VacCiencia

FINLAY EDICIONES

Boletín Científico

No. 28 (12-20 octubre / 2021)

EN ESTE NÚMERO

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

- Resumen de la información publicada por la OMS sobre los candidatos vacunales en desarrollo contra la COVID-19 a nivel mundial.
- Noticias más recientes en la Web sobre vacunas.
- Artículos científicos más recientes de Medline sobre vacunas contra la COVID-19.
- Patentes más recientes en Patentscope sobre vacunas.
- Patentes más recientes en USPTO sobre vacunas.

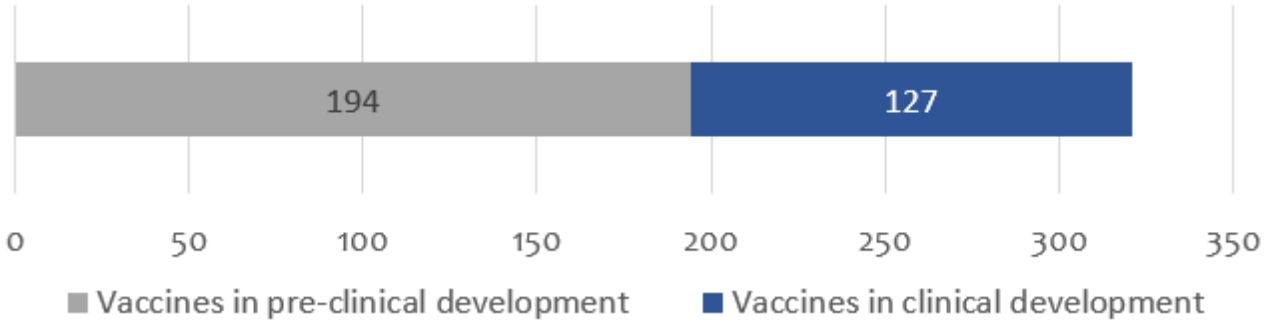
IFV INSTITUTO FINLAY DE VACUNAS SiViFinlay VaCyT

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

Última actualización por la OMS: 19 de octubre de 2021.

Fuente de información utilizada: World Health Organization | R&D Blueprint Powering research to prevent epidemics

127 candidatos vacunales en evaluación clínica y 194 en evaluación preclínica.



Candidatos vacunales en evaluación clínica por plataforma

Platform		Candidate vaccines (no. and %)	
PS	Protein subunit	44	35%
VVnr	Viral Vector (non-replicating)	18	14%
DNA	DNA	14	11%
IV	Inactivated Virus	17	13%
RNA	RNA	21	17%
VVr	Viral Vector (replicating)	2	2%
VLP	Virus Like Particle	5	4%
VVr + APC	VVr + Antigen Presenting Cell	2	2%
LAV	Live Attenuated Virus	2	2%
VVnr + APC	VVnr + Antigen Presenting Cell	1	1%
BacAg-SpV	Bacterial antigen-spore expression vector	1	1%
		127	

Candidatos vacunales mucosales en evaluación clínica

Desarrollador de la vacuna/fabricante/país	Plataforma de la vacuna	Vía de administración	Fase
University of Oxford/Reino Unido	Vector viral no replicativo	Intranasal	1
Vaxart/Estados Unidos	Vector viral no replicativo	Oral	2
Univ. Hong Kong, Xiamen Univ./Beiging Wantai Biol. Pharm./China	Vector viral replicativo	Intranasal	3
Symvivo/Canadá	ADN	Oral	1
ImmunityBio, Inc./Estados Unidos	Vector viral no replicativo	Oral o SL	1/2
Codagenix/Serum Institute of India	Virus vivo atenuado	Intranasal	3
Center for Genetic Engineering and Biotechnology (CIGB)/Cuba	Subunidad proteica	Intranasal	1/2
Razi Vaccine and Serum Research Institute/India	Subunidad proteica	IM e IN	3
Bharat Biotech International Limited/India	Vector viral no replicativo	Intranasal	1
Meissa Vaccines, Inc./Estados Unidos	Virus vivo atenuado	Intranasal	1
Laboratorio Avi-Mex/México	Virus inactivado	IM o IN	1
USSF + VaxForm/Estados Unidos	Subunidad proteica	Oral	1
CyanVac LLC/Estados Unidos	Vector viral no replicativo	Intranasal	1
DreamTec Research Limited/Hong Kong	BacAg-SpV	Oral	NA

Candidatos vacunales más avanzados a nivel global

Desarrollador de la vacuna/fabricante/país	Plataforma vacuna	Fase
Sinovac/China	Virus Inactivado	4
Sinopharm/Wuhan Institute of Biological Products/China	Virus Inactivado	4
Sinopharm/Beijing Institute of Biological Products/China	Virus Inactivado	4
AstraZeneca + University of Oxford/Reino Unido	Vector viral no replicativo	4
CanSino Biological Inc./Beijing Institute Biotechnology/China	Vector viral no replicativo	4
Gamaleya Research Institute/Rusia	Vector viral no replicativo	3
Janssen Pharmaceutical Companies/Estados Unidos	Vector viral no replicativo	4
Novavax/Estados Unidos	Subunidad proteica	3
Moderna/NIAID/Estados Unidos	ARN	4
Pfizer/BioNTech + Fosun Pharma/Estados Unidos	ARN	4
Anhui Zhifei Longcom Biopharmac./Inst. Microbiol, Chin Acad Sci/China	Subunidad proteica	3
CureVac AG/Alemania	ARN	3
Institute of Medical Biology/Chinese Academy of Medical Sciences	Virus inactivado	3
Research Institute for Biological Safety Problems, Kazakhstan	Virus inactivado	3
Inovio Pharmaceut. + International Vacc. Inst. + Advaccine Biopharma-	ADN	3
Zydus Cadila Healthcare Ltd./India	ADN	3
Bharat Biotech/India	Virus Inactivado	3
Sanofi Pasteur + GSK/Francia/Gran Bretaña	Subunidad proteica	3
Shenzhen Kangtai Biological Products Co., Ltd./China	Virus Inactivado	3
Clover Biopharmaceuticals Inc./GSK/Dynavax/China/Reino Unido/EE.UU	Subunidad proteica	3
Vaxine Pty Ltd. + CinnaGen Co./Australia, Irán	Subunidad proteica	3
Medigen Vaccine Biol./Dynavax/NIAID/Taiwán/EE.UU	Subunidad proteica	3
Instituto Finlay de Vacunas/Cuba	Subunidad proteica	3
Federal Budget Res Inst State Res Cent Virol Biotechnol "Vector"/Rusia	Subunidad proteica	3
West China Hospital + Sichuan University/China	Subunidad proteica	3
Univ. Hong Kong + Xiamen Univ. + Beijing Wantai Biological Pharmacy	Vector viral replicativo	3
Acad Milit Sci (AMS) Walvax Biotechnol, Suzhou Abogen Biosci/China	ARN	3
Medicago Inc./Canadá	Partícula similar a virus	3
Codagenix/Serum Institute of India	Virus vivo atenuado	3
Center for Genetic Engineering and Biotechnology (CIGB)/Cuba	Subunidad proteica	3
Valneva, National Institute for Health Research, Reino Unido	Virus inactivado	3
Biological E. Limited	Subunidad proteica	3
Nanogen Pharmaceutical Biotechnology/Vietnam	Subunidad proteica	3
Erciyes University/Turquía	Virus inactivado	3
SK Bioscience Co., Ltd./CEPI/Corea del Sur/Noruega	Subunidad proteica	3
Razi Vaccine and Serum Research Institute	Subunidad proteica	3
Arcturus Therapeutics, Inc./ Estados Unidos	ARN	3

Noticias en la Web

COVID-19 en el mundo: Argentina comienza vacunación de niños de 3 a 11 años

12 oct. El Ministerio de Salud de Argentina inició este martes la vacunación contra el nuevo coronavirus de los menores de 3 a 11 años que tengan enfermedades preexistentes, a los que se les aplicará la vacuna del laboratorio chino Sinopharm.

"Es importante tener una herramienta preventiva en pediatría, no sólo por los niños de alto riesgo, sino porque también va a tener un efecto importante en disminuir la trasmisión del virus sobre todo en los entornos intrafamiliares", dijo la ministra de Salud, Carla Vizzotti, a Radio Urbana.

Vizzotti se disponía a viajar a la provincia de La Pampa, donde encabezará el lanzamiento simultáneo a nivel nacional de la vacunación para esa franja etaria. Primeramente serán inmunizados los menores que sufren enfermedades crónicas y luego se seguirá con el resto, reportó AP.

La vacuna de Sinopharm para menores de esa edad fue aprobada recientemente por la Administración Nacional de Medicamentos, Alimentos y Tecnología Médica, para lo cual se tuvieron en cuenta los estudios clínicos realizados en Emiratos Árabes. Hay nueve millones de dosis reservadas para garantizar la inmunización.

En Argentina la campaña de vacunación avanza con fluidez luego de sufrir contratiempos sobre todo en la primera parte del año. La inmunización de adolescentes de entre 12 y 17 años que no sufren problemas de salud se inició a fines de septiembre y a partir del martes tomará impulso con la distribución de 1,6 millones de dosis de la vacuna del laboratorio estadounidense Pfizer.

Con anterioridad, se llevó a cabo la inmunización de los adolescentes con comorbilidades como diabetes y enfermedades respiratorias.

La ministra también dijo que las autoridades sanitarias están evaluando un refuerzo con una tercera dosis para aquellos ciudadanos "que ya cumplieron un año" desde que recibieron la primera inoculación.

"Acordamos con los ministros y ministras en el Consejo de Salud arrancar con aquellos que tienen más riesgo, con comorbilidades, y después se puede escalar rapidísimo y de forma simultánea con el resto", apuntó la funcionaria.

Los contagios por coronavirus disminuyen desde hace 19 semanas en Argentina gracias al avance de la vacunación. Según infectólogos, en la actualidad se detecta un leve aumento de la presencia de la variante Delta con transmisión comunitaria, aunque la mayoritaria sigue siendo la Gamma.

Unas 30,1 millones de personas han recibido la primera dosis de alguna vacuna y 23,9 millones las dos dosis de una población de unos 45 millones de habitantes.

Más de 5,2 millones de personas se han contagiado desde que comenzó la pandemia en marzo de 2020 y más de 115.000 han fallecido.

Fuente: Cubadebate. Disponible en https://cutt.ly/ZRnMAVo

Aplicarán en Cuba dosis de refuerzo anti-COVID-19 desde noviembre

12 oct. Con el propósito de lograr que el mayor porciento de la población cubana alcance o mantenga los niveles de anticuerpos requeridos para la protección frente al SARS-COV-2, está previsto, desde el próximo mes, el comienzo de la administración de dosis de refuerzo de vacunas cubanas contra la COVID-19, anunció, en conferencia de prensa celebrada este martes, el doctor Eduardo Martínez Díaz, presidente del Grupo Empresarial BioCubaFarma.

El directivo explicó que, como parte de la preparación de las evidencias técnicas para el refuerzo de vacunas, se han realizado estudios en un grupo de personas que ya cumplieron seis meses de vacunados, demostrándose que, pasado ese tiempo, aún mantienen altos niveles de anticuerpos específicos contra el virus.

Sin embargo –agregó–, ya se puede comenzar a aplicar una dosis de refuerzo en determinados grupos poblacionales vulnerables que, por alguna razón, no logran una alta respuesta, y son más propensos a infectarse con el virus y desarrollar formas graves de la enfermedad.

En tal sentido, explicó que desde noviembre se prevé empezar este proceso con el personal de la Salud y de la industria biofarmacéutica, extendiéndose posteriormente a la población en la medida de lo priorizado.

Para ello se emplearán las vacunas de producción nacional que se han obtenido por la ciencia cubana en estos meses, como son los inmunógenos Soberana Plus, Soberana 01, Abdala y Mambisa.

El doctor Martínez Díaz recordó que en nuestra estrategia de vacunación se diseñó, desde el principio, aplicar una tercera dosis previendo que la aparición de variantes más transmisoras del SARS-COV-2 disminuyeran los niveles de capacidad de neutralización de los anticuerpos. «Lo diseñamos así y eso nos ha dado resultado, porque después de seis meses todavía se mantienen altos títulos de anticuerpos», significó.

No obstante, con la dosis de refuerzo se van a incrementar aún más los niveles de protección, sobre todo ante la peligrosa variante Delta.

LA ESTRATEGIA CUBANA DE VACUNACIÓN ANTI-COVID-19 FUNCIONÓ

A solo meses de haber comenzado la vacunación masiva contra la COVID-19 en la población cubana se puede decir que la estrategia nacional de vacunación funcionó, destacó el Presidente de BioCubaFarma.

Dijo que, durante septiembre, además de completarse todas las dosis de vacunas necesarias para inmunizar a la población, la mayor parte de las personas vacunables recibieron una primera dosis e inició la campaña de vacunación en edades pediátricas de dos a 18 años, así como en los convalecientes y alérgicos al Tiomersal.

El doctor Martínez Díaz refirió también que, a partir del Autorizo de Uso en Emergencia otorgado por el Centro para el Control Estatal de Medicamentos, Equipos y Dispositivos Médicos a las vacunas Abdala y

Soberana, varios países de América, Asia, Europa y África se han acercado con interés de comercializar los inmunógenos cubanos.

Otras naciones como Venezuela, Vietnam y Nicaragua ya han recibido cargamentos de Abdala, mientras que a Irán se ha exportado Soberana 02 y Soberana Plus, como parte de un acuerdo conjunto con el Instituto Pasteur, que incluyó estudios clínicos de eficacia.

Por su parte, el doctor José Angel Portal Miranda, ministro de Salud Pública, al caracterizar el modelo cubano de enfrentamiento a la COVID-19, destacó que este ha sido el resultado de la unión de la gestión de la ciencia, la gestión epidemiológica y la gestión asistencial, a partir de la voluntad política del Gobierno y la premisa de que la salud de las personas es la prioridad.

Refirió cómo, desde la intensificación del proceso de vacunación, donde Cuba marcha a la cabeza en ese esfuerzo en América Latina, en la Isla ha ocurrido, durante las últimas semanas, un descenso de los casos positivos, activos confirmados, fallecidos y graves y críticos.

Sobre el avance de la estrategia de vacunación, expuso que hasta el cierre del 10 de octubre, el 86,1 % de la población cubana total había recibido la primera dosis, mientras que el 55,8 % ya tenía esquema completo.

Fuente: Granma. Disponible en https://cutt.ly/HRn4B5g

Presidente de México insta a OMS aprobar vacunas contra la Covid-19

13 oct. El presidente de México, Andrés Manuel López Obrador, exhortó este miércoles a la Organización Mundial de la Salud (OMS) a aprobar todas las vacunas contra la Covid-19 porque han demostrado ser eficaces.

"Vamos a pedirle a la OMS que termine de dar los certificados a las farmacéuticas de todo el mundo que han entregado vacunas, que han demostrado su eficacia y que no han generado ningún problema de salud", señaló el presidente López Obrador.

El mandatario mexicano sugirió al organismo internacional a acelerar el proceso de certificación de los fármacos contra la pandemia, al mismo tiempo refirió que la OMS lleva mucho tiempo en el trámite de aceptación de las vacunas.

“Ya ha pasado mucho tiempo y esto no tiene que ver con banderas políticas sino con la ciencia”, acotó el presidente López Obrador, en un contexto donde, a pesar de esta realidad, vacunas como la Sputnik V y las cubanas Abdala y Soberana han demostrado su eficacia ante la enfermedad, pero no son reconocidas por el organismo.

“Son derechos humanos y la OMS tiene que actuar con imparcialidad; es que en todos lados hay burocracias, elefantes reumáticos qué hay que estar empujando”, insistió el jefe de Estado.

Las vacunas Pfizer-BioNTech, Moderna, AstraZeneca, Sinopharm, Sinovac y Johnson & Johnson, se encuentran en la lista de reconocimiento por parte de la Organización Mundial de la Salud.

Fuente: teleSURtv.net. Disponible en https://cutt.ly/wRn1cfg

Los fabricantes de vacunas contra la COVID-19 de todo el mundo producen 1.500 millones de dosis al mes

14 oct. Farmaindustria ha desarrollado un documento a base de preguntas y respuestas sobre el papel de la industria farmacéutica en la fabricación y distribución de vacunas contra la COVID-19. Esta información la ha elaborado con recursos de la Organización Mundial de la Salud (OMS), la consultora Airfinity, la Universidad de Duke, Unicef y la Federación Internacional de la Industria Farmacéutica (Ifpma). Los datos obtenidos reflejan todo lo que se ha logrado hasta el momento y las previsiones futuras.

Fabricación

Así, entre los datos que proporciona, se especifica que los fabricantes de vacunas de todo el mundo están produciendo 1.500 millones de dosis al mes, y se espera que esta capacidad continúe creciendo. Los primeros 1.000 millones de dosis tardaron en administrarse 140 días, mientras que los últimos 1.000 millones se han tardado en proporcionar en tan solo 26 días.

La producción de la vacuna COVID-19 comenzó a mediados de diciembre de 2020, y a finales del mes de septiembre de 2021, la producción superó la marca de 7.500 millones de dosis. Una cifra que se ha logrado en tan solo nueve meses.

Las sustancias necesarias para la fabricación de las vacunas contra la COVID-19 se están produciendo en la actualidad en 83 plantas de producción situadas en 70 países.

En cuanto a España, cabe destacar su excelente contribución. Ha sido el primer país de Europa y el cuarto del mundo en número de ensayos clínicos contra el coronavirus. Todo ello, en línea con su papel de referencia internacional en investigación clínica de medicamentos. Además, hasta cuatro compañías españolas están participando, en colaboración con empresas desarrolladoras, en la producción de vacunas.

Vacunación actual y futura

Según los datos que maneja Unicef, unos 208 países o territorios en el mundo han administrado ya más de 6.500 millones de dosis de la vacuna contra la COVID-19. Actualmente, el 46% de toda la población mundial ha recibido al menos una dosis de la vacuna.

Las estimaciones de entidades como la consultora internacional Airfinity, la organización Unicef o la Universidad de Duke, en Estados Unidos, apuntan a una producción prevista de unos 12.000 millones de dosis a finales de 2021, suficientes para vacunar a la población adulta mundial. Además, se estima que para junio de 2022 la producción total de vacunas alcanzará los 24.000 millones, momento en el cual los suministros de vacunas probablemente superarán la demanda mundial.

Actualmente, el 46% de toda la población mundial ha recibido al menos una dosis de la vacuna.

Distribución responsable

La industria farmacéutica sigue pidiendo que se compartan las dosis distribuidas y renueva su compromiso de trabajar con los gobiernos para apoyar medidas que lo hagan posible. Según la FPMA, con la distribución de vacunas realizada hasta ahora, los países del G7 tienen reservas suficientes de dosis para vacunar a sus adultos y adolescentes y poner en marcha programas de refuerzo para proteger a los grupos de mayor

riesgo, y disponen además de un número de dosis importante para distribuir a los países del tercer mundo.

Desde las propias compañías se pide intensificar la distribución responsable de dosis a los países de renta más baja a través del mecanismo Covax, la iniciativa liderada por la Organización Mundial de la Salud para hacer llegar las vacunas de COVID-19 a las poblaciones con menos recursos, y que cuenta desde el inicio con el apoyo de la industria farmacéutica y de más de 190 países de todo el mundo, entre ellos España. El objetivo del proyecto es la entrega de 2.000 millones de dosis en 2021 a los 100 países con ingresos más bajos del mundo.

Vacunas y tratamientos en investigación

Por el momento, existen ocho vacunas contra la COVID-19 aprobadas en todo el mundo, cuatro de ellas de uso en Europa al contar con el visto bueno de la Agencia Europea del Medicamento. Las investigaciones sobre nuevas vacunas continúan y actualmente hay otras 114 en ensayos clínicos, de las que 23 están ya en la última fase de investigación.

Desde el inicio de la pandemia se pusieron en marcha ensayos con medicamentos existentes para otras patologías con potencialidad para combatir la COVID-19. Actualmente, según los registros de la OMS, se están llevando a cabo 1.612 ensayos clínicos con pacientes en todo el mundo. Los tratamientos con anticuerpos monoclonales se muestran prometedores para el tratamiento ambulatorio, al igual que los nuevos antivirales.

Fuente: PHARMA MARKET. Disponible en https://cutt.ly/8Rn9otD

C's pide la permanencia de COVAX para el acceso equitativo a vacunas cuando acabe la pandemia

14 oct. COVAX, el Fondo de Acceso Global para Vacunas COVID-19, está siendo "uno de los pilares fundamentales del sistema de distribución de vacunas para prevenir la infección por SARS-CoV-2 y el desarrollo de cuadros clínicos graves de la enfermedad COVID-19 en todo el mundo". Así lo afirman desde el Grupo Parlamentario Ciudadanos, quienes consideran que este mecanismo debería permanecer una vez acabe la pandemia.

C's apunta que el objetivo de COVAX ha sido asegurar un acceso equitativo a las vacunas una vez estuvieron disponibles en el mercado "gracias al impulso innovador de las empresas del sector farmacéutico y al apoyo de las instituciones públicas". Por ello, la formación naranja ha impulsado en el Congreso de los Diputados una Proposición no de Ley (PNL) para la permanencia de COVAX para el acceso equitativo a vacunas en todo el mundo.

Otras enfermedades infecciosas

A través de esta iniciativa, C's defiende, en el seno de las Naciones Unidas, la necesidad de que este mecanismo se mantenga para asegurar el acceso igualitario a las vacunas de todo tipo de enfermedades infecciosas para la población de los países menos desarrollados.

Y es que, pese al éxito de esta iniciativa, COVAX no tiene aspiración de permanencia más allá de la COVID-19. Sin embargo, los problemas en el acceso equitativo a vacunas no son característicos únicamente de esta enfermedad, sino que afectan a otras tantas enfermedades infecciosas mortales, especialmente en países en desarrollo.

Por ejemplo, apunta C's, la malaria, la tuberculosis y el VIH/SIDA siguen "entre las 10 principales causas de

muerte en el mundo en desarrollo". Precisamente, la Organización Mundial de la Salud (OMS) ha aprobado recientemente la primera vacuna contra la malaria, que "de hacerse accesible a toda la población podría salvar la vida de medio millón de personas en todo el mundo, de los cuales más de la mitad serían menores de edad".

Donación de vacunas

La PNL también pretende impulsar, dentro de las instituciones de la Unión Europea, una renovación del compromiso de los Estados miembro con la donación de vacunas COVID-19 al mecanismo COVAX. Y propone aumentar la contribución europea a esta iniciativa hasta los 750 millones de euros y los 500 millones de dosis.

"Según las cifras proporcionadas por la iniciativa GAVI a fecha de 8 de octubre de 2021, COVAX ha enviado más de 341 millones de vacunas contra el COVID-19 a 144 países participantes", ha destacado C's.

La formación asegura que han apoyado a COVAX en su objetivo de hacer llegar las vacunas a todos los rincones del mundo. En concreto, señala, C's ha solicitado al Gobierno desde septiembre de 2020, cuando las primeras vacunas comenzaron a avanzar en las fases para su aprobación definitiva, que tuviera en cuenta la necesidad de garantizar un acceso equitativo a las dosis en todo el mundo mediante mecanismos de colaboración con el sector privado y con instituciones sin ánimo de lucro, como COVAX.

De hecho, la Comisión de Asuntos Exteriores del Congreso de los Diputados aprobó el 24 de septiembre de 2020 una PNL de Ciudadanos en este sentido.

Contribución española a COVAX

Asimismo, la formación naranja también pide aumentar la contribución española al mecanismo, tanto en términos de financiación comprometida para que pueda desarrollar sus funciones de almacenamiento y distribución como en términos de dosis donadas por nuestro país.

Además, instan al Gobierno a elaborar un informe de resultados que detalle el impacto generado por los recursos y vacunas donados por España a COVAX durante los años 2020 y 2021, para presentarlo ante las Cortes Generales en los primeros tres meses del próximo año 2022.

Fuente: GACETA MÉDICA. Disponible en https://cutt.ly/FRn4DJU

Valneva Reports Positive Phase 3 Results for Inactivated, Adjuvanted COVID-19 Vaccine Candidate VLA2001

Oct 18. Valneva SE (Nasdaq: VALN; Euronext Paris: VLA), a specialty vaccine company, today announced positive topline results from the Phase 3 pivotal trial Cov-Compare of its inactivated, adjuvanted COVID-19 vaccine candidate, VLA2001. Valneva's Chief Executive Officer, Thomas Lingelbach, and the trial's Chief Investigator, Adam Finn, Professor of Paediatrics at the University of Bristol, will comment on the results in a live webcast beginning at 3 p.m. CET today. Please refer to this link: https://edge.media-server.com/mmc/p/3zmb7nnp.

The pivotal Phase 3, Cov-Compare trial recruited a total of 4,012 participants aged 18 years and older across 26 trial sites in the United Kingdom. The trial met its co-primary endpoints: VLA2001 demonstrated superiority against AZD1222 (ChAdOx1-S), in terms of geometric mean titer for neutralization antibodies (GMT ratio=1.39, p<0.0001), (VLA2001 GMT 803.5 (95% CI: 748.48, 862.59)), (AZD1222(ChAdOx1-S) GMT 576.6 (95% CI 543.6, 611.7)), as well as non-inferiority in terms of seroconversion rates (SCR above 95% in both

treatment groups) at two weeks after the second vaccination (i.e. Day 43) in adults aged 30 years and older.

T-cell responses analyzed in a sub-set of participants showed that VLA2001 induced broad antigen-specific IFN-gamma producing T-cells reactive against the S- (74.3%), N- (45.9%) and M- (20.3%) protein.

VLA2001 was generally well tolerated. The tolerability profile of VLA2001 was significantly more favorable compared to the active comparator vaccine. Participants 30 years and older reported significantly fewer solicited adverse events up to seven days after vaccination, both with regards to injection site reactions (73.2% VLA2001 vs. 91.1% AZD1222 (ChAdOx1-S), p<0.0001) and systemic reactions (70.2% VLA2001 vs. 91.1% AZD1222 (ChAdOx1-S), p<0.0001). No unsolicited treatment-related serious adverse events (SAE) have been reported. Less than 1% reported an adverse event of special interest in both treatment groups. Participants in the younger age group vaccinated with VLA2001 showed an overall safety profile comparable to the older age group.

The occurrence of COVID-19 cases (exploratory endpoint) was similar between treatment groups. The complete absence of any severe COVID-19 cases may suggest that both vaccines used in the study prevented severe COVID-19 caused by the circulating variant(s) (predominantly Delta).

Adam Finn, Professor of Paediatrics, University of Bristol, Trial Chief Investigator, said: “The low levels of reactogenicity and high functional antibody responses alongside broad T-cell responses seen with this adjuvanted inactivated whole virus vaccine are both impressive and extremely encouraging. This is a much more traditional approach to vaccine manufacture than the vaccines so far deployed in the UK, Europe and North America and these results suggest this vaccine candidate is on track to play an important role in overcoming the pandemic.”

Thomas Lingelbach, Chief Executive Officer of Valneva, said: “These results confirm the advantages often associated with inactivated whole virus vaccines. We are committed to bringing our differentiated vaccine candidate to licensure as quickly as possible and continue to believe that we will be able to make an important contribution to the global fight against the COVID-19 pandemic. We are keen to propose an alternative vaccine solution for people who have not yet been vaccinated.”

Juan Carlos Jaramillo, M.D., Chief Medical Officer of Valneva, commented: “I would like to thank the trial investigators as well as all trial participants and collaborators, especially the National Institute for Health Research and the clinical teams within the NHS Research Centres as well as Public Health England. This outcome shows the value of the collaboration that we started in September 2020 and we could not have achieved this milestone without them. We’ll continue to work very closely with the MHRA to complete our rolling submission for approval.”

Valneva commenced rolling submission for initial approval with the UK’s Medicines and Healthcare products Regulatory Agency (MHRA) and is preparing to commence rolling submission for conditional approval with the European Medicines Agency. A final assay validation required by the MHRA to verify the integrity of the VLA2001-301 data remains ongoing and is a prerequisite for final submission of the clinical study report.

As part of the product development strategy, Valneva has completed recruitment of 306 volunteers aged 56 years and older in New Zealand[1] into its VLA2001-304 trial and expects topline data in early 2022. Valneva has also announced the start of recruitment of adolescents as an expansion of the Cov-Compare trial[2].

The Company is preparing for trials in children (5-12 years of age) and a Valneva sponsored booster trial to evaluate VLA2001’s booster performance for people in need of a booster.

About Phase 3 Trial Cov-Compare (VLA2001-301)

Cov-Compare (VLA2001-301) is a randomized, observer-blind, controlled, comparative immunogenicity trial in 4,012 adults and 660 adolescents. Co-Primary immunogenicity endpoints are superiority of GMT ratio of VLA2001 compared to AZD1222 (ChAdOx1-S) as well as non-inferiority of seroconversion rates of neutralizing antibodies administered in a two-dose immunization schedule four weeks apart, measured at two weeks after the second vaccination (i.e. Day 43) in adults aged 30 years and older. It also evaluates the safety and tolerability of VLA2001 at two weeks after the second vaccination in adults and adolescents aged 12 years and older. The trial is being conducted at 26 sites across the U.K. 2,972 participants 30 years of age and older were randomized in a 2:1 ratio to receive two intramuscular doses of either VLA2001 (n=1,977) or AZD1222 (ChAdOx1-S) (n=995) at the recommended dose level, 28 days apart, on Days 1 and 29. For immunogenicity analyses, samples from 990 participants (492 vaccinated with VLA2001, 498 vaccinated with AZD1222 (ChAdOx1-S)) who tested sero-negative for SARS-CoV-2 at screening were analyzed. 1,040 participants that are under 30 years of age were recruited in a non-randomized treatment group and received VLA2001 28 days apart. Safety data on those participants 18-29 years of age are analyzed in parallel to the adults 30 years of age and above. Recently, the trial commenced enrolling the first adolescent participants.

About VLA2001

VLA2001 is currently the only whole virus, inactivated, adjuvanted vaccine candidate against COVID-19 in clinical trials in Europe. It is intended for active immunization of at-risk populations to prevent carriage and symptomatic infection with COVID-19 during the ongoing pandemic and potentially later for routine vaccination including addressing new variants. VLA2001 may also be suited for boosting, as repeat booster vaccinations have been shown to work well with whole virus inactivated vaccines. VLA2001 is produced on Valneva's established Vero-cell platform, leveraging the manufacturing technology for Valneva's licensed Japanese encephalitis vaccine, IXIARO®. VLA2001 consists of inactivated whole virus particles of SARS-CoV-2 with high S-protein density, in combination with two adjuvants, alum and CpG 1018. This adjuvant combination has consistently induced higher antibody levels in preclinical experiments than alum-only formulations and shown a shift of the immune response towards Th1. CpG 1018 adjuvant, supplied by Dynavax Technologies Corporation (Nasdaq: DVAX), is a component of the US FDA- and EMA-approved HEPLISAV-B® vaccine. The manufacturing process for VLA2001, which has already been upscaled to final industrial scale, includes chemical inactivation to preserve the native structure of the S-protein. VLA2001 is expected to conform with standard cold chain requirements (2 degrees to 8 degrees Celsius).

About Valneva SE

Valneva is a specialty vaccine company focused on the development and commercialization of prophylactic vaccines for infectious diseases with significant unmet medical need. The Company takes a highly specialized and targeted approach to vaccine development and then applies its deep understanding of vaccine science to develop prophylactic vaccines addressing these diseases. Valneva has leveraged its expertise and capabilities both to successfully commercialize two vaccines and to rapidly advance a broad range of vaccine candidates into and through the clinic, including candidates against Lyme disease, the chikungunya virus and COVID-19.

Fuente: Valneva website. Disponible en https://cutt.ly/7Rn5vP2

Vacunas COVID-19. India, Egipto y Cuba, entre los países que desarrollan su propia cosecha

18 oct. Los países en desarrollo están recurriendo cada vez más a las vacunas COVID-19 de cosecha propia a medida que el programa Covax respaldado por la ONU se queda atrás.

Mientras que los países occidentales implementan inyecciones de refuerzo en sus propias poblaciones, Covax, que fue establecido por agencias de la ONU, gobiernos y donantes para garantizar un acceso justo a las vacunas Covid-19 para los países de ingresos bajos y medianos, ha dicho que no alcanzará su objetivo. distribuir 2.000 millones de dosis en todo el mundo a finales de este año.

Según el último pronóstico de suministro , el 8 de septiembre, el programa ahora espera proporcionar 1.400 millones de dosis de vacunas durante 2021, un déficit de casi un tercio.

Según el último pronóstico de suministro , el 8 de septiembre, el programa ahora espera proporcionar 1.400 millones de dosis de vacunas durante 2021, un déficit de casi un tercio.

La escasez se debe en gran medida a las limitaciones de las exportaciones y la fabricación y al aumento de la demanda de los países productores de vacunas. India, un productor clave, solo entregó 28 millones de las dosis prometidas de 40 millones en marzo, cuando las infecciones aumentaron a medida que la variante Delta se extendía por todo el país.

Los países en desarrollo han respondido produciendo nuevas vacunas locales. Entre ellos se encuentra Egipto, que ha lanzado ensayos en humanos para su vacuna casera Covi Vax, después de exitosas pruebas de laboratorio.

"La Autoridad de Medicamentos de Egipto dio su aprobación para fabricar el primer lote de dosis de vacuna con el nombre de Covi Vax para su uso en ensayos clínicos", dijo Mohamed Ahmed Ali, profesor de virología en el Centro Nacional de Investigación y jefe del equipo de investigación para la producción de la vacuna.

A principios de este año, investigadores de Arabia Saudita anunciaron el inicio de ensayos en humanos en etapa temprana de una vacuna desarrollada por investigadores de la Universidad Imam Abdulrahman bin Faisal.

Cuba busca la aprobación de la OMS para sus propias vacunas, ya que busca alcanzar la inmunización completa, incluidos niños de tan solo dos años, para fines de 2021.

Varios institutos de investigación brasileños también están apostando por el desarrollo de vacunas de cosecha propia contra Covid-19.

El Instituto Butantan, un centro de investigación público en São Paulo, está llevando a cabo ensayos en

humanos de etapa inicial de ButanVac. La vacuna del vector viral, desarrollada por la Escuela de Medicina Icahn en Nueva York y un consorcio internacional, se puede producir íntegramente en Brasil en el futuro.

Cristiano Gonçalves, gerente de innovación de Butantan, dijo: "El consorcio y los partidarios de ButanVac están preocupados por los países de ingresos bajos y medios que están siendo desatendidos en este momento. La idea es que ButanVac sirva al mercado interno y que Butantan reserve parte de su producción para la exportación ".

El gobierno de la India también planea lanzar ZyCoV-D, la primera vacuna de ADN del mundo, que está siendo producida por Zydus Cadila, una empresa privada, en asociación con el departamento de biotecnología del Ministerio de Ciencia y Tecnología de la India. Esto permitirá la expansión del programa de vacunación existente para incluir a niños pequeños y adolescentes.

En Singapur , tres vacunas de ARNm desarrolladas por la empresa estadounidense Arcturus Therapeutics se están sometiendo a ensayos en humanos en etapa intermedia para comprobar su eficacia.

La producción de vacunas de cosecha propia sigue una serie de acuerdos en los que los países en desarrollo han comenzado a asumir la fabricación de vacunas desarrolladas en Europa , Estados Unidos o China.

En Brasil, alrededor de dos tercios de la población han recibido al menos una dosis de vacuna, muchas de las cuales fueron resultado de acuerdos de transferencia de tecnología entre laboratorios brasileños y compañías farmacéuticas internacionales.

En julio de 2020, el Instituto Butantan respaldó ensayos en humanos a gran escala de CoronaVac, la vacuna fabricada por la empresa china Sinovac Biotech. A cambio, Sinovac se comprometió a transferir tecnología al instituto brasileño.

Butantan está importando las materias primas de China y empaquetando la vacuna en Brasil. Para la siguiente fase del acuerdo de transferencia de tecnología, se está preparando una fábrica para comenzar a producir dosis.

La Fundación Oswaldo Cruz, un centro de investigación en Río de Janeiro vinculado al Ministerio de Salud, inició negociaciones con AstraZeneca en el primer semestre del año pasado.

Como resultado, la vacuna Covishield de la farmacéutica anglo-sueca también se sometió a pruebas en humanos a gran escala en Brasil, y ahora se está produciendo en el país con materias primas importadas del exterior. En el futuro, la vacuna se producirá íntegramente en Brasil.

Fuente: ALERTA El Diario de Cantabria. Disponible en https://cutt.ly/zRQG3fT

Coronavirus España, hoy | La EMA evalúa cuatro posibles nuevas vacunas y ocho tratamientos contra la COVID

20 oct. La incidencia acumulada del coronavirus en España vuelve a bajar y se sitúa en 41,9 casos por cada 100.000 habitantes, según el último informe ofrecido por el Ministerio de Sanidad, que contabiliza 1.889 casos nuevos y 21 muertes por COVID-19 en las últimas 24 horas.

Las comunidades siguen suavizando sus restricciones para controlar la pandemia y recuperan aforos máximos, mientras ya han administrado más de 71 millones de dosis de las vacunas de Pfizer, Moderna,

AstraZeneca/Oxford y Janssen desde el arranque de la campaña hace casi nueve meses, aunque el ritmo diario se está ralentizando.

Más de 37 millones de personas tienen la pauta completa para combatir el coronavirus (78,2 % de la población), más de 37,9 millones han recibido al menos una dosis (79,9 %) y más de 393.000 ya han recibido la tercera dosis.

El certificado COVID obligatorio se abre paso en todo el mundo, tras la exigencia de Francia a los trabajadores sanitarios y de Italia a todos los empleados para acceder a su puesto de trabajo, la ciudad de Nueva York se suma y lo exigirá a todos los empleados públicos. Rusia plantea una alternativa para frenar la pandemia, una semana de vacaciones retribuidas. Será del 30 de octubre al 7 de noviembre, según ha anunciado su presidente Vladimir Putin.

La Unión Europea se ha comprometido a donar 500 millones de dosis de la vacuna del coronavirus "en los próximos meses" para el programa COVAX de la ONU, mientras la Agencia Europea del Medicamento (EMA) sigue analizando cuatro posibles vacunas para su autorización, entre ellas la rusa Sputnik V y la china Sinovac.

Actualidad sobre la pandemia de coronavirus

El Gobierno británico descarta aplicar por ahora su llamado "Plan B" -que contemplaría la obligatoriedad de llevar mascarillas y el uso de pasaportes de vacunas- para afrontar el alza de contagios diarios en el Reino Unido cara al invierno, ha aclarado este miércoles un portavoz de Downing Street. Continuarán supervisando las últimas cifras actualizadas por el Ministerio británico de Sanidad, que desde hace días no bajan de los 40.000 positivos.

Por otro lado, el Gobierno de Estados Unidos ha anunciado su plan para distribuir vacunas contra la COVID-19 a los niños de entre 5 y 11 años en cuanto las autoridades competentes lo autoricen. El objetivo es que la inmunización de los menores sea más eficiente que la de los adultos, cuyo comienzo hace diez meses estuvo marcado por la escasez de dosis que hizo que muchos tuvieran que esperar para vacunarse.

Los ocho tratamientos contra el coronavirus que está analizando la EMA

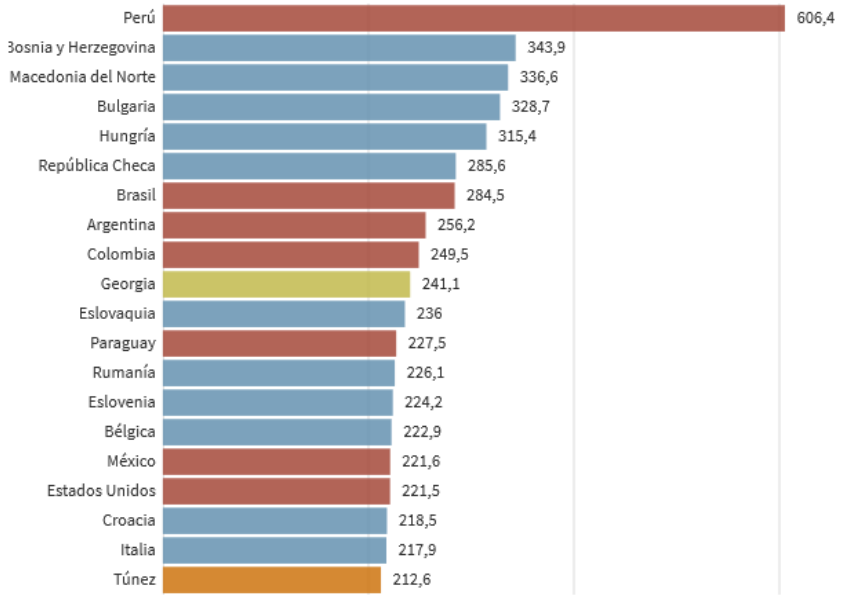
1. El fármaco de anticuerpos monoclonales bamlanivimab y etesemivab, desarrollado por la estadounidense Eli Lilly
2. Evusheld, combinación de anticuerpos tixagevimab y cilgavimab desarrollado por AstraZeneca AB.
3. Sotrovimab, un anticuerpo monoclonal desarrollado por las farmacéuticas británica GlaxoSmithKline y estadounidense Vir Biotechnology.
4. El inmunosupresor Kineret (anakinra), ya autorizado para tratar enfermedades inflamatorias.
5. Olumiant (baricitinib), un fármaco para la artritis reumatoide.
6. Regkirona (regdanvimab), un tratamiento con anticuerpos monoclonales.
7. El antiinflamatorio tocilizumab (RoActemra), también usado para tratar artritis reumatoide.
8. Ronapreve, un cóctel de anticuerpos monoclonales de las firmas Regeneron y Roche.

Una fuente de la EMA ha explicado que "cuatro vacunas contra la COVID-19 permanecen en revisión continua hasta que se disponga de pruebas suficientes para que la compañía presente una solicitud formal de autorización de comercialización", un paso solo posible cuando haya información suficiente que respalde su seguridad, calidad y eficacia. Entre las vacunas pendientes de autorización están la china Sinovac y la rusa Sputnik V. (EFE)

Casos y muertos con coronavirus por continentes

FUENTES: Elaboración propia, JHU CSSE

Países con más muertes con coronavirus por 100.000 habitantes



Fuente: Elaboración propia, Universidad John Hopkins, Banco Mundial

Fuente: rtve CORONAVIRUS. Disponible en https://cutt.ly/qRQ3aPq

Concluye en Cienfuegos vacunación del ensayo clínico Soberana Plus Pediatría

20 oct. El proyecto del ensayo clínico Fase II Soberana Plus Pediatría para convalecientes de la COVID-19 en el Hospital Pediátrico Paquito González Cueto, de Cienfuegos, finalizó, luego de vacunarse a 240 niños y adolescentes, de entre dos y 18 años.

El proyecto diseñado por el Instituto Finlay de Vacunas, se lleva a cabo de conjunto con el Hospital Juan Manuel Márquez, de La Habana.

La coordinadora por la provincia de Cienfuegos, Doctora Mercedes Fonseca Hernández, manifestó al periódico local 5 de Septiembre el honor de los cienfuegueros por haber sido escogidos para el ensayo.

«Todos querían vacunar a sus niños, dice, y la asistencia de los voluntarios con sus padres u otros familiares fue del ciento por ciento. Les hicimos un seguimiento hasta las 24 horas a la totalidad de los inmunizados, desde el pasado lunes hasta el sábado.

«A partir de esta semana estamos siguiendo a los pacientes, al séptimo día de vacunados. No hemos encontrado eventos adversos importantes o graves, ni en la primera hora, ni a los siete días posteriores.

«Los eventos adversos fueron los esperados, sobre todo en el sitio de vacunación, dolor que no limita la actividad del niño y en ocasiones ligero aumento del volumen, como puede suceder en cualquier tipo de vacuna».

Considera la Doctora Mercedes que «de esta manera esperamos terminar la evaluación del séptimo día, y con una toma de muestra de sangre, el día 14 para el primer grupo, y el 28 para el segundo grupo.

«Quiero felicitar al pueblo cienfueguero porque ha participado de forma muy entusiasta, con sus hijos en este ensayo clínico, lo cual nos satisface grandemente».

Cienfuegos tiene experiencias en proyectos de vacunación anteriores, por ejemplo, en el Neumococo y Soberana Centro.

Fuente: Granma. Disponible en https://cutt.ly/JRQ4eF7

50.000 casos en un día: por qué Reino Unido tiene el número más alto de casos de covid-19 en Europa

20 oct. El número de casos de COVID-19 en Reino Unido es más alto ahora que en esta época del año pasado cuando partes de Inglaterra estaban bajo confinamiento.

Sin embargo, gracias a la vacuna hay menos casos de enfermedades graves y menos internamientos en hospitales.

Pero las crecientes infecciones siguen siendo motivo de preocupación.

Según advierten los científicos, cuanto más virus circule, más posibilidades habrá de que rompa las defensas de las vacunas, que infecte a las personas vulnerables y que sobrecargue los servicios de salud.

¿Qué muestran las cifras?

En los últimos días el número de personas que dieron positivo por COVID-19 en Reino Unido ha ido aumentando, registrándose casi 50.000 casos en las últimas 24 horas.

Las cifras de infección en el país son actualmente mucho más altas que en otros países de Europa occidental.

Desde que se registró el primer caso de COVID-19 en Europa en enero de 2020, Reino Unido ha confirmado más de 8,2 millones de casos, la cifra más alta de toda la región.

Te explicamos qué está impulsando el aumento de casos en este país.

¿Menos mascarillas?

Los residentes de Reino Unido son más proclives a decir que ya no usan mascarilla ni se cubren la cara en comparación con las poblaciones de Alemania, Francia, España e Italia.

Los casos de covid son más altos en Reino Unido que en cualquiera de esos países, pero no podemos decir necesariamente que un factor sea la causa del otro.

Estudio tras estudio ha demostrado que las mascarillas pueden ayudar a evitar que el virus se transmita entre las personas.

Sin embargo, cuando se trata de medir la cantidad de mascarillas que logran reducir un brote, es mucho más difícil de precisar.

Esto se debe a que es difícil distinguir entre todas las otras cosas que ocurren al mismo tiempo, como la cantidad de personas que eligen mezclarse con los demás.

Las personas en Suecia y los Países Bajos, por ejemplo, son más propensas que las de Reino Unido a decir que nunca usaron mascarilla, según una encuesta del Imperial College de Londres.

Pero estos países tienen menos casos confirmados de COVID-19 que Reino Unido.

En Reino Unido, las regulaciones escocesas todavía recomiendan usar mascarilla en la mayoría de los lugares en interior, mientras que las inglesas no lo hacen.

Y según una encuesta de la Oficina de Estadísticas Nacionales, las personas en Escocia se inclinan más a decir que se han cubierto la cara en los siete días anteriores.

Aun así, esa nación también experimentó un aumento en las admisiones hospitalarias en las últimas semanas.

¿Reglas más flexibles, más socialización?

Reino Unido relajó muchas restricciones antes que la mayor parte del resto de Europa occidental.

Los ciudadanos de Inglaterra, Gales y Escocia han podido ir a clubes nocturnos y asistir a reuniones con un número ilimitado de personas desde el verano boreal, a diferencia de muchos otros países.

Los datos de la encuesta del Imperial College sugieren que las personas en Reino Unido son algo más proclives que algunos de sus vecinos europeos más cercanos a usar el transporte público y menos propensos a no salir.

La última encuesta de contactos y socialización en Reino Unido encontró que ha habido relativamente pocos cambios en las últimas semanas, con tasas de contacto entre niños similares a las del inicio del trimestre.

Ha habido un aumento gradual en el número de empleados que van a su lugar de trabajo, aunque todavía es bastante bajo, con solo aproximadamente la mitad de los empleados en los lugares de trabajo que están abiertos.

No es obligatorio el uso de mascarilla en el transporte en Londres.

¿Inmunidad menguante?

Reino Unido se adelantó en el lanzamiento de la vacuna.

Sin duda, esto ha salvado muchas vidas al prevenir casos severos de COVID-19, pero este progreso temprano podría dar una pista de por qué el país enfrenta más casos ahora.

Un estudio de los resultados de las pruebas de COVID-19 de personas vacunadas que registraron sus síntomas en una aplicación sugirió que la protección de la vacuna contra la infección disminuye significativamente después de cinco o seis meses de su inoculación.

En Israel, que originalmente lideró el mundo en términos de población vacunada, los científicos que analizaron los datos dijeron que un aumento en los casos se debió a la reducción de la protección que

brinda la vacuna.

Y los casos se estabilizaron una vez que se administró una dosis de refuerzo a suficientes personas mayores.

Lo que nos muestra Israel sobre cómo salir de la COVID-19

Ahora, en Reino Unido se están administrando dosis de refuerzo a las personas mayores: hasta el 17 de octubre se habían administrado 3,7 millones de dosis en Inglaterra.

Es importante destacar que la protección contra la enfermedad grave parece mantenerse alta seis meses después de la vacunación.

Es cierto que cuantos más contagios hay, mayor es el riesgo de que algunas personas terminen gravemente enfermas, incluso cuando la mayoría ha sido vacunada.

Probablemente esa sea la razón por la que las admisiones hospitalarias en Reino Unido son más altas ahora que a principios del verano boreal, cuando había menos casos.

Pero cuando observamos las cifras generales, vemos muchos menos ingresos hospitalarios ahora que la última vez que hubo tantos casos y la mayoría de las personas no estaban vacunadas.

¿Un programa de vacunación estancado?

El rápido lanzamiento de Reino Unido de su programa de vacunación se ha estancado en los últimos meses.

La tasa de personas totalmente vacunadas en ese país ya no está en la lista de las primeras 10 naciones con una población de al menos un millón.

En las dos primeras semanas de octubre, la proporción del público británico de 12 años o más que ha recibido al menos una dosis de la vacuna apenas se movió.

Un portavoz del gobierno dijo que "el programa de vacunación ha debilitado significativamente el vínculo entre los casos, las hospitalizaciones y las muertes, y seguirá siendo la primera línea de defensa contra COVID-19".

"Alentamos a aquellos que pueden recibir una vacuna de refuerzo a que se presenten para asegurarse de tener esta protección adicional vital a medida que nos acercamos al invierno [boreal]".

Vacunación de niños: cómo se compara Reino Unido

La tasa de vacunación de Reino Unido está ligeramente sesgada por la baja administración de dosis entre los niños.

Las vacunación para niños de 12 a 15 años en el país comenzó el pasado 20 de septiembre.

Hasta ahora, un 15% de los jóvenes de 12 a 15 años en Inglaterra han recibido una sola dosis.

En Israel, más de la mitad de los jóvenes de 12 a 15 años han tenido al menos una dosis.

La mayoría de los otros países europeos están vacunando a los mayores de 12 años, incluido Francia, que comenzó a implementarla en junio.

Las vacunación para niños de 12 a 15 años en el país comenzó el 20 de septiembre.

Fuente: BBC News. Disponible en https://cutt.ly/pRWqHFo

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

Síganos en redes sociales

@vaccimonitor

@finlayediciones

@finlayediciones

Artículos científicos publicados en Medline

Filters activated: Publication date from 2021/10/12 to 2021/10/20. "Vaccine" (Title/Abstract) 326 records.

Evaluating the Efficacy of Coronavirus Disease 2019 Vaccines.
Lin DY, Zeng D, Mehrotra DV, Corey L, Gilbert PB. Clin Infect Dis. 2021 Oct 20;73(8):1540-1544. doi: 10.1093/cid/ciaa1863. PMID: 33340397

Neisseria Meningitidis.
Nguyen N, Ashong D. 2021 Oct 12. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2021 Jan–. PMID: 31751039

Vaccine and vaccination as a part of human life: In view of Covid-19.
Megha KB, Nayar SA, Mohanan PV. Biotechnol J. 2021 Oct 19:e2100188. doi: 10.1002/biot.202100188. Online ahead of print. PMID: 34665927

Safety and immunogenicity of CpG 1018 and aluminium hydroxide-adjuvanted SARS-CoV-2 S-2P protein vaccine MVC-COV1901: interim results of a large-scale, double-blind, randomised, placebo-controlled phase 2 trial in Taiwan.
Hsieh SM, Liu MC, Chen YH, Lee WS, Hwang SJ, Cheng SH, Ko WC, Hwang KP, Wang NC, Lee YL, Lin YL, Shih SR, Huang CG, Liao CC, Liang JJ, Chang CS, Chen C, Lien CE, Tai IC, Lin TY. Lancet Respir Med. 2021 Oct 13:S2213-2600(21)00402-1. doi: 10.1016/S2213-2600(21)00402-1. Online ahead of print. PMID: 34655522

Anaphylactic and nonanaphylactic reactions to SARS-CoV-2 vaccines: a systematic review and meta-analysis.
Alhumaid S, Al Mutair A, Al Alawi Z, Rabaan AA, Tirupathi R, Alomari MA, Alshakhes AS, Alshawi AM, Ahmed GY, Almusabeh HM, Alghareeb TT, Alghuwainem AA, Alsulaiman ZA, Alabdulmuhsin MA, AlBuwaidi EA, Dukhi AKB, Mufti HN, Al-Qahtani M, Dhama K, Al-Tawfiq JA, Al-Omari A. Allergy Asthma Clin Immunol. 2021 Oct 16;17(1):109. doi: 10.1186/s13223-021-00613-7. PMID: 34656181

COVID-19 Vaccine Hesitancy on Social Media: Building a Public Twitter Dataset of Anti-vaccine Content, Vaccine Misinformation and Conspiracies.
Muric G, Wu Y, Ferrara E. JMIR Public Health Surveill. 2021 Oct 12. doi: 10.2196/30642. Online ahead of print. PMID: 34653016

COVID-19: State of the Vaccination.
Fenton C, Lamb YN. Drugs Ther Perspect. 2021 Oct 15:1-11. doi: 10.1007/s40267-021-00869-4. Online ahead of print. PMID: 34667427

Estimated US Infection- and Vaccine-Induced SARS-CoV-2 Seroprevalence Based on Blood Donations, July 2020-May 2021.
Jones JM, Stone M, Sulaeman H, Fink RV, Dave H, Levy ME, Di Germanio C, Green V, Notari E, Saa P, Biggerstaff BJ, Strauss D, Kessler D, Vassallo R, Reik R, Rossmann S, Destree M, Nguyen KA, Sayers M, Lough C, Bougie DW, Ritter M, Latoni G, Weales B, Sime S, Gorlin J, Brown NE, Gould CV, Berney K, Benoit TJ, Miller MJ, Freeman D, Kartik D, Fry AM, Azziz-Baumgartner E, Hall AJ, MacNeil A, Gundlapalli AV, Basavaraju SV, Gerber SI, Patton ME, Custer B, Williamson P, Simmons G, Thornburg NJ, Kleinman

S, Stramer SL, Opsomer J, Busch MP. JAMA. 2021 Oct 12;326(14):1400-1409. doi: 10.1001/jama.2021.15161. PMID: 34473201

Rotavirus research: 2014-2020.
Caddy S, Papa G, Borodavka A, Desselberger U. Virus Res. 2021 Oct 15;304:198499. doi: 10.1016/j.virusres.2021.198499. Epub 2021 Jul 2. PMID: 34224769

Safety and Immunogenicity of a Respiratory Syncytial Virus Prefusion F Vaccine When Co-Administered With a Tetanus, Diphtheria, and Acellular Pertussis Vaccine.
Peterson JT, Zareba AM, Fitz-Patrick D, Essink BJ, Scott DA, Swanson KA, Chelani D, Radley D, Cooper D, Jansen KU, Dormitzer PR, Gruber WC, Gurtman A. J Infect Dis. 2021 Oct 12:jiab505. doi: 10.1093/infdis/jiab505. Online ahead of print. PMID: 34637519

Multi-residue method for the detection of 40 β-lactam-antibiotics in vaccines by LC-MS/MS.
Yang Q, Liu Y, Jiang Z, Xu M, Yao S, Li C, Chen G, Xu M, Liu W, Yin L, Hu Z. Anal Biochem. 2021 Oct 15;631:114299. doi: 10.1016/j.ab.2021.114299. Epub 2021 Aug 12. PMID: 34391726

What drives popularity and virality of COVID-19 vaccine discourse on Twitter: Insights from text mining and network visualization.
Zhang JM, Wang YJ, Shi M, Wang X. JMIR Public Health Surveill. 2021 Oct 13. doi: 10.2196/32814. Online ahead of print. PMID: 34665761

COVID-19 Vaccine and Myocarditis.
Salah HM, Mehta JL. Am J Cardiol. 2021 Oct 15;157:146-148. doi: 10.1016/j.amjcard.2021.07.009. Epub 2021 Jul 12. PMID: 34399967

Why advocating for children and vaccine equity is not zero-sum.
Myles DE. J Natl Med Assoc. 2021 Oct 14:S0027-9684(21)00209-1. doi: 10.1016/j.jnma.2021.09.004. Online ahead of print. PMID: 34657742

COVID-19 Vaccinations in EMS Professionals: Prevalence and Predictors.
Gregory ME, Powell JR, MacEwan SR, Kurth JD, Kenah E, Panchal AR, McAlearney AS. Prehosp Emerg Care. 2021 Oct 13:1-13. doi: 10.1080/10903127.2021.1993391. Online ahead of print. PMID: 34644239

Effectiveness of self-financed rotavirus vaccination in Ise City, Japan.
Ito M, Higashigawa M. Hum Vaccin Immunother. 2021 Oct 12:1-6. doi: 10.1080/21645515.2021.1972706. Online ahead of print. PMID: 34641737

Vaccinomics: a future avenue for vaccine development against emerging pathogens.
de la Fuente J, Contreras M. Expert Rev Vaccines. 2021 Oct 13:1-9. doi: 10.1080/14760584.2021.1987222. Online ahead of print. PMID: 34582295

Influenza Vaccination During COVID-19 in a Rural Community: A Cross-sectional Survey.
Marcus RE, Kolade VO. J Community Health. 2021 Oct 13:1-6. doi: 10.1007/s10900-021-01036-6. Online ahead of print. PMID: 34647201

COVID-19 and Agricultural Workers: A Descriptive Study.
Chicas R, Xiuhtecutli N, Houser M, Glastra S, Elon L, Sands JM, McCauley L, Hertzberg V. J Immigr Minor Health. 2021 Oct 12:1-7. doi: 10.1007/s10903-021-01290-9. Online ahead of print. PMID: 34637039

Whole Inactivated Virus and Protein-Based COVID-19 Vaccines.
Hotez PJ, Bottazzi ME. Annu Rev Med. 2021 Oct 12. doi: 10.1146/annurev-med-042420-113212. Online ahead of print. PMID: 34637324

Influenza vaccine and risk of acute myocardial infarction in a population-based case-control study.
de Abajo FJ, Rodríguez-Martín S, Barreira D, Rodríguez-Miguel A, Fernández-Antón E, Gil M, García-Lledó A. Heart. 2021 Oct 13:heartjnl-2021-319754. doi: 10.1136/heartjnl-2021-319754. Online ahead of print. PMID: 34645644

Factors associated with pediatric vaccine hesitancy of parents: a cross-sectional study in Turkey.
Yörük S, Güler D. Hum Vaccin Immunother. 2021 Oct 19:1-7. doi: 10.1080/21645515.2021.1953348. Online ahead of print. PMID: 34665993

Acceptance of SARS-CoV-2 vaccines by liver transplant recipients and candidates.
Reuken PA, Albers S, Rauchfuss F, Strnad P, Settmacher U, Trautwein C, Stallmach A, Bruns T. Z Gastroenterol. 2021 Oct 20. doi: 10.1055/a-1649-8568. Online ahead of print. PMID: 34670294

Laser vaccine adjuvants: Light-augmented immune responses.
Maki Y, Kashiwagi S, Kimizuka Y. Vaccine. 2021 Oct 16:S0264-410X(21)01233-0. doi: 10.1016/j.vaccine.2021.09.042. Online ahead of print. PMID: 34666921

Development and Evaluation of a Cryopreserved Whole-Parasite Vaccine in a Rodent Model of Blood-Stage Malaria.
Stanisic DI, Ho MF, Nevagi R, Cooper E, Walton M, Islam MT, Hussein WM, Skwarczynski M, Toth I, Good MF. mBio. 2021 Oct 19:e0265721. doi: 10.1128/mBio.02657-21. Online ahead of print. PMID: 34663097

Connecting MHC-I-binding motifs with HLA alleles via deep learning.
Lee KH, Chang YC, Chen TF, Juan HF, Tsai HK, Chen CY. Commun Biol. 2021 Oct 18;4(1):1194. doi: 10.1038/s42003-021-02716-8. PMID: 34663927

COVID-19 mRNA vaccine allergy.
Risma KA. Curr Opin Pediatr. 2021 Oct 19. doi: 10.1097/MOP.0000000000001077. Online ahead of print. PMID: 34670264

Origin, phylogeny, variability and epitope conservation of SARS-CoV-2 worldwide.
Vale FF, Vítor JMB, Marques AT, Azevedo-Pereira JM, Anes E, Goncalves J. Virus Res. 2021 Oct 15;304:198526. doi: 10.1016/j.virusres.2021.198526. Epub 2021 Jul 30. PMID: 34339772

Call to action: cardiologists should promote influenza vaccination.
Habib GL, Yousuf H, Narula J, Hofstra L. Neth Heart J. 2021 Oct 14:1-4. doi: 10.1007/s12471-021-01637-9. Online ahead of print. PMID: 34648125

Surveillance for Adverse Events After COVID-19 mRNA Vaccination.
Klein NP, Lewis N, Goddard K, Fireman B, Zerbo O, Hanson KE, Donahue JG, Kharbanda EO, Naleway A, Nelson JC, Xu S, Yih WK, Glanz JM, Williams JTB, Hambidge SJ, Lewin BJ, Shimabukuro TT, DeStefano F, Weintraub ES. JAMA. 2021 Oct 12;326(14):1390-1399. doi: 10.1001/jama.2021.15072. PMID: 34477808

A dual kisspeptin-GnRH immunogen for reproductive immunosterilization.
Junco JA, Fuentes F, Millar RP. Vaccine. 2021 Oct 15;39(43):6437-6448. doi: 10.1016/j.vaccine.2021.07.080. Epub 2021 Sep 4. PMID: 34489132

Safety surveillance of varicella vaccine using tree-temporal scan analysis.
Liu CH, Huang WT, Chie WC, Arnold Chan K. Vaccine. 2021 Oct 15;39(43):6378-6384. doi: 10.1016/j.vaccine.2021.09.035. Epub 2021 Sep 21. PMID: 34561139

Blockchain applications in health care for COVID-19 and beyond: a systematic review.
Ng WY, Tan TE, Movva PVH, Fang AHS, Yeo KK, Ho D, Foo FSS, Xiao Z, Sun K, Wong TY, Sia AT, Ting DSW. Lancet Digit Health. 2021 Oct 12:S2589-7500(21)00210-7. doi: 10.1016/S2589-7500(21)00210-7. Online ahead of print. PMID: 34654686

Advanced Nanotheranostics of CRISPR/Cas for Viral Hepatitis and Hepatocellular Carcinoma.
Kong H, Ju E, Yi K, Xu W, Lao YH, Cheng D, Zhang Q, Tao Y, Li M, Ding J. Adv Sci (Weinh). 2021 Oct 19:e2102051. doi: 10.1002/advs.202102051. Online ahead of print. PMID: 34665528

mRNA Vaccines in the COVID-19 Pandemic and Beyond.
Hogan MJ, Pardi N. Annu Rev Med. 2021 Oct 20. doi: 10.1146/annurev-med-042420-112725. Online ahead of print. PMID: 34669432

Intention to receive COVID-19 vaccine during pregnancy: A systematic review and meta-analysis.
Shamshirsaz AA, Hessami K, Morain S, Afshar Y, Nassr A, Arian SE, Meshinchi Asl N, Aagaard K. Am J Perinatol. 2021 Oct 20. doi: 10.1055/a-1674-6120. Online ahead of print. PMID: 34670322

Immunogenicity of a new enhanced tetanus-reduced dose diphtheria-acellular pertussis (Tdap) vaccine against Bordetella pertussis in a murine model.
Kang KR, Huh DH, Kim JA, Kang JH. BMC Immunol. 2021 Oct 12;22(1):68. doi: 10.1186/s12865-021-00457-1. PMID: 34641798

Knowledge, attitude and practice of influenza vaccination among Lebanese parents: A cross-sectional survey from a developing country.
Zakhour R, Tamim H, Faytrouni F, Khoury J, Makki M, Charafeddine L. PLoS One. 2021 Oct 14;16(10):e0258258. doi: 10.1371/journal.pone.0258258. eCollection 2021. PMID: 34648535

An active inference account of protective behaviours during the COVID-19 pandemic.
Bottemanne H, Friston KJ. Cogn Affect Behav Neurosci. 2021 Oct 15:1-13. doi: 10.3758/s13415-021-00947-0. Online ahead of print. PMID: 34652601

Efficacy of a Cell-Culture-Derived Quadrivalent Influenza Vaccine in Children.
Nolan T, Fortanier AC, Leav B, Põder A, Bravo LC, Szymański HT, Heeringa M, Vermeulen W, Matassa V, Smolenov I, Edelman JM. N Engl J Med. 2021 Oct 14;385(16):1485-1495. doi: 10.1056/NEJMoa2024848. PMID: 34644472

Bioinspired and Biomimetic Delivery Platforms for Cancer Vaccines.
Liu J, Liew SS, Wang J, Pu K. Adv Mater. 2021 Oct 14:e2103790. doi: 10.1002/adma.202103790. Online ahead of print. PMID: 34651344

Vaccine-induced immune thrombosis and thrombocytopenia syndrome following adenovirus-vectored severe acute respiratory syndrome coronavirus 2 vaccination: a novel hypothesis regarding mechanisms and implications for future vaccine development.
Monagle P, Ng AP, Linden M, Ignjatovic V, Farley A, Taoudi S, Pasricha SR, Torresi J. Immunol Cell Biol. 2021 Oct 18. doi: 10.1111/imcb.12505. Online ahead of print. PMID: 34664303

Reducing the risk of COVID-19 transmission in hospitals: focus on additional infection control strategies.
Dancer SJ. Surgery (Oxf). 2021 Oct 13. doi: 10.1016/j.mpsur.2021.10.003. Online ahead of print. PMID: 34658477

The role of toll-like receptors in peptic ulcer disease.
Jin S, Nepal N, Gao Y. Immunol Med. 2021 Oct 16:1-10. doi: 10.1080/25785826.2021.1963190. Online ahead of print. PMID: 34657578

Therapeutic Emergency Use Authorizations (EUAs) During Pandemics: Double-Edged Swords.
Bhimraj A, Morgan RL, Shumaker AH, Lavergne V, Baden L, Cheng VC, Edwards KM, Gandhi RT, Gallagher JC, Muller WJ, O'Horo JC, Shoham S, Wollins DS, Falck-Ytter Y. Clin Infect Dis. 2021 Oct 20:ciab880. doi: 10.1093/cid/ciab880. Online ahead of print. PMID: 34668010

The controversy surrounding vaccination of young people against COVID-19.
Verd S, Fernández-Bernabeu M, Cardo E. Acta Paediatr. 2021 Oct 18. doi: 10.1111/apa.16156. Online ahead of print. PMID: 34658059

A sigh of relief: vaccine-associated hypermetabolic lymphadenopathy following the third COVID-19 vaccine dose is short in duration and uncommonly interferes with the interpretation of [(18)F]FDG PET-CT studies performed in oncologic patients.
Cohen D, Hazut Krauthammer S, Wolf I, Even-Sapir E. Eur J Nucl Med Mol Imaging. 2021 Oct 15:1-7. doi: 10.1007/s00259-021-05579-7. Online ahead of print. PMID: 34651230

COVID-19 Vaccination Hesitancy among Health Care Workers, Communication, and Policy-Making.
Toth-Manikowski SM, Swirsky ES, Gandhi R, Piscitello G. Am J Infect Control. 2021 Oct 12:S0196-6553(21)00648-9. doi: 10.1016/j.ajic.2021.10.004. Online ahead of print. PMID: 34653527

Vaccination Coverage by Age 24 Months Among Children Born in 2017 and 2018 - National Immunization Survey-Child, United States, 2018-2020.
Hill HA, Yankey D, Elam-Evans LD, Singleton JA, Sterrett N. MMWR Morb Mortal Wkly Rep. 2021 Oct 15;70(41):1435-1440. doi: 10.15585/mmwr.mm7041a1. PMID: 34648486

COVID-19 and Novel mRNA Vaccines in Pregnancy: An Updated Literature Review.
Joubert E, Kekeh AC, Amin CN. BJOG. 2021 Oct 15. doi: 10.1111/1471-0528.16973. Online ahead of print. PMID: 34651406

Countering COVID-19 vaccine hesitancy in pregnancy: the "4 Cs".
Shook L, Kishkovich T, Edlow A. Am J Perinatol. 2021 Oct 19. doi: 10.1055/a-1673-5546. Online ahead of print. PMID: 34666378

Vaccines targeting angiogenesis in melanoma.
Zahedipour F, Zamani P, Jamialahmadi K, Jaafari MR, Sahebkar A. Eur J Pharmacol. 2021 Oct 14:174565. doi: 10.1016/j.ejphar.2021.174565. Online ahead of print. PMID: 34656608

Immunogenicity Evaluation of N-Glycans Recognized by HIV Broadly Neutralizing Antibodies.
Shivatare SS, Cheng TR, Cheng YY, Shivatare VS, Tsai TI, Chuang HY, Wu CY, Wong CH. ACS Chem Biol. 2021 Oct 15;16(10):2016-2025. doi: 10.1021/acschembio.1c00375. Epub 2021 Aug 15. PMID: 34649433

Disproportionate Impact of COVID-19 on Racial and Ethnic Minority Groups in the United States: a 2021 Update.
Tai DBG, Sia IG, Doubeni CA, Wieland ML. J Racial Ethn Health Disparities. 2021 Oct 13:1-6. doi: 10.1007/s40615-021-01170-w. Online ahead of print. PMID: 34647273

Molecular Insights of SARS-CoV-2 Infection and Molecular Treatments.
Abdurrahman L, Fang X, Zhang Y. Curr Mol Med. 2021 Oct 13. doi: 10.2174/1566524021666211013121831. Online ahead of print. PMID: 34645374

The very low risk of myocarditis and pericarditis after mRNA COVID-19 vaccination should not discourage vaccination.
Haaf P, Kuster GM, Mueller C, Berger CT, Monney P, Burger P, Stämpfli SF, Attenhofer Jost CH, Zellweger MJ, Osswald S, Donner BC, Koestner SC, Tanner FC. Swiss Med Wkly. 2021 Oct 19;151:w30087. doi: 10.4414/smw.2021.w30087. eCollection 2021 Oct 11. PMID: 34668687

Risk factors for breakthrough SARS-CoV-2 infection in vaccinated healthcare workers.
Alishaq M, Nafady-Hego H, Jeremijenko A, Al Ajmi JA, Elgendy M, Vinoy S, Fareh SB, Veronica Plaatjies J, Nooh M, Alanzi N, Kaleeckal AH, Latif AN, Coyle P, Elgendy H, Abou-Samra AB, Butt AA. PLoS One. 2021 Oct 15;16(10):e0258820. doi: 10.1371/journal.pone.0258820. eCollection 2021. PMID: 34653228

Immune complexes, innate immunity, and NETosis in ChAdOx1 vaccine-induced thrombocytopenia.
Holm S, Kared H, Michelsen AE, Kong XY, Dahl TB, Schultz NH, Nyman TA, Fladeby C, Seljeflot I, Ueland T, Stensland M, Mjaaland S, Goll GL, Nissen-Meyer LS, Aukrust P, Skagen K, Gregersen I, Skjelland M, Holme PA, Munthe LA, Halvorsen B. Eur Heart J. 2021 Oct 14;42(39):4064-4072. doi: 10.1093/eurheartj/ehab506. PMID: 34405870

Does a lack of vaccine side effects correlate with reduced BNT162b2 mRNA vaccine response among healthcare workers and nursing home residents?
Oyebanji OA, Wilson B, Keresztesy D, Carias L, Wilk D, Payne M, Aung H, Denis KS, Lam EC, Rowley CF, Berry SD, Cameron CM, Cameron MJ, Schmader KE, Balazs AB, King CL, Canaday DH, Gravenstein

S. Aging Clin Exp Res. 2021 Oct 15:1-10. doi: 10.1007/s40520-021-01987-9. Online ahead of print. PMID: 34652783

COVID-19 Eradication for Vaccine Equity in Low Income Countries.
Dharmapalan D, John TJ. Indian Pediatr. 2021 Oct 15;58(10):970-972. Epub 2021 Jun 10. PMID: 34108276

Clinical and Genomic Characterization of SARS CoV-2 infections in mRNA Vaccinated Health Care Personnel in New York City.
Robilotti EV, Whiting K, Lucca A, Poon C, Guest R, McMillen T, Jani K, Solovyov A, Kelson S, Browne K, Freeswick S, Hohl TM, Korenstein D, Ruchnewitz D, Lässig M, Łuksza M, Greenbaum B, Seshan VE, Babady NE, Kamboj M. Clin Infect Dis. 2021 Oct 13:ciab886. doi: 10.1093/cid/ciab886. Online ahead of print. PMID: 34644393

A phase 3, multicenter, single-arm, open-label study to assess the safety, tolerability, and immunogenicity of a single dose of 13-valent pneumococcal conjugate vaccine in Japanese participants aged 6-64 years who are considered to be at increased risk of pneumococcal disease and who are naive to pneumococcal vaccines.
Yamazaki Y, Ikeda M, Imada T, Furuno K, Mizukami T, de Solom R, Shoji Y, Oe M, Aizawa M, Giardina PC, Schmoele-Thoma B, Scott DA. Vaccine. 2021 Oct 15;39(43):6414-6421. doi: 10.1016/j.vaccine.2021.08.106. Epub 2021 Sep 23. PMID: 34563397

The role of different components of the immune system against Plasmodium falciparum malaria: possible contribution towards malaria vaccine development.
Mandala WL, Harawa V, Dzinjalamala F, Tembo D. Mol Biochem Parasitol. 2021 Oct 16:111425. doi: 10.1016/j.molbiopara.2021.111425. Online ahead of print. PMID: 34666102

High Prevalence of Anal High-Grade Squamous Intraepithelial Lesions, and Prevention Through Human Papillomavirus Vaccination, in Young Men Who Have Sex With Men Living With Human Immunodeficiency Virus.
Palefsky JM, Lensing SY, Belzer M, Lee J, Gaur AH, Mayer K, Futterman D, Stier EA, Paul ME, Chiao EY, Reirden D, Goldstone SE, Tirado M, Cachay ER, Barroso LF, Da Costa M, Darragh TM, Rudy BJ, Wilson CM, Kahn JA. Clin Infect Dis. 2021 Oct 20;73(8):1388-1396. doi: 10.1093/cid/ciab434. PMID: 33991185

Virologic features of SARS-CoV-2 infection in children.
Yonker LM, Boucau J, Regan J, Choudhary MC, Burns MD, Young N, Farkas EJ, Davis JP, Moschovis PP, Kinane TB, Fasano A, Neilan AM, Li JZ, Barczak AK. J Infect Dis. 2021 Oct 14:jiab509. doi: 10.1093/infdis/jiab509. Online ahead of print. PMID: 34647601

COVID-19 vaccine - can it affect fertility?
Schaler L, Wingfield M. Ir J Med Sci. 2021 Oct 15:1-3. doi: 10.1007/s11845-021-02807-9. Online ahead of print. PMID: 34651258

Correlates of Protection for Cholera.
Iyer AS, Harris JB. J Infect Dis. 2021 Oct 20:jiab497. doi: 10.1093/infdis/jiab497. Online ahead of print. PMID: 34668561

Thromboinflammatory findings and clinical predictors of mortality in vaccine-induced immune thrombotic thrombocytopenia.
Connors JM. Eur Heart J. 2021 Oct 14;42(39):4073-4076. doi: 10.1093/eurheartj/ehab585. PMID: 34545405

Challenges for Programmatic Implementation of Oral Cholera Vaccine in India.
Chakraborty D, Kanungo S, Nandy RK, Deb AK, Mukhopadhyay AK, Dutta S. J Infect Dis. 2021 Oct 20:jiab465. doi: 10.1093/infdis/jiab465. Online ahead of print. PMID: 34668559

SARS-CoV-2 Antibody Binding and Neutralization in Dried Blood Spot Eluates and Paired Plasma.
Itell HL, Weight H, Fish CS, Logue JK, Franko N, Wolf CR, McCulloch DJ, Galloway J, Matsen FA 4th, Chu HY, Overbaugh J. Microbiol Spectr. 2021 Oct 20:e0129821. doi: 10.1128/Spectrum.01298-21. Online ahead of print. PMID: 34668728

VITT, COVID-19 and the Expert Haematology Panel: The story of how the UK responded to emerging cases of vaccine-induced immune thrombocytopenia and thrombosis during the vaccination programme.
Chevassut T, Hunt BJ, Pavord S. Clin Med (Lond). 2021 Oct 13:clinmed.2021-0488. doi: 10.7861/clinmed.2021-0488. Online ahead of print. PMID: 34645700

Knowledge, attitudes and perceptions towards COVID-19 vaccinations: a cross-sectional community survey in Bangladesh.
Islam MS, Siddique AB, Akter R, Tasnim R, Sujan MSH, Ward PR, Sikder MT. BMC Public Health. 2021 Oct 13;21(1):1851. doi: 10.1186/s12889-021-11880-9. PMID: 34645399

Adenoviral vector-based platforms for developing effective vaccines to combat respiratory viral infections.
Elkashif A, Alhashimi M, Sayedahmed EE, Sambhara S, Mittal SK. Clin Transl Immunology. 2021 Oct 12;10(10):e1345. doi: 10.1002/cti2.1345. eCollection 2021. PMID: 34667600

The comparison of seroconversion rates among different varicella vaccines administered Turkish children; MAV/06 and vOka.
Umit Z, Sahbudak Bal Z, Zeytinoglu A, Gulbahar Aydogan T, Bag O, Guner Ozenen G, Ozkinay F, Kurugol Z. Hum Vaccin Immunother. 2021 Oct 13:1-4. doi: 10.1080/21645515.2021.1967037. Online ahead of print. PMID: 34643479

A Live Olfactory Mouse Cytomegalovirus Vaccine, Attenuated for Systemic Spread, Protects against Superinfection.
Farrell HE, Bruce K, Stevenson PG. J Virol. 2021 Oct 13;95(21):e0126421. doi: 10.1128/JVI.01264-21. Epub 2021 Aug 25. PMID: 34431701

Vaccine Breakthrough Infections in Veterans Hospitalized with Coronavirus Infectious Disease-2019: A Case Series.
Kim PS, Schildhouse RJ, Saint S, Bradley SF, Chensue S, Houchens N, Gupta A. Am J Infect Control. 2021 Oct 12:S0196-6553(21)00646-5. doi: 10.1016/j.ajic.2021.10.003. Online ahead of print. PMID: 34653528

Predictors of mortality in thrombotic thrombocytopenia after adenoviral COVID-19 vaccination: the FAPIC score.

Hwang J, Park SH, Lee SW, Lee SB, Lee MH, Jeong GH, Kim MS, Kim JY, Koyanagi A, Jacob L, Jung SY, Song J, Yon DK, Shin JI, Smith L. Eur Heart J. 2021 Oct 14;42(39):4053-4063. doi: 10.1093/eurheartj/ehab592. PMID: 34545400

Influence function methods to assess the effectiveness of influenza vaccine with survey data.
Tian M, Yu J, Lillvis DF, Vexler A. Health Serv Res. 2021 Oct 13. doi: 10.1111/1475-6773.13895. Online ahead of print. PMID: 34643942

An Evaluation of Dose-related HPV Vaccine Effectiveness Using Central Registries in Michigan.
Gargano JW, You M, Potter R, Alverson G, Swanson R, Saraiya M, Markowitz LE, Copeland G. Cancer Epidemiol Biomarkers Prev. 2021 Oct 18:cebp.0625.2021. doi: 10.1158/1055-9965.EPI-21-0625. Online ahead of print. PMID: 34663615

UAE efforts in promoting COVID-19 vaccination and building vaccine confidence.
Suliman DM, Nawaz FA, Mohanan P, Modber MAKA, Musa MK, Musa MB, El Chbib D, Elhadi YAM, Essar MY, Isa MA, Lucero-Prisno DE 3rd, Moonesar IA. Vaccine. 2021 Oct 15;39(43):6341-6345. doi: 10.1016/j.vaccine.2021.09.015. Epub 2021 Sep 7. PMID: 34561138

The effect of health literacy on vaccine hesitancy among Italian anticoagulated population during COVID-19 pandemic: the moderating role of health engagement.
Magon A, Arrigoni C, Graffigna G, Barello S, Moia M, Palareti G, Caruso R. Hum Vaccin Immunother. 2021 Oct 13:1-6. doi: 10.1080/21645515.2021.1984123. Online ahead of print. PMID: 34643478

Second Dose of COVID-19 Vaccination in Immediate Reactions to the First BNT162b2.
Rosa Duque JS, Leung D, Au EY, Lau YL. Pediatr Allergy Immunol. 2021 Oct 20. doi: 10.1111/pai.13683. Online ahead of print. PMID: 34669219

Targeting CD166(+) lung cancer stem cells: Molecular study using murine dendritic cell vaccine.
El-Ashmawy NE, Salem ML, Abd El-Fattah EE, Khedr EG. Toxicol Appl Pharmacol. 2021 Oct 15;429:115699. doi: 10.1016/j.taap.2021.115699. Epub 2021 Aug 23. PMID: 34437932

Engineered Attenuated *Salmonella typhimurium* Expressing Neoantigen Has Anticancer Effects.
Hyun J, Jun S, Lim H, Cho H, You SH, Ha SJ, Min JJ, Bang D. ACS Synth Biol. 2021 Oct 15;10(10):2478-2487. doi: 10.1021/acssynbio.1c00097. Epub 2021 Sep 15. PMID: 34525796

Cattle and goats' humoral response to vaccination with Clostridium perfringens type D purified epsilon toxoids.
Oliveira RC, de Oliveira Júnior CA, Alves GG, Assis RA, Silva ROS, de Sousa Xavier MA, Lobato FCF. Anaerobe. 2021 Oct 15:102465. doi: 10.1016/j.anaerobe.2021.102465. Online ahead of print. PMID: 34662696

Humoral and cellular response to SARS-CoV-2 BNT162b2 mRNA vaccine in hemodialysis patients.
Melin J, Svensson MK, Albinsson B, Winqvist O, Pauksens K. BMC Immunol. 2021 Oct 19;22(1):70. doi: 10.1186/s12865-021-00458-0. PMID: 34666683

ESC: a comprehensive resource for SARS-CoV-2 immune escape variants.
Rophina M, Pandhare K, Shamnath A, Imran M, Jolly B, Scaria V. Nucleic Acids Res. 2021 Oct 13:gkab895. doi: 10.1093/nar/gkab895. Online ahead of print. PMID: 34643704

Characterization of SARS-CoV-2-specific humoral immunity and its potential applications and therapeutic prospects.
Zheng J, Deng Y, Zhao Z, Mao B, Lu M, Lin Y, Huang A. Cell Mol Immunol. 2021 Oct 13:1-8. doi: 10.1038/s41423-021-00774-w. Online ahead of print. PMID: 34645940

Analysis of IgG, IgA, and IgM antibodies against SARS-CoV-2 spike protein S1 in convalescent and vaccinated patients with the Pfizer-BioNTech and CanSinoBio vaccines.
Melgoza-González EA, Hinojosa-Trujillo D, Reséndiz-Sandoval M, Mata-Haro V, Hernández-Valenzuela S, García-Vega M, Bravo-Parra M, Arvizu-Flores AA, Valenzuela O, Velázquez E, Soto-Gaxiola A, Gómez-Meza MB, Pérez-Jacobo F, Villela L, Hernández J. Transbound Emerg Dis. 2021 Oct 16. doi: 10.1111/tbed.14344. Online ahead of print. PMID: 34655457

Vaccines against leishmaniasis: using controlled human infection models to accelerate development.
Parkash V, Kaye PM, Layton AM, Lacey CJ. Expert Rev Vaccines. 2021 Oct 19. doi: 10.1080/14760584.2021.1991795. Online ahead of print. PMID: 34664543

Oral vaccination of foxes and raccoon dogs against rabies with the 3rd generation oral rabies virus vaccine, SPBN GASGAS, in Finland.
Vos A, Nokireki T, Isomursu M, Gadd T, Kovacs F. Acta Vet Scand. 2021 Oct 13;63(1):40. doi: 10.1186/s13028-021-00605-y. PMID: 34645487

Hepatitis-B Vaccine Response in Inflammatory Bowel Disease Patients: A Systematic Review and Meta-analysis.
Kochhar GS, Mohan BP, Khan SR, Chandan S, Kassab LL, Ponnada S, Desai A, Caldera F, Dulai PS, Farraye FA. Inflamm Bowel Dis. 2021 Oct 18;27(10):1610-1619. doi: 10.1093/ibd/izaa353. PMID: 33393585

Interactive, on-line visualization tools to measure and drive equity in COVID-19 vaccine administrations.
Shaheen AW, Ciesco E, Johnson K, Kuhnen G, Paolini C, Gartner G. J Am Med Inform Assoc. 2021 Oct 12;28(11):2451-2455. doi: 10.1093/jamia/ocab180. PMID: 34480569

Subacute thyroiditis after vaccination against SARS-CoV-2.
Sigstad E, Grøholt KK, Westerheim O. Tidsskr Nor Laegeforen. 2021 Oct 11;141(2021-14). doi: 10.4045/tidsskr.21.0554. Print 2021 Oct 12. PMID: 34641650

Guillain-Barré Syndrome Associated with COVID-19 Vaccination.
Shao SC, Wang CH, Chang KC, Hung MJ, Chen HY, Liao SC. Emerg Infect Dis. 2021 Oct 14;27(12). doi: 10.3201/eid2712.211634. Online ahead of print. PMID: 34648420

Preclinical development of a Pfs230-Pfs48/45 chimeric malaria transmission-blocking vaccine.
Singh SK, Plieskatt J, Chourasia BK, Singh V, Bengtsson KL, Reimer JM, van Daalen RC, Teelen K, van de Vegte-Bolmer M, van Gemert GJ, Jore MM, Theisen M. NPJ Vaccines. 2021 Oct 12;6(1):120. doi: 10.1038/s41541-021-00383-8. PMID: 34642303

Safety, tolerability, and immunogenicity of V114, a 15-valent pneumococcal conjugate vaccine, followed by sequential PPSV23 vaccination in healthy adults aged 50 years: A randomized phase III trial (PNEU-PATH).
Song JY, Chang CJ, Andrews C, Diez-Domingo J, Oh MD, Dagan R, Hartzel J, Pedley A, Li J, Sterling T, Tamms G, Chiarappa JA, Lutkiewicz J, Musey L, Tu Y, Buchwald UK; V114-016 (PNEU-PATH) study group. Vaccine. 2021 Oct 15;39(43):6422-6436. doi: 10.1016/j.vaccine.2021.08.038. Epub 2021 Sep 4. PMID: 34489128

Rapid development of analytical methods for evaluating pandemic vaccines: a COVID-19 perspective.
Baldwin J, Piplani S, Sakala IG, Honda-Okubo Y, Li L, Petrovsky N. Bioanalysis. 2021 Oct 14:10.4155/bio-2021-0096. doi: 10.4155/bio-2021-0096. Online ahead of print. PMID: 34645288

SARS-CoV-2 Vaccine Induced Atypical Immune Responses in Antibody Defects: Everybody Does their Best.
Salinas AF, Mortari EP, Terreri S, Quintarelli C, Pulvirenti F, Di Cecca S, Guercio M, Milito C, Bonanni L, Auria S, Romaggioli L, Cusano G, Albano C, Zaffina S, Perno CF, Spadaro G, Locatelli F, Carsetti R, Quinti I. J Clin Immunol. 2021 Oct 20. doi: 10.1007/s10875-021-01133-0. Online ahead of print. PMID: 34669144

Maternal Secretor Status Affects Oral Rotavirus Vaccine Response in Breastfed Infants in Bangladesh.
Williams FB, Kader A, Colgate ER, Dickson DM, Carmolli M, Uddin MI, Sharmin S, Islam S, Bhuiyan TR, Alam M, Nayak U, Mychaleckyj JC, Petri WA, Haque R, Qadri F, Kirkpatrick BD, Lee B. J Infect Dis. 2021 Oct 13;224(7):1147-1151. doi: 10.1093/infdis/jiaa101. PMID: 32157282

Determinants of HPV-vaccination uptake and subgroups with a lower uptake in the Netherlands.
de Munter AC, Klooster TMST, van Lier A, Akkermans R, de Melker HE, Ruijs WLM. BMC Public Health. 2021 Oct 12;21(1):1848. doi: 10.1186/s12889-021-11897-0. PMID: 34641851

Identification of immunodominant epitopes in allelic variants VK210 and VK247 of Plasmodium Vivax Circumsporozoite immunogen.
Naz S, Ahmad S, Abbasi SW, Ismail S, Waseem S, Qamar MTU, Almatroudi A, Ali Z. Infect Genet Evol. 2021 Oct 13:105120. doi: 10.1016/j.meegid.2021.105120. Online ahead of print. PMID: 34655808

Presence of defective viral genes in H1N1 live attenuated influenza vaccine strains is not associated with reduced human cell fitness or vaccine effectiveness.
Ayaz S, Dibben O, Chapman D. Vaccine. 2021 Oct 15:S0264-410X(21)01320-7. doi: 10.1016/j.vaccine.2021.10.011. Online ahead of print. PMID: 34663504

COVID-19 vaccination program in the mainland of China: a subnational descriptive analysis on target population size and current progress.
Zheng W, Yan X, Zhao Z, Yang J, Yu H. Infect Dis Poverty. 2021 Oct 15;10(1):124. doi: 10.1186/s40249-021-00909-1. PMID: 34654478

The Features of Pathobiology and Clinical translation of Approved treatments for Coronavirus Disease 2019 (COVID-19).
Abbasi H, Razavi Nikoo H, Fallah A, Mohammad-Hasani A, Hosseinzadeh Colagar A, Khosravi A. Intervirology. 2021 Oct 19. doi: 10.1159/000520234. Online ahead of print. PMID: 34666335

Invasive pneumococcal disease burden in hospitalized adults in Bogota, Colombia.
Narváez PO, Gomez-Duque S, Alarcon JE, Ramirez-Valbuena PC, Serrano-Mayorga CC, Lozada-Arcinegas J, Bastidas A, Gómez S, Vargas H, Feldman C, Reyes LF. BMC Infect Dis. 2021 Oct 12;21(1):1059. doi: 10.1186/s12879-021-06769-2. PMID: 34641809

Hybrid immunity improves B cells and antibodies against SARS-CoV-2 variants.
Andreano E, Paciello I, Piccini G, Manganaro N, Pileri P, Hyseni I, Leonardi M, Pantano E, Abbiento V, Benincasa L, Giglioli G, De Santi C, Fabbiani M, Rancan I, Tumbarello M, Montagnani F, Sala C, Montomoli E, Rappuoli R. Nature. 2021 Oct 20. doi: 10.1038/s41586-021-04117-7. Online ahead of print. PMID: 34670266

Cutaneous findings following COVID-19 vaccination: Review of world literature and own experience.
Gambichler T, Boms S, Susok L, Dickel H, Finis C, Abu Rached N, Barras M, Stücker M, Kasakovski D. J Eur Acad Dermatol Venereol. 2021 Oct 17. doi: 10.1111/jdv.17744. Online ahead of print. PMID: 34661927

Moving towards a strategy to accelerate cervical cancer elimination in a high-burden city-Lessons learned from the Amazon city of Manaus, Brazil.
Torres KL, Rondon HHMF, Martins TR, Martins S, Ribeiro A, Raiol T, Marques CP, Corrêa F, Migowski A, Minuzzi-Souza TTCE, Schiffman M, Rodriguez AC, Gage JC. PLoS One. 2021 Oct 18;16(10):e0258539. doi: 10.1371/journal.pone.0258539. eCollection 2021. PMID: 34662368

Catch-up immunization for adolescents and young adults during pre-travel consultation in Japan.
Yamamoto K, Suzuki M, Ujiie M, Kanagawa S, Ohmagari N. PLoS One. 2021 Oct 14;16(10):e0258357. doi: 10.1371/journal.pone.0258357. eCollection 2021. PMID: 34648541

PREVALENCE OF UNWILLINGNESS AND UNCERTAINTY TO VACCINATE AGAINST COVID-19 IN OLDER PEOPLE: A SYSTEMATIC REVIEW AND META-ANALYSIS.
Veronese N, Saccaro C, Demurtas J, Smith L, Dominguez LJ, Maggi S, Barbagallo M. Ageing Res Rev. 2021 Oct 15:101489. doi: 10.1016/j.arr.2021.101489. Online ahead of print. PMID: 34662744

Impact of mRNA vaccines in curtailing SARS-CoV-2 infection and disability leave utilisation among healthcare workers during the COVID-19 pandemic: cross-sectional analysis from a tertiary healthcare system in the Greater Houston metropolitan area.
Vahidy FS, Pan AP, Hagan K, Bako AT, Sostman HD, Schwartz RL, Phillips R, Boom ML. BMJ Open. 2021 Oct 12;11(10):e054332. doi: 10.1136/bmjopen-2021-054332. PMID: 34642201

Malaria vaccine approval: a step change for global health.
The Lancet. Lancet. 2021 Oct 16;398(10309):1381. doi: 10.1016/S0140-6736(21)02235-2. PMID: 34656212

The quality of life in women with cervical cancer and precancerous lesions of Han and ethnic minorities in Southwest China.
Zhao M, Pu X, Yan YJ, Zhang S, Long X, Luo L, Li Z. BMC Cancer. 2021 Oct 16;21(1):1110. doi: 10.1186/s12885-021-08856-8. PMID: 34656093

How do patient-provider relationship continuity, gender, and language affect pediatric HPV vaccine acceptance?
Polonijo AN, Lee SS, Nagpal N, Barros R, Hopfer S, Brown B, Pellman H, Singh J. Hum Vaccin Immunother. 2021 Oct 13:1-3. doi: 10.1080/21645515.2021.1973322. Online ahead of print. PMID: 34643482

An antigenically diverse, representative panel of envelope glycoproteins for HCV vaccine development.
Salas JH, Urbanowicz RA, Guest JD, Frumento N, Figueroa A, Clark KE, Keck Z, Cowton VM, Cole SJ, Patel AH, Fuerst TR, Drummer HE, Major M, Tarr AW, Ball JK, Law M, Pierce BG, Foung SKH, Bailey JR. Gastroenterology. 2021 Oct 13:S0016-5085(21)03624-6. doi: 10.1053/j.gastro.2021.10.005. Online ahead of print. PMID: 34655573

Recombinant *Pseudomonas* Bionanoparticles Induce Protection against Pneumonic Pseudomonas aeruginosa Infection.
Li P, Wang X, Sun X, Cimino J, Guan Z, Sun W. Infect Immun. 2021 Oct 15;89(11):e0039621. doi: 10.1128/IAI.00396-21. Epub 2021 Jul 26. PMID: 34310892

Under-Vaccination in Adults: Qualitative Insights Into Perceived Barriers Reported by Vaccine Supporters, Undecided and Refuters.
Tsimtsiou Z, Tatsioni A, Gkizlis V, Kolokas K, Papaioannou A, Birka S, Tirodimos I, Tsiligianni I. J Prim Prev. 2021 Oct 17. doi: 10.1007/s10935-021-00650-3. Online ahead of print. PMID: 34657269

Regional drug information center disseminates educational materials related to the COVID-19 pandemic.
Dos Santos JRB. Explor Res Clin Soc Pharm. 2021 Oct 15:100080. doi: 10.1016/j.rcsop.2021.100080. Online ahead of print. PMID: 34667973

Characterization and pathogenicity of a naturally reassortant and recombinant infectious bursal disease virus in China.
Feng X, Zhu N, Cui Y, Hou L, Zhou J, Qiu Y, Yang X, Liu C, Wang D, Guo J, Sun T, Shi Y, Han N, Mo M, Liu J. Transbound Emerg Dis. 2021 Oct 16. doi: 10.1111/tbed.14347. Online ahead of print. PMID: 34657384

Frequency and impact of the inclusion of broader measures of value in economic evaluations of vaccines.
Silver MC, Neumann PJ, Ma S, Kim DD, Cohen JT, Nyaku M, Roberts C, Sinha A, Ollendorf DA. Vaccine. 2021 Oct 13:S0264-410X(21)01285-8. doi: 10.1016/j.vaccine.2021.09.070. Online ahead of print. PMID: 34656380

Role of African swine fever virus (ASFV) proteins EP153R and EP402R in reducing viral persistence in blood and virulence in pigs infected with BeninΔDP148R.
Petrovan V, Rathakrishnan A, Islam M, Goatley LC, Moffat K, Sanchez-Cordon PJ, Reis AL, Dixon LK. J Virol. 2021 Oct 13:JVI0134021. doi: 10.1128/JVI.01340-21. Online ahead of print. PMID: 34643433

Effects of BNT162b2 mRNA vaccine on COVID-19 infection and hospitalisation amongst older people: matched case control study for England.
Mason TFD, Whitston M, Hodgson J, Watkinson RE, Lau YS, Abdulrazeg O, Sutton M. BMC Med. 2021 Oct 18;19(1):275. doi: 10.1186/s12916-021-02149-4. PMID: 34663326

Profiling Human Cytomegalovirus-Specific T Cell Responses Reveals Novel Immunogenic Open Reading Frames.
Dhanwani R, Dhanda SK, Pham J, Williams GP, Sidney J, Grifoni A, Picarda G, Lindestam Arlehamn CS, Sette A, Benedict CA. J Virol. 2021 Oct 13;95(21):e0094021. doi: 10.1128/JVI.00940-21. Epub 2021 Aug 11. PMID: 34379494

The Adjuvanted Recombinant Zoster Vaccine in Adults Aged 65 Years Previously Vaccinated With a Live-Attenuated Herpes Zoster Vaccine.
Dagnew AF, Klein NP, Hervé C, Kalema G, Di Paolo E, Peterson J, Salaun B, Schuind A. J Infect Dis. 2021 Oct 13;224(7):1139-1146. doi: 10.1093/infdis/jiaa083. PMID: 32103273

Genomic surveillance of SARS-CoV-2 tracks early interstate transmission of P.1 lineage and diversification within P.2 clade in Brazil.
Lamarca AP, de Almeida LGP, Francisco RDS Jr, Lima LFA, Scortecci KC, Perez VP, Brustolini OJ, Sousa ESS, Secco DA, Santos AMG, Albuquerque GR, Mariano APM, Maciel BM, Gerber AL, Guimarães APC, Nascimento PR, Neto FPF, Gadelha SR, Porto LC, Campana EH, Jeronimo SMB, Vasconcelos ATR. PLoS Negl Trop Dis. 2021 Oct 13;15(10):e0009835. doi: 10.1371/journal.pntd.0009835. Online ahead of print. PMID: 34644287

Dynamic Interactions of Fully Glycosylated SARS-CoV-2 Spike Protein with Various Antibodies.
Cao Y, Choi YK, Frank M, Woo H, Park SJ, Yeom MS, Seok C, Im W. J Chem Theory Comput. 2021 Oct 12;17(10):6559-6569. doi: 10.1021/acs.jctc.1c00552. Epub 2021 Sep 16. PMID: 34529436

Adverse events reported by Iranian patients with multiple sclerosis after the first dose of Sinopharm BBIBP-CorV.
Ali Sahraian M, Ghadiri F, Azimi A, Naser Moghadasi A. Vaccine. 2021 Oct 15;39(43):6347-6350. doi: 10.1016/j.vaccine.2021.09.030. Epub 2021 Sep 23. PMID: 34579974

Unilateral axillary adenopathy induced by COVID-19 vaccine: US follow-up evaluation.
Igual-Rouilleault AC, Soriano I, Quan PL, Fernández-Montero A, Elizalde A, Pina L. Eur Radiol. 2021 Oct 16. doi: 10.1007/s00330-021-08309-7. Online ahead of print. PMID: 34655312

Determinants in Nonstructural Protein 4A of Dengue Virus Required for RNA Replication and Replication Organelle Biogenesis.
Cortese M, Mulder K, Chatel-Chaix L, Scaturro P, Cerikan B, Plaszczyca A, Haselmann U, Bartenschlager M, Neufeldt CJ, Bartenschlager R. J Virol. 2021 Oct 13;95(21):e0131021. doi: 10.1128/JVI.01310-21. Epub 2021 Aug 11. PMID: 34379504

Effectiveness of mRNA BNT162b2 COVID-19 vaccine up to 6 months in a large integrated health system in the USA: a retrospective cohort study.
Tartof SY, Slezak JM, Fischer H, Hong V, Ackerson BK, Ranasinghe ON, Frankland TB, Ogun OA, Zamparo JM, Gray S, Valluri SR, Pan K, Angulo FJ, Jodar L, McLaughlin JM. Lancet. 2021 Oct 16;398(10309):1407-1416. doi: 10.1016/S0140-6736(21)02183-8. Epub 2021 Oct 4. PMID: 34619098

Two-Component Nanoparticle Vaccine Displaying Glycosylated Spike S1 Domain Induces Neutralizing Antibody Response against SARS-CoV-2 Variants.

van Oosten L, Altenburg JJ, Fougeroux C, Geertsema C, van den End F, Evers WAC, Westphal AH, Lindhoud S, van den Berg W, Swarts DC, Deurhof L, Suhrbier A, Le TT, Torres Morales S, Myeni SK, Kikkert M, Sander AF, de Jongh WA, Dagil R, Nielsen MA, Salanti A, Søgaard M, Keijzer TMP, Weijers D, Eppink MHM, Wijffels RH, van Oers MM, Martens DE, Pijlman GP. mBio. 2021 Oct 12;12(5):e0181321. doi: 10.1128/mBio.01813-21. Online ahead of print. PMID: 34634927

Increasing Black, Indigenous and People of Color participation in clinical trials through community engagement and recruitment goal establishment.
Andrasik MP, Broder GB, Wallace SE, Chaturvedi R, Michael NL, Bock S, Beyrer C, Oseso L, Aina J, Lucas J, Wilson DR, Kublin JG, Mensah GA. PLoS One. 2021 Oct 19;16(10):e0258858. doi: 10.1371/journal.pone.0258858. eCollection 2021. PMID: 34665829

Detection and Clinical Implications of Monovalent Rotavirus Vaccine-Derived Virus Strains in Children with Gastroenteritis in Alberta, Canada.
Zhuo R, Tarr GAM, Xie J, Freedman SB, Payne DC, Lee BE, McWilliams C, Chui L, Ali S, Pang X; Alberta Provincial Pediatric EnTeric Infection TEam (APPETITE). J Clin Microbiol. 2021 Oct 19;59(11):e0115421. doi: 10.1128/JCM.01154-21. Epub 2021 Aug 18. PMID: 34406795

RBD-IgG levels correlate with protection in residents facing SARS-CoV-2 B.1.1.7 Outbreaks.
Blain H, Tuaillon E, Gamon L, Pisoni A, Miot S, Delpui V, Si-Mohamed N, Niel C, Rolland Y, Montes B, Groc S, Rafasse S, Dupuy AM, Gros N, Muriaux D, Picot MC, Bousquet J. Allergy. 2021 Oct 15. doi: 10.1111/all.15142. Online ahead of print. PMID: 34652831

IFNα, but not IFNβ, acts early to control chronic chikungunya virus pathogenesis.
Locke MC, Fox LE, Dunlap BF, Young AR, Monte K, Lenschow DJ. J Virol. 2021 Oct 20:JVI0114321. doi: 10.1128/JVI.01143-21. Online ahead of print. PMID: 34668781

Vaccination information, motivations, and barriers in the context of meningococcal serogroup A conjugate vaccine introduction: A qualitative assessment among caregivers in Burkina Faso, 2018.
Aksnes BN, Walldorf JA, Nkwenkeu SF, Zoma RL, Mirza I, Tarbangdo F, Fall S, Hien S, Ky C, Kambou L, Diallo AO, Aké FH, Hatcher C, Patel JC, Novak RT, Hyde TB, Medah I, Soeters HM, Jalloh MF. Vaccine. 2021 Oct 15;39(43):6370-6377. doi: 10.1016/j.vaccine.2021.09.038. Epub 2021 Sep 25. PMID: 34579975

Family of Structurally Related Bioconjugates Yields Antibodies with Differential Selectivity against Ketamine and 6-Hydroxynorketamine.
Zheng Z, Kyzer JL, Worob A, Wenthur CJ. ACS Chem Neurosci. 2021 Oct 15. doi: 10.1021/acschemneuro.1c00498. Online ahead of print. PMID: 34652905

Development of an experimental inactivated vaccine from Vero cell adapted Enterovirus D68.
Raychoudhuri A, Naru AK, Kanubothula SR, Uddala R. Virus Res. 2021 Oct 15;304:198528. doi: 10.1016/j.virusres.2021.198528. Epub 2021 Jul 30. PMID: 34339771

Acute myelitis and ChAdOx1 nCoV-19 vaccine: Casual or causal association?
Vegezzi E, Ravaglia S, Buongarzone G, Bini P, Diamanti L, Gastaldi M, Prunetti P, Rognone E, Marchioni E. J Neuroimmunol. 2021 Oct 15;359:577686. doi: 10.1016/j.jneuroim.2021.577686. Epub 2021 Jul 31. PMID: 34392078

Covid-19 Breakthrough Infections in Vaccinated Health Care Workers.
Bergwerk M, Gonen T, Lustig Y, Amit S, Lipsitch M, Cohen C, Mandelboim M, Levin EG, Rubin C, Indenbaum V, Tal I, Zavitan M, Zuckerman N, Bar-Chaim A, Kreiss Y, Regev-Yochay G. N Engl J Med. 2021 Oct 14;385(16):1474-1484. doi: 10.1056/NEJMoa2109072. Epub 2021 Jul 28. PMID: 34320281

Serological response to mRNA and inactivated COVID-19 vaccine in healthcare workers in Hong Kong: decline in antibodies 12 weeks after two doses.
Zee JST, Lai KTW, Ho MKS, Leung ACP, Fung LH, Luk WP, Kwok LF, Kee KM, Chan QWL, Tang SF, Ma ESK, Lee KH, Lau CC, Yung RWH. Hong Kong Med J. 2021 Oct 18. doi: 10.12809/hkmj219744. Online ahead of print. PMID: 34657837

Systemic autoimmune myopathies: A prospective phase 4 controlled trial of an inactivated virus vaccine against SARS-CoV-2.
Shinjo SK, de Souza FHC, Borges IBP, Dos Santos AM, Miossi R, Misse RG, Medeiros-Ribeiro AC, Saad CGS, Yuki EFN, Pasoto SG, Kupa LVK, Ceneviva C, Seraphim JC, Pedrosa TN, Vendramini MBG, Silva CA, Aikawa NE, Bonfá E. Rheumatology (Oxford). 2021 Oct 19:keab773. doi: 10.1093/rheumatology/keab773. Online ahead of print. PMID: 34664616

SARS-CoV-2 specific memory T cell epitopes identified in COVID-19-recovered subjects.
Zhao J, Wang L, Schank M, Dang X, Lu Z, Cao D, Khanal S, Nguyen LN, Nguyen LNT, Zhang J, Zhang Y, Adkins JL, Baird EM, Wu XY, Ning S, Gazzar ME, Moorman JP, Yao ZQ. Virus Res. 2021 Oct 15;304:198508. doi: 10.1016/j.virusres.2021.198508. Epub 2021 Jul 27. PMID: 34329696

Guillain-Barré syndrome presenting with facial diplegia following COVID-19 vaccination in two patients.
Kanabar G, Wilkinson P. BMJ Case Rep. 2021 Oct 14;14(10):e244527. doi: 10.1136/bcr-2021-244527. PMID: 34649856

Effectiveness of the BNT162b2mRNA Covid-19 Vaccine in Patients with Hematological Neoplasms.
Mittelman M, Magen O, Barda N, Dagan N, Oster HS, Leader A, Balicer R. Blood. 2021 Oct 18:blood.2021013768. doi: 10.1182/blood.2021013768. Online ahead of print. PMID: 34662390

Structural and Biochemical Characterization of Cysteinylation in Broadly Neutralizing Antibodies to HIV-1.
Omorodion O, Wilson IA. J Mol Biol. 2021 Oct 16:167303. doi: 10.1016/j.jmb.2021.167303. Online ahead of print. PMID: 34666044

Different protective efficacies of a novel antigen-specific DNA vaccine encoding chicken type collagen via intramuscular, subcutaneous, and intravenous vaccination against experimental rheumatoid arthritis.
Zhao X, Long J, Liang F, Liu N, Sun Y, Xi Y. Biomed Pharmacother. 2021 Oct 12;144:112294. doi: 10.1016/j.biopha.2021.112294. Online ahead of print. PMID: 34653764

A cross-sectional survey study on influenza and pneumococcal vaccination rates and the factors affecting vaccination rates in hemodialysis patients in Kocaeli Province of Turkey.
Mutlu A, Şengül E, Boz G. Ther Apher Dial. 2021 Oct 13. doi: 10.1111/1744-9987.13744. Online ahead of print. PMID: 34647428

Molecular mechanism of enhancing the immune effect of the Newcastle disease virus vaccine in broilers fed with Bacillus cereus PAS38.

Li W, Li J, He N, Dai X, Wang Z, Wang Y, Ni X, Zeng D, Zhang D, Zeng Y, Pan K. Food Funct. 2021 Oct 14. doi: 10.1039/d1fo01777b. Online ahead of print. PMID: 34647113

Optimized design of obstacle sequences for microfluidic mixing in an inertial regime.
Antognoli M, Stoecklein D, Galletti C, Brunazzi E, Di Carlo D. Lab Chip. 2021 Oct 12;21(20):3910-3923. doi: 10.1039/d1lc00483b. PMID: 34636817

Racial differences in anticipated COVID-19 vaccine acceptance among religious populations in the US.
Jacobi CJ, Vaidyanathan B. Vaccine. 2021 Oct 15;39(43):6351-6355. doi: 10.1016/j.vaccine.2021.09.005. Epub 2021 Sep 7. PMID: 34544600

Sensory Guillain-Barre syndrome following the ChAdOx1 nCov-19 vaccine: Report of two cases and review of literature.
Min YG, Ju W, Ha YE, Ban JJ, Lee SA, Sung JJ, Shin JY. J Neuroimmunol. 2021 Oct 15;359:577691. doi: 10.1016/j.jneuroim.2021.577691. Epub 2021 Aug 8. PMID: 34416410

Association between immunogenicity and reactogenicity: a post hoc analysis of two Phase 3 studies with the adjuvanted recombinant zoster vaccine.
Callegaro A, Burny W, Hervé C, Kim JH, Levin MJ, Zahaf T, Cunningham AL, Didierlaurent AM. J Infect Dis. 2021 Oct 18:jiab536. doi: 10.1093/infdis/jiab536. Online ahead of print. PMID: 34662415

Erythema Multiforme Major following SARS-CoV-2 vaccine.
Saibene AM, Alliata A, Cozzi AT, Ottavi A, Spagnolini S, Pipolo C, Maccari A, Felisati G. Clin Case Rep. 2021 Oct 13;9(10):e04947. doi: 10.1002/ccr3.4947. eCollection 2021 Oct. PMID: 34667612

Sentinel surveillance for bacterial pneumonia and meningitis in children under the age of 5 in a tertiary pediatric hospital in Colombia - 2016.
Camacho-Moreno G, Duarte C, García D, Calderón V, Maldonado LY, Castellar L, Moreno J, Palacios J, Gallego Á, Castillo O, Sanabria O, Talavera I, Montoya R. Biomedica. 2021 Oct 15;41(Sp. 2):62-75. doi: 10.7705/biomedica.5658. PMID: 34669279

The association of opening K-12 schools with the spread of COVID-19 in the United States: County-level panel data analysis.
Chernozhukov V, Kasahara H, Schrimpf P. Proc Natl Acad Sci U S A. 2021 Oct 19;118(42):e2103420118. doi: 10.1073/pnas.2103420118. PMID: 34642247

Plasmodium Preerythrocytic Vaccine Antigens Enhance Sterile Protection in Mice Induced by Circumsporozoite Protein.
Daniel S, Pichugin A, Torano H, Renn JP, Kwan J, Cowles MV, Conteh S, Lambert LE, Alani N, MacDonald NJ, Dai W, Highsmith K, Anderson C, Gorres JP, Musgrove J, Butler B, Althubaiti N, Dixit S, Zarling-Bejma S, Krzych U, Duffy PE. Infect Immun. 2021 Oct 15;89(11):e0016521. doi: 10.1128/IAI.00165-21. Epub 2021 Jul 26. PMID: 34310889

Elicitation of broadly protective sarbecovirus immunity by receptor-binding domain nanoparticle vaccines.
Walls AC, Miranda MC, Schäfer A, Pham MN, Greaney A, Arunachalam PS, Navarro MJ, Tortorici MA, Rogers K, O'Connor MA, Shirreff L, Ferrell DE, Bowen J, Brunette N, Kepl E, Zepeda SK, Starr T, Hsieh CL, Fiala B, Wrenn S, Pettie D, Sydeman C, Sprouse KR, Johnson M, Blackstone A, Ravichandran R,

Ogohara C, Carter L, Tilles SW, Rappuoli R, Leist SR, Martinez DR, Clark M, Tisch R, O'Hagan DT, Van Der Most R, Van Voorhis WC, Corti D, McLellan JS, Kleanthous H, Sheahan TP, Smith KD, Fuller DH, Villinger F, Bloom J, Pulendran B, Baric RS, King NP, Veesler D. Cell. 2021 Oct 14;184(21):5432-5447.e16. doi: 10.1016/j.cell.2021.09.015. Epub 2021 Sep 15. PMID: 34619077

Deletion of the A137R Gene from the Pandemic Strain of African Swine Fever Virus Attenuates the Strain and Offers Protection against the Virulent Pandemic Virus.
Gladue DP, Ramirez-Medina E, Vuono E, Silva E, Rai A, Pruitt S, Espinoza N, Velazquez-Salinas L, Borca MV. J Virol. 2021 Oct 13;95(21):e0113921. doi: 10.1128/JVI.01139-21. Epub 2021 Aug 18. PMID: 34406865

One dose of COVID-19 nanoparticle vaccine REVC-128 provides protection against SARS-CoV-2 challenge at two weeks post immunization.
Gu M, Torres JL, Li Y, Ry AV, Greenhouse J, Wallace S, Chiang CI, Pessaint L, Jackson AM, Porto M, Kar S, Li Y, Ward AB, Wang Y. Emerg Microbes Infect. 2021 Oct 15:1-35. doi: 10.1080/22221751.2021.1994354. Online ahead of print. PMID: 34651563

Schistosoma mansoni egg-derived extracellular vesicles: A promising vaccine candidate against murine schistosomiasis.
Mossallam SF, Abou-El-Naga IF, Abdel Bary A, Elmorsy EA, Diab RG. PLoS Negl Trop Dis. 2021 Oct 13;15(10):e0009866. doi: 10.1371/journal.pntd.0009866. Online ahead of print. PMID: 34644290

A case of Graves' disease and type 1 diabetes mellitus following SARS-CoV-2 vaccination.
Patrizio A, Ferrari SM, Antonelli A, Fallahi P. J Autoimmun. 2021 Oct 12;125:102738. doi: 10.1016/j.jaut.2021.102738. Online ahead of print. PMID: 34653776

Surveillance of SARS-CoV-2 lineage B.1.1.7 in Slovakia using a novel, multiplexed RT-qPCR assay.
Boršová K, Paul ED, Kováčová V, Radvánszka M, Hajdu R, Čabanová V, Sláviková M, Ličková M, Lukáčiková Ľ, Belák A, Roussier L, Kostičová M, Líšková A, Maďarová L, Štefkovičová M, Reizigová L, Nováková E, Sabaka P, Koščálová A, Brejová B, Staroňová E, Mišík M, Vinař T, Nosek J, Čekan P, Klempa B. Sci Rep. 2021 Oct 14;11(1):20494. doi: 10.1038/s41598-021-99661-7. PMID: 34650153

An immunization quality improvement learning collaborative in the college health setting.
Fu L, Smith A, Ciotoli C, Dannenbaum M, Jacobs M. J Am Coll Health. 2021 Oct 20:1-10. doi: 10.1080/07448481.2021.1979560. Online ahead of print. PMID: 34670105

Attenuated activation of pulmonary immune cells in mRNA-1273-vaccinated hamsters after SARS-CoV-2 infection.
Meyer M, Wang Y, Edwards D, Smith GR, Rubenstein AB, Ramanathan P, Mire CE, Pietzsch C, Chen X, Ge Y, Cheng WS, Henry C, Woods A, Ma L, Stewart-Jones GB, Bock KW, Minai M, Nagata BM, Periasamy S, Shi PY, Graham BS, Moore IN, Ramos I, Troyanskaya OG, Zaslavsky E, Carfi A, Sealfon SC, Bukreyev A. J Clin Invest. 2021 Oct 15;131(20):e148036. doi: 10.1172/JCI148036. PMID: 34449440

Safety Surveillance of COVID-19 mRNA Vaccines Through the Vaccine Safety Datalink.
Blumenthal KG, Phadke NA, Bates DW. JAMA. 2021 Oct 12;326(14):1375-1377. doi: 10.1001/jama.2021.14808. PMID: 34477809

Lessons from vaccine-induced immune thrombotic thrombocytopenia.
Kelton JG, Arnold DM, Nazy I. Nat Rev Immunol. 2021 Oct 18. doi: 10.1038/s41577-021-00642-8. Online ahead of print. PMID: 34663971

Cautious optimism for malaria vaccine roll-out.
Samarasekera U. Lancet. 2021 Oct 16;398(10309):1394. doi: 10.1016/S0140-6736(21)02237-6. PMID: 34656216

Developing COVID-19 vaccine policy in increments.
Saag MS. Lancet. 2021 Oct 16;398(10309):1382-1383. doi: 10.1016/S0140-6736(21)02242-X. PMID: 34656213

Vaccine-Induced SARS-CoV-2 Antibodies in Inflammatory Diseases.
Abbasi J. JAMA. 2021 Oct 12;326(14):1365. doi: 10.1001/jama.2021.17500. PMID: 34636872

Conspiratorial thinking, selective exposure to conservative media, and response to COVID-19 in the US.
Romer D, Jamieson KH. Soc Sci Med. 2021 Oct 12;291:114480. doi: 10.1016/j.socscimed.2021.114480. Online ahead of print. PMID: 34662759

Robust and prototypical immune responses toward influenza vaccines in the high-risk group of Indigenous Australians.
Hensen L, Nguyen THO, Rowntree LC, Damelang T, Koutsakos M, Aban M, Hurt A, Harland KL, Auladell M, van de Sandt CE, Everitt A, Blacker C, Oyong DA, Loughland JR, Webb JR, Wines BD, Hogarth PM, Flanagan KL, Plebanski M, Wheatley A, Chung AW, Kent SJ, Miller A, Clemens EB, Doherty PC, Nelson J, Davies J, Tong SYC, Kedzierska K. Proc Natl Acad Sci U S A. 2021 Oct 12;118(41):e2109388118. doi: 10.1073/pnas.2109388118. PMID: 34607957

OAS: A diverse database of cleaned, annotated and translated unpaired and paired antibody sequences.
Olsen TH, Boyles F, Deane CM. Protein Sci. 2021 Oct 15. doi: 10.1002/pro.4205. Online ahead of print. PMID: 34655133

A highly potent antibody effective against SARS-CoV-2 variants of concern.
Fenwick C, Turelli P, Perez L, Pellaton C, Esteves-Leuenberger L, Farina A, Campos J, Lana E, Fiscalini F, Raclot C, Pojer F, Lau K, Demurtas D, Descatoire M, Joo VS, Foglierini M, Noto A, Abdelnabi R, Foo CS, Vangeel L, Neyts J, Du W, Bosch BJ, Veldman G, Leyssen P, Thiel V, LeGrand R, Lévy Y, Trono D, Pantaleo G. Cell Rep. 2021 Oct 12;37(2):109814. doi: 10.1016/j.celrep.2021.109814. Epub 2021 Sep 21. PMID: 34599871

mRNA vaccine-induced T cells respond identically to SARS-CoV-2 variants of concern but differ in longevity and homing properties depending on prior infection status.
Neidleman J, Luo X, McGregor M, Xie G, Murray V, Greene WC, Lee SA, Roan NR. Elife. 2021 Oct 12;10:e72619. doi: 10.7554/eLife.72619. Online ahead of print. PMID: 34636722

The nearest neighbor nuclei method to objectify analysis of pertussis toxin-induced clustering.
Hoonakker ME, Remarque E, Veth J, Sloots A, Bajramovic JJ. ALTEX. 2021 Oct 15. doi: 10.14573/altex.2012171. Online ahead of print. PMID: 34654933

Deletion of the type IV secretion system promoter VirB in Brucella abortus A19 strain attenuated the virulence of the bacteria and promotes autophagy.
Deng X, He J, Wang Y, Yang Q, Yi JH, Zhang H, Wang Y, Miao Y, Wang Z, Chen C. Can J Microbiol. 2021 Oct 13. doi: 10.1139/cjm-2021-0053. Online ahead of print. PMID: 34644507

Experimental evaluation of protection and immunogenicity of Streptococcus suis bacterin-based vaccines formulated with different commercial adjuvants in weaned piglets.
Obradovic MR, Corsaut L, Dolbec D, Gottschalk M, Segura M. Vet Res. 2021 Oct 19;52(1):133. doi: 10.1186/s13567-021-01004-x. PMID: 34666827

The Importance of Cellular Immune Response to HIV: Implications for Antibody Production and Vaccine Design.
Brenna E, McMichael AJ. DNA Cell Biol. 2021 Oct 18. doi: 10.1089/dna.2021.0520. Online ahead of print. PMID: 34664991

Deep Venous Thrombosis after Ad26.COV2.S Vaccination in Adult Male.
Hussain H, Sehring M, Soriano S. Case Rep Crit Care. 2021 Oct 14;2021:7682655. doi: 10.1155/2021/7682655. eCollection 2021. PMID: 34659839

COVID-19 Vaccines Programs: adverse events following immunization (AEFI) among medical Clerkship Student in Jember, Indonesia.
Supangat, Sakinah EN, Nugraha MY, Qodar TS, Mulyono BW, Tohari AI. BMC Pharmacol Toxicol. 2021 Oct 12;22(1):58. doi: 10.1186/s40360-021-00528-4. PMID: 34641944

Tracking the impact of the COVID-19 pandemic on routine infant vaccinations in the Dominican Republic.
Colomé-Hidalgo M, Campos JD, Gil de Miguel Á. Hum Vaccin Immunother. 2021 Oct 13:1-6. doi: 10.1080/21645515.2021.1972708. Online ahead of print. PMID: 34644243

Mannose-modified liposome designed for epitope peptide drug delivery in cancer immunotherapy.
Yu J, Wang S, Qi J, Yu Z, Xian Y, Liu W, Wang X, Liu C, Wei M. Int Immunopharmacol. 2021 Oct 12;101(Pt A):108148. doi: 10.1016/j.intimp.2021.108148. Online ahead of print. PMID: 34653955

COVID19 Vaccine Type and Humoral Immune Response in Patients Receiving Dialysis.
Garcia P, Anand S, Han J, Montez-Rath M, Sun S, Shang T, Parsonnet J, Chertow G, Schiller B, Abra G. J Am Soc Nephrol. 2021 Oct 13:ASN.2021070936. doi: 10.1681/ASN.2021070936. Online ahead of print. PMID: 34645698

Recent developments in systems biology and genetic engineering toward design of vaccines for TB.
Singh Y, Beamer G, Sun X, Shukla P. Crit Rev Biotechnol. 2021 Oct 12:1-16. doi: 10.1080/07388551.2021.1951649. Online ahead of print. PMID: 34641752

Predicting Mutational Effects on Receptor Binding of the Spike Protein of SARS-CoV-2 Variants.
Bai C, Wang J, Chen G, Zhang H, An K, Xu P, Du Y, Ye RD, Saha A, Zhang A, Warshel A. J Am Chem Soc. 2021 Oct 14:jacs.1c07965. doi: 10.1021/jacs.1c07965. Online ahead of print. PMID: 34648291

INO-4800 DNA vaccine induces neutralizing antibodies and T cell activity against global SARS-CoV-2 variants.

Andrade VM, Christensen-Quick A, Agnes J, Tur J, Reed C, Kalia R, Marrero I, Elwood D, Schultheis K, Purwar M, Reuschel E, McMullan T, Pezzoli P, Kraynyak K, Sylvester A, Mammen MP, Tebas P, Joseph Kim J, Weiner DB, Smith TRF, Ramos SJ, Humeau LM, Boyer JD, Broderick KE. NPJ Vaccines. 2021 Oct 14;6(1):121. doi: 10.1038/s41541-021-00384-7. PMID: 34650089

Limited Neutralization of Authentic Severe Acute Respiratory Syndrome Coronavirus 2 Variants Carrying E484K In Vitro.
Widera M, Wilhelm A, Hoehl S, Pallas C, Kohmer N, Wolf T, Rabenau HF, Corman VM, Drosten C, Vehreschild MJGT, Goetsch U, Gottschalk R, Ciesek S. J Infect Dis. 2021 Oct 13;224(7):1109-1114. doi: 10.1093/infdis/jiab355. PMID: 34223909

Safety and immunogenicity of a multidose vial formulation of 13-valent pneumococcal conjugate vaccine administered with routine pediatric vaccines in healthy infants in India: A phase 4, randomized, open-label study.
Lalwani SK, Ramanan PV, Sapru A, Sundaram B, Shah BH, Kaul D, Karthik Nagesh N, Kalina WV, Chand R, Ding M, Suroju S, Scott DA, Lockhart SP. Vaccine. 2021 Oct 13:S0264-410X(21)01208-1. doi: 10.1016/j.vaccine.2021.09.029. Online ahead of print. PMID: 34656378

Sudden sensorineural hearing loss after COVID-19 vaccination.
Jeong J, Choi HS. Int J Infect Dis. 2021 Oct 17:S1201-9712(21)00815-8. doi: 10.1016/j.ijid.2021.10.025. Online ahead of print. PMID: 34670143

mRNA vaccines induce durable immune memory to SARS-CoV-2 and variants of concern.
Goel RR, Painter MM, Apostolidis SA, Mathew D, Meng W, Rosenfeld AM, Lundgreen KA, Reynaldi A, Khoury DS, Pattekar A, Gouma S, Kuri-Cervantes L, Hicks P, Dysinger S, Hicks A, Sharma H, Herring S, Korte S, Baxter AE, Oldridge DA, Giles JR, Weirick ME, McAllister CM, Awofolaju M, Tanenbaum N, Drapeau EM, Dougherty J, Long S, D'Andrea K, Hamilton JT, McLaughlin M, Williams JC, Adamski S, Kuthuru O; UPenn COVID Processing Unit‡, Frank I, Betts MR, Vella LA, Grifoni A, Weiskopf D, Sette A, Hensley SE, Davenport MP, Bates P, Luning Prak ET, Greenplate AR, Wherry EJ, Adamski S, Alam Z, Addison MM, Byrne KT, Chandra A, Descamps HC, Han N, Kaminskiy Y, Kammerman SC, Kim J, Greenplate AR, Hamilton JT, Markosyan N, Noll JH, Omran DK, Pattekar A, Perkey E, Prager EM, Pueschl D, Rennels A, Shah JB, Shilan JS, Wilhausen N, Vanderbeck AN. Science. 2021 Oct 14:eabm0829. doi: 10.1126/science.abm0829. Online ahead of print. PMID: 34648302

Synergistic effects of exosomal crocin or curcumin compounds and HPV L1-E7 polypeptide vaccine construct on tumor eradication in C57BL/6 mouse model.
Abbasifarid E, Bolhassani A, Irani S, Sotoodehnejadnematalahi F. PLoS One. 2021 Oct 14;16(10):e0258599. doi: 10.1371/journal.pone.0258599. eCollection 2021. PMID: 34648579

Designing a Pro-Equity HPV Vaccine Delivery Program for Girls Who Have Dropped Out of School: Community Perspectives From Uttar Pradesh, India.
Holroyd TA, Yan SD, Srivastava V, Srivastava A, Wahl B, Morgan C, Kumar S, Yadav AK, Jennings MC. Health Promot Pract. 2021 Oct 12:15248399211046611. doi: 10.1177/15248399211046611. Online ahead of print. PMID: 34636268

Evaluation of Cell-Penetrating Peptides as Mucosal Immune Enhancers for Nasal Vaccination.
Lobaina Y, Urquiza D, Garay H, Perera Y, Yang K. Int J Pept Res Ther. 2021 Oct 13:1-10. doi: 10.1007/s10989-021-10296-8. Online ahead of print. PMID: 34658688

Subcutaneous immunoglobulin replacement for treatment of humoral immune dysfunction in patients with chronic lymphocytic leukemia.
Mustafa SS, Jamshed S, Vadamalai K, Ramsey A. PLoS One. 2021 Oct 15;16(10):e0258529. doi: 10.1371/journal.pone.0258529. eCollection 2021. PMID: 34653210

Phase 1 randomized, placebo-controlled, dose-escalating study to evaluate OVX836, a nucleoprotein-based influenza vaccine: intramuscular results.
Withanage K, De Coster I, Cools N, Viviani S, Tourneur J, Chevandier M, Lambiel M, Willems P, Le Vert A, Nicolas F, Van Damme P. J Infect Dis. 2021 Oct 15:jiab532. doi: 10.1093/infdis/jiab532. Online ahead of print. PMID: 34653245

Dynamics and turnover of memory CD8 T cell responses following yellow fever vaccination.
Zarnitsyna VI, Akondy RS, Ahmed H, McGuire DJ, Zarnitsyn VG, Moore M, Johnson PLF, Ahmed R, Li KW, Hellerstein MK, Antia R. PLoS Comput Biol. 2021 Oct 14;17(10):e1009468. doi: 10.1371/journal.pcbi.1009468. Online ahead of print. PMID: 34648489

Multilevel determinants of COVID-19 vaccination uptake among South Asian ethnic minorities in Hong Kong: cross-sectional online survey.
Singh A, Lai AHY, Wang J, Asim S, Chan PS, Wang Z, Yeoh EK. JMIR Public Health Surveill. 2021 Oct 12. doi: 10.2196/31707. Online ahead of print. PMID: 34653014

Data-independent acquisition mass spectrometry for site-specific glycoproteomics characterization of SARS-CoV-2 spike protein.
Chang D, Klein JA, Nalehua MR, Hackett WE, Zaia J. Anal Bioanal Chem. 2021 Oct 12:1-14. doi: 10.1007/s00216-021-03643-7. Online ahead of print. PMID: 34635934

Longitudinal extensive transverse myelitis following ChAdOx1 nCOV-19 vaccine: a case report.
Tan WY, Yusof Khan AHK, Mohd Yaakob MN, Abdul Rashid AM, Loh WC, Baharin J, Ibrahim A, Ismail MR, Inche Mat LN, Wan Sulaiman WA, Basri H, Hoo FK. BMC Neurol. 2021 Oct 12;21(1):395. doi: 10.1186/s12883-021-02427-x. PMID: 34641797

Ensuring High and Equitable COVID-19 Vaccine Uptake Among Patients With IBD.
Caldera F, Balzora S, Hayney MS, Farraye FA, Cross RK. Inflamm Bowel Dis. 2021 Oct 18;27(10):1703-1705. doi: 10.1093/ibd/izab114. PMID: 34013958

Herpes Simplex Virus Keratitis Reactivation after SARS-CoV-2 BNT162b2 mRNA Vaccination: A Report of Two Cases.
Alkhalifah MI, Alsobki HE, Alwael HM, Al Fawaz AM, Al-Mezaine HS. Ocul Immunol Inflamm. 2021 Oct 12:1-3. doi: 10.1080/09273948.2021.1986548. Online ahead of print. PMID: 34637667

Rotavirus Vaccination Likely to Be Cost Saving to Society in the United States.
Newall AT, Leong RN, Reyes JF, Curns AT, Rudd J, Tate J, Macartney K, Parashar U. Clin Infect Dis. 2021 Oct 20;73(8):1424-1430. doi: 10.1093/cid/ciab442. PMID: 34038527

PCSK9 vaccine: so near, yet so far!
Sahebkar A, Momtazi-Borojeni AA, Banach M. Eur Heart J. 2021 Oct 14;42(39):4007-4010. doi: 10.1093/eurheartj/ehab299. PMID: 34151957

A metalloproteinase Tsdpy31 from Trichinella spiralis participates in larval molting and development.
Ren HN, Bai SJ, Wang Z, Han LL, Yan SW, Jiang P, Zhang X, Wang ZQ, Cui J. Int J Biol Macromol. 2021 Oct 14:S0141-8130(21)02168-1. doi: 10.1016/j.ijbiomac.2021.10.021. Online ahead of print. PMID: 34656542

"That same stigma...that same hatred and negativity:" a qualitative study to understand stigma and medical mistrust experienced by people living with HIV diagnosed with COVID-19.
Hall A, Joseph O, Devlin S, Kerman J, Schmitt J, Ridgway JP, McNulty MC. BMC Infect Dis. 2021 Oct 14;21(1):1066. doi: 10.1186/s12879-021-06693-5. PMID: 34649501

Immunodominant linear B cell epitopes in the spike and membrane proteins of SARS-CoV-2 identified by immunoinformatics prediction and immunoassay.
Polyiam K, Phoolcharoen W, Butkhot N, Srisaowakarn C, Thitithanyanont A, Auewarakul P, Hoonsuwan T, Ruengjitchatchawalya M, Mekvichitsaeng P, Roshorm YM. Sci Rep. 2021 Oct 14;11(1):20383. doi: 10.1038/s41598-021-99642-w. PMID: 34650130

The Annual costs of treating genital warts in the Public Healthcare Sector in Peru.
Saldarriaga EM, Cárcamo CP, Babigumira JB, García PJ. BMC Health Serv Res. 2021 Oct 14;21(1):1092. doi: 10.1186/s12913-021-07120-w. PMID: 34649539

Determinants of information diffusion in online communication on vaccination: The benefits of visual displays.
Giese H, Neth H, Gaissmaier W. Vaccine. 2021 Oct 15;39(43):6407-6413. doi: 10.1016/j.vaccine.2021.09.016. Epub 2021 Sep 22. PMID: 34561137

COVID-19 BBIBP-CorV vaccine and transient heart block - A phenomenon by chance or a possible correlation - A case report.
Shams P, Ali J, Saadia S, Khan AH, Sultan FAT, Tai J. Ann Med Surg (Lond). 2021 Oct 15:102956. doi: 10.1016/j.amsu.2021.102956. Online ahead of print. PMID: 34667594

Human Monoclonal Antibodies against NS1 Protein Protect against Lethal West Nile Virus Infection.
Wessel AW, Doyle MP, Engdahl TB, Rodriguez J, Crowe JE Jr, Diamond MS. mBio. 2021 Oct 12;12(5):e0244021. doi: 10.1128/mBio.02440-21. Online ahead of print. PMID: 34634945

A non-inferiority trial comparing two recombinant vaccines (Hepa-B vs. Engerix-B) for hepatitis B among adults in Dhaka, Bangladesh.
Chowdhury F, Akter A, Rahman Bhuiyan T, Tauheed I, Ahmed T, Ahmmed F, Ahmed F, Karim M, Mainul Ahasan M, Rahman Mia M, Mohammad Ibna Masud M, Wahab Khan A, Masum Billah M, Nahar Z, Khan I, Rahad Hossain M, Ariful Islam AZM, Panday AS, Muktadir Rahman Ashik M, Qadri F. Vaccine. 2021 Oct 15;39(43):6385-6390. doi: 10.1016/j.vaccine.2021.09.031. Epub 2021 Sep 22. PMID: 34561142

Neutralizing antibody activity in convalescent sera from infection in humans with SARS-CoV-2 and variants of concern.
Dupont L, Snell LB, Graham C, Seow J, Merrick B, Lechmere T, Maguire TJA, Hallett SR, Pickering S, Charalampous T, Alcolea-Medina A, Huettner I, Jimenez-Guardeño JM, Acors S, Almeida N, Cox D, Dickenson RE, Galao RP, Kouphou N, Lista MJ, Ortega-Prieto AM, Wilson H, Winstone H, Fairhead C, Su JZ, Nebbia G, Batra R, Neil S, Shankar-Hari M, Edgeworth JD, Malim MH, Doores KJ. Nat Microbiol. 2021 Oct 15. doi: 10.1038/s41564-021-00974-0. Online ahead of print. PMID: 34654917

African Swine Fever Virus F317L Protein Inhibits NF-κB Activation To Evade Host Immune Response and Promote Viral Replication.
Yang J, Li S, Feng T, Zhang X, Yang F, Cao W, Chen H, Liu H, Zhang K, Zhu Z, Zheng H. mSphere. 2021 Oct 20:e0065821. doi: 10.1128/mSphere.00658-21. Online ahead of print. PMID: 34668754

Charge-transfer complexation of TCNE with azithromycin, the antibiotic used worldwide to treat the coronavirus disease (COVID-19). Part IV: A comparison between solid and liquid interactions.
Adam AMA, Refat MS, Altalhi TA, Alsuhaibani KS. J Mol Liq. 2021 Oct 15;340:117224. doi: 10.1016/j.molliq.2021.117224. Epub 2021 Aug 11. PMID: 34393305

Erythema nodosum following the first dose of ChAdOx1-S nCoV-19 vaccine.
Cameli N, Silvestri M, Mariano M, Bennardo L, Nisticò SP, Cristaudo A. J Eur Acad Dermatol Venereol. 2021 Oct 18. doi: 10.1111/jdv.17762. Online ahead of print. PMID: 34662466

CD4 T Cell Responses to *Theileria parva* in Immune Cattle Recognize a Diverse Set of Parasite Antigens Presented on the Surface of Infected Lymphoblasts.
Morrison WI, Aguado A, Sheldrake TA, Palmateer NC, Ifeonu OO, Tretina K, Parsons K, Fenoy E, Connelley T, Nielsen M, Silva JC. J Immunol. 2021 Oct 15;207(8):1965-1977. doi: 10.4049/jimmunol.2100331. Epub 2021 Sep 10. PMID: 34507950

Dendritic cell therapy with CD137L-DC-EBV-VAX in locally recurrent or metastatic nasopharyngeal carcinoma is safe and confers clinical benefit.
Nickles E, Dharmadhikari B, Yating L, Walsh RJ, Koh LP, Poon M, Tan LK, Wang LZ, Ang Y, Asokumaran Y, Chong WQ, Huang Y, Loh KS, Tay J, Soo R, Koh M, Ho LP, Chan M, Niam M, Soh M, Luah YH, Lim CM, Kaliaperumal N, Au VB, Talib NBSN, Sng R, Connolly JE, Goh BC, Schwarz H. Cancer Immunol Immunother. 2021 Oct 18. doi: 10.1007/s00262-021-03075-3. Online ahead of print. PMID: 34661709

Optimizing immunization schedules in endemic cholera regions: cost-effectiveness assessment of vaccination strategies for cholera control in Bangladesh.
Zeng W, Cui Y, Jarawan E, Avila C, Li G, Turbat V, Bouey J, Farag M, Mutasa R, Ahn H, Sun D, Shen J. Vaccine. 2021 Oct 15;39(43):6356-6363. doi: 10.1016/j.vaccine.2021.09.044. Epub 2021 Sep 25. PMID: 34579976

BNT162b2 and ChAdOx1 nCoV-19 Vaccine Effectiveness against Death from the Delta Variant.
Sheikh A, Robertson C, Taylor B. N Engl J Med. 2021 Oct 20. doi: 10.1056/NEJMc2113864. Online ahead of print. PMID: 34670038

Post COVID-19 vaccination neuromyelitis optica spectrum disorder: Case report & MRI findings.
Badrawi N, Kumar N, Albastaki U. Radiol Case Rep. 2021 Dec;16(12):3864-3867. doi: 10.1016/j.radcr.2021.09.033. Epub 2021 Oct 13. PMID: 34659602

Incidental findings in UK healthy volunteers screened for a COVID-19 vaccine trial.
Hodgson SH, Iveson P, Larwood J, Roche S, Morrison H, Cosgrove C, Galiza E, Ikram S, Lemm NM, Mehdipour S, Owens D, Pacurar M, Schumacher M, Shaw RH, Faust SN, Heath PT, Pollard AJ, Emary KRW, Pollock KM, Lazarus R. Clin Transl Sci. 2021 Oct 20. doi: 10.1111/cts.13170. Online ahead of print. PMID: 34670021

Influenza Vaccine Effectiveness for Prevention of Severe Influenza-Associated Illness Among Adults in the United States, 2019-2020: A Test-Negative Study.
Grijalva CG, Feldstein LR, Talbot HK, Aboodi M, Baughman AH, Brown SM, Casey JD, Erickson HL, Exline MC, Files DC, Gibbs KW, Ginde AA, Gong MN, Halasa N, Khan A, Lindsell CJ, Nwosu SK, Peltan ID, Prekker ME, Rice TW, Shapiro NI, Steingrub JS, Stubblefield WB, Tenforde MW, Patel MM, Self WH; Influenza and Other Viruses in the Acutely Ill (IVY) Network. Clin Infect Dis. 2021 Oct 20;73(8):1459-1468. doi: 10.1093/cid/ciab462. PMID: 34014274

The role of COVID-19 survivor status and gender towards neutralizing antibody titers 1, 2, 3 months after sinovac vaccine administration on clinical year medical student in Indonesia.
Heriyanto RS, Kurniawan A, Wijovi F, Halim DA, Jodhinata C, Marcella E, Susanto B, Wibowo J, Indrawan M, Heryadi NK, Imanuelly M, Anurantha JJ, Hariyanto TI, Marcellin C, Sinaga TD, Rizki SA, Sieto N, Siregar JI, Lugito NPH. Int J Infect Dis. 2021 Oct 12:S1201-9712(21)00797-9. doi: 10.1016/j.ijid.2021.10.009. Online ahead of print. PMID: 34653654

Structural Basis of a Human Neutralizing Antibody Specific to the SARS-CoV-2 Spike Protein Receptor-Binding Domain.
Yang M, Li J, Huang Z, Li H, Wang Y, Wang X, Kang S, Huang X, Wu C, Liu T, Jia Z, Liang J, Yuan X, He S, Chen X, Zhou Z, Chen Q, Liu S, Li J, Zheng H, Liu X, Li K, Yao X, Lang B, Liu L, Liao HX, Chen S. Microbiol Spectr. 2021 Oct 13:e0135221. doi: 10.1128/Spectrum.01352-21. Online ahead of print. PMID: 34643438

Effect of Delta variant on viral burden and vaccine effectiveness against new SARS-CoV-2 infections in the UK.
Pouwels KB, Pritchard E, Matthews PC, Stoesser N, Eyre DW, Vihta KD, House T, Hay J, Bell JI, Newton JN, Farrar J, Crook D, Cook D, Rourke E, Studley R, Peto TEA, Diamond I, Walker AS. Nat Med. 2021 Oct 14. doi: 10.1038/s41591-021-01548-7. Online ahead of print. PMID: 34650248

Human anti-neuraminidase antibodies reduce airborne transmission of clinical influenza virus isolates in the guinea pig model.
Tan J, O'Dell G, Hernandez MM, Sordillo EM, Kahn Z, Kriti D, van Bakel H, Ellebedy AH, Wilson PC, Simon V, Krammer F, McMahon M. J Virol. 2021 Oct 20:JVI0142121. doi: 10.1128/JVI.01421-21. Online ahead of print. PMID: 34669506

Immunogenicity and safety of a heterologous prime-boost COVID-19 vaccine schedule: ChAdOx1 vaccine Covishield followed by BBV152 Covaxin.

Kant R, Dwivedi G, Zaman K, Sahay RR, Sapkal G, Kaushal H, Nyayanit DA, Yadav PD, Deshpande G, Singh R, Chaowdhary S, Gupta N, Kumar S, Abraham P, Panda S, Bhargava B. J Travel Med. 2021 Oct 15:taab166. doi: 10.1093/jtm/taab166. Online ahead of print. PMID: 34652440

Thoughts and Consideration Regarding Immigrant Clinicians: Is Cultural Preservation Influencing Providers' Practice in HPV Vaccination?
Ashing KT, Ragin C, Ariyo O, Amini A. Cancer Invest. 2021 Oct 18:1-8. doi: 10.1080/07357907.2021.1993879. Online ahead of print. PMID: 34663155

Coverage and factors associated with receiving campaign polio vaccines in an urban population in Guinea-Bissau.
Buus M, da Silva I, Nielsen S, Thysen SM, Fisker AB. Vaccine. 2021 Oct 12:S0264-410X(21)01150-6. doi: 10.1016/j.vaccine.2021.08.090. Online ahead of print. PMID: 34654578

Potent Induction of Envelope-Specific Antibody Responses by Virus-Like Particle (VLP) Immunogens Based on HIV-1 Envelopes from Patients with Early Broadly Neutralizing Responses.
Beltran-Pavez C, Bontjer I, Gonzalez N, Pernas M, Merino-Mansilla A, Olvera A, Miro JM, Brander C, Alcami J, Sanders RW, Sanchez-Merino V, Yuste E. J Virol. 2021 Oct 20:JVI0134321. doi: 10.1128/JVI.01343-21. Online ahead of print. PMID: 34668778

Multifunctional Antibodies Are Induced by the RTS,S Malaria Vaccine and Associated With Protection in a Phase 1/2a Trial.
Kurtovic L, Atre T, Feng G, Wines BD, Chan JA, Boyle MJ, Drew DR, Hogarth PM, Fowkes FJI, Bergmann-Leitner ES, Beeson JG. J Infect Dis. 2021 Oct 13;224(7):1128-1138. doi: 10.1093/infdis/jiaa144. PMID: 32236404

How do attitudes toward Covid-19 vaccine impact intentions to vaccinate in an emerging economy? The moderating effect of risk perception and Covid-19 anxiety.
Mohanty A, Dash P, Banerji D. Health Mark Q. 2021 Oct 13:1-17. doi: 10.1080/07359683.2021.1987030. Online ahead of print. PMID: 34645369

Estimating the burden of adult hospital admissions due to RSV and other respiratory pathogens in England.
Sharp A, Minaji M, Panagiotopoulos N, Reeves R, Charlett A, Pebody R. Influenza Other Respir Viruses. 2021 Oct 17. doi: 10.1111/irv.12910. Online ahead of print. PMID: 34658161

Changes in COVID-19 Vaccine Intent From April/May to June/July 2021.
Szilagyi PG, Thomas K, Shah MD, Vizueta N, Cui Y, Vangala S, Kapteyn A. JAMA. 2021 Oct 13. doi: 10.1001/jama.2021.18761. Online ahead of print. PMID: 34643651

Deletion of E184L, a putative DIVA target from the pandemic strain of African swine fever virus, produces a reduction in virulence and protection against virulent challenge.
Ramirez-Medina E, Vuono E, Rai A, Pruitt S, Espinoza N, Velazquez-Salinas L, Pina-Pedrero S, Zhu J, Rodriguez F, Borca MV, Gladue DP. J Virol. 2021 Oct 20:JVI0141921. doi: 10.1128/JVI.01419-21. Online ahead of print. PMID: 34668772

Immunogenicity and reactogenicity of BNT162b2 booster in BBIBP-CorV-vaccinated individuals compared with homologous BNT162b2 vaccination: Results of a pilot prospective cohort study from Lebanon.
Moghnieh R, Mekdashi R, El-Hassan S, Abdallah D, Jisr T, Bader M, Jizi I, Sayegh MH, Rahman Bizri A. Vaccine. 2021 Oct 13:S0264-410X(21)01314-1. doi: 10.1016/j.vaccine.2021.10.007. Online ahead of print. PMID: 34656379

High-affinity memory B cells induced by SARS-CoV-2 infection produce more plasmablasts and atypical memory B cells than those primed by mRNA vaccines.
Pape KA, Dileepan T, Kabage AJ, Kozysa D, Batres R, Evert C, Matson M, Lopez S, Krueger PD, Graiziger C, Vaughn BP, Shmidt E, Rhein J, Schacker TW, Khoruts A, Jenkins MK. Cell Rep. 2021 Oct 12;37(2):109823. doi: 10.1016/j.celrep.2021.109823. Epub 2021 Sep 25. PMID: 34610291

Insights into the molecular determinants involved in *Mycobacterium tuberculosis* persistence and their therapeutic implications.
Joshi H, Kandari D, Bhatnagar R. Virulence. 2021 Oct 12. doi: 10.1080/21505594.2021.1990660. Online ahead of print. PMID: 34637683

Intracluster correlation coefficients in a large cluster randomized vaccine trial in schools: Transmission and impact of shared characteristics.
Whelan J, Marshall H, Sullivan TR. PLoS One. 2021 Oct 14;16(10):e0254330. doi: 10.1371/journal.pone.0254330. eCollection 2021. PMID: 34648533

Response to COVID-19 mRNA vaccination in multiple myeloma is conserved but impaired compared to controls.
Bitoun S, Henry J, Vauloup-Fellous C, Dib N, Belkhir R, Mouna L, Joly C, Desjardins D, Bitu M, Le Grand R, Seror R, Roque Afonso AM, Mariette X. J Hematol Oncol. 2021 Oct 13;14(1):166. doi: 10.1186/s13045-021-01183-2. PMID: 34645504

Response to 'A skin reaction with rust-like discolouration to mRNA COVID-19 vaccine.
Kouki C, Sellami K, Bahloul E, Amouri M, Masmoudi A, Turki H. J Eur Acad Dermatol Venereol. 2021 Oct 17. doi: 10.1111/jdv.17751. Online ahead of print. PMID: 34657348

HPV Knowledge Retention and Concurrent Increase in Vaccination Rates 1.5 Years After a Novel HPV Workshop in Medical School.
Sutton S, Azar SS, Evans LK, Murtagh A, McCarthy C, John MS. J Cancer Educ. 2021 Oct 20. doi: 10.1007/s13187-021-02106-y. Online ahead of print. PMID: 34669178

Intradermal-delivered DNA vaccine induces durable immunity mediating a reduction in viral load in a rhesus macaque SARS-CoV-2 challenge model.
Patel A, Walters JN, Reuschel EL, Schultheis K, Parzych E, Gary EN, Maricic I, Purwar M, Eblimit Z, Walker SN, Guimet D, Bhojnagarwala P, Adeniji OS, Doan A, Xu Z, Elwood D, Reeder SM, Pessaint L, Kim KY, Cook A, Chokkalingam N, Finneyfrock B, Tello-Ruiz E, Dodson A, Choi J, Generotti A, Harrison J, Tursi NJ, Andrade VM, Dia Y, Zaidi FI, Andersen H, Abdel-Mohsen M, Lewis MG, Muthumani K, Kim JJ, Kulp DW, Humeau LM, Ramos SJ, Smith TRF, Weiner DB, Broderick KE. Cell Rep Med. 2021 Oct 19;2(10):100420. doi: 10.1016/j.xcrm.2021.100420. Epub 2021 Sep 28. PMID: 34604818

Hydrogel-Based Slow Release of a Receptor-Binding Domain Subunit Vaccine Elicits Neutralizing Antibody Responses Against SARS-CoV-2.
Gale EC, Powell AE, Roth GA, Meany EL, Yan J, Ou BS, Grosskopf AK, Adamska J, Picece VCTM, d'Aquino AI, Pulendran B, Kim PS, Appel EA. Adv Mater. 2021 Oct 14:e2104362. doi: 10.1002/adma.202104362. Online ahead of print. PMID: 34651342

India's New COVID-19 DNA Vaccine for Adolescents and Adults Is a First.
Abbasi J. JAMA. 2021 Oct 12;326(14):1365. doi: 10.1001/jama.2021.16625. PMID: 34636874

An allogeneic multiple myeloma GM-CSF-secreting vaccine with lenalidomide induces long-term immunity and durable clinical responses in patients in near complete remission.
Biavati L, Huff CA, Ferguson A, Sidorski A, Stevens MA, Rudraraju L, Zucchinetti C, Ali SA, Imus P, Gocke CB, Gittelman RM, Johnson S, Sanders C, Vignali M, Gandhi A, Ye X, Noonan KA, Borrello I. Clin Cancer Res. 2021 Oct 19:clincanres.CCR-21-1916-A.2021. doi: 10.1158/1078-0432.CCR-21-1916. Online ahead of print. PMID: 34667029

A simple and general strategy for postsurgical personalized cancer vaccine therapy based on an injectable dynamic covalent hydrogel.
Yu Z, Xu Y, Yao H, Si X, Ji G, Dong S, Zhao J, Tang Z, Fang X, Song W, Chen X. Biomater Sci. 2021 Oct 12;9(20):6879-6888. doi: 10.1039/d1bm01000j. PMID: 34505857

Rationalizing the design of a broad coverage Shigella vaccine based on evaluation of immunological cross-reactivity among S. flexneri serotypes.
Citiulo F, Necchi F, Mancini F, Rossi O, Aruta MG, Gasperini G, Alfini R, Rondini S, Micoli F, Rappuoli R, Saul A, Martin LB. PLoS Negl Trop Dis. 2021 Oct 13;15(10):e0009826. doi: 10.1371/journal.pntd.0009826. Online ahead of print. PMID: 34644291

Brief report on a phase I/IIa study to assess the safety, tolerability, and immune response of AGMG0201 in patients with essential hypertension.
Nakagami H, Ishihama T, Daikyoji Y, Sasakura C, Yamada E, Morishita R. Hypertens Res. 2021 Oct 17. doi: 10.1038/s41440-021-00755-6. Online ahead of print. PMID: 34657138

The PD-1 Regulatory Axis Inhibits T Cell-Independent B Cell Memory Generation and Reactivation.
Spurrier MA, Jennings-Gee JE, Daly CA, Haas KM. J Immunol. 2021 Oct 15;207(8):1978-1989. doi: 10.4049/jimmunol.2100336. Epub 2021 Sep 17. PMID: 34535576

Vaccines beyond antibodies: Spurred by pandemic research, are T-cell vaccines moving closer to reality?
King A. EMBO Rep. 2021 Oct 18:e54073. doi: 10.15252/embr.202154073. Online ahead of print. PMID: 34661336

Increasing HPV Vaccination among Low-income, Ethnic Minority Adolescents: Effects of a Multicomponent System Intervention through a County Health Department Hotline.
Bastani R, Glenn BA, Singhal R, Crespi CM, Nonzee NJ, Tsui J, Chang LC, Herrmann AK, Taylor VM. Cancer Epidemiol Biomarkers Prev. 2021 Oct 14:cebp.1578.2020. doi: 10.1158/1055-9965.EPI-20-1578. Online ahead of print. PMID: 34649960

The art and science of the thrombosis with thrombocytopenia syndrome.
Toh CH. Clin Med (Lond). 2021 Oct 12:clinmed.2021-0525. doi: 10.7861/clinmed.2021-0525. Online ahead of print. PMID: 34642168

Effectiveness of BNT162b2 Vaccine against Delta Variant in Adolescents.
Reis BY, Barda N, Leshchinsky M, Kepten E, Hernán MA, Lipsitch M, Dagan N, Balicer RD. N Engl J Med. 2021 Oct 20. doi: 10.1056/NEJMc2114290. Online ahead of print. PMID: 34670036

Minicells from Highly Genome Reduced *Escherichia coli*: Cytoplasmic and Surface Expression of Recombinant Proteins and Incorporation in the Minicells.
Yu H, Khokhlatchev AV, Chew C, Illendula A, Conaway M, Dryden K, Maeda DLNF, Rajasekaran V, Kester M, Zeichner SL. ACS Synth Biol. 2021 Oct 15;10(10):2465-2477. doi: 10.1021/acssynbio.1c00375. Epub 2021 Sep 13. PMID: 34516078

Liver graft outcomes from donors with vaccine induced thrombosis and thrombocytopenia (VITT): United Kingdom multicenter experience.
Hann A, Hartog H, Nutu A, Quist K, Sanabria-Mateos R, Greenhall GHB, Ushiro-Lumb I, Nicolson PL, Cain O, Oo YH, Chauhan A, Lester W, Pollok JM, Prachalias A, Isaac JR, Thorburn D, Forsythe J, Sharif K, Neil DA, Mirza DF, Perera MTPR. Am J Transplant. 2021 Oct 18. doi: 10.1111/ajt.16869. Online ahead of print. PMID: 34662508

Early tolerability of Comirnaty vaccine in patients with chronic neurological diseases.
Budowski C, Zavanone C, Thivard L, Vassilev K, Dupont S. Rev Neurol (Paris). 2021 Oct 12:S0035-3787(21)00652-4. doi: 10.1016/j.neurol.2021.05.005. Online ahead of print. PMID: 34654546

A phase IIA extension study evaluating the effect of booster vaccination with a fractional dose of RTS,S/AS01$_E$ in a controlled human malaria infection challenge.
Moon JE, Greenleaf ME, Regules JA, Debois M, Duncan EH, Sedegah M, Chuang I, Lee CK, Sikaffy AK, Garver LS, Ivinson K, Angov E, Morelle D, Lievens M, Ockenhouse CF, Ngauy V, Ofori-Anyinam O; RTS S Malaria Vaccine Working Group. Vaccine. 2021 Oct 15;39(43):6398-6406. doi: 10.1016/j.vaccine.2021.09.024. Epub 2021 Sep 27. PMID: 34593270

Two Cross-Protective Antigen Sites on Foot-and-Mouth Disease Virus Serotype O Structurally Revealed by Broadly Neutralizing Antibodies from Cattle.
Li K, He Y, Wang L, Li P, Wang S, Sun P, Bao H, Cao Y, Liu X, Zhu G, Song Y, Bai X, Ma X, Fu Y, Yuan H, Zhang J, Wang J, Chen Y, Li D, Lou Z, Liu Z, Lu Z. J Virol. 2021 Oct 13;95(21):e0088121. doi: 10.1128/JVI.00881-21. Epub 2021 Aug 18. PMID: 34406868

The Impact of Contact Structure and Mixing on Control Measures and Disease-Induced Herd Immunity in Epidemic Models: A Mean-Field Model Perspective.
Di Lauro F, Berthouze L, Dorey MD, Miller JC, Kiss IZ. Bull Math Biol. 2021 Oct 15;83(11):117. doi: 10.1007/s11538-021-00947-8. PMID: 34654959

B and T Cell Responses after a Third Dose of SARS-CoV-2 Vaccine in Kidney Transplant Recipients.
Schrezenmeier E, Rincon-Arevalo H, Stefanski AL, Potekhin A, Staub-Hohenbleicher H, Choi M, Bachmann F, Pross V, Hammett C, Schrezenmeier H, Ludwig C, Jahrsdörfer B, Lino A, Eckardt KU,

Kotsch K, Döerner T, Budde K, Sattler A, Halleck F. J Am Soc Nephrol. 2021 Oct 19:ASN.2021070966. doi: 10.1681/ASN.2021070966. Online ahead of print. PMID: 34667083

Moderna's mRNA Vaccine for Seasonal Flu Enters Clinical Trials.
Abbasi J. JAMA. 2021 Oct 12;326(14):1365. doi: 10.1001/jama.2021.17499. PMID: 34636873

Visible blue light inhibits infection and replication of SARS-CoV-2 at doses that are well-tolerated by human respiratory tissue.
Stasko N, Kocher JF, Annas A, Henson I, Seitz TS, Miller JM, Arwood L, Roberts RC, Womble TM, Keller EG, Emerson S, Bergmann M, Sheesley ANY, Strong RJ, Hurst BL, Emerson D, Tarbet EB, Bradrick SS, Cockrell AS. Sci Rep. 2021 Oct 18;11(1):20595. doi: 10.1038/s41598-021-99917-2. PMID: 34663881

Brain Cross-Protection against SARS-CoV-2 Variants by a Lentiviral Vaccine in New Transgenic Mice.
Ku MW, Authié P, Bourgine M, Anna F, Noirat A, Moncoq F, Vesin B, Nevo F, Lopez J, Souque P, Blanc C, Fert I, Chardenoux S, Lafosse L, Cussigh D, Hardy D, Nemirov K, Guinet F, Langa Vives F, Majlessi L, Charneau P. EMBO Mol Med. 2021 Oct 14:e14459. doi: 10.15252/emmm.202114459. Online ahead of print. PMID: 34647691

Indian Academy of Pediatrics Revised Guidelines on School Reopening: First Revision, September 2021.
Ghate S, Zadey S, Thapar RK, Shah D, Basavaraja GV, Kamath SS, Kumar RR, Desai NG, Parekh BJ, Vashishtha VM, Pandey A, Gupta P. Indian Pediatr. 2021 Oct 15;58(10):959-961. PMID: 34636327

Evaluating COVID-19 Vaccine-Related Messenger RNA in Breast Milk.
Egwang TG. JAMA Pediatr. 2021 Oct 18. doi: 10.1001/jamapediatrics.2021.4090. Online ahead of print. PMID: 34661603

WHO gives first malaria vaccine the green light.
Vogel G. Science. 2021 Oct 15;374(6565):245-246. doi: 10.1126/science.acx9344. Epub 2021 Oct 14. PMID: 34648307

Evaluating COVID-19 Vaccine-Related Messenger RNA in Breast Milk-Reply.
Golan Y, Flaherman VJ, Gaw SL. JAMA Pediatr. 2021 Oct 18. doi: 10.1001/jamapediatrics.2021.4087. Online ahead of print. PMID: 34661610

Fractionating a COVID-19 Ad5-vectored vaccine improves virus-specific immunity.
Sanchez S, Palacio N, Dangi T, Ciucci T, Penaloza-MacMaster P. Sci Immunol. 2021 Oct 14:eabi8635. doi: 10.1126/sciimmunol.abi8635. Online ahead of print. PMID: 34648369

Severe necrotizing myopathy after COVID-19 vaccine with BNT162b2 and regimen with ipilimumab plus nivolumab in a patient with advanced melanoma.
Blaise M, Rocher F, Spittler H, Sanchez A, Lanteri E, Coco L, Puma A, Martel A, Gonfrier G, Passeron T, Montaudié H. J Eur Acad Dermatol Venereol. 2021 Oct 17. doi: 10.1111/jdv.17760. Online ahead of print. PMID: 34661938

Switching clinic-based cervical cancer screening programs to HPV self-sampling: A cost-effectiveness analysis of vaccinated and unvaccinated Norwegian women.

Pedersen K, Portnoy A, Sy S, Hansen BT, Trope A, Kim JJ, Burger EA. Int J Cancer. 2021 Oct 18. doi: 10.1002/ijc.33850. Online ahead of print. PMID: 34664271

Improving COVID-19 vaccine coverage in patients with autoimmune and inflammatory diseases.
Goulenok T, Francois C, Mendes C, Farhi F, Alexandra JF, Rouzaud D, Papo T, Sacre K. J Rheumatol. 2021 Oct 15:jrheum.210534. doi: 10.3899/jrheum.210534. Online ahead of print. PMID: 34654731

Whole genome sequence of a non-toxigenic Corynebacterium diphtheriae strain from a hospital in southeastern China.
Li G, Wang S, Zhao S, Zhou Y, Pan X. BMC Genom Data. 2021 Oct 16;22(1):42. doi: 10.1186/s12863-021-00998-9. PMID: 34656079

Concordance of self-reported varicella history and serology among adolescent and adult refugee patients at a primary care clinic in Toronto, Canada.
Müller F, Chandra S, Wright V, Rashid M, Redditt V. Vaccine. 2021 Oct 15;39(43):6391-6397. doi: 10.1016/j.vaccine.2021.09.027. Epub 2021 Sep 22. PMID: 34563396

Nonarteritic Anterior Ischemic Optic Neuropathy following COVID-19 Vaccination: Consequence or Coincidence.
Tsukii R, Kasuya Y, Makino S. Case Rep Ophthalmol Med. 2021 Oct 14;2021:5126254. doi: 10.1155/2021/5126254. eCollection 2021. PMID: 34659851

Syndromic Surveillance as a Tool for Case-Based Varicella Reporting in Georgia, 2016-2019.
Adam CM, Borroto R, Thomas E, Tuttle J, Pavlick J, Drenzek C. Public Health Rep. 2021 Oct 13:333549211050897. doi: 10.1177/00333549211050897. Online ahead of print. PMID: 34644188

Inhibition of receptor-binding domain-ACE2 interaction after two doses of Sinovac's CoronaVac or AstraZeneca/Oxford's AZD1222 SARS-CoV-2 vaccines.
Silva VO, Yamashiro R, Ahagon CM, de Campos IB, de Oliveira IP, de Oliveira EL, López-Lopes GIS, Matsuda EM, Castejon MJ, de Macedo Brígido LF. J Med Virol. 2021 Oct 14. doi: 10.1002/jmv.27396. Online ahead of print. PMID: 34647623

A bioinformatics approach to investigate serum and hematopoietic cell-specific therapeutic microRNAs targeting the 3' UTRs of all four Dengue virus serotypes.
Baig MS, Krishnan A. Pathog Dis. 2021 Oct 18;79(8):ftab050. doi: 10.1093/femspd/ftab050. PMID: 34610125

Cerebral venous sinus thrombosis associated with Covid-19 vaccine-induced thrombocytopenia: improvement in mortality rate over time.
Casolla B, Cordonnier C. Eur J Neurol. 2021 Oct 19. doi: 10.1111/ene.15151. Online ahead of print. PMID: 34665505

SARS-CoV-2-specific Humoral and Cell-mediated Immune Responses after Immunization with Inactivated COVID-19 Vaccine in Kidney Transplant Recipients (CVIM 1 Study).
Bruminhent J, Setthaudom C, Chaumdee P, Boongird S, Kiertiburanakul S, Malathum K, Nongnuch A, Phuphuakrat A, Jirasiritham S, Janphram C, Thotsiri S, Upama S, Assanatham M, Ramathibodi Transplant

Infectious Diseases Rtid Study Group T. Am J Transplant. 2021 Oct 17. doi: 10.1111/ajt.16867. Online ahead of print. PMID: 34657386

Needle-free Epicutaneous For t 2 DNA Vaccine is Effective for Preventing and Treating Biting Midge (Forcipomyia taiwana) allergy in a murine model.
Lee MF, Wu CS, Lin SJ, Chen YH. Allergy. 2021 Oct 15. doi: 10.1111/all.15141. Online ahead of print. PMID: 34653268

SARS-CoV-2 vaccine breakthrough infections with the alpha variant are asymptomatic or mildly symptomatic among health care workers.
Rovida F, Cassaniti I, Paolucci S, Percivalle E, Sarasini A, Piralla A, Giardina F, Sammartino JC, Ferrari A, Bergami F, Muzzi A, Novelli V, Meloni A, Cutti S, Grugnetti AM, Grugnetti G, Rona C, Daglio M, Marena C, Triarico A, Lilleri D, Baldanti F. Nat Commun. 2021 Oct 15;12(1):6032. doi: 10.1038/s41467-021-26154-6. PMID: 34654808

Lumpy skin disease outbreaks in Egypt during 2017-2018 among sheeppox vaccinated cattle: Epidemiological, pathological, and molecular findings.
Rouby SR, Safwat NM, Hussein KH, Abdel-Ra'ouf AM, Madkour BS, Abdel-Moneim AS, Hosein HI. PLoS One. 2021 Oct 20;16(10):e0258755. doi: 10.1371/journal.pone.0258755. eCollection 2021. PMID: 34669748

Total syntheses of conjugation-ready repeating units of Acinetobacter baumannii AB5075 for glycoconjugate vaccine development.
Zhang S, Seeberger PH. Chemistry. 2021 Oct 19. doi: 10.1002/chem.202103234. Online ahead of print. PMID: 34665908

ChAdOx1 nCov-19 vaccine-induced thrombotic thrombocytopenic purpura successfully treated with plasmapheresis.
Wang YC, Chen TC, Teng CJ, Wu CH. Ann Hematol. 2021 Oct 18. doi: 10.1007/s00277-021-04701-x. Online ahead of print. PMID: 34661713

Rate of Serum SARS-CoV-2 Antibody Decline for two mRNA Vaccines.
Wu AHB, Nguyen ED, Ong CM, Yun C, Lynch KL. J Appl Lab Med. 2021 Oct 14:jfab137. doi: 10.1093/jalm/jfab137. Online ahead of print. PMID: 34648027

Response to "The moral and religious obligation to vaccinate children in Jewish ethics".
Zorzato D, Pook CJ, Bekhor J. Acta Paediatr. 2021 Oct 16. doi: 10.1111/apa.16154. Online ahead of print. PMID: 34655482

Shared clinical decision-making on vaccines: out of sight, out of mind.
Shen AK, Michel JJ, Langford AT, Sobczyk EA. J Am Med Inform Assoc. 2021 Oct 12;28(11):2523-2525. doi: 10.1093/jamia/ocab147. PMID: 34338789

The Burden of Hospitalizations for Vaccine-Preventable Infections in Heart Transplant Recipients.
Dang A, Khaled Soufi M, Nguyen C, Orndorff J, Baliss M, Berbarie RF, Khalife WI. Am J Cardiol. 2021 Oct 15;157:148-150. doi: 10.1016/j.amjcard.2021.07.010. Epub 2021 Aug 7. PMID: 34373079

The level of Ig anti-RBD SARS-CoV-2 after two doses of CoronaVac vaccine.
Ulhaq ZS, Soraya GV, Indriana K, Devitasari R, Pradiptha IPY, Zulfikar DB, Uxiana V, Zulkarnain, Rachma LN, Arisanti D. J Med Virol. 2021 Oct 14. doi: 10.1002/jmv.27390. Online ahead of print. PMID: 34647630

Myocarditis-induced Sudden Death after BNT162b2 mRNA COVID-19 Vaccination in Korea: Case Report Focusing on Histopathological Findings.
Choi S, Lee S, Seo JW, Kim MJ, Jeon YH, Park JH, Lee JK, Yeo NS. J Korean Med Sci. 2021 Oct 18;36(40):e286. doi: 10.3346/jkms.2021.36.e286. PMID: 34664804

Antibody response elicited by a third boost dose of inactivated SARS-CoV-2 vaccine can neutralize SARS-CoV-2 variants of concern.
Yue L, Zhou J, Zhou Y, Yang X, Xie T, Yang M, Zhao H, Zhao Y, Yang T, Li H, Xiang H, Wang J, Lu S, Liu H, Zhao H, Wei X, Zhang Y, Xie Z. Emerg Microbes Infect. 2021 Oct 19:1-9. doi: 10.1080/22221751.2021.1996210. Online ahead of print. PMID: 34666622

Effectiveness of the mRNA-1273 Vaccine during a SARS-CoV-2 Delta Outbreak in a Prison.
Chin ET, Leidner D, Zhang Y, Long E, Prince L, Li Y, Andrews JR, Studdert DM, Goldhaber-Fiebert JD, Salomon JA. N Engl J Med. 2021 Oct 20. doi: 10.1056/NEJMc2114089. Online ahead of print. PMID: 34670040

TRANSIENT INCREASE OF PLASMA HIV RNA AFTER COVID-19 VACCINATION WITH mRNA-1272.
Bozzi G, Lombardi A, Ludovisi S, Muscatello A, Manganaro L, Cattaneo D, Gori A, Bandera A. Int J Infect Dis. 2021 Oct 16:S1201-9712(21)00806-7. doi: 10.1016/j.ijid.2021.10.021. Online ahead of print. PMID: 34666164

On Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons.
Sun H. N Engl J Med. 2021 Oct 14;385(16):1535-1536. doi: 10.1056/NEJMc2113516. Epub 2021 Sep 8. PMID: 34496197

FDA Full Approval for COVID-19 Vaccine Increases the Call for Mandates.
Culp KR, Corwin C, Dukes KC, Sinnwell E. Workplace Health Saf. 2021 Oct 20:21650799211051649. doi: 10.1177/21650799211051649. Online ahead of print. PMID:

Natural vaccines accumulated in facemasks during COVID-19: Underappreciated role of facial masking.
Sharma NK, Sarode S, Sarode G. J Oral Biol Craniofac Res. 2021 Oct 13. doi: 10.1016/j.jobcr.2021.10.001. Online ahead of print. PMID: 34660190

Reduced CoronaVac vaccine antibody response in patients with chronic kidney disease.
Akpolat T. Int Urol Nephrol. 2021 Oct 18. doi: 10.1007/s11255-021-03023-1. Online ahead of print. PMID: 34661822

Covid-19: Valneva's vaccine produces stronger immune response than AstraZeneca's, company reports.
Mahase E. BMJ. 2021 Oct 18;375:n2551. doi: 10.1136/bmj.n2551. PMID: 34663573

Generalized erythema multiforme-like skin rash following the first dose of COVID-19 vaccine (Pfizer-BioNTech).

Kim M, Kim JW, Kim M, Choi SY, Na JI. J Eur Acad Dermatol Venereol. 2021 Oct 17. doi: 10.1111/jdv.17757. Online ahead of print. PMID: 34661942

Personalized Nanovaccine Coated with Calcinetin-Expressed Cancer Cell Membrane Antigen for Cancer Immunotherapy.
Xiong X, Zhao J, Pan J, Liu C, Guo X, Zhou S. Nano Lett. 2021 Oct 13;21(19):8418-8425. doi: 10.1021/acs.nanolett.1c03004. Epub 2021 Sep 21. PMID: 34546061

On Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons. Reply.
Meaney-Delman DM, Ellington SR, Shimabukuro TT. N Engl J Med. 2021 Oct 14;385(16):1536. doi: 10.1056/NEJMc2113516. Epub 2021 Sep 8. PMID: 34496198

Thrombosis And Thrombocytopenia Syndrome Causing Isolated Symptomatic Carotid Occlusion After Ad26.COV2.S (Janssen) COVID-19 Vaccine.
Rodriguez-Pardo J, Gilo-Arrojo FA, Ruiz-Ares G, Sánchez-Manso JC, Valiente-Gordillo E, de Celis E, Fuentes B, Ximénez-Carrillo Á, Alonso de Leciñana M, Rigual-Bobillo R, Vivancos-Mora JA, Díez-Tejedor E. Thromb Haemost. 2021 Oct 20. doi: 10.1055/a-1674-0341. Online ahead of print. PMID: 34670287

Dengue virus is sensitive to inhibition prior to productive replication.
Talemi SR, Bartenschlager M, Schmid B, Ruggieri A, Bartenschlager R, Höfer T. Cell Rep. 2021 Oct 12;37(2):109801. doi: 10.1016/j.celrep.2021.109801. PMID: 34644578

Subdiaphragmatic Lymph Nodes Uptake on 18F-FDG PET/CT After COVID-19 Vaccination in the Thigh.
Quak E, Morel A, Faudemer J, Levy C, Ciappuccini R. Clin Nucl Med. 2021 Oct 15. doi: 10.1097/RLU.0000000000003941. Online ahead of print. PMID: 34661560

Response to BNT162b2 mRNA COVID-19 vaccine among healthcare workers in Italy: a 3-month follow-up.
Ponticelli D, Madotto F, Conti S, Antonazzo IC, Vitale A, Della Ragione G, Romano ML, Borrelli M, Schiavone B, Polosa R, Ferrara P, Mantovani LG. Intern Emerg Med. 2021 Oct 12:1-6. doi: 10.1007/s11739-021-02857-y. Online ahead of print. PMID: 34637084

A novel linear and broadly neutralizing peptide in the SARS-CoV-2 S2 protein for universal vaccine development.
Li T, Kan Q, Ge J, Wan Z, Yuan M, Huang Y, Xie Q, Yang Y, Shao H, Li X, Ye L, Qin A, Bu Z, Liu P, Ye J. Cell Mol Immunol. 2021 Oct 13:1-3. doi: 10.1038/s41423-021-00778-6. Online ahead of print. PMID: 34645942

Influenza vaccination and prognosis of COVID-19 in hospitalized patients with diabetes: Results from the CORONADO study.
Diallo A, Pichelin M, Wargny M, Gourdy P, Bonnet JB, Hadjadj S, Cariou B, Sultan A, Galtier F; CORONADO investigators. Diabetes Obes Metab. 2021 Oct 17. doi: 10.1111/dom.14577. Online ahead of print. PMID: 34658131

Humoral response after SARS-COV2 vaccination in patient undergoing maintenance hemodialysis: loss of immunity, third dose and non-responders.

Robert T, Lano G, Giot M, Fourié T, de Lamballeri X, Jehel O, Bouchouareb D, Brunet P, Ninove L, Burtey S. Nephrol Dial Transplant. 2021 Oct 13:gfab299. doi: 10.1093/ndt/gfab299. Online ahead of print. PMID: 34643714

Spanish Society of Hematology and Hemotherapy expert consensus opinion for SARS-CoV-2 vaccination in onco-hematological patients.
Piñana JL, Vázquez L, Martino R, de la Cámara R, Sureda A, Rodríguez-Veiga R, Garrido A, Sierra J, Ribera JM, Torrent A, Mateos MV, de la Rubia J, Tormo M, Díez-Campelo M, García-Gutiérrez V, Álvarez-Larrán A, Sancho JM, MartínGarcía-Sancho A, Yañez L, Pérez Simón JA, Barba P, Abrisqueta P, Álvarez-Twose I, Bonanad S, Lecumberri R, Ruiz-Camps I, Navarro D, Hernández-Rivas JÁ, Cedillo Á, García-Sanz R, Bosch F. Leuk Lymphoma. 2021 Oct 20:1-13. doi: 10.1080/10428194.2021.1992619. Online ahead of print. PMID: 34668835

Waning humoral response six months after SARS-CoV-2 vaccination with the mRNA-BNT162b2 vaccine in hemodialysis patients - time for a boost.
Davidovic T, Schimpf J, Abbassi-Nik A, Stockinger R, Sprenger-Mähr H, Lhotta K, Zitt E. Kidney Int. 2021 Oct 14:S0085-2538(21)00942-X. doi: 10.1016/j.kint.2021.10.006. Online ahead of print. PMID: 34656642

Cutaneous adverse reactions from 35,229 doses of Sinovac and AstraZeneca COVID-19 vaccination: A prospective cohort study in healthcare workers.
Rerknimitr P, Puaratanaarunkon T, Wongtada C, Wittayabusarakam N, Krithin S, Paitoonpong L, Kumtornrut C, Kerr SJ, Asawanonda P, Jantarabenjakul W, Klaewsongkram J. J Eur Acad Dermatol Venereol. 2021 Oct 17. doi: 10.1111/jdv.17761. Online ahead of print. PMID: 34661934

Comment on "Development of eruptive pseudoangiomatosis following COVID-19 inmunization-apropos of 5 cases": could eruptive pseudoangiomatosis represent a paraviral eruption associated with SARS-CoV-2?
Moya-Martinez C, Berná-Rico ED, Melian-Olivera A, Moreno-Garcia Del Real C, Fernández-Nieto D. J Eur Acad Dermatol Venereol. 2021 Oct 17. doi: 10.1111/jdv.17750. Online ahead of print. PMID: 34657329

Asymptomatic SARS-CoV-2 Vaccine Breakthrough Infections in Health Care Workers Identified Through Routine Universal Surveillance Testing.
Novazzi F, Taborelli S, Baj A, Focosi D, Maggi F. Ann Intern Med. 2021 Oct 19. doi: 10.7326/M21-3486. Online ahead of print. PMID: 34662153

Impact of immunosuppressive treatment on the immunogenicity of mRNA Covid-19 vaccine in vulnerable patients with giant cell arteritis.
Delvino P, Bartoletti A, Cassaniti I, Bergami F, Lilleri D, Baldanti F, Bozzalla Cassione E, Biglia A, Montecucco C, Monti S. Rheumatology (Oxford). 2021 Oct 19:keab776. doi: 10.1093/rheumatology/keab776. Online ahead of print. PMID: 34664631

Domestic risk factors for increased rodent abundance in a Lassa fever endemic region of rural Upper Guinea.
Clark J, Yakob L, Douno M, Lamine J, Magassouba N', Fichet-Calvet E, Mari-Saez A. Sci Rep. 2021 Oct 19;11(1):20698. doi: 10.1038/s41598-021-00113-z. PMID: 34667210

Vaccine Hesitancy Among Parents of Children With Neurodevelopmental Disabilities: A Possible Threat to COVID-19 Vaccine Coverage.

Aggarwal S, Madaan P, Sharma M. J Child Neurol. 2021 Oct 13:8830738211042133. doi: 10.1177/08830738211042133. Online ahead of print. PMID: 34643476

Construction of a multi-epitope vaccine candidate against Fasciola hepatica: an in silico design using various immunogenic excretory/secretory antigens.
Akil M, Aykur M, Karakavuk M, Can H, Döşkaya M. Expert Rev Vaccines. 2021 Oct 19. doi: 10.1080/14760584.2022.1996233. Online ahead of print. PMID: 34666598

Determinants of COVID-19 vaccine Hesitancy among Health Care Workers in Amhara region referral hospitals, Northwest Ethiopia: a cross-sectional study.
Aemro A, Amare NS, Shetie B, Chekol B, Wassie M. Epidemiol Infect. 2021 Oct 14:1-23. doi: 10.1017/S0950268821002259. Online ahead of print. PMID:

Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons.
[No authors listed] N Engl J Med. 2021 Oct 14;385(16):1536. doi: 10.1056/NEJMx210016. Epub 2021 Sep 8. PMID: 34496171
Corrigendum to: Hepatitis-B Vaccine Response in Inflammatory Bowel Disease Patients: A Systematic Review and Meta-analysis.
[No authors listed] Inflamm Bowel Dis. 2021 Oct 18;27(10):1706. doi: 10.1093/ibd/izab077. PMID: 33877304

The glycan hole area of HIV-1 envelope trimers contributes prominently to the induction of autologous neutralization.
Schorcht A, Cottrell CA, Pugach P, Ringe RP, Han AX, Allen JD, van den Kerkhof TLGM, Seabright GE, Schermer EE, Ketas TJ, Burger JA, van Schooten J, LaBranche CC, Ozorowski G, de Val N, Bader DLV, Schuitemaker H, Russell CA, Montefiori DC, van Gils MJ, Crispin M, Klasse PJ, Ward AB, Moore JP, Sanders RW. J Virol. 2021 Oct 20:JVI0155221. doi: 10.1128/JVI.01552-21. Online ahead of print. PMID: 34669426

Flu vaccinations: College campus not making the grade. A study of influenza vaccination at an urban public university.
Kreiger JE, Zigmont VA, Michalski CD, Borgognone KS. J Am Coll Health. 2021 Oct 20:1-9. doi: 10.1080/07448481.2021.1976192. Online ahead of print. PMID: 34670106

Correction: Immunogenicity of an oral rotavirus vaccine administered with prenatal nutritional support in Niger: A cluster randomized clinical trial.
Isanaka S, Garba S, Plikaytis B, McNeal MM, Guindo O, Langendorf C, Adehossi E, Ciglenecki I, Grais RF. PLoS Med. 2021 Oct 15;18(10):e1003776. doi: 10.1371/journal.pmed.1003776. eCollection 2021 Oct. PMID: 34653179

Patentes registradas en Patentscope

Estrategia de búqueda: *Vaccine in the title or abstract AND 20211012:20211020 as the publication date 44 records.*

1.WO/2021/203236BAT-DERIVED CORONAVIRUS VACCINE FOR PREVENTION OF COVID-19
WO - 14.10.2021
Clasificación Internacional A61K 39/215 Nº de solicitud PCT/CN2020/083487 Solicitante SICHUAN CHENGYU BIOLOGICAL PRODUCTS INC. Inventor/a YU, Li
A bat-derived coronavirus vaccine for prevention of COVID-19, which uses bat-derived coronavirus Bat/CovRATG13 to produce a vaccine to control and prevent the ongoing COVID-19 pandemic and future epidemics of the disease. Bat/CovRaTG13 has the closest genetic fingerprint to the 2019 novel coronavirus (SARS-CoV-2). Homology of full amino acid sequences determines not only relatedness of amino acids, but also the similarity of biological properties of the amino acids, with antigenicity being one of the main factors determining vaccine specificity and effectiveness. The vaccine strain is derived from a Bat/CovRaTG13 family member and has sequence homology. The bat-derived coronavirus vaccine can be prepared, by means of corresponding construction and manufacturing method procedures, into three types of vaccines: a live vaccine, an inactivated vaccine and/or a recombinant vaccine to prevent a COVID-19 pandemic.

2.WO/2021/204204ANTIGEN GENE TRANSFECTION CELL VACCINE AND RELATED IMMUNE CELL
WO - 14.10.2021
Clasificación Internacional C12N 5/10 Nº de solicitud PCT/CN2021/085973 Solicitante CHINEO MEDICAL TECHNOLOGY CO., LTD. Inventor/a GU, Weiyue
Provided are a cell vaccine for an infection by a pathogenic micro-organism and an illness related to the infection, said vaccine can be prepared by means of in vitro transfection of autologous or allogeneic antigen-presenting cells with a pathogenic micro-organism antigen, and as such the antigen-presenting cells loaded with the pathogenic micro-organism antigen serve as a prophylactic or therapeutic vaccine. Further provided are an immune cell, comprising a T cell or an NK cell, which can be activated by the antigen-loaded vaccine of the present invention, or can be directly activated by a pathogenic micro-organism. Further provided is a composition simultaneously including the cell vaccine and immune cells, said composition being used for preventing or treating an infection caused by the pathogenic micro-organism and an illness related thereto.

3.WO/2021/206581GENETIC CONSTRUCT-BASED VACCINE AGAINST CORONAVIRUS INFECTION
WO - 14.10.2021
Clasificación Internacional A61K 39/215 Nº de solicitud PCT/RU2020/000257 Solicitante DUKHOVLINOV, Ilya Vladimirovich Inventor/a DUKHOVLINOV, Ilya Vladimirovich
The invention relates to molecular biology, biotechnology, medicine and can be used to prevent and treat corona virus infection, mainly caused by 2019-nCoV. A vaccine is proposed based on a genetic construct encoding a fusion protein, including fragments of M, S, N, E new coronavirus proteins. The speed and simplicity of preparation (from 2-3 hours to 4-5 days), safety are the advantages of the developed vaccine, due to the nature of the molecule- of the active substance, as well as to the lack of an ACE2 binding site in the fusion protein synthesized from the genetic construct, and the lack of its homology with proteins of the organism, induction of the immune response profile, to a large extent represented by the cytotoxic immune response, in addition to the humoral one. The vaccine can be administered as standard or by electroporation.

4.WO/2021/206103VACCINE FOR SUBCUTANEOUS ADMINISTRATION

WO - 14.10.2021
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/JP2021/014677 Solicitante APPLIED MEDICAL ENZYME RESEARCH INSTITUTE CORPORATION Inventor/a KIDO, Hiroshi
Provided is vaccine for subcutaneous administration that uses an antigen protein in a smaller amount than in conventional vaccines, that has the superior effect of inducing antigen-specific blood IgG antibody, and that is free of problems such as formation of a painful lump at the site of administration. Vaccine for subcutaneous administration was produced, the vaccine containing an antigen protein, a synthetic peptide comprising an amino acid sequence of KnLm, a phospholipid-containing liquid, and a carboxy vinyl polymer.

5.3890774IMPFSTOFF ZUR VORBEUGUNG UND BEHANDLUNG VON INFEKTIONEN MIT C. DIFFICILE UND SEINE VERWENDUNG
EP - 13.10.2021
Clasificación Internacional A61K 39/08 Nº de solicitud 19829681 Solicitante INST IMMUNOLOGII I TERAPII DOSWIADCZALNEJ IM LUDWIKA HIRSZFELDA POLSKIEJ AKADEMII NAUK Inventor/a MYC ANDRZEJ
The present invention relates to a veterinary vaccine containing nanoadjuvants in the form of emulsion and *Clostridium difficile* antigens, as well as the use of the vaccine in the preventions and treatment of a *C. difficile* infection, especially in birds and mammals. The object of the invention is also the use of this vaccine to produce *C. difficile*-specific antibodies.

6.WO/2021/205017IMPROVEMENTS IN VACCINE FORMULATIONS FOR MEDICAL USE
WO - 14.10.2021
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/EP2021/059333 Solicitante VALNEVA AUSTRIA GMBH Inventor/a SCHLEGL, Robert
The present invention relates to an aluminum composition for use as an adjuvant or for use in a method of vaccination, the use of an alum-adjuvanted vaccine composition comprising less than 1.25 ppb copper for increasing bioavailability of an antigen in the vaccine, wherein the antigen is a protein, particularly an OspA protein or a Clostridium difficile toxin A and toxin B fusion protein or a SARS-CoV-2 protein or an hMPV protein, in an aluminum-containing vaccine composition and the use of a radical quenching compound such as L- methionine for increasing bioavailability of a protein antigen in a copper- and aluminum-containing vaccine composition.10

7.WO/2021/205027INDIVIDUALIZED THERAPEUTIC ANTICANCER VACCINE
WO - 14.10.2021
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/EP2021/059353 Solicitante VACCIBODY AS Inventor/a FREDRIKSEN, Agnete, Brunsvik
The present invention relates to an individualized therapeutic anticancer vaccine, methods of treatment of cancer wherein such an anticancer vaccine is used as well as methods for producing the vaccine.

8.WO/2021/206587SARS-COV-2 DNA VACCINE BASED ON GENE THERAPY DNA VECTOR GDTT1.8NAS12
WO - 14.10.2021
Clasificación Internacional A61K 39/215 Nº de solicitud PCT/RU2021/000148 Solicitante GENETIC DIAGNOSTICS AND THERAPY 21 LTD Inventor/a GAMOLSKI, Anton
The invention refers to genetic engineering and can be used in biotechnology, medicine as a DNA vaccine for human vaccination against SARS-CoV-2 virus. A DNA vaccine as a composition of gene therapy DNA vectors GDTT1.8NAS12-S, GDTT1.8NAS12-M, and GDTT1.8NAS12-N based on gene therapy DNA vector GDTT1.8NAS12 encoding immunogenic epitopes of S, M, and N proteins of SARS-CoV-2 virus was constructed. Each of the constructed gene therapy DNA vectors included in the DNA

vaccine has the ability to efficiently penetrate human and animal cells and express the therapeutic S protein of SARS-CoV-2 cloned to it, therapeutic M protein of SARS-CoV-2 cloned to it and therapeutic N protein of SARS- CoV-2 cloned to it due to the limited size of GDTT1.8NAS12 vector part not exceeding 2600 bp. As part of each of the constructed gene therapy DNA vectors uses nucleotide sequences that are not antibiotic resistance genes or regulatory elements of viral genomes are used as the structural elements, which ensures its safe use for gene therapy and human vaccination.

9.20210315988VACCINATION AGAINST CORONAVIRUS WITH POLIOMYELITIS VACCINE
US - 14.10.2021
Clasificación Internacional A61K 39/13 Nº de solicitud 17155953 Solicitante E-MO Biology Inc. Inventor/a Qiyi Xie
Provided herein is a method for preventing a person from an infection by a Coronaviridae virus with a poliomyelitis vaccine. Also provided herein is a method of inducing a protective immune response against a Coronaviridae virus with a poliomyelitis vaccine.

10.WO/2021/207420AN INNOVATIVE DNA VACCINE FOR SARS-COV, SARS-COV-2, AND MERS-COV
WO - 14.10.2021
Clasificación Internacional A61K 39/215 Nº de solicitud PCT/US2021/026268 Solicitante THE JOHNS HOPKINS UNIVERSITY Inventor/a WU, T.C.
Provided herein are DNA vaccine constructs comprising linking polynucleotides encoding human albumin to polynucleotides comprising one or more of the receptor binding domains (RBD) of the spike protein of SARS-CoV-2 and/or MERS-CoV and/or SARS-CoV. Methods for making the vaccine constructs and their use in prophylaxis and treatment of SARS coronavirus infections are also provided.

11.WO/2021/203608VEGFR2-TARGETED METASTATIC CANCER VACCINE
WO - 14.10.2021
Clasificación Internacional C07K 19/00 Nº de solicitud PCT/CN2020/109970 Solicitante NEWISH TECHNOLOGY (BEIJING) CO., LTD. Inventor/a QI, Hailong
Provided is a VEGFR2 (KDR)-targeted metastatic cancer vaccine. By means of fusion expression of VEGFR2 protein promoting generation of tumor angiogenesis with a DC cell ligand XCL1, the efficiency of cytophagy, processing and presentation of the VEGFR2 protein by DC cells is improved, and the effect of inhibiting tumor growth is improved. Experiments prove that the protein for nucleic acid vaccine expression can effectively bind the DC cells, induce specific T-cell reaction of VEGFR2 and significantly inhibit growth of tumor highly expressing VEGFR2 in various models.

12.WO/2021/204998NATURAL ANTIBODIES IN PROPHYLAXIS AND THERAPY
WO - 14.10.2021
Clasificación Internacional A61K 39/04 Nº de solicitud PCT/EP2021/059294 Solicitante HEIDELBERG IMMUNOTHERAPEUTICS GMBH Inventor/a ÜBELHART, Rudolf
Described is a human or humanized natural IgM and/or IgA antibody recognizing oxidized phospholipids and/or oxidation-specific epitopes for use in a method of treating or preventing a disorder or a disease associated with/related to/caused by a natural IgM/IgA antibody deficiency (NAD) in a subject. Moreover, described is a vaccine comprising a compound that induces the generation of natural IgM and/or IgA antibodies for use in a method of reducing or preventing the clinical signs or disease associated with/related to/caused by natural IgM/IgA antibody deficiency (NAD) in a subject, wherein said vaccine comprises a pharmaceutically acceptable carrier or excipient. Further, described is such a vaccine for use in a method of reducing or preventing the clinical signs or disease associated with/related to/caused by natural IgM/IgA antibody deficiency (NAD) in a subject, wherein said compound induces human natural IgM and/or IgA antibody recognizing oxidized phospholipids and/or oxidation-specific epitopes.

13.WO/2021/206783VACCINATION AGAINST CORONAVIRUS WITH POLIOMYELITIS VACCINE
WO - 14.10.2021
Clasificación Internacional A61K 39/13 Nº de solicitud PCT/US2021/014253 Solicitante XIE, Qiyi Inventor/a XIE, Qiyi
Provided herein is a poliomyelitis vaccine for use in preventing a person from an infection by a Coronaviridae virus. Also provided herein is a poliomyelitis vaccine for use in inducing a protective immune response in a person against a Coronaviridae virus.

14.WO/2021/206638VACCINE AND/OR ANTIBODY FOR VIRAL INFECTION
WO - 14.10.2021
Clasificación Internacional C07K 14/165 Nº de solicitud PCT/SG2021/050197 Solicitante INTRA-IMMUSG PRIVATE LIMITED Inventor/a ZENG, Qi
The present invention relates to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) N-protein and/or an immunogenic fragment thereof and uses thereof. The invention also includes a nucleic acid molecule encoding the SARS-CoV-2 N-protein and/or an immunogenic fragment thereof; and uses thereof. The SARS-CoV-2 N protein and/or immunogenic fragment thereof may be produced by recombinant DNA technology or may be chemically synthesised. In particular, the SARS-CoV-2 N-protein and/or an immunogenic fragment thereof and/or nucleic acid molecule encoding the SARS-CoV-2 N-protein and immunogenic may be for use as a vaccine. The invention further includes an antibody capable of binding to the SARS-CoV-2 N-protein or antigen-binding fragment thereof and uses thereof.

15.20210319847PEPTIDE-BASED VACCINE GENERATION SYSTEM
US - 14.10.2021
Clasificación Internacional G16B 15/30 Nº de solicitud 17197166 Solicitante NEC Laboratories America, Inc. Inventor/a Renqiang Min
A method is provided for peptide-based vaccine generation. The method receives a dataset of positive and negative binding peptide sequences. The method pre-trains a set of peptide binding property predictors on the dataset to generate training data. The method trains a Wasserstein Generative Adversarial Network (WGAN) only on the positive binding peptide sequences, in which a discriminator of the WGAN is updated to distinguish generated peptide sequences from sampled positive peptide sequences from the training data, and a generator of the WGAN is updated to fool the discriminator. The method trains the WGAN only on the positive binding peptide sequences while simultaneously updating the generator to minimize a kernel Maximum Mean Discrepancy (MMD) loss between the generated peptide sequences and the sampled peptide sequences and maximize prediction accuracies of a set of pre-trained peptide binding property predictors with parameters of the set of pre-trained peptide binding property predictors being fixed.

16.3892295INDIVIDUALISIERTE IMPFSTOFFE GEGEN KREBS
EP - 13.10.2021
Clasificación Internacional A61K 39/00 Nº de solicitud 21168360 Solicitante BIONTECH SE Inventor/a SAHIN UGUR
The present invention relates to the provision of vaccines which are specific for a patient's tumor and are potentially useful for immunotherapy of the primary tumor as well as tumor metastases. In one aspect, the present invention relates to a method for providing an individualized cancer vaccine comprising the steps: (a) identifying cancer specific somatic mutations in a tumor specimen of a cancer patient to provide a cancer mutation signature of the patient; and (b) providing a vaccine featuring the cancer mutation signature obtained in step (a). In a further aspect, the present invention relates to vaccines which are obtainable by said method.

17.WO/2021/205079NOVEL VACCINE COMPOSITIONS

WO - 14.10.2021
Clasificación Internacional A61K 9/51 Nº de solicitud PCT/FI2021/050261 Solicitante FINNCURE OY Inventor/a NIEMELÄ, Erik
The present technology provides vaccine compositions and a method for selecting immunogenic epitopes from novel coronaviruses such as SARS-CoV-2. The identified epitopes derived from SARS-CoV-2 have high affinity towards specific MHC molecules in humans that are known to elicit an effective T cell response in vitro. The carrier comprises biocompatible particles having a maximum size in at least one dimension in the nanometer or micrometer range, forming a core, and further having a functionalized surface or loaded with the said immunogenic epitopes or nucleotides encoding for said polypeptides capable of eliciting a cell specific protection against the said virus. A temporary or prolonged protection against novel coronaviruses is achieved by stimulating the immune system for efficiently identifying viral-infected cells.

18.3892633SELEKTIVE ANTIKÖRPER FÜR N-TERMINAL TRUNKIERTE AMYLOID-BETA-PROTOFIBRILLEN/OLIGOMERE
EP - 13.10.2021
Clasificación Internacional C07K 16/18 Nº de solicitud 21153326 Solicitante BIOARCTIC AB Inventor/a GELLERFORS PÄR
A vaccine for delaying onset of or for treatment of Alzheimer's disease or an Alzheimer-related disorder in an individual comprises a therapeutically effective amount of a physiologically acceptable protofibril/oligomer comprising N-terminal truncated Aβ. An antibody for delaying an onset of or for treatment of Alzheimer's disease or an Alzheimer-related disorder in an individual binds one or more truncated Aβ protofibrils/oligomers, but exhibits no or substantially no cross-reactivity with full length Aβ monomers, and optionally said antibody shows cross-reactivity to N-terminal truncated Aβ monomers .. Methods for delaying an onset of or for treatment of Alzheimer's disease or an Alzheimer-related disorder employ the vaccine or antibody. Methods of detecting soluble N-terminal truncated amyloid-beta (Aβ) protofibrils/oligomers and N-terminal truncated Aβ monomers employ the antibody.

19.3890770PERTUSSIS-AUFFRISCHUNGSIMPFSTOFF
EP - 13.10.2021
Clasificación Internacional A61K 38/17 Nº de solicitud 19893265 Solicitante SANOFI PASTEUR INC Inventor/a BURDIN NICOLAS
The present disclosure is directed to a modified acellular pertussis booster vaccine comprising a TLR agonist and methods of using the same for inducing an immune response.

20.WO/2021/207249VACCINE PLATFORM FOR THE INDUCTION OF SYSTEMIC IMMUNE RESPONSES
WO - 14.10.2021
Clasificación Internacional A61K 38/17 Nº de solicitud PCT/US2021/026022 Solicitante THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY Inventor/a CHERPES, Thomas L.
Compositions and methods are provided relating to vaccine formulations comprising (i) an agent that specifically binds to CD244; (ii) an effective dose of an antigen; and (iii) an adjuvant, which adjuvant can be, without limitation, an activator of innate-like T cells.

21.20210315503SYSTEM AND METHOD FOR A HEALTH STATUS DISPLAY BASED ON DETECTED MAGNETIC NANOPARTICLES
US - 14.10.2021
Clasificación Internacional A61B 5/256 Nº de solicitud 17358499 Solicitante Blue Storm Media, Inc. Inventor/a Gareth John Llewelyn Methods are disclosed for displaying a health status on a user-worn or carried device comprising of disposing a magnet within a housing of the user-worn or carried device,

configured to detect a magnetic field supercutaneously, wherein the field is generated by an interaction of the magnet with magnetic nanoparticles of a delivery agent delivering a therapeutic or vaccine intravenously, converting the detected magnetic field into a field-specific electrical signal and outputting at least one of a pre-defined color, symbol, or audio-coded display on a display portion of the user-worn or carried device signaling the user health status based on the converted field-specific electrical signal.

22.20210319096SECURITY SYSTEM AND METHOD FOR SOFTWARE TO BE INPUT TO A CLOSED INTERNAL NETWORK
US - 14.10.2021
Clasificación Internacional G06F 21/55 Nº de solicitud 17205560 Solicitante SOFTCAMP CO., LTD. Inventor/a Hwan-Kuk BAE
A security system for software to be input to a closed internal network includes: a kiosk including a registration module configured to read the stored software of a connected portable storage medium, a vaccine module configured to detect malicious code in the software, and an authentication module configured to set inspection authentication for the portable storage medium whose software has been inspected for malicious code; and a client including a check module configured to check the portable storage medium for inspection authentication and authorize the execution of the stored software.

23.726578RECOMBINANT LISTERIA VACCINE STRAINS AND METHODS OF PRODUCING THE SAME
NZ - 15.10.2021
Clasificación Internacional C12N 1/21 Nº de solicitud 726578 Solicitante ADVAXIS, INC. Inventor/a WALLECHA, Anu
The present invention provides methods of treating, protecting against and inducing an immune response against a tumor or cancer, comprising the step of administering to a subject a recombinant Listeria strain. In one embodiment the present invention relates to a recombinant Listeria strain, said recombinant Listeria strain comprising a recombinant nucleic add, said nucleic add comprising a first open reading frame encoding a recombinant polypeptide comprising a first N-terminal fragment of an LLO protein fused to a heterologous antigen or fragment thereof, and wherein said recombinant nucleic add further comprises a second open reading frame encoding a mutant PrfA protein.

24.3891170IMMUNOGENE FÜR HIV-IMPFSTOFF
EP - 13.10.2021
Clasificación Internacional C07K 14/005 Nº de solicitud 19893005 Solicitante UNIV ROCKEFELLER Inventor/a NUSSENZWEIG MICHEL
This disclosure provides HIV immunogens and use thereof for generating an immune response in a subject. Also disclosed is a method of isolating anti-HIV antibodies and use thereof. This disclosure further provides a method for treating or preventing a human immunodeficiency type 1 (HIV-1) infection in a subject using the disclosed HIV immunogens and/or antibodies.

25.3892296IMMUNOGENE ZUSAMMENSETZUNG MIT EINEM ANTIGENEN ANTEIL UND EINER LIPOSOMALEN FORMULIERUNG, VERFAHREN ZUR HERSTELLUNG DER ZUSAMMENSETZUNG, DIE ZUSAMMENSETZUNG ZUR VERWENDUNG ALS ARZNEIMITTEL, INSBESONDERE ZUR VERWENDUNG ALS IMPFSTOFF
EP - 13.10.2021
Clasificación Internacional A61K 39/12 Nº de solicitud 20168554 Solicitante INNOMEDICA HOLDING AG Inventor/a HALBHERR STÉFAN JONATHAN
The present invention concerns an immunogenic composition comprising (a) an antigenic moiety, preferably an antigenic moiety being or comprising an amino acid sequence corresponding to a surface protein domain of SARS-CoV-2 virus; and (b) a liposomal formulation as an adjuvant. More specifically,

the antigenic moiety preferably is either the receptor binding domain RBD of Spike protein S of SARS-CoV-2 virus, or the HR domain of S_2 subunit of spike protein S of SARS-CoV-2 virus; or an immunogenic fragment thereof.

26.WO/2021/205022IMPROVED METHODS OF PRODUCING A LIPIDATED PROTEIN
WO - 14.10.2021
Clasificación Internacional C12P 21/02 Nº de solicitud PCT/EP2021/059342 Solicitante VALNEVA AUSTRIA GMBH Inventor/a SCHLEGL, Robert
The present invention relates to method of producing a lipidated protein, a pharmaceutical composition comprising the protein of any of SEQ ID NOs: 1, 2, and/or 3 and/or the lipidated form of a protein comprising the protein of SEQ ID NO: 7 (C-TAB.G5) and/or SEQ ID NO: 8 (C-TAB.G5.1), especially the protein of SEQ ID NO: 12 (Lip-C- TAB.G5.1), and/or a lipidated form of a protein comprising the protein of SEQ ID NO: 15 (Spike protein of SARS-CoV-2) and/or a lipidated form of a protein comprising the any of the proteins of SEQ ID NOs: 16-22 (hMPV F protein), and the pharmaceutical composition for use as a medicament, particularly a vaccine and/or for use in a method for eliciting an immune response in a human against Lyme disease, a disease caused by Clostridium difficile or hMPV and/or of SARS-CoV-2 (COVID-19).

27.WO/2021/204873IMMUNOGENIC COMPOSITION COMPRISING AN ANTIGENIC MOIETY AND A LIPOSOMAL FORMULATION, METHOD OF PRODUCING THE COMPOSITION, THE COMPOSITION FOR USE AS A MEDICAMENT, IN PARTICULAR FOR USE AS A VACCINE
WO - 14.10.2021
Clasificación Internacional A61K 39/12 Nº de solicitud PCT/EP2021/059055 Solicitante INNOMEDICA HOLDING AG Inventor/a HALBHERR, Stéfan Jonathan
The present invention concerns an immunogenic composition comprising (a) an antigenic moiety, preferably an antigenic moiety being or comprising an amino acid sequence corresponding to a surface protein domain of SARS-CoV-2 virus; and (b) a liposomal formulation as an adjuvant. More specifically, the antigenic moiety preferably is either the receptor binding domain RBD of Spike protein S of SARS-CoV-2 virus, or the HR domain of S2 subunit of spike protein S of SARS-CoV-2 virus; or an immunogenic fragment thereof. The invention further relates to a method of producing an immunogenic composition and the use of such composition as a medicament.

28.3892729REKOMBINANTES SCHWEINEPARVOVIRUS-ANTIGENPROTEIN UND VERWENDUNG DAVON
EP - 13.10.2021
Clasificación Internacional C12N 15/82 Nº de solicitud 19892393 Solicitante REPUBLIC KOREA ANIMAL & PLANT QUARANTINE AGENCY Inventor/a SONG JAE-YOUNG
The present invention provides: a recombinant expression vector comprising a gene encoding a porcine parvovirus VP2 protein; a recombinant plant or a recombinant insect cell transformed with the vector; and a vaccine composition for a porcine parvovirus and a composition for diagnosing porcine parvovirus, both of which contain a porcine parvovirus VP2 protein obtained from the recombinant plant or the recombinant insect cell. When the recombinant plant or recombinant insect cell of the present invention is used, the porcine parvovirus antigenic protein can be produced with high efficiency, and the porcine parvovirus antigenic protein production method using the recombinant plant or recombinant insect cell has excellent safety and stability compared with other antigen production methods. The composition for diagnosis of porcine parvovirus of the present disclosure uses a recombinant antigenic protein, and thus is safe due to the absence of the possibility of contamination caused by handling of live viruses and enables a prompt diagnosis of the infection with porcine parvovirus from a large amount of samples.

29.WO/2021/207615COMPOSITIONS COMPRISING THREE OSPA FUSION PROTEINS FOR MEDICAL USE
WO - 14.10.2021
Clasificación Internacional C07K 14/20 Nº de solicitud PCT/US2021/026599 Solicitante VALNEVA AUSTRIA GMBH Inventor/a BÉZAY, Nicole
The present invention relates to a composition comprising the OspA fusion protein of SEQ ID NO: 1 (LipSlDl-S2Dl), the OspA fusion protein of SEQ ID NO: 2 (Lip-S4D1- SShybD1) and the OspA fusion protein of SEQ ID NO: 3 (Lip-S5D1-S6D1) for use in a vaccine or for use in a method for eliciting an immune response in a human against Lyme disease.

30.WO/2021/204825INACTIVATED SARS-CoV-2 VIRUS VACCINE
WO - 14.10.2021
Clasificación Internacional A61K 39/12 Nº de solicitud PCT/EP2021/058974 Solicitante VALNEVA AUSTRIA GMBH Inventor/a MEINKE, Andreas
Described herein are SARS-CoV-2 vaccines and compositions and methods of producing and administering said vaccines to subjects in need thereof.

31.3892731ENZYMATISCHES VERFAHREN ZUR HERSTELLUNG VON CMP-NEU5AC
EP - 13.10.2021
Clasificación Internacional C12P 19/26 Nº de solicitud 20168848 Solicitante MAX PLANCK GESELLSCHAFT Inventor/a REXER THOMAS F T
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.

32.WO/2021/204898ENZYMATIC METHOD FOR PREPARATION OF CMP-NEU5AC
WO - 14.10.2021
Clasificación Internacional C12P 19/26 Nº de solicitud PCT/EP2021/059101 Solicitante MAX-PLANCK-GESELLSCHAFT ZUR FÖRDERUNG DER WISSENSCHAFTEN E.V. Inventor/a REXER, Thomas, F., T.,
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.

33.WO/2021/207306RECOMBINANT BACTERIA FOR USE AS A VACCINE TO PREVENT COVID19 INFECTION
WO - 14.10.2021

Clasificación Internacional A61K 39/12 Nº de solicitud PCT/US2021/026106 Solicitante SYNLOGIC OPERATING COMPANY, INC. Inventor/a GAO, Jian-Rong
Modified microorganisms, pharmaceutical compositions thereof, and methods of preventing and treating the coronavirus disease 2019 (COVID-19) are disclosed.

34.3892298EPITOPE MIT SEQUENZHOMOLOGIE ZUR CORONAVIRUS-SPIKE-PROTEIN-UNTEREINHEIT UND DEREN VERWENDUNGEN
EP - 13.10.2021
Clasificación Internacional A61K 39/215 Nº de solicitud 20169101 Solicitante PREVIPHARMA CONSULTING GMBH Inventor/a KIESSIG STEPHAN T
The present invention relates to polypeptides comprising epitopes having a sequence homology to a sequence section of subunit S1 and/or subunit S2 of coronavirus spike protein from severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Moreover, the present invention refers to a vaccine comprising such polypeptide. The invention further relates to an antibody binding to subunit S1 and/or subunit S2 and to methods for isolating and detecting such antibody and to uses of the polypeptides and antibodies.

35.3890766VERFAHREN UND ZUSAMMENSETZUNGEN MIT EINEN NFKB-INHIBITOR UND EINEM ADJUVANS
EP - 13.10.2021
Clasificación Internacional A61K 38/08 Nº de solicitud 19892608 Solicitante UNIV CHICAGO Inventor/a ESSER-KAHN AARON
The current disclosure describes the use of NFkB inhibitors as immune potentiators in vaccine compositions comprising adjuvants. Accordingly, aspects of the disclosure relate to a method for vaccinating a subject comprising administering a NFkB inhibitor and an adjuvant (or a composition of the disclosure comprising NFkB and an adjuvant) to the subject. Further aspects relate to a method for inhibiting an inflammatory reaction associated with an adjuvant in a subject, the method comprising co-administering a NFkB inhibitor and an adjuvant (or a composition of the disclosure comprising NFkB and an adjuvant) to the subject. Yet further aspects relate to a pharmaceutical composition comprising a NFkB inhibitor and an adjuvant.

36.3890776REKOMBINANTE HIV-ENV-POLYPEPTIDE UND IHRE VERWENDUNGEN
EP - 13.10.2021
Clasificación Internacional A61K 39/21 Nº de solicitud 19892591 Solicitante INT AIDS VACCINE INITIATIVE Inventor/a BURTON DENNIS R
The present disclosure relates to recombinant HIV Env polypeptides and their use in the treatment and prevention of HIV/AIDS.

37.WO/2021/207040SYSTEMS AND METHODS FOR PRE-FILLED MEDICAL DELIVERY DEVICES
WO - 14.10.2021
Clasificación Internacional A61M 5/28 Nº de solicitud PCT/US2021/025683 Solicitante KOSKA FAMILY LIMITED Inventor/a WALKER, Jay, S.
A pre-filled medical delivery assembly assembled and configured to allow delivery of a single dose of a therapeutic agent {e.g., vaccine, drug, medicament, etc.) from a Blow-Fill-Seal (BFS) vial to a patient. The delivery assembly generally includes a modular design consisting of separately constructed components cooperatively arranged and coupled to one another.

38.20210317123CBP/CATENIN SIGNALING PATHWAY INHIBITORS AND USES THEREOF
US - 14.10.2021
Clasificación Internacional C07D 487/04 Nº de solicitud 17199304 Solicitante 3+2 Pharma Inventor/a Fuqiang Ruan Provided are compounds of formula (Ia), (Ib) and (IIa), 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 a clinical grade drug, comprising use, in a penultimate, or last reaction step under GMP conditions, of an intermediate 2-propynyl-compound to form a clinical grade isoxazole derivative (e.g., via 3+2 cycloaddition).

39.20210315986PSMA AND STEAP1 VACCINES AND THEIR USES
US - 14.10.2021
Clasificación Internacional A61K 39/00 Nº de solicitud 17228871 Solicitante Janssen Biotech, Inc. Inventor/a Marco Gottardis
Disclosed herein are PSMA and/or STEAP1 polynucleotides, polypeptides, vectors, viruses, vaccines, and vaccine combinations, and their uses.

40.WO/2021/207599ANTIGEN SPECIFIC IMMUNOTHERAPY FOR COVID-19 FUSION PROTEINS AND METHODS OF USE
WO - 14.10.2021
Clasificación Internacional C07K 14/005 Nº de solicitud PCT/US2021/026577 Solicitante AKSTON BIOSCIENCES CORPORATION Inventor/a ZION, Todd C.
The present disclosure provides recombinantly manufactured fusion proteins comprising a SARS-CoV-2 Receptor Binding Domain (SARS-CoV-2-RBD) fragment or an analog thereof linked to a human Fc fragment for use in relation to the 2019 Novel Coronavirus (CQVID-19). Embodiments include the administration of the fusion proteins to patients that have recovered from COVID-19 as a booster vaccination, to antibody naive patients to produce antibodies to the S ARS-CoV-2 virus to enable the patients to become convalescent plasma donors, to patients who have been infected by the SARS-CoV-2 virus and have contracted COVID-19 in order to limit the scope of the infection and ameliorate the disease, and as a prophylactic COVID-19 vaccine. Exemplary Fc fusion proteins and pharmaceutical formulations of exemplary Fc fusion proteins are provided, in addition to methods of use and preparation.

41.20210317175NOVEL PEPTIDES AND COMBINATION OF PEPTIDES AND SCAFFOLDS THEREOF FOR USE IN IMMUNOTHERAPY AGAINST COLORECTAL CARCINOMA (CRC) AND OTHER CANCERS
US - 14.10.2021
Clasificación Internacional C07K 14/47 Nº de solicitud 17351341 Solicitante Immatics Biotechnologies GmbH Inventor/a Oliver SCHOOR
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.

42.WO/2021/207592USE OF VIRAL VECTORS FOR CORONAVIRUS VACCINE PRODUCTION
WO - 14.10.2021

Clasificación Internacional A61K 39/12 Nº de solicitud PCT/US2021/026566 Solicitante 4MVAC LLC Inventor/a BRIDGES, Charles R.
Provided herein are compositions that includes AAVs and AAV vectors that include a sequence encoding a SARS-CoV-2 polypeptide or a fragment thereof. Also provided herein are methods and materials for making and using AAVs and AAV vectors to generate immunity to a coronavirus in a subject.

43.3892297PEPTIDE UND KOMBINATIONEN VON PEPTIDEN ZUR VERWENDUNG IN DER IMMUNTHERAPIE GEGEN EINE INFEKTION DURCH SARS-COV-2 (COVID-19)
EP - 13.10.2021
Clasificación Internacional A61K 39/215 Nº de solicitud 20169047 Solicitante UNIV TUEBINGEN MEDIZINISCHE FAKULTAET Inventor/a WALZ JULIANE
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 an infection by SARS-CoV-2 (COVID-19). The present invention furthermore relates to SARS-CoV2-associated T-cell peptide epitopes that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-SARS-CoV2 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.

44.WO/2021/204969PEPTIDES AND COMBINATIONS OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST AN INFECTION BY SARS-COV-2 (COVID-19)
WO - 14.10.2021
Clasificación Internacional A61K 39/215 Nº de solicitud PCT/EP2021/059232 Solicitante EBERHARD KARLS UNIVERSITAET TUEBINGEN MEDIZINISCHE FAKULTAET Inventor/a WALZ, Juliane
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 an infection by SARS-CoV-2 (COVID-19). The present invention furthermore relates to SARS-CoV2-associated T-cell peptide epitopes that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-SARS-CoV2 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.

Patentes registradas en la United States Patent and Trademark Office (USPTO)

Results Search in US Patent Collection db for: (ABST/vaccine AND ISD/20211012->20211020),14 records.

	PAT. NO.	Title
1	11,149,278	Artificial nucleic acid molecules for improved protein expression
2	11,149,255	Compositions and methods for generating reversion free attenuated and/or replication incompetent vaccine vectors
3	11,147,869	Herpes simplex virus nanoemulsion vaccine
4	11,147,863	Multivalent pneumococcal conjugate vaccine

5	11,147,839	Peptides and combination of peptides of non-canonical origin for use in immunotherapy against different types of cancers
6	11,147,838	Peptides and combination of peptides of non-canonical origin for use in immunotherapy against different types of cancers
7	11,142,556	Immunotherapy with A*01 restricted peptides and combination of peptides against cancers and related methods
8	11,142,547	Polypeptide and use thereof
9	11,141,545	Sprayer technology
10	11,141,476	MERS coronavirus vaccine
11	11,141,475	Inactivating pathogens and producing highly immunogenic inactivated vaccines using a dual oxidation process
12	11,141,474	Artificial nucleic acid molecules encoding a norovirus antigen and uses thereof
13	11,141,437	Peptides and combination of peptides of non- canonical origin for use in immunotherapy against different types of cancers
14	11,141,377	Nanostructured lipid carriers and stable emulsions and uses thereof

Edición: Annia Ramos Rodríguez aramos@finlay.edu.cu
Ma. Victoria Guzmán Sánchez mguzman@finlay.edu.cu
Randelys Molina Castro rmolina@finlay.edu.cu
Irina Crespo Molina icrespo@finlay.edu.cu
Yamira Puig Fernández yamipuig@finlay.edu.cu
Rolando Ochoa Azze ochoa@finlay.edu.cu

FINLAY EDICIONES

CUBA