.1093/rheumatology/keae584. Online ahead of print.PMID: 39447032

Pangenome analysis of five representative Tropheryma whipplei strains following multiepitope-based vaccine design via immunoinformatic approaches.

Hasan A, Ibrahim M, Alonazi WB, Yu R, Li B.Mol Genet Genomics. 2024 Oct 26;299(1):101. doi: 10.1007/s00438-024-02189-4.PMID: 39460811

Prevalence of caregiver hesitancy for vaccinations in children and its associated factors: A systematic review and meta-analysis.

Maamor NH, Muhamad NA, Mohd Dali NS, Leman FN, Rosli IA, Tengku Bahrudin Shah TPN, Jamalluddin NH, Misnan NS, Mohamad ZA, Bakon SK, Mutalip MHA, Hassan MRA, Lai NM.PLoS One. 2024 Oct 24;19(10):e0302379. doi: 10.1371/journal.pone.0302379. eCollection 2024.PMID: 39446774

Architectural organization and *in situ* fusion protein structure of lymphocytic choriomeningitis virus.

Kang JS, Zhou K, Wang H, Tang S, Lyles KVM, Luo M, Zhou ZH.J Virol. 2024 Oct 22;98(10):e0064024. doi: 10.1128/jvi.00640-24. Epub 2024 Sep 27.PMID: 39329471

Cell-mediated and humoral immune responses of cyprinids induced by a live attenuated vaccine against cyprinid herpesvirus 2 infection in comparison to the virus non-permissive high temperature water treatment.

Saito H, Lau LM, Minami S, Yuguchi M, Matsumoto M, Nakanishi T, Kondo H, Kato G, Sano M.Fish Shellfish Immunol. 2024 Oct 28:109991. doi: 10.1016/j.fsi.2024.109991. Online ahead of print.PMID: 39477169

Effect of standardized patient simulation with BCG vaccination on nursing students' skills, knowledge and satisfaction, and self-confidence: A randomized controlled study.

Unal E, Ozdemir A, Aydın MO, Alper Z.Nurse Educ Pract. 2024 Oct 18;81:104159. doi: 10.1016/j.nepr.2024.104159. Online ahead of print.PMID: 39447444

"If the nurse tells me this is a good thing, I trust her completely" - Exploring health system enablers of MMR vaccine uptake in the Finnish Somali community: A mixed method study.

Hussein I, Mohamud H, Hussein A, Luomala O, Kontio M, Edelstein M, Nohynek H.Vaccine. 2024 Oct 24;42(24):126087. doi: 10.1016/j.vaccine.2024.06.054. Epub 2024 Jun 25.PMID: 38926069

Long term T cell response and safety of a tetravalent dengue vaccine in healthy children.

Mandaric S, Friberg H, Saez-Llorens X, Borja-Tabora C, Biswal S, Escudero I, Faccin A, Gottardo R, Brose M, Roubinis N, Fladager D, DeAntonio R, Dimero JAL, Montenegro N, Folschweiller N, Currier JR, Sharma M, Tricou V.NPJ Vaccines. 2024 Oct 17;9(1):192. doi: 10.1038/s41541-024-00967-0.PMID: 39420169

Epidemiology of pneumococcal meningitis in sentinel hospital surveillance of Viet Nam, 2015-2018.

Nguyen DT, Nguyen TL, Olmsted A, Duong TH, Hoang HM, Nguyen LH, Ouattara M, Milucky J, Lessa FC, Vo TTD, Phan VT, Nguyen THA, Pham NMN, Truong HK, Phan TQT, Bui THH, Pham VK, Iijima M, Le B, Kim L, Farrar JL.BMC Infect Dis. 2024 Oct 18;24(1):1179. doi: 10.1186/s12879-024-10065-0.PMID: 39425015

Advancement in the development of DNA vaccines against Trypanosoma brucei and future perspective.

Tahir Aleem M, Munir F, Shakoor A, Ud Din Sindhu Z, Gao F.Int Immunopharmacol. 2024 Oct 25;140:112847. doi: 10.1016/j.intimp.2024.112847. Epub 2024 Jul 31.PMID: 39088922

Health Care Personnel Workdays Lost and Direct Health Care Salary Costs Incurred due to COVID-19 Infection in the Age of Widespread Vaccine Availability.

Townsend L, Gillespie P, McGrath J, Kenny C; PRECISE Study Steering Group; Bergin C, Fleming C.J Infect Dis. 2024 Oct 16;230(4):e872-e880. doi: 10.1093/infdis/jiae223.PMID: 38771075

Evaluation of adenoviral vector Ad19a encoding RSV-F as novel vaccine against respiratory syncytial virus.

Fuchs J, Hübner J, Schmidt A, Irrgang P, Maier C, Vieira Antão A, Oltmanns F, Thirion C, Lapuente D, Tenbusch M.NPJ Vaccines. 2024 Oct 29;9(1):205. doi: 10.1038/s41541-024-01001-z.PMID: 39472590

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

Silva HM.Vaccine. 2024 Oct 18:126449. doi: 10.1016/j.vaccine.2024.126449. Online ahead of print.PMID: 39426934

Erratum: Comparison of DNA vaccines with AddaS03 as an adjuvant and an mRNA vaccine against SARS-CoV-2.

Neeli P, Chai D, Wang X, Sobhani N, Udeani G, Li Y.iScience. 2024 Oct 15;27(10):110969. doi: 10.1016/j.isci.2024.110969. eCollection 2024 Oct 18.PMID: 39474074

Vaccine-induced NA immunity decreases viral shedding, but does not disrupt chains of airborne transmission for the 2009 pandemic H1N1 virus in ferrets.

Septer KM, Heinly TA, Sim DG, Patel DR, Roder AE, Wang W, Chung M, Johnson KEE, Ghedin E, Sutton TC.mBio. 2024 Oct 16;15(10):e0216124. doi: 10.1128/mbio.02161-24. Epub 2024 Sep 9.PMID: 39248566

Lipschutz ulcer following first dose of COVID-19 tozinameran vaccine: Report of a case and review of a World Health Organization pharmacovigilance database.

Ewig E, Ben Othman N, Viard D, Gauci PA, Rocher F, Drici MD.Int J Gynaecol Obstet. 2024 Oct 23. doi: 10.1002/ijgo.15941. Online ahead of print.PMID: 39441542

A multivalent RSV vaccine based on the modified vaccinia Ankara vector shows moderate protection against disease caused by RSV in older adults in a phase 3 clinical study.

Jordan E, Jenkins V, Silbernagl G, Chávez MPV, Schmidt D, Schnorfeil F, Schultz S, Chen L, Salgado F, Jacquet JM, Welte T, De Moerlooze L.Vaccine. 2024 Oct 25;42(26):126427. doi: 10.1016/j.vaccine.2024.126427. Online ahead of print.PMID: 39461302

Bidirectional modulation of extracellular vesicle-autophagy axis in acute lung injury: Molecular mechanisms and therapeutic implications.

Tian L, Jin J, Lu Q, Zhang H, Tian S, Lai F, Liu C, Liang Y, Lu Y, Zhao Y, Yao S, Ren W.Biomed Pharmacother. 2024 Oct 17;180:117566. doi: 10.1016/j.biopha.2024.117566. Online ahead of print.PMID: 39423751

Th1 polarization in Bordetella pertussis vaccine responses is maintained through a positive feedback loop.

Willemsen L, Lee J, Shinde P, Soldevila F, Aoki M, Orfield S, Kojima M, da Silva Antunes R, Sette A, Peters B.bioRxiv [Preprint]. 2024 Oct 17:2024.08.05.606623. doi: 10.1101/2024.08.05.606623.PMID: 39149302

Impact of Comorbidities and Skin Diseases on Post-Vaccination Reactions: A Study on COVID-19 Vaccinations in Poland.

Jęśkowiak-Kossakowska I, Nowotarska P, Grosman-Dziewiszek P, Szeląg A, Wiatrak B.J Clin Med. 2024 Oct 17;13(20):6173. doi: 10.3390/jcm13206173.PMID: 39458123

Parental Perspectives on Human Papillomavirus (HPV) Vaccination in Gulf Cooperation Council Countries: A systematic review.

Alshahrani NZ, Alshahrani JA, Almushari BS, Alshammri FM, Alshahrani WS, Alzabali AAH, Alshehri AA, Alduaydi NZ, Alqarni M, Alamri AMA, Alotaibi K.Medicine (Baltimore). 2024 Oct 18;103(42):e40124. doi: 10.1097/MD.0000000000040124.PMID: 39432651

Safety and immunogenicity of a modified mRNA-lipid nanoparticle vaccine candidate against COVID-19: Results from a phase 1, dose-escalation study.

Essink BJ, Shapiro C, Isidro MGD, Bradley P, Pragalos A, Bloch M, Santiaguel J, Frias MV, Miyakis S, Alves de Mesquita M, Berrè S, Servais C, Waugh N, Hoffmann C, Baba E, Schönborn-Kellenberger O, Wolz OO, Koch SD, Ganyani T, Boutet P, Mann P, Mueller SO, Ramanathan R, Gaudinski MR, Vanhoutte N.Hum Vaccin Immunother. 2024 Dec 31;20(1):2408863. doi: 10.1080/21645515.2024.2408863. Epub 2024 Oct 18.PMID: 39422261

Enhanced Cellular Immunity for Hepatitis B Virus Vaccine: A Novel Polyinosinic-Polycytidylic Acid-Incorporated Adjuvant Leveraging Cytoplasmic Retinoic Acid-Inducible Gene-Like Receptor Activation and Increased Antigen Uptake.

Liu X, Min Q, Li Y, Chen S.Biomater Res. 2024 Oct 28;28:0096. doi: 10.34133/bmr.0096. eCollection 2024.PMID: 39469105

[Immunotherapy for head and neck tumors : Updates from the 2024 ASCO Annual Meeting].

von Witzleben A, Doescher J, Hoffmann TK, Laban S.HNO. 2024 Oct 28. doi: 10.1007/s00106-024-01524-w. Online ahead of print.PMID: 39466338

Dietary prebiotic alleviates experimentally induced coccidiosis in broilers.

Bayat M, Darmani Kuhi H, Mehr MR, Hossein-Zadeh NG.Res Vet Sci. 2024 Oct 22;180:105440. doi: 10.1016/j.rvsc.2024.105440. Online ahead of print.PMID: 39471752

New advances in RSV: Is prevention attainable?

Zar HJ.Pediatr Pulmonol. 2024 Oct 28. doi: 10.1002/ppul.27310. Online ahead of print.PMID: 39466029

[Vaccination against respiratory syncytial virus (RSV)-For the protection of infants and older adults].

Pley C, Kampmann B.Inn Med (Heidelb). 2024 Oct 25. doi: 10.1007/s00108-024-01795-z. Online ahead of print.PMID: 39453450

Humoral and cellular immune response to AZD1222 /Covishield and BV152/Covaxin COVID-19 vaccines among adults in India.

Tripathy AS, Singh D, Trimbake D, Salwe S, Tripathy S, Kakrani A, Jali P, Chavan H, Yadav P, Sahay R, Sarje P, Babar P, Shete A, Nandapurkar A, Kulkarni M.Hum Vaccin Immunother. 2024 Dec 31;20(1):2410579. doi: 10.1080/21645515.2024.2410579. Epub 2024 Oct 21.PMID: 39434214

Evaluation of the adjuvant effect of imiquimod and CpG ODN 1826 in chimeric DNA vaccine against Japanese encephalitis.

Zang X, Li G, Zhu J, Dong X, Zhai Y.Int Immunopharmacol. 2024 Oct 25;140:112816. doi: 10.1016/j.intimp.2024.112816. Epub 2024 Jul 30.PMID: 39083930

RENOIR Trial - RSVpreF Vaccine Efficacy over Two Seasons.

Walsh EE, Pérez Marc G, Falsey AR, Jiang Q, Eiras D, Patton M, Polack FP, Llapur C, Doreski PA, Zareba AM, Ilangovan K, Rämet M, Fukushima Y, Hussen N, Bont LJ, Cardona J, DeHaan E, Mikati T, Shah RN, Schneider K, Cooper D, Koury K, Lino MM, Anderson AS, Jansen KU, Swanson KA, Gruber WC, Schmoele-Thoma B, Gurtman A.N Engl J Med. 2024 Oct 17;391(15):1459-1460. doi: 10.1056/NEJMc2311560.PMID: 39413383

Targeting RSV-neutralizing B cell receptors with anti-idiotypic antibodies.

Scharffenberger SC, Wan YH, Homad LJ, Kher G, Haynes AM, Poudel B, Sinha IR, Aldridge N, Pai A, Bibby M, Chhan CB, Davis AR, Moodie Z, Palacio MB, Escolano A, McElrath MJ, Boonyaratanakornkit J, Pancera M, McGuire AT.Cell Rep. 2024 Oct 22;43(10):114811. doi: 10.1016/j.celrep.2024.114811. Epub 2024 Oct 8.PMID: 39383036

Dual-strain dynamics of COVID-19 variants in India: Modeling, analysis, and implications for pandemic control.

Singh Negi S, Sharma N, Mehmet Baskonus H.Gene. 2024 Oct 30;926:148586. doi: 10.1016/j.gene.2024.148586. Epub 2024 May 22.PMID: 38782223

Neurodevelopmental outcomes of infants after in utero exposure to SARS-CoV-2 or mRNA COVID-19 vaccine compared to unexposed infants: a COVI-PREG prospective cohort study.

Favre G, Bromley RL, Bluett-Duncan M, Maisonneuve E, Pomar L, Daire C, Radan AP, Raio L, Surbek D, Blume C, Kalimeris S, Madec Y, Schneider J, Graz MB, Winterfeld U, Panchaud A, Baud D.Clin Microbiol Infect. 2024 Oct 23:S1198-743X(24)00501-9. doi: 10.1016/j.cmi.2024.10.019. Online ahead of print.PMID: 39454753

The Effect of Cervical Cancer and Human Papillomavirus Vaccine Education on Vaccination Perception in University Students: A Quasi-Experimental Controlled Educational Intervention.

Duzova US, Kaplan Serin E, Mutlu A, Ocal N, Akkus H, Toprak N, Ceylan D.J Adolesc Young Adult Oncol. 2024 Oct 17. doi: 10.1089/jayao.2024.0121. Online ahead of print.PMID: 39419037

Diverse BCR usage and T cell activation induced by different COVID-19 sequential vaccinations.

Wang J, Li K, Wang Y, Lin Z, Li W, Cao J, Mei X, Wei R, Yang J, Zhai X, Huang D, Zhou K, Liang X, Wang Z.mBio. 2024 Oct 16;15(10):e0142924. doi: 10.1128/mbio.01429-24. Epub 2024 Sep 9.PMID: 39248564

Online Media Use and COVID-19 Vaccination in Real-World Personal Networks: Quantitative Study.

Oană I, Hâncean MG, Perc M, Lerner J, Mihăilă BE, Geantă M, Molina JL, Tincă I, Espina C.J Med Internet Res. 2024 Oct 25;26:e58257. doi: 10.2196/58257.PMID: 39454189

A genome-based survey of invasive pneumococci in Norway over four decades reveals lineage-specific responses to vaccination.

Eldholm V, Osnes MN, Bjørnstad ML, Straume D, Gladstone RA.Genome Med. 2024 Oct 25;16(1):123. doi: 10.1186/s13073-024-01396-3.PMID: 39456053

Correction to: Combined immunogenicity evaluation for a new single-dose live-attenuated chikungunya vaccine.

[No authors listed]J Travel Med. 2024 Oct 29:taae137. doi: 10.1093/jtm/taae137. Online ahead of print.PMID: 39475148

Lumpy skin disease: a systematic review of mode of transmission, risk of emergence, and risk entry pathways.

Kaur B, Dhillon SS, Pannu AS, Mukhopadhyay CS.Virus Genes. 2024 Oct 22. doi: 10.1007/s11262-024-02117-z. Online ahead of print.PMID: 39436496

Preliminary evaluation of the protective effect of rEi-SAG19 on Eimeria intestinalis infection in rabbits.

Pu J, Hao G, Chen H, He W, Xiong C, Xiao J, Yang G.Exp Parasitol. 2024 Oct 16:108845. doi: 10.1016/j.exppara.2024.108845. Online ahead of print.PMID: 39423994

Broadly therapeutic antibody provides cross-serotype protection against enteroviruses via Fc effector functions and by mimicking SCARB2.

Zhu R, Wu Y, Huang Y, Jiang Y, Jiang Y, Zhang D, Sun H, Zhou Z, Zhou L, Weng S, Chen H, Chen X, Ning W, Zou Y, He M, Yang H, Deng W, Li Y, Chen Z, Ye X, Han J, Yin Z, Zhao H, Liu C, Que Y, Fang M, Yu H, Zhang J, Luo W, Li S, Zheng Q, Xu L, Xia N, Cheng T.Nat Microbiol. 2024 Nov;9(11):2939-2953. doi: 10.1038/s41564-024-01822-7. Epub 2024 Oct 18.PMID: 39424982

Costs of seasonal influenza vaccine delivery in a pediatric demonstration project for children aged 6-23 months - Nakuru and Mombasa Counties, Kenya, 2019-2021.

Gharpure R, Akumu AO, Dawa J, Gobin S, Adhikari BB, Lafond KE, Fischer LS, Mirieri H, Mwazighe H, Tabu C, Jalang'o R, Kamau P, Silali C, Kalani R, Oginga P, Jewa I, Njenga V, Ebama MS, Bresee JS, Njenga MK, Osoro E, Meltzer MI, Emukule GO.Vaccine. 2024 Oct 24;42 Suppl 4:125519. doi: 10.1016/j.vaccine.2023.12.029. Epub 2023 Dec 27.PMID: 38154992

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

MacIntyre CR, Akhtar Z, Moa A.Vaccine. 2024 Oct 29:126486. doi: 10.1016/j.vaccine.2024.126486. Online ahead of print.PMID: 39477710

The Global Burden of Absenteeism Related to COVID-19 Vaccine Side Effects Among Healthcare Workers: A Systematic Review and Meta-Analysis.

Politis M, Rachiotis G, Mouchtouri VA, Hadjichristodoulou C.Vaccines (Basel). 2024 Oct 19;12(10):1196. doi: 10.3390/vaccines12101196.PMID: 39460361

Cellular and humoral immunity and IgG subclass distribution after omicron XBB.1.5 monovalent vaccination in Japan.

Sano K, Kurosawa T, Horikawa K, Kimura Y, Goto A, Ryo A, Hasegawa H, Kato H, Miyakawa K.Vaccine. 2024 Oct 16;42(26):126452. doi: 10.1016/j.vaccine.2024.126452. Online ahead of print.PMID: 39418690

Factors associated with COVID-19 vaccination or intent to be vaccinated across three U.S. states.

Cockerill R, Horney JA, Penta SC, Silver A, Clay L.Vaccine. 2024 Oct 16;42(26):126457. doi: 10.1016/j.vaccine.2024.126457. Online ahead of print.PMID: 39418685

Surveillance for adverse events following immunization in Hebei Province, China, 2018-2020.

Sun L, Wang S, Wang Y, Wang Y, Wang J, Li J, Xu X, Zhang J, Cong Y, Guo Y.Hum Vaccin Immunother. 2024 Dec 31;20(1):2387904. doi: 10.1080/21645515.2024.2387904. Epub 2024 Oct 28.PMID: 39466071

A TLR7 Agonist Conjugated to a Nanofibrous Peptide Hydrogel as a Potent Vaccine Adjuvant.

Euliano EM, Pogostin BH, Agrawal A, Yu MH, Baryakova TH, Graf TP, Kunkel AA, Cahue KA, Hartgerink JD, McHugh KJ.Adv Healthc Mater. 2024 Oct 25:e2402958. doi: 10.1002/adhm.202402958. Online ahead of print.PMID: 39460390

A reverse vaccinology approach identified novel recombinant tick proteins with protective efficacy against Rhipicephalus microplus infestation.

Domingues LN, Bendele KG, Bodine DM, Halos L, Cutolo AA, Liebstein M, Widener J, Figueiredo M, Moreno Y, Epe C, da Costa AJ, Gomes LVC, Guerrero FD.Ticks Tick Borne Dis. 2024 Oct 19;15(6):102403. doi: 10.1016/j.ttbdis.2024.102403. Online ahead of print.PMID: 39427604

Immunogenicity analysis based on VP1 and VP2 proteins of bovine enterovirus.

Peng Y, Luo Y, Pan L, Hou Y, Qin L, Lan L, Ouyang K, Chen Y, Wei Z, Qin Y, Huang W.Virology. 2024 Oct 18;600:110260. doi: 10.1016/j.virol.2024.110260. Online ahead of print.PMID: 39442312

Insights from an observational translational research program during the COVID-19 pandemic: Four years of experience.

Rowe M, Collier AY, Barouch DH.Vaccine. 2024 Oct 24;42(24):126306. doi: 10.1016/j.vaccine.2024.126306. Epub 2024 Sep 5.PMID: 39241351

Rap1b: A cytoskeletal regulator Advantageous to viral infection.

Zhang B, Li S, Ding J, Guo J, Ma Z.iScience. 2024 Sep 24;27(10):111023. doi: 10.1016/j.isci.2024.111023. eCollection 2024 Oct 18.PMID: 39474066

The global burden of enteric fever, 2017-2021: a systematic analysis from the global burden of disease study 2021.

Piovani D, Figlioli G, Nikolopoulos GK, Bonovas S.EClinicalMedicine. 2024 Oct 18;77:102883. doi: 10.1016/j.eclinm.2024.102883. eCollection 2024 Nov.PMID: 39469533

Comparative Analysis of the Neutralizing Capacity of Monovalent and Bivalent Formulations of Betuvax-CoV-2, a Subunit Recombinant COVID-19 Vaccine, Against Various Strains of SARS-CoV-2.

Vakhrusheva AV, Romanovskaya-Romanko EA, Stukova MA, Sukhova MM, Kuznetsova KS, Kudriavtsev AV, Frolova ME, Ivanishin TV, Krasilnikov IV, Isaev AA.Vaccines (Basel). 2024 Oct 21;12(10):1200. doi: 10.3390/vaccines12101200.PMID: 39460365

Effectiveness of Digital Education on Human Papillomavirus Knowledge, Vaccination Intent and Completion Rates in Adolescents and Young Adults: A Meta-Analysis.

Sandi YDL, Yang LY, Andarini E, Maryam D, Wu LM.J Adv Nurs. 2024 Oct 28. doi: 10.1111/jan.16575. Online ahead of print.PMID: 39465620

The Burden of Human Metapneumovirus- and Influenza-Associated Hospitalizations in Adults in New Zealand, 2012-2015.

Aminisani N, Wood T, Jelley L, Wong C, Sue Huang Q.J Infect Dis. 2024 Oct 16;230(4):933-943. doi: 10.1093/infdis/jiae064.PMID: 38349230

An emerging zoonotic disease to be concerned about - a review of the nipah virus.

Paliwal S, Shinu S, Saha R.J Health Popul Nutr. 2024 Oct 28;43(1):171. doi: 10.1186/s41043-024-00666-5.PMID: 39468679

Vaccine decision-making among pregnant women: a protocol for a cross-sectional mixed-method study in Brazil, Ghana, Kenya and Pakistan.

Schue JL, Singh P, Fesshaye B, Miller ES, Quinn S, Karron RA, Souza RT, Costa ML, Cecatti JG, Torpey K, Badzi CD, Modey E, Guure C, Okwaro F, Temmerman M, Jessani S, Saleem S, Asim M, Nausheen S, Yasmeen H, Belayneh G, Brizuela V, Gottlieb S, Limaye RJ.Gates Open Res. 2024 Oct 21;8:94. doi: 10.12688/gatesopenres.16280.1. eCollection 2024.PMID: 39429544

Hepatitis B virus infection and vaccination among people who use drugs in Xi'an, China.

Hou X, Li N, Zhang H, Liu W, Zheng H, Wang R, Zhuang T, Hui H, Zou Z, Xia R, Santella AJ, Wang F, Wang L, Wei X, Zhuang G.Vaccine. 2024 Oct 24;42(24):126259. doi: 10.1016/j.vaccine.2024.126259. Epub 2024 Sep 3.PMID: 39226787

Development of learning objectives to support undergraduate virology curriculum guidelines.

Kushner DB, Breitbart M, Debbink KM, Ferran MC, Johnson DM, Newcomb LL, O'Donnell LA.J Microbiol Biol Educ. 2024 Oct 21:e0010024. doi: 10.1128/jmbe.00100-24. Online ahead of print.PMID: 39431826

Severe Adverse Reaction to Measles Vaccine Due to Homozygous Mutation in the IFNAR2 Gene: A Case Report and Literature Review.

Adi G, Obaid Z, Hafez DH, Shahrani AMA, Nahass AA, Saud HA, Alkateb FA.J Clin Immunol. 2024 Oct 22;45(1):30. doi: 10.1007/s10875-024-01814-6.PMID: 39436454

Accumulating Robust Evidence for Reducing Vaccine Hesitancy in Early Pregnancy.

Triunfo S, Boselli L.JAMA Pediatr. 2024 Oct 21. doi: 10.1001/jamapediatrics.2024.4346. Online ahead of print.PMID: 39432282

FDA Greenlights Nasal Spray Flu Vaccine for Use at Home.

Anderer S.JAMA. 2024 Oct 18. doi: 10.1001/jama.2024.21299. Online ahead of print.PMID: 39422920

Accumulating Robust Evidence for Reducing Vaccine Hesitancy in Early Pregnancy-Reply.

Kharbanda EO, DeSilva MB, Vazquez-Benitez G.JAMA Pediatr. 2024 Oct 21. doi: 10.1001/jamapediatrics.2024.4349. Online ahead of print.PMID: 39432290

Development of pseudotyped VSV-SARS-CoV-2 spike variants for the assessment of neutralizing antibodies.

Cimen AN, Torabfam GC, Tok YT, Yucebag E, Arslan N, Saribal D, Esken G, Dogan O, Kuskucu MA, Mete B, Aygun G, Tabak F, Can F, Ergonul O, Midilli K, Kutlu O, Cetinel S.Bioanalysis. 2024 Oct 16:1-11. doi: 10.1080/17576180.2024.2411920. Online ahead of print.PMID: 39411978

Gender Differences on the Awareness of Human Papillomavirus Infection and Vaccination.

Heimbecker V, Bordini SC, Rodrigues AC, de Alencar NM, Blanco NS, Fitz F, Moura GB, Dumitru M, Mercadante AF, Alvarenga LM, Monteiro CLB, Marconi C.J Cancer Educ. 2024 Oct 18. doi: 10.1007/s13187-024-02516-8. Online ahead of print.PMID: 39422816

Shared decision-making for patients with vaccine-related concerns of blood transfusion: A single institution experience.

Cho DJ, Klompas AM, Gonzalez JA, Petsch JL, Burt JM, Kor DJ, Winters JL, van Buskirk CM, Warner MA.Transfusion. 2024 Oct 24. doi: 10.1111/trf.18052. Online ahead of print.PMID: 39446607

A Survey on Knowledge and Attitudes Towards Vaccination Against Herpes Zoster Virus Among Medical Oncologists for Patients with Solid Tumors.

Scandurra G, Sambataro D, Gebbia V, Piazza D, Valerio MR.J Cancer Educ. 2024 Oct 19. doi: 10.1007/s13187-024-02524-8. Online ahead of print.PMID: 39425870

Evolution of microneedle applicators for vaccination: the role of the latch applicator in optimizing dissolving microneedle-based immunization.

Kim M, Kang G, Min HS, Lee Y, Park S, Jung H.Expert Opin Drug Deliv. 2024 Oct 30:1-13. doi: 10.1080/17425247.2024.2422939. Online ahead of print.PMID: 39460635

Combined immunogenicity evaluation for a new single-dose live-attenuated chikungunya vaccine.

Buerger V, Maurer G, Kosulin K, Hochreiter R, Larcher-Senn J, Dubischar K, Eder-Lingelbach S.J Travel Med. 2024 Oct 19;31(7):taae084. doi: 10.1093/jtm/taae084.PMID: 38959854

"Hot phase" clinical presentation of biventricular arrhythmogenic cardiomyopathy: when the perfect electrical storm spontaneously stops.

Gomes Tinoco M, Castro M, Pinheiro L, Pereira T, Oliveira M, Ribeiro S, Ferreira N, Azevedo O, Lourenço A.Monaldi Arch Chest Dis. 2024 Oct 18. doi: 10.4081/monaldi.2024.3086. Online ahead of print.PMID: 39429136

[Vaccinations in pulmonary diseases - part 2: herpes zoste, RSV, pneumococcal infection and pertussis].

Kodde C, Sander LE.Dtsch Med Wochenschr. 2024 Nov;149(22):1372-1376. doi: 10.1055/a-2372-1157. Epub 2024 Oct 22.PMID: 39437831

Development of a Shigella conjugate vaccine targeting Shigella flexneri 6 that is immunogenic and provides protection against virulent challenge.

Kelly M, Janardhanan J, Wagh C, Verma S, Charles RC, Leung DT, Kamruzzaman M, Pansuriya RK, Chowdhury F, Vann WF, Kaminski RW, Khan AI, Bhuiyan TR, Qadri F, Kováč P, Xu P, Ryan ET.Vaccine. 2024 Oct 24;42(24):126263. doi: 10.1016/j.vaccine.2024.126263. Epub 2024 Aug 31.PMID: 39217775

Systems Vaccinology: Navigating the Future of Personalized Immunity and Next Generation Vaccines.

Dib SM, Tandon Wimalasena S, Graciaa DS, Rouphael N.J Infect Dis. 2024 Oct 19:jiae505. doi: 10.1093/infdis/jiae505. Online ahead of print.PMID: 39424292

A prospective, randomized, parallel, active controlled, phase III Indian study of immunogenicity and safety of two inactivated influenza vaccines - Vaxiflu-4 and Fluarix tetra in children aged 6 months to 35 months.

Kothari K, Shah S, Gill VK, Ray RK, Kumar NR, Sanmukhani J, Daultani P, Mittal R, Dutta T, Mahajan M, Desai S.Hum Vaccin Immunother. 2024 Dec 31;20(1):2416329. doi: 10.1080/21645515.2024.2416329. Epub 2024 Oct 24.PMID: 39445787

Clinical and economic burden of otitis media in children under 5 years of age in the United States: A retrospective study.

Ben Debba L, Derreumaux D, Lonnet G, Taddei L, Scherbakov M.Hum Vaccin Immunother. 2024 Dec 31;20(1):2409510. doi: 10.1080/21645515.2024.2409510. Epub 2024 Oct 18.PMID: 39422213

Vaccinations in older adults: Optimization, strategies, and latest guidelines.

Pangilinan AR, Brangman SA, Gravenstein S, Schmader K, Kuchel GA.J Am Geriatr Soc. 2024 Oct 29. doi: 10.1111/jgs.19243. Online ahead of print.PMID: 39470291

Broad cross neutralizing antibodies against sarbecoviruses generated by SARS-CoV-2 infection and vaccination in humans.

Hu Y, Wu Q, Chang F, Yang J, Zhang X, Wang Q, Chen J, Teng S, Liu Y, Zheng X, Wang Y, Lu R, Pan D, Liu Z, Liu F, Xie T, Wu C, Tang Y, Tang F, Qian J, Chen H, Liu W, Li YP, Qu X.NPJ Vaccines. 2024 Oct 22;9(1):195. doi: 10.1038/s41541-024-00997-8.PMID: 39438493

Long-term immunological changes after corrective cardiac surgery.

Bilgic-Eltan S, Amirov R, Babayeva R, Yorgun Altunbas M, Karakurt T, Can S, Yalcin Gungoren E, Bozkurt S, Ozturk N, Catak MC, Bulutoglu A, Onder G, Ng YY, Hatırnaz Ng O, Karakoc-Aydiner E, Ozen AO, Baris S.Scand J Immunol. 2024 Oct 30:e13418. doi: 10.1111/sji.13418. Online ahead of print.PMID: 39474990

Designing a multi-epitope influenza vaccine: an immunoinformatics approach.

Momajadi L, Khanahmad H, Mahnam K.Sci Rep. 2024 Oct 25;14(1):25382. doi: 10.1038/s41598-024-74438-w.PMID: 39455641

Burden of vaccine-preventable diseases in adults (50+) in the United States: a retrospective claims analysis.

Hartmann M, Servotte N, Aris E, Doherty TM, Salem A, Beck E.BMC Public Health. 2024 Oct 25;24(1):2960. doi: 10.1186/s12889-024-20145-0.PMID: 39456037

Recombinant ClearColi-derived outer membrane vesicles as an effective carrier for development of neoepitope-based vaccine candidate against colon carcinoma.

Sharif E, Nezafat N, Mohit E.Int Immunopharmacol. 2024 Oct 16;143(Pt 2):113283. doi: 10.1016/j.intimp.2024.113283. Online ahead of print.PMID: 39418728

Study: MMR Vaccine Protection Wanes Slightly Over Time.

Anderer S.JAMA. 2024 Oct 25. doi: 10.1001/jama.2024.21822. Online ahead of print.PMID: 39453649

Person-Centered Web-Based Mobile Health System (Symptoms) for Reporting Symptoms in COVID-19 Vaccinated Individuals: Observational Study of System, Users, and Symptoms.

Gustafson Hedov E, Nyberg F, Gustafsson S, Li H, Gisslén M, Sundström J.JMIR Form Res. 2024 Oct 30;8:e57514. doi: 10.2196/57514.PMID: 39476854

Political engagement: a key pillar in revitalisation of polio and routine immunisation programmes in the Democratic Republic of the Congo.

Kamba R, El Mourid A, Mpoyi Ngambwa R, Chungu Salumu D, Le Gargasson JB, Nacoulma D, Nimpa Mengouo M, Meyer N, Luhata C, Hoff NA, Samaha H, Madika C, Mputu C, Tangney S, Nogier C, Diomi C, Merritt S, Din E, Kabila P, Burgett A, Nyombo D, Assy E, Nkamba DM, Bertin L, Hatton T, Kaba D, Rimoin AW, Mukamba Musenga E, Cikomola A, Mwamba GN, Ramazani SY, Senouci K, Robert M.BMJ Glob Health. 2024 Oct 22;9(10):e015675. doi: 10.1136/bmjgh-2024-015675.PMID: 39438072

Immunoproteomics: Approach to Diagnostic and Vaccine Development.

Gomase VS, Dhamane SP, Kemkar KR, Kakade PG, Sakhare AD.Protein Pept Lett. 2024 Oct 25. doi: 10.2174/0109298665342261240912105111. Online ahead of print.PMID: 39473104

Nationwide Discrete Choice Experiment on Chinese Guardians' Preferences for HPV Vaccination for Mothers and Daughters.

Zhao J, Zhao T, Zhang S, Huang N, Du J, Liu Y, Lu Q, Wang C, Cui F.Vaccines (Basel). 2024 Oct 18;12(10):1186. doi: 10.3390/vaccines12101186.PMID: 39460353

Omicron-specific ultra-potent SARS-CoV-2 neutralizing antibodies targeting the N1/N2 loop of Spike N-terminal domain.

Niu X, Li Z, Wang J, Jian F, Yu Y, Song W, Yisimayi A, Du S, Zhang Z, Wang Q, Wang J, An R, Wang Y, Wang P, Sun H, Yu L, Yang S, Xiao T, Gu Q, Shao F, Wang Y, Xiao J, Cao Y.Emerg Microbes Infect. 2024 Dec;13(1):2412990. doi: 10.1080/22221751.2024.2412990. Epub 2024 Oct 28.PMID: 39361729

Adenovirus type 5-expressing Gn induces better protective immunity than Gc against SFTSV infection in mice.

Qian H, Tian L, Liu W, Liu L, Li M, Zhao Z, Lei X, Zheng W, Zhao Z, Zheng X.NPJ Vaccines. 2024 Oct 19;9(1):194. doi: 10.1038/s41541-024-00993-y.PMID: 39426985

Modeling the population-level impact of a third dose of MMR vaccine on a mumps outbreak at the University of Iowa.

Park SW, Lawal T, Marin M, Marlow MA, Grenfell BT, Masters NB.Proc Natl Acad Sci U S A. 2024 Oct 22;121(43):e2403808121. doi: 10.1073/pnas.2403808121. Epub 2024 Oct 14.PMID: 39401354

Longitudinal safety and efficacy of the BNT162b2 mRNA COVID-19 vaccine in children aged 4-11 years with juvenile-onset autoimmune inflammatory rheumatic diseases: A prospective multicenter study.

Eviatar T, Ziv A, Oved A, Miller-Barmak A, Pappo A, Livny R, Amarilyo G, Aviel YB, Naor R, Pel S, Furer V, Elkayam O, Uziel Y, Heshin-Bekenstein M.Vaccine. 2024 Oct 17;42(26):126426. doi: 10.1016/j.vaccine.2024.126426. Online ahead of print.PMID: 39423454

Packaging of alphavirus-based self-amplifying mRNA yields replication-competent virus through a mechanism of aberrant homologous RNA recombination.

Hick TAH, Geertsema C, Nijland R, Pijlman GP.mBio. 2024 Oct 16;15(10):e0249424. doi: 10.1128/mbio.02494-24. Epub 2024 Sep 25.PMID: 39320113

Vaccine hesitancy on stage.

Burki T.Lancet Infect Dis. 2024 Oct 22:S1473-3099(24)00725-4. doi: 10.1016/S1473-3099(24)00725-4. Online ahead of print.PMID: 39454589

Impact of Infections During Pregnancy on Transplacental Antibody Transfer.

Coler C, King-Nakaoka E, Every E, Chima S, Vong A, Del Rosario B, VanAbel R, Adams Waldorf KM.Vaccines (Basel). 2024 Oct 21;12(10):1199. doi: 10.3390/vaccines12101199.PMID: 39460363

Predictors of Change in Vaccination Decisions Among the Vaccine Hesitant: Examining the Roles of Age and Intolerance of Uncertainty.

Halilova JG, Fynes-Clinton S, Addis DR, Rosenbaum RS.Ann Behav Med. 2024 Oct 18;58(11):768-777. doi: 10.1093/abm/kaae053.PMID: 39269193

Repeated COVID-19 mRNA-based vaccination contributes to SARS-CoV-2 neutralizing antibody responses in the mucosa.

Declercq J, Gerlo S, Van Nevel S, De Ruyck N, Holtappels G, Delesie L, Tobback E, Lammens I, Gerebtsov N, Sedeyn K, Saelens X, Lambrecht BN, Gevaert P, Vandekerckhove L, Vanhee S.Sci Transl Med. 2024 Oct 23;16(770):eadn2364. doi: 10.1126/scitranslmed.adn2364. Epub 2024 Oct 23.PMID: 39441904

Outer membrane protein C is a protective and unique vaccine antigen against Shigella flexneri 3a.

Jarząb A, Dąbrowska A, Naporowski P, Krasna K, Szmyt A, Świat M, Pawlik K, Witkowska D, Ziomek E, Gamian A.Sci Rep. 2024 Oct 25;14(1):25398. doi: 10.1038/s41598-024-76745-8.PMID: 39455688

New-Onset Focal to Bilateral Tonic-Clonic Seizure Following COVID-19 Vaccination.

Phua CS, Raymond AA, Bhaskar S.Case Rep Neurol Med. 2024 Oct 16;2024:8808334. doi: 10.1155/2024/8808334. eCollection 2024.PMID: 39445053

Generation and evaluation of Salmonella entericaserovar Choleraesuis mutant strains as a potential live-attenuated vaccine.

Huang X, Yang S, Zhao J, Yang J, Jiang H, Li S, Wang C, Liu G.Vaccine. 2024 Oct 24;42(24):126262. doi: 10.1016/j.vaccine.2024.126262. Epub 2024 Aug 27.PMID: 39197218

Recent advances in mRNA-based cancer vaccines encoding immunostimulants and their delivery strategies.

Eslami SM, Lu X.J Control Release. 2024 Oct 22;376:413-428. doi: 10.1016/j.jconrel.2024.10.035. Online ahead of print.PMID: 39437963

Computational identification of monkeypox virus epitopes to generate a novel vaccine antigen against Mpox.

Dülek Ö, Mutlu G, Koçkaya ES, Can H, Karakavuk M, Değirmenci Döşkaya A, Gürüz AY, Döşkaya M, Ün C.Biologicals. 2024 Oct 28;88:101798. doi: 10.1016/j.biologicals.2024.101798. Online ahead of print.PMID: 39471737

Post-marketing study design to evaluate the effectiveness of the 9-valent and 4-valent HPV vaccines on serious HPV-related cervical disease in China.

Yang Y, Zhang L, Hartwig S, Jiang P, Zhao H, Meng R, Liu Z, Liu Z, Ding K, You X, Koro C, Xu G, Zhan S.Hum Vaccin Immunother. 2024 Dec 31;20(1):2418168. doi: 10.1080/21645515.2024.2418168. Epub 2024 Oct 24.PMID: 39445828

Developing National Information Systems to Monitor COVID-19 Vaccination: A Global Observational Study.

Brooks DJ, Kim CI, Mboussou FF, Danovaro-Holliday MC.JMIR Public Health Surveill. 2024 Oct 25;10:e62657. doi: 10.2196/62657.PMID: 39454019

Influenza Vaccine Effectiveness Against Illness and Asymptomatic Infection in 2022-2023: A Prospective Cohort Study.

White EB, Grant L, Mak J, Olsho L, Edwards LJ, Naleway A, Burgess JL, Ellingson KD, Tyner H, Gaglani M, Lutrick K, Caban-Martinez A, Newes-Adeyi G, Duque J, Yoon SK, Phillips AL, Thompson M, Britton A, Flannery B, Fowlkes A.Clin Infect Dis. 2024 Oct 24:ciae491. doi: 10.1093/cid/ciae491. Online ahead of print.PMID: 39446477

Costs of in- and outpatient respiratory disease and the seasonal influenza vaccination program in Armenia - 2020-2021.

Gobin S, Sahakyan G, Kusi Appiah M, Manukyan A, Palayan K, Ebama M, Vanyan A, McCarron M, Bresee J.Vaccine. 2024 Oct 24;42 Suppl 4(Suppl 4):126007. doi: 10.1016/j.vaccine.2024.05.055. Epub 2024 Jun 4.PMID: 38839517

Mixed Th1/Th2/Th17 Responses Induced by Plant Oil Adjuvant-Based B. bronchiseptica Vaccine in Mice, with Mechanisms Unraveled by RNA-Seq, 16S rRNA and Metabolomics.

Cui X, Xiang Q, Huang Y, Ji Q, Hu Z, Shi T, Bao G, Liu Y.Vaccines (Basel). 2024 Oct 17;12(10):1182. doi: 10.3390/vaccines12101182.PMID: 39460348

Seropositivity against vaccine preventable infections in the early post chimeric antigen receptor T-cell period: Preservation of vaccine-associated antibodies between 0 and 6 months.

Reynolds GK, Klimevski E, Saunders NR, Teenakoon GS, Harrison SJ, Dowling M, Anderson MA, Thursky K, Slavin MA, Teh BW.Br J Haematol. 2024 Oct 27. doi: 10.1111/bjh.19807. Online ahead of print.PMID: 39462188

Efficacy of Intralesional Candida Injection in the Treatment of Cutaneous Warts: A Systematic Review and Meta-Analysis.

Chang CH, Sung ZY, Huang YC.Acta Derm Venereol. 2024 Oct 18;104:adv40819. doi: 10.2340/actadv.v104.40819.PMID: 39420872

MPXV Infection Stimulates a More Robust and Durable Neutralizing Antibody Response Compared to MVA-BN Vaccination.

Selverian CN, Monticelli SR, Jaleta YM, Lasso G, DeMouth ME, Meola A, Berrigan J, Batchelor TG, Battini L, Guardado-Calvo P, Herbert AS, Chandran K, Meyerowitz E, Miller EH.J Infect Dis. 2024 Oct 18:jiae515. doi: 10.1093/infdis/jiae515. Online ahead of print.PMID: 39422181

Cost-effectiveness of recombinant influenza vaccine compared with standard dose influenza vaccine in adults 18-64 years of age.

Nowalk MP, Smith KJ, Raviotta JM, Wateska A, Zimmerman RK.Vaccine. 2024 Oct 24;42(24):126107. doi: 10.1016/j.vaccine.2024.07.008. Epub 2024 Jul 5.PMID: 38971665

A novel HBc-S230 protein chimeric VLPs induced robust immune responses against SARS-CoV-2.

Feng W, Chen Z, Wu L, Chen X, Li Q, Xiang Y, Guo Y, Du W, Chen J, Zhu S, Dong H, Xue X, Zhao KN, Zhang L.Int Immunopharmacol. 2024 Oct 18;143(Pt 2):113362. doi: 10.1016/j.intimp.2024.113362. Online ahead of print.PMID: 39426233

PRR adjuvants restrain high stability peptides presentation on APCs.

Li B, Zhang J, He T, Yuan H, Wu H, Wang P, Wu C.Elife. 2024 Oct 30;13:RP99173. doi: 10.7554/eLife.99173.PMID: 39475096

Loss of HIV candidate vaccine efficacy in male macaques by mucosal nanoparticle immunization rescued by V2-specific response.

Rahman MA, Bissa M, Scinto H, Howe SE, Sarkis S, Ma ZM, Gutowska A, Jiang X, Luo CC, Schifanella L, Moles R, Silva de Castro I, Basu S, N'guessan KF, Williams LD, Becerra-Flores M, Doster MN, Hoang T, Choo-Wosoba H, Woode E, Sui Y, Tomaras GD, Paquin-Proulx D, Rao M, Talton JD, Kong XP, Zolla-Pazner S, Cardozo T, Franchini G, Berzofsky JA.Nat Commun. 2024 Oct 22;15(1):9102. doi: 10.1038/s41467-024-53359-2.PMID: 39438480

Routine vaccination coverage at ages 2 and 7, before, during, and after the COVID-19 pandemic: Results from the STARVAX surveillance system.

Jeevakanthan A, Roubos S, Hong C, Hender A, Granger M, Khan S, Shahid M, LeBlanc S, O'Connell J, Gilbert NL.Can J Public Health. 2024 Oct 26. doi: 10.17269/s41997-024-00956-9. Online ahead of print.PMID: 39461928

Exploring the attitudes and practices of adult service users and providers towards vaccination in non-primary care settings: A mixed methods scoping review.

Lentakis E, Seale H, Lazarus R, Mounier-Jack S.Vaccine. 2024 Oct 27;42(26):126472. doi: 10.1016/j.vaccine.2024.126472. Online ahead of print.PMID: 39467407

Multi-omics analysis reveals regime shifts in the gastrointestinal ecosystem in chickens following anticoccidial vaccination and *Eimeria tenella* challenge.

Liu P-Y, Liaw J, Soutter F, Ortiz JJ, Tomley FM, Werling D, Gundogdu O, Blake DP, Xia D.mSystems. 2024 Oct 22;9(10):e0094724. doi: 10.1128/msystems.00947-24. Epub 2024 Sep 17.PMID: 39287379

The challenges and clinical landscape of glioblastoma immunotherapy.

Ng AT, Steve T, Jamouss KT, Arham A, Kawtharani S, Assi HI.CNS Oncol. 2024 Dec 31;13(1):2415878. doi: 10.1080/20450907.2024.2415878. Epub 2024 Oct 29.PMID: 39469854

Fibrolytic vaccination against ADAM12 reduces desmoplasia in preclinical pancreatic adenocarcinomas.

Chen J, Sobecki M, Krzywinska E, Thierry K, Masmoudi M, Nagarajan S, Fan Z, He J, Ferapontova I, Nelius E, Seehusen F, Gotthardt D, Takeda N, Sommer L, Sexl V, Münz C, DeNardo D, Hennino A, Stockmann C.EMBO Mol Med. 2024 Oct 30. doi: 10.1038/s44321-024-00157-4. Online ahead of print.PMID: 39478152

Humoral and cellular response to the third COVID-19 vaccination in patients with inborn errors of immunity or mannose-binding lectin deficiency : A prospective controlled open-label trial.

Vossen MG, Kartnig F, Mrak D, Simader E, Stiasny K, Kain R, Perkmann T, Haslacher H, Aberle JH, Heinz LX, Sieghart D, Burgmann H, Aletaha D, Scheinecker C, Bonelli M, Göschl L.Wien Klin Wochenschr. 2024 Oct 24. doi: 10.1007/s00508-024-02459-6. Online ahead of print.PMID: 39446203

Socio-Demographic Factors Influencing Monkeypox Vaccination Intentions Among Healthcare Workers and the General Population of Makurdi, Nigeria: A Cross-Sectional Study.

Lawrence A.Cureus. 2024 Oct 19;16(10):e71828. doi: 10.7759/cureus.71828. eCollection 2024 Oct.PMID: 39429994

In silico analysis and structural vaccinology prediction of Toxoplasma gondii ROP41 gene via immunoinformatics methods as a vaccine candidate.

Asadi M, Ghaffari AD, Mohammadhasani F.Curr Res Transl Med. 2024 Oct 16;73(1):103475. doi: 10.1016/j.retram.2024.103475. Online ahead of print.PMID: 39461097

Bridging the gap: A new tool to down select HCV vaccine candidates.

Law JL, Drummer HE.Hepatology. 2024 Nov 1;80(5):1006-1008. doi: 10.1097/HEP.0000000000000948. Epub 2024 Oct 17.PMID: 38935861

Evaluation of PLGA, lipid-PLGA hybrid nanoparticles, and cationic pH-sensitive liposomes as tuberculosis vaccine delivery systems in a Mycobacterium tuberculosis challenge mouse model - A comparison.

Szachniewicz MM, Neustrup MA, van den Eeden SJF, van Meijgaarden KE, Franken KLMC, van Veen S, Koning RI, Limpens RWAL, Geluk A, Bouwstra JA, Ottenhoff THM.Int J Pharm. 2024 Oct 17;666:124842. doi: 10.1016/j.ijpharm.2024.124842. Online ahead of print.PMID: 39424087

Immunoinformatics Design of a Multiepitope Vaccine (MEV) Targeting Streptococcus mutans: A Novel Computational Approach.

Naorem RS, Pangabam BD, Bora SS, Fekete C, Teli AB.Pathogens. 2024 Oct 21;13(10):916. doi: 10.3390/pathogens13100916.PMID: 39452787

COVID19 infection and vaccination and the risk of pituitary apoplexy: an entangled yarn.

Ragni A, Biamonte E, Cavigiolo B, Mollero ELM, Bendotti G, Gabellieri E, Leporati P, Gallo M.Endocrine. 2024 Oct 21. doi: 10.1007/s12020-024-04078-7. Online ahead of print.PMID: 39433700

Early spatiotemporal evolution of the immune response elicited by adenovirus serotype 26 vector vaccination in mice.

Blass E, Colarusso A, Aid M, Larocca RA, Reeves RK, Barouch DH.bioRxiv [Preprint]. 2024 Oct 18:2024.10.18.618988. doi: 10.1101/2024.10.18.618988.PMID: 39464013

Engineered protein subunit COVID19 vaccine is as immunogenic as nanoparticles in mouse and hamster models.

Matthews MM, Kim TG, Kim KY, Meshcheryakov V, Iha HA, Tamai M, Sasaki D, Laurino P, Toledo-Patiño S, Collins M, Hsieh TY, Shibata S, Shibata N, Obata F, Fujii J, Ito T, Ito H, Ishikawa H, Wolf M.Sci Rep. 2024 Oct 26;14(1):25528. doi: 10.1038/s41598-024-76377-y.PMID: 39462119

Epidemiological characteristics and interrupted time series analysis of mumps in Quzhou City, 2005-2023.

Fu C, Xu W, Zheng W, Gong X, Fang Q, Yin Z, Zheng C.Hum Vaccin Immunother. 2024 Dec 31;20(1):2411828. doi: 10.1080/21645515.2024.2411828. Epub 2024 Oct 17.PMID: 39415596

Robust and Sustained STING Pathway Activation via Hydrogel-Based In Situ Vaccination for Cancer Immunotherapy.

Cheng SL, Lee HM, Li CP, Lin MW, Chou MY, Yen YT, Wu TH, Lian YC, Shih YC, Chiang CS, Chen TW, Wan D, Chen Y.ACS Nano. 2024 Oct 29;18(43):29439-29456. doi: 10.1021/acsnano.3c12337. Epub 2024 Oct 15.PMID: 39405469

Immunoproteomic discovery of Mycobacterium bovis antigens, including the surface lipoprotein Mpt83 as a T cell antigen useful for vaccine development.

Karunakaran KP, Yu H, Jiang X, Chan QWT, Sigola L, Millis LA, Chen J, Tang P, Foster LJ, Brunham RC.Vaccine. 2024 Oct 24;42(24):126266. doi: 10.1016/j.vaccine.2024.126266. Epub 2024 Sep 3.PMID: 39232399

A behaviourally informed chatbot increases vaccination rates in Argentina more than a one-way reminder.

Brown D, Barrera A, Ibañez L, Budassi I, Murphy B, Shrestha P, Salomon-Ballada S, Kriscovich J, Torrente F.Nat Hum Behav. 2024 Oct 18. doi: 10.1038/s41562-024-01985-7. Online ahead of print.PMID: 39424963

Human papillomavirus vaccine to prevent CIN3 or worse (CIN3+): A nationwide case-control study in Japan.

Ikeda S, Ueda Y, Yagi A, Mizushima T, Sukegawa A, Kudoh R, Yamaguchi M, Kurosawa M, Miyagi E, Sekine M, Enomoto T.Cancer Sci. 2024 Oct 25. doi: 10.1111/cas.16375. Online ahead of print.PMID: 39460387

Determination of T cell response against XBB variants in adults who received either monovalent wild type inactivated whole virus or mRNA vaccine or bivalent WT/BA.4-5 COVID-19 mRNA vaccine as the additional booster.

Tang YS, Tan CW, Chong KC, Chen C, Sun Y, Yiu K, Ling KC, Chan KK, Peiris M, Mok CKP, Hui DS.Int J Infect Dis. 2024 Oct 17:107271. doi: 10.1016/j.ijid.2024.107271. Online ahead of print.PMID: 39426493

Vaccine-induced human monoclonal antibodies to PfRH5 show broadly neutralizing activity against P. falciparum clinical isolates.

Thiam LG, McHugh K, Ba A, Li R, Guo Y, Pouye MN, Cisse A, Pipini D, Diallo F, Sene SD, Patel SD, Thiam A, Sadio BD, Mbengue A, Vigan-Womas I, Sheng Z, Shapiro L, Draper SJ, Bei AK.NPJ Vaccines. 2024 Oct 24;9(1):198. doi: 10.1038/s41541-024-00986-x.PMID: 39448626

A pan-genomic analysis based multi-epitope vaccine development by targeting Stenotrophomonas maltophilia using reverse vaccinology method: an in-silico approach.

Shovon MHJ, Imtiaz M, Biswas P, Tareq MMI, Zilani MNH, Hasan MN.In Silico Pharmacol. 2024 Oct 24;12(2):93. doi: 10.1007/s40203-024-00271-8. eCollection 2024.PMID: 39464855

Assessment of the herpes zoster risk among renal transplant recipients administered the influenza vaccine.

Cheng TM, Chen YS, Wei KC, Chang YC, Huang YT, Chen CL.Vaccine. 2024 Oct 24;42(24):126075. doi: 10.1016/j.vaccine.2024.06.042. Epub 2024 Jun 18.PMID: 38897892

Polymyalgia rheumatica following COVID-19 vaccination: Case series of 3 patients and literature review on polymyalgia rheumatica induced by various vaccines.

Irani L, Bou Karroum M, Chehab Y, Abi Saad N, Al Dailaty A, Husni R.Medicine (Baltimore). 2024 Oct 25;103(43):e40204. doi: 10.1097/MD.0000000000040204.PMID: 39470514

How has post-implementation surveillance of high-coverage vaccination with HPV16/18-AS04 vaccine in England added to evidence about its cross-protective effects?

Navarro-Torné A, Anderson A, Panwar K, Ghys E, Benninghoff B, Weynants V, Beddows S, Checchi M.Vaccine. 2024 Oct 24;42(24):126215. doi: 10.1016/j.vaccine.2024.126215. Epub 2024 Aug 29.PMID: 39213982

The value of using COVID-19 antibody tests as a potential approach to prioritize vaccination delivery.

Alrabadi N, Obeidat H, Haddad R, Alyassin N, Alzoubi KH, Obeidat O, Shteiwi SM, Al-Rabadi D, Al-Faouri I.PLoS One. 2024 Oct 16;19(10):e0311881. doi: 10.1371/journal.pone.0311881. eCollection 2024.PMID: 39413075

Epidemiological characteristics and survival analysis of pertussis in Quzhou.

Xu W, Fu C, Zheng C, Gong X, Fang Q, Yin Z.Hum Vaccin Immunother. 2024 Dec 31;20(1):2420448. doi: 10.1080/21645515.2024.2420448. Epub 2024 Oct 30.PMID: 39474925

Design and antiviral assessment of a panel of fusion proteins targeting human papillomavirus type 16.

Bai C, Wang R, Yang Q, Hao J, Zhong Q, Fan R, Han P.PLoS One. 2024 Oct 25;19(10):e0311137. doi: 10.1371/journal.pone.0311137. eCollection 2024.PMID: 39453911

A single-dose circular RNA vaccine prevents Zika virus infection without enhancing dengue severity in mice.

Liu X, Li Z, Li X, Wu W, Jiang H, Zheng Y, Zhou J, Ye X, Lu J, Wang W, Yu L, Li Y, Qu L, Wang J, Li F, Chen L, Wu L, Feng L.Nat Commun. 2024 Oct 16;15(1):8932. doi: 10.1038/s41467-024-53242-0.PMID: 39414822

Antitumor activity of PAbs generated by immunization with a novel HER3-targeting protein-based vaccine candidate in preclinical models.

Bermúdez-Abreut E, Bergado Báez G, Martínez Pestano M, Attanasio G, Gonzales Castillo CY, Hernández Fernández DR, Alvarez-Arzola R, Alimonti A, Sánchez-Ramírez B.Front Oncol. 2024 Oct 16;14:1472607. doi: 10.3389/fonc.2024.1472607. eCollection 2024.PMID: 39479017

Virus-like Particles-Based Vaccine to Combat Neurodegenerative Diseases.

Lim LWC, Lee JY, Chen CH, Voon KGL, Koh RY, Chye SM.Curr Pharm Biotechnol. 2024 Oct 29. doi: 10.2174/0113892010331763241002122854. Online ahead of print.PMID: 39473206

Five accelerated schedules for the tick-borne encephalitis vaccine FSME-Immun in last-minute travellers: an open-label, single-centre, randomized controlled pilot trial.

Berens-Riha N, Andries P, Aerssens A, Ledure Q, Van Der Beken Y, Heyndrickx L, Genbrugge E, Tsoumanis A, Van Herrewege Y, Ariën KK, Van Innis M, Vanbrabant P, Soentjens P; FASTBEPROTECT Research Team.J Travel Med. 2024 Oct 19;31(7):taad053. doi: 10.1093/jtm/taad053.PMID: 37074147

T-Cell Epitope-Based Vaccines: A Promising Strategy for Prevention of Infectious Diseases.

Song X, Li Y, Wu H, Qiu H, Sun Y.Vaccines (Basel). 2024 Oct 17;12(10):1181. doi: 10.3390/vaccines12101181.PMID: 39460347

Challenges of Infectious Diseases in Older Adults: From Immunosenescence and Inflammaging Through Antibiotic Resistance to Management Strategies.

Mancinetti F, Marinelli A, Boccardi V, Mecocci P.Mech Ageing Dev. 2024 Oct 22:111998. doi: 10.1016/j.mad.2024.111998. Online ahead of print.PMID: 39447983

Relationship Between Primary School Teachers' COVID-19 Fear Levels and COVID-19 Vaccine Attitudes After the Start of Face-to-face Education During the Pandemic Period: A School Health Study.

Tayhan A, Işık K.Public Health Nurs. 2024 Oct 24. doi: 10.1111/phn.13469. Online ahead of print.PMID: 39449272

Similar humoral responses but distinct CD4$^+$ T cell transcriptomic profiles in older adults elicited by MF59 adjuvanted and high dose influenza vaccines.

Quach HQ, Haralambieva IH, Goergen KM, Grill DE, Chen J, Ovsyannikova IG, Poland GA, Kennedy RB.Sci Rep. 2024 Oct 18;14(1):24420. doi: 10.1038/s41598-024-75250-2.PMID: 39424894

Impact of VP2 structure on antigenicity: comparison of BTV1 and the highly virulent BTV8 serotype.

Bissett SL, Roy P.J Virol. 2024 Oct 22;98(10):e0095324. doi: 10.1128/jvi.00953-24. Epub 2024 Sep 25.PMID: 39320096

Immunogenicity and Determinants of Antibody Response to the BNT162b2 mRNA Vaccine: A Longitudinal Study in a Cohort of People Living with HIV.

Baldovin T, Leoni D, Geppini R, Miatton A, Amoruso I, Fonzo M, Bertoncello C, Finco M, Mazzitelli M, Sasset L, Cattelan A, Baldo V.Vaccines (Basel). 2024 Oct 16;12(10):1172. doi: 10.3390/vaccines12101172.PMID: 39460338

Incremental Effectiveness of Emergency Vaccination Against a Varicella Outbreak at an Elementary School in Beijing, China, 2019: An Observational Cohort Study.

Cao Z, Zhao D, Shi R, Zhao Y, Wen X, Ma Y, Li X, Suo L.Vaccines (Basel). 2024 Oct 17;12(10):1184. doi: 10.3390/vaccines12101184.PMID: 39460350

Generation of a novel attenuated IBDV vaccine strain by mutation of critical amino acids in IBDV VP5.

Gao H, Zhang S, Chang H, Guo Y, Li Z, Wang Y, Gao L, Li X, Cao H, Zheng SJ.Vaccine. 2024 Oct 24;42(24):126081. doi: 10.1016/j.vaccine.2024.06.048. Epub 2024 Jun 29.PMID: 38944579

Exploring yeast glucans for vaccine enhancement: Sustainable strategies for overcoming adjuvant challenges in a SARS-CoV-2 model.

Azevedo-Silva J, Amorim M, Tavares-Valente D, Sousa P, Mohamath R, Voigt EA, Guderian JA, Kinsey R, Viana S, Reis F, Pintado ME, Paddon CJ, Fox CB, Fernandes JC.Eur J Pharm Biopharm. 2024 Oct 24:114538. doi: 10.1016/j.ejpb.2024.114538. Online ahead of print.PMID: 39461571

Researchers Are Exploring the Role of Shingles-and a Protective Role of Shingles Vaccine-in Dementia.

Rubin R.JAMA. 2024 Oct 18. doi: 10.1001/jama.2024.0227. Online ahead of print.PMID: 39422893

Adjuvant potential of Peyssonnelia caulifera extract on the efficacy of an influenza vaccine in a murine model.

Ho TL, Ahn SY, Ko EJ.Sci Rep. 2024 Oct 25;14(1):25353. doi: 10.1038/s41598-024-76736-9.PMID: 39455811

Phase 1 trial of an investigational Tdap booster vaccine with CpG 1018 adjuvant compared with Boostrix in healthy adults and adolescents.

Richmond P, Nolan T, McGirr A, Napier-Flood F, Kim J, Leah A, Xie F, Campbell JD, Godeaux O, Henry O, Wood N, Janssen RS.Vaccine. 2024 Oct 24;42(24):126251. doi: 10.1016/j.vaccine.2024.126251. Epub 2024 Sep 2.PMID: 39226786

Adapted Milwaukee protocol for rabies treatment in a Brazilian indigenous child: case report.

Júnior DST, Marques MSV, de Oliveira RC.Virol J. 2024 Oct 25;21(1):265. doi: 10.1186/s12985-024-02536-2.PMID: 39456043

Immunopeptidomics of *Salmonella enterica* Serovar *Typhimurium*-Infected Pig Macrophages Genotyped for Class II Molecules.

Celis-Giraldo C, Suárez CF, Agudelo W, Ibarrola N, Degano R, Díaz J, Manzano-Román R, Patarroyo MA.Biology (Basel). 2024 Oct 16;13(10):832. doi: 10.3390/biology13100832.PMID: 39452141

Vaccination coverage and delay in vaccination of infants born in 2017 and 2018 in municipalities in the Southern region of Brazil: National Vaccination Coverage Survey 2020.

Luhm KR, Boing AF, Mengue SS, Daniel NS, Mélo TR, Farion RJ, França AP, Moraes JC; ICV 2020 Group; Silva AID, Ramos AN Jr, França AP, Oliveira ANM, Boing AF, Domingues CMAS, Oliveira CS, Maciel ELN, Guibu IA, Mirabal IRB, Barbosa JC, Lima JC, Moraes JC, Luhm KR, Caetano KAA, Lima LHO, Antunes MBC, Teixeira MDG, Teixeira MDC, Borges MFSO, Queiroz RCS, Gurgel RQ, Barata RB, Azevedo RNC, Oliveira SMDVL, Teles SA, Gama SGND, Mengue SS, Simões TC, Nascimento V, Araújo WN.Epidemiol Serv Saude. 2024 Oct 21;33(spe2):e20231206. doi: 10.1590/S2237-96222024v33e20231206.especial2.en. eCollection 2024.PMID: 39442144

A plant-based oligomeric CD2v extracellular domain antigen exhibits equivalent immunogenicity to the live attenuated vaccine ASFV-G-I177L.

Nguyen GT, Le TT, Vu SDT, Nguyen TT, Le MTT, Pham VT, Nguyen HTT, Ho TT, Hoang HTT, Tran HX, Chu HH, Pham NB.Med Microbiol Immunol. 2024 Oct 16;213(1):22. doi: 10.1007/s00430-024-00804-0.PMID: 39412651

Genetically modified live vaccine offers protective immunity against wild-type Anaplasma marginale tick-transmission challenge.

Ferm J, Jaworski DC, Stoll I, Kleinhenz MD, Kocan KM, Madesh S, Ferm D, Liu H, Fitzwater S, Schlieper A, Ganta RR.Vaccine. 2024 Oct 24;42(24):126069. doi: 10.1016/j.vaccine.2024.06.036. Epub 2024 Jun 15.PMID: 38880695

A Fentanyl Hapten-Displaying Lipid Nanoparticle Vaccine that Non-Covalently Encapsulates a TLR7/8 Agonist and T-helper Epitope Induces Protective Anti-Fentanyl Immunity.

Zhong Z, Deventer MH, Chen Y, Vanhee S, Lammens I, Deswarte K, Huang Y, Ye T, Wang H, Nuhn L, Vandeputte M, Gontsarik M, Cui X, Sanders NN, Lienenklaus S, Lambrecht BN, Stove CP, Baptista AP, de Geest B.Angew Chem Int Ed Engl. 2024 Oct 23:e202419031. doi: 10.1002/anie.202419031. Online ahead of print.PMID: 39441822

Evaluation of interventions to improve timely hepatitis B birth dose vaccination among infants and maternal tetanus vaccination among pregnant women in Nigeria.

Kanu FA, Freeland C, Nwokoro UU, Mohammed Y, Ikwe H, Uba B, Sandhu H, An Q, Asekun A, Akataobi C, Adewole A, Fadahunsi R, Wisdom M, Akudo OL, Ugbenyo G, Simple E, Waziri N, Vasumu JJ, Bahuli AU, Bashir SS, Isa A, Ugwu G, Obi EI, Binta H, Bassey BO, Shuaib F, Bolu O, Tohme RA.Vaccine. 2024 Oct 24;42(24):126222. doi: 10.1016/j.vaccine.2024.126222. Epub 2024 Aug 27.PMID: 39197221

Perspectives and involvement of children and adolescents during the decision-making process of their Covid-19 vaccination.

Böhm-González ST, Detemple S, Gruß J, Franke R, Dötsch J, Berner R, Härtel C, Weyersberg A.Patient Educ Couns. 2024 Oct 16;130:108476. doi: 10.1016/j.pec.2024.108476. Online ahead of print.PMID: 39461034

Safety of mRNA COVID-19 vaccines among persons 15- years and above in Ghana: A cohort event monitoring study.

Darko DM, Seaneke SK, Karikari-Boateng E, Nkansah E, Amponsa-Achiano K, Mohamed NT, Bonful HA, Buabeng RO, Ashie A, Asamoa-Amoakohene A, Ewudzie-Sampson J, Derizie AM, Neimatu AD, Wilfred AA, Ogar C, Hagos A, Sabblah GT.Vaccine. 2024 Oct 23;42(26):126460. doi: 10.1016/j.vaccine.2024.126460. Online ahead of print.PMID: 39447252

Comparing performance of year-round and campaign-mode influenza vaccination strategies among children aged 6-23 months in Kenya: 2019-2021.

Dawa J, Jalang'o R, Mirieri H, Kalani R, Marwanga D, Lafond KE, Muriuki MM, Ejoi J, Chiguba F, Patta S, Amoth P, Okunga E, Tabu C, Chaves SS, Ebama MS, Muthoka P, Njenga V, Kiptoo E, Jewa I, Mwanyamawi R, Bresee J, Njenga MK, Osoro E, Mecca L, Emukule GO.Vaccine. 2024 Oct 24;42 Suppl 4(Suppl 4):125461. doi: 10.1016/j.vaccine.2023.11.036. Epub 2023 Dec 16.PMID: 38105140

Characterization of a triple-type chimeric vaccine against human papillomavirus types 18, 45, and 59.

Chi X, Han F, Jiang Y, Cao L, Chen J, Qian C, Zhang S, Li J, Guo X, Jiang M, Zheng Q, Xia N, Li S, Gu Y.Vaccine. 2024 Oct 24;42(24):126245. doi: 10.1016/j.vaccine.2024.126245. Epub 2024 Aug 30.PMID: 39216181

Characteristics Associated With Measles, Mumps, and Rubella Coverage and Exemptions After a School Immunization Law Change in Washington, 2019-2020.

Moore T, Graff K, Bell TR.J Sch Health. 2024 Nov;94(11):1031-1039. doi: 10.1111/josh.13504. Epub 2024 Oct 21.PMID: 39434196

Reverse vaccinology approach for identification of epitopes from E1 protein as peptide vaccine against HCV: A proof of concept.

Meshram R, Kolte B, Gacche R.Vaccine. 2024 Oct 24;42(24):126106. doi: 10.1016/j.vaccine.2024.07.007. Epub 2024 Jul 8.PMID: 38971664

Three RSV vaccines now recommended for many older adults; what about travellers?

Freedman DO, Kotton CN.J Travel Med. 2024 Oct 19;31(7):taae100. doi: 10.1093/jtm/taae100.PMID: 39073905

Kynurenine-AhR reduces T-cell infiltration and induces a delayed T-cell immune response by suppressing the STAT1-CXCL9/CXCL10 axis in tuberculosis.

Liu X, Yang M, Xu P, Du M, Li S, Shi J, Li Q, Yuan J, Pang Y.Cell Mol Immunol. 2024 Oct 22. doi: 10.1038/s41423-024-01230-1. Online ahead of print.PMID: 39438693

Knowledge gap of human monkeypox among high-risk individuals receiving preexposure vaccination in Taiwan.

Hu TH, Tou CY, Lee YH, Chang HH, Cheng SY, Huang KC, Lu CW.Vaccine. 2024 Oct 24;42(24):126111. doi: 10.1016/j.vaccine.2024.07.012. Epub 2024 Jul 17.PMID: 39019660

Effectively protecting health care workers as clade 1 mpox epidemic complexifies: a call for vaccine and antivirals deployment.

Musumeci S, Jacquerioz F, Segeral O, Calmy A.J Travel Med. 2024 Oct 19;31(7):taae120. doi: 10.1093/jtm/taae120.PMID: 39209326

Jurisdiction-level costs of the initial phase of the COVID-19 vaccination program in the United States, December 20, 2020-May 31, 2021.

Kim C, Dunphy C, Duggar C, Pike J.Vaccine. 2024 Oct 24;42(24):126287. doi: 10.1016/j.vaccine.2024.126287. Epub 2024 Sep 3.PMID: 39232401

Salp14 epitope-based mRNA vaccination induces early recognition of a tick bite.

Cui Y, Cibichakravarthy B, Tang X, Alameh MG, Dwivedi G, Weissman D, Fikrig E.Vaccine. 2024 Oct 24;42(24):126304. doi: 10.1016/j.vaccine.2024.126304. Epub 2024 Sep 5.PMID: 39236403

Escherichia coli heat-labile enterotoxin B subunit as an adjuvant of mucosal immune combined with GCRV-II VP6 triggers innate immunity and enhances adaptive immune responses following oral vaccination of grass carp (Ctenopharyngodon idella).

Yin J, Wu H, Li W, Wang Y, Li Y, Mo X, Li S, Ren Y, Pan H, Jiang P, Wang Q.Fish Shellfish Immunol. 2024 Oct 16;154:109969. doi: 10.1016/j.fsi.2024.109969. Online ahead of print.PMID: 39419132

Patients with Inflammatory Bowel Disease are at Increased Risk for Complications of Herpes Zoster.

Caldera F, Singh S, Zona EE, Ramirez Ramirez O, Inselman J, Heien H, Keaveny AP, Hayney MS, Farraye FA.Clin Gastroenterol Hepatol. 2024 Oct 24:S1542-3565(24)00960-1. doi: 10.1016/j.cgh.2024.09.022. Online ahead of print.PMID: 39461467

Shedding of nontyphoidal *Salmonella* by asymptomatic convalescing children under 5 years as a risk factor for invasive disease in Mukuru informal settlement in Nairobi, Kenya.

Kering K, Njaanake K, Wairimu C, Mureithi M, Kebenei C, Odityo G, Mugo M, Kavai SM, Mbae C, Weber K, Pietsch M, Pilz T, Drechsel O, Thürmer A, Semmler T, Fuchs S, Simon S, Flieger A, Wieler LH, Kariuki S.J Clin Microbiol. 2024 Oct 24:e0075024. doi: 10.1128/jcm.00750-24. Online ahead of print.PMID: 39445835

Delayed reinforcement of costimulation improves the efficacy of mRNA vaccines in mice.

Sanchez S, Dangi T, Awakoaiye B, Lew MH, Irani N, Fourati S, Penaloza-MacMaster P.J Clin Invest. 2024 Oct 17:e183973. doi: 10.1172/JCI183973. Online ahead of print.PMID: 39432667

Design of the conserved epitope peptide of SARS-CoV-2 spike protein as the broad-spectrum COVID-19 vaccine.

Chang TY, Li CJ, Chao TL, Chang SY, Chang SC.Appl Microbiol Biotechnol. 2024 Oct 16;108(1):486. doi: 10.1007/s00253-024-13331-y.PMID: 39412657

Primary care physicians' perspectives on adults with diabetes and the recommended hepatitis B vaccine: A qualitative study.

Müller DL, Stuckey H, Flores ES, Wang L, Godfrey T, Calo WA, Yingst J.PLoS One. 2024 Oct 18;19(10):e0312168. doi: 10.1371/journal.pone.0312168. eCollection 2024.PMID: 39423235

Design of the conserved epitope peptide of SARS-CoV-2 spike protein as the broad-spectrum COVID-19 vaccine.

Chang TY, Li CJ, Chao TL, Chang SY, Chang SC.Appl Microbiol Biotechnol. 2024 Oct 16;108(1):486. doi: 10.1007/s00253-024-13331-y.PMID: 39412657

Primary care physicians' perspectives on adults with diabetes and the recommended hepatitis B vaccine: A qualitative study.

Müller DL, Stuckey H, Flores ES, Wang L, Godfrey T, Calo WA, Yingst J.PLoS One. 2024 Oct 18;19(10):e0312168. doi: 10.1371/journal.pone.0312168. eCollection 2024.PMID: 39423235

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

Gam PH, Dung NM, Aziz JMA, Makram AM, Elsheikh R, Huy NT.Vaccine. 2024 Oct 27:126491. doi: 10.1016/j.vaccine.2024.126491. Online ahead of print.PMID: 39467726

Antiretroviral Therapy with Ritonavir-Boosted Atazanavir- and Lopinavir-Containing Regimens Correlates with Diminished HIV-1 Neutralization.

Yuste E, Gil H, Garcia F, Sanchez-Merino V.Vaccines (Basel). 2024 Oct 17;12(10):1176. doi: 10.3390/vaccines12101176.PMID: 39460342

Applicability of selected Brighton Collaboration case definitions in low-resource settings: A prospective hospital-based active surveillance in Addis Ababa, Ethiopia.

Sintayehu K, Shaum A, Bonger ZT, Dagnachew Zeleke E, Mamo BT, Anito AA, Bekele D, Longley AT, Gashaw H, Alemu A, Degefaw D, Wang SH, Huang WT.Vaccine. 2024 Oct 24;42(24):126079. doi: 10.1016/j.vaccine.2024.06.046. Epub 2024 Jun 21.PMID: 38909000

The effect of Plasmodium falciparum exposure and maternal anti-circumsporozoite protein antibodies on responses to RTS,S/AS01$_E$ vaccination in infants and children: an ancillary observational immunological study to a phase 3, randomised clinical trial.

Macià D, Campo JJ, Jairoce C, Mpina M, Sorgho H, Dosoo D, Agnandji ST, Kusi KA, Molinos-Albert LM, Kariuki S, Daubenberger C, Mordmüller B, Moncunill G, Dobaño C.Lancet Infect Dis. 2024 Oct 23:S1473-3099(24)00527-9. doi: 10.1016/S1473-3099(24)00527-9. Online ahead of print.PMID: 39461358

Comparative Efficacy of Parenteral and Mucosal Recombinant Probiotic Vaccines Against SARS-CoV-2 and *S. pneumoniae* Infections in Animal Models.

Leontieva G, Kramskaya T, Gupalova T, Bormotova E, Desheva Y, Korzhevsky D, Kirik O, Koroleva I, Borisevitch S, Suvorov A.Vaccines (Basel). 2024 Oct 19;12(10):1195. doi: 10.3390/vaccines12101195.PMID: 39460360

A qualitative study of Chicago gay men and the Mpox outbreak of 2022 in the context of HIV/AIDS, PrEP, and COVID-19.

Hughes D, Ai J, Vazirnia P, McLeish T, Krajco C, Moraga R, Quinn K.BMC Infect Dis. 2024 Oct 18;24(1):1174. doi: 10.1186/s12879-024-09491-x.PMID: 39425023

Revaccination outcomes among adolescents and adults with suspected hypersensitivity reactions following COVID-19 vaccination: A Canadian immunization research network study.

Fitzpatrick T, Yamoah P, Lacuesta G, Sadarangani M, Cook V, Pourshahnazari P, Kalicinsky C, Upton JEM, Cameron SB, Zaborniak K, Kanani A, Lam G, Burton C, Constantinescu C, Pernica JM, Abdurrahman Z, Betschel S, Drolet JP, De Serres G, Quach C, Des Roches A, Chapdelaine H, Salvadori MI, Carignan A, McConnell A, Pham-Huy A, Buchan CA, Cowan J, Hildebrand K, Top KA; Special Immunization Clinic Network investigators.Vaccine. 2024 Oct 24;42(24):126078. doi: 10.1016/j.vaccine.2024.06.045. Epub 2024 Jun 22.PMID: 38910092

Exploring risk factors for Raynaud's phenomenon post COVID-19 vaccination.

Ho TC, Chuang SC, Hung KC, Chang CC, Chuang KP, Yuan CH, Yang MH, Tyan YC.Vaccine. 2024 Oct 27;42(26):126470. doi: 10.1016/j.vaccine.2024.126470. Online ahead of print.PMID: 39467409

Cistanche deserticola polysaccharide-functionalized dendritic fibrous nano-silica as oral delivery system for H(9)N(2) vaccine to promote systemic and mucosal immune response.

He J, Zhu T, Mao N, Jiang W, Lin F, Lu X, Gao Z, Yang Y, Wang D.Int J Biol Macromol. 2024 Oct 20;282(Pt 1):136690. doi: 10.1016/j.ijbiomac.2024.136690. Online ahead of print.PMID: 39433190

Prevalence of the novel recombinant LSDV in east and Southeast Asia: Inducing skin and testicular damage in golden hamsters.

Wang J, Wan S, Liu S, Wang Z, Ding X, Wu Q, Liu X, Chen Z, Chen L, Wang H, Jia K, Li S.Microb Pathog. 2024 Oct 22;197:107057. doi: 10.1016/j.micpath.2024.107057. Online ahead of print.PMID: 39447659

Qualification of an enzyme-linked immunosorbent assay for quantification of anti-Vi IgG in human sera.

Carducci M, Massai L, Lari E, Semplici B, Aruta MG, De Simone D, Piu P, Montomoli E, Berlanda Scorza F, Grappi S, Iturriza-Gómara M, Canals R, Rondini S, Rossi O.Front Immunol. 2024 Oct 16;15:1466869. doi: 10.3389/fimmu.2024.1466869. eCollection 2024.PMID: 39478859

Analysis of antibody dynamics in Chinese children aged 1-3 years after single-dose varicella vaccination: A 42 months prospective study.

Sun X, Zhang L, Wang Z, Wang W.Hum Vaccin Immunother. 2024 Dec 31;20(1):2410065. doi: 10.1080/21645515.2024.2410065. Epub 2024 Oct 16.PMID: 39411866

Effect of RTS,S/AS01(E) vaccine booster dose on cellular immune responses in African infants and children.

Mitchell RA, Macià D, Jairoce C, Mpina M, Naidu A, Chopo-Pizarro A, Vázquez-Santiago M, Campo JJ, Aide P, Aguilar R, Daubenberger C, Dobaño C, Moncunill G.NPJ Vaccines. 2024 Oct 25;9(1):200. doi: 10.1038/s41541-024-00977-y.PMID: 39455625

Public health rapid response in managing COVID-19 outbreaks in residential aged care facilities: a regional public health unit perspective.

Hashan MR, Walker J, Charles M, Le Brasse S, Odorico D, Smoll N, Kirk M, Booy R, Khandaker G.Commun Dis Intell (2018). 2024 Oct 23;48. doi: 10.33321/cdi.2024.48.36.PMID: 39438261

Polio outbreak in Pakistan: urgent need for strengthened localized eradication strategies.

Singh M, Balaraman AK, Mehta R, Sah S.Infect Dis (Lond). 2024 Oct 30:1-3. doi: 10.1080/23744235.2024.2422513. Online ahead of print.PMID: 39475479

Serious adverse events following immunization with COVID-19 vaccines in Lebanon: a retrospective analysis of the National Pharmacovigilance Database.

Karam R, Iskandar K, Watfa M, Zeitoun A.BMC Public Health. 2024 Oct 21;24(1):2905. doi: 10.1186/s12889-024-20297-z.PMID: 39434043

RABV antigenic peptide loaded polymeric nanoparticle production, characterization, and preliminary investigation of its biological activity.

Bezir K, Pelit Arayici P, Akgül B, Abamor EŞ, Acar S.Nanotechnology. 2024 Oct 18;36(2). doi: 10.1088/1361-6528/ad84fe.PMID: 39383880

Targeted degradation of the HPV oncoprotein E6 reduces tumor burden in cervical cancer.

Smalley TB, Nicolaci A, Tran KC, Lokhandwala J, Obertopp N, Matlack JK, Miner RE 3rd, Teng MN, Pilon-Thomas S, Binning JM.bioRxiv [Preprint]. 2024 Oct 17:2024.10.17.618959. doi: 10.1101/2024.10.17.618959.PMID: 39464070

Comparison of the sensitivity and specificity of commercial anti-dengue virus IgG tests to identify persons eligible for dengue vaccination.

Medina FA, Vila F, Adams LE, Cardona J, Carrion J, Lamirande E, Acosta LN, De León-Rodríguez CM, Beltran M, Grau D, Rivera-Amill V, Balmaseda A, Harris E, Madewell ZJ, Waterman SH, Paz-Bailey G, Whitehead S, Muñoz-Jordán JL.J Clin Microbiol. 2024 Oct 16;62(10):e0059324. doi: 10.1128/jcm.00593-24. Epub 2024 Aug 28.PMID: 39194193

Community-led diphtheria vaccination campaign to manage a diphtheria outbreak in a remote Aboriginal community.

Hempenstall A, Neville J, Taunton C, Fisher V, Connellan V, Tayley A, Keys G, Hanson J.Commun Dis Intell (2018). 2024 Oct 23;48. doi: 10.33321/cdi.2024.48.49.PMID: 39438263

Review of Gold Nanoparticles: Synthesis, Properties, Shapes, Cellular Uptake, Targeting, Release Mechanisms and Applications in Drug Delivery and Therapy.

Georgeous J, AlSawaftah N, Abuwatfa WH, Husseini GA.Pharmaceutics. 2024 Oct 16;16(10):1332. doi: 10.3390/pharmaceutics16101332.PMID: 39458661

Self-Adjuvanting Adenoviral Nanovaccine for Effective T-Cell-Mediated Immunity and Long-Lasting Memory Cell Activation against Tuberculosis.

Sowndharya CK, Mehnath S, Ponbharathi A, Jeyaraj M.ACS Infect Dis. 2024 Oct 28. doi: 10.1021/acsinfecdis.4c00619. Online ahead of print.PMID: 39463350

A novel anti-CTLA-4 nanobody-IL12 fusion protein in combination with a dendritic cell/tumour fusion cell vaccine enhances the antitumour activity of CD8(+) T cells in solid tumours.

Jiang MJ, Cui HP, Li TT, Yang XM, Lu XL, Liu AQ.J Nanobiotechnology. 2024 Oct 19;22(1):645. doi: 10.1186/s12951-024-02914-6.PMID: 39427185

A novel inactivated oral rabies vaccine with the incorporation of U-OMP19 enhances the immunogenicity by reducing viral proteins degradation and activating dendritic cells in a mouse model.

Zeng Z, Wu D, Xiong J, Zhao J, Liang C, Wu Q, Huang C, Zhou R, Fu ZF, Zhao L, Zhou M.Vet Microbiol. 2024 Oct 28;298:110287. doi: 10.1016/j.vetmic.2024.110287. Online ahead of print.PMID: 39471657

Genetic polymorphism of merozoite surface protein 1 and merozoite surface protein 2 in the Vietnam Plasmodium falciparum population.

Võ TC, Lê HG, Kang JM, Trinh NTM, Quang HH, Na BK.BMC Infect Dis. 2024 Oct 28;24(1):1216. doi: 10.1186/s12879-024-10116-6.PMID: 39468465

COVID-19 vaccination intention among people who use drugs in France in 2021: results from the international community-based research program EPIC.

Lacoux C, Villes V, Riegel L, Coulmain S, Lorente N, Derras SE, Castro DR, Roux P, Delabre RM, Michels D.Harm Reduct J. 2024 Oct 16;21(1):184. doi: 10.1186/s12954-024-01096-6.PMID: 39415258

Emergence of non-classical genotype constellations of G9P[8] rotavirus strains in diarrheic children in Sabah, Malaysia.

Fong SY, Akari Y, Amit LN, John JL, Chin AZ, Komoto S, Ahmed K.Infect Genet Evol. 2024 Oct 24;125:105685. doi: 10.1016/j.meegid.2024.105685. Online ahead of print.PMID: 39461399

Assessment of Neutralizing Antibody Response as a Correlate of Protection against Symptomatic SARS-CoV-2 Infections after Administration of two doses of the CoronaVac inactivated COVID-19 Vaccine: A Phase III Randomized Controlled Trial.

Chen X, Meng X, Wu Q, Lim WW, Xin Q, Cowling BJ, Meng W, Yu H, Covasa DT.J Infect. 2024 Oct 16:106315. doi: 10.1016/j.jinf.2024.106315. Online ahead of print.PMID: 39423875

Spatial transcriptomics of a parasitic flatworm provides a molecular map of drug targets and drug resistance genes.

Gramberg S, Puckelwaldt O, Schmitt T, Lu Z, Haeberlein S.Nat Commun. 2024 Oct 16;15(1):8918. doi: 10.1038/s41467-024-53215-3.PMID: 39414795

In brief: FluMist influenza vaccine for self-administration.

[No authors listed]Med Lett Drugs Ther. 2024 Oct 28;66(1714):174-175. doi: 10.58347/tml.2024.1714c.PMID: 39466308

Documenting human papillomavirus vaccine refusal among adolescents in electronic health records: A mixed methods study.

Vielot NA, Ballard CAP, St Jean DT, Page S, Hammond K, Thompson P, Butler AM, Ranney LM.Vaccine. 2024 Oct 27;42(26):126467. doi: 10.1016/j.vaccine.2024.126467. Online ahead of print.PMID: 39467411

Dendritic Cells Loaded With Heat Shock Inactivated Glioma Stem Cells Enhance Antitumor Response of Mouse Glioma When Combining With CD47 Blockade.

Tan Q, Li F, Wang J, Liu Y, Cai Y, Zou Y, Jiang X.Clin Med Insights Oncol. 2024 Oct 16;18:11795549241285239. doi: 10.1177/11795549241285239. eCollection 2024.PMID: 39429684

Identification of three subtypes of ovarian cancer and construction of prognostic models based on immune-related genes.

Gao W, Yuan H, Yin S, Deng R, Ji Z.J Ovarian Res. 2024 Oct 21;17(1):208. doi: 10.1186/s13048-024-01526-w.PMID: 39434163

High-throughput sequencing-based neutralization assay reveals how repeated vaccinations impact titers to recent human H1N1 influenza strains.

Loes AN, Tarabi RAL, Huddleston J, Touyon L, Wong SS, Cheng SMS, Leung NHL, Hannon WW, Bedford T, Cobey S, Cowling BJ, Bloom JD.J Virol. 2024 Oct 22;98(10):e0068924. doi: 10.1128/jvi.00689-24. Epub 2024 Sep 24.PMID: 39315814

Hyperfunctional T cell responses unchecked by regulatory T cells are unable to resolve hepaciviral infection without humoral contribution.

Jin F, Gridley J, Kumari A, Saeidi A, Holland B, Elrod E, Dravid P, Trivedi S, Kapoor A, Thapa M, Grakoui A.J Hepatol. 2024 Oct 16:S0168-8278(24)02632-1. doi: 10.1016/j.jhep.2024.10.012. Online ahead of print.PMID: 39423870

A novel costimulatory molecule gene-modified leukemia cell-derived exosome enhances the anti-leukemia efficacy of DC vaccine in mouse models.

Zhang D, Jiang Y, Wang M, Zhao J, Wan J, Li Z, Huang D, Yu J, Li J, Liu J, Huang F, Hao S.Vaccine. 2024 Oct 24;42(24):126097. doi: 10.1016/j.vaccine.2024.06.064. Epub 2024 Jul 2.PMID: 38960787

Risk of major adverse cerebro-cardiovascular events following BNT162b2, CoronaVac, and ChAdOx1 vaccination and SARS-CoV-2 infection: A self-controlled case-series study.

Ab Rahman N, King TL, Pearlasamy KM, Sivasampu S; SAFECOVAC study group.Vaccine. 2024 Oct 23;42(26):126465. doi: 10.1016/j.vaccine.2024.126465. Online ahead of print.PMID: 39447251

FTIR monitoring of the 13-valent pneumococcal conjugate vaccine for lung cancer patients: Changes in amides vibrations correlated with biochemical assays.

Smok-Kalwat J, Góźdź S, Macek P, Wasiński P, Khalavka M, Raczkiewicz P, Stepulak A, Depciuch J.Vaccine. 2024 Oct 19;42(26):126459. doi: 10.1016/j.vaccine.2024.126459. Online ahead of print.PMID: 39427598

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

Seeberger PH, Pradhan K, Reuber EE, Sletten ET, Tomaso H.Angew Chem Int Ed Engl. 2024 Oct 17:e202416432. doi: 10.1002/anie.202416432. Online ahead of print.PMID: 39417793

Evaluation of Protective Efficacy of Recombinant Toxoplasma gondii DDX39 Protein Vaccine against Acute and Chronic T. gondii Infection in Mice.

Wang J, Wang Y, Zhang H, Ma H, Wang Q, Wang L, Fan Y, Tian X, Mei X, Zhang Z, Wang S, Yang Z.Acta Trop. 2024 Oct 24:107442. doi: 10.1016/j.actatropica.2024.107442. Online ahead of print.PMID: 39461580

Micro RNA-175 Targets *Claudin-1* to Inhibit Madin-Darby Canine Kidney Cell Adhesion.

Li X, Ma F, Wang S, Tang T, Ma L, Qiao Z, Ma Z, Wang J, Liu Z.Genes (Basel). 2024 Oct 16;15(10):1333. doi: 10.3390/genes15101333.PMID: 39457456

Vaccination with a Lawsonia intracellularis subunit water in oil emulsion vaccine mitigated some disease parameters but failed to affect shedding.

Fourie KR, Jeffery A, Chand D, Choudhary P, Ng SH, Liu H, Magloire D, Khatooni Z, Berberov E, Wilson HL.Vaccine. 2024 Oct 24;42(24):126254. doi: 10.1016/j.vaccine.2024.126254. Epub 2024 Aug 29.PMID: 39213981

Social listening applied to tailor communication on immunization in the Republic of Moldova.

Timotin A, Paladi A, Mita V, Chihai V, Lozan O.Eur J Public Health. 2024 Oct 28:ckae161. doi: 10.1093/eurpub/ckae161. Online ahead of print.PMID: 39470446

Trends in influenza vaccination and its determinants among pregnant French women between 2015 and 2020: A single-center study.

Alaoui K, Vanderstichele S, Bartolo S, Hammou Y, Debarge V, Dessein R, Faure K, Subtil D.Hum Vaccin Immunother. 2024 Dec 31;20(1):2132799. doi: 10.1080/21645515.2022.2132799. Epub 2024 Oct 28.PMID: 39466072

Leveraging Synthetic Virology for the Rapid Engineering of Vesicular Stomatitis Virus (VSV).

Moles CM, Basu R, Weijmarshausen P, Ho B, Farhat M, Flaat T, Smith BF.Viruses. 2024 Oct 21;16(10):1641. doi: 10.3390/v16101641.PMID: 39459973

Estimated Population-Level Impact of Pneumococcal Conjugate Vaccines Against All-Cause Pneumonia Mortality Among Unvaccinated in 5 Latin American Countries.

Prunas O, Shioda K, Toscano CM, Bastias M, Valenzuela-Bravo MT, Tito JD, Warren JL, Weinberger DM, de Oliveira LH.J Infect Dis. 2024 Oct 16;230(4):e768-e776. doi: 10.1093/infdis/jiae144.PMID: 38502711

First report on genetic characterization of egg drop syndrome 1976 virus in Egypt.

Al-Ebshahy E, AboElkhair M, Shehata A, Elgendy E.Braz J Microbiol. 2024 Oct 24. doi: 10.1007/s42770-024-01537-1. Online ahead of print.PMID: 39446256

Disruption of Erythritol Catabolism via the Deletion of Fructose-Bisphosphate Aldolase (Fba) and Transaldolase (Tal) as a Strategy to Improve the Brucella Rev1 Vaccine.

Elizalde-Bielsa A, Lázaro-Antón L, de Miguel MJ, Muñoz PM, Conde-Álvarez R, Zúñiga-Ripa A.Int J Mol Sci. 2024 Oct 18;25(20):11230. doi: 10.3390/ijms252011230.PMID: 39457012

Markers of T-cell dysfunction and not inflammaging predict the waning of humoral responses to SARS-CoV-2 mRNA booster vaccination in people with HIV.

Augello M, Bono V, Rovito R, Santoro A, Tincati C, Marchetti G.AIDS. 2024 Nov 15;38(14):1987-1990. doi: 10.1097/QAD.0000000000004010. Epub 2024 Oct 31.PMID: 39474654

Short CDRL1 in intermediate VRC01-like mAbs is not sufficient to overcome key glycan barriers on HIV-1 Env.

Agrawal P, Knudsen ML, MacCamy A, Hurlburt NK, Khechaduri A, Salladay KR, Kher GM, Kallur Siddaramaiah L, Stuart AB, Bontjer I, Shen X, Montefiori D, Gristick HB, Bjorkman PJ, Sanders RW, Pancera M, Stamatatos L.J Virol. 2024 Oct 22;98(10):e0074424. doi: 10.1128/jvi.00744-24. Epub 2024 Sep 6.PMID: 39240111

Immunogenicity of Comirnaty Omicron XBB.1.5 booster COVID-19 mRNA vaccine in long-term survivors after allogeneic hematopoietic stem cell transplantation.

Einarsdottir S, Al-Dury S, Fridriksson E, Andius LD, Wang H, Sharba S, Mountagui A, Waern J, Ringlander J, Martner A, Hellstrand K, Waldenström J, Lagging M.Sci Rep. 2024 Oct 21;14(1):24749. doi: 10.1038/s41598-024-74712-x.PMID: 39433814

A single immunization of *Borreliella burgdorferi*-infected mice with Vanguard crLyme elicits robust antibody responses to diverse strains and variants of outer surface protein C.

Chambers GZ, Chambers KMF, Marconi RT.Infect Immun. 2024 Oct 22:e0039624. doi: 10.1128/iai.00396-24. Online ahead of print.PMID: 39436053

Performing national independence through medical diplomacy: tuberculosis control and socialist internationalism in Cold War Vietnam.

Aso M.Br J Hist Sci. 2024 Oct 21:1-16. doi: 10.1017/S0007087424000487. Online ahead of print.PMID: 39429122

Engineering a SARS-CoV-2 Vaccine Targeting the Receptor-Binding Domain Cryptic-Face via Immunofocusing.

Bruun TUJ, Do J, Weidenbacher PA, Utz A, Kim PS.ACS Cent Sci. 2024 Sep 17;10(10):1871-1884. doi: 10.1021/acscentsci.4c00722. eCollection 2024 Oct 23.PMID: 39463836

Acute autoimmune hepatitis following COVID-19 mRNA vaccination: A population-based study using electronic health records in Singapore.

Ng AJJ, Teo DCH, Dorajoo SR, Yap AJY, Chow WC, Ng NKM, Soh SBL.Vaccine. 2024 Oct 24;42(26):126462. doi: 10.1016/j.vaccine.2024.126462. Online ahead of print.PMID: 39454292

Recombinant avian-derived antiviral proteins cIFITM1, cIFITM3, and cViperin as effective adjuvants in inactivated H9N2 subtype avian influenza vaccines.

Yan S, Chen Y, Lin J, Chen H, Hu C, Liu H, Diao H, Liu S, Chen JL.Vet Microbiol. 2024 Oct 18;298:110277. doi: 10.1016/j.vetmic.2024.110277. Online ahead of print.PMID: 39454284

High-Throughput Luminescence-Based Serum Bactericidal Assay Optimization and Characterization to Assess Human Sera Functionality Against Multiple *Shigella flexneri* Serotypes.

Caradonna V, Pinto M, Alfini R, Giannelli C, Iturriza M, Micoli F, Rossi O, Mancini F.Int J Mol Sci. 2024 Oct 16;25(20):11123. doi: 10.3390/ijms252011123.PMID: 39456904

Clinical Pathology Evaluation in Pet Rabbits Vaccinated Against Rabbit Hemorrhagic Disease Virus 2 (RHDV2).

Griffin C, Locke S, Montiani-Ferreira F, Lopes Grego A, Soto J, Cray C.Animals (Basel). 2024 Oct 19;14(20):3029. doi: 10.3390/ani14203029.PMID: 39457958

A Novel Monoallelic Small Deletion Confers Gain-of-Function of STAT1 in a Child with Candidiasis and Mycobacterial Diseases.

Tello HG; STAT1 Consortium; Téllez VL, Okada S, Galicia LB.J Clin Immunol. 2024 Oct 22;45(1):29. doi: 10.1007/s10875-024-01820-8.PMID: 39436495

Effect of Vaccination Against *E. coli*, *C. perfringens* Type A/C on Piglet Productive and Clinical Parameters Under Field Conditions.

Dors A, Panek R, Łużyński W, Janeczko K, Augustyniak A, Turlewicz-Podbielska H, Czyżewska-Dors E, Pomorska-Mól M.Vaccines (Basel). 2024 Oct 17;12(10):1185. doi: 10.3390/vaccines12101185.PMID: 39460351

Persistence of immunity in children aged 2 months and 7 months - 5 years old after primary immunization with 13-valent pneumococcal conjugate vaccine.

Li G, Ren T, Zhang H, Ti J, Chang X, Yin S, Guan Y, Liu G, Liang Q, Liu J.Vaccine. 2024 Oct 24;42(24):126209. doi: 10.1016/j.vaccine.2024.126209. Epub 2024 Aug 31.PMID: 39217777

New Onset Systemic Lupus Erythematosus with Unusual Presentation and Multi-Organ Involvement after Covid-19 Vaccination in a Pediatric Patient: A Case Report.

Vahedi M, Malek A, Saadat S, Tahghighi Sharabian F, Pourbadakhshan N.Iran J Kidney Dis. 2024 Oct 18;18(5). doi: 10.52547/rh64ar35.PMID: 39423111

Prescribing equity: physicians as advocates for access to essential medicines. A call to action from medical graduates.

Adams-Gelinas E, Bianco A, Boisvert-Plante V, Conte S, Dupuis I, Gaita A, Hadidi L, Huang Y, Jabrane M, Kaffash K, Lamrani L, Leblanc M, Marier S, Moise A, Pereira-Kelton C, Rochon A, Rumjahn-Gryte S, Svistkova V, Viau MC, Yau K.Ther Adv Infect Dis. 2024 Oct 18;11:20499361241281136. doi: 10.1177/20499361241281136. eCollection 2024 Jan-Dec.PMID: 39430412

Spleen-Targeted mRNA Vaccine Doped with Manganese Adjuvant for Robust Anticancer Immunity In Vivo.

Luo Z, Lin Y, Meng Y, Li M, Ren H, Shi H, Cheng Q, Wei T.ACS Nano. 2024 Oct 28. doi: 10.1021/acsnano.4c09902. Online ahead of print.PMID: 39463304

Corrigendum to "Bilateral sequential acute retinal necrosis following administration of an adjuvanted recombinant subunit vaccine for herpes zoster" Canadian Journal of Ophthalmology, volume 59 (2024), e187-e189.

Ralhan A, Al-Mehiawi A.Can J Ophthalmol. 2024 Oct 16:S0008-4182(24)00308-9. doi: 10.1016/j.jcjo.2024.10.001. Online ahead of print.PMID: 39426799

Complete genome sequences of nine double recombinant vaccine-derived novel oral poliovirus type 2 genomes from Nigeria 2023-2024.

Castro CJ, Oderinde BS, Poston KD, Mawashi KY, Bullard K, Akinola M, Meade C, Liu H, Hu F, Bullows JE, Gonzalez Z, Pang H, Sarris S, Agha C, Dybdahl-Sissoko N, Perry DB, McDuffie L, Henderson E, Burns CC, Jorba J, Baba M.Microbiol Resour Announc. 2024 Oct 29:e0088124. doi: 10.1128/mra.00881-24. Online ahead of print.PMID: 39470242

Quantitative Biodistribution of OMVs Using SPECT/CT Imaging with HYNIC-Duramycin Radiolabeling.

Szöllősi D, Hajdrik P, Tordai H, Bergmann R, Horváth I, Mihály J, Gaál A, Jezsó B, Shailaja KD, Felföldi T, Padmanabhan P, Zoltán Gulyás B, Máthé D, Varga Z, Szigeti K.ACS Omega. 2024 Oct 11;9(42):42808-42813. doi: 10.1021/acsomega.4c04632. eCollection 2024 Oct 22.PMID: 39464435

Proteomic approach to identify host cell attachment proteins provides protective Pseudomonas aeruginosa vaccine antigen FtsZ.

Jurado-Martín I, Tomás-Cortázar J, Hou Y, Sainz-Mejías M, Mysior MM, Sadonès O, Huebner J, Romero-Saavedra F, Simpson JC, Baugh JA, McClean S.NPJ Vaccines. 2024 Oct 28;9(1):204. doi: 10.1038/s41541-024-00994-x.PMID: 39468053

Burden of Pneumococcal Disease in Young Children Due to Serotypes Contained in Different Pneumococcal Conjugate Vaccines in Eight Asian Countries and Territories.

Huang L, Li X, Eugenia N, Leung J, Hung SA, Cheong EZB, Avila R, Nua W, Choowanich K, Rampal R, Kulkarni N, Daigle D, Taysi BN.Vaccines (Basel). 2024 Oct 19;12(10):1197. doi: 10.3390/vaccines12101197.PMID: 39460362

Correction to: Has Ghana's Rotavirus Vaccine Switch Met Programmatic Expectations? An Analysis of National Surveillance Data; 2018-2022.

[No authors listed]Open Forum Infect Dis. 2024 Oct 16;11(10):ofae624. doi: 10.1093/ofid/ofae624. eCollection 2024 Oct.PMID: 39416996

The combination of infectious bronchitis virus BR1 and Mass vaccines provides broad protection.

Bataille H, Molenaar RJ, Schaefer G, Zuanaze M, De Wit S.Avian Pathol. 2024 Oct 24:1-7. doi: 10.1080/03079457.2024.2415668. Online ahead of print.PMID: 39446860

Immunoglobulin M-based local production in skin-associated lymphoid tissue of flounder (Paralichthys olivaceus) initiated by immersion with inactivated Edwardsiella tarda.

Guo Y, Sheng X, Tang X, Xing J, Chi H, Zhan W.Fish Shellfish Immunol. 2024 Oct 24;154:109982. doi: 10.1016/j.fsi.2024.109982. Online ahead of print.PMID: 39461396

Assessment of a Structurally Modified Alternanthera Mosaic Plant Virus as a Delivery System for Sarcoma Cells.

Fayzullina D, Manukhova T, Evtushenko E, Tsibulnikov S, Kirgizov K, Ulasov I, Nikitin N, Karpova O.Viruses. 2024 Oct 16;16(10):1621. doi: 10.3390/v16101621.PMID: 39459953

Genomic Analysis of *Aeromonas salmonicida* ssp. *salmonicida* Isolates Collected During Multiple Clinical Outbreaks Supports Association with a Single Epidemiological Unit.

Wojnarowski K, Cholewińska P, Steinbauer P, Lautwein T, Hussein W, Streb LM, Palić D.Pathogens. 2024 Oct 17;13(10):908. doi: 10.3390/pathogens13100908.PMID: 39452779

Immunoprotective effect of recombinant Lactobacillus plantarum expressing largemouth bass virus MCP on largemouth bass.

Yang YL, Zhang RR, Pang JY, Xing JH, Guo TK, Shi CW, Yang GL, Huang HB, Jiang YL, Wang JZ, Cao X, Wang N, Zeng Y, Yang WT, Yao JY, Wang CF.Fish Shellfish Immunol. 2024 Oct 24:109986. doi: 10.1016/j.fsi.2024.109986. Online ahead of print.PMID: 39461397

Cell binding tropism of rat hepatitis E virus is a pivotal determinant of its zoonotic transmission to humans.

Guo H, Xu J, Situ J, Li C, Wang X, Hou Y, Yang G, Wang L, Ying D, Li Z, Wang Z, Su J, Ding Y, Zeng D, Zhang J, Ding X, Wu S, Miao W, Tang R, Lu Y, Kong H, Zhou P, Zheng Z, Zheng K, Pan X, Sridhar S, Wang W.Proc Natl Acad Sci U S A. 2024 Nov 5;121(45):e2416255121. doi: 10.1073/pnas.2416255121. Epub 2024 Oct 28.PMID: 39467126

In-silico evaluation of the T-cell based immune response against SARS-CoV-2 omicron variants.

Sharma S, Roy D, Cherian S.Sci Rep. 2024 Oct 25;14(1):25413. doi: 10.1038/s41598-024-75658-w.PMID: 39455652

Impact of PCV13 and PPSV23 Vaccination on Invasive Pneumococcal Disease in Adults with Treated Rheumatoid Arthritis: A Population-Based Study.

Alvarez CA, Hall RG 2nd, Lin S, Perkins AR, Mortensen EM.Microorganisms. 2024 Oct 16;12(10):2073. doi: 10.3390/microorganisms12102073.PMID: 39458381

Intranasal Prime-Boost with Spike Vectors Generates Antibody and T-Cell Responses at the Site of SARS-CoV-2 Infection.

Metko M, Tonne J, Veliz Rios A, Thompson J, Mudrick H, Masopust D, Diaz RM, Barry MA, Vile RG.Vaccines (Basel). 2024 Oct 18;12(10):1191. doi: 10.3390/vaccines12101191.PMID: 39460356

Field Trial with Vaccine Candidates Against Bovine Tuberculosis Among Likely Infected Cattle in a Natural Transmission Setting.

Ferrara Muñiz X, García E, Blanco FC, Garbaccio S, Garro C, Zumárraga M, Dellagostin O, Trangoni M, Marfil MJ, Bianco MV, Abdala A, Revelli J, Bergamasco M, Soutullo A, Marini R, Rocha RV, Sánchez A, Bigi F, Canal AM, Eirin ME, Cataldi AA.Vaccines (Basel). 2024 Oct 17;12(10):1173. doi: 10.3390/vaccines12101173.PMID: 39460339

Antibodies targeting the Crimean-Congo Hemorrhagic Fever Virus nucleoprotein protect via TRIM21.

Leventhal SS, Bisom T, Clift D, Rao D, Meade-White K, Shaia C, Murray J, Mihalakakos EA, Hinkley T, Reynolds SJ, Best SM, Erasmus JH, James LC, Feldmann H, Hawman DW.Nat Commun. 2024 Oct 25;15(1):9236. doi: 10.1038/s41467-024-53362-7.PMID: 39455551

Protecting Against Postsurgery Oral Cancer Recurrence with an Implantable Hydrogel Vaccine for In Situ Photoimmunotherapy.

Chen L, Yin Q, Zhang H, Zhang J, Yang G, Weng L, Liu T, Xu C, Xue P, Zhao J, Zhang H, Yao Y, Chen X, Sun S.Adv Sci (Weinh). 2024 Oct 28:e2309053. doi: 10.1002/advs.202309053. Online ahead of print.PMID: 39467056

Multifocal Cutaneous Tuberculosis in an Immunocompetent Patient: A Case Report.

Mei Y, Wang H.Infect Drug Resist. 2024 Oct 25;17:4633-4636. doi: 10.2147/IDR.S482501. eCollection 2024.PMID: 39479401

Intranasal immunization with poly I:C and CpG ODN adjuvants enhances the protective efficacy against Helicobacter pylori infection in mice.

Sun M, Liu Y, Ni X, Tan R, Wang Y, Jiang Y, Ke D, Du H, Guo G, Liu K.Microbes Infect. 2024 Oct 24:105433. doi: 10.1016/j.micinf.2024.105433. Online ahead of print.PMID: 39461584

Quantifiable Cross-cultural Research on Medical Mistrust is Necessary for Effective and Equitable Vaccination in Low- and Middle-income Countries.

Prall SP.J Epidemiol Glob Health. 2024 Oct 28. doi: 10.1007/s44197-024-00319-0. Online ahead of print.PMID: 39466559

Divergence of variant antibodies following SARS-CoV-2 booster vaccines in myeloma and impact of hybrid immunity.

Moreno A, Manning K, Azeem MI, Nooka AK, Ellis M, Manalo RJ, Switchenko JM, Wali B, Kaufman JL, Hofmeister CC, Joseph NS, Lonial S, Dhodapkar KM, Dhodapkar MV, Suthar MS.NPJ Vaccines. 2024 Oct 27;9(1):201. doi: 10.1038/s41541-024-00999-6.PMID: 39465249

Analysis of the vaccination situation against Mpox in people living with HIV/AIDS: an ecological study.

Tavares NVDS, Santos AAPD, Carvalho MMPCF, Melo KORC, Oliveira HGDS, Bernardo THL, Calheiros SSA, Santos JAM.Rev Bras Enferm. 2024 Oct 25;77(5):e20230234. doi: 10.1590/0034-7167-2023-0234. eCollection 2024.PMID: 39476043

Media Representation of Scientists in Jornal Nacional: Reaffirmation of Stereotypes During the First Year of the COVID-19 Pandemic.

Massarani L, Oliveira T, Medeiros A, Tavares C, Soares C, Magalhães E, Gagliardi J, Maia L, Ramalho M, Carneiro M.Health Commun. 2024 Oct 28:1-12. doi: 10.1080/10410236.2024.2420143. Online ahead of print.PMID: 39466111

Prevalence of hepatitis A and B antibodies among enlisted accessions, Joint Base San Antonio-Lackland, 2023.

Kelly DC, Ching SJ, Casey T, Osuna A, Jung GO, Winkler EL, Sayers DR.MSMR. 2024 Oct 20;31(10):17-18.PMID: 39467271

A case report on symptomatic disease caused by serotype 4 vaccine virus following tetravalent anti-dengue vaccination.

Oliveira RD, Santos ADS, Gonçalves CCM, Giovanetti M, Alcantara LCJ, Demarchi LHF, Lichs GGC, Ilis TM, Hiane ST, Abbud A, Sacchi CT, Naveca FG, Santos DS, Marques EMM, Lucena Junior WP, Croda J.Travel Med Infect Dis. 2024 Oct 24;62:102782. doi: 10.1016/j.tmaid.2024.102782. Online ahead of print.PMID: 39461453

One HPV Vaccination Message Does Not Fit All: Differences Between Young Adults Deciding to Be Vaccinated and Parents Deciding for Their Children.

Su R, Stephens KK, McGlone MS, Jia M.Health Commun. 2024 Oct 31:1-16. doi: 10.1080/10410236.2024.2417115. Online ahead of print.PMID: 39478362

Stochastic optimal control of pre-exposure prophylaxis for HIV infection for a jump model.

Đorđević J, Dahl KR.J Math Biol. 2024 Oct 29;89(5):55. doi: 10.1007/s00285-024-02151-3.PMID: 39470810

How did slovak students perceive the COVID-19 pandemic: Insights from one of the least vaccinated EU countries.

Korim V, Masaryk R, Lesičková M.J Health Psychol. 2024 Oct 27:13591053241291477. doi: 10.1177/13591053241291477. Online ahead of print.PMID: 39462181

Corrigendum to "Enhancing vaccine efficacy: Evaluating the superiority of cationic liposome-embedded squalene adjuvant against PCV2 infection" [Virol. 600 (2024) 110251].

Zhang J, Pan W, Wang Y, Zhang C, Wang C, Li S, Chen F, Zhu A.Virology. 2024 Oct 21:110263. doi: 10.1016/j.virol.2024.110263. Online ahead of print.PMID: 39438241

The SARS-CoV-2 neutralising antibody profile of New Zealand adults in 2023: Impact of vaccination and infection.

McGregor R, Paterson A, Lavender B, Hooker C, Frampton C, Wiig K, Le Gros G, Ussher JE, Brewerton M, Moreland NJ.Vaccine. 2024 Oct 27;42(26):126482. doi: 10.1016/j.vaccine.2024.126482. Online ahead of print.PMID: 39467412

Reply to: mRNA COVID-19 vaccinations are not associated with RVO development 21 days and 12 weeks after vaccination.

Li JX, Wang YH, Bair H, Hsu SB, Chen C, Wei JC, Lin CJ.NPJ Vaccines. 2024 Oct 28;9(1):203. doi: 10.1038/s41541-024-00984-z.PMID: 39468071

Association of human leucocyte antigen loci with vaccine-induced immune thrombotic thrombocytopenia: Potential role of the interaction between platelet factor 4-derived peptides and MHC-II.

Petito E, Bury L, Antunes Heck L, Sadler B, De Candia E, Podda GM, Falanga A, Stefanini L, Boccatonda A, Sciancalepore P, Florio I, Imbalzano E, Marcucci R, Noris P, Panella M, Santoro RC, Turi MC, Vaudo G, Di Paola J, Rondina MT, Gresele P.Br J Haematol. 2024 Oct 27. doi: 10.1111/bjh.19838. Online ahead of print.PMID: 39462764

Serum Mpox-specific IgG titers before and after breakthrough Mpox infection in an HIV-infected individual with viral suppression and prior 2-dose Mpox vaccination.

Liu WD, Chao TL, Chang SY, Hung CC.J Microbiol Immunol Infect. 2024 Oct 22:S1684-1182(24)00188-9. doi: 10.1016/j.jmii.2024.10.003. Online ahead of print.PMID: 39472243

Cilgavimab and tixagevimab as pre-exposure prophylaxis in vaccine non-responder kidney transplant recipients during a period of prevalent SARS-CoV-2 BA.2 and BA.4/5 variants-a prospective cohort study (RESCUE-TX).

Reindl-Schwaighofer R, Heinzel A, Raab L, Strassl R, Herz CT, Regele F, Doberer K, Helk O, Spechtl P, Aschauer C, Hu K, Jagoditsch R, Reiskopf B, Böhmig GA, Benka B, Mahr B, Stiasny K, Weseslindtner L, Kammer M, Wekerle T, Oberbauer R.EBioMedicine. 2024 Oct 22;109:105417. doi: 10.1016/j.ebiom.2024.105417. Online ahead of print.PMID: 39442367

An open-label, phase IV randomised controlled trial of two schedules of a four-component meningococcal B vaccine in UK preterm infants.

Calvert A, Andrews N, Barlow S, Borrow R, Black C, Bromage B, Carr J, Clarke P, Collinson AC, Few K, Hayward N, Jones CE, Le Doare K, Ladhani SN, Louth J, Papadopoulou G, Pople M, Scorrer T, Snape MD, Heath PT.Arch Dis Child. 2024 Oct 18;109(11):898-904. doi: 10.1136/archdischild-2024-327040.PMID: 38977298

High-Throughput Algorithmic Optimization of In Vitro Transcription for SARS-CoV-2 mRNA Vaccine Production.

McMinn SE, Miller DV, Yur D, Stone K, Xu Y, Vikram A, Murali S, Raffaele J, Holland D, Wang SC, Smith JP.Biochemistry. 2024 Oct 20. doi: 10.1021/acs.biochem.4c00188. Online ahead of print.PMID: 39428617

Poly(β-amino ester) polymer library with monomer variation for mRNA delivery.

Kim HL, Saravanakumar G, Lee S, Jang S, Kang S, Park M, Sobha S, Park SH, Kim SM, Lee JA, Shin E, Kim YJ, Jeong HS, Kim D, Kim WJ.Biomaterials. 2024 Oct 16;314:122896. doi: 10.1016/j.biomaterials.2024.122896. Online ahead of print.PMID: 39426123

Development and characterization of HCMV recombinant subunit vaccines based on T-cell epitopes.

Li J, Li X, Liu F, Jiang S, Zhang S, Yu M, Liu W, Li Z, Wang B, Wang Y.Vaccine. 2024 Oct 16;42(26):126454. doi: 10.1016/j.vaccine.2024.126454. Online ahead of print.PMID: 39418688

Evaluating the effect of BCG vaccination for non-specific protection from infection in senior citizens during the COVID-19 pandemic: A randomised clinical trial.

Madsen AMR, Gehrt L, Schaltz-Buchholzer F, Möller S, Christiansen R, Schellerup L, Norberg LA, Krause TG, Nielsen S, Bliddal M, Aaby P, Benn CS.J Infect. 2024 Oct 17;89(6):106319. doi: 10.1016/j.jinf.2024.106319. Online ahead of print.PMID: 39423874

A Novel Monoclonal Antibody Against a Modified Vaccinia Ankara (MVA) Envelope Protein as a Tool for MVA Virus Titration by Flow Cytometry.

Cua S, Tello BA, Farelo MA, Rodriguez E, Escalante GM, Mutsvunguma LZ, Ogembo JG, Reidel IG.Viruses. 2024 Oct 17;16(10):1628. doi: 10.3390/v16101628.PMID: 39459960

A conserved Plasmodium nuclear protein is critical for late liver stage development.

Goswami D, Arredondo SA, Betz W, Armstrong J, Kumar S, Zanghi G, Patel H, Camargo N, Oualim KMZ, Seilie AM, Schneider S, Murphy SC, Kappe SHI, Vaughan AM.Commun Biol. 2024 Oct 25;7(1):1387. doi: 10.1038/s42003-024-07063-y.PMID: 39455824

Genotype of Varicella-zoster virus isolated in Jiangsu, China.

Wang Y, Zhang L, Bian M, Guo H, Wang Z, Hu Y, Deng X, Sun X, Ren J.Virol J. 2024 Oct 24;21(1):264. doi: 10.1186/s12985-024-02543-3.PMID: 39449007

Collaborative Real-World Evidence Among Regulators: Lessons and Perspectives.

Beck AE, Kampman M, Huynh C, Simon C, Plueschke K, Cohet C, Verpillat P, Robinson K, Arlett P.Clin Pharmacol Ther. 2024 Oct 21. doi: 10.1002/cpt.3457. Online ahead of print.PMID: 39434493

Drugs for Vector-Borne Protozoal Diseases in a One Health Scenario. A European Perspective.

Cordeiro da Silva A, Calogeropoulou T, Costi MP, Alunda JM.ACS Infect Dis. 2024 Oct 29. doi: 10.1021/acsinfecdis.4c00339. Online ahead of print.PMID: 39471826

Metatranscriptomic insights into the dengue patient blood microbiome: Enhanced microbial diversity and metabolic activity in severe patients.

Yadav A, Devi P, Kumari P, Shamim U, Tarai B, Budhiraja S, Pandey R.PLoS Negl Trop Dis. 2024 Oct 17;18(10):e0012589. doi: 10.1371/journal.pntd.0012589. eCollection 2024 Oct.PMID: 39418297

CXCL13 promotes broad immune responses induced by circular RNA vaccines.

Wan J, Wang C, Wang Z, Wang L, Wang H, Zhou M, Fu ZF, Zhao L.Proc Natl Acad Sci U S A. 2024 Oct 29;121(44):e2406434121. doi: 10.1073/pnas.2406434121. Epub 2024 Oct 22.PMID: 39436660

Structure-based identification of small-molecule inhibitors that target the DIII domain of the Dengue virus glycoprotein E pan-serotypically.

Agrawal P, Arya H, Senthil Kumar G.PLoS One. 2024 Oct 25;19(10):e0311548. doi: 10.1371/journal.pone.0311548. eCollection 2024.PMID: 39453957

Generation of a Nonbilayer Lipid Nanoenvironment after Epitope Binding Potentiates Neutralizing HIV-1 MPER Antibody.

Insausti S, Ramos-Caballero A, Wiley B, González-Resines S, Torralba J, Elizaga-Lara A, Shamblin C, Ojida A, Caaveiro JMM, Zwick MB, Rujas E, Domene C, Nieva JL.ACS Appl Mater Interfaces. 2024 Oct 24. doi: 10.1021/acsami.4c13353. Online ahead of print.PMID: 39446590

Attenuated neutralization, maintained specificity: Humoral response to SARS-CoV-2 booster in kidney allograft recipients.

Fialova M, Cecrdlova E, Zahradka I, Petr V, Hruby F, Modos I, Viklicky O, Striz I.Diagn Microbiol Infect Dis. 2024 Oct 16;111(1):116550. doi: 10.1016/j.diagmicrobio.2024.116550. Online ahead of print.PMID: 39437653

The Efficacy of Post-Exposure Prophylaxis in Infants Born to HBsAg-Positive Mothers: A Single Center Experience in Saudi Arabia.

Al Qurashi M, Al-Najjar H, Aga SS, Mohammad H, Mustafa A, Al Hindi M, Ahmed A, Al Harbi M, Hasosah M, Alsahaf A, Aldabbagh M, Abed S.Glob Pediatr Health. 2024 Oct 18;11:2333794X241290780. doi: 10.1177/2333794X241290780. eCollection 2024.PMID: 39429536

Autoantibodies to protein S may explain rare cases of coagulopathy following COVID-19 vaccination.

Yalcinkaya A, Cavalli M, Aranda-Guillén M, Cederholm A, Güner A, Rietrae I, Mildner H, Behere A, Eriksson O, Gonzalez L, Mugabo CH, Johnsson A, Lakshmikanth T, Brodin P, Wadelius M, Hallberg P, Landegren N.Sci Rep. 2024 Oct 18;14(1):24512. doi: 10.1038/s41598-024-75514-x.PMID: 39424883

The recombinant feline herpesvirus 1 expressing feline Calicivirus VP1 protein is safe and effective in cats.

Tang A, Zhu M, Zhu J, Zhang D, Zhu S, Meng C, Li C, Liu G.Vaccine. 2024 Oct 27;42(26):126468. doi: 10.1016/j.vaccine.2024.126468. Online ahead of print.PMID: 39467408

Footprints of innate immune activity during HIV-1 reservoir cell evolution in early-treated infection.

Sun W, Gao C, Gladkov GT, Roseto I, Carrere L, Parsons EM, Gasca-Capote C, Frater J, Fidler S, Yu XG, Lichterfeld M; RIVER Trial Study Group.J Exp Med. 2024 Nov 4;221(11):e20241091. doi: 10.1084/jem.20241091. Epub 2024 Oct 28.PMID: 39466203

"But then that's another barrier": A qualitative study of parent and provider perspectives on rural versus urban disparities in adolescent vaccination.

Brewer SE, Cataldi JR, Perreira C, Nederveld A, Fisher MP, Furniss A, Williams C, O'Leary ST, Dempsey AF.Vaccine. 2024 Oct 21;42(26):126456. doi: 10.1016/j.vaccine.2024.126456. Online ahead of print.PMID: 39437648

Genetically Encoded Trensor Circuits Report HeLa Cell Treatment with Polyplexed Plasmid DNA and Small-Molecule Transfection Modulators.

Redwood-Sawyerr C, Howe G, Evans Theodore A, Nesbeth DN.ACS Synth Biol. 2024 Oct 18;13(10):3163-3172. doi: 10.1021/acssynbio.4c00148. Epub 2024 Sep 6.PMID: 39240234

Cancer Vaccines: Recent Insights and Future Directions.

Malacopol AT, Holst PJ.Int J Mol Sci. 2024 Oct 19;25(20):11256. doi: 10.3390/ijms252011256.PMID: 39457036

Using reverse vaccinology techniques combined with B-cell epitope prediction to screen potential antigenic proteins of the bovine pathogen Clostridium perfringens type A.

Qin H, Ren J, Zeng D, Jin R, Deng Q, Su L, Luo Z, Jiang J, Wang P.Microb Pathog. 2024 Oct 22;197:107049. doi: 10.1016/j.micpath.2024.107049. Online ahead of print.PMID: 39447662

Reliability of information recorded on the National Immunization Program Information System.

Moraes JC, França AP, Guibu IA, Barata RB; ICV 2020 Group; Silva AID, Ramos AN Jr, França AP, Oliveira ANM, Boing AF, Domingues CMAS, Oliveira CS, Maciel ELN, Guibu IA, Mirabal IRB, Barbosa JC, Lima JC, Moraes JC, Luhm KR, Caetano KAA, Lima LHO, Antunes MBC, Teixeira MDG, Teixeira MDC, Borges MFSO, Queiroz RCS, Gurgel RQ, Barata RB, Azevedo RNC, Oliveira SMDVL, Teles SA, Gama SGND, Mengue SS, Simões TC, Nascimento V, Araújo WN.Epidemiol Serv Saude. 2024 Oct 21;33(spe2):e20231309. doi: 10.1590/S2237-96222024v33e20231309.especial2.en. eCollection 2024.PMID: 39442145

Factors associated with disease flare following SARS-CoV-2 vaccination in people with inflammatory rheumatic and musculoskeletal diseases: results from the physician-reported EULAR Coronavirus Vaccine (COVAX) Registry.

Farisogullari B, Lawson-Tovey S, Hyrich KL, Gossec L, Carmona L, Strangfeld A, Mateus EF, Schäfer M, Rodrigues A, Hachulla E, Gomez-Puerta JA, Mosca M, Durez P, Trefond L, Goulenok T, Cornalba M, Stenova E, Bulina I, Strakova E, Zepa J, Roux N, Brocq O, Veillard E, Raffeiner B, Burmester GR, Mariette X, Machado PM; EULAR COVAX Registry.Ann Rheum Dis. 2024 Oct 21;83(11):1584-1595. doi: 10.1136/ard-2024-225869.PMID: 38816065

Determinants of COVID-19 vaccination acceptance based on the novel Omale INDEPT FORCIS Framework and recommendations for subsequent pandemics: a qualitative study among community members in Ebonyi state, Nigeria.

Omale UI, Adeke AS, Oka OU, Ikegwuonu CO, Iyare O, Nnachi OO, Uduma VU, Amuzie CI, Nkwo GE, Nwali UIA, Ukpabi OO, Okeke IM, Ewah RL.Int J Equity Health. 2024 Oct 28;23(1):223. doi: 10.1186/s12939-024-02284-3.PMID: 39468612

Human anti-rabies care in the State of São Paulo: evaluating prophylaxis conduct in individuals attacked by dogs and cats.

Andrade BFMDC, Queiroz LH, Marinho M.Rev Soc Bras Med Trop. 2024 Oct 28;57:e004202024. doi: 10.1590/0037-8682-0170-2023. eCollection 2024.PMID: 39476076

Therapeutic effect of topical tamoxifen in murine cutaneous leishmaniasis caused by *Leishmania major*.

Hassani-Abharian P, Hejazi Dehaghani S, Shahmoradi Z, Hejazi SH.Antimicrob Agents Chemother. 2024 Oct 24:e0035824. doi: 10.1128/aac.00358-24. Online ahead of print.PMID: 39445817

Novel imported clades accelerated the RSV surge in Beijing, China, 2023-2024.

Wei X, Wang L, Li M, Qi J, Kang L, Hu G, Gong C, Wang C, Wang Y, Huang F, Gao GF.J Infect. 2024 Oct 18;89(6):106321. doi: 10.1016/j.jinf.2024.106321. Online ahead of print.PMID: 39426631

The risk of postherpetic neuralgia in COVID-19 vaccination-associated herpes zoster: A retrospective cohort study using TriNetX.

Ma SH, Chen TL, Ou WF, Chao WC, Chen HH, Wu CY.Vaccine. 2024 Oct 18;42(26):126451. doi: 10.1016/j.vaccine.2024.126451. Online ahead of print.PMID: 39426285

Zika virus tropism and pathogenesis: understanding clinical impacts and transmission dynamics.

Tajik S, Farahani AV, Ardekani OS, Seyedi S, Tayebi Z, Kami M, Aghaei F, Hosseini TM, Nia MMK, Soheili R, Letafati A.Virol J. 2024 Oct 29;21(1):271. doi: 10.1186/s12985-024-02547-z.PMID: 39472938

Assessment of Nine Real-Time PCR Kits for African Swine Fever Virus Approved in Republic of Korea.

Lee S, Han TU, Kim JH.Viruses. 2024 Oct 17;16(10):1627. doi: 10.3390/v16101627.PMID: 39459959

Double-layered protein nanoparticles conjugated with truncated flagellin induce improved mucosal and systemic immune responses in mice.

Kim JK, Zhu W, Dong C, Wei L, Ma Y, Denning T, Kang SM, Wang BZ.Nanoscale Horiz. 2024 Oct 21;9(11):2016-2030. doi: 10.1039/d4nh00287c.PMID: 39240547

Genome-wide fitness analysis of *Salmonella enterica* reveals *aroA* mutants are attenuated due to iron restriction *in vitro*.

Rooke JL, Goodall ECA, Pullela K, Da Costa R, Martinelli N, Smith C, Mora M, Cunningham AF, Henderson IR.mBio. 2024 Oct 16;15(10):e0331923. doi: 10.1128/mbio.03319-23. Epub 2024 Sep 17.PMID: 39287440

Memory T Cells Subpopulations in a Cohort of COVID-19 Vaccinated or Recovered Subjects.

Iuliano M, Mongiovì RM, Parente A, Grimaldi L, Kertusha B, Carraro A, Marocco R, Mancarella G, Del Borgo C, Dorrucci M, Lichtner M, Mangino G, Romeo G.Viral Immunol. 2024 Oct 30. doi: 10.1089/vim.2024.0065. Online ahead of print.PMID: 39474707

Modelling the spatial variability and uncertainty for under-vaccination and zero-dose children in fragile settings.

Alegana VA, Ticha JM, Mwenda JM, Katsande R, Gacic-Dobo M, Danovaro-Holliday MC, Shey CW, Akpaka KA, Kazembe LN, Impouma B.Sci Rep. 2024 Oct 17;14(1):24405. doi: 10.1038/s41598-024-74982-5.PMID: 39420047

Enhancing preventive and therapeutic cancer vaccine efficacy through biotherapeutic ligand-associated extracellular vesicles.

Kahraman T, Akpinar GG, Yildirim M, Larssen P, Bayyurt-Kocabas B, Yagci FC, Gursel A, Horuluoglu BH, Yazar V, Ayanoglu IC, Yildirim TC, Evcili I, Yilmaz IC, Eldh M, Gabrielsson S, Guler U, Salih B, Gursel M, Gursel I.J Control Release. 2024 Oct 25;376:618-631. doi: 10.1016/j.jconrel.2024.10.025. Online ahead of print.PMID: 39419449

AMR and Sustainable Development Goals: at a crossroads.

Aslam B, Asghar R, Muzammil S, Shafique M, Siddique AB, Khurshid M, Ijaz M, Rasool MH, Chaudhry TH, Aamir A, Baloch Z.Global Health. 2024 Oct 17;20(1):73. doi: 10.1186/s12992-024-01046-8.PMID: 39415207

A 50-year-old question: Can imidocarb chemoprophylaxis ensure seroconversion for babesiosis in cattle under field conditions?

Reck J, Klafke G, Scheffer R, Correia TR, Scott FB, Martins JR.Vet Parasitol. 2024 Oct 19;332:110337. doi: 10.1016/j.vetpar.2024.110337. Online ahead of print.PMID: 39467446

Factors influencing vaccination up-take among nomadic population in four regions of Ghana: a qualitative study.

Afari-Asiedu S, Febir LG, Tawiah C, Omoleke S, Ofosu-Apea P, Osei-Sarpong F, Ziao AMC, Kyei C, Apraku EA, Antwi A, Kubio C, Ofosu AA, Kwarteng PG, Shetye M, Asante KP.BMC Public Health. 2024 Oct 22;24(1):2921. doi: 10.1186/s12889-024-20397-w.PMID: 39438846

Impaired SARS-CoV-2-specific responses via activated T follicular helper cells in immunocompromised kidney transplant recipients.

Tomita Y, Uehara S, Terada M, Yamamoto N, Nakamura M.Sci Rep. 2024 Oct 19;14(1):24571. doi: 10.1038/s41598-024-76251-x.PMID: 39427014

Practical immunomodulatory landscape of glioblastoma multiforme (GBM) therapy.

Norollahi SE, Yousefi B, Nejatifar F, Yousefzadeh-Chabok S, Rashidy-Pour A, Samadani AA.J Egypt Natl Canc Inst. 2024 Oct 28;36(1):33. doi: 10.1186/s43046-024-00240-4.PMID: 39465481

Emergence and Etiological Characteristics of Novel Genotype Ⅱ Pseudorabies Virus Variant with High Pathogenicity in Tianjin, China.

Cheng XJ, Cheng N, Yang C, Li XL, Sun JY, Sun YF.Microb Pathog. 2024 Oct 21:107061. doi: 10.1016/j.micpath.2024.107061. Online ahead of print.PMID: 39442822

Vaccination coverage survey by social stratum in children up to 24 months of age in Londrina, Paraná, Brazil, between 2021 and 2022.

Oliveira E, Moraes JC, França AP; ICV 2020 Group; Silva AID, Ramos AN Jr, França AP, Oliveira ANM, Boing AF, Domingues CMAS, Oliveira CS, Maciel ELN, Guibu IA, Mirabal IRB, Barbosa JC, Lima JC, Moraes JC, Luhm KR, Caetano KAA, Lima LHO, Antunes MBC, Teixeira MDG, Teixeira MDC, Borges MFSO, Queiroz RCS, Gurgel RQ, Barata RB, Azevedo RNC, Oliveira SMDVL, Teles SA, Gama SGND, Mengue SS, Simões TC, Nascimento V, Araújo WN.Epidemiol Serv Saude. 2024 Oct 21;33(spe2):e20231393. doi: 10.1590/S2237-96222024v33e20231393.especial2.en. eCollection 2024.PMID: 39442146

Polarization toward Tfh2 cell involved in development of MBC and antibody responses against Plasmodium vivax infection.

Thawornpan P, Salsabila ZZ, Kochayoo P, Khunsri T, Malee C, Wangriatisak K, Leepiyasakulchai C, Ntumngia FB, Adams JH, Chootong P.PLoS Negl Trop Dis. 2024 Oct 30;18(10):e0012625. doi: 10.1371/journal.pntd.0012625. eCollection 2024 Oct.PMID: 39475899

Vaccination during febrile illness, what do we know? A systematic-narrative hybrid review of the literature and international recommendations.

Essalim S, Tachet C, Demingo S, Bruel S, Gagneux-Brunon A, Botelho-Nevers E.Vaccine. 2024 Oct 24;42(26):126473. doi: 10.1016/j.vaccine.2024.126473. Online ahead of print.PMID: 39454291

Non-Physician Healthcare Workers During COVID-19 Pandemic and Association Between Work-Related Factors, Perceived Stress, Depressive Symptoms, and Fatigue.

Mahony WL, Ostovar-Kermani T, Gonzalez S, Zoorob R, Rupp RE, Hirth J.Disaster Med Public Health Prep. 2024 Oct 30;18:e242. doi: 10.1017/dmp.2024.131.PMID: 39473386

Role of new vaccinators/pharmacists in life-course vaccination.

Mark Doherty T, Privor-Dumm L.Ann Med. 2024 Dec;56(1):2411603. doi: 10.1080/07853890.2024.2411603. Epub 2024 Oct 25.PMID: 39453787

Infectious etiology of intussusception in Indian children less than 2 years old: a matched case-control analysis.

Praharaj I, Reddy SN, Nair NP, Tate JE, Giri S, Thiyagarajan V, Mohan VR, Revathi R, Maheshwari K, Hemavathy P, Kumar N, Gupte MD, Arora R, Senthamizh S, Mekala S, Goru KB, Pamu P, Badur M, Pradhan S, Dash M, Mohakud NK, Ray RK, Gathwala G, Gupta M, Kanojia R, Gupta R, Goyal S, Sharma P, Mathew MA, Kochukaleekal Jacob TJ, Sundaram B, Girish Kumar CP, Dorairaj P, Pitchumani R, Maniam R, Kumaravel S, Jain H, Goswami JK, Wakhlu A, Gupta V, Liu J, Houpt ER, Parashar UD, Kang G.Gut Pathog. 2024 Oct 23;16(1):61. doi: 10.1186/s13099-024-00659-z.PMID: 39444015

Optimal control analysis on the spread of COVID-19: Impact of contact transmission and environmental contamination.

Singh Negi S, Ravina, Sharma N, Priyadarshi A.Gene. 2024 Oct 22:149033. doi: 10.1016/j.gene.2024.149033. Online ahead of print.PMID: 39447707

Characterization of the viral genome of Omicron variants of SARS-CoV-2 circulating in Tripura, a remote frontier state in Northeastern India.

Chakrabarti A, Majumder S, Sarkar A, Majumdar T.Mol Biol Rep. 2024 Oct 28;51(1):1100. doi: 10.1007/s11033-024-10048-z.PMID: 39466467

Endoplasmic Reticulum Stress Nano-Orchestrators for Precisely Regulated Immunogenic Cell Death as Potent Cancer Vaccines.

Teng Y, Yang Z, Peng Y, Yang Y, Chen S, Li J, Gao D, Sun W, Wu Z, Zhou Y, Li X, Qi X.Adv Healthc Mater. 2024 Oct 24:e2401851. doi: 10.1002/adhm.202401851. Online ahead of print.PMID: 39449212

Development of an ELISA for an effective potency determination of recombinant rabies human monoclonal antibody.

Divase A, Pisal S, Dake M, Dhere R, Dakshinamurthy PK, Reddy PRS, Kamat C, Chahar DS, Pal J, Nawani N.J Immunol Methods. 2024 Oct 22:113769. doi: 10.1016/j.jim.2024.113769. Online ahead of print.PMID: 39447634

Multiplexed Antibody Sequencing and Profiling of the Human Hemagglutinin-specific Memory B Cell Response following Influenza Vaccination.

Raju N, Kramer KJ, Cavallaro M, Diotti RA, Shiakolas AR, Campos Mota Y, Richardson RA, Scheibe IJ, Ross TM, Georgiev IS, Sautto GA.J Immunol. 2024 Oct 23:ji2400326. doi: 10.4049/jimmunol.2400326. Online ahead of print.PMID: 39441352

Determinants of maternal adherence to child vaccination in jordan: A cross-sectional study.

Ta'an WF, Al-Rashdan RA, Shatnawi RM, Ai-Zenati A, Williams B, Mukattash TL.Sci Rep. 2024 Oct 20;14(1):24635. doi: 10.1038/s41598-024-74183-0.PMID: 39428393

Enhancing the tissue penetration to improve sonodynamic immunotherapy for pancreatic ductal adenocarcinoma using membrane-camouflaged nanoplatform.

Du J, Chen X, Xu X, Que Z, Zhai M, Xiang Q, Zhang Z, Zhang Z, Shao Y, Yang X, Miao F, Zhang J, Xie J, Ju S.Eur J Nucl Med Mol Imaging. 2024 Oct 18. doi: 10.1007/s00259-024-06952-y. Online ahead of print.PMID: 39422735

Near-atomic structures of RHDV reveal insights into capsid assembly and different conformations between mature virion and VLP.

Ruan Z, Shao Q, Song Y, Hu B, Fan Z, Wei H, Liu Y, Wang F, Fang Q.J Virol. 2024 Oct 22:e0127524. doi: 10.1128/jvi.01275-24. Online ahead of print.PMID: 39436094

Isolation and evaluation of the pathogenicity of a hybrid shiga toxin-producing and Enterotoxigenic Escherichia coli in pigs.

Nammuang D, Shen YW, Ke CH, Kuan NL, Lin CN, Yeh KS, Chang YC, Chang CY, Chang HW.BMC Vet Res. 2024 Oct 21;20(1):480. doi: 10.1186/s12917-024-04317-z.PMID: 39434059

The Future of Cervical Cancer Screening.

Goldstein A, Gersh M, Skovronsky G, Moss C.Int J Womens Health. 2024 Oct 23;16:1715-1731. doi: 10.2147/IJWH.S474571. eCollection 2024.PMID: 39464249

Histone deacetylase 2 and 3 of *Sarcoptes scabiei*: characterization of a potential drug target.

He R, Xu L, Guo M, Cheng K, Song Z, Xie Y, Wang H, Zhou X, Gu X, Xu J, Deng H, Yang G.Microbiol Spectr. 2024 Oct 22:e0073724. doi: 10.1128/spectrum.00737-24. Online ahead of print.PMID: 39436071

Rubella epidemiology in Lesotho after vaccine introduction: a five-year review, 2018-2022.

Makhupane T, Habedi D.BMC Public Health. 2024 Oct 18;24(1):2874. doi: 10.1186/s12889-024-20081-z.PMID: 39425042

Triple-negative breast cancer-derived exosomes change the immunological features of human monocyte-derived dendritic cells and influence T-cell responses.

Safaei S, Alipour S, Bahojb Mahdavi SZ, Shalmashi H, Shahgoli VK, Shanehbandi D, Baradaran B, Kazemi T.Mol Biol Rep. 2024 Oct 17;51(1):1058. doi: 10.1007/s11033-024-10007-8.PMID: 39417912

Using health literacy principles to improve understanding of evolving evidence in health emergencies: Optimisation and evaluation of a COVID-19 vaccination risk-benefit calculator.

Bonner C, Taba M, Fajardo MA, Batcup C, Newell BR, Li AX, Mayfield HJ, Lau CL, Litt JCB.Vaccine. 2024 Oct 24;42(24):126296. doi: 10.1016/j.vaccine.2024.126296. Epub 2024 Sep 3.PMID: 39232400

Co-designing an intervention to improve the childhood catch-up vaccination process for migrant parents in Australia.

Chau M, Kaufman J, Holland P, Danchin M, Tuckerman J.Vaccine. 2024 Oct 24;42(24):126104. doi: 10.1016/j.vaccine.2024.07.005. Epub 2024 Jul 19.PMID: 39030082

Unraveling the full impact of SPD_0739: a key effector in *S. pneumoniae* iron homeostasis.

Womack E, Antone M, Eichenbaum Z.Microbiol Spectr. 2024 Oct 29:e0133124. doi: 10.1128/spectrum.01331-24. Online ahead of print.PMID: 39470285

Predictors of mental well-being among family caregivers of adults with intellectual and developmental disabilities during COVID-19.

Mendoza O, St John L, Tarzi G, Thakur A, Lake JK, Lunsky Y.BJPsych Open. 2024 Oct 28;10(6):e191. doi: 10.1192/bjo.2024.761.PMID: 39465571

Serum proteomic analysis identifies ITIH4 as potential novel biomarkers for feline infectious peritonitis.

Jiao Y, Yang M, Fang L, Yan Y, Fu Z, Li M, Li L, Liu Z, Hu X, Wu B, Shi Y, Kang C, Shen Z, Peng G.J Proteomics. 2024 Oct 23:105338. doi: 10.1016/j.jprot.2024.105338. Online ahead of print.PMID: 39454824

Influencing factors of antibody response after 2 doses of inactivated COVID-19 vaccine among adults aged 18 years in Chongqing, China: A cross-sectional serological study.

Wang Q, Xu J, Liu Y, Li J.Medicine (Baltimore). 2024 Oct 18;103(42):e40075. doi: 10.1097/MD.0000000000040075.PMID: 39432616

Effectiveness and efficiency of immunisation strategies to prevent RSV among infants and older adults in Germany: a modelling study.

Krauer F, Guenther F, Treskova-Schwarzbach M, Schoenfeld V, Koltai M, Jit M, Hodgson D, Schneider U, Wichmann O, Harder T, Sandmann FG, Flasche S.BMC Med. 2024 Oct 17;22(1):478. doi: 10.1186/s12916-024-03687-3.PMID: 39420374

Genetic and pathogenic potential of highly pathogenic avian influenza H5N8 viruses from live bird markets in Egypt in avian and mammalian models.

Moatasim Y, Aboulhoda BE, Gomaa M, El Taweel A, Kutkat O, Kamel MN, El Sayes M, GabAllah M, Elkhrsawy A, AbdAllah H, Kandeil A, Ali MA, Kayali G, El-Shesheny R.PLoS One. 2024 Oct 29;19(10):e0312134. doi: 10.1371/journal.pone.0312134. eCollection 2024.PMID: 39471134

Birth Outcomes After Pertussis and Influenza Diagnosed in Pregnancy: A Retrospective, Population-Based Study.

Frawley JE, He WQ, McCallum L, McIntyre P, Hayen A, Gidding H, Sullivan E, Liu B.BJOG. 2024 Oct 18. doi: 10.1111/1471-0528.17984. Online ahead of print.PMID: 39422128

The Effect of Cervical Cancer Education Given to Women in Turkey on Knowledge, Attitudes, and Health Beliefs: A Randomized Controlled Study.

Gül Öztaş H, Işik K.Public Health Nurs. 2024 Oct 17. doi: 10.1111/phn.13456. Online ahead of print.PMID: 39420668

Tetrahydropyrimidine Ionizable Lipids for Efficient mRNA Delivery.

Isaac I, Shaikh A, Bhatia M, Liu Q, Park S, Bhattacharya C.ACS Nano. 2024 Oct 22;18(42):29045-29058. doi: 10.1021/acsnano.4c10154. Epub 2024 Oct 11.PMID: 39393001

Identification and characterization of linear B-cell epitopes on African swine fever virus H171R protein.

Xin C, Chen Z, Zhou J, Chen Y, Liu Y, Liu H, Liang C, Zhu X, Qi Y, Zhang G, Wang A.Microbiol Spectr. 2024 Oct 23:e0141124. doi: 10.1128/spectrum.01411-24. Online ahead of print.PMID: 39440988

Clinical Staff Perceptions of Pay-for-Performance Financial Incentives for HPV Vaccine Promotion.

Rodriguez V, Brignole K, Licciardello Queen T, Trogdon JG.Am J Med Qual. 2024 Oct 30. doi: 10.1097/JMQ.0000000000000207. Online ahead of print.PMID: 39472771

The phospholipase A of *Neisseria gonorrhoeae* lyses eukaryotic membranes and is necessary for survival in neutrophils and cervical epithelial cells.

Apicella MA, Edwards JL, Ketterer MR, Weiss DS, Zhang Y, Jen FE-C, Jennings MP.mBio. 2024 Oct 16;15(10):e0242524. doi: 10.1128/mbio.02425-24. Epub 2024 Sep 26.PMID: 39324821

Analysis of virulence factors in extracellular vesicles secreted by Naegleria fowleri.

Rodríguez-Mera IB, Rojas-Hernández S, Barrón-Graciano KA, Carrasco-Yépez MM.Parasitol Res. 2024 Oct 21;123(10):357. doi: 10.1007/s00436-024-08378-9.PMID: 39432113

The spatial-temporal variations and influencing factors of COVID-19 case fatality rate: a worldwide study in 30 countries from February 2021 to May 2022.

Zhao J, Huang X, Li X, Li B, Rong Z, Huang X, Ren R, Li D, Li C, Li Q, Xiao J, Shi G.Epidemiol Infect. 2024 Oct 17;152:e124. doi: 10.1017/S0950268824000852.PMID: 39417399

Triton X-100-treated virus-based ELLA demonstrates discordant antigenic evolution of influenza B virus hemagglutinin and neuraminidase.

Do THT, Wille M, Wheatley AK, Koutsakos M.J Virol. 2024 Oct 22;98(10):e0118624. doi: 10.1128/jvi.01186-24. Epub 2024 Oct 3.PMID: 39360825

Exploring the delivery of adult vaccination outside of primary care settings: A mixed methods scoping review.

Lentakis E, Seale H, Lazarus R, Mounier-Jack S.Vaccine. 2024 Oct 27;42(26):126458. doi: 10.1016/j.vaccine.2024.126458. Online ahead of print.PMID: 39467410

A human model of Buruli ulcer: Provisional protocol for a *Mycobacterium ulcerans* controlled human infection study.

Muhi S, Marshall JL, O'Brien DP, Johnson PDR, Ross G, Ramakrishnan A, Mackay LK, Doerflinger M, McCarthy JS, Jamrozik E, Osowicki J, Stinear TP.Wellcome Open Res. 2024 Oct 21;9:488. doi: 10.12688/wellcomeopenres.22719.1. eCollection 2024.PMID: 39386965

Anaplasma phagocytophilum invasin AipA interacts with CD13 to elicit Src kinase signaling that promotes infection.

Lind MCH, Naimi WA, Chiarelli TJ, Sparrer T, Ghosh M, Shapiro L, Carlyon JA.mBio. 2024 Oct 16;15(10):e0156124. doi: 10.1128/mbio.01561-24. Epub 2024 Sep 26.PMID: 39324816

Prevalence of Human Papillomavirus (HPV) and HPV Type Distribution in Penile Samples in Young Men in Denmark: Results 10 Years After Implementation of a Girls-Only HPV Vaccination Program.

Munk C, Reinholdt K, Kjaer AK, Hemmingsen CH, Ørnskov D, Iftner T, Waldstrøm M, Kjaer SK.J Infect Dis. 2024 Oct 16;230(4):949-956. doi: 10.1093/infdis/jiae068.PMID: 38470214

eHealth Communication Intervention to Promote Human Papillomavirus Vaccination Among Middle-School Girls: Development and Usability Study.

Kim Y, Lee H, Park J, Kim YC, Kim DH, Lee YM.JMIR Form Res. 2024 Oct 28;8:e59087. doi: 10.2196/59087.PMID: 39466304

Cycle Threshold Values of SARS-CoV-2 RT-PCR during Outbreaks in Nursing Homes: A Retrospective Cohort Study.

Gascó-Laborda JC, Gil-Fortuño M, Tirado-Balaguer MD, Meseguer-Ferrer N, Sabalza-Baztán O, Pérez-Olaso Ó, Gómez-Alfaro I, Poujois-Gisbert S, Hernández-Pérez N, Lluch-Bacas L, Rusen V, Arnedo-Pena A, Bellido-Blasco JB.Epidemiologia (Basel). 2024 Oct 16;5(4):658-668. doi: 10.3390/epidemiologia5040046.PMID: 39449389

Detection of *Hepatovirus A* (HAV) in wastewater indicates widespread national distribution and association with socioeconomic indicators of vulnerability.

Zulli A, Chan EMG, Boehm AB.mSphere. 2024 Oct 30:e0064524. doi: 10.1128/msphere.00645-24. Online ahead of print.PMID: 39475316

Unveiling the dimension of regional disparities: Assessing the disruption of immunisation services by COVID-19 in Bangladesh.

Akter E, Sayeed A, Siddique AB, Ahamed B, Manna RM, Hossain L, Tanvir KM, Sanim MAI, Rahman MH, Chowdhury S, Ara T, Hossain MA, Haider MS, Jabeen S, Ameen S, Shomik MS, Ahmed A, Huicho L, Matijasevich A, Maiga A, Rahman AE, Akseer N, El Arifeen S, Hossain AT, Amouzou A.J Glob Health. 2024 Oct 25;14:05028. doi: 10.7189/jogh.14.05028.PMID: 39451061

Leveraging Multiple Administrative Data Sources to Reduce Missing Race and Ethnicity Data: A Descriptive Epidemiology Cross-Sectional Study of COVID-19 Case Relative Rates.

Dorabawila V, Hoen R, Hoefer D.J Racial Ethn Health Disparities. 2024 Oct 22. doi: 10.1007/s40615-024-02211-w. Online ahead of print.PMID: 39436568

Antibody sequence determinants of viral antigen specificity.

Abu-Shmais AA, Vukovich MJ, Wasdin PT, Suresh YP, Marinov TM, Rush SA, Gillespie RA, Sankhala RS, Choe M, Joyce MG, Kanekiyo M, McLellan JS, Georgiev IS.mBio. 2024 Oct 16;15(10):e0156024. doi: 10.1128/mbio.01560-24. Epub 2024 Sep 12.PMID: 39264172

mRNA vaccination reduces the thrombotic possibility in COVID-19: Inflammation risk estimates.

Al-Sammarraie MR, Al-Sammarraie MR, Azaiez F, Al-Rubae ZMM, Litaiem H, Taay YM.Int Immunopharmacol. 2024 Oct 25;140:112776. doi: 10.1016/j.intimp.2024.112776. Epub 2024 Jul 29.PMID: 39079343

Rapid identification, pathotyping and quantification of infectious bursal disease virus by high-resolution melting curve quantitative reverse transcription PCR analysis: An innovative technology well-suited for real-time large-scale epidemiological surveillance.

Wang W, Zhang Y, Zuo W, Qiao Y, Shi J, Huang J, Huang T, Wei T, Mo M, He X, Wei P.Poult Sci. 2024 Oct 21;103(12):104440. doi: 10.1016/j.psj.2024.104440. Online ahead of print.PMID: 39471672

Identifying System-Level Strategies to Engage in HPV Prevention Across Oral Health and Primary Care Settings.

Maness SB, Egan KL, Sanchez L, Al-Dajani M, Torres E, Flores A, Richman AR.Vaccines (Basel). 2024 Oct 19;12(10):1194. doi: 10.3390/vaccines12101194.PMID: 39460359

Assessment of the first 5 years of pharmacist-administered vaccinations in Australia: learnings to inform expansion of services.

Patel C, Vette K, Dalton L, Dey A, Hendry A, Hull B, McIntyre P, Macartney K, Beard F.Public Health Res Pract. 2024 Oct 23;34(3):3432420. doi: 10.17061/phrp3432420.PMID: 39443092

Exploring the association between chronic prostatitis and the risk of herpes zoster in a cohort study in Taiwan.

Lai SW, Kuo YH, Liao KF.Int J Urol. 2024 Oct 21. doi: 10.1111/iju.15605. Online ahead of print.PMID: 39428916

Norovirus acute gastroenteritis amongst US and European travellers to areas of moderate to high risk of travellers' diarrhoea: a prospective cohort study.

Alberer M, Moe CL, Hatz C, Kling K, Kirby AE, Lindsay L, Nothdurft HD, Riera-Montes M, Steffen R, Verstraeten T, Wu HM, DuPont HL.J Travel Med. 2024 Oct 19;31(7):taad051. doi: 10.1093/jtm/taad051.PMID: 37074164

Seroprevalence of SARS-CoV-2 antibodies among healthy blood donors: a systematic review and meta-analysis.

Ukwishaka J, Mela CF, Aseneh JBN, Ettaj M, Ilboudo D, Danwang C, Samadoulougou S, Kirakoya-Samadoulougou F.BMC Public Health. 2024 Oct 22;24(1):2925. doi: 10.1186/s12889-024-20364-5.PMID: 39438911

MicroRNAs are enriched at COVID-19 genomic risk regions, and their blood levels correlate with the COVID-19 prognosis of cancer patients infected by SARS-CoV-2.

Anfossi S, Darbaniyan F, Quinlan J, Calin S, Shimizu M, Chen M, Rausseo P, Winters M, Bogatenkova E, Do KA, Martinez I, Li Z, Antal L, Olariu TR, Wistuba I, Calin GA.Mol Cancer. 2024 Oct 21;23(1):235. doi: 10.1186/s12943-024-02094-9.PMID: 39434078

Growth defect of domain III glycoprotein B mutants of human cytomegalovirus reverted by compensatory mutations co-localizing in post-fusion conformation.

Mollik M, Rohorzka A, Chen X, Kropff B, Eisler L, Külekci B, Puchhammer-Stöckl E, Thomas M, Görzer I.mBio. 2024 Oct 16;15(10):e0181224. doi: 10.1128/mbio.01812-24. Epub 2024 Sep 24.PMID: 39315800

Quantitating SARS-CoV-2 neutralizing antibodies from human dried blood spots.

Berman K, Van Slyke G, Novak H, Rock JM, Bievenue R, Damjanovic AK, DeRosa KL, Mirabile G, Phipps K, Machowski J, Bialosuknia S, Giradin RC, Dupuis AP, Payne AF, Lee WT, McDonough KA, Parker MM, Styer LM, Mantis NJ.Microbiol Spectr. 2024 Oct 29:e0084624. doi: 10.1128/spectrum.00846-24. Online ahead of print.PMID: 39470282

Maternal Bacille Calmette-Guérin Scars and Mortality Risk for Male and Female Newborns: Observational Study From Guinea-Bissau.

Schaltz-Buchholzer F, Nielsen S, Sørensen MK, Gomes GM, Hoff S, Toft AM, Stjernholm EB, Monteiro I, Aaby P, Benn CS.J Infect Dis. 2024 Oct 16;230(4):995-1003. doi: 10.1093/infdis/jiae262.PMID: 38758135

The Risk of SARS-CoV-2 Transmission in Community Indoor Settings: A Systematic Review and Meta-analysis.

Francis MR, Gidado S, Nuorti JP.J Infect Dis. 2024 Oct 16;230(4):e824-e836. doi: 10.1093/infdis/jiae261.PMID: 38753340

Assessing the relationship between existing childhood, adolescent and adult immunization programmes and national COVID-19 vaccination capacities in 2021.

Goldin S, Moen A, Moss WJ, Nuzzo J.Vaccine. 2024 Oct 24;42 Suppl 4:125528. doi: 10.1016/j.vaccine.2023.12.038. Epub 2024 Jan 11.PMID: 38216440

Rheumatoid Arthritis and COVID-19 at the Intersection of Immunology and Infectious Diseases: A Related PRISMA Systematic Literature Review.

Vlădulescu-Trandafir AI, Bojincă VC, Munteanu C, Anghelescu A, Popescu C, Stoica SI, Aurelian S, Bălănescu A, Băetu C, Ciobanu V, Onose G.Int J Mol Sci. 2024 Oct 17;25(20):11149. doi: 10.3390/ijms252011149.PMID: 39456932

Rapid detection of SARS-CoV-2 variants by molecular-clamping technology-based RT-qPCR.

Shen S, Fu AY, Jamba M, Li J, Cui Z, Pastor L, Cataldi D, Sun Q, Pathakamuri JA, Kuebler D, Rohall M, Krohn M, Kissinger D, Neves J, Archibeque I, Zhang A, Lu CM, Sha MY.Microbiol Spectr. 2024 Oct 16:e0424823. doi: 10.1128/spectrum.04248-23. Online ahead of print.PMID: 39412285

MERS-CoV Infection and Its Impact on the Expression of TSLP Cytokine and IgG Antibodies: An In Vivo and In Vitro Study.

Mubarak A, Alqoufail M, Almutairi S, Alrfaei B, Almotairi A, Aziz I, Almanaa TN, Abdel-Maksoud MA, Farrag MA, Aldreiwish AD, Awadalla ME, Alosaimi B, Alturaiki W.Infect Drug Resist. 2024 Oct 23;17:4589-4598. doi: 10.2147/IDR.S483133. eCollection 2024.PMID: 39469096

The role of preoperative immunonutrition on morbidity and immune response after cystectomy: protocol of a multicenter randomized controlled trial (INCyst Trial).

Derré L, Crettenand F, Grilo N, Stritt K, Kiss B, Tawadros T, Domingos-Pereira S, Roth B, Cerantola Y, Lucca I.Trials. 2024 Oct 17;25(1):687. doi: 10.1186/s13063-024-08536-5.PMID: 39415282

Caerin 1.1 and 1.9 peptides halt B16 melanoma metastatic tumours via expanding cDC1 and reprogramming tumour macrophages.

Fu Q, Luo Y, Li J, Li H, Liu X, Chen Z, Ni G, Wang T.J Transl Med. 2024 Oct 28;22(1):973. doi: 10.1186/s12967-024-05763-x.PMID: 39468595

High prevalence of human papillomavirus (HPV) in unvaccinated adolescent girls in South Africa, particularly those living with HIV.

Travill DI, Machalek DA, Rees H, Mbulawa Z, Chikandiwa A, Munthali R, Petoumenos K, Kaldor JM, Delany-Moretlwe S.Vaccine. 2024 Oct 17;42(26):126442. doi: 10.1016/j.vaccine.2024.126442. Online ahead of print.PMID: 39423451

Vitamin D: A key player in COVID-19 immunity and lessons from the pandemic to combat immune-evasive variants.

Sabit H, Abdel-Ghany S, Abdallah MS, Abul-Maaty O, Khoder AI, Shoman NA, Farrag MS, Martasek P, Noreddin AM, Nazih M.Inflammopharmacology. 2024 Oct 16. doi: 10.1007/s10787-024-01578-w. Online ahead of print.PMID: 39406981

Aberrations in medically certified sick leave and primary healthcare consultations in Norway in 2023 compared to pre-COVID-19-pandemic trends.

White RA, Zhang C, Valcarcel Salamanca B, Angelsen A, Zakiudin DP, Andries A, Kabashi S, Moberg LL.Arch Public Health. 2024 Oct 22;82(1):187. doi: 10.1186/s13690-024-01411-4.PMID: 39438966

mRNA-based COVID-19 vaccination of lung transplant recipients with prior SARS-CoV-2 infection induces durable SARS-CoV-2-specific antibodies and T cells.

Liu S, van Dijk LLA, den Hartog Y, Hoek R, Verschuuren E, Geurtsvankessel CH, de Vries RD, Van Baarle D, Buter CVL.Vaccine. 2024 Oct 24;42(24):126250. doi: 10.1016/j.vaccine.2024.126250. Epub 2024 Sep 2.PMID: 39226789

Clinical validation of an RSV neutralization assay and analysis of cross-sectional sera associated with 2021-2023 RSV outbreaks to investigate the immunity debt hypothesis.

Piliper EA, Reed JC, Greninger AL.Microbiol Spectr. 2024 Oct 29:e0211524. doi: 10.1128/spectrum.02115-24. Online ahead of print.PMID: 39470275

Development and optimization of a double antigen sandwich ELISA detecting for Senecavirus A antibodies based on VP2 protein.

Chen J, Shi Z, Luo J, Jia C, Zhang X, Wei J, Li S, Zhu Y, Xi T, Zhou J, He Y, Shi X, Liao H, Tian H, Zheng H.Microbiol Spectr. 2024 Oct 22:e0204324. doi: 10.1128/spectrum.02043-24. Online ahead of print.PMID: 39436135

Congenital Cytomegalovirus Infection: Update on Screening, Diagnosis and Treatment: Scientific Impact Paper No. 56.

Khalil A, Heath PT, Jones CE, Soe A, Ville YG; Royal College of Obstetricians and Gynaecologists.BJOG. 2024 Oct 21. doi: 10.1111/1471-0528.17966. Online ahead of print.PMID: 39434207

Contact Tracing Different Age Groups During the COVID-19 Pandemic: Retrospective Study From South-West Germany.

Dyer CM, Negoescu AT, Borchert M, Harter C, Kühn A, Dambach P, Marx M.Online J Public Health Inform. 2024 Oct 29;16:e54578. doi: 10.2196/54578.PMID: 39471373

Prevalence of Shigella species and antimicrobial resistance patterns in Africa: systematic review and meta-analysis.

Nyarkoh R, Odoom A, Donkor ES.BMC Infect Dis. 2024 Oct 29;24(1):1217. doi: 10.1186/s12879-024-09945-2.PMID: 39472797

Patentes registradas en Patentscope

Estrategia de búqueda: (Vaccine) AND DP:([16.10.2024 TO 31.10.2024]) *as the publication date 89 records.*

1.WO/2024/216134COMBINATORIAL STRATEGIES TO ENHANCE VACCINIA VIRUS IN VITRO AND IN VIVO ONCOLYSIS

WO - 17.10.2024

Clasificación Internacional C12N 15/86Nº de solicitud PCT/US2024/024404Solicitante UNIVERSITY OF MIAMIInventor/a MERCHAN, Jaime R.

The present disclosure provides for a method for treating a cancer, comprising administering to a subject in need thereof an oncolytic vaccinia virus and a tyrosine kinase inhibitor. Further disclosed herein is a method for treating a cancer, comprising administering to a subject in need thereof an oncolytic vaccinia virus and an adenosine receptor blocker.

2.20240350622VACCINE ANTIGEN

US - 24.10.2024

Clasificación Internacional A61K 39/215Nº de solicitud 18682740Solicitante Macfarlane Burnet Institute for Medical Research and Public Health LimitedInventor/a Pantelis Poumbourios

The field of the specification relates broadly to SARS-CoV-2 vaccine spike protein antigens and methods of using and manufacturing these antigens. The invention also relates to vectors and polynucleotides encoding the SARS-CoV-2 vaccine antigens and vaccines, kits, devices and strips comprising the coronavirus vaccine antigen. The spike protein from SARS-CoV-2 has prolines substituted at positions 986, 987 (2P or S-2P) and additional alanine cavity filling mutations at positions A1016 and A1020.

3.4448003IMPFSTOFFZUBEREITUNG

EP - 23.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud 22829720Solicitante HCEMM NONPROFIT KFTInventor/a GRABUSCHNIG STEFAN

A vaccine preparation to be administered intramuscularly without or at least minor adverse effects comprises in addition to a mRNA-vaccine at least one vasoconstrictive agent, such as epinephrine, levonorderfrine and norepinephrine.

4.20240350601THERAPEUTIC ANTICANCER NEOEPITOPE VACCINE

US - 24.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 18738685Solicitante Nykode Therapeutics ASAInventor/a Stine Granum

The present invention relates to an anticancer vaccine which includes polynucleotides or polypeptides, methods of treatment of cancer wherein such an anticancer vaccine is used as well as methods for producing the vaccine. The vaccine includes a polynucleotide with a nucleotide sequence encoding a targeting unit, a dimerization unit, a first linker and an antigenic unit. The antigenic unit includes from 3 to 50 antigenic subunits separated by a second linker with each antigenic subunit having at least a part of a cancer neoepitope

sequence. The vaccine can include a polypeptide encoded by the polynucleotide or a dimeric protein with two polypeptides encoded by the polynucleotide.

5.WO/2024/213740VACCINE MIXING METHOD, SYRINGE AND SYSTEM

WO - 17.10.2024

Clasificación Internacional A61J 1/20Nº de solicitud PCT/EP2024/060037Solicitante BIONTECH SEInventor/a MUIK, Alexander

A method of preparing a combination vaccine includes: (a) obtaining a first amount of a first vaccine in a first syringe, (b) obtaining a second amount of a second vaccine In a second syringe, (c) connecting the first and the second syringe using an adapter, (d) mixing the first vaccine and the second vaccine, and (e) transferring the mixture of the first vaccine and the second vaccine, as needed, to the first syringe or the second syringe, and discarding the syringe that the mixture was not transferred to.

6.WO/2024/220712VACCINE COMPOSITIONS

WO - 24.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud PCT/US2024/025270Solicitante SAIL BIOMEDICINES, INC.Inventor/a ARAFA, Emad

Disclosed herein are nucleic acid vaccine compositions including one or more polynucleotides encoding one or more antigenic polypeptide, formulated within a lipid reconstructed natural messenger packs (LNMPs) comprising natural lipids and an ionizable lipid. The disclosure also includes a method for making a nucleic acid vaccine, comprising reconstituting a film comprising purified NMP lipids in the presence of an ionizable lipid to produce a LNMP comprising the ionizable lipid, and loading into the LNMPs with one or more polynucleotides encoding one or more antigenic polypeptides.

7.4448103RNA-IMPFSTOFF GEGEN LYME-KRANKHEIT

EP - 23.10.2024

Clasificación Internacional A61P 31/04Nº de solicitud 22840585Solicitante SANOFIInventor/a PAVOT VINCENT

The present disclosure provides a Lyme disease vaccine, comprising a messenger RNA (mRNA) comprising an open reading frame (ORF) encoding at least one antigenic polypeptide derived from at least one bacteria of the genus *Borrelia*, and methods of eliciting an immune response by administering said vaccine.

8.WO/2024/220936VACCINE COMPOSITIONS AND USES THEREOF

WO - 24.10.2024

Clasificación Internacional A61K 39/145Nº de solicitud PCT/US2024/025583Solicitante CENTIVAX, INC.Inventor/a GLANVILLE, Jacob

The present disclosure provides vaccine compositions comprising a plurality of distinct antigens. Also provided are nucleic acid vaccine composition comprising one or more nucleic acids encoding for a plurality of distinct antigens. The plurality of distinct antigens comprises a combination of influenza antigens. The vaccine composition can be formulated for delivery as a mRNA/LNP, a recombinant protein, a virus-like

particle (VLP), or DNA. Methods of preventing an influenza infection and methods of inducing an immune response are also disclosed.

9.WO/2024/226784COMPOSITIONS AND METHODS FOR THERAPEUTIC OR VACCINE DELIVERY

WO - 31.10.2024

Clasificación Internacional Nº de solicitud PCT/US2024/026254Solicitante GENVIVO, INC.Inventor/a FISCHER-LOUGHEED, Jacqueline

Described herein are compositions comprising recombinant viral vectors, e.g., recombinant retroviral vectors, for delivering a therapeutic or a vaccine. The recombinant retroviral vectors described herein are modified for safer application of therapeutic or vaccine delivery. Also described herein are methods for using the compositions comprising recombinant viral vectors for delivering a therapeutic or a vaccine.

10.4448770EFFIZIENTER IMPFSTOFF

EP - 23.10.2024

Clasificación Internacional C12N 15/62Nº de solicitud 22907538Solicitante VLP THERAPEUTICS JAPAN INCInventor/a AKAHATA WATARU

Provided herein is an isolated polynucleotide, which encodes structural proteins nsp1, nsp2, nsp3 and nsp4 and a polypeptide comprising an antigenic protein fused to a signal sequence, a transmembrane domain and at least one peptide selected from CD4+ T cell epitopes and CD8+ T cell epitopes. The polynucleotide is useful for manufacturing a vaccine against virus infection, especially, COVID-19 infection, the treatment of a cancer and/or an inflammatory disease.

11.WO/2024/217567INHALED ADENOVIRUS VECTOR VACCINE, PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 24.10.2024

Clasificación Internacional A61K 9/72Nº de solicitud PCT/CN2024/088940Solicitante CANSINO BIOLOGICS INC.Inventor/a ZHAO, Xiaolong

The present invention relates to an inhaled aerosol vaccine, and in particular to a recombinant adenovirus vector inhaled aerosol vaccine, a preparation method therefor and a use thereof. The inhaled aerosol vaccine can simultaneously express one or more antigens. After inhaling and mucosal immunization are carried out on the body, a high-level specific antibody can be generated in the lung and the body at the same time, and a high cell immune response can be generated by means of stimulation. In addition, the vaccine is an inhaled preparation, which can effectively stimulate mucosal immunization and increase the third protection of the body. The recombinant adenovirus vector vaccine has good stability, is safe, efficient and painless, and can effectively cope with the recurrence of emerging infections and latent infections of bacteria and viruses.

12.WO/2024/212931NINE-COMPONENT ANTIGEN AFRICAN SWINE FEVER SUBUNIT VACCINE

WO - 17.10.2024

Clasificación Internacional C07K 14/01Nº de solicitud PCT/CN2024/086656Solicitante LANZHOU VETERINARY RESEARCH INSTITUTE, CHINESE ACADEMY OF AGRICULTURAL SCIENCESInventor/a ZHENG, Haixue

The present invention relates to the field of biotechnology, and in particular relates to a nine-component antigen African swine fever subunit vaccine. First, an African swine fever virus antigen protein combination composed of African swine fever virus P34 protein, P30 protein, P54 protein, A104R protein, E165R protein, C129R protein, P72 protein, X protein, and Y protein is provided, wherein the African swine fever virus antigen protein combination can induce a strong immune response in an organism; and second, a nine-component antigen African swine fever subunit vaccine containing the African swine fever virus antigen protein combination is prepared, the nine-component antigen African swine fever subunit vaccine exhibiting a good immune protection rate against the parent African swine fever virulent strain and posing no biological safety risks. The described vaccine addresses the problem that existing African swine fever subunit vaccines in China and abroad can not provide effective immune protection in pigs, and thereby demonstrates the feasibility of research solutions of African swine fever subunit vaccines.

13.20240350606VACCINE COMPOSITIONS AND METHODS FOR ENHANCED ANTIGEN-SPECIFIC VACCINATION

US - 24.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 18665046Solicitante DUKE UNIVERSITYInventor/a YOU-WEN HE

Vaccine design, polycistronic vaccine constructs, compositions, and methods comprising nucleic acids (DNA, RNA), peptides, proteins and derivatives thereof, including cells and cell-lines, for enhanced antigen-specific vaccination.

14.WO/2024/222693COMBINED VACCINE, AND PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 31.10.2024

Clasificación Internacional A61K 39/116Nº de solicitud PCT/CN2024/089383Solicitante CANSINO BIOLOGICS INC.Inventor/a SUI, Xiuwen

Provided is a combined vaccine, which can respectively reduce the number of instances of vaccination for infants, adults and teenagers, and reduce the cost of vaccination. The combined vaccine comprises: a) a conjugate of a Haemophilus influenzae type b (Hib) antigen and a carrier protein; b) a conjugate of a meningococcal polysaccharide and a protein, which conjugate contains a conjugate of group A epidemic meningococcal capsular polysaccharide and a carrier protein, a conjugate of group C epidemic meningococcal capsular polysaccharide and a carrier protein, a conjugate of group Y epidemic meningococcal capsular polysaccharide and a carrier protein, and a conjugate of group W135 epidemic meningococcal capsular polysaccharide and a carrier protein; c) a diphtheria-tetanus-pertussis (three-component pertussis or five-component pertussis) vaccine, etc. The carrier proteins involved in the combined vaccine are specifically screened. Experimental results show that the combined vaccine prepared from the specifically selected carrier proteins can induce the body to generate good immune responses and improve the immunization coverage.

15.WO/2024/212919SEVEN-COMPONENT ANTIGEN AFRICAN SWINE FEVER SUBUNIT VACCINE

WO - 17.10.2024

Clasificación Internacional C07K 14/01Nº de solicitud PCT/CN2024/086558Solicitante LANZHOU VETERINARY RESEARCH INSTITUTE, CHINESE ACADEMY OF AGRICULTURAL SCIENCESInventor/a ZHENG, Haixue

Provided is a seven-component antigen African swine fever subunit vaccine. Firstly, an African swine fever virus antigen protein combination consisting of African swine fever virus P34 protein, P30 protein, P54 protein, A104R protein, X protein, C129R protein and Y protein is provided, wherein the African swine fever virus antigen protein combination can produce a strong immune response. Secondly, a seven-component antigen African swine fever subunit vaccine comprising the African swine fever virus antigen protein combination is prepared, wherein the seven-component antigen African swine fever subunit vaccine has a high relative percent survival against challenges of a parent African swine fever virulent strain, and has no biosafety risk.

16.20240342276SILICON DIOXIDE VACCINE DELIVERY SYSTEM TAKING VIRUS-LIKE PARTICLES AS TEMPLATE, AND CONSTRUCTION METHOD AND APPLICATION OF SILICON DIOXIDE VACCINE DELIVERY SYSTEM

US - 17.10.2024

Clasificación Internacional A61K 39/39Nº de solicitud 18293608Solicitante DALIAN UNIVERSITY OF TECHNOLOGYInventor/a Bingbing SUN

A silicon dioxide vaccine delivery system uses virus-like particles as templates. The particle morphology of the silicon dioxide vaccine system is 50-500 nm of nanoparticles, of which an antigenic component is 20-200 nm of virus-like particles, an adjuvant component is nano silicon dioxide, the silicon dioxide component is wrapped on the surface of the virus-like particle, and a mass ratio of silicon element to antigen is 50-0.5:1. The construction of the silicon dioxide vaccine delivery system includes steps of: (1) adding a proper amount of 3-aminopropyltriethoxysilane into an aqueous solution containing virus-like particles and stirring; (2) adding a proper amount of tetraethoxysilane into the dispersion system in step (1) and stirring; and (3) centrifuging a reactant obtained in step (2) and removing a supernatant to obtain a product. A vaccine constructed by means of the vaccine system can trigger a host to generate humoral and cellular immune levels.

17.WO/2024/215759BIODEGRADABLE SCAFFOLDS FOR ENHANCING VACCINE EFFICACY

WO - 17.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud PCT/US2024/023874Solicitante THE REGENTS OF THE UNIVERSITY OF CALIFORNIAInventor/a SHAH, Nisarg

ABSTRACT Scaffolds and materials which provide for sustained release of vaccine components upon delivery to a subject, thus resulting enhanced immune response compared to bolus vaccination strategies.

18.20240350609METHODS FOR IMPROVING THE ADSORPTION OF POLYSACCHARIDE-PROTEIN CONJUGATES AND MULTIVALENT VACCINE FORMULATION OBTAINED THEREOF

US - 24.10.2024

Clasificación Internacional A61K 39/09Nº de solicitud 18637620Solicitante Serum Institute of India Private LimitedInventor/a Poonawalla Cyrus Soli

The present disclosure relates to vaccine compositions comprising pneumococcal polysaccharide-carrier protein conjugates. The present disclosure particularly relates to improved, stable, immunogenic multivalent *Streptococcus pneumoniae* polysaccharide-protein conjugate vaccine compositions having at least three distinct carrier proteins, preparing the vaccine compositions and methods for prevention and/or treatment of subjects with *Streptococcus pneumoniae*. These multivalent pneumococcal compositions will overcome carrier induced epitopic suppression, provide enhanced immune response for new serotypes (as compared to existing approved vaccines) and also help address the emergence of non-vaccine serotypes.

19.4450082VERFAHREN ZUR VERBESSERUNG DER ADSORPTION VON POLYSACCHARID-PROTEIN-KONJUGATEN UND DARAUS ERHALTENE MULTIVALENTE IMPFSTOFFFORMULIERUNG

EP - 23.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 24170725Solicitante SERUM INSTITUTE OF INDIA PRIVATE LTDInventor/a POONAWALLA CYRUS SOLI

The present disclosure relates to vaccine compositions comprising pneumococcal polysaccharide-carrier protein conjugates. The present disclosure particularly relates to improved, stable, immunogenic multivalent Streptococcus pneumoniae polysaccharide-protein conjugate vaccine compositions having at least three distinct carrier proteins, preparing the vaccine compositions and methods for prevention and/ or treatment of subjects with Streptococcus pneumoniae. These multivalent pneumococcal compositions will overcome carrier induced epitopic suppression, provide enhanced immune response for new serotypes (as compared to existing approved vaccines) and also help address the emergence of non-vaccine serotypes.

20.WO/2024/226815B-CELL EPITOPES OF TREPONEMA PALLIDUM ANTIGENS FOR USE IN A SYPHILIS VACCINE

WO - 31.10.2024

Clasificación Internacional Nº de solicitud PCT/US2024/026293Solicitante UNIVERSITY OF WASHINGTONInventor/a GIACANI, Lorenzo

B-cell epitopes of Treponema pallidum and vaccines against syphilis based on the same are described herein. The epitopes described herein can be concatenated or presented on a delivery scaffold such as a scaffold protein, virus-like particle, or nanoparticle for delivery as a vaccine. The present disclosure also provides methods of stimulating an anti-syphilis immune response in a subject using the epitopes and/or vaccine described herein.

21.4444346NEOEPITOPIMPFSTOFFABGABEVEHIKEL UND VERFAHREN ZUR HERSTELLUNG DAVON

EP - 16.10.2024

Clasificación Internacional A61K 39/385Nº de solicitud 22905297Solicitante IMMUNITYBIO INCInventor/a LIU PHILIP T

Disclosed herein are mannan nanogels as a novel vaccine delivery platform as well as a novel method of making a self-assembling mannan nanogel for in vivo delivery of therapeutic agents.

22.WO/2024/221489FISH INACTIVATED VIRUS VACCINE AND PREPARATION METHOD THEREFOR

WO - 31.10.2024

Clasificación Internacional C12N 7/04Nº de solicitud PCT/CN2023/092842Solicitante SHANGHAI EAGLE HIGH TECHNOLOGY CO., LTDInventor/a SU, Chun

Provided are a method for preparing a fish inactivated virus vaccine by means of electron beam irradiation, and a prepared fish inactivated virus vaccine. The method comprises: diluting a separated and purified fish-related virus to a set final concentration, and recording same as an initial titer; then performing gradient irradiation on the virus until the virus titer is reduced to 1/10 of the initial titer, and recording the corresponding total irradiation dose ±0.15 kGy as the D 10 value of the virus; calculating the SD value of the sterilization dose according to the following formula: SD＝kD 10Lg(N 0/N), wherein N 0 is the initial titer, N is SAL＝10 -6, K is a safety coefficient, and k≥1; and performing multiple small-dose irradiation on the purified fish-related virus sample with a final concentration which is the initial titer on the basis that an accumulated radiation dose is greater than or equal to the SD value.

23.20240350634MONOCLONAL ANTIBODY AND VACCINE TARGETING FILAMENTOUS BACTERIOPHAGE

US - 24.10.2024

Clasificación Internacional A61K 45/06Nº de solicitud 18425772Solicitante INIMMUNE CORPORATIONInventor/a Paul L. Bollyky

Described here is a method for reducing or preventing *Pseudomonas aeruginosa* biofilm formation in a human subject in need thereof, comprising administering to the human subject a first composition comprising (a) an antigen-binding polypeptide that binds Pf-family bacteriophage, or (b) a vaccine against Pf-family bacteriophage. Also described is an antigen-binding polypeptide that binds specifically to a CoaB protein of Pf-family bacteriophage or fragment thereof.

24.20240350618ANTI-HIV-1 RECOMBINANT HIV-1 DERIVED TOPOISOMERASE II BETA KINASE AS AN IMMUNOGEN FOR HIV VACCINE

US - 24.10.2024

Clasificación Internacional A61K 39/21Nº de solicitud 18443332Solicitante UNIVERSITY OF HYDERABADInventor/a Satyajit Mukhopadhyay

The present invention relates to an anti-HIV recombinant HIV-1 derived Topoisomerase IIβ kinase. It inhibits HIV-1 replication by blocking viral entry. Its recognition by envelope antibodies ID6 and 4G10 makes it a justifiable immunogen for use as vaccine candidate in form of protein, mRNA and DNA vaccine against HIV infection. Thus, the protein, mRNA and DNA of immunogenic recombinant HIV-1 derived Topoisomerase IIβ kinase and derived peptides with and without spacers can be used as a HIV vaccine.

FIG. 1, FIG. 2, FIG. 3, FIG. 4, FIG. 5, FIG. 6, FIG. 7, FIG. 7, FIG. 8, FIG. 9, FIG. 10, FIG. 11, FIG. 12, FIG. 13, FIG. 14, FIG. 15, FIG. 16.

25.4450516IMPFSTOFF ZUR VERWENDUNG BEI DER PROPHYLAXE UND/ODER BEHANDLUNG EINER ERKRANKUNG

EP - 23.10.2024

Clasificación Internacional C07K 14/47Nº de solicitud 24165997Solicitante INPROTHER APSInventor/a HOLST PETER

The present invention relates to an adenoviral vector capable of encoding a virus-like particle (VLP), said VLP displaying an inactive immune-suppressive domain (ISD). The vaccine of the invention shows an improved immune response from either of both of the response pathways initiated by CD4 T cells or CD8 T cells.

26.4445910IMPFSTOFFZUSAMMENSETZUNG ZUR INDUZIERUNG EINES ANTI-IL-23-ANTIKÖRPERS

EP - 16.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 22904247Solicitante OSAKA UNIVInventor/a NAKAGAMI HIRONORI

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)whereinX1 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 F,X7 is Q, A, G, T, or N, andX8 is R, A, G, or K.

27.WO/2024/212380CANCER VACCINE BASED ON PART OF COMPONENTS OF CANCER CELLS OR TUMOR TISSUE, AND PREPARATION METHOD THEREFOR

WO - 17.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud PCT/CN2023/106259Solicitante SUZHOU ERSHENG BIOMEDICAL CO., LTD.Inventor/a LIU, Mi

Provided are a cancer vaccine based on part of components of cancer cells or tumor tissue and a preparation method therefor. The preparation method comprises: first, separating water-soluble proteins and non-water-soluble components from all cell components by means of using a salting-out method and the like, and then loading same onto nanoparticles or micron-particles, so as to be used for preventing or treating cancers. A provided vaccine system comprises the nanoparticles and/or micron-particles, the proteins in water-soluble components of cancer cells and/or tumor tissue, and the non-water-soluble components of cancer cells and/or tumor tissue, and can efficiently activate specific immune responses against cancer cells, and therefore can be used for preventing and treating diseases such as cancers.

28.20240342265E PROTEIN-MUTATED WEST NILE VIRUS USED AS LIVEATTENUATED VACCINE AND ONCOLYTIC DRUG FOR CANCER THERAPY

US - 17.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud 18626704Solicitante SICHUAN ANCOCARE BIOPHARMACEUTICAL, Ltd.Inventor/a Li YU

The invention provides a recombinant West Nile virus, in which the amino acid sequence of envelope E protein is genetically modified to attenuation, and its RNA genome is inserted with a foreign gene fragment. The

engineered E gene contains the mutation of five amino acids for reducing its neural virulence to the central nervous system; the integrated foreign gene between E and S1 gene makes a new chimerical virus. Thus, the present invention provides the application of this attenuated West Nile virus as a vaccine in preventive medicine and the application of the RNA-viral vector as a novel gene-drug in the pharmaceutical industry. The newly attenuated virus may fill the gap of no live-attenuated vaccine to the West Nile virus epidemic. The attenuated and recombinant virus can be used as an RNA oncolytic virus to target solid tumors, especially neural tumors, for cancer therapy with higher safety.

29.20240350614VACCINE FOR PREVENTING AFRICAN SWINE FEVER, COMPRISING AFRICAN SWINE FEVER VIRUS-DERIVED ANTIGEN PROTEIN

US - 24.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud 18686801Solicitante BioApplications Inc.Inventor/a Hyangju KANG

The present invention relates to: a recombinant vector comprising a nucleotide sequence of antigen protein(s) Lectin, CD2v, p72, p54, p30, p15, p35, E199L, and/or F317L of an African swine fever virus; a transformant transformed by means of the recombinant vector; and a vaccine composition for preventing African swine fever, comprising, as an active ingredient, African swine fever virus antigen protein(s) Lectin, CD2v, p72, p54, p30, p15, p35, E199L, and/or F317L, isolated from the transformant; and the like.

30.20240350598ANTI-ABETA THERAPEUTIC VACCINES

US - 24.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 18650535Solicitante AC Immune SAInventor/a Emma Fiorini

A liposomal vaccine composition comprises a β-amyloid (Aβ)-derived peptide antigen displayed on the surface of the liposome. The vaccine composition also comprises a peptide comprising a universal T-cell epitope encapsulated within the liposome. The vaccine composition also comprises an adjuvant, which may form part of the liposome and may be displayed at least in part on the surface of the liposome. These vaccine compositions are used for treating, preventing, inducing a protective immune response against or alleviating the symptoms associated with an amyloid-beta associated disease or condition or a condition characterised by, or associated with, loss of cognitive memory capacity in a subject. The vaccine compositions may be provided as a kit. Related methods of producing a liposomal vaccine composition are also provided.

31.WO/2024/215140RECOMBINANT EXPRESSION VECTOR FOR PRODUCTION OF VIRUS-LIKE PARTICLE-BASED MULTIVALENT NOROVIRUS VACCINE AND MANUFACTURING METHOD THEREFOR

WO - 17.10.2024

Clasificación Internacional C07K 14/005Nº de solicitud PCT/KR2024/004954Solicitante INTHERA INC.Inventor/a CHOI, Deog Young

The present invention provides a fusion protein for promoting soluble expression of a norovirus antigen, and an expression vector thereof. More specifically, the present invention provides combinations of various genotypes of norovirus antigen proteins and RID mutants, in which the most efficient folding occurs when a norovirus antigen is used as a target protein to form a recombinant fusion protein, the yield of soluble expression of a fusion protein produced is improved, and the assembly efficacy and homogeneity of norovirus

VLPs can be enhanced. Also, the present invention provides a method for rapidly mass-producing various other genotypes of norovirus VLPs, as well as GII.4, in E. coli by using mutant RID, thus enabling the development of a VLP-based multivalent vaccine comprising more genotypes.

32.4444278RNA-FORMULIERUNGEN UND LIPIDE

EP - 16.10.2024

Clasificación Internacional A61K 9/51Nº de solicitud 22840006Solicitante IMMORNA HANGZHOU BIOTECHNOLOGY CO LTDInventor/a WANG ZIHAO

The disclosure relates to the method of lyophilizing RNA and mixing with a liquid LNP solution, e. g., to make an RNA vaccine or therapeutic. Included are methods for preparing and administering the vaccine or therapeutic.

33.20240343782MONOCLONAL ANTIBODIES DIRECTED AGAINST TRIMERIC FORMS OF THE HIV-1 ENVELOPE GLYCOPROTEIN WITH BROAD AND POTENT NEUTRALIZING ACTIVITY

US - 17.10.2024

Clasificación Internacional C07K 16/10Nº de solicitud 18734520Solicitante Theraclone Sciences, Inc.Inventor/a Po-Ying Chan-Hui

The invention provides a method for obtaining a broadly neutralizing antibody (bNab), including screening memory B cell cultures from a donor PBMC sample for neutralization activity against a plurality of HIV-1 species, cloning a memory B cell that exhibits broad neutralization activity; and rescuing a monoclonal antibody from that memory B cell culture. The resultant monoclonal antibodies are characterized by their ability to selectively bind epitopes from the Env proteins in native or monomeric form, as well as to inhibit infection of HIV-1 species from a plurality of clades. Compositions containing human monoclonal anti-HIV antibodies used for prophylaxis, diagnosis and treatment of HIV infection are provided. Methods for generating such antibodies by immunization using epitopes from conserved regions within the variable loops of gp120 are provided. Immunogens for generating anti-HIV1 bNAbs are also provided. Furthermore, methods for vaccination using suitable epitopes are provided.

34.WO/2024/222647OLIGONUCLEOTIDES FOR USE IN MODULATING IMMUNE RESPONSES AGAINST HEPATITIS B VIRAL INFECTION

WO - 31.10.2024

Clasificación Internacional A61K 39/29Nº de solicitud PCT/CN2024/089195Solicitante AUSPERBIO THERAPEUTICS INC.Inventor/a CHENG, Guofeng

Provided herein are vaccine compositions comprising an oligonucleotide and a Hepatitis B viral antigen, either present in the same composition, or in separate compositions, useful for prevention or treatment of Hepatitis B viral infection in a subject. The vaccine compositions can exert a sustained immunomodulatory effect and lead to the reduction of HBV antigen levels in an infected subject.Also provided herein are methods of making and use thereof.

35.20240348455BLOCKCHAIN-BASED SUPERVISION METHOD FOR ELECTRONIC IMMUNITY PASSPORT

US - 17.10.2024

Clasificación Internacional H04L 9/32Nº de solicitud 18022519Solicitante Nanjing University of Posts and TelecommunicationsInventor/a Haiping HUANG

The invention provides a blockchain-based supervision method for an electronic immunity passport. A certificate authority generates and correspondingly distributes public-private key pairs. A hospital generates an immunity passport for a vaccine and assigns a passport number; encrypts the immunity passport and the passport number; and generates and uploads a transaction to a national alliance chain node (NACN). The NACN generates and uploads a second transaction to a world alliance chain (WAC). When the vaccine is requested to show the immunity passport, the vaccinee provides the passport number, generates and uploads a trapdoor to the WAC. The vaccine decrypts received ciphertext from the WAC to obtain plaintext data. An alliance chain node performs periodic maintenance by a smart contract. The invention can ensure data openness, traceability, and immutability, achieve effective supervision for the immunity passport data, provide reliable immunity passport data, and achieve search and regular maintenance for the immunity passport.

36.WO/2024/216217HIV VACCINE

WO - 17.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud PCT/US2024/024503Solicitante BIONTECH SEInventor/a LE DOUCE, Valentin

The present invention concerns compositions comprising an RNA molecule, wherein the RNA molecule comprises an expression cassette encoding an immunogenic peptide, which peptide comprises at least two fragments, wherein each fragment comprises at least one epitope, wherein the epitope is derived from an amino acid sequence encoded by the human immunodeficiency virus (HIV) and medical preparations comprising such compositions. Furthermore, the invention concerns methods for preventing or treating HIV.

37.20240342262CELLULAR ADJUVANTS FOR VIRAL INFECTION

US - 17.10.2024

Clasificación Internacional A61K 39/108Nº de solicitud 18664198Solicitante NantBio, Inc.Inventor/a Kayvan Niazi

Two-component vaccine formulations and methods are contemplated where the vaccine has an adjuvant component and a therapeutic component. The therapeutic component comprises preferably a recombinant therapeutic virus encoding a therapeutic antigen while the adjuvant component comprises a non-host cell or immune stimulating portion thereof. Notably, use of the adjuvant component will result in significant uptake of the therapeutic component into immune competent cells, even in the absence of receptors for entry of the therapeutic component. In addition, such adjuvant also stimulates expression of the therapeutic antigen.

38.WO/2024/223952CALIXARENE-BASED DELIVERY SYSTEM AND METHOD OF USE

WO - 31.10.2024

Clasificación Internacional A61K 9/51Nº de solicitud PCT/EP2024/061814Solicitante QUANTOOM BIOSCIENCES S.A.Inventor/a VANDER STRAETEN, Aurélien

The current invention relates to a delivery system to deliver one or more cargo to one or more cells, wherein the cargo delivery system comprises at least a calixarene, a phospholipid, an additional lipid such as sterol.

The invention further relates to a method of delivering cargo to a subject using the delivery system and a pharmaceutical composition comprising the delivery system. The invention also relates to the use of a calixarene in an immunogenic composition, wherein said composition comprises an immunogenic component encapsulated in a lipid nanoparticle (LNP) comprising said calixarene and wherein said LNP has an adjuvant effect in said immunogenic composition. The invention also relates to a vaccine, wherein said vaccine comprises an immunogenic component encapsulated in a lipid nanoparticle, wherein said lipid nanoparticle comprises at least one calixarene molecule and said lipid nanoparticle acts as an adjuvant in said vaccine. The invention also relates to a method of preparing an immunogenic composition and a composition comprising a lipid nanoparticle (LNP) adjuvant comprising calixarene.

39.20240342267VACCINATION OF IMMUNOCOMPROMISED SUBJECTS

US - 17.10.2024

Clasificación Internacional A61K 39/145Nº de solicitud 18394260Solicitante Seqirus UK LimitedInventor/a Giuseppe DEL GIUDICE

Disclosed herein are methods for enhancing immune responses to a vaccine in immunocompromised individuals, including those receiving a statin therapy. Related products are also provided.

40.4448001PROSTATAKREBSIMPFSTOFFE UND VERWENDUNGEN DAVON

EP - 23.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 22906790Solicitante JANSSEN BIOTECH INCInventor/a WILKINSON PATRICK

Disclosed herein are methods of treating or preventing prostate cancer in a subject, the methods comprising administering to the subject a treatment regimen comprising two or more vaccines comprising a great ape adenovirus serotype 20 (GAd20) virus that, in turn, comprises a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 1 and one or more vaccines comprising a Modified Vaccinia Ankara (MVA) virus that, in turn, comprises a nucleotide sequence encoding the amino acid sequence of SEQ ID NO: 3 to thereby treat or prevent the prostate cancer.

41.WO/2024/216243PEPTIDE-BASED VACCINES AND METHODS FOR TREATMENT

WO - 17.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud PCT/US2024/024544Solicitante THE JOHNS HOPKINS UNIVERSITYInventor/a KOKKOLI, Efrosini

Provided are, *inter alia,* immunogenic and vaccine compositions including a lipid vesicle, a first nucleic acid; and a peptide, and methods of treating or preventing pancreatic cancer using the compositions.

42.20240342271SYNERGISM OF IMMUNOGENICITY VIA COMBINED PARENTERAL AND MUCOSAL IMMUNIZATION AGAINST COVID-19

US - 17.10.2024

Clasificación Internacional A61K 39/215Nº de solicitud 18294775Solicitante BHARAT BIOTECH INTERNATIONAL LIMITEDInventor/a Raches Ella

The present invention discloses a system and method of generating robust immune response in mammals against SARS-CoV-2 antigen by administering two or more doses of same or different COVID-19 vaccines through same or different routes, wherein at least one vaccine is selected from a primary series of vaccines and at least one vaccine is selected from a secondary series of vaccines and wherein vaccines of primary and secondary series are administered through homologous or heterologous routes. The homologous route of administration comprises administering primary and secondary series of vaccines through same route. The heterologous route of administration comprises administering primary and secondary series vaccines through different routes. The system and method of the invention induces superior cross protection against SARS-CoV-2 variants including against Delta and Omicron variants.

43.2024227153IMPROVED CORONAVIRUS VACCINE.

AU - 17.10.2024

Clasificación Internacional Nº de solicitud 2024227153Solicitante Academia SinicaInventor/a HUANG, Han-Yi

44.WO/2024/219994EXPRESSION VECTOR BASED ON HUMAN ADENOVIRUS SEROTYPE 19 AND METHOD FOR USING SAME

WO - 24.10.2024

Clasificación Internacional C12N 15/861Nº de solicitud PCT/RU2024/000129Solicitante FEDERAL STATE BUDGETARY INSTITUTION "NATIONAL RESEARCH CENTER FOR EPIDEMIOLOGY AND MICROBIOLOGY NAMED AFTER HONORARY ACADEMICIAN N.F. GAMALEI" OF THE MINISTRY OF HEALTH OF THE RUSSIAN FEDERATIONInventor/a GOLDOVSKAIA, Polina Pavlovna

The group of inventions relates to biotechnology, immunology and virology. Proposed is an expression vector based on the genome of human adenovirus serotype 19, containing: a constant sequence with E1 and E3 region deletions which contains an expression cassette with the target gene; and a variable region on the right-hand end of the genome, having a size of up to 1000 bp. In a specific embodiment of the expression vector, the constant sequence has the sequence SEQ ID NO:1 up to the expression cassette and the sequence SEQ ID NO:2 after the expression cassette. The expression cassette can contain, as a vaccine antigen gene, SEQ ID NO:3, or SEQ ID NO:4, or SEQ ID NO:5, or SEQ ID NO:6, or SEQ ID NO:7. Also proposed is a method for producing the claimed expression vector, characterized by the use of a shuttle plasmid containing a sequence that is homologous with a region of the genome of an adenovirus of a serotype other than 19. Still further proposed is a method for the use of the claimed expression vector to induce an immune response to a vaccine antigen. The group of inventions provides for the creation of an expression vector based on human adenovirus serotype 19 which is capable of inducing an immune response to a vaccine antigen.

45.20240350629GENETICALLY ENGINEERED CELL-DERIVED VACCINES

US - 24.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 18681457Solicitante THE REGENTS OF THE UNIVERSITY OF CALIFORNIAInventor/a Young Jik Kwon

The disclosure provides for compositions and methods comprising cell-derived vesicles induced from cells that have been genetically engineered or infected to express specific antigen(s), and uses thereof, including as a cell-free, cell-like vaccine.

46.20240350540TUMOR LYSATE LOADED PARTICLES

US - 24.10.2024

Clasificación Internacional A61K 35/15Nº de solicitud 18395053Solicitante Orbis Health Solutions LLCInventor/a Thomas E. Wagner

Dendritic cells containing tumor lysate loaded particles are prepared. The dendritic cells present tumor antigens to elicit the Major Histocompatibility Complex class I pathway and can be used as a vaccine to treat cancer, including ocular melanoma.

47.4444359IMMUNOGENE NANOPARTIKELZUSAMMENSETZUNGEN UND IMPFVERFAHREN

EP - 16.10.2024

Clasificación Internacional A61K 47/60Nº de solicitud 22847493Solicitante YALE UNIVInventor/a IWASAKI AKIKO

Compositions and methods for inducing a protective mucosal immunity against an antigen in a subject include the step of administering to a mucosal tissue an effective amount of a vaccine composition including the antigen or polynucleotide encoding an antigen associated or encapsulated within carriers such as poly(amine-*co*-ester) polymers in the form of particles (*e.g.*, solid nanoparticles formed of PACE) or PACE copolymers and/or blends. Typically, the subject has previously been exposed to the antigen, for example, by administering to the same subject *via* a systemic or mucosal route of administration a priming antigen. In some embodiments, the polynucleotides-based vaccines are messenger RNAs encoding a viral antigen such as a coronavirus spike protein sequence, or a portion thereof. In preferred embodiments, the vaccine composition is administered intranasally.

48.WO/2024/216165COMPUTATIONAL METHODS FOR SELECTING PERSONALIZED NEOANTIGEN VACCINES

WO - 17.10.2024

Clasificación Internacional G16B 20/20Nº de solicitud PCT/US2024/024443Solicitante ICAHN SCHOOL OF MEDICINE AT MOUNT SINAIInventor/a O'DONNELL, Tim

Systems and methods for identifying a personalized tumor vaccine are provided. Somatic variants for a subject are determined and RNA sequence reads from a tumor of the subject are obtained. From the RNA sequence reads, fusion proteins are determined, each fusion protein a fusion of a portion of a first protein and a portion of a second protein. Candidate neoantigens are selected, including a first subset of candidate neoantigens encoding somatic variants and a second subset of candidate neoantigens encoding residues of the portions of the first and second proteins. A score is determined for each candidate neoantigen using a scoring function including a first scoring term that upweights candidate neoantigens having a higher relative class I MHC affinity, given a class I HLA type of the subject. Two or more candidate neoantigens are selected for the tumor vaccine as a final set of neoantigens based on the respective scores.

49.WO/2024/218789LIPOSOMAL FORMULATION FOR TREATMENT OF VISCERAL LEISHMANIASIS

WO - 24.10.2024

Clasificación Internacional A61K 39/008Nº de solicitud PCT/IN2024/050371Solicitante COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCHInventor/a ALI, Nahid

Antigens from multiple sources is a promising strategy to effectively stimulate all immuno- phenotypic sections of a diverse population. Therefore, combination of multiple protective antigens is a rationale strategy to boost immunogenicity of the vaccine designed for immunization in heterogeneous population as well as to use in effective diagnosis in all endemic areas. The strategy to combine antigens isisis to construct a fusion chimeric multivalent antigen. The present invention relates to the diagnostic and vaccine potential of a recombinant multiantigenic T cell epitope enriched fusion protein comprising of three Leishmania donovani proteins, glycoprotein 63 (GP63), elongation factor 1 α (EF1-α) and cysteine protease C (CPC) against visceral leishmaniasis. The said invention in particular relates to designing, cloning and purification of a novel T cell enriched multiantigenic recombinant protein for detection of Leishmania infection in the form of antigen-specific antibodies in the biological samples such as serum and urine.

50.WO/2024/218165HPV VIRAL VECTOR VACCINE

WO - 24.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud PCT/EP2024/060445Solicitante BARINTHUS BIOTHERAPEUTICS (UK) LIMITEDInventor/a EVANS, Thomas

The present invention relates to a multi-HPV immunogen containing viral vectors, vaccines, compositions, methods and dosage regimes for use in medicine, wherein the use may be the treatment of human papillomavirus (HPV) infection including prophylactic use to prevent HPV infection and/or cancer.

51.20240342268RECOMBINANT VIRUS CONTAINING DEGRON, PREPARATION METHOD THEREFOR, AND APPLICATION THEREOF

US - 17.10.2024

Clasificación Internacional A61K 39/145Nº de solicitud 18682494Solicitante SHENZHEN INSTITUTES OF ADVANCED TECHNOLOGY CHINESE ACADEMY OF SCIENCESInventor/a Longlong SI

A recombinant virus containing a degron, a preparation method therefor, and an application thereof. At least one viral protein of the recombinant virus containing the degron contains at least one degron capable of being recognized by a protein degradation system of a host cell, wherein the degron comprises any one of or a combination of at least two of an amino acid sequence, a polypeptide, or a structural motif. Further provided are a nucleic acid molecule, a recombinant vector, a preparation method for the recombinant virus containing the degron, a preparation system for the recombinant virus containing the degron, a vaccine, an oncolytic virus, and a drug. The recombinant virus containing the degron can be recognized and degraded by the protein degradation system in the host cell, the replication capability is weakened or even removed, and after a corresponding vaccine, oncolytic virus or drug is prepared, a good effect and practical application value are achieved.

52.WO/2024/226106TP0751 CHIMERA-CONTAINING VACCINE

WO - 31.10.2024

Clasificación Internacional A61K 39/02Nº de solicitud PCT/US2023/079879Solicitante UVIC INDUSTRY PARTNERSHIPS INC.Inventor/a CAMERON, Caroline E.

Provided are chimeric Tp0751 (99-237) peptides containing one or more non-native epitopes that replace all or of part of one or more loops 1-8 of the native Tp0751 (99-237) peptide. The non-native epitopes can be from one or more sexually transmitted infections (STIs), such as Treponema pallidum, Chlamydia, or Neisseria gonorrhoeae. Also provided are nucleic acid molecules that encode the chimeric Tp0751 (99-237) peptides. Methods of using the chimeric Tp0751 (99-237) peptides to stimulate an immune response, for example to treat syphilis or other sexually STIs are provided.

53.20240342269OPTIMIZED NUCLEOTIDE SEQUENCES ENCODING SARS-COV-2 ANTIGENS

US - 17.10.2024

Clasificación Internacional A61K 39/215Nº de solicitud 17923497Solicitante TRANSLATE BIO, INC.Inventor/a Anusha DIAS

The present invention relates to optimized nucleotide sequence encoding SARS-COV-2 antigens. These sequences are particularly suitable for use in vaccine compositions for the treatment or prevention of infections caused by a β-coronaviruses, including COVID-19 infections, in a human or animal subject in need of such treatment.

54.20240350620RIBONUCLEOPROTEIN NANOCOMPLEX VACCINES AND USES THEREOF

US - 24.10.2024

Clasificación Internacional A61K 39/215Nº de solicitud 18643883Solicitante Centre for Virology, Vaccinology and Therapeutics LimitedInventor/a Kin Hang KOK

The present invention relates to vaccine compositions that specifically contain complexes comprising an adaptor-antigen polypeptide and viral RNA scaffold. The present invention further relates to uses of the vaccines for the preparation of pharmaceutical compositions, methods of treating or preventing viral infections, and kits comprising the vaccines.

55.WO/2024/223421COLD STORAGE DEVICE

WO - 31.10.2024

Clasificación Internacional F25D 3/06Nº de solicitud PCT/EP2024/060666Solicitante B MEDICAL SYSTEMS S.À R.L.Inventor/a BRUNO, Simone

An RFID enabled cold storage device, notably a vaccine storage device, has a cold storage compartment separated from an ice lining by a thermal barrier. The thermal barrier comprises a layer of thermal insulation material and a planar temperature distributing metal sheet, with the planar temperature distributing metal sheet providing an RFID antenna.

56.4448548BAKTERIOPHAGEN-LAMBDA-IMPFSTOFFSYSTEM

EP - 23.10.2024

Clasificación Internacional C07K 14/005Nº de solicitud 22847091Solicitante THE US SECRETARY DEPARTMENT OF HEALTH AND HUMAN SERVICESInventor/a ADHYA SANKAR L

Bacteriophage λ are disclosed herein that include a head, a tail, and a lambda genome comprising a nucleic acid sequence encoding a fusion protein comprising a D protein linked to heterologous antigen, wherein the nucleic acid sequence is inserted into a native *gene D* locus adjacent to *gene E*, in the lambda genome, and wherein expression of the fusion protein results in the head of the bacteriophage λ comprising the fusion protein. Host bacterial cells also disclosed herein that are infected with the bacteriophage λ. In addition, immunogenic compositions are disclosed that include an effective amount of the bacteriophage λ. Methods also are disclosed for inducing an immune response to the heterologous antigen in a subject. Furthermore, methods are disclosed for preparing these bacteriophage λ.

57.WO/2024/223713ANTI-NGF VACCINE COMPOSITION

WO - 31.10.2024

Clasificación Internacional A61K 38/00Nº de solicitud PCT/EP2024/061328Solicitante PEPTINOVInventor/a ZAGURY, Jean-François

The present invention relates to a polypeptide comprising, or consisting of: - a first sequence consisting of at least 8 contiguous amino acids chosen from within the sequence running from amino acids 122 to 136 of the β subunit of the NGF protein and of at most 30 contiguous amino acids chosen from within the complete sequence of the β subunit of the NGF protein; and/or - a second sequence consisting of at least 8 contiguous amino acids chosen from within the sequence running from amino acids 148 to 158 of the β subunit of the NGF protein and of at most 30 contiguous amino acids chosen from within the complete sequence of the β subunit of the NGF protein.

58.20240350624COMBINATION THERAPY OF IMMUNOTOXIN AND CHECKPOINT INHIBITOR

US - 24.10.2024

Clasificación Internacional A61K 39/395Nº de solicitud 18428597Solicitante Duke UniversityInventor/a Darell Bigner

Regional, tumor-targeted, cytotoxic therapy, such as D2C7-immunotoxin (D2C7-IT), not only specifically target and destroy tumor cells, but in the process initiate immune events that promote an in situ vaccine effect. The antitumor effects are amplified by immune checkpoint blockade which engenders a long-term systemic immune response that effectively eliminates all tumor cells.

59.WO/2024/215616METHODS AND COMPOSITIONS FOR DENDRITIC CELL TARGETING VACCINES

WO - 17.10.2024

Clasificación Internacional C07H 15/06Nº de solicitud PCT/US2024/023597Solicitante ROCK BIOMEDICAL INC.Inventor/a LEE, Jeng Shin

The present disclosure provides novel compounds, methods, and cell targeting mRNA vaccine formulations for targeted delivery, such as delivery to dendritic cells. The compound and formulation provided herein are designed to have a targeting moiety configured to provide selective delivery features specific for dendritic cells and a lipid tail for incorporated into the bilayer membrane of the formed lipid nanoparticle.

60.WO/2024/221135OLIGONUCLEOTIDES FOR USE IN MODULATING IMMUNE RESPONSES AGAINST HEPATITIS B VIRAL INFECTION

WO - 31.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud PCT/CN2023/090098Solicitante AUSPER BIOPHARMA CO., LTD.Inventor/a CHENG, Guofeng

Provided herein are vaccine compositions comprising an oligonucleotide and a Hepatitis B viral antigen, either present in the same composition, or in separate compositions, useful for prevention or treatment of Hepatitis B viral infection in a subject. The oligonucleotides can exert a sustained immunomodulatory effect and lead to the reduction of HBV antigen levels in an infected subject. Also provided herein are methods of making and use thereof.

61.4444347IMPFSTOFFVERSTÄRKUNGSVERFAHREN UND -ZUSAMMENSETZUNGEN

EP - 16.10.2024

Clasificación Internacional A61K 39/395Nº de solicitud 22826685Solicitante BARINTHUS BIOTHERAPEUTICS UK LTDInventor/a EVANS THOMAS

The invention relates to combinations, compositions, methods and dosage regimes for use in medicine, optionally wherein the use may be the treatment of chronic hepatitis B virus (HBV) infection or cancer, including inducing an improved immune response and improvement in the performance of therapeutic vaccines.

62.4448774RNA-KONSTRUKT

EP - 23.10.2024

Clasificación Internacional C12N 15/86Nº de solicitud 22830606Solicitante IMPERIAL COLLEGE INNOVATIONS LTDInventor/a MCKAY PAUL

The invention relates to RNA constructs, and particularly, although not exclusively, to mRNA constructs and saRNA replicons and to nucleic acids and expression vectors encoding such RNA constructs. The invention extends to the use of such RNA constructs in therapy, for example in treating diseases and/or in vaccine delivery. The invention extends to pharmaceutical compositions comprising such RNA constructs, and methods and uses thereof.

63.20240350619VACCINES AND COMPOSITIONS BASED ON SARS-COV-2 S PROTEIN

US - 24.10.2024

Clasificación Internacional A61K 39/215Nº de solicitud 18027132Solicitante GUANGZHOU RIBOBIO CO., LTD.Inventor/a Bill Biliang ZHANG

This disclosure provides vaccines and compositions based on SARS-COV-2 S protein, and specifically relates to recombinant SARS-COV-2 spike protein (Sprotein) and mRNA and DNA coding thereof. This disclosure also relates to recombinant plasmid comprising DNA sequence encoding recombinant S protein. This disclosure further relates to composition comprising the recombinant S protein and/or mRNA mentioned above, mRNA-carrier particle such as lipid nanoparticle (LNP), and composition such as a vaccine composition.

64.WO/2024/226653SARS-COV-2 VACCINE COMPOSITIONS

WO - 31.10.2024

Clasificación Internacional Nº de solicitud PCT/US2024/026065Solicitante NOVAVAX, INC.Inventor/a SMITH, Gale

Disclosed herein are coronavirus (CoV) Spike (S) polypeptides, including naturally and non-naturally occurring polypeptides, and nanoparticles and immunogenic compositions comprising the same, which are useful for stimulating immune responses against various SARS-CoV-2 strains. The nanoparticles present antigens from pathogens surrounded to and associated with a detergent core resulting in enhanced stability and good immunogenicity. Dosages, formulations, and methods for preparing the vaccines and nanoparticles are also disclosed.

65.WO/2024/216115METHODS FOR PRODUCING A SUPER CENTRAL MEMORY CD8 T CELL SUBTYPE BY POLY(ADP-RIBOSE) POLYMERASE (PARP) INHIBITION AND USES THEREOF

WO - 17.10.2024

Clasificación Internacional A61K 31/502Nº de solicitud PCT/US2024/024381Solicitante GEORGETOWN UNIVERSITYInventor/a KHLEIF, Samir N.

A unique CD8 T cell central memory subtype obtained by treatment of CD8 T cells with a poly(ADP-ribose) polymerase (PARP) inhibitor (PARPi) is described. These cells, referred to as super-central memory CD8 T cells (T_{CM}^{sup}) or PARPi-induced memory T cells, are significantly more efficient for cancer therapy than traditional central memory T cells (T_{CM}) generated by tumor antigens. Methods of using the T_{CM}^{sup} cells for enhancing cancer immunotherapy, enhancing vaccine-induced immunity, and treating cancer are described.

66.4448004IMPLANTIERBARE GERÜSTE FÜR IMMUNTHERAPEUTISCHE UND ANDERE VERWENDUNGEN

EP - 23.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud 22908453Solicitante THE REGENTS OF UNIV OF CALIFORNIAInventor/a HASANI-SADRABADI MOHAMMAD MAHDI

An implantable or injectable scaffold comprising an antigen, a T memory cell inducer, and other optional components is provided for use in enhancing the immune response to the antigen, in particular for subjects who are elderly, immunosenescent and/or immunocompromised, or undergoing cancer therapy. Coronavirus SARS-CoV-2 has caused millions of confirmed cases and hundreds of thousands of deaths. However, there is no effective drug treatment, and vaccine is in great need to control the spread of such highly infectious virus.

67.20240352076SPECIFIC BACULOVIRUS MAJOR ENVELOPE GLYCOPROTEIN GP64 BINDING PROTEINS

US - 24.10.2024

Clasificación Internacional C07K 14/005Nº de solicitud 18629324Solicitante Navigo Proteins GmbHInventor/a Erik Fiedler

gp64 is the major envelope glycoprotein of baculoviruses. The present invention relates to novel proteins that specifically bind to the baculovirus envelope protein gp64. The novel proteins of the present invention are advanced and powerful tools because they allow precise capturing of gp64 in affinity chromatography. The gp64 binding proteins are particularly useful tools within the process of protein production

(e.g. vaccine production) to provide for gp64 free samples. Further, the binding protein for gp64 are useful for methods to analyze the presence of gp64.

68.20240355417SYSTEMS AND METHODS FOR DETECTION, MONITORING, AND INTERACTIVE DISPLAY OF CIRCULATING INFECTIOUS DISEASES AND THEIR CHARACTERISTICS

US - 24.10.2024

Clasificación Internacional G16B 20/50Nº de solicitud 18618412Solicitante BioNTech SEInventor/a Alexander Muik

The present disclosure, among other things, provides technologies for identifying, characterizing, and/or monitoring variant sequences of a particular reference infections agent. Among other things, systems, methods, and architectures described herein provide visualization and decision support tools that can, e.g., facilitate decision making processes by local authorities and improve pandemic response in terms of, e.g., resource allocation, policy making, and speed tailored vaccine development. The present disclosure also provides tools for analyzing circulating variants to predict mutations likely to increase immune evasion of infectious agents.

69.WO/2024/221114AEROSPACE-BASED HEALTHCARE SYSTEMS

WO - 31.10.2024

Clasificación Internacional A61G 3/00Nº de solicitud PCT/CA2024/050575Solicitante THINKING ROBOTSTUDIOS INC. AND MASH.FLIGHTSInventor/a JOUDRIE, Kendall

A mobile transportation system, having a plurality of modules, including a self-sufficient hospital facility, small-scale medical device manufacturing facility, vaccine production facility, pharmaceutical production facility, sterilization facility, and food production facility, as well as an accommodation facility; wherein each of said plurality of modules, when necessary can be unloaded from the aerospace object and connected to other modules to become part of a larger modular facility with specific purposes, to allows for customization of the facility depending on the medical or other needs.

70.WO/2024/221577METHOD FOR SERUM-FREE ADHERENT CULTURE AND DOMESTICATION OF MDCK CELLS

WO - 31.10.2024

Clasificación Internacional C12N 5/071Nº de solicitud PCT/CN2023/101772Solicitante SHANGHAI OPM BIOSCIENCES CO., LTD.Inventor/a LI, Juan

The present invention belongs to the technical field of biology, and relates to a method for producing a biological product, in particular a method for the adherent culture and domestication of MDCK cells. Provided is a set of serum-free domestication platforms for MDCK. Using a specific culture medium and domestication culture conditions, MDCK can rapidly adapt to serum-free culture, and then is used for producing an avian influenza vaccine, which is key to preparing the next-generation of safe, effective and quality-controllable influenza vaccines.

71.20240350602NOVEL PEPTIDES & COMBINATION OF PEPTIDES AS TARGETS OR ACTIVE INGREDIENTS FOR USE IN IMMUNOTHERAPY AGAINST AML & OTHER CANCERS

US - 24.10.2024

Clasificación Internacional A61K 39/00Nº de solicitud 18759376Solicitante Immatics Biotechnologies GmbHInventor/a Andrea MAHR

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

72.WO/2024/220043A TRANSMISSION-BLOCKING COMPOSITION AGAINST *PLASMODIUM VIVAX*

WO - 24.10.2024

Clasificación Internacional A61K 39/015Nº de solicitud PCT/TH2023/000006Solicitante MAHIDOL UNIVERSITYInventor/a PRACHUMSRI, Jetsumon

The present disclosure relates to a composition for prohibiting cross-species infection of malaria caused by P. vivax in a subject. Preferably, the disclosed composition is prepared in the form of a vaccine, which comprises a plurality of polynucleotides each comprising a sequence as setting forth in SEQ ID No. 1 or SEQ ID No. 2, the polynucleotides being expressed in a body of the subject for inducing an immune response reactive against the infection of malaria thereof; a liquid phase of lipid nanoparticles configured to form a protective layer encapsulating the pluralities of polynucleotides within the protective layer; and a pharmaceutically acceptable adjuvant.

73.4450084GROSSE EXTRAZELLULÄRE SCHLEIFE (LEL) VON CD9 ALS IMMUNOGENES ADJUVANS IN LIPIDNANOVESIKELN

EP - 23.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud 23382365Solicitante UNIV AUTONOMA DE MADRIDInventor/a YÁÑEZ MÓ MARÍA

The present invention refers to a pharmaceutical composition (from hereinafter pharmaceutical composition of the invention), preferably a vaccine composition, comprising a lipid-based nanoparticle and optionally an excipient, wherein the lipid-based nanoparticle comprises the large extracellular loop (LEL) of CD9 of SEQ ID NO 2 displayed on its surface or an amino acid sequence having at least 75%, 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99% or 100% identity to SEQ ID NO 2 displayed on its surface. That is, the large extracellular loop (LEL) of CD9 of SEQ ID NO 2, or a sequence having the indicated sequence identity, is associated with or displayed on the exterior surface of the lipid nanoparticle.

74.WO/2024/218358THE LARGE EXTRACELLULAR LOOP (LEL) OF CD9 AS AN IMMUNOGENIC ADJUVANT IN LIPID NANOVESICLES

WO - 24.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud PCT/EP2024/060824Solicitante UNIVERSIDAD AUTÓNOMA DE MADRIDInventor/a YÁÑEZ-MÓ, María

The present invention refers to a pharmaceutical composition (from hereinafter pharmaceutical composition of the invention), preferably a vaccine composition, comprising a lipid-based nanoparticle and optionally an excipient, wherein the lipid-based nanoparticle comprises the large extracellular loop (LEL) of CD9 of SEQ ID NO 2 displayed on its surface or an amino acid sequence having at least 75%, 80%, 85%, 90%, 91%, 92%, 93%, 94%, 95%, 96%, 97%, 98%, 99% or 100% identity to SEQ ID NO 2 displayed on its surface. That is, the large extracellular loop (LEL) of CD9 of SEQ ID NO 2, or a sequence having the indicated sequence identity, is associated with or displayed on the exterior surface of the lipid nanoparticle.

75.20240350616VIRUS-LIKE PARTICLE VACCINE FOR RESPIRATORY SYNCYTIAL VIRUS

US - 24.10.2024

Clasificación Internacional A61K 39/155Nº de solicitud 18682281Solicitante Icosavax, Inc.Inventor/a Niranjan Kanesa-Thasan

The present disclosure relates to targeting Respiratory Syncytial Virus (RSV), and methods of using such vaccines to treat infections with RSV, in particular, lower respiratory tract infections (LRTIs).

76.20240352497ENZYMATIC METHOD FOR PREPARATION OF CMP-NEU5AC

US - 24.10.2024

Clasificación Internacional C12P 19/46Nº de solicitud 17995816Solicitante Max-Planck-Gesellschaft zur Förderung der Wissenschaften e.V.Inventor/a Thomas F.T. Rexer

The present invention relates to a method for producing cytidine 5'-monophospho-N-acetyl-neuraminic acid (CMP-Neu5Ac, 1) from low-cost substrates N-acetyl-D-glucosamine (GlcNAc), pyruvate, cytidine and polyphosphate in a single reaction mixture with a set of optionally immobilized or optionally co-immobilized enzymes comprising N-acylglucoamine 2-epimerase (AGE), an N-acetylneuraminate lyase (NAL), an N-acylneuraminate cytidylyltransferase (CSS), a uridine kinase (UDK), a uridine monophosphate kinase and a polyphosphate kinase 3 (PPK3). Further, said process may be adapted to produce Neu5Acylated i.e. sialylated biomolecules and biomolecules including a saccharide, a peptide, a protein, a glycopeptide, a glycoprotein, a glycolipid, a glycan, an antibody, and a glycoconjugate, in particular, an antibody drug conjugate, and a carbohydrate conjugate vaccine, or a flavonoid.

77.20240350611RECOMBINANT ANTIGEN FOR INDUCING AN IMMUNE RESPONSE AGAINST THE ZIKA VIRUS

US - 24.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud 18292237Solicitante CENTRO DE INGENIERÍA GENÉTICA Y BIOTECNOLOGÍAInventor/a Iris VALDES PRADO

Recombinant chimeric antigen containing a polypeptide comprises amino acids 2 to 104 of the zika virus capsid protein or a polypeptide with an amino acid sequence with at least 90% identity with such capsid protein region. Vaccine composition that comprises such recombinant chimeric antigen and a pharmaceutically approved adjuvant. Use of the recombinant chimeric antigen containing a polypeptide comprises amino acids 2 to 104 of the zika virus capsid protein or a polypeptide with an amino acid sequence with at least 90% identity with such capsid protein region, for manufacturing a medicament for the induction of immune response against

zika virus. The invention revels also a method for the induction of immune response against zika virus wherein this recombinant chimeric antigen is administered.

78.WO/2024/215719COMPOSITION, VACCINE AND METHOD FOR TREATING INFLUENZA A

WO - 17.10.2024

Clasificación Internacional A61K 39/145Nº de solicitud PCT/US2024/023820Solicitante ACADEMIA SINICAInventor/a CHOU, Mei-Yin

The present disclosure provides a composition comprising a polymeric nanoparticle encapsulating an antigen and an agonist, wherein the antigen is M2e peptide. The composition may induce the immune response to influenza A. A method for inducing immune response to influenza A is also provided.

79.20240352020PYRAZOLE-CONTAINING CBP/CATENIN ANTAGONISTS AND USES THEREOF

US - 24.10.2024

Clasificación Internacional C07D 487/04Nº de solicitud 18684619Solicitante 3+2 PHARMA, LLCInventor/a Fuqiang Ruan

Provided are compounds of formula (la) and (lb), and pharmaceutically acceptable salts thereof. Additionally provided are compositions and pharmaceutical compositions comprising the compounds, therapeutic methods using same for modulating (e.g., inhibiting) CREB binding protein (CBP)/β-catenin mediated signaling in treating a condition, disease or disorder (e.g., fibrosis, cancer, neurological conditions, metabolic disorders (e.g., diabetes, etc.), and skin conditions (dermatitis, psoriasis, scarring, alopecia, etc.) mediated by aberrant CBP/β-catenin signaling, and cosmetic methods for treating skin conditions (e.g., aging, etc.). Additionally provided are methods for enhancing vaccine efficacy using the compounds and compositions. Further provided are methods for efficiently synthesizing an antagonist of CBP/catenin signaling pathway, comprising use, in a penultimate, or last reaction step, of an intermediate 2-propynyl-compound to form a pyrazole derivative (e.g., via 3+2 cycloaddition).

80.20240342270PROTECTIVE IMMUNITY ENHANCED ATTENUATED SALMONELLA VACCINE (PIESV) VECTOR SYSTEMS

US - 17.10.2024

Clasificación Internacional A61K 39/215Nº de solicitud 18265323Solicitante UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INCORPORATEDInventor/a Roy CURTISS, III

Described within is a new much improved host-vector systems for delivery of synthesized antigens or of DNA vaccines to a diversity of animal and human hosts to elicit immune responses, especially protective immune responses to control infection and disease induction and/or transmission by bacterial, viral, parasite and fungal infectious disease agents.

81.20240352411ANIMAL-FREE MATERIALS FOR CELL CULTIVATION IN BIOREACTORS AND METHODS OF MAKING AND USING THEREOF

US - 24.10.2024

Clasificación Internacional C12N 5/00Nº de solicitud 18144264Solicitante NouBio Inc.Inventor/a Samad Ahadian

Microstructures made of dairy products derived from fermentation or mammalian cells as edible or biodegradable microcarriers for cell culture in bioreactors for biomedical applications ranging from tissue engineering, cell-based foods or materials (e.g., cultivated meat, leather), vaccine production, human tissue fabrication, and cell/gene therapy. Edible or biodegradable microcarriers have the potential to be used for the scalable growth of cells in bioreactors in animal serum-free media without the need to be separated from the microcarriers for a final cell-based meat or other cell-based products. Edible microcarriers can act as a replacement for fat in various products and can be modified with the inclusion of flavor molecules and custom proteins and extracellular matrix components to enhance the final creation of cell-based meat or other cell-based products in a bioreactor.

82.WO/2024/218154NUCLEIC ACID VACCINE FOR ACTIVATING NKG2C+ NATURAL KILLER CELLS

WO - 24.10.2024

Clasificación Internacional A61K 38/03Nº de solicitud PCT/EP2024/060423Solicitante CHARITÉ - UNIVERSITÄTSMEDIZIN BERLINInventor/a ROMAGNANI, Chiara

The invention relates to a nucleic acid molecule, comprising (a) a sequence encoding a human cytomegalovirus (HCMV) UL40 signal peptide, or sequence variant thereof, and (b) an endoplasmic reticulum (ER)-targeting sequence. In a preferred embodiment the nucleic acid molecule further comprises a stability inducing motif at its 3'-end. The invention relates to the nucleic acid molecule of the invention for use as a medicament or as an immunogenic composition. The invention relates further to a pharmaceutical composition comprising the nucleic acid molecule of the invention.

83.WO/2024/226031COMPOSITIONS, DEVICES, SYSTEMS AND METHODS RELATING TO VACCINATION AND STERILE PROTECTION AGAINST MALARIA

WO - 31.10.2024

Clasificación Internacional A61K 39/015Nº de solicitud PCT/US2023/019674Solicitante MALARVX INC.Inventor/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., LIONTM) 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.

84.20240343769MULTI-EPITOPE VACCINE FOR THE TREATMENT OF ALZHEIMER'S DISEASE

US - 17.10.2024

Clasificación Internacional C07K 14/47Nº de solicitud 18594435Solicitante OTHAIR PROTHENA LIMITEDInventor/a Robin BARBOUR

The disclosure provides peptide compositions and immunotherapy compositions comprising an amyloid-beta (Aβ) peptide and a tau peptide. The disclosure also provides methods of treating or effecting prophylaxis of Alzheimer's disease or other diseases with beta-amyloid deposition in a subject, including methods of clearing deposits, inhibiting or reducing aggregation of Aβ and/or tau, blocking the uptake by neurons, clearing amyloid, and inhibiting propagation of tau seeds in a subject having or at risk of developing Alzheimer's disease or other diseases containing tau and/or amyloid-beta accumulations. The methods include administering to such patients the compositions comprising an amyloid-beta (Aβ) peptide and a tau peptide.

85.4446336NEOGLYCOKONJUGATE ALS IMPFSTOFFE UND THERAPEUTISCHE WERKZEUGE

EP - 16.10.2024

Clasificación Internacional C07K 9/00Nº de solicitud 24193866Solicitante KORANEX CAPITALInventor/a SHIAO TZE CHIEH

Neoglycoconjugates as immunogens and therapeutic/diagnostic tools are described herein. The neoglycoconjugates are produced by conjugating a carbohydrate antigen intermediate to a free amine group of a carrier material (e.g., carrier protein). The intermediate comprises a linker having a first end and a second end, the first end being conjugated to a carbohydrate antigen via a thio ether bond and the second end comprising a functional group reactable with a free amine group. Following coupling, the carbohydrate antigen becomes covalently bound to the carrier material via an amide, a carbamate, a sulfonamide, a urea, or a thiourea bond, thereby producing the neoglycoconjugate. Applications of the neoglycoconjugates as antigens, immunogens, vaccines, and in diagnostics are also described. Specifically, the use of (neo)glycoconjugates as vaccine candidates and other therapeutic tools against cancers, viruses such as SARS-CoV-2, and other diseases characterized by expression of aberrant glycosylation are also described.

86.WO/2024/223994A VIRAL VECTOR AND A VACCINE COMPOSITION COMPRISING THE VECTOR

WO - 31.10.2024

Clasificación Internacional A61K 39/12Nº de solicitud PCT/FI2024/050203Solicitante ROKOTE LABORATORIES FINLAND OYInventor/a SAKSELA, Kalle

The present invention provides a viral vector comprising, at an insertion site in the viral genome, a nucleic acid sequence encoding a modified extracellular domain of the SARS- CoV-2 spike protein, wherein said modified extracellular domain comprises an N-terminal signal peptide causing the spike protein to enter a secretory system in a host cell, wherein said modified extracellular domain comprises a C-terminal deletion of at least of heptad repeat 2 (HR2), transmembrane segment (TM) and cytoplasmic tail (CT) of the spike protein. The present invention also provides a vaccination composition comprising said viral vector.

87.WO/2024/217142BIOMINERALIZED COMPOSITE NANOMATERIAL, AND PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 24.10.2024

Clasificación Internacional A61K 47/69Nº de solicitud PCT/CN2024/077929Solicitante NANJING UNIVERSITY OF POSTS AND TELECOMMUNICATIONSInventor/a DING, Xianguang

A biomineralized composite nanomaterial, and a preparation method therefor and a use thereof. The nanomaterial takes a cell and a derivative thereof as a core, and mineralizes the core to form a protective

layer of the cell and the derivative thereof, and a hydrophilic shell targeting tumor cells, and the shell has a modified end covalently bonded to the cell and the derivative thereof and a hydrophilic end targeting tumor cells. Preferably, the core is composed of a cell or a cell sub-structure or an extracellular vesicle derivative; the shell is composed of an iron oxide or a manganese oxide or an aluminum oxide in a metal salt. The nanomaterial can be used as a novel vaccine for immunotherapy, can protect a cell and a derivative thereof, can target tumor cells, improves efficiency, and reduces toxic and side effects on patients; the preparation method has the advantages of easy operation, controllable conditions and large-scale production.

88.4448559CD44-GLYCOEPITOPE UND CHIMÄRE IMPFSTOFF-GLYCOKONJUGATE FÜR DIE KREBSTHERAPIE UND SYNTHESEVERFAHREN DAFÜR

EP - 23.10.2024

Clasificación Internacional C07K 14/705Nº de solicitud 22777018Solicitante I3S INSTITUTO DE INVESTIG E INOVACAO EM SAUDE ASSOCIACAOInventor/a RIBEIRO DE CASTRO FERREIRA JOSÉ ALEXANDRE

The present invention refers to glycopeptides derived from the short CD44 isoforms lacking the amino acids encoded by exons 6-14, the said glycopeptides presenting at least one or multiple serine or threonine residues substituted with Tn (GalNAca-O-Ser/Thr) and/or sialyl-Tn (STn; Neu5Aca2-6GalNAca-O-Ser/Thr) antigens. The present invention further provides a method for synthesizing the herein disclosed glycopeptides, the said method comprising a one-pot glycosylation of synthetic short isoform CD44 peptides through combination with nucleotide sugars and glycosyl trans f erases and subsequent purification of the CD44s-Tn glycopeptides by lectin affinity chromatography followed by Ti02 chromatography or liquid chromatography. In one embodiment, the present invention further comprises immunogenic chimeras derived from the said CD44-Tn and/or STn glycopeptides, which are linked, in a polyvalent form, to a carrier immunogenic protein, such as keyhole limpet hemocyanin (KLH) or cross-reacting material (CRM197). Methods for conj ugating the synthesized CD44s-Tn glycopeptides to the immunogenic protein carriers CRM197 and KLH, are described, generating the chimeric glycopeptides, herein termed CRM197 -CD44 s-Tn and KLH-CD44s-Tn, respectively. The present invention further regards the above-mentioned CD44-Tn/STn glycopeptides or compositions comprising said glycopeptides for use in the treatment of cancer and pre-neoplastic diseases, most preferably of neoplastic diseases expressing short CD44 isoforms, through generation of antibodies against cancer cells and treatment and prevention of cancer by vaccination. The glycopeptides, compositions, synthesis methods and uses of the present invention can be advantageously employed in the treatment of cancer, alone or in combination with immune checkpoint inhibitor therapy, chemotherapy, and radiotherapy.

89.20240342272ORAL VACCINE VIA DENTAL BACTERIA AND EMITTED PEPTIDES TO PREVENT INFECTION FROM A PATHOGEN

US - 17.10.2024

Clasificación Internacional A61K 39/215Nº de solicitud 18755430Solicitante David KotlyarInventor/a David Kotlyar

Disclosed is a pharmaceutical composition to prevent transmission of a pathogen (i.e., including SARS-CoV-2 amongst other pathogens), the pharmaceutical composition comprising: genetically modified bacteria; sequences of small peptides; and pharmaceutical excipients, wherein the genetically modified oral bacteria are modified to translate, produce, and emit the sequences of small peptides which neutralize a pathogen (i.e., including SARS-CoV-2 amongst other pathogens), wherein transgenic technology is used to modify the

genetically modified oral bacteria to add genes in genetically modified oral bacteria that are transcribed to produce small peptides from the sequences of small peptides so added, wherein the sequences of small peptides show extreme binding and neutralization to a pathogen (i.e., including SARS-CoV-2 amongst other pathogens) but not to host proteins or processes, and wherein the pharmaceutical excipients aid the oral and/or nasal administration of the pharmaceutical composition.

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