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EDICIONES

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VaCyT

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IFV INSTITUTO FINLAY DE VACUNAS

...vacunar es prevenir.

Análisis bibliométrico sobre vacunas contra el virus del papiloma humano (VPH)

Fuente de información utilizada:

WEB OF SCIENCE™

Estrategia de búsqueda:

TITLE: ("papillomavirus vaccine") 1001 records

Periodo de estudio 1999-2020

Las variables utilizadas en el análisis fueron:

⇒ Productividad científica por año.

⇒ Autores con mayor productividad científica.

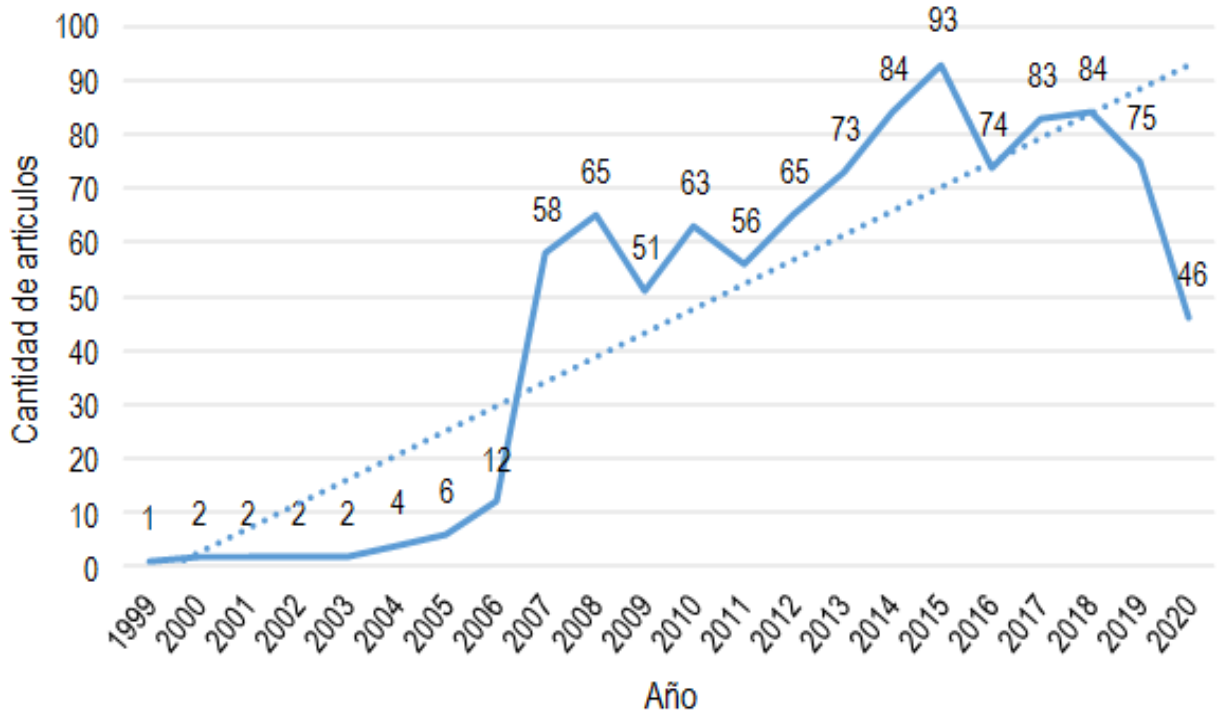
⇒ Revistas con mayor número de publicaciones sobre el tema.

⇒ Instituciones que han trabajado el tema de estudio.

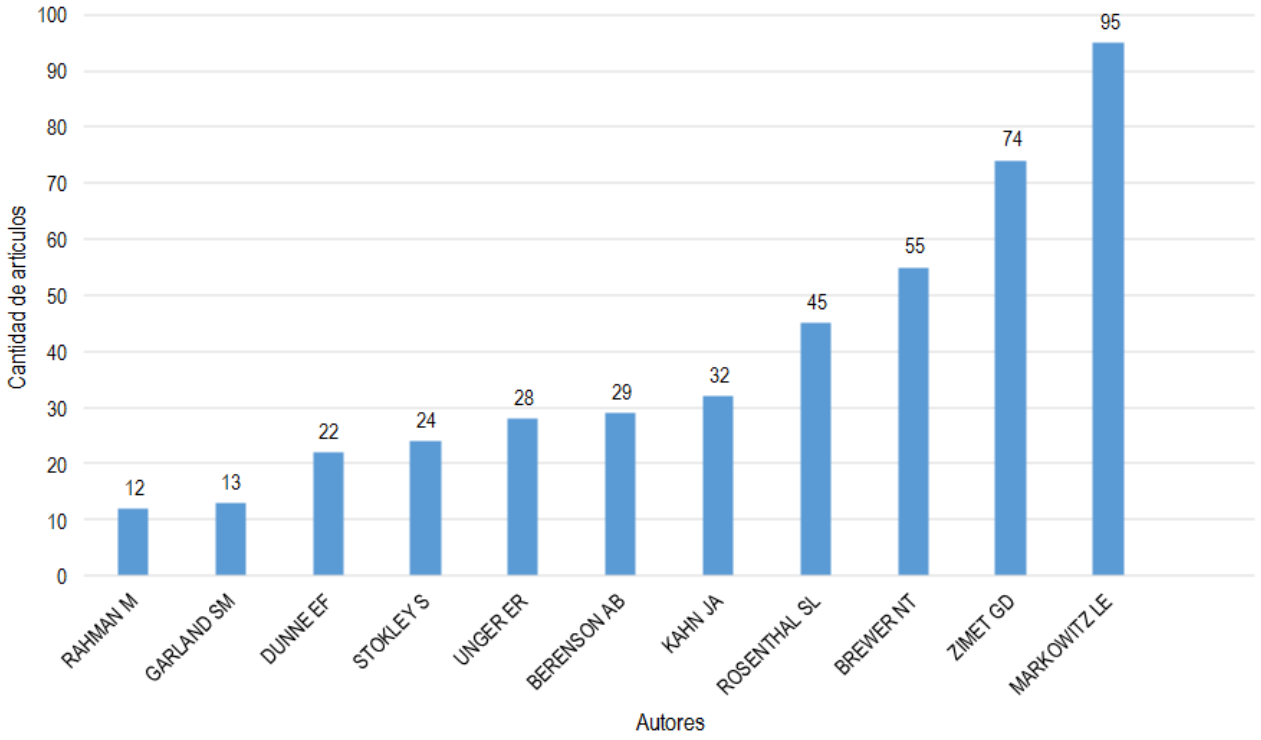
⇒ Países a la vanguardia sobre el tema.

EN ESTE NÚMERO

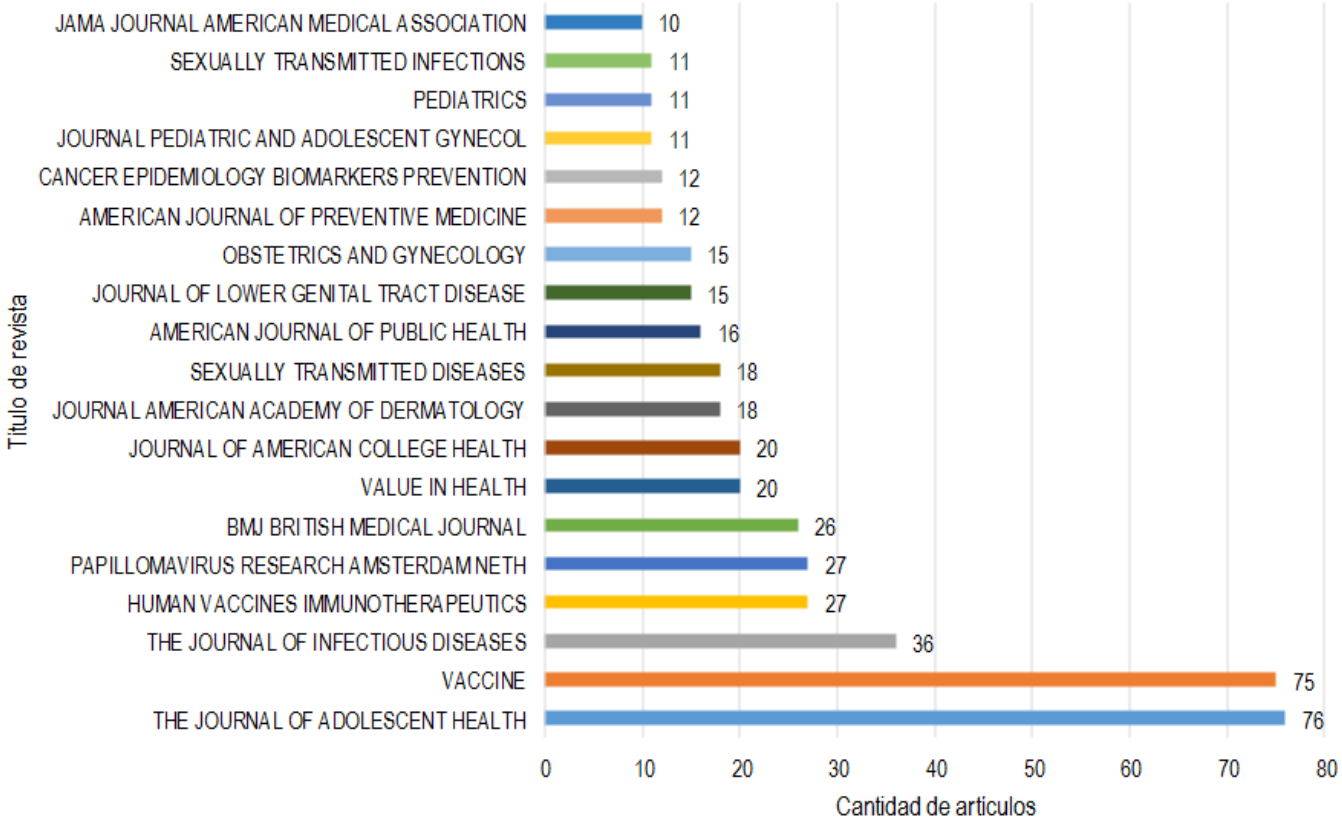
Productividad científica por año



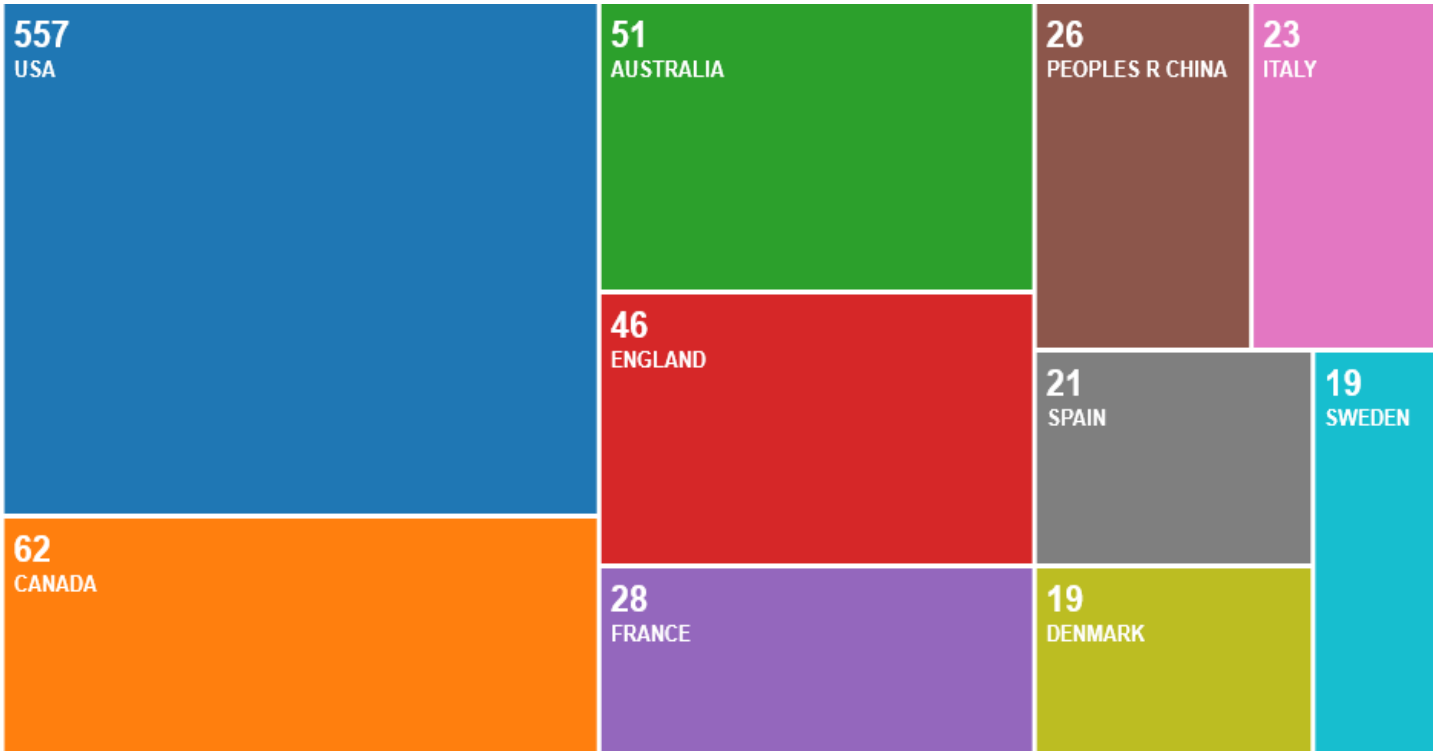
Autores con mayor productividad científica



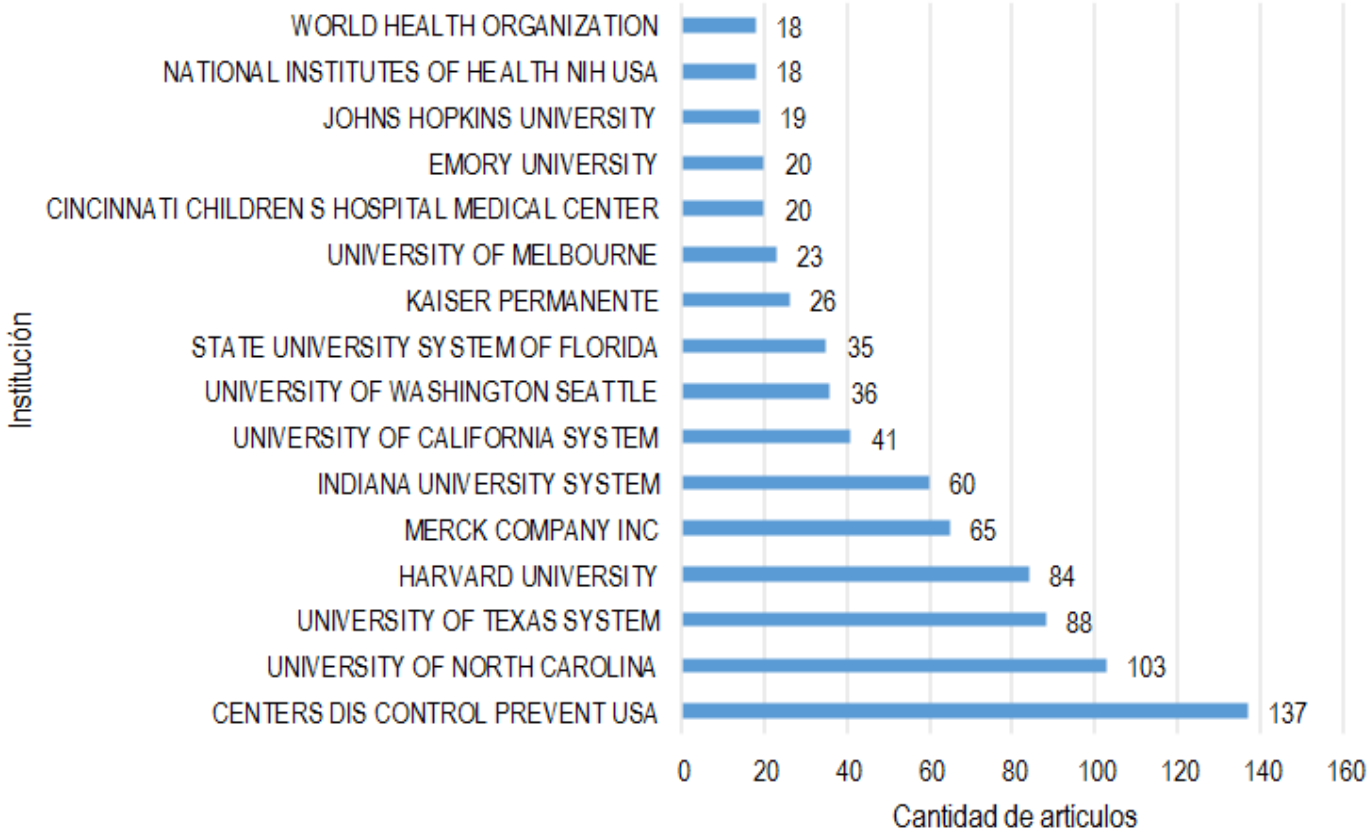
Revistas científicas que han publicado sobre el tema (2019-2020)



Producción científica por países registrada en Web of Science (1999-2020)



Instituciones que han trabajado el tema de estudio



Noticias en la Web

El poder de la vacuna contra la tuberculosis: ¿revacunación protegería frente a la Covid-19?

9 jun. Desde hace tiempo se conocen algunos estudios en los que se muestra la capacidad protectora de esta vacuna frente a otros patógenos que no son la bacteria de la tuberculosis, incluso, frente algunos virus. Nuevos estudios en desarrollo sugieren que esta inoculación reactiva la memoria inmunología de las personas, protegiendo contra el coronavirus.

Un grupo de investigadores de la Universidad Católica de Chile y del Instituto Milenio de Inmunología e Inmunoterapia, IMII, liderado por el Alexis Kalergis, e integrado por los académicos de la Universidad Católica: Susan Bueno, Camila Covián y Angello Retamal, recientemente publicaron dos trabajos en la revista especializada Frontiers in Immunology. En ellos los especialistas sugerirían un posible efecto beneficioso de los programas de inmunización con la vacuna BCG (Bacillus Calmette-Guérin) -utilizada para combatir los casos de tuberculosis- como protección frente al coronavirus humano. Los análisis presentados en este trabajo de investigadores chileno sugieren la importancia de evaluar científicamente el posible efecto benéfico de la BCG contra el Sars-CoV-2 por medio de estudios clínicos.

Además, las observaciones presentadas en esta publicación por los investigadores nacionales, se basan en datos públicos que sugieren que los países que utilizan la BCG presentan, en general, un menor número de casos por millón de habitantes, en comparación con aquellos que no la utilizan.

Este fenómeno podría deberse a la inmunidad entrenada que induce esta vacuna en las personas y que consiste en la capacidad de las células inmunes innatas para actuar con cierta programación inmunológica. Por lo tanto, los científicos plantean que este tipo de inmunidad podría ser favorable como estrategia de inmunización contra el Sars-CoV-2.

Sin embargo, los académicos plantean que otros factores podrían también influir en los índices que se discuten, como por ejemplo la frecuencia de los diagnósticos, el nivel socioeconómico y la tasa de contagio en los países analizados.

“Estudiamos el número de casos positivos y fatalidades en diferentes países y los correlacionamos con la inclusión de la vacuna BCG al nacer en sus programas nacionales de inmunización. Curiosamente, aquellos donde esta se administra reportan una tasa de contagio más baja y una menor cantidad de fallecimientos relacionadas con Covid-19”, explica Alexis Kalergis.

El académico de la Universidad Católica agrega que “esto sugiere que esta vacuna puede inducir inmunidad entrenada, la cual podría otorgar cierto nivel de protección para el Sars-CoV-2 y disminuir la probabilidad de infección. Se ha demostrado que este tipo de inmunidad confiere protección contra una amplia variedad de patógenos, incluidas bacterias, hongos, virus y protozoos”. Sin embargo, esta hipótesis debe ser evaluada

científicamente por medio de estudios clínicos. Como consecuencia, existen actualmente más de diez estudios clínicos en el planeta para evaluar si acaso la BCG común puede proteger contra el Covid-19.

Estos datos sugieren un papel crucial para esta vacuna en el desarrollo de memoria inespecífica contra otros virus respiratorios, como Sars-CoV-2. Sin embargo, el fenotipo "entrenado" dura un tiempo limitado, lo que sugiere que este tipo de inmunidad desarrollada al nacer podría no ser capaz de proteger a los adultos contra infecciones posteriores. Por lo tanto, los investigadores del Departamento de Genética Molecular y Microbiología, Facultad de Ciencias Biológicas de la Universidad Católica sugieren que la vacunación con BCG podría reactivar la inmunidad entrenada de una manera más fuerte en comparación con la primera inducción.

Modelos experimentales

El Dr. Alexis Kalergis comenta que, en un modelo experimental de infección viral por fiebre amarilla, la inducción de inmunidad entrenada reduce los niveles de viremia o ingreso de un virus en el torrente sanguíneo.

"Además, se ha demostrado que la vacuna BCG es efectiva para prevenir infecciones agudas del tracto respiratorio superior en los ancianos y se asocia con una reducción del asma y la atopia en adultos", resalta Kalergis.

"La vacuna BCG ha demostrado su inmunogenicidad y seguridad, por lo que se ha utilizado durante casi 100 años en humanos. Además, puede conferir protección independiente del antígeno contra una amplia variedad de patógenos", destaca Kalergis. Dos ensayos clínicos diferentes. agrega, respaldan la idea de que la revacunación con BCG induce una activación más fuerte de la protección cruzada no específica asociada a esta vacuna.

El primer ensayo clínico realizado entre 1935 y 1947, evidenció que la revacunación de los niños disminuía progresivamente su mortalidad general. La primera vacuna lo redujo solo en un 3%, pero lograron un 47% de reducción de la mortalidad en los niños después de la tercera revacunación.

Otro ensayo clínico realizado en Guinea-Bissau también demostró una disminución de la mortalidad en niños revacunados, con una reducción del 64%.

Tratamiento antiviral efectivo

Las vacunas estimulan la activación de la respuesta inmune adaptativa y el desarrollo de la memoria inmunológica.

Sin embargo, uno de los mayores problemas de la pandemia producida por el SARS-CoV-2 es la ausencia de un tratamiento antiviral efectivo o una vacuna, el cual pueda contrarrestar la respuesta inflamatoria e incluso el daño agudo severo a los pulmones.

Para el desarrollo de una vacuna, es necesario conocer la estructura del patógeno contra el cual está diseñada la formulación, así como los componentes inmunogénicos, como los adyuvantes. Sin embargo, el desarrollo de una nueva formulación y ensayos preclínicos y clínicos puede llevar una cantidad significativa de tiempo.

Tomando en cuenta su seguridad como vacuna en grandes poblaciones, BCG podría considerarse por su amplia disponibilidad y bajo costo como una buena estrategia para el desarrollo de inmunidad entrenada y protección contra nuevos patógenos.

Actualmente, la capacidad de inmunidad entrenada inducida por BCG para proteger contra Covid-19 se está evaluando en más de diez ensayos clínicos. Uno se está llevando a cabo en Holanda, involucrando a 1,500 participantes y 147 trabajadores de la salud que serán vacunados, y otro en Australia con 4.000 participantes y 148 voluntarios que serán vacunados.

Fuente: La Tercera. Disponible en https://bit.ly/319wHSV

Científicos identifican 47 medicamentos existentes que podrían ayudar a combatir la COVID-19

9 jun. En lugar de pensar en fármacos de nuevo diseño, científicos de la Universidad de California buscaron entre los 2 mil medicamentos ya aprobados para humanos, algunos que pudieran tratar o indicar un camino terapéutico para la COVID-19.

El equipo multidisciplinario de UCSF identificó 69 medicamentos y componentes con potencial para tratar la COVID-19. A medida que lo hacía, enviaba muestras de esas sustancias al Instituto Pasteur, en París, y a la Escuela de Medicina Icahn de Mount Sinai, en Nueva York, para someterlos a pruebas. Hasta el momento, 47 mostraron "fuertes pautas para el tratamiento" y se identificaron "dos mecanismos separados" sobre el modo en que interceptarían al SARS-CoV-2, según sintetizaron en un primer estudio.

En principio, esas pautas y mecanismos derivados del cruce entre el mapa del coronavirus y el catálogo de la FDA no señalaban más que interacciones potenciales: "No sabíamos si las drogas que identificamos harían que una persona fuera más resistente al virus o más susceptible, si harían algo o nada". Para eso hacía falta probarlas en muestras vivas del causante de la COVID-19 y en células, que se tomaron del mono verde porque reaccionan de manera muy similar a las humanas.

Los investigadores de UCSF identificaron principalmente dos grupos de sustancias que afectan al virus de dos maneras diferentes, una de las cuales no había sido descrita antes.

El primer grupo interrumpe la traducción del mensaje del ARN, que es uno de los pasos finales que da el coronavirus para multiplicarse. Cuando ingresa a una célula, el SARS-CoV-2 se apropia de los mecanismos naturales de ella para hacer copias de sí mismo. Primero se replica, luego transcribe las instrucciones para hacer eso numerosas veces gracias a la capacidad propia de la célula y por último traduce ese mensaje: en ese punto las proteínas hacen nuevas copias que pasan a infectar a otras células. Y el proceso vuelve a comenzar.

Actualmente está en estudio una molécula similar a la ternatina-4, el medicamento Aplidin, un antitumoral de origen español cuyo principio activo es la plitidespina. Según dijo Luis Mora, director de la empresa que lo produce, PharmaMar, sus efectos contra la COVID-19 podrían ser "mil veces superiores a los que consigue el remdesivir", el antiviral de Gilead aprobado por la FDA.

En cambio, la zotatifina apunta a otra proteína.

El equipo de investigación de UCSF trabaja actualmente con el laboratorio que la produce eFFECTOR Therapeutics, para comenzar cuanto antes los ensayos clínicos. Según explicó el director ejecutivo de la firma, Steve Worland, a diferencia de los otros antivirales esta molécula, originalmente creada contra el cáncer, no apunta al virus sino que actúa sobre las células que el SARS-CoV-2 secuestra.

Los receptores celulares, que se encuentran tanto en el interior como en la superficie de las células, "actúan como interruptores especializados", comparó el investigador: "Cuando una molécula específica se une a un receptor específico, le indica así a la célula que haga una tarea específica. Con frecuencia los virus utilizan receptores para infectar las células".

El mapa original había mostrado que dos receptores importantes en los tratamientos farmacológicos, SigmaR1 y SigmaR2, podían participar en el combate contra la COVID-19. "Las pruebas confirmaron nuestras sospechas", siguió Krogan.

Fuente: sinembargo. Disponible en https://bit.ly/381Yx4P

China inicia la etapa 1 de las pruebas clínicas del anticuerpo recombinante JS016 para tratar la COVID-19

9 jun. Según informes, es la primera prueba clínica a nivel mundial del anticuerpo en un participante humano saludable después de terminar las pruebas en primates no humanos, indicó la comisión municipal de ciencia y tecnología de Shanghai.

El primer sujeto del Hospital Huashan de la Universidad de Fudan, en Shanghai, recibió hoy por la mañana una inyección de JS016, un anticuerpo recombinante, completamente humano y monoclonal contra la COVID-19.

El anticuerpo, desarrollado de forma conjunta por la compañía biofarmacéutica Junshi Biosciences, el Instituto de Microbiología de la Academia de Ciencias de China y otros, entró a la etapa 1 de la prueba clínica después de recibir la aprobación de la Administración Nacional de Productos Médicos.

La prueba aleatoria, a doble ciego y controlada con placebo busca evaluar la tolerabilidad, seguridad, características farmacocinéticas e inmunogenicidad de JS016 entre la población china, para sentar bases para posteriores estudios clínicos del anticuerpo.

La prueba fue dirigida por Zhang Jin, subdirector del Instituto de Antibióticos del hospital, y Zhang Wenhong, jefe del Centro de Enfermedades Contagiosas del hospital.

Se espera que la terapia con anticuerpo neutralizador sea la primera opción de tratamiento en el combate a la COVID-19, dijo Zhang Wenhong, quien señaló que el anticuerpo puede atacar con precisión el coronavirus e inhibir la replicación del virus.

Fuente: sinembargo. Disponible en https://bit.ly/3fUVwWR

La expansión del coronavirus depende del estilo de vida

9 jun. Una serie de variables que caracterizan la organización y el estilo de vida de un país (desde el número de visitantes que recibe, a su consumo eléctrico o sus emisiones de CO2), predicen el número total de contagiados y de muertos por Covid-19 que va a tener ese país con mucha más exactitud que otras variables, como el desarrollo de su sanidad o su nivel de riqueza y progreso. Esta es la conclusión de una investigación desarrollada por científicos de la Facultad de Veterinaria de la Universidad Complutense de Madrid y publicada en la sección de COVID-19 SARS-CoV-2 preprints de MedRxiv: analiza qué variables pueden predecir mejor el número de infecciones y muertes en todo el mundo por SARS-CoV-2.

Los autores estudian docenas de variables en 50 países diferentes, desde los indicadores generales del país (área, superficie, porcentaje de población urbana…), a sus parámetros demográficos (tasa de nacimiento, esperanza de vida, población mayor de 65 años…), sus estimadores económicos (tasa de inflación, tasa de

paro…), su gasto en I+D y en educación, sus indicadores de salud (camas de hospital por habitante, médicos por habitante…), su consumo eléctrico, sus índices de contaminación ambiental (emisiones de CO2, oxido nitroso, metano…), etc.

Además, analizaron cómo la eficacia de estas variables predictivas varía con el tiempo: hay análisis independientes para los meses de marzo, abril y mayo de 2020 (y los autores pretenden seguir su estudio durante los meses siguientes).

El principal problema es que, cuando el SARS-CoV-2 empezó su expansión por el mundo, había una absoluta falta de conocimientos: era un nuevo virus del que no se sabía nada.

Muchos asumieron que se comportaría como el virus de la gripe. Otros que lo haría de forma similar a otros coronavirus anteriores (SARS-CoV-1 o MERS). Pero, en realidad no había conocimientos suficientes para saberlo.

Nadie sabía cómo acertar

Muchos países -por ejemplo, España- se fiaron de la supuesta robustez de su sistema sanitario. Recordemos que al principio de la pandemia de la Covid-19, el director del Centro de Coordinación de Alertas y Emergencias Sanitarias previó que el SARS-CoV-2 tendría "poco efecto en España" pues teníamos "la mejor sanidad del mundo".

No sirvió de nada: Al principio de desatarse la pandemia, el número de muertos de cada país tan solo dependió del número de contagiados que tenía ese país. Daba igual que tuviesen una sanidad extraordinaria o que su sanidad fuera endeble. Poco importó que tuviesen muchos o pocos médicos por habitante y muchas o pocas camas hospitalarias.

Al inicio de la pandemia, tanto lo países con una sanidad excelente como los países con una sanidad deficiente mostraron un comportamiento prácticamente idéntico: en todos ellos se moría el mismo porcentaje de infectados.

Este resultado era de esperar: Como no se sabía nada del virus, no había vacuna ni fármacos eficaces y se desconocían los protocolos de tratamiento: los grandes recursos sanitarios todavía servían de poco.

En esos momentos, la clave estaba en impedir que la gente se contagiase.

Y en el número de contagios, la organización de los distintos países resultó esencial: en aquellos que recibían un mayor número turistas y viajeros (casos de Italia, España, Francia, Estados Unidos...) se desató la catástrofe.

Y eso que en las fechas en las que se inició la pandemia no era temporada alta (lo que hubiese tenido un resultado desolador). Pero el que un país esté más o menos volcado en el turismo condiciona su estilo de vida: un estilo de vida que resulta fatal en la expansión de las pandemias.

La prevención inicial es esencial

A los países que adoptaron, cuanto antes, estas estrategias preventivas controlando rigurosamente las fronteras y manteniendo, de una forma u otra, un riguroso aislamiento social, les fue muy bien, con independencia de su grado de desarrollo.

Países desarrollados como Taiwán o Nueva Zelanda, que primaron las medidas preventivas, acertaron. Países ricos como Suecia, que confiando en su sistema sanitario relajaron la prevención, se equivocaron (y recientemente sus responsables lo reconocieron).

Se dio la paradoja de que países como Vietnam (una nación pobre, con una elevada población -95 millones de habitantes-, una sanidad precaria y 1400 kilómetros de frontera con China) apenas resultó afectado por el coronavirus (a finales de abril aún no había tenido ni un solo muerto por Covid-19). Uruguay, que adoptó pronto medidas de confinamiento, no tuvo que enfrentarse a la catástrofe sanitaria de su vecino Brasil.

También la contaminación influye

Además, otra serie de variables permiten predecir con gran exactitud las cifras de muertes y contagios por Covid-19:

Entre ellas destacan las emisiones de CO_2 y de óxido nitroso a la atmósfera.

En la gran mayoría de los casos, basta conocer si un país tiene muchas emisiones de estos gases contaminantes para acertar con el número de contagiados y muertos por Covid-19 que ha tenido.

Sin embargo, esto no quiere decir que sean causa y efecto: que haya más CO_2 atmosférico no necesariamente significa que el CO_2 favorezca los contagios por SARS-CoV-2. Lo que significa es que los países que liberan más CO_2 tienen mayor número de contagiados y de muertos por Covid-19 (y mientras más CO_2 liberan, tienen más contagiados).

Probablemente tenga que ver con su estilo de vida: buena parte del CO_2 y del óxido nitroso liberados a la atmósfera provienen del transporte (en buena parte de los automóviles y los aviones).

Otras variables indirectamente relacionadas con la contaminación, como el consumo eléctrico, también presentan una correlación significativa con el número de muertos por Covid-19. Y con ellas ocurre lo mismo: solo son variables predictivas, no causa y efecto.

Cambio global, más pandemias

El cambio global está acelerando las pandemias que asolan a la humanidad.

Tan solo en lo que va de siglo la humanidad padeció epidemias y pandemias como el SARS (2002-2004), la Gripe A (2009-2010), el MERS (2012), el Chikungunya (2013-2014), el Ébola (2014, 2018), el Zika (2015-2016), el Cólera (2016-2017) y el Dengue (año 2019).

Seguimos con una elevada tasa de SIDA, y gracias a los antivacunas se están produciendo rebrotes preocupantes de enfermedades que se creían erradicadas como el Sarampión, la Polio o la Difteria. Buena parte de ellas son zoonóticas (tienen un origen en los animales salvajes tal y como ocurrió con el SARS-CoV-2).

Vendrán más pandemias. No tardarán mucho. Y serán peores que la del Covid-19, concluyen los investigadores.

Por eso, cada vez se piensa más en el concepto de One Health (Una Salud). Nuestra salud y nuestro bienestar se basa en tres pilares fundamentales: la salud de los ecosistemas, la salud de los animales (salvajes y domésticos) y la salud humana. Tenemos que cuidar estas tres patas.

Estilo de vida insostenible

La gestión de la salud de los animales puede enseñarnos mucho acerca de la gestión de las pandemias humanas.

Hay muchos más animales de abasto que seres humanos. Viven muchísimo más hacinados. Están sometidos a muchas más pandemias potenciales que las personas.

Y, por razones económicas, no se puede gastar mucho dinero en el tratamiento de pandemias. Por eso la gestión veterinaria de las pandemias se basa en la prevención y en tomar medidas de aislamiento inmediato.

Unas medidas que hubiesen funcionado excelentemente impidiendo que la Covid-19 llegase a ser una pandemia mundial, concluyen los investigadores.

Fuente: Tendencias Científicas. Disponible en https://bit.ly/3eAZUKk

EMASESA desarrolla sistema de alerta temprana de SARS-CoV-2 en aguas residuales

9 jun. El nuevo escenario mundial ocasionado por la aparición de un nuevo coronavirus, ha cambiado nuestra forma de vida hasta extremos insospechados. Este nuevo virus ha dado lugar a una nueva enfermedad humana denominada COVID-19, que afecta principalmente a las vías respiratorias y ha generado una pandemia mundial que no entiende de fronteras. La emergencia mundial ha provocado que la comunidad científica se vuelque en realizar estudios sobre el nuevo virus y buscar soluciones a nuestro alcance para luchar contra esta pandemia.

En la sociedad en su conjunto, existe un miedo generalizado por la aparición de nuevos brotes. La dinámica del virus hace que se produzca un desfase entre el contagio y la aparición de los primeros síntomas.

Por ello es importante poder contar con herramientas de detección precoz de población portadora, para la prevención de nuevos casos.

Distintas líneas de investigación en España y Europa han constatado que en las aguas residuales se pueden detectar un aumento de los niveles de circulación del Covid-19 o partes de sus fragmentos genéticos en las aguas residuales , tanto en los casos en que haya un foco de población contagiada o, cuando el foco de la población sólo haya presentado los primeros síntomas o sean asintomáticos, por lo que el análisis de las aguas residuales se convierte en una herramienta de anticipación ante nuevos rebrotes y muy útil para los servicios médicos y la administración.

Ante estas evidencias científicas y la irrupción de la pandemia por la COVID-19 y la preocupación por la crisis sanitaria ocasionada, EMASESA lleva semanas trabajando en la detección del actual coronavirus una vez que las aguas residuales llegan a sus EDAR, Estación Depuradora de Aguas Residuales (El Copero, Norte, Tablada, Ranilla, Mairena-El Viso). EMASESA, como responsable de la gestión de las aguas residuales, cuenta con una extensa red de saneamiento de 2.980 km. de longitud, que recoge las aguas de más de un millón de personas de Sevilla y su área metropolitana (Alcalá de Guadaíra, Dos Hermanas, La Rinconada, Camas, San Juan de Aznalfarache, Coria del Río, La Puebla del Río, Mairena del Alcor, Alcalá del Río, El Garrobo y El Ronquillo), transportándolas hasta las EDAR.

EMASESA viene trabajando en su protocolo habitual en la toma y análisis permanente de muestras por ello tenemos muestras congeladas desde semanas previas a la pandemia.

Con relación al COVID-19 nos hemos ido adaptando a los protocolos de este nuevo virus a través del Proyecto:" Determinación de SARS-CoV-2 en aguas residuales como Sistema de Alerta Temprana para el estudio epidemiológico de la pandemia" Hoy somos capaces y estamos en condiciones de afirmar si existe COVID-19 en nuestras aguas residuales. Tal es así que se ha constatado que en días en los que aún había pocos contagios se encontraron restos de COVID -19 en la red de saneamiento.

La información obtenida es muy sensible y relevante por ello, partiendo de esta dinámica de muestreo y análisis, se está trabajando en tramificar y sectorizar la red de saneamiento para facilitar la detección de procedencia de la muestra y ser capaces de aislar la información, si se produjera, un posible brote en una zona concreta de cualquier municipio. Por ejemplo, una barriada o un distrito tanto en Sevilla como en su área metropolitana.

Podemos confirmar que, a día de hoy, con la aplicación de este sistema de alerta, todas las muestras analizadas han dado resultados negativos en COVID-19.

Este método nace con vocación de ampliarse a otros patógenos y virus; y de ser una herramienta complementaria para la de otros profesionales a nivel sanitario o epidemiológico.

Así, podremos poner a disposición de las autoridades sanitarias una herramienta de estudio que complemente a la información que ya maneja

permitiéndoles localizar zonas y posibles focos en los que puedan producirse nuevos brotes y posibilitar su temprana mitigación. Así como detectar casos asintomáticos, ya que como adelantábamos, en las muestras se puede detectar el virus antes de que aparezcan los síntomas de contagio en las personas afectadas.

La presencia de restos de virus en las aguas residuales no es perjudicial para la salud. Se analizan muestras de restos de virus para cuantificar su presencia. Las EDAR son instalaciones seguras, ya que los tratamientos que reciben las aguas residuales permiten la eliminación de estos restos de virus, devolviéndose al cauce el agua "límpia" es decir, en óptimas condiciones.

Para Emasesa, como empresa pública de un servicio esencial, ha sido una preocupación la calidad y seguridad del agua, así como la protección de la salud de las personas y la conservación del medio ambiente. De ahí el esfuerzo por ofrecer nuevos servicios y trabajar con instalaciones más seguras, como el nuevo laboratorio que incorpora novedades tecnológicas y científicas para estar al día en el control de calidad.

Fuente: RETEMA Revista Técnica de Medio Ambiente. Disponible en https://bit.ly/2CuRvd9

Congress to closely monitor pneumonia vaccine tender

10 jun. A party-list lawmaker on Wednesday said Congress would closely monitor the tender for the anti-pneumonia vaccine for children to ensure cost-effectiveness and viability of the product choice, in Manila, Philippine.

PHILRECA Rep. Presley de Jesus said a resolution has been filed to encourage an open, fair, and competitive bidding for the pneumococcal conjugate vaccines, PCV 10 and PCV 13.

He said the procurement of vaccines should not be delayed to prevent further disease outbreaks, particularly vaccine-preventable diseases (VPDs), amid the coronavirus disease 2019 (Covid-19) pandemic.

"As a policy, we should not delay the procurement of vaccines for VPDs especially as we have seen a surge of VPDs in several pockets of community outbreaks. While the DOH (Department of Health) promised a swift review of the PCV tender, we at Congress should make sure the viability of all types of pneumonia vaccines," de Jesus said.

House Resolution 906 urges the DOH to ensure continued safe implementation of the mandated National Immunization Program for children despite the challenges posed by the pandemic.

During a virtual forum hosted by the Samahang Plaridel on Tuesday, Pediatric Infectious Diseases Society of the Philippines (PIDSP) vice president Dr. Mary Ann Bunyi the two PCVs are comparable in performance based on new evidence gathered by global health experts.

"We have been given updates on both PCV10 and PCV13. These updates have been reviewed and assessed by the immunization committee and we see that both are comparable," Bunyi said.

"So, the updates that were given to us by both companies we have forwarded to the Department of Health and we leave it to the DOH, which pneumococcal vaccine will be made available for public use. Especially given for free to the vulnerable children," he added.

Meanwhile, Health Undersecretary Dr. Maria Rosario Vergeire said the government is spending PHP4.9 billion on the procurement of pneumococcal vaccines

The DOH previously requested the Health Technology Assessment Committee to review the National Immunization Program (NIP), particularly the Pneumococcal Vaccination Program for children, in light of new 2017 and 2019 evidence from the World Health Organization (WHO).

In February 2019, WHO reaffirmed this earlier position saying that the two available PCVs in the market, PCV10 and PCV13, are equally effective in preventing overall pneu mococcal diseases in children.

Vergeire said the result of the review is yet to be released, but a public health forum regarding the matter is set to happen this week.

"We have a public forum on Thursday based on the assessment that has been done by the HTAC so that we can address the different queries coming from our stakeholders. We can also consult on the different aspects of this assessment," she said.

Dr. Wilda Silva, National Immunization Program Manager of the DOH, reported on the high reproduction number of vaccine-preventable diseases, such as polio, diphtheria, pertussis, and measles.

"Although there is a big problem with SARS-CoV-2, we should not forget other diseases which have vaccines as a bullet to control these vaccine-preventable diseases," Silva said.

Silva stressed the importance of continued immunization services, saying that "vaccine gives our children a good start at life."

"...ALTHOUGH THERE IS A BIG PROBLEM WITH SARS-CoV-2, WE SHOULD NOT FORGET OTHER DISEASES WHICH HAVE VACCINES AS A BULLET TO CONTROL THESE VACCINE-PREVENTABLE DISEASES ."

Fuente: Philippine Canadian Inquirer. Disponible en https://bit.ly/387C1b1

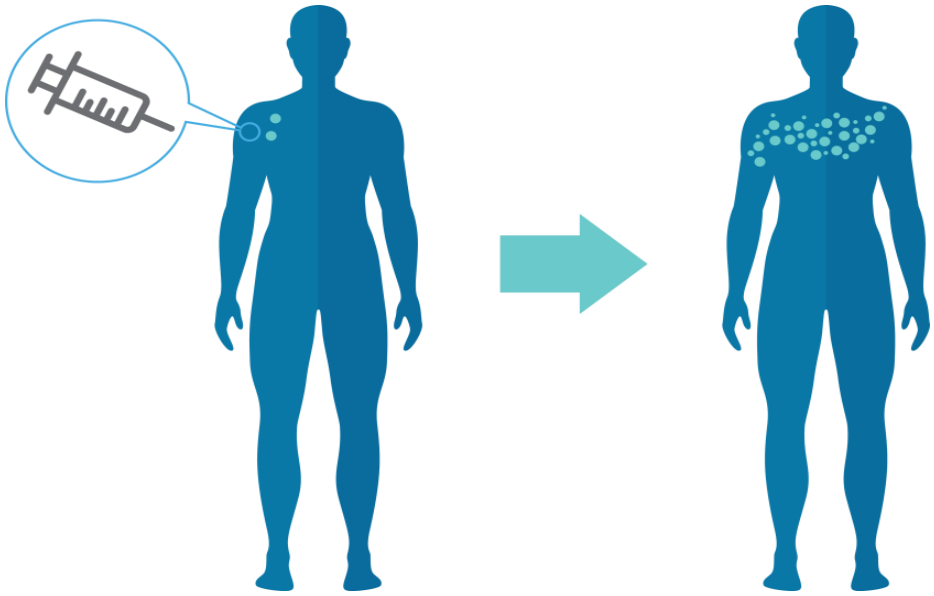
Biotecnología de San Diego ayudará con ensayo de vacuna inteligente contra covid-19

10 jun. TriLink Biotechnologies se asoció con científicos del Reino Unido para probar si la vacuna es segura y efectiva.

Encontrar una vacuna que funcione contra covid-19 no será suficiente. Los científicos necesitarán hacer rápidamente una vacuna suficiente para cientos de millones, tal vez miles de millones, de personas.

¿Una solución de la biotecnología de San Diego para este desafío de fabricación? Una vacuna que haga más de sí misma.

TriLink Biotechnologies se asoció con investigadores del Imperial College London para probar dicha vacuna en un ensayo que comenzará a mediados de junio. Si tiene éxito, el enfoque podría ayudar a llevar una vacuna contra covid-19 a una amplia franja de la población rápidamente, dice Anton McCaffrey, director



de ciencia e innovación emergente de TriLink.

"En este momento, todo el mundo quiere ir a la velocidad de la luz", dijo McCaffrey. "Es necesario saber que se puede hacer (una vacuna) a la escala necesaria para vacunar a una parte sustancial de la población".

Una vacuna de imitación

La vacuna de TriLink utiliza genes que los virus normalmente utilizan para copiar su material genético. Solo que esta vez, esos genes ayudan a copiar una vacuna que centra la atención del sistema inmunológico en la superficie del nuevo coronavirus. Después de copiarse a sí misma en el curso de un par de semanas, la vacuna eventualmente sería eliminada del sistema de una persona, según McCaffrey.

Los genes virales que permiten que la vacuna se copie a sí misma también la hacen más grande y difícil de producir, pero los científicos no necesitarían hacer tanto.

La compañía estima que el enfoque reduce la cantidad de vacuna que cada persona necesitaría entre 25 y 50 veces.

Debido a que una vacuna autoreplicante se copia a sí misma de la misma manera que un virus, activaría las mismas alarmas provocadas por la infección.

Eso podría ser algo bueno, dice McCaffrey, ya que una respuesta antiviral llevaría a un contraataque inmunológico más fuerte.

Eso tendrá que ser demostrado por ensayos clínicos.

Los investigadores del Imperial College comenzarán un ensayo clínico de fase 1 para probar la seguridad de la vacuna a mediados de junio.

Si eso va bien, los científicos del Reino Unido llevarán a cabo un ensayo más amplio para probar si la vacuna protege contra covid-19.

TriLink puede producir suficientes vacunas para los ensayos clínicos. Pero McCaffrey dice que necesitaría construir nuevas instalaciones o licenciar su tecnología para hacer suficientes vacunas para uso global. TriLink Biotechnologies emplea a unas 200 personas y fue fundada en San Diego en 1996.

La biotecnológica de San Diego Arcturus Therapeutics está explorando una estrategia similar para la vacuna contra covid-19 en asociación con la autoridad sanitaria nacional de Singapur.

Fuente: The San Diego Union Tribune. Disponible en https://bit.ly/2BilYd3

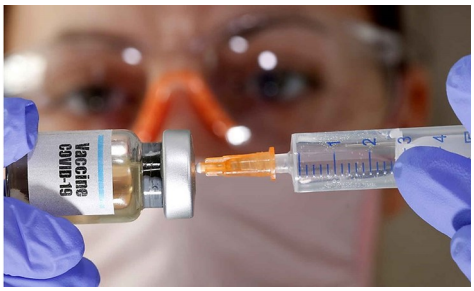
La OMS descarta que haya vacuna contra el coronavirus en 2020

10 jun. La directora del Departamento de Salud Pública y de Ambiente en la Organización Mundial de la Salud (OMS), María Neira, ha asegurado que la vacuna contra el covid-19, la enfermedad que provoca el nuevo coronavirus, no va a estar disponible este año, si bien ha asegurado que en pocas semanas habrá "buenas noticias" sobre los tratamientos.

Durante los encuentros 'Conversaciones 2020', organizados por el Economista, Neira ha señalado que, "tal vez", a principios de 2021 ya se pueda comercializar una vacuna contra el nuevo coronavirus, aunque ha avisado de que hay que ser "realistas" y ver que sólo quedan seis meses para terminar el año y que no va a dar tiempo a desarro-llarla.

"Este año lo veo francamente difícil por mucha aceleración que haya y se tenga el máximo apoyo por parte de todos los países y de la OMS para obtenerla, pero hay muchos procesos que hay que seguir para asegurarse de cuando la vacuna salga al mercado sea segura", ha recalcado la dirigente de la OMS.

Ahora bien, respecto a los tratamientos, y después de que el organismo de Naciones Unidas haya retomado las investigaciones con el fármaco hidroxicloroquina, tras suspenderlas temporalmente por un posible



aumento del riesgo de muerte y enfermedades cardiacas, Neira ha asegurado que en unas pocas semanas se sabrá si aporta o no beneficio para los pacientes.

Finalmente, la directora del Departamento de Salud Pública y de Ambiente ha asegurado que los tratamientos que se están utilizando en la actualidad, y que están siendo valorados por al OMS, van a dar "buenas noticias" en un par de semanas.

Fuente: EL ESPAÑOL. Disponible en https://bit.ly/2BfDGiB

VaCyT SiViFinlay IFV INSTITUTO FINLAY DE VACUNAS

Triple golpe al coronavirus: pruebas, vacunas y medicamentos

10 jun. La lucha contra el coronavirus tiene tres frentes: diagnóstico, prevención y tratamiento. Los científicos rusos comentaron los avances del país en cada una de estas áreas en la reunión organizada por el Ministerio de Educación Superior y Ciencia de Rusia, la Academia Rusa de Ciencias y el portal Nauchnaya Rossiya (Rusia Científica).

El diagnóstico implica la introducción de sistemas de pruebas para detectar la presencia del coronavirus SARS-CoV-2 y la prueba de anticuerpos. La profilaxis consiste en desarrollo de diferentes variantes de vacunas contra este virus. El tratamiento incluye la creación de fármacos recombinantes de cuerpos específicos que neutralizan el virus, así como el desarrollo de fármacos antivirales con una actividad anti-SARS-CoV-2.

Diagnóstico avanzado

Un sistema de prueba para la determinación de inmunoenzimas de anti-SARS-CoV-2 fue creado por los científicos rusos del Instituto Engelhardt de Biología Molecular junto con el Instituto de Hematología del Ministerio de Sanidad.

El inmunógeno era la proteína S, que permite al coronavirus SARS -CoV-2 entrar en las células, específica para el SARS-CoV y el SARS-CoV-2. La proteína recombinante fue desarrollada en células de mamíferos.

"Los anticuerpos detectados son anticuerpos neutralizantes, y esto es muy importante", aclaró Vladímir Chejonin, vicepresidente de la Academia Rusa de Ciencias.

Precisó que esta prueba permite detectar la inmunoglobulina G con una sensibilidad del 95% y una especificidad del 98%. La prueba ya se usa en la práctica.

Vacunas prometedoras

Rusia ya ha registrado ocho vacunas candidatas en fase de ensayo clínico que incluyen vacunas vectorizadas, inactivadas, de ADN y ARN.

Además en la etapa preclínica se encuentran 26 vacunas vectorizadas, 43 vacunas subunidades, 10 de ADN, cinco inactivadas y algunas otras.

Asimismo, según el académico, los científicos rusos desarrollan una inusual vacuna contra el coronavirus que se administra como un yogur.

"La vacuna mucosal contra SARS-CoV-2 se está desarrollando en el Instituto de la Medicina Experimental de San Petersburgo", señaló.

Según Chejonin, por métodos de ingeniería genética los científicos insertaron la proteína S, que permite al coronavirus SARS-CoV-2 entrar en las células, en los apéndices pilosos de las bacterias probióticas.

Chejonin precisó que esta vacuna puede ser inyectada como un producto de leche fermentada e informó que están en curso los estudios preclínicos de la vacuna.

Fármacos únicos

Los especialistas de la Academia Rusa de Ciencias han desarrollado un fármaco que permite prevenir la penetración del coronavirus en el cuerpo. Los médicos militares de San Petersburgo ya llevan a cabo ensayos preclínicos.

Al mismo tiempo, los científicos intentan crear las drogas que bloquearían la interacción del nuevo coronavirus con las células epiteliales, mencionó Chejonin.

Estos fármacos han pasado las normas de laboratorio, y ahora se llevan a cabo ensayos preclínicos de esta droga.

Previsión innovadora

En Rusia se desarrolló un modelo descriptivo y predictivo de la pandemia COVID-19 basado en métodos de análisis inteligente de datos.

Se elaboraron modelos de aprendizaje automático sobre la base de los datos obtenidos de la vigilancia de la situación epidemiológica en San Petersburgo, informó.

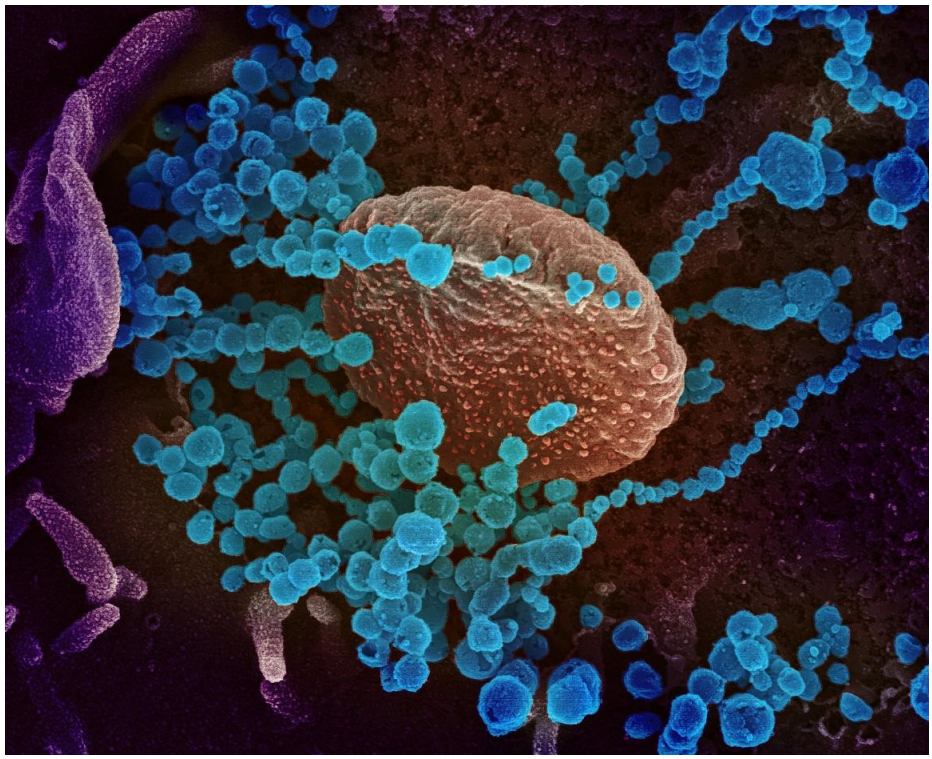
Los científicos pudieron calcular la probabilidad de los picos de la enfermedad, el número de pacientes atendidos y dados de alta. Además, se elaboraron escenarios detallados teniendo en cuenta la intensidad de las medidas de contención, los modelos de mortalidad y la duración del tratamiento del paciente.

"Este es un trabajo muy importante, que permite hoy en día no solo predecir, sino también tomar decisiones sobre la atención médica de los pacientes y la construcción de nuevas instalaciones para su terapia", concluyó Chejonin.

Fuente: SPUTNIK NEWS. Disponible en https://bit.ly/3dEAev4

Eli Lilly comienza la dosificación en el estudio de fase uno del segundo tratamiento potencial con anticuerpos contra la COVID-19

10 jun. Eli Lilly and Company (Indianápolis, Ind, EUA) anunció que su socio Shanghái Junshi Biosciences Co. Ltd. (Shanghái, China) dosificó al primer voluntario sano en un estudio sobre un posible tratamiento de anticuerpos neutralizantes diseñado para combatir la COVID-19.



La medicina en investigación, denominada JS016, es desarrollada conjuntamente por Junshi Biosciences y Lilly. JS016 es un anticuerpo neutralizante monoclonal completamente humano recombinante, que se ha modificado para disminuir la función efectora. JS016 se une específicamente al dominio de unión al receptor de la proteína spike de la superficie del SARS-CoV-2 y puede bloquear efectivamente la unión de los virus al receptor en la superficie de la célula huésped de ACE2.

Junshi Biosciences lidera su desarrollo en la Gran China, mientras que Lilly tiene derechos exclusivos en el resto del mundo y comenzará a dosificar pacientes en un estudio complementario de Fase 1 en los Estados Unidos en los próximos días. Ambos estudios de Fase 1 tienen como objetivo evaluar la seguridad, tolerabilidad, farmacocinética e inmunogenicidad de JS016 en participantes sanos que no han sido diagnosticados con COVID-19. Este es el segundo anticuerpo neutralizante de Lilly en iniciar ensayos clínicos, después de LY-CoV555 que ingresó recientemente en la Fase 1 y actualmente está en prueba en pacientes hospitalizados con COVID-19.

Lilly planea un programa de desarrollo clínico que incluye una cartera de monoterapia y combinaciones de regímenes de anticuerpos (este último a menudo denominado “cócteles” de anticuerpos) para comprender cuál proporciona la mejor eficacia y tolerabilidad en los pacientes. Estos cócteles incluirán JS016, LY-CoV555, así como anticuerpos adicionales actualmente en desarrollo preclínico. JS016 y LY-CoV555 se unen a diferentes epítopes en la proteína spike y, por lo tanto, expanden la diversidad de opciones para lograr la eficacia y evitar la resistencia.

“Hay muchas cosas que aún no sabemos sobre la COVID-19”, dijo Daniel Skovronsky, M.D., Ph.D., director científico de Lilly y presidente de Lilly Research Laboratories. “El mejor camino para aprender más sobre el potencial para neutralizar los anticuerpos, ya sea en monoterapia o en combinación, es a través de ensayos aleatorios cuidadosamente controlados. Esperamos los resultados de dichos ensayos en los próximos meses”.

Fuente: Lab Medica. Disponible en https://bit.ly/2Nw0pJQ

Early Data From Coronavirus Vaccine Trials Are Encouraging, But There's Still A Long Way To Go

11 jun. Virologist Dave Wessner explains what we know about two promising coronavirus vaccines so far - and how much more we still need to know before they come onto the market.

In May, biotechnology company Moderna described positive preliminary results from a Phase I trial of its potential vaccine (mRNA-1273) for the Covid-19 virus. Just days later, researchers from CanSino Biologics published data about its own potential vaccine (Ad5-nCoV). In both cases, the news was met with great initial fanfare. However, although the news is encouraging, it doesn't mean that an effective vaccine will be available anytime soon. Here are the answers to some of the most pressing questions about the vaccines.

Do these two vaccines work the same?

No. As the name indicates, mRNA-1273 is an mRNA-based therapeutic. A molecule of mRNA encoding the novel coronavirus spike protein is encapsulated in a lipid nanoparticle. Upon injection, the mRNA enters that person's cells and is read by ribosomes, your cell's protein factories, in a similar fashion to reading code in a computer program. Having been "programmed," the ribosomes being making copies of the viral protein.

In contrast, Ad5-nCoV is a recombinant adenovirus-based vaccine. Basically, the gene encoding the SARS-CoV-2 spike protein is added to an adenovirus (one of the types of viruses that cause the common cold) that's been genetically modified so it can't make you sick. Again, following intramuscular injection, the viral spike protein should be produced. In both cases, our immune system should recognize this foreign protein and begin manufacturing antibodies.

Hopefully, antibodies produced against the SARS-CoV-2 spike protein would inhibit the actual virus, if a person became infected, thereby preventing disease. However, as Phase I trials, neither of these studies addressed that crucial point.

What is a Phase I trial?

To address this question, let's look at what a Phase I study is not. Generally, Phase I trials do not examine efficacy. In other words, we won't know from these trials if the vaccines work. That's another question for another trial. Instead, researchers conducting these studies asked three more basic questions. Is the vaccine safe? Do participants develop antibodies to the Covid-19 virus? Can these antibodies inhibit the virus in the laboratory? For both the mRNA-1273 and Ad5-nCoV vaccines, the preliminary answer to all three questions appears to be, "yes."

It should be noted, though, that data from the mRNA-1273 trial have not been released. We have Moderna's press release, but little else. In contrast, data from the Ad5 -nCoV trial have been published. It also should be noted that the most encouraging part of the Moderna report is based on an early analysis of just eight "sentinel" participants. The trial has not yet been completed and a final analysis is not available.

What do we know about the clinical trials so far?

The Moderna study initially enrolled 45 participants between the ages of 18 and 55, whereas the CanSino Biologics study included 108 participants between the ages of 18 and 60. In both cases, the participants received one of three different doses of the candidate vaccine. For both vaccines, few of the participants experienced unusual adverse side effects. That's good news. And all of the participants developed antibodies. That's also good news. Perhaps most importantly, both groups reported evidence of participants developing neutralizing antibodies. In the Moderna study, all eight sentinel participants developed neutralizing antibodies. In the CanSino Biologics study, 50% of participants who received the low or intermediate vaccine dose and 75% of participants who received the high dose developed neutralizing antibodies.

What are neutralizing antibodies?

When exposed to a virus, our immune system typically produces a variety of antibodies that recognize different structural determinants, or antigens, associated with that virus. However, only certain antigens are used by the virus to

initiate an infection. Often, antibodies that bind to these determinants inhibit viral replication and, as a result, are called neutralizing antibodies. In contrast, non-neutralizing antibodies may bind to the virus, but do not inhibit its replication.

So, participants in both studies produced neutralizing antibodies. Does that mean that these individuals now are protected from future SARS-CoV-2 infections? No. To detect neutralizing antibodies, the scientists used in vitro assays. SARS-CoV-2 was mixed with serum from a participant or a control solution. The treated virus then was added to mammalian cells grown in the laboratory. The number of cells that became infected was determined. If fewer infected cells were detected when the virus was mixed with serum from a participant, then that participant was deemed to have made neutralizing antibodies.

But what happens in the lab does not necessarily mirror what happens in the body.

Although the identification of neutralizing antibodies is encouraging, questions remain. Do these same antibodies offer protection? How long-lasting is this protection? Will antibodies elicited by this vaccine recognize related coronaviruses or mutants of this virus that may emerge? We know from our long history of trying to develop an HIV vaccine that the road can be bumpy. And a vaccine against SARS-CoV-2 may present additional challenges.

Animals given a candidate vaccine for the closely-related SARS virus exhibited a severe immunopathology after being exposed to the virus. In other words, rather than being protected by the vaccines, the animals' immune systems went into overdrive, making them sicker than they might have been otherwise. Before a vaccine for the Covid-19 virus becomes available, subsequent Phase II and Phase III trials will be needed to measure how well the vaccine works, to shed light on these important safety questions, and to identify any unforeseen challenges.

For now, the news is encouraging, but still preliminary.

Fuente: Forbes. Disponible en https://bit.ly/2BalCXj

Can old vaccines from science's medicine cabinet ward off coronavirus?

11 jun. Researchers think tuberculosis and polio vaccines could rev up the body's innate immune system against a new pathogen.

The old vaccines are oddities among the cutting-edge and targeted technologies being developed to combat the novel coronavirus. New vaccines aim to teach the body's immune system to recognize and destroy the coronavirus, but scientists are only now beginning to test them in people. Vaccines developed against TB and polio have already been used in millions of people and could offer a low-risk way to rev up the body's first line of defense — the innate immune system — against a broad array of pathogens, including the coronavirus.

"This is the only vaccine in the world that can be given to combat covid-19 right now," said Jeffrey D. Cirillo, a professor of microbial pathogenesis and immunology at Texas A&M Health Science Center, who is leading a trial of the tuberculosis vaccine, called bacillus Calmette-Guérin and known by the shorthand BCG. The BCG vaccine, Cirillo noted, is already approved by the Food and Drug Administration and has a lengthy record of being used safely.

Scientists are betting on an underappreciated facet of the body's immune system. Vaccines are designed to teach it to develop a memory of a particular pathogen. But over the years, vaccines that use live, weakened pathogens have been shown to have potent off-target effects, activating other components of the immune response to beat back other infections, including respiratory diseases.

The idea isn't necessarily that those vaccines could altogether prevent covid-19, the disease caused by the novel coronavirus, but that they might lessen the severity of disease and prepare the

innate immune system to fight off the virus for a short period of time.

Research comparing rates of coronavirus infections in countries that widely use the tuberculosis vaccine against those that do not initially drew attention to the idea that the inoculation could offer protection, spurring ongoing trials in the United States, the Netherlands and Australia.

A group of prominent researchers working to raise money to test the oral polio vaccine in 11,000 people described their ambitions in a paper published Thursday in the journal Science.

If shown effective, those vaccines could potentially provide protection against the second wave of coronavirus, which is likely to crest before a covid-specific vaccine is widely available.

Azra Raza, a professor of medicine at Columbia University Medical Center, said BCG can improve people's ability to fight off other pathogens, even for patients who are given the vaccine for another approved use, against bladder cancer.

Fuente: The Washington Post. Disponible en https://wapo.st/3dJPQxg

Surfacen, producto cubano eficaz en el tratamiento de adultos con COVID-19

11 jun. El surfacen, producto cubano para tratar el síndrome de dificultad respiratoria, ha sido utilizado, de manera satisfactoria, en el protocolo cubano a pacientes adultos con la COVID-19 en estado crítico o grave.

Nivian Montes de Oca Martínez, directora general del Centro Nacional de Sanidad Agropecuaria (Censa), explicó a la Agencia Cubana de Noticias que hoy la institución, gracias a la eficacia del producto en adultos con el nuevo coronavirus, ha aportado a varios foros internacionales de discusión científica artículos sobre sus beneficios, y cuándo y cómo utilizarlo.

El Surfacen se ha suministrado a pacientes intubados en la Unidad de Cuidados Intensivos, pero de manera muy temprana, lo que constituye un resultado significativo de la ciencia cubana, explicó la directiva.

Nunca un producto es el responsable máximo de la evolución positiva de los ingresados, sino

que la combinación del arsenal de medicamentos, la asistencia médica, así como los protocolos de manejo han arrojado estos buenos resultados, aclaró Montes de Oca Martínez.

Para obtener este surfactante se precisa de cerdos pequeños que son criados con una tecnología específica y diferenciados de aquellos que son para la producción de carne para el consumo de la población, pues solo deben alcanzar los 25 kilogramos de peso, refirió Odalys Uffo Reinosa, subdirectora general de Internacionalización y Gestión Empresarial.

Estos animales son sacrificados y de sus pulmones se realiza un lavado, lo que constituye la materia prima fundamental para la elaboración del surfacen, un producto, que al ser ciento por ciento natural presenta la desventaja de que disminuye la rapidez con que se pueden obtener las dosis.

Las producciones de surfacen no recaen solo sobre el Censa, por ejemplo, intervienen el Ministerio de Agricultura, con unidades que son donantes de cerdos, y el

Centro de Biopreparados en la parte final del proceso: formulación y envasado de productos, una industria con altos estándares de calidad.

Al Censa le corresponde la obtención del instituto farmacéutico activo que son los lavados pulmonares con las condiciones necesarias como la concentración adecuada; además es labor del centro la comercialización de los lotes, destacó Uffo Reinosa.

El surfacen está registrado en el país desde 1995 y es aplicado principalmente en las terapias intensivas de los hospitales a pacientes en edad pediátrica, a niños con síndromes de dificultad respiratoria y a neonatos con bajo peso; este año el Ministerio de Salud Pública tiene una demanda mínima de siete mil dosis.

Sin embargo, hasta el año pasado se presentaron dificultades con las materias primas fundamentales que se precisan para realizar los lavados pulmonares, situación que con el apoyo del Minsap y de BioCubaFarma ha tenido solución.

Al ser este un fármaco de gran interés para el país y de producción nacional, lo que garantiza soberanía tecnológica, se logró importar, a través de un sistema diferenciado, la materia prima suficiente para asegurar la elaboración de las dosis en el 2020.

Las producciones de surfacen deben mantenerse, e incluso en un futuro ampliarse puesto que se trabaja para su exportación y se conoce que, en su formulación actual, puede ser un transportador para que otras moléculas puedan llegar al pulmón y tratar otras afecciones.

Se evalúa, además, su eficacia para el asma bronquial y otras enfermedades que se producen en el sistema respiratorio, por lo que es necesario pensar con más fuerza en el encadenamiento productivo, sobre todo en la transferencia de tecnologías tan complicadas como la animal, señaló Montes de Oca Martínez.

Fuente: tv avileña. Disponible en https://bit.ly/2Zf6nEs

Sinovac and Butantan Join Efforts to Advance the Clinical Development of An Inactivated Vaccine for COVID-19 to Phase III

11 jun. Sinovac Biotech Ltd., ("Sinovac" or the "Company") (NASDAQ: SVA), a leading provider of biopharmaceutical products in China, and Instituto Butantan, a leading Brazilian producer of immunobiologic products, today announced the signing of a clinical development collaboration agreement to advance the clinical trials of CoronaVac, Sinovac's inactivated vaccine candidate against COVID -19 to Phase III.

Sinovac has made significant progress in the development of CoronaVac. Promising preclinical results regarding CoronaVac were recently published in the peer-reviewed academic journal Science in an article stating that the vaccine candidate is safe and provides protection to rhesus macaques (monkeys) through an animal challenge study. Sinovac has received approval from China's National Medical Products Administration (NMPA) to conduct Phase I/II human clinical trials in China to determine the vaccine candidate's safety, tolerance, dosage and immunization schedule. In addition, Sinovac is constructing a commercial vaccine production plant in China that is expected to manufacture up to 100 million doses of CoronaVac annually.

Through this collaboration, Instituto Butantan will sponsor Phase III clinical trials in Brazil. This is the first in a series of agreements expected to be completed between the parties to establish extensive collaboration that includes technology licensing, market authorization and commercialization of CoronaVac. In this way, Instituto Butantan can ensure that the Brazilian population has access to this vaccine.

Dr. Dimas Covas, Director of Instituto Butantan commented, "This pandemic is having a tragic impact worldwide and this distinguished alliance with Sinovac to conduct the last phase of the clinical trials will bring hope to have a vaccine in the short term. Butantan expects to support not only on the

clinical development, but also commercialization and manufacturing activities of CoronaVac in Brazil."

Dr. Ricardo Palacios, Clinical Research Medical Director of Instituto Butantan added, "Sinovac's CoronaVac is based on a well-known, reliable technology suited to being incorporated into existing public health immunization programs in Brazil. Current epidemiology in Brazil and the experience of Butantan in clinical development will complement Sinovac's efforts allowing accelerated progress toward development of a safe and effective immunization against COVID-19."

Mr. Weidong Yin, Chairman, President and CEO of Sinovac, commented, "We are proud to take part in the fight against COVID-19, and we look forward to working with Instituto Butantan to help the people of Brazil. Through this partnership, Sinovac will be able to further the unprecedented speed of developing CoronaVac without compromising our high safety standards and procedures. We also welcome this opportunity to further our commitment to developing vaccines for global use and to our mission of supplying vaccines to eliminate human diseases."

Fuente: DAILY JOURNAL. Disponible en https://bit.ly/387EMcl

Científicos de Florida descubren que mutación hace más eficaz al SARS-CoV-2

13 jun. Un equipo del Instituto de Investigación Scripps de Florida ha descubierto que una leve mutación genética en el coronavirus SARS-CoV-2 incrementa de manera significativa su capacidad para infectar las células, según un comunicado de la institución.

La viróloga Hyeryun Choe, autora principal del estudio, dijo que pudieron determinar en los sistemas de cultivo celular que "los virus con esa mutación son mucho más contagiosos que los que no la tienen".

Lo que hace la mutación D614G es incrementar hasta 4 ó 5 veces el número o la densidad de "espigas" funcionales existentes en la superficie viral y a la vez hacerlas más flexibles.

Las espigas, que le dan al virus su aspecto de corona, son precisamente las que le hacen capaz de infectar las células, apuntando a los receptores celulares ACE2.

"Nuestros datos son muy claros, el virus se hace mucho más estable con la mutación", dijo Choe.

Según el comunicado del Instituto de Investigación Scripps, que tiene sede en Jupiter (sureste de Florida), la variante del SARS-CoV-2 que circuló en los primeros brotes no tenía la mutación D614G, que es ahora la variante dominante en gran parte del mundo.

Según Michael Farzan, coautor de la investigación y copresidente del Departamento de Inmunología y Microbiología de Scripps, ninguna de las secuencias del SARS-CoV-2 depositadas en la base de datos GenBank tenía la mutación.

En marzo ya aparecía en una de cada 4 muestras y en mayo en el 70 % de las muestras, señaló.

Choe y Farzan, que realizaron su investigación con virus inocuos diseñados para producir proteínas claves del coronavirus, advierten que se necesitan estudios epidemiológicos adicionales para determinar si lo que ellos han comprobado sobre una mayor efectividad para contagiar las células a causa de la mutación sucede también en "el mundo real".

Ambos científicos han estudiado los coronavirus desde hace casi 20 años, desde que se registró el primer estallido de SARS, y en 2003 fueron los primeros en descubrir que el SARS apuntaba a los receptores ACE2 de las células, como hace el SARS-CoV-2.

Además de Choe y Farzan, también trabajaron en esta investigación respaldada por el Centro Nacional de Salud, los científicos Lizhou Zhang, Cody Jackson, Huihui Mou, Amrita Ojha, Erumbi Rangarajan y Tina Izard, todos ellos del Instituto Scripps.

Fuente: Listín Diario. Disponible en https://bit.ly/2BRwxEX

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358 Resultados

1. A compendium answering 150 questions on COVID-19 and SARS-CoV-2.
Riggioni C, Comberiati P, Giovannini M, Agache I, Akdis M, Alves-Correia M, Antó JM, Arcolaci A, Kursat Azkur A, Azkur D, Beken B, Boccabella C, Bousquet J, Breiteneder H, Carvalho D, De Las Vecillas L, Diamant Z, Eguiluz-Gracia I, Eiwegger T, Eyerich S, Fokkens W, Gao YD, Hannachi F, Johnston SL, Jutel M, Karavelia A, Klimek L, Moya B, Nadeau K, O'Hehir R, O'Mahony L, Pfaar O, Sanak M, Schwarze J, Sokolowska M, Torres MJ, van de Veen W, van Zelm MC, Wang Y, Zhang L, Jiménez-Saiz R, Akdis CA. Allergy. 2020 Jun 14. doi: 10.1111/all.14449. Online ahead of print.
PMID: 32535955

2. Telbivudine.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000804

3. Entecavir.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000803

4. Demystifying BCG **Vaccine** and COVID-19 Relationship.
Kumar J, Meena J. Indian Pediatr. 2020 Jun 15;57(6):588-589. Epub 2020 Apr 30.
PMID: 32358227

5. Lamivudine.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000596

6. Emtricitabine.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000608

7. Individualizing risk prediction for positive COVID-19 testing: results from 11,672 patients.

Jehi L, Ji X, Milinovich A, Erzurum S, Rubin B, Gordon S, Young J, Kattan MW. Chest. 2020 Jun 10:S0012-3692(20)31654-8. doi: 10.1016/j.chest.2020.05.580. Online ahead of print.
PMID: 32533957

8. Tenofovir.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000609

9. Rubella **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000156

10. Adefovir.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000802

11. Diphtheria-Tetanus-Pertussis Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 29999632

12. Measles-Mumps-Rubella-Varicella **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000747

13. The future of **vaccine** development.
Koff WC, Schenkelberg T. Vaccine. 2020 Jun 9;38(28):4485-4486. doi: 10.1016/j.vaccine.2019.07.101. Epub 2019 Aug 20.
PMID: 31443989

14. Yellow Fever **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000198

15. Early Impact of 13-Valent Pneumococcal Conjugate **Vaccine** Use on Invasive Pneumococcal Disease Among Adults With and Without Underlying Medical Conditions-United States.

Ahmed SS, Pondo T, Xing W, McGee L, Farley M, Schaffner W, Thomas A, Reingold A, Harrison LH, Lynfield R, Rowlands J, Bennett N, Petit S, Barnes M, Smelser C, Beall B, Whitney CG, Pilishvili T. Clin Infect Dis. 2020 Jun 10;70(12):2484-2492. doi: 10.1093/cid/ciz739.
PMID: 31402387

16. A noncompeting pair of human neutralizing antibodies block COVID-19 virus binding to its receptor ACE2.
Wu Y, Wang F, Shen C, Peng W, Li D, Zhao C, Li Z, Li S, Bi Y, Yang Y, Gong Y, Xiao H, Fan Z, Tan S, Wu G, Tan W, Lu X, Fan C, Wang Q, Liu Y, Zhang C, Qi J, Gao GF, Gao F, Liu L. Science. 2020 Jun 12;368(6496):1274-1278. doi: 10.1126/science.abc2241. Epub 2020 May 13.
PMID: 32404477

17. Smallpox **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000158

18. Influenza Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000049

19. BCG **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000153

20. Anthrax **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000064

21. Human Papillomavirus Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000765

22. Adenovirus Type 4 and Type 7 **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.

PMID: 30000974

23. Varicella **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000193

24. Rabies **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–. PMID: 30000149

25. Cholera **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000632

26. Typhoid **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000191

27. Causes and Clinical Features of Childhood Encephalitis: A Multicenter, Prospective Cohort Study.
Britton PN, Dale RC, Blyth CC, Clark JE, Crawford N, Marshall H, Elliott EJ, Macartney K, Booy R, Jones CA. Clin Infect Dis. 2020 Jun 10;70(12):2517-2526. doi: 10.1093/cid/ciz685.
PMID: 31549170

28. H_2S as a potential defence against COVID-19?
Yang G. Am J Physiol Cell Physiol. 2020 Jun 9. doi: 10.1152/ajpcell.00187.2020. Online ahead of print. PMID: 32515982

29. Vaccination strategies to combat novel corona virus SARS-CoV-2.
Pandey SC, Pande V, Sati D, Upreti S, Samant M. Life Sci. 2020 Jun 12;256:117956. doi: 10.1016/j.lfs.2020.117956. Online ahead of print.
PMID: 32535078

30. Poliovirus Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000133

31. Safety, tolerability, and immunogenicity of a recombinant adenovirus type-5 vectored COVID-19 vaccine: a dose-escalation, open-label, non-randomised, first-in-human trial.

Zhu FC, Li YH, Guan XH, Hou LH, Wang WJ, Li JX, Wu SP, Wang BS, Wang Z, Wang L, Jia SY, Jiang HD, Wang L, Jiang T, Hu Y, Gou JB, Xu SB, Xu JJ, Wang XW, Wang W, Chen W. Lancet. 2020 Jun 13;395(10240):1845-1854. doi: 10.1016/S0140-6736(20)31208-3. Epub 2020 May 22.
PMID: 32450106

32. Early experience with convalescent plasma as immunotherapy for COVID-19 in China: Knowns and unknowns.
Chen B, Xia R. Vox Sang. 2020 Jun 9:10.1111/vox.12968. doi: 10.1111/vox.12968. Online ahead of print.
PMID: 32516839

33. Measles-Mumps-Rubella Vaccine.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000093

34. Development and serology based efficacy assessment of a trivalent foot-and-mouth disease vaccine.
Al Amin M, Ali MR, Islam MR, Alam ASMRU, Shill DK, Rahman MS, Siddique MA, Sultana M, Hossain MA. Vaccine. 2020 Jun 10:S0264-410X(20)30734-9. doi: 10.1016/j.vaccine.2020.05.079. Online ahead of print.
PMID: 32535015

35. Immunogenicity, safety and reactogenicity of a Phase II trial of Vi-DT typhoid conjugate vaccine in healthy Filipino infants and toddlers: A preliminary report.
Capeding MR, Alberto E, Sil A, Saluja T, Teshome S, Kim DR, Park JY, Yang JS, Chinaworapong S, Park J, Jo SK, Chon Y, Yang SY, Ham DS, Ryu JH, Lynch J, Kim JH, Kim H, Excler JL, Wartel TA, Sahastrabuddhe S. Vaccine. 2020 Jun 9;38(28):4476-4483. doi: 10.1016/j.vaccine.2019.09.074. Epub 2019 Oct 1.
PMID: 31585725

36. Hepatitis A Vaccine.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 29999991

37. Considering how biological sex impacts immune responses and COVID-19 outcomes.
Scully EP, Haverfield J, Ursin RL, Tannenbaum C, Klein SL. Nat Rev Immunol. 2020 Jun 11:1-6. doi: 10.1038/s41577-020-0348-8. Online ahead of print.
PMID: 32528136

38. Review on the clinical pharmacology of hydroxychloroquine sulfate for the treatment of COVID-19.
Cui C, Tu S, En VSJ, Li X, Yao X, Li H, Liu D. Curr Drug Metab. 2020 Jun 10. doi: 10.2174/1389200221666200610172929. Online ahead of print.
PMID: 32520683

39. Toxin A-Predominant Pathogenic Clostridioides difficile: A Novel Clinical Phenotype.

Lin Q, Pollock NR, Banz A, Lantz A, Xu H, Gu L, Gerding DN, Garey KW, Gonzales-Luna AJ, Zhao M, Song L, Duffy DC, Kelly CP, Chen X. Clin Infect Dis. 2020 Jun 10;70(12):2628-2633. doi: 10.1093/cid/ciz727.
PMID: 31400280

40. The role of extracellular vesicles in COVID-19 virus infection.
Hassanpour M, Rezaie J, Nouri M, Panahi Y. Infect Genet Evol. 2020 Jun 13;85:104422. doi: 10.1016/j.meegid.2020.104422. Online ahead of print.
PMID: 32544615

41. Pneumococcal Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000132

42. Meningococcal Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000073

43. Live-Attenuated Respiratory Syncytial Virus **Vaccine** With M2-2 Deletion and With Small Hydrophobic Noncoding Region Is Highly Immunogenic in Children.
McFarland EJ, Karron RA, Muresan P, Cunningham CK, Perlowski C, Libous J, Oliva J, Jean-Philippe P, Moye J, Schappell E, Barr E, Rexroad V, Fearn L, Cielo M, Wiznia A, Deville JG, Yang L, Luongo C, Collins PL, Buchholz UJ. J Infect Dis. 2020 Jun 11;221(12):2050-2059. doi: 10.1093/infdis/jiaa049.
PMID: 32006006

44. Barriers and facilitators to HPV **vaccine** uptake among US rural populations: a scoping review.
Peterson CE, Silva A, Holt HK, Balanean A, Goben AH, Dykens JA. Cancer Causes Control. 2020 Jun 14. doi: 10.1007/s10552-020-01323-y. Online ahead of print.
PMID: 32537702

45. Ebola virus glycoprotein stimulates IL-18-dependent natural killer cell responses.
Wagstaffe HR, Clutterbuck EA, Bockstal V, Stoop JN, Luhn K, Douoguih M, Shukarev G, Snape MD, Pollard AJ, Riley EM, Goodier MR. J Clin Invest. 2020 Jun 15:132438. doi: 10.1172/JCI132438. Online ahead of print.
PMID: 32315287
Free article.

46. Zoster **Vaccine** Live.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000567

47. Exosomes: From garbage bins to translational medicine.
Liu Y, Wang Y, Lv Q, Li X. Int J Pharm. 2020 Jun 15;583:119333. doi: 10.1016/j.ijpharm.2020.119333. Epub 2020 Apr 26.
PMID: 32348800

48. Costing oral cholera **vaccine** delivery using a generic oral cholera **vaccine** delivery planning and costing tool (CholTool).
Morgan W, Levin A, Hutubessy RC, Mogasale V. Hum Vaccin Immunother. 2020 Jun 12:1-8. doi: 10.1080/21645515.2020.1747930. Online ahead of print.
PMID: 32530361

49. Natural Products as Potential Leads Against Coronaviruses: Could They be Encouraging Structural Models Against SARS-CoV-2?
Orhan IE, Senol Deniz FS. Nat Prod Bioprospect. 2020 Jun 11:1-16. doi: 10.1007/s13659-020-00250-4. Online ahead of print.
PMID: 32529545

50. Opportunities for an atherosclerosis **vaccine**: From mice to humans.
Roy P, Ali AJ, Kobiyama K, Ghosheh Y, Ley K. Vaccine. 2020 Jun 9;38(28):4495-4506. doi: 10.1016/j.vaccine.2019.12.039. Epub 2020 Jan 19.
PMID: 31964554

51. Patchless administration of canine influenza vaccine on dog's ear using insertion-responsive microneedles (IRMN) without removal of hair and its in vivo efficacy evaluation.
Choi IJ, Na W, Kang A, Ahn MH, Yeom M, Kim HO, Lim JW, Choi SO, Baek SK, Song D, Park JH. Eur J Pharm Biopharm. 2020 Jun 13;153:150-7. doi: 10.1016/j.ejpb.2020.06.006. Online ahead of print.
PMID: 32544527

52. Hepatitis B Vaccine.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000002

53. Development and Challenges in Animal Tuberculosis Vaccination.
Balseiro A, Thomas J, Gortázar C, Risalde MA. Pathogens. 2020 Jun 15;9(6):E472. doi: 10.3390/pathogens9060472.
PMID: 32549360

54. Malaria vaccines since 2000: progress, priorities, products.
Duffy PE, Patrick Gorres J. NPJ Vaccines. 2020 Jun 9;5:48. doi: 10.1038/s41541-020-0196-3. eCollection 2020.
PMID: 32566259

55. [High-dose trivalent influenza vaccine. Efficacy and effectiveness].
Gil de Miguel A, Redondo Marguello E, Díez Domingo J, Ortiz de Lejarazu R, Martinón Torres F. Rev Esp Quimioter. 2020 Jun 9:gil09jun2020. doi: 10.37201/req/043.2020. Online ahead of print.
PMID: 32515178

56. Overview of lethal human coronaviruses.
Chen B, Tian EK, He B, Tian L, Han R, Wang S, Xiang Q, Zhang S, El Arnaout T, Cheng W. Version 2. Signal Transduct Target Ther. 2020 Jun 10;5(1):89. doi: 10.1038/s41392-020-0190-2.
PMID: 32533062

57. Safety and immunogenicity of a recombinant vaccine against Trypanosoma cruzi in Rhesus macaques.
Dumonteil E, Herrera C, Tu W, Goff K, Fahlberg M, Haupt E, Kaur A, Marx PA, Ortega-Lopez J, Hotez PJ, Bottazzi ME. Vaccine. 2020 Jun 15;38(29):4584-4591. doi: 10.1016/j.vaccine.2020.05.010. Epub 2020 May 13.
PMID: 32417142

58. Tracking the immune response with single-cell genomics.
Yost KE, Chang HY, Satpathy AT. Vaccine. 2020 Jun 9;38(28):4487-4490. doi: 10.1016/j.vaccine.2019.11.035. Epub 2019 Dec 16.
PMID: 31859202

59. Recent progress of graphene oxide as a potential vaccine carrier and adjuvant.
Cao W, He L, Cao W, Huang X, Jia K, Dai J. Acta Biomater. 2020 Jun 10:S1742-7061(20)30330-5. doi: 10.1016/j.actbio.2020.06.009. Online ahead of print.
PMID: 32531395

60. Haemophilus Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 29999947

61. Recent progress of graphene oxide as a potential **vaccine** carrier and adjuvant.
Cao W, He L, Cao W, Huang X, Jia K, Dai J. Acta Biomater. 2020 Jun 10:S1742-7061(20)30330-5. doi: 10.1016/j.actbio.2020.06.009. Online ahead of print.
PMID: 32531395

62. Haemophilus Vaccines.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 29999947

63. Immune Responses to SARS-CoV, MERS-CoV and SARS-CoV-2.
İnandıklıoğlu N, Akkoc T. Adv Exp Med Biol. 2020 Jun 9. doi: 10.1007/5584_2020_549. Online ahead of print.
PMID: 32514817

64. Possible therapeutic agents for COVID-19: a comprehensive review.
Elhusseiny KM, Abd-Elshahed Abd-Elhay F, Kamel MG. Expert Rev Anti Infect Ther. 2020 Jun 13. doi: 10.1080/14787210.2020.1782742. Online ahead of print.
PMID: 32538209

65. Gonococcal vaccines: Public health value and preferred product characteristics; report of a WHO global stakeholder consultation, January 2019.
Gottlieb SL, Ndowa F, Hook EW 3rd, Deal C, Bachmann L, Abu-Raddad L, Chen XS, Jerse A, Low N, MacLennan CA, Petousis-Harris H, Seib KL, Unemo M, Vincent L, Giersing BK; Gonococcal Vaccine PPC Expert Advisory Group. Vaccine. 2020 Jun 9;38(28):4362-4373. doi: 10.1016/j.vaccine.2020.02.073. Epub 2020 Apr 28.
PMID: 32359875

66. Immune Response to Herpes Simplex Virus Infection and **Vaccine** Development.
Ike AC, Onu CJ, Ononugbo CM, Reward EE, Muo SO. Vaccines (Basel). 2020 Jun 12;8(2):E302. doi: 10.3390/vaccines8020302.
PMID: 32545507

67. Japanese Encephalitis **Vaccine**.
2020 Jun 15. Drugs and Lactation Database (LactMed) [Internet]. Bethesda (MD): National Library of Medicine (US); 2006–.
PMID: 30000055

68. Viral Shedding in Recipients of Live Attenuated Influenza **Vaccine** in the 2016-2017 and 2017-2018 Influenza Seasons in the United Kingdom.
Jackson D, Pitcher M, Hudson C, Andrews N, Southern J, Ellis J, Höschler K, Pebody R, Turner PJ, Miller E, Zambon M. Clin Infect Dis. 2020 Jun 10;70(12):2505-2513. doi: 10.1093/cid/ciz719.
PMID: 31642899

69. Parental Hesitancy About Routine Childhood and Influenza Vaccinations: A National Survey.
Kempe A, Saville AW, Albertin C, Zimet G, Breck A, Helmkamp L, Vangala S, Dickinson LM, Rand C, Humiston S, Szilagyi PG. Pediatrics. 2020 Jun 15:e20193852. doi: 10.1542/peds.2019-3852. Online ahead of print.
PMID: 32540985

70. Long-term Impact of Pneumococcal Conjugate Vaccines on Invasive Disease and Pneumonia Hospitalizations in Indigenous and Non-Indigenous Australians.

Meder KN, Jayasinghe S, Beard F, Dey A, Kirk M, Cook H, Strachan J, Sintchenko V, Smith H, Giele C, Howden B, Krause V, Mcintyre P. Clin Infect Dis. 2020 Jun 10;70(12):2607-2615. doi: 10.1093/cid/ciz731. PMID: 31388670

71. Exploiting Preexisting Immunity to Enhance Oncolytic Cancer Immunotherapy.
Tähtinen S, Feola S, Capasso C, Laustio N, Groeneveldt C, Ylösmäki EO, Ylösmäki L, Martins B, Fusciello M, Medeot M, Tagliamonte M, Chiaro J, Hamdan F, Peltonen K, Ranki T, Buonaguro L, Cerullo V. Cancer Res. 2020 Jun 15;80(12):2575-2585. doi: 10.1158/0008-5472.CAN-19-2062. Epub 2020 Feb 27.
PMID: 32107211

72. The starting line for COVID-19 **vaccine** development.
Lee N, McGeer A. Lancet. 2020 Jun 13;395(10240):1815-1816. doi: 10.1016/S0140-6736(20)31239-3. Epub 2020 May 28.
PMID: 32473680

73. From bad to worse: The representation of the HPV **vaccine** Facebook.
Luisi MLR. Vaccine. 2020 Jun 15;38(29):4564-4573. doi: 10.1016/j.vaccine.2020.05.016. Epub 2020 May 13.
PMID: 32417141

74. The contagious nature of a **vaccine** scare: How the introduction of HPV vaccination lifted and eroded MMR vaccination in Denmark.
Gørtz M, Brewer NT, Hansen PR, Ejrnæs M. Vaccine. 2020 Jun 9;38(28):4432-4439. doi: 10.1016/j.vaccine.2020.04.055. Epub 2020 May 15.
PMID: 32418796

75. Metabolic syndrome and COVID-19: An update on the associated comorbidities and proposed therapies.
Costa FF, Rosário WR, Ribeiro Farias AC, de Souza RG, Duarte Gondim RS, Barroso WA. Diabetes Metab Syndr. 2020 Jun 11;14(5):809-814. doi: 10.1016/j.dsx.2020.06.016. Online ahead of print.
PMID: 32540733

76. Overview of Coronavirus Disease 2019 (COVID-19): Treatment Updates and Advances.
Luo YH, Chiu HY, Weng CS, Chen YM. J Chin Med Assoc. 2020 Jun 9. doi: 10.1097/JCMA.0000000000000367. Online ahead of print.
PMID: 32520770

77. An SAMT-247 Microbicide Provides Potent Protection against Intravaginal Simian Immunodeficiency Virus Infection of Rhesus Macaques, whereas an Added **Vaccine** Component Elicits Mixed Outcomes.
Helmold Hait S, Hogge CJ, Rahman MA, Ko EJ, Hunegnaw R, Mushtaq Z, Enyindah-Asonye G, Hoang T, Miller Jenkins LM, Appella E, Appella DH, Robert-Guroff M. J Immunol. 2020 Jun 15;204(12):3315-3328. doi: 10.4049/jimmunol.2000165. Epub 2020 May 11.
PMID: 32393514

78. Chemo-immunotherapy with doxorubicin prodrug and erythrocyte membrane-enveloped polymer nano-**vaccine** enhances antitumor activity.
Bao Y, Hu Q, Wang X, Feng X, He Y, Guo Y, Fu D. Biomed Pharmacother. 2020 Jun 15;129:110377. doi: 10.1016/j.biopha.2020.110377. Online ahead of print.
PMID: 32554247

79. Applying lessons from the Ebola **vaccine** experience for SARS-CoV-2 and other epidemic pathogens.
Wolf J, Bruno S, Eichberg M, Jannat R, Rudo S, VanRheenen S, Coller BA. NPJ Vaccines. 2020 Jun 15;5:51. doi: 10.1038/s41541-020-0204-7. eCollection 2020.
PMID: 32566261

80. Decoding SARS-CoV-2 transmission, evolution and ramification on COVID-19 diagnosis, **vaccine**, and medicine.
Wang R, Hozumi Y, Yin C, Wei G. J Chem Inf Model. 2020 Jun 12. doi: 10.1021/acs.jcim.0c00501. Online ahead of print.
PMID: 32530284

81. Hepatitis E virus infection during pregnancy.
Wu C, Wu X, Xia J. Version 2. Virol J. 2020 Jun 10;17(1):73. doi: 10.1186/s12985-020-01343-9.
PMID: 32522266

82. Adenovector 26 encoded prefusion conformation stabilized RSV-F protein induces long-lasting Th1-biased immunity in neonatal mice.
van der Fits L, Bolder R, Heemskerk-van der Meer M, Drijver J, van Polanen Y, Serroyen J, Langedijk JPM, Schuitemaker H, Saeland E, Zahn R. NPJ Vaccines. 2020 Jun 12;5:49. doi: 10.1038/s41541-020-0200-y. eCollection 2020.
PMID: 32566260

83. Mannose-Modified Chitosan-Nanoparticle-Based *Salmonella* Subunit OralVaccine-Induced Immune Response and Efficacy in a Challenge Trial in Broilers.
Han Y, Renu S, Patil V, Schrock J, Feliciano-Ruiz N, Selvaraj R, Renukaradhya GJ. Vaccines (Basel). 2020 Jun 11;8(2):E299. doi: 10.3390/vaccines8020299.
PMID: 32545295

84. Exploring membrane proteins of Leishmania major to design a new multi-epitope vaccine using immunoinformatics approach.
Rabienia M, Roudbari Z, Ghanbariasad A, Abdollahi A, Mohammadi E, Mortazavidehkordi N, Farjadfar A. Eur J Pharm Sci. 2020 Jun 10;152:105423. doi: 10.1016/j.ejps.2020.105423. Online ahead of print.
PMID: 32534195

85. The legal extension of the role of pharmacists in light of the COVID-19 global pandemic.

Merks P, Jakubowska M, Drelich E, Świeczkowski D, Bogusz J, Bilmin K, Sola KF, May A, Majchrowska A, Koziol M, Pawlikowski J, Jaguszewski M, Vaillancourt R. Res Social Adm Pharm. 2020 Jun 12:S1551-7411(20)30662-8. doi: 10.1016/j.sapharm.2020.05.033. Online ahead of print.
PMID: 32546449

86. A framework for the systematic consideration of ethics, equity, feasibility, and acceptability in vaccine program recommendations.
Ismail SJ, Hardy K, Tunis MC, Young K, Sicard N, Quach C. Vaccine. 2020 Jun 9:S0264-410X(20)30696-4. doi: 10.1016/j.vaccine.2020.05.051. Online ahead of print.
PMID: 32532544

87. Incidence and characteristics of nosocomial influenza in a country with low vaccine coverage.
Paz DL, Pronier C, Bayeh B, Jouneau S, Grolhier C, Le Bot A, Bénézit F, Thibault V, Tattevin P. J Hosp Infect. 2020 Jun 12:S0195-6701(20)30290-5. doi: 10.1016/j.jhin.2020.06.005. Online ahead of print.
PMID: 32540461

88. Covid-19: A Comprehensive Review of a Formidable Foe and the Road Ahead.
Hussain A, Yadav S, Hadda V, Suri TM, Tiwari P, Mittal S, Madan K, Mohan A. Expert Rev Respir Med. 2020 Jun 12. doi: 10.1080/17476348.2020.1782198. Online ahead of print.
PMID: 32529866

89. The importance of effective risk communication and transparency: lessons from the dengue vaccine controversy in the Philippines.
Dayrit MM, Mendoza RU, Valenzuela SA. J Public Health Policy. 2020 Jun 9. doi: 10.1057/s41271-020-00232-3. Online ahead of print.
PMID: 32518285

90. A Veterinary Vaccine Development Process Map to assist in the development of new vaccines.
Francis MJ. Vaccine. 2020 Jun 15;38(29):4512-4515. doi: 10.1016/j.vaccine.2020.05.007. Epub 2020 May 6.
PMID: 32418794

91. The development of ghost vaccines trials.
Batah AM, Ahmad TA. Expert Rev Vaccines. 2020 Jun 15:1-14. doi: 10.1080/14760584.2020.1777862. Online ahead of print.
PMID: 32500816

92. Environmental modifiers of RTS,S/AS01 malaria **vaccine** efficacy in Lilongwe, Malawi.
Bell GJ, Loop MS, Mvalo T, Juliano JJ, Mofolo I, Kamthunzi P, Tegha G, Lievens M, Bailey J, Emch M, Hoffman I. BMC Public Health. 2020 Jun 12;20(1):910. doi: 10.1186/s12889-020-09039-z.
PMID: 32532234

93. 'It takes two to tango': Bridging the gap between country need and **vaccine** product innovation.

Archer RA, Kapoor R, Isaranuwatchai W, Teerawattananon Y, Giersing B, Botwright S, Luttjeboer J, Hutubessy RCW. PLoS One. 2020 Jun 10;15(6):e0233950. doi: 10.1371/journal.pone.0233950. eCollection 2020.
PMID: 32520934

94. Influence of gut microbiota on mucosal IgA antibody response to the polio **vaccine**.
Zhao T, Li J, Fu Y, Ye H, Liu X, Li G, Yang X, Yang J. NPJ Vaccines. 2020 Jun 9;5:47. doi: 10.1038/s41541-020-0194-5. eCollection 2020.
PMID: 32566258

95. Adenovector 26 encoded prefusion conformation stabilized RSV-F protein induces long-lasting Th1-biased immunity in neonatal mice.
van der Fits L, Bolder R, Heemskerk-van der Meer M, Drijver J, van Polanen Y, Serroyen J, Langedijk JPM, Schuitemaker H, Saeland E, Zahn R. NPJ Vaccines. 2020 Jun 12;5:49. doi: 10.1038/s41541-020-0200-y. eCollection 2020.
PMID: 32566260

96. Improving HPV Vaccination Rates: A Stepped-Wedge Randomized Trial.
Perkins RB, Legler A, Jansen E, Bernstein J, Pierre-Joseph N, Eun TJ, Biancarelli DL, Schuch TJ, Leschly K, Fenton ATHR, Adams WG, Clark JA, Drainoni ML, Hanchate A. Pediatrics. 2020 Jun 15:e20192737. doi: 10.1542/peds.2019-2737. Online ahead of print.
PMID: 32540986

97. Comparison of anti-capsular antibody quantity and functionality in children after different primary dose and booster schedules of 13 valent-pneumococcal conjugate **vaccine**.
Kaur R, Pichichero M. Vaccine. 2020 Jun 9;38(28):4423-4431. doi: 10.1016/j.vaccine.2020.04.063. Epub 2020 May 10.
PMID: 32402752

98. Determination of parvovirus antigen in the **vaccine** using time-resolved fluorescence immunoassay.
Chen C, Liang H, Hu B, Ning B, Lai H, He Y, Guo G, Zhong S, Li L. Biotechnol Appl Biochem. 2020 Jun 13. doi: 10.1002/bab.1967. Online ahead of print.
PMID: 32533780

99. A TLR9-adjuvanted **vaccine** formulated into dissolvable microneedle patches or cationic liposomes protects against leishmaniasis after skin or subcutaneous immunization.
Lanza JS, Vucen S, Flynn O, Donadei A, Cojean S, Loiseau PM, Fernandes APSM, Frézard F, Moore AC. Int J Pharm. 2020 Jun 12:119390. doi: 10.1016/j.ijpharm.2020.119390. Online ahead of print.
PMID: 32540349

100. Impact of Reactogenicity After Two Doses of Recombinant Zoster **Vaccine** Upon Physical Functioning and Quality of Life: An Open Phase III Trial in Older Adults.

Schmader KE, Levin MJ, Chen M, Matthews S, Riley ME, Woo W, Hervé C, Grupping K, Schuind AE, Oostvogels L, Curran D. J Gerontol A Biol Sci Med Sci. 2020 Jun 12:glaa127. doi: 10.1093/gerona/glaa127. Online ahead of print.
PMID: 32530462

101. An effective CTL peptide vaccine for Ebola Zaire Based on Survivors' CD8+ targeting of a particular nucleocapsid protein epitope with potential implications for COVID-19 vaccine design.
Herst CV, Burkholz S, Sidney J, Sette A, Harris PE, Massey S, Brasel T, Cunha-Neto E, Rosa DS, Chao WCH, Carback R, Hodge T, Wang L, Ciotlos S, Lloyd P, Rubsamen R. Vaccine. 2020 Jun 9;38(28):4464-4475. doi: 10.1016/j.vaccine.2020.04.034. Epub 2020 Apr 28.
PMID: 32418793

102. Reaction Cycles of Halogen Species in the Immune Defense: Implications for Human Health and Diseases and the Pathology and Treatment of COVID-19.
Lu QB. Cells. 2020 Jun 13;9(6):E1461. doi: 10.3390/cells9061461.
PMID: 32545714

103. Improving Utilization of Vaccine Two-Dimensional (2D) Barcode Scanning Technology Maximizes Accuracy Benefits.
Reed JH, Evanson HV, Cox R, Williams WW, Vallero J, Caughron S, Rodgers L, Greene M, Koeppl P, Gerlach K. J Healthc Qual. 2020 Jun 9. doi: 10.1097/JHQ.0000000000000265. Online ahead of print.
PMID: 32544140

104. Identification of potential inhibitors of SARS-COV-2 endoribonuclease (EndoU) from FDA approved drugs: a drug repurposing approach to find therapeutics for COVID-19.
Chandra A, Gurjar V, Qamar I, Singh N. J Biomol Struct Dyn. 2020 Jun 9:1-11. doi: 10.1080/07391102.2020.1775127. Online ahead of print.
PMID: 32462970

105. Fighting COVID-19.
Campos DMO, Oliveira CBS, Andrade JMA, Oliveira JIN. Braz J Biol. 2020 Jun 10:S1519-69842020005017203. doi: 10.1590/1519-6984.238155. Online ahead of print.
PMID: 32555974

106. Projected Population Benefit of Increased Effectiveness and Coverage of Influenza Vaccination on Influenza Burden in the United States.
Hughes MM, Reed C, Flannery B, Garg S, Singleton JA, Fry AM, Rolfes MA. Clin Infect Dis. 2020 Jun 10;70(12):2496-2502. doi: 10.1093/cid/ciz676.
PMID: 31344229

107. Adaptive Immunity to Dengue Virus: Slippery Slope or Solid Ground for Rational Vaccine Design?

Wilken L, Rimmelzwaan GF. Pathogens. 2020 Jun 15;9(6):E470. doi: 10.3390/pathogens9060470.
PMID: 32549226

108. Safety and Immunogenicity of a Second Dose of an Investigational Maternal Trivalent Group B Streptococcus Vaccine in Nonpregnant Women 4-6 Years After a First Dose: Results From a Phase 2 Trial.
Leroux-Roels G, Bebia Z, Maes C, Aerssens A, De Boever F, Grassano L, Buffi G, Margarit I, Karsten A, Cho S, Slobod K, Corsaro B, Henry O. Clin Infect Dis. 2020 Jun 10;70(12):2570-2579. doi: 10.1093/cid/ciz737.
PMID: 31394574

109. Innate Molecular and Cellular Signature in the Skin Preceding Long-Lasting T Cell Responses after Electroporated DNA Vaccination.
Adam L, Tchitchek N, Todorova B, Rosenbaum P, Joly C, Poux C, Chapon C, Spetz AL, Ustav M, Le Grand R, Martinon F. J Immunol. 2020 Jun 15;204(12):3375-3388. doi: 10.4049/jimmunol.1900517. Epub 2020 May 8.
PMID: 32385135

110. Algorithms and Health Misinformation: A Case Study of Vaccine Books on Amazon.
Shin J, Valente T. J Health Commun. 2020 Jun 14:1-8. doi: 10.1080/10810730.2020.1776423. Online ahead of print.
PMID: 32536257

111. Safety and immunogenicity of a mosquito saliva peptide-based **vaccine**: a randomised, placebo-controlled, double-blind, phase 1 trial.
Manning JE, Oliveira F, Coutinho-Abreu IV, Herbert S, Meneses C, Kamhawi S, Baus HA, Han A, Czajkowski L, Rosas LA, Cervantes-Medina A, Athota R, Reed S, Mateja A, Hunsberger S, James E, Pleguezuelos O, Stoloff G, Valenzuela JG, Memoli MJ. Lancet. 2020 Jun 11:S0140-6736(20)31048-5. doi: 10.1016/S0140-6736(20)31048-5. Online ahead of print.
PMID: 32534628

112. Cost-effectiveness of pneumococcal vaccination for elderly in Sweden.
Wolff E, Storsaeter J, Örtqvist Å, Naucler P, Larsson S, Lepp T, Roth A. Vaccine. 2020 Jun 11:S0264-410X(20)30727-1. doi: 10.1016/j.vaccine.2020.05.072. Online ahead of print.
PMID: 32536548

113. Epidemiology of Epstein-Barr virus infection and infectious mononucleosis in the United Kingdom.
Kuri A, Jacobs BM, Vickaryous N, Pakpoor J, Middeldorp J, Giovannoni G, Dobson R. BMC Public Health. 2020 Jun 12;20(1):912. doi: 10.1186/s12889-020-09049-x.
PMID: 32532296

114. The effects of regional climatic condition on the spread of COVID-19 at global scale.

Iqbal MM, Abid I, Hussain S, Shahzad N, Waqas MS, Iqbal MJ. Sci Total Environ. 2020 Jun 9;739:140101. doi: 10.1016/j.scitotenv.2020.140101. Online ahead of print.
PMID: 32531684

115. What influenza vaccination programmes are preferred by healthcare personnel? A discrete choice experiment.
Liao Q, Ng TWY, Cowling BJ. Vaccine. 2020 Jun 15;38(29):4557-4563. doi: 10.1016/j.vaccine.2020.05.012. Epub 2020 May 7.
PMID: 32414654

116. The Drug Shortage Era: A Scoping Review of the Literature 2001-2019.
Tucker EL, Cao Y, Fox ER, Sweet BV. Clin Pharmacol Ther. 2020 Jun 10. doi: 10.1002/cpt.1934. Online ahead of print.
PMID: 32521038

117. The Dual Epidemics of COVID-19 and Influenza: **Vaccine** Acceptance, Coverage, and Mandates.
Gostin LO, Salmon DA. JAMA. 2020 Jun 11. doi: 10.1001/jama.2020.10802. Online ahead of print.
PMID: 32525519

118. Two decades of **vaccine** innovations for global public good: Report of the Developing Countries' **Vaccine** Manufacturers Network 20th meeting, 21-23 october 2019, Rio de Janeiro, Brazil.
Pagliusi S, Dennehy M, Homma A. Vaccine. 2020 Jun 10:S0264-410X(20)30707-6. doi: 10.1016/j.vaccine.2020.05.062. Online ahead of print.
PMID: 32535016

119. Japanese encephalitis vaccination in pregnancy among U.S. active duty military women.
Khodr ZG, Hall C, Chang RN, Bukowinski AT, Gumbs GR, Conlin AMS. Vaccine. 2020 Jun 15;38(29):4529-4535. doi: 10.1016/j.vaccine.2020.05.023. Epub 2020 May 16.
PMID: 32423771

120. Policy implications of the potential use of a novel **vaccine** to prevent infection with Schistosoma mansoni with or without mass drug administration.
Kura K, Collyer BS, Toor J, Truscott JE, Hollingsworth TD, Keeling MJ, Anderson RM. Vaccine. 2020 Jun 9;38(28):4379-4386. doi: 10.1016/j.vaccine.2020.04.078. Epub 2020 May 14.
PMID: 32418795

121. Effectiveness of quadrivalent influenza **vaccine** in pregnant women and infants, 2018-2019.
Maltezou HC, Asimakopoulos G, Stavrou S, Daskalakis G, Koutroumanis P, Sindos M, Theodora M, Katerelos P, Kostis E, Gavrili S, Kossyvakis A, Theodoridou M, Mentis A, Drakakis P, Loutradis D, Rodolakis A. Vaccine. 2020 Jun 15;38(29):4625-4631. doi: 10.1016/j.vaccine.2020.04.060. Epub 2020 May 8.
PMID: 32402751

122. Key Positions of HIV-1 Env and Signatures of **Vaccine** Efficacy Show Gradual Reduction of Population Founder Effects at the Clade and Regional Levels.
Han C, Johnson J, Dong R, Kandula R, Kort A, Wong M, Yang T, Breheny PJ, Brown GD, Haim H. mBio. 2020 Jun 9;11(3):e00126-20. doi: 10.1128/mBio.00126-20.
PMID: 32518179

123. Potent neutralizing antibodies from COVID-19 patients define multiple targets of vulnerability.
Brouwer PJM, Caniels TG, van der Straten K, Snitselaar JL, Aldon Y, Bangaru S, Torres JL, Okba NMA, Claireaux M, Kerster G, Bentlage AEH, van Haaren MM, Guerra D, Burger JA, Schermer EE, Verheul KD, van der Velde N, van der Kooi A, van Schooten J, van Breemen MJ, Bijl TPL, Sliepen K, Aartse A, Derking R, Bontjer I, Kootstra NA, Wiersinga WJ, Vidarsson G, Haagmans BL, Ward AB, de Bree GJ, Sanders RW, van Gils MJ. Science. 2020 Jun 15:eabc5902. doi: 10.1126/science.abc5902. Online ahead of print.
PMID: 32540902

124. Foreign Bodies in the Skin: Evaluation and Management.
Rupert J, Honeycutt JD, Odom MR. Am Fam Physician. 2020 Jun 15;101(12):740-747.
PMID: 32538598

125. Spring in London with Covid-19: a personal view.
Brahams D. Med Leg J. 2020 Jun 9:25817220923692. doi: 10.1177/0025817220923692. Online ahead of print.
PMID: 32515258

126. SAEFVIC: Surveillance of adverse events following immunisation (AEFI) in Victoria, Australia, 2018.
Clothier HJ, Lawrie J, Lewis G, Russell M, Crawford NW, Buttery JP. Commun Dis Intell (2018). 2020 Jun 15;44. doi: 10.33321/cdi.2020.44.46.
PMID: 32536336

127. Repurposing cefuroxime for treatment of COVID-19: a scoping review of *in silico* studies.
Durojaiye AB, Clarke JD, Stamatiades GA, Wang C. J Biomol Struct Dyn. 2020 Jun 13:1-8. doi: 10.1080/07391102.2020.1777904. Online ahead of print.
PMID: 32538276

128. Sex differences in shigellosis incidence rates: analysis of national data from nine countries using meta-analytic method.
Peer V, Schwartz N, Green MS. Eur J Public Health. 2020 Jun 14:ckaa087. doi: 10.1093/eurpub/ckaa087. Online ahead of print.
PMID: 32535632

129. Influenza vaccination as a novel means of preventing coronary heart disease: Effectiveness in older adults.
Aidoud A, Marlet J, Angoulvant D, Debacq C, Gavazzi G, Fougère B. Vaccine. 2020 Jun 11:S0264-410X(20)30725-8. doi: 10.1016/j.vaccine.2020.05.070. Online ahead of print.
PMID: 32536551

130. Close the gap for routine mumps vaccination in Japan.
Kitano T. Hum Vaccin Immunother. 2020 Jun 12:1-6. doi: 10.1080/21645515.2020.1765619. Online ahead of print.
PMID: 32530735

131. Immunogenicity and safety of a quadrivalent meningococcal tetanus toxoid-conjugate vaccine (MenACYW-TT) in ≥56-year-olds: A Phase III randomized study.
Esteves-Jaramillo A, Koehler T, Jeanfreau R, Neveu D, Jordanov E, Singh Dhingra M. Vaccine. 2020 Jun 9;38(28):4405-4411. doi: 10.1016/j.vaccine.2020.04.067. Epub 2020 May 6.
PMID: 32387012

132. Toward Nanotechnology-Enabled Approaches against the COVID-19 Pandemic.
Weiss C, Carriere M, Fusco L, Capua I, Regla-Nava JA, Pasquali M, Scott JA, Vitale F, Unal MA, Mattevi C, Bedognetti D, Merkoçi A, Tasciotti E, Yilmazer A, Gogotsi Y, Stellacci F, Delogu LG. ACS Nano. 2020 Jun 10:acsnano.0c03697. doi: 10.1021/acsnano.0c03697. Online ahead of print.
PMID: 32519842

133. Combined Prebiotic and Microbial Intervention Improves Oral Cholera Vaccination Responses in a Mouse Model of Childhood Undernutrition.
Di Luccia B, Ahern PP, Griffin NW, Cheng J, Guruge JL, Byrne AE, Rodionov DA, Leyn SA, Osterman AL, Ahmed T, Colonna M, Barratt MJ, Delahaye NF, Gordon JI. Cell Host Microbe. 2020 Jun 10;27(6):899-908.e5. doi: 10.1016/j.chom.2020.04.008. Epub 2020 Apr 28.
PMID: 32348782

134. Attitudes towards varicella vaccination in parents and paediatric healthcare providers in Hungary.
Huber A, Gazder J, Dobay O, Mészner Z, Horváth A. Vaccine. 2020 Jun 13:S0264-410X(20)30758-1. doi: 10.1016/j.vaccine.2020.05.091. Online ahead of print.
PMID: 32546413

135. Innate Immune Components that Regulate the Pathogenesis and Resolution of hRSV and hMPV Infections.
Andrade CA, Pacheco GA, Gálvez NMS, Soto JA, Bueno SM, Kalergis AM. Viruses. 2020 Jun 12;12(6):E637. doi: 10.3390/v12060637.
PMID: 32545470

136. Use of the guinea pig model of genital herpes to evaluate vaccines and antivirals: review.
Bernstein DI. Antiviral Res. 2020 Jun 13:104821. doi: 10.1016/j.antiviral.2020.104821. Online ahead of print.
PMID: 32544409 Review.

137. Knowledge, attitudes and practices about vaccination in Trentino, Italy in 2019.
Melot B, Bordin P, Bertoni C, Tralli V, Zuccali M, Grignolio A, Majori S, Ferro A. Hum Vaccin Immunother. 2020 Jun 12:1-10. doi: 10.1080/21645515.2020.1763085. Online ahead of print.
PMID: 32530773

138. Immunogenicity and safety of the 13-valent pneumococcal conjugate vaccine in patients with immunocompromising conditions: a review of available evidence.
Chilson E, Scott DA, Schmoele-Thoma B, Watson W, Moran MM, Isturiz R. Hum Vaccin Immunother. 2020 Jun 12:1-15. doi: 10.1080/21645515.2020.1735224. Online ahead of print.
PMID: 32530360

139. Production and evaluating the properties of HIV-1-Nef-MPER-V3 fusion protein harboring IMT-P8 cell penetrating peptide.
Jahedian S, Sadat SM, Javadi GR, Bolhassani A. Curr HIV Res. 2020 Jun 12. doi: 10.2174/1570162X18666200612151925. Online ahead of print.
PMID: 32532193

140. Assessing the vaccine effectiveness for hand, foot, and mouth disease in Guangzhou, China: a time-series analysis.
Du Z, Huang Y, Bloom MS, Zhang Z, Yang Z, Lu J, Xu J, Hao Y. Hum Vaccin Immunother. 2020 Jun 12:1-7. doi: 10.1080/21645515.2020.1763076. Online ahead of print.
PMID: 32530733

141. Development and evaluation of a new recombinant protein **vaccine** (YidR) against Klebsiella pneumoniae infection.
Rodrigues MX, Yang Y, de Souza Meira EB Jr, do Carmo Silva J, Bicalho RC. Vaccine. 2020 Jun 15;38(29):4640-4648. doi: 10.1016/j.vaccine.2020.03.057. Epub 2020 May 20.
PMID: 32444194

142. Vaccination in patients with chronic kidney disease - review of current recommendations and recent advances.
Ma BM, Yap DYH, Yip TPS, Hung IFN, Tang SCW, Chan TM. Nephrology (Carlton). 2020 Jun 10. doi: 10.1111/nep.13741. Online ahead of print.
PMID: 32524684

143. CARD9-Associated Dectin-1 and Dectin-2 Are Required for Protective Immunity of a Multivalent **Vaccine** against Coccidioides posadasii Infection.

Campuzano A, Zhang H, Ostroff GR, Dos Santos Dias L, Wüthrich M, Klein BS, Yu JJ, Lara HH, Lopez-Ribot JL, Hung CY. J Immunol. 2020 Jun 15;204(12):3296-3306. doi: 10.4049/jimmunol.1900793. Epub 2020 May 1.
PMID: 32358020

144. HPV **vaccine** coverage and acceptability among a national sample of sexual minority women ages 18-45.
Reiter PL, Bustamante G, McRee AL. Vaccine. 2020 Jun 11:S0264-410X(20)30762-3. doi: 10.1016/j.vaccine.2020.06.001. Online ahead of print.
PMID: 32536546

145. VSV-Displayed HIV-1 Envelope Identifies Broadly Neutralizing Antibodies Class-Switched to IgG and IgA.
Jia M, Liberatore RA, Guo Y, Chan KW, Pan R, Lu H, Waltari E, Mittler E, Chandran K, Finzi A, Kaufmann DE, Seaman MS, Ho DD, Shapiro L, Sheng Z, Kong XP, Bieniasz PD, Wu X. Cell Host Microbe. 2020 Jun 10;27(6):963-975.e5. doi: 10.1016/j.chom.2020.03.024. Epub 2020 Apr 20.
PMID: 32315598

146. Protection of layers and breeders against homologous or heterologous HPAIv by vaccines from Korean national antigen bank.
Kang YM, Cho HK, Kim HM, Lee CH, Kim DY, Choi SH, Lee MH, Kang HM. Sci Rep. 2020 Jun 10;10(1):9436. doi: 10.1038/s41598-020-66343-9.
PMID: 32523096

147. A Natural Peptide Antigen within the Plasmodium Ribosomal Protein RPL6 Confers Liver T_{RM} Cell-Mediated Immunity against Malaria in Mice.
Valencia-Hernandez AM, Ng WY, Ghazanfari N, Ghilas S, de Menezes MN, Holz LE, Huang C, English K, Naung M, Tan PS, Tullett KM, Steiner TM, Enders MH, Beattie L, Chua YC, Jones CM, Cozijnsen A, Mollard V, Cai Y, Bowen DG, Purcell AW, La Gruta NL, Villadangos JA, de Koning-Ward T, Barry AE, Barchet W, Cockburn IA, McFadden GI, Gras S, Lahoud MH, Bertolino P, Schittenhelm RB, Caminschi I, Heath WR, Fernandez-Ruiz D. Cell Host Microbe. 2020 Jun 10;27(6):950-962.e7. doi: 10.1016/j.chom.2020.04.010. Epub 2020 May 11.
PMID: 32396839

148. Microneutralization assay titer correlates analysis in two phase 3 trials of the CYD-TDV tetravalent dengue **vaccine** in Asia and Latin America.
Carpp LN, Fong Y, Bonaparte M, Moodie Z, Juraska M, Huang Y, Price B, Zhuang Y, Shao J, Zheng L, Chambonneau L, Small R, Sridhar S, DiazGranados CA, Gilbert PB. PLoS One. 2020 Jun 15;15(6):e0234236. doi: 10.1371/journal.pone.0234236. eCollection 2020.
PMID: 32542024

149. Antigen Discovery, Bioinformatics and Biological Characterization of Novel Immunodominant Babesia microti Antigens.
Verma N, Puri A, Essuman E, Skelton R, Anantharaman V, Zheng H, White S, Gunalan K, Takeda K, Bajpai S, Lepore TJ, Krause PJ, Aravind L, Kumar S. Sci Rep. 2020 Jun 12;10(1):9598. doi: 10.1038/s41598-020-66273-6.
PMID: 32533024

150. Impact of Influenza on Pneumococcal **Vaccine** Effectiveness during Streptococcus pneumoniae Infection in Aged Murine Lung.
Jirru E, Lee S, Harris R, Yang J, Cho SJ, Stout-Delgado H. Vaccines (Basel). 2020 Jun 11;8(2):E298. doi: 10.3390/vaccines8020298.
PMID: 32545261

151. Implementing a clinical protocol using breastfeeding to mitigate vaccination pain in infants.
Komaroff A, Forest S. J Pediatr Nurs. 2020 Jun 10;54:50-57. doi: 10.1016/j.pedn.2020.05.017. Online ahead of print.
PMID: 32534408

152. Liposomal Formulation of ChimeraT, a Multiple T-Cell Epitope-Containing Recombinant Protein, Is a Candidate Vaccine for Human Visceral Leishmaniasis.
Lage DP, Ribeiro PAF, Dias DS, Mendonça DVC, Ramos FF, Carvalho LM, Steiner BT, Tavares GSV, Martins VT, Machado AS, Oliveira-da-Silva JA, Santos TTO, Freitas CS, Oliveira JS, Roatt BM, Machado-de-Ávila RA, Humbert MV, Christodoulides M, Coelho EAF. Vaccines (Basel). 2020 Jun 9;8(2):E289. doi: 10.3390/vaccines8020289.
PMID: 32526867

153. Immunizations at Wisconsin Pharmacies: Results of a statewide vaccine registry analysis and pharmacist survey.
Berce PC, Bernstein RS, MacKinnon GE, Sorum S, Martin E, MacKinnon KJ, Rein LE, Schellhase KG. Vaccine. 2020 Jun 9;38(28):4448-4456. doi: 10.1016/j.vaccine.2020.04.043. Epub 2020 May 13.
PMID: 32417143

154. Cost effectiveness of trivalent and quadrivalent influenza vaccines in 50- to 64-year-old adults in Korea.
Choi EJ, Park JH, Chun BC. Vaccine. 2020 Jun 9:S0264-410X(20)30710-6. doi: 10.1016/j.vaccine.2020.05.065. Online ahead of print.
PMID: 32532543

155. Novel Genotype Definition and Genome Characteristics of Duck Circovirus in Central and Eastern China.
Ji J, Chen Q, Sui C, Yu Z, Xu X, Yao L, Kan Y, Bi Y, Xie Q. Transbound Emerg Dis. 2020 Jun 12. doi: 10.1111/tbed.13676. Online ahead of print.

PMID: 32531142

156. Efficacy of Infectious Bronchitis GI-13 (793B) Vaccine Candidate Tested According to the Current European Union Requirements and for Cross-Protection Against Heterologous QX-Like Challenge.
Kutle L, Ljuma Skupnjak L, Vrdoljak A, Janković D, Boelm GJ, Kelemen F, Zorman Rojs O, Millecam J. Viral Immunol. 2020 Jun 9. doi: 10.1089/vim.2020.0011. Online ahead of print. PMID: 32522104

157. Coverage and Timeliness of Birth Dose Vaccination in Sub-Saharan Africa: A Systematic Review and Meta-Analysis.
Bassoum O, Kimura M, Tal Dia A, Lemoine M, Shimakawa Y. Vaccines (Basel). 2020 Jun 11;8(2):E301. doi: 10.3390/vaccines8020301.
PMID: 32545322

158. Sirolimus enhances the protection achieved by a DNA vaccine against Leishmania infantum.
Martínez-Flórez A, Martori C, Monteagudo PL, Rodriguez F, Alberola J, Rodríguez-Cortés A. Parasit Vectors. 2020 Jun 9;13(1):294. doi: 10.1186/s13071-020-04165-4.
PMID: 32517744

159. Nourishing the Microbiota to Promote Mucosal Immunity.
Shenoy MK, Koch MA. Cell Host Microbe. 2020 Jun 10;27(6):849-851. doi: 10.1016/j.chom.2020.05.016.
PMID: 32526178

160. Paediatric Active Enhanced Disease Surveillance (PAEDS) 2017 and 2018: Prospective hospital-based surveillance for serious paediatric conditions.
McRae JE, Quinn HE, Saravanos GL, Carlson SJ, Britton PN, Crawford NW, Wood NJ, Marshall HS, Macartney KK; Paediatric Active Enhanced Disease Surveillance (PAEDS) network. Commun Dis Intell (2018). 2020 Jun 15;44. doi: 10.33321/cdi.2020.44.49.
PMID: 32536339

161. Travel Medicine Curricula across Canadian Pharmacy Programs and Alignment with Scope of Practice.
Fernandes HVJ, Cook B, Houle SKD. Pharmacy (Basel). 2020 Jun 15;8(2):E102. doi: 10.3390/pharmacy8020102.
PMID: 32549192

162. Efficacy and safety of telbivudine treatment for the prevention of HBV perinatal transmission.
Ren C, Wang L, Sun W, Ma L, Dong Z, Hao A, Zhou L, Li F, Ma W. Medicine (Baltimore). 2020 Jun 12;99(24):e20583. doi: 10.1097/MD.0000000000020583.
PMID: 32541488

163. Multivalue ethical framework for fair global allocation of a COVID-19 **vaccine**.

Liu Y, Salwi S, Drolet B. J Med Ethics. 2020 Jun 12:medethics-2020-106516. doi: 10.1136/medethics-2020-106516. Online ahead of print.
PMID: 32532826

164. The potential of cannabidiol in the COVID-19 pandemic: a hypothesis letter.
Esposito G, Pesce M, Seguella L, Sanseverino W, Lu J, Corpetti C, Sarnelli G. Br J Pharmacol. 2020 Jun 10:10.1111/bph.15157. doi: 10.1111/bph.15157. Online ahead of print.
PMID: 32519753

165. Serotype distribution of *Streptococcus pneumonia* in children with invasive disease in Turkey: 2015-2018.
Ceyhan M, Aykac K, Gurler N, Ozsurekci Y, Öksüz L, Altay Akısoglu Ö, Öz FN, Emiroglu M, TurkDagi H, Yaman A, Söyletir G, Öztürk C, Akpolat N, Özakin C, Aydın F, Aydemir Ş, Kiremitci A, Gültekin M, Camcıoglu Y, Zer Y, Güdücüoğlu H, Gülay Z, Birinci A, Arabaci C, Karbuz A, Devrim I, Sorguc Y, Baysan BÖ, Karadag Oncel E, Yilmaz N, Altintop YA. Hum Vaccin Immunother. 2020 Jun 12:1-6. doi: 10.1080/21645515.2020.1747931. Online ahead of print.
PMID: 32530357

166. **Vaccine**-associated Rubella - a report of two cases and a review of the literature.
Ong SWX, Vasoo S, Sadarangani SP, Cui L, Marimuthu K, Lim PL, Kong JW, Wong JCC, Puong KY, Chan KP. Hum Vaccin Immunother. 2020 Jun 12:1-4. doi: 10.1080/21645515.2020.1765623. Online ahead of print.
PMID: 32530771

167. Isolation of potent SARS-CoV-2 neutralizing antibodies and protection from disease in a small animal model.
Rogers TF, Zhao F, Huang D, Beutler N, Burns A, He WT, Limbo O, Smith C, Song G, Woehl J, Yang L, Abbott RK, Callaghan S, Garcia E, Hurtado J, Parren M, Peng L, Ramirez S, Ricketts J, Ricciardi MJ, Rawlings SA, Wu NC, Yuan M, Smith DM, Nemazee D, Teijaro JR, Voss JE, Wilson IA, Andrabi R, Briney B, Landais E, Sok D, Jardine JG, Burton DR. Science. 2020 Jun 15:eabc7520. doi: 10.1126/science.abc7520. Online ahead of print.
PMID: 32540903

168. Generation and immunogenicity assessment of ELPylated virus-like particles of porcine circovirus type 2.
Li Y, Wang Y, Cheng J, Zhou X, Lu H, Zhang X, Xia X, Sun H. Virol J. 2020 Jun 9;17(1):72. doi: 10.1186/s12985-020-01346-6.
PMID: 32517704
Free PMC article.

169. Application of median lethal concentration (LC(50)) of pathogenic microorganisms and their antigens in **vaccine** development.
Saganuwan SA. Version 2. BMC Res Notes. 2020 Jun 15;13(1):289. doi: 10.1186/s13104-020-05126-x.

PMID: 32539814 Free PMC article.

170. Vitamin D Receptor stimulation to reduce Acute Respiratory Distress Syndrome (ARDS) in patients with Coronavirus SARS-CoV-2 infections: Revised Ms SBMB 2020_166.
Quesada-Gomez JM, Castillo ME, Bouillon R. J Steroid Biochem Mol Biol. 2020 Jun 11:105719. doi: 10.1016/j.jsbmb.2020.105719. Online ahead of print.
PMID: 32535032

171. A Simple and High-Throughput ELISA-Based Neutralization Assay for the Determination of Anti-Flavivirus Neutralizing Antibodies.
Balingit JC, Phu Ly MH, Matsuda M, Suzuki R, Hasebe F, Morita K, Moi ML. Vaccines (Basel). 2020 Jun 10;8(2):E297. doi: 10.3390/vaccines8020297.
PMID: 32532141

172. Are vaccinated measles cases protected against severe disease?
Bonneton M, Antona D, Danis K, Aït-Belghiti F, Levy-Bruhl D. Vaccine. 2020 Jun 15;38(29):4516-4519. doi: 10.1016/j.vaccine.2020.05.005. Epub 2020 May 14.
PMID: 32418790

173. Cost-Effectiveness of Dengue Vaccination in Indonesia: Considering Integrated Programs with *Wolbachia*-Infected Mosquitos and Health Education.
Suwantika AA, Kautsar AP, Supadmi W, Zakiyah N, Abdulah R, Ali M, Postma MJ. Int J Environ Res Public Health. 2020 Jun 12;17(12):E4217. doi: 10.3390/ijerph17124217.
PMID: 32545688

174. Potential for elimination of SAR-CoV-2 through vaccination as inspired by elimination of multiple influenza viruses through natural pandemics or mass vaccination.
Chen JM, Sun YX, Chen JW. J Med Virol. 2020 Jun 11:10.1002/jmv.26162. doi: 10.1002/jmv.26162. Online ahead of print.
PMID: 32525587

175. Dynamic interactions of influenza viruses in Hong Kong during 1998-2018.
Yang W, Lau EHY, Cowling BJ. PLoS Comput Biol. 2020 Jun 15;16(6):e1007989. doi: 10.1371/journal.pcbi.1007989. Online ahead of print.
PMID: 32542015

176. Preparing to introduce new maternal immunizations in low- and lower-middle-income countries: A report from the Bill & Melinda Gates Foundation convening "Allies in Maternal and Newborn Care"; May 3-4, 2018.
Sobanjo-Ter Meulen A, Liljestrand J, Lawn JE, Hombach J, Smith J, Dickson KE, Munoz FM, Omer SB, Williams BA, Klugman KP. Vaccine. 2020 Jun 9;38(28):4355-4361. doi: 10.1016/j.vaccine.2020.04.075. Epub 2020 May 14.

PMID: 32418791

177. A Phase I/IIa trial of a frameshift peptide neoantigen-based vaccine for mismatch repair-deficient cancers.
Kloor M, Reuschenbach M, Pauligk C, Karbach J, Rafiyan MR, Al-Batran SE, Tariverdian M, Jaeger E, von Knebel Doeberitz M. Clin Cancer Res. 2020 Jun 15:clincanres.3517.2019. doi: 10.1158/1078-0432.CCR-19-3517. Online ahead of print.
PMID: 32540851

178. Prosocial polio vaccination in Israel.
Wells CR, Huppert A, Fitzpatrick MC, Pandey A, Velan B, Singer BH, Bauch CT, Galvani AP. Proc Natl Acad Sci U S A. 2020 Jun 9;117(23):13138-13144. doi: 10.1073/pnas.1922746117. Epub 2020 May 26.
PMID: 32457142

179. Feasibility of direct venous inoculation of the radiation-attenuated Plasmodium falciparum whole sporozoite vaccine in children and infants in Siaya, western Kenya.
Oneko M, Cherop YR, Sang T, Gutman JR, Wiegand R, Nyang'au EM, Odila AD, Akach D, Hamel MJ, Samuels AM, Kariuki S, Abebe Y, Nzuu EL, Wijayalath W, James ER, Sim BKL, Billingsley PF, Richie TL, Hoffman SL, Seder RA, Steinhardt LC. Vaccine. 2020 Jun 15;38(29):4592-4600. doi: 10.1016/j.vaccine.2020.05.008. Epub 2020 May 19.
PMID: 32444192

180. Serotype distribution and clinical characteristics associated with *streptococcus pneumoniae* among Chinese children and adults with invasive pneumococcal disease: a multicenter observational study.
Li MC, Wang Y, Zhang H, Liu Y, Chen XJ, Yang HW, Ma P, Wang DC, Zhang BC, Dong AY, Wang CX, Li Y, Bai P, Tang WM, Wang J, Shao ZJ, Xu YC. Hum Vaccin Immunother. 2020 Jun 12:1-11. doi: 10.1080/21645515.2020.1757996. Online ahead of print.
PMID: 32530720

181. Evaluation of a Rapid Point-of-Care Multiplex Immunochromatographic Assay for the Diagnosis of Enteric Fever.
Kumar S, Nodoushani A, Khanam F, DeCruz AT, Lambotte P, Scott R, Bogoch II, Vaidya K, Calderwood SB, Bhuiyan TR, Esfandiari J, Ryan ET, Qadri F, Andrews JR, Charles RC. mSphere. 2020 Jun 10;5(3):e00253-20. doi: 10.1128/mSphere.00253-20.
PMID: 32522777

182. Combined Intranasal Nanoemulsion and RIG-I Activating RNA Adjuvants Enhance Mucosal, Humoral, and Cellular Immunity to Influenza Virus.
Wong PT, Goff PH, Sun RJ, Ruge MJ, Ermler ME, Sebring A, O'Konek JJ, Landers JJ, Janczak KW, Sun W, Baker JR Jr. Mol Pharm. 2020 Jun 15. doi: 10.1021/acs.molpharmaceut.0c00315. Online ahead of print.
PMID: 32491861

183. A Phase 1 Randomized Placebo-Controlled Study to Assess the Safety, Immunogenicity and Genetic Stability of a New Potential Pandemic H7N9 Live Attenuated Influenza Vaccine in Healthy Adults.
Kiseleva I, Isakova-Sivak I, Stukova M, Erofeeva M, Donina S, Larionova N, Krutikova E, Bazhenova E, Stepanova E, Vasilyev K, Matyushenko V, Krylova M, Galatonova J, Ershov A, Lioznov D, Sparrow EG, Torelli G, Rudenko L. Vaccines (Basel). 2020 Jun 10;8(2):E296. doi: 10.3390/vaccines8020296.
PMID: 32532097

184. Investigation of the combination of anti-PD-L1 mAb with HER2/neu-loaded dendritic cells and QS-21 saponin adjuvant: effect against HER2 positive breast cancer in mice.
Özverel CS, Uyanikgil Y, Karaboz İ, Nalbantsoy A. Immunopharmacol Immunotoxicol. 2020 Jun 9:1-12. doi: 10.1080/08923973.2020.1775644. Online ahead of print.
PMID: 32515626

185. Co-delivery of antigens and immunostimulants via a polymersome for improvement of antigen-specific immune response.
Lim JW, Na W, Kim HO, Yeom M, Kang A, Park G, Park C, Ki J, Lee S, Jung B, Jeong HH, Park D, Song D, Haam S. J Mater Chem B. 2020 Jun 15. doi: 10.1039/d0tb00892c. Online ahead of print.
PMID: 32538414

186. Routine immunization coverage in Pakistan: a survey of children under 1 year of age in community-based vaccination areas.
Sreevatsava M, Burman AL, Wahdan A, Safdar RM, O'Leary A, Amjad R, Salam A, Quershi M, Ishaq R, Khan J, Khan J, Parker EPK, Sheikh Mahamud A, Ahmed J. Vaccine. 2020 Jun 9;38(28):4399-4404. doi: 10.1016/j.vaccine.2020.04.068. Epub 2020 May 8.
PMID: 32402754

187. Analysis of HBsAg mutations in the 25 years after the implementation of the hepatitis B vaccination plan in China.
Ye H, Teng J, Lin Z, Wang Y, Fu X. Virus Genes. 2020 Jun 15. doi: 10.1007/s11262-020-01773-1. Online ahead of print.
PMID: 32542478

188. Relative vaccine efficacy of high-dose versus standard-dose influenza vaccines in preventing probable influenza in a Medicare Fee-for-Service population.
Paudel M, Mahmud S, Buikema A, Korrer S, Van Voorhis D, Brekke L, Chit A. Vaccine. 2020 Jun 15;38(29):4548-4556. doi: 10.1016/j.vaccine.2020.05.020. Epub 2020 May 20.
PMID: 32446835

189. Missed opportunities for human papillomavirus vaccination at office visits during which influenza vaccine was administered: An AAP pediatric research in office settings (PROS) national primary care research network study.
Kelly MK, Grundmeier RW, Stephens-Shields AJ, Localio R, Shone LP, Wright M, Steffes J, Humiston SG, Rand C, Albertin C, Breck A, Abney DE, McFarland G, Szilagyi PG, Fiks AG. Vaccine. 2020 Jun 12:S0264-410X(20)30757-X. doi: 10.1016/j.vaccine.2020.05.090. Online ahead of print.
PMID: 32540274

190. Immune effect of a Newcastle disease virus DNA vaccine with IL-12 as a molecular adjuvant delivered by electroporation.
Xie P, Li Y, Li Y, Liang J, Xiang B, Lin Q, Jin J, Ding C, Xu C, Ren T. Arch Virol. 2020 Jun 9:1-10. doi: 10.1007/s00705-020-04669-5. Online ahead of print.
PMID: 32519007

191. Distinct neutralizing antibody correlates of protection among related Zika virus vaccines identify a role for antibody quality.
Maciejewski S, Ruckwardt TJ, Morabito KM, Foreman BM, Burgomaster KE, Gordon DN, Pelc RS, DeMaso CR, Ko SY, Fisher BE, Yang ES, Nair D, Foulds KE, Todd JP, Kong WP, Roy V, Aleshnick M, Speer SD, Bourne N, Barrett AD, Nason MC, Roederer M, Gaudinski MR, Chen GL, Dowd KA, Ledgerwood JE, Alter G, Mascola JR, Graham BS, Pierson TC. Sci Transl Med. 2020 Jun 10;12(547):eaaw9066. doi: 10.1126/scitranslmed.aaw9066.
PMID: 32522807

192. Vaccination as a social contract.
Korn L, Böhm R, Meier NW, Betsch C. Proc Natl Acad Sci U S A. 2020 Jun 15:201919666. doi: 10.1073/pnas.1919666117. Online ahead of print.
PMID: 32541033

193. The impact of influenza vaccination in patients with cardiovascular disease: an overview of systematic reviews.
Rodrigues BS, Alves M, Duarte GS, Costa J, Pinto FJ, Caldeira D. Trends Cardiovasc Med. 2020 Jun 11:S1050-1738(20)30082-7. doi: 10.1016/j.tcm.2020.06.003. Online ahead of print.
PMID: 32535214

194. Vaccination pattern of the 23-valent pneumococcal polysaccharide vaccine (PPV23) in Hangzhou, China: a coverage and adverse events following immunization of different age groups.
Liu Y, Xu Y, Wang J, Che X, Gu W, Du J, Zhang X, Zhang X, Jiang W, Chen J, An Z. Hum Vaccin Immunother. 2020 Jun 12:1-5. doi: 10.1080/21645515.2020.1765620. Online ahead of print.
PMID: 32530728

195. Impact of a Catch-Up Strategy of DT-IPV Vaccination during Hospitalization on Vaccination Coverage among People Over 65 Years of Age in France: The HOSPIVAC Study (Vaccination during Hospitalization).
Blanchi S, Vaux J, Toqué JM, Hery L, Laforest S, Piccoli GB, Crochette N. Vaccines (Basel). 2020 Jun 9;8(2):E292. doi: 10.3390/vaccines8020292.
PMID: 32527049

196. Local Lung Immune Response to *Mycobacterium bovis* Challenge after BCG and *M. bovis* Heat-Inactivated Vaccination in European Badger (*Meles meles*).
Blanco Vázquez C, Prieto M, Barral M, Juste RA, Lesellier S, Salguero FJ, Davé D, Martínez IZ, de Garnica García MG, Casais R, Balseiro A. Pathogens. 2020 Jun 9;9(6):E456. doi: 10.3390/pathogens9060456.
PMID: 32526872

197. Immunoinformatics and Structural Analysis for Identification of Immunodominant Epitopes in SARS-CoV-2 as Potential Vaccine Targets.
Mukherjee S, Tworowski D, Detroja R, Mukherjee SB, Frenkel-Morgenstern M. Vaccines (Basel). 2020 Jun 9;8(2):E290. doi: 10.3390/vaccines8020290.
PMID: 32526960

198. Persistence of Neutralizing Antibody Responses Among Yellow Fever Virus 17D Vaccinees Living in a Nonendemic Setting.
Kareko BW, Booty BL, Nix CD, Lyski ZL, Slifka MK, Amanna IJ, Messer WB. J Infect Dis. 2020 Jun 11;221(12):2018-2025. doi: 10.1093/infdis/jiz374.
PMID: 31545367

199. Metal Nanoparticles in Infection and Immunity.
Crane JK. Immunol Invest. 2020 Jun 11:1-14. doi: 10.1080/08820139.2020.1776724. Online ahead of print.
PMID: 32524902

200. "I think meningitis is a virus, while septicaemia might be caused by bacteria." A study of vaccination views, disease awareness and MenACWY and MMR uptake among freshers at a London university.
Jones S, Cortina Borja M, Bedford H. Int J Adolesc Med Health. 2020 Jun 10:/j/ijamh.ahead-of-print/ijamh-2019-0254/ijamh-2019-0254.xml. doi: 10.1515/ijamh-2019-0254. Online ahead of print.
PMID: 32543452

201. Impact of a Catch-Up Strategy of DT-IPV Vaccination during Hospitalization on Vaccination Coverage among People Over 65 Years of Age in France: The HOSPIVAC Study (Vaccination during Hospitalization).
Blanchi S, Vaux J, Toqué JM, Hery L, Laforest S, Piccoli GB, Crochette N. Vaccines (Basel). 2020 Jun 9;8(2):E292. doi: 10.3390/vaccines8020292.
PMID: 32527049

202. Local Lung Immune Response to *Mycobacterium bovis* Challenge after BCG and *M. bovis* Heat-Inactivated Vaccination in European Badger (*Meles meles*).
Blanco Vázquez C, Prieto M, Barral M, Juste RA, Lesellier S, Salguero FJ, Davé D, Martínez IZ, de Garnica García MG, Casais R, Balseiro A. Pathogens. 2020 Jun 9;9(6):E456. doi: 10.3390/pathogens9060456.
PMID: 32526872

203. Immunoinformatics and Structural Analysis for Identification of Immunodominant Epitopes in SARS-CoV-2 as Potential Vaccine Targets.
Mukherjee S, Tworowski D, Detroja R, Mukherjee SB, Frenkel-Morgenstern M. Vaccines (Basel). 2020 Jun 9;8(2):E290. doi: 10.3390/vaccines8020290.
PMID: 32526960

204. Persistence of Neutralizing Antibody Responses Among Yellow Fever Virus 17D Vaccinees Living in a Nonendemic Setting.
Kareko BW, Booty BL, Nix CD, Lyski ZL, Slifka MK, Amanna IJ, Messer WB. J Infect Dis. 2020 Jun 11;221(12):2018-2025. doi: 10.1093/infdis/jiz374.
PMID: 31545367

205. Metal Nanoparticles in Infection and Immunity.
Crane JK. Immunol Invest. 2020 Jun 11:1-14. doi: 10.1080/08820139.2020.1776724. Online ahead of print.
PMID: 32524902

206. "I think meningitis is a virus, while septicaemia might be caused by bacteria." A study of vaccination views, disease awareness and MenACWY and MMR uptake among freshers at a London university.
Jones S, Cortina Borja M, Bedford H. Int J Adolesc Med Health. 2020 Jun 10:/j/ijamh.ahead-of-print/ijamh-2019-0254/ijamh-2019-0254.xml. doi: 10.1515/ijamh-2019-0254. Online ahead of print.
PMID: 32543452

207. An Extended Primer Grip of Picornavirus Polymerase Facilitates Sexual RNA Replication Mechanisms.
Kempf BJ, Watkins CL, Peersen OB, Barton DJ. J Virol. 2020 Jun 10:JVI.00835-20. doi: 10.1128/JVI.00835-20. Online ahead of print. PMID: 32522851

208. Group B Streptococcus colonization rate and serotype distribution among pregnant women and their newborns at Adama Hospital Medical College, Ethiopia.
Ali MM, Asrat D, Fenta DA, Chaka TE, Woldeamanuel Y. Sci Rep. 2020 Jun 9;10(1):9301. doi: 10.1038/s41598-020-66474-z.
PMID: 32518331

209. Improved protection against Chlamydia muridarum using the native major outer membrane protein trapped in Resiquimod-carrying amphipols and effects in protection with addition of a Th1 (CpG-1826) and a Th2 (Montanide ISA 720) adjuvant.
Tifrea DF, Pal S, le Bon C, Cocco MJ, Zoonens M, de la Maza LM. Vaccine. 2020 Jun 9;38(28):4412-4422. doi: 10.1016/j.vaccine.2020.04.065. Epub 2020 Apr 30.
PMID: 32386746

210. Estimating the contribution of different age strata to vaccine serotype pneumococcal transmission in the pre vaccine era: a modelling study.
Flasche S, Lipsitch M, Ojal J, Pinsent A. BMC Med. 2020 Jun 10;18(1):129. doi: 10.1186/s12916-020-01601-1. PMID: 32517683

211. BTV-14 Infection in Sheep Elicits Viraemia with Mild Clinical Symptoms.
Flannery J, Frost L, Fay P, Hicks H, Henstock M, Smreczak M, Orłowska A, Rajko-Nenow P, Darpel K, Batten C. Microorganisms. 2020 Jun 13;8(6):E892. doi: 10.3390/microorganisms8060892.
PMID: 32545731

212. Immunoproteomics of Brucella abortus reveals potential of recombinant antigens for discriminating vaccinated from naturally infected cattle.
Faria AR, Dorneles EMS, Pires SDF, Andrade HM, Lage AP. Microb Pathog. 2020 Jun 13:104345. doi: 10.1016/j.micpath.2020.104345. Online ahead of print.
PMID: 32544523

213. Efficient mucosal vaccination of a novel classical swine fever virus E2-Fc fusion protein mediated by neonatal Fc receptor.
Li J, Li X, Ma H, Ren X, Hao G, Zhang H, Zhao Z, Fang K, Li X, Rong Z, Sun S, Chen H, Qian P. Vaccine. 2020 Jun 15;38(29):4574-4583. doi: 10.1016/j.vaccine.2020.05.013. Epub 2020 May 7.
PMID: 32417139

214. From threat to cure: understanding of virus-induced cell death leads to highly immunogenic oncolytic influenza viruses.
Kabiljo J, Laengle J, Bergmann M. Version 2. Cell Death Discov. 2020 Jun 11;6:48. doi: 10.1038/s41420-020-0284-1. eCollection 2020.
PMID: 32542113

215. Monitoring Neutralization Property Change of Evolving Hantaan and Seoul Viruses with a Novel Pseudovirus-Based Assay.
Ning T, Wang L, Liu S, Ma J, Nie J, Huang W, Li X, Li Y, Wang Y. Virol Sin. 2020 Jun 12. doi: 10.1007/s12250-020-00237-y. Online ahead of print.
PMID: 32533414

216. High level of vaccination and protection against hepatitis B with low rate of HCV infection markers among hospital health care personnel in north of Iran: a cross-sectional study.
Hiva S, Negar K, Mohammad-Reza P, Gholam-Reza G, Mohsen A, Ali-Asghar NG, Mohammed-Jafar S. Version 2. BMC Public Health. 2020 Jun 12;20(1):920. doi: 10.1186/s12889-020-09032-6.
PMID: 32532228

217. Septic Shock and Purpura Fulminans Due to Streptococcus pneumoniae Bacteremia in an Unvaccinated Immunocompetent Adult: Case Report and Review.
Djurdjevic N, Taweesedt PT, Paulson M, LaNou A, Radovanovic M, Patel JN, Veselinovic M, McDermott WR, Dumic I. Am J Case Rep. 2020 Jun 9;21:e923266. doi: 10.12659/AJCR.923266.
PMID: 32513908

218. Strict assembly restriction of peptides from rabbit hemorrhagic disease virus presented by rabbit MHC class I molecule RLA-A1.
Zhang Q, Liu K, Yue C, Zhang D, Lu D, Xiao W, Liu P, Zhao Y, Gao G, Ding C, Lyu J, Liu WJ. J Virol. 2020 Jun 10:JVI.00396-20. doi: 10.1128/JVI.00396-20. Online ahead of print.
PMID: 32522857

219. Novel Corona virus disease infection in Tunisia: Mathematical model and the impact of the quarantine strategy.
Fredj HB, Chérif F. Chaos Solitons Fractals. 2020 Sep;138:109969. doi: 10.1016/j.chaos.2020.109969. Epub 2020 Jun 10.
PMID: 32536761

220. Viral vectored hepatitis C virus vaccines generate pan-genotypic T cell responses to conserved subdominant epitopes.
Donnison T, von Delft A, Brown A, Swadling L, Hutchings C, Hanke T, Chinnakannan S, Barnes E. Vaccine. 2020 Jun 9:S0264-410X(20)30687-3. doi: 10.1016/j.vaccine.2020.05.042. Online ahead of print.
PMID: 32532545

221. Dynamic proteomic analysis of Aedes aegypti Aag-2 cells infected with Mayaro virus.
Vasconcellos AF, Mandacaru SC, de Oliveira AS, Fontes W, Melo RM, de Sousa MV, Resende RO, Charneau S. Parasit Vectors. 2020 Jun 10;13(1):297. doi: 10.1186/s13071-020-04167-2. PMID: 32522239 Free PMC article.

222. Recent trends in pediatric bacterial meningitis in Japan, 2016-2018 - S. agalactiae has been the most common pathogen.
Shinjoh M, Yamaguchi Y, Furuichi M, Yaginuma M, Takahashi T, Iwata S. J Infect Chemother. 2020 Jun 13:S1341-321X(20)30176-8. doi: 10.1016/j.jiac.2020.05.018. Online ahead of print.
PMID: 32546331

223. Bioinformatics analysis of candidate proteins Omp2b, P39 and BLS for Brucella multivalent epitope vaccines.
Sha T, Li Z, Zhang C, Zhao X, Chen Z, Zhang F, Ding J. Microb Pathog. 2020 Jun 9:104318. doi: 10.1016/j.micpath.2020.104318. Online ahead of print.
PMID: 32531499

224. Group Testing-Based Robust Algorithm for Diagnosis of COVID-19.
Seong JT. Diagnostics (Basel). 2020 Jun 11;10(6):E396. doi: 10.3390/diagnostics10060396.
PMID: 32545224

225. Immunotargeting of the xCT cystine/glutamate antiporter potentiates the efficacy of Her2-targeted immunotherapies in breast cancer.
Conti L, Bolli E, Di Lorenzo A, Franceschi V, Macchi F, Riccardo F, Ruiu R, Russo L, Quaglino E, Donofrio G, Cavallo F. Cancer Immunol Res. 2020 Jun 12:canimm.0082.2020. doi: 10.1158/2326-6066.CIR-20-0082. Online ahead of print.
PMID: 32532810

226. Development of a DNA Vaccine for Melanoma Metastasis by Inhalation Based on an Analysis of Transgene Expression Characteristics of Naked pDNA and a Ternary Complex in Mouse Lung Tissues.
Kodama Y, Nakashima M, Nagahara T, Oyama N, Hashizume J, Nakagawa H, Harasawa H, Muro T, Kurosaki T, Yamashita C, Hashida M, Kitahara T, Sasaki H, Kawakami S, Nakamura T. Pharmaceutics. 2020 Jun 11;12(6):E540. doi: 10.3390/pharmaceutics12060540.
PMID: 32545209

227. Evaluation of the protective potential of antibody and T cell responses elicited by a novel preventative vaccine towards respiratory syncytial virus small hydrophobic protein.
Torrey HL, Kaliaperumal V, Bramhecha Y, Weir GM, Falsey AR, Walsh EE, Langley JM, Schepens B, Saelens X, Stanford MM. Hum Vaccin Immunother. 2020 Jun 12:1-11. doi: 10.1080/21645515.2020.1756671. Online ahead of print.
PMID: 32530723

228. Impaired T cell responses in domestic pigs and wild boar upon infection with a highly virulent African swine fever virus strain.
Hühr J, Schäfer A, Schwaiger T, Zani L, Sehl J, Mettenleiter TC, Blome S, Blohm U. Transbound Emerg Dis. 2020 Jun 12. doi: 10.1111/tbed.13678. Online ahead of print. PMID: 32530090

229. HIV-1 pol gene diversity and molecular dating of subtype C from Sri Lanka.
Patil A, Elwitigala JP, Rajapaksa L, Gangakhedkar R, Chaturbhuj D, Pendse R, Rajapaksha DI, Rewari BB, Malliawadu N, Jayamanna K, Dombawela D, Kurle S. PLoS One. 2020 Jun 11;15(6):e0234133. doi: 10.1371/journal.pone.0234133. eCollection 2020.
PMID: 32525892

230. Silencing Adenosine A2a Receptor Enhances Dendritic Cell-Based Cancer Immunotherapy.
Masjedi A, Ahmadi A, Ghani S, Malakotikhah F, Afjadi MN, Irandoust M, Kiani FK, Asl SH, Atyabi F, Hassannia H, Hojjat-Farsangi M, Namdar A, Ghalamfarsa G, Jadidi-Niaragh F. Nanomedicine. 2020 Jun 15:102240. doi: 10.1016/j.nano.2020.102240. Online ahead of print.
PMID: 32553948

231. Porcine circovirus type 2 (PCV2) genotyping in Austrian pigs in the years 2002 to 2017.
Weissenbacher-Lang C, Kristen T, Mendel V, Brunthaler R, Schwarz L, Weissenböck H. BMC Vet Res. 2020 Jun 15;16(1):198. doi: 10.1186/s12917-020-02413-4.
PMID: 32539835

232. Restoration of MHC-I on Tumor Cells by Fhit Transfection Promotes Immune Rejection and Acts as an Individualized Immunotherapeutic Vaccine.
Pulido M, Chamorro V, Romero I, Algarra I, S-Montalvo A, Collado A, Garrido F, Garcia-Lora AM. Cancers (Basel). 2020 Jun 12;12(6):E1563. doi: 10.3390/cancers12061563.
PMID: 32545680

233. A novel particulate delivery system based on antigen-Zn2+ coordination interactions enhances stability and cellular immune response of inactivated foot and mouth disease virus.
Li S, Yang Y, Lin X, Li Z, Ma G, Su Z, Zhang S. Mol Pharm. 2020 Jun 15. doi: 10.1021/acs.molpharmaceut.0c00365. Online ahead of print.
PMID: 32539415

234. The WetNet: What the Oral Polio Vaccine Hypothesis Exposes about Globalized Interspecies Fluid Bonds.
Jain SL. Med Anthropol Q. 2020 Jun 12. doi: 10.1111/maq.12587. Online ahead of print.
PMID: 32529703

235. Cutting Edge: TNF Is Essential for Mycobacteria-Induced MINCLE Expression, Macrophage Activation, and Th17 Adjuvanticity.
Schick J, Schäfer J, Alexander C, Dichtl S, Murray PJ, Christensen D, Sorg U, Pfeffer K, Schleicher U, Lang R. J Immunol. 2020 Jun 15:ji2000420. doi: 10.4049/jimmunol.2000420. Online ahead of print.
PMID: 32540999

236. Ten challenging questions about SARS-CoV-2 and COVID-19.
Teymoori-Rad M, Samadizadeh S, Tabarraei A, Moradi A, Shahbaz MB, Tahamtan A. Expert Rev Respir Med. 2020 Jun 13. doi: 10.1080/17476348.2020.1782197. Online ahead of print.
PMID: 32536226

237. Use of personal protective equipment against coronavirus disease 2019 by healthcare professionals in Wuhan, China: cross sectional study.
Liu M, Cheng SZ, Xu KW, Yang Y, Zhu QT, Zhang H, Yang DY, Cheng SY, Xiao H, Wang JW, Yao HR, Cong YT, Zhou YQ, Peng S, Kuang M, Hou FF, Cheng KK, Xiao HP. BMJ. 2020 Jun 10;369:m2195. doi: 10.1136/bmj.m2195.
PMID: 32522737

238. Tumor membrane-based vaccine immunotherapy in combination with anti-CTLA-4 antibody confers protection against immune checkpoint resistant murine triple-negative breast cancer.
Pack CD, Bommireddy R, Munoz LE, Patel JM, Bozeman EN, Dey P, Radhakrishnan V, Vartabedian VF, Venkat K, Ramachandiran S, Reddy SJC, Selvaraj P. Hum Vaccin Immunother. 2020 Jun 12:1-10. doi: 10.1080/21645515.2020.1754691. Online ahead of print.
PMID: 32530786

239. Intussusception in children aged under two years in India: Retrospective surveillance at nineteen tertiary care hospitals.
Das MK, Arora NK, Gupta B, Sharan A, Kameswari K, Padmalatha P, Prasad GR, Shad J, Shyamala J, Harish Kumar S, Nagender Y, Sharmila K, Shad R, Garge S, Bharadia L, Gupta A, Goswami JK, Lahiri K, Sankhe L, Mane S, Patwari YP, Ajayakumar MK, Santhosh Kumar A, Sarangi R, Tripathy BB, Mohapatra SSG, Sahoo SK, Kumar V, Kumar R, Sarkar S, Sarkar R, Sarkar NR, Wakhlu A, Ratan SK, Dubey AP, Mohan N, Luthra M, Vyas BR, Trivedi H, Mathai J, Sam CJ, Jothilakshmi K, Arunachalam P, Bhat JI, Mufti G, Charoo BA, Jena PK, Debbarma SK, Ghosh SK, Aggarwal MK, Haldar P, Zuber PLF, Maure C, Bonhoeffer J, Ray A. Vaccine. 2020 Jun 15:S0264-410X(20)30563-6. doi: 10.1016/j.vaccine.2020.04.059. Online ahead of print.
PMID: 32553492

240. Timely completion of vaccination and its determinants among children in northwest, Ethiopia: a multilevel analysis.
Mekonnen ZA, Gelaye KA, Were MC, Tilahun B. BMC Public Health. 2020 Jun 11;20(1):908. doi: 10.1186/s12889-020-08935-8.
PMID: 32527248

241. A novel particulate delivery system based on antigen-Zn2+ coordination interactions enhances stability and cellular immune response of inactivated foot and mouth disease virus.
Li S, Yang Y, Lin X, Li Z, Ma G, Su Z, Zhang S. Mol Pharm. 2020 Jun 15. doi: 10.1021/acs.molpharmaceut.0c00365. Online ahead of print.
PMID: 32539415

242. Cutting Edge: TNF Is Essential for Mycobacteria-Induced MINCLE Expression, Macrophage Activation, and Th17 Adjuvanticity.
Schick J, Schäfer J, Alexander C, Dichtl S, Murray PJ, Christensen D, Sorg U, Pfeffer K, Schleicher U, Lang R. J Immunol. 2020 Jun 15:ji2000420. doi: 10.4049/jimmunol.2000420. Online ahead of print.
PMID: 32540999

243. Ten challenging questions about SARS-CoV-2 and COVID-19.
Teymoori-Rad M, Samadizadeh S, Tabarraei A, Moradi A, Shahbaz MB, Tahamtan A. Expert Rev Respir Med. 2020 Jun 13. doi: 10.1080/17476348.2020.1782197. Online ahead of print.
PMID: 32536226

244. Use of personal protective equipment against coronavirus disease 2019 by healthcare professionals in Wuhan, China: cross sectional study.
Liu M, Cheng SZ, Xu KW, Yang Y, Zhu QT, Zhang H, Yang DY, Cheng SY, Xiao H, Wang JW, Yao HR, Cong YT, Zhou YQ, Peng S, Kuang M, Hou FF, Cheng KK, Xiao HP. BMJ. 2020 Jun 10;369:m2195. doi: 10.1136/bmj.m2195.
PMID: 32522737

245. Tumor membrane-based **vaccine** immunotherapy in combination with anti-CTLA-4 antibody confers protection against immune checkpoint resistant murine triple-negative breast cancer.
Pack CD, Bommireddy R, Munoz LE, Patel JM, Bozeman EN, Dey P, Radhakrishnan V, Vartabedian VF, Venkat K, Ramachandiran S, Reddy SJC, Selvaraj P. Hum Vaccin Immunother. 2020 Jun 12:1-10. doi: 10.1080/21645515.2020.1754691. Online ahead of print.
PMID: 32530786

246. Intussusception in children aged under two years in India: Retrospective surveillance at nineteen tertiary care hospitals.
Das MK, Arora NK, Gupta B, Sharan A, Kameswari K, Padmalatha P, Prasad GR, Shad J, Shyamala J, Harish Kumar S, Nagender Y, Sharmila K, Shad R, Garge S, Bharadia L, Gupta A, Goswami JK, Lahiri K, Sankhe L, Mane S, Patwari YP, Ajayakumar MK, Santhosh Kumar A, Sarangi R, Tripathy BB, Mohapatra SSG, Sahoo SK, Kumar V, Kumar R, Sarkar S, Sarkar R, Sarkar NR, Wakhlu A, Ratan SK, Dubey AP, Mohan N, Luthra M, Vyas BR, Trivedi H, Mathai J, Sam CJ, Jothilakshmi K, Arunachalam P, Bhat JI, Mufti G, Charoo BA, Jena PK, Debbarma SK, Ghosh SK, Aggarwal MK, Haldar P, Zuber PLF, Maure C, Bonhoeffer J, Ray A. Vaccine. 2020 Jun 15:S0264-410X(20)30563-6. doi: 10.1016/j.vaccine.2020.04.059. Online ahead of print.
PMID: 32553492

247. Timely completion of vaccination and its determinants among children in northwest, Ethiopia: a multilevel analysis.
Mekonnen ZA, Gelaye KA, Were MC, Tilahun B. BMC Public Health. 2020 Jun 11;20(1):908. doi: 10.1186/s12889-020-08935-8.
PMID: 32527248

248. May rotavirus **vaccine** be affect food allergy prevalence?
Karakaş NM, Arslan A, Atalay E, Ayli I, Bağcı ZI, Cesaretli S, Köksal BT, Yilmaz Özbek Ö. Hum Vaccin Immunother. 2020 Jun 12:1-5. doi: 10.1080/21645515.2020.1732167. Online ahead of print.
PMID: 32530362

249. Polymeric nanostructure vaccines: applications and challenges.
Simón-Vázquez R, Peleteiro M, González-Fernández Á. Expert Opin Drug Deliv. 2020 Jun 10:1-17. doi: 10.1080/17425247.2020.1776259. Online ahead of print.
PMID: 32476491

250. Boceprevir, GC-376, and calpain inhibitors II, XII inhibit SARS-CoV-2 viral replication by targeting the viral main protease.
Ma C, Sacco MD, Hurst B, Townsend JA, Hu Y, Szeto T, Zhang X, Tarbet B, Marty MT, Chen Y, Wang J. Cell Res. 2020 Jun 15:1-15. doi: 10.1038/s41422-020-0356-z. Online ahead of print.
PMID: 32541865

251. Passive Immunity for Coronavirus Disease 2019: A Commentary on Therapeutic Aspects Including Convalescent Plasma.
Lindholm PF, Ramsey G, Kwaan HC. Semin Thromb Hemost. 2020 Jun 11. doi: 10.1055/s-0040-1712157. Online ahead of print.
PMID: 32526774

252. The Improbability of the Rapid Development of a Vaccine for SARS-CoV-2.
Morris KV. Mol Ther. 2020 Jun 12:S1525-0016(20)30295-1. doi: 10.1016/j.ymthe.2020.06.005. Online ahead of print.
PMID: 32533920

253. The pseudorabies virus R2 non-neuroinvasive vaccine: A proof-of-concept study in pigs.
Pickard GE, Brodersen B, Sollars PJ, Smith GA. Vaccine. 2020 Jun 15;38(29):4524-4528. doi: 10.1016/j.vaccine.2020.05.002. Epub 2020 May 22.
PMID: 32448623

254. Shielding and Beyond: The Roles of Glycans in SARS-CoV-2 Spike Protein.
Casalino L, Gaieb Z, Dommer AC, Harbison AM, Fogarty CA, Barros EP, Taylor BC, Fadda E, Amaro RE. bioRxiv. 2020 Jun 11:2020.06.11.146522. doi: 10.1101/2020.06.11.146522. Preprint.
PMID: 32577644

255. *Cis*-acting sequences and secondary structures in untranslated regions of duck Tembusu virus RNA are important for cap-independent translation and viral proliferation.
Wang T, Merits A, Wu Y, Wang M, Jia R, Zhu D, Liu M, Zhao X, Yang Q, Wu Y, Zhang S, Liu Y, Zhang L, Yu Y, Pan L, Chen S, Cheng A. J Virol. 2020 Jun 10:JVI.00906-20. doi: 10.1128/JVI.00906-20. Online ahead of print.
PMID: 32522848

256. Whole exome sequencing reveals the different responsiveness to Enterovirus 71 vaccination in Chinese children.
Zhang L, Yu C, Ge Z, Tao H, Meng F, Xu X, Tian T, Song C, Hu Z, Li J, Zhu F. Int J Infect Dis. 2020 Jun 10;97:47-53. doi: 10.1016/j.ijid.2020.06.008. Online ahead of print.
PMID: 32531432

257. High genomic-based predicted strain coverage among invasive meningococcal isolates when combining Bexsero and Trumenba vaccines.
Säll O, Olofsson E, Jacobsson S. Vaccine. 2020 Jun 9;38(28):4374-4378. doi: 10.1016/j.vaccine.2020.04.074. Epub 2020 May 12.
PMID: 32414653

258. The quest to find an effective vaccine for COVID-19.
Glasper A. Br J Nurs. 2020 Jun 11;29(11):644-646. doi: 10.12968/bjon.2020.29.11.644.
PMID: 32516041

259. Influence of pneumococcal vaccination on the hospitalization of healthy pediatric patients due to typical community-acquired pneumonia.
Valdivielso Martínez AI, Ramos Fernández JM, Pérez Frías J, Moreno Pérez D. Int J Infect Dis. 2020 Jun 14:S1201-9712(20)30469-0. doi: 10.1016/j.ijid.2020.06.034. Online ahead of print. PMID: 32553718

260. Preclinical in vitro and in vivo profile of a highly-attenuated, broadly efficacious pneumolysin genetic toxoid.
Thanawastien A, Joyce KE, Cartee RT, Haines LA, Pelton SI, Tweten RK, Killeen KP. Vaccine. 2020 Jun 9:S0264-410X(20)30581-8. doi: 10.1016/j.vaccine.2020.04.064. Online ahead of print.
PMID: 32532546

261. Impact of state weights on national vaccination coverage estimates from household surveys in Nigeria.
Dong TQ, Rhoda DA, Mercer LD. Vaccine. 2020 Jun 9:S0264-410X(20)30645-9. doi: 10.1016/j.vaccine.2020.05.026. Online ahead of print.
PMID: 32532542

262. When a COVID-19 vaccine is ready, will we all be ready for it?
Fadda M, Albanese E, Suggs LS. Int J Public Health. 2020 Jun 11:1-2. doi: 10.1007/s00038-020-01404-4. Online ahead of print.
PMID: 32529534

263. High overall confidence in childhood vaccination in Norway, slightly lower among the unemployed and those with a lower level of education.
Steens A, Stefanoff P, Daae A, Vestrheim DF, Riise Bergsaker MA. Vaccine. 2020 Jun 15;38(29):4536-4541. doi: 10.1016/j.vaccine.2020.05.011. Epub 2020 May 21. PMID: 32448621

264. T cell immunity rather than antibody mediates cross-protection against Zika virus infection conferred by a live attenuated Japanese encephalitis SA14-14-2 vaccine.
Wang R, Zhen Z, Turtle L, Hou B, Li Y, Wu N, Gao N, Fan D, Chen H, An J. Appl Microbiol Biotechnol. 2020 Jun 15. doi: 10.1007/s00253-020-10710-z. Online ahead of print.
PMID: 32556415

265. Citizens' juries give verdict on whether private practice veterinarians should attend unvaccinated Hendra virus suspect horses.
Annand EJ, Reid PA, Johnson J, Gilbert GL, Taylor M, Walsh M, Ward MP, Wilson A, Degeling C. Aust Vet J. 2020 Jun 11. doi: 10.1111/avj.12957. Online ahead of print.
PMID: 32529687

266. Immune Response to Vaccination in Children and Young People with Inflammatory Bowel Disease: A Systematic Review and Meta-Analysis.
Dembiński Ł, Dziekiewicz M, Banaszkiewicz A. J Pediatr Gastroenterol Nutr. 2020 Jun 15. doi: 10.1097/MPG.0000000000002810. Online ahead of print.
PMID: 32558670

267. Diphtheria, tetanus and pertussis: unequal vaccine siblings with distinct characteristics.
Heininger U. Clin Infect Dis. 2020 Jun 9:ciaa643. doi: 10.1093/cid/ciaa643. Online ahead of print.
PMID: 32516807

268. Increasing healthcare workers' uptake of seasonal influenza vaccination in a tertiary-care pediatric hospital in Greece with a low-cost, tailor-made, multifaceted strategy.
Kopsidas I, Tsopela GC, Maroudi-Manta S, Kourkouni E, Charalampopoulos D, Sirogianni A, Collins ME, Lourida A, Kourlaba G, Zaoutis TE, Coffin SE. Vaccine. 2020 Jun 15;38(29):4609-4615. doi: 10.1016/j.vaccine.2020.05.021. Epub 2020 May 16.
PMID: 32430148

269. Clinical characteristics of children and adults with anti-N-methyl-D-aspartate receptor encephalitis.
Norioka R, Kumada S, Tobisawa S, Tsuyusaki Y, Isozaki E. Clin Neurol Neurosurg. 2020 Jun 12;196:106015. doi: 10.1016/j.clineuro.2020.106015. Online ahead of print.
PMID: 32574966

270. A GM-CSF-neuroantigen tolerogenic vaccine elicits inefficient antigen recognition events below the CD40L triggering threshold to expand $CD4^+$ $CD25^+$ $FOXP3^+$ Tregs that inhibit experimental autoimmune encephalomyelitis (EAE).
Moorman CD, Bastian AG, DeOca KB, Mannie MD. J Neuroinflammation. 2020 Jun 10;17(1):180. doi: 10.1186/s12974-020-01856-8.
PMID: 32522287

271. Duration of immunity against heterologous porcine parvovirus 1 challenge in gilts immunized with a novel subunit vaccine based on the viral protein 2.
Garcia-Morante B, Noguera M, Klocke S, Sommer K, Bridger P. BMC Vet Res. 2020 Jun 9;16(1):184. doi: 10.1186/s12917-020-02394-4.
PMID: 32517691

272. Inhibitory effects of piceatannol on human cytomegalovirus (hCMV) in vitro.
Wang SY, Zhang J, Xu XG, Su HL, Xing WM, Zhang ZS, Jin WH, Dai JH, Wang YZ, He XY, Sun C, Yan J, Mao GX. J Microbiol. 2020 Jun 10. doi: 10.1007/s12275-020-9528-2. Online ahead of print.
PMID: 32524342

273. [Development and achievements regarding the prevention and control of cervical cancer in the last 20 years in China].
Zhang SK, Zhao FH, Qiao YL. Zhonghua Liu Xing Bing Xue Za Zhi. 2020 Jun 10;41(6):809-812. doi: 10.3760/cma.j.cn112338-20191203-00849.
PMID: 32564540

274. U-Omp19 from Brucella abortus increases dmLT immunogenicity and improves protection against Escherichia coli heat-labile toxin (LT) oral challenge.
Coria LM, Martinez FL, Bruno LA, Pasquevich KA, Cassataro J. Vaccine. 2020 Jun 11:S0264-410X(20)30670-8. doi: 10.1016/j.vaccine.2020.05.039. Online ahead of print.
PMID: 32536545

275. Lead Optimization of Second-Generation Acridones as Broad-Spectrum Antimalarials.
Kancharla P, Dodean RA, Li Y, Pou S, Pybus B, Melendez V, Read L, Bane CE, Vesely B, Kreishman-Deitrick M, Black C, Li Q, Sciotti RJ, Olmeda R, Luong TL, Gaona H, Potter B, Sousa J, Marcsisin S, Caridha D, Xie L, Vuong C, Zeng Q, Zhang J, Zhang P, Lin H, Butler K, Roncal N, Gaynor-Ohnstad L, Leed SE, Nolan C, Ceja FG, Rasmussen SA, Tumwebaze PK, Rosenthal PJ, Mu J, Bayles BR, Cooper RA, Reynolds KA, Smilkstein MJ, Riscoe MK, Kelly JX. J Med Chem. 2020 Jun 11;63(11):6179-6202. doi: 10.1021/acs.jmedchem.0c00539. Epub 2020 May 26.
PMID: 32390431

276. Muscle destruction caused by coxsackievirus A10 in gerbils: construction of a novel animal model for antiviral evaluation.
Chen C, Xia Y, Zhu S, Xu F, Sun Y, Lu H, Gao M, Yang Z, Mao Z, Ge Q, Miao Z, Zhu H, Yao P. Virus Res. 2020 Jun 15:198067. doi: 10.1016/j.virusres.2020.198067. Online ahead of print.
PMID: 32553610

277. Salmonella Enteritidis ghost vaccine carrying the hemagglutinin globular head (HA1) domain from H1N1 virus protects against salmonellosis and influenza in chickens.
Won G, Senevirathne A, Lee JH. Vaccine. 2020 Jun 9;38(28):4387-4394. doi: 10.1016/j.vaccine.2020.04.077. Epub 2020 May 10. PMID: 32402750

278. Trends in measles cases in Bayelsa state, Nigeria: a five-year review of case-based surveillance data (2014-2018).
Aworabhi-Oki N, Numbere T, Balogun MS, Usman A, Utulu R, Ebere N, Omubo W, Stow J, Abba S, Olorukooba A. BMC Public Health. 2020 Jun 15;20(1):938. doi: 10.1186/s12889-020-09070-0.
PMID: 32539691

279. Click chemistry compared to thiol chemistry for the synthesis of site-selective glycoconjugate vaccines using CRM_{197} as carrier protein.
Stefanetti G, Allan M, Usera A, Micoli F. Glycoconj J. 2020 Jun 13. doi: 10.1007/s10719-020-09930-2. Online ahead of print.
PMID: 32535667

280. Evaluation of the protective efficacy of a Leishmania protein associated with distinct adjuvants against visceral leishmaniasis and in vitro immunogenicity in human cells.
Ribeiro PAF, Dias DS, Lage DP, Mendonça DVC, Vale DL, Ramos FF, Carvalho LM, Carvalho AMRS, Steiner BT, Roque MC, Oliveira-da-Silva JA, Oliveira JS, Tavares GSV, Martins VT, Chávez-Fumagalli MA, Roatt BM, Moreira RLF, Menezes-Souza D, Duarte MC, Oliveira MC, Machado-de-Ávila RA, Teixeira AL, Coelho EAF. Parasitol Res. 2020 Jun 13. doi: 10.1007/s00436-020-06752-x. Online ahead of print.
PMID: 32535734

281. Transcriptional control of the gonococcal ompA gene by the MisR/MisS two-component regulatory system.
Holley CL, Ayala JC, Shafer WM. Sci Rep. 2020 Jun 10;10(1):9425. doi: 10.1038/s41598-020-66382-2.
PMID: 32523077

282. Assessing the Knowledge, Attitudes, and Practices Regarding Sexually Transmitted Infections Among College Students in a Rural Midwest Setting.
McMann N, Trout KE. J Community Health. 2020 Jun 12. doi: 10.1007/s10900-020-00855-3. Online ahead of print.
PMID: 32533286

283. Infant antibody levels following 10-valent pneumococcal-protein D conjugate and DTaP-Hib vaccinations in the first year of life after maternal Tdap vaccination: An open-label, parallel, randomised controlled trial.
Barug D, Berbers GAM, van Houten MA, Kuijer M, Pronk I, Knol MJ, Sanders EAM, Rots NY. Vaccine. 2020 Jun 15;38(29):4632-4639. doi: 10.1016/j.vaccine.2020.04.001. Epub 2020 May 21.
PMID: 32448624

284. The Stronger Downregulation of *in vitro* and *in vivo* Innate Antiviral Responses by a Very Virulent Strain of Infectious Bursal Disease Virus (IBDV), Compared to a Classical Strain, Is Mediated, in Part, by the VP4 Protein.

Dulwich KL, Asfor A, Gray A, Giotis ES, Skinner MA, Broadbent AJ. Front Cell Infect Microbiol. 2020 Jun 9;10:315. doi: 10.3389/fcimb.2020.00315. eCollection 2020.
PMID: 32582573

285. Identification of Immunogenic Antigens of *Naegleria fowleri* Adjuvanted by Cholera Toxin.
Rojas-Hernández S, Gutiérrez-Sánchez M, Rojas-Ortega DA, Bonilla-Lemus P, Contis-Montes de Oca A, Herrera-Díaz J, López-Reyes I, Carrasco-Yépez MM. Pathogens. 2020 Jun 10;9(6):E460. doi: 10.3390/pathogens9060460.
PMID: 32531943

286. Measles vaccination of young infants in China: A cost-effectiveness analysis.
Janusz CB, Wagner AL, Masters NB, Ding Y, Zhang Y, Hutton DW, Boulton ML. Vaccine. 2020 Jun 15;38(29):4616-4624. doi: 10.1016/j.vaccine.2020.04.079. Epub 2020 May 22.
PMID: 32451210

287. Human CLEC9A antibodies deliver Wilms' tumor 1 (WT1) antigen to CD141^{+} dendritic cells to activate naïve and memory WT1-specific CD8^{+} T cells.
Pearson FE, Tullett KM, Leal-Rojas IM, Haigh OL, Masterman KA, Walpole C, Bridgeman JS, McLaren JE, Ladell K, Miners K, Llewellyn-Lacey S, Price DA, Tunger A, Schmitz M, Miles JJ, Lahoud MH, Radford KJ. Clin Transl Immunology. 2020 Jun 12;9(6):e1141. doi: 10.1002/cti2.1141. eCollection 2020.
PMID: 32547743

288. Elevated CXCL10 serum levels in Measles virus primary infection and reinfection correlate with the serological stage and hospitalization status.
Semmler G, Griebler H, Aberle SW, Stiasny K, Richter L, Holzmann H, Weseslindtner L. J Infect Dis. 2020 Jun 9:jiaa326. doi: 10.1093/infdis/jiaa326. Online ahead of print.
PMID: 32515478

289. A 8- year Bangladeshi girl with disseminated histoplasmosis, presented as chronic liver disease with portal hypertension: a rare case report.
Nahar L, Benzamin M, Sarkar N, Roy U, Nahar K, Rukunuzzaman M, Nahid KL, Karim ASMB, Dey BP. BMC Pediatr. 2020 Jun 9;20(1):284. doi: 10.1186/s12887-020-02189-4.
PMID: 32513141

290. Computational Model Reveals a Stochastic Mechanism behind Germinal Center Clonal Bursts.
Pélissier A, Akrout Y, Jahn K, Kuipers J, Klein U, Beerenwinkel N, Rodríguez Martínez M. Cells. 2020 Jun 10;9(6):E1448. doi: 10.3390/cells9061448.
PMID: 32532145

291. Adjuvant VACcination against HPV in surgical treatment of Cervical Intra-epithelial Neoplasia (VACCIN study) a study protocol for a randomised controlled trial.

van de Laar RLO, Hofhuis W, Duijnhoven RG, Polinder S, Melchers WJG, van Kemenade FJ, Bekkers RLM, Van Beekhuizen HJ. BMC Cancer. 2020 Jun 9;20(1):539. doi: 10.1186/s12885-020-07025-7.
PMID: 32517663
Free PMC article.

292. Review of pediatric encephalitis and encephalopathy cases following immunization reported to the Canadian Immunization Monitoring Program Active (IMPACT) from 1992 to 2012.

Tam J, Tran D, Bettinger JA, Moore D, Sauvé L, Jadavji T, Tan B, Vaudry W, Halperin SA, Top KA; Canadian Immunization Monitoring Program Active Investigators. Vaccine. 2020 Jun 9;38(28):4457-4463. doi: 10.1016/j.vaccine.2020.04.035. Epub 2020 May 12.
PMID: 32414652

293. Characterization of Hepatitis B Surface Antigen Loaded Polylactic Acid-Based Microneedle and Its Dermal Safety Profile.

Na YG, Kim M, Han M, Huh HW, Kim JS, Kim JC, Park JH, Lee HK, Cho CW. Pharmaceutics. 2020 Jun 9;12(6):E531. doi: 10.3390/pharmaceutics12060531.
PMID: 32527003

294. Accessibility of O Antigens Shared between *Salmonella* Serovars Determines Antibody-Mediated Cross-Protection.

Ahmed A, Akhade AS, Qadri A. J Immunol. 2020 Jun 15:ji1900624. doi: 10.4049/jimmunol.1900624. Online ahead of print.
PMID: 32540995

295. [Imported B3 genotype measles virus isolated in Fujian province].

Li D, Yang XH, Zhang SH, Pan WY, Zhou Y, Chen ZF, Wu RH. Zhonghua Liu Xing Bing Xue Za Zhi. 2020 Jun 10;41(6):946-951. doi: 10.3760/cma.j.cn112338-20190815-00599.
PMID: 32564565

296. Impact of the National Perinatal Hepatitis B Prevention Programme in the Republic of Korea: A retrospective registry-based cohort study.

Yang TU, Jung CW, Kim D, Park HA, Jee Y. Vaccine. 2020 Jun 12:S0264-410X(20)30689-7. doi: 10.1016/j.vaccine.2020.05.044. Online ahead of print.
PMID: 32540270

297. Sofosbuvir as a potential alternative to treat the SARS-CoV-2 epidemic.

Jácome R, Campillo-Balderas JA, Ponce de León S, Becerra A, Lazcano A. Sci Rep. 2020 Jun 9;10(1):9294. doi: 10.1038/s41598-020-66440-9.
PMID: 32518317

298. Aetiology of bacterial meningitis in infants aged <90 days: prospective surveillance in Luanda, Angola.
Pelkonen T, Urtti S, Anjos ED, Cardoso O, de Gouveia L, Roine I, Peltola H, von Gottberg A, Kyaw MH. Int J Infect Dis. 2020 Jun 10:S1201-9712(20)30454-9. doi: 10.1016/j.ijid.2020.06.016. Online ahead of print.
PMID: 32534141

299. Intralesional antigen immunotherapy for the treatment of plane warts: A comparative study.
Fawzy MM, Nofal A, Alakad R. Dermatol Ther. 2020 Jun 12:e13807. doi: 10.1111/dth.13807. Online ahead of print.
PMID: 32530550

300. Antigenic membrane proteins of virulent variant of *Entamoeba histolytica* HM-1:IMSS.
Kumarasamy G, Abdus Sani AA, Olivos-García A, Noordin R, Othman N. Pathog Glob Health. 2020 Jun 15:1-10. doi: 10.1080/20477724.2020.1780402. Online ahead of print.
PMID: 32536281

301. Australia: an island in a sea of measles.
Williamson KM, Merritt T, Durrheim DN. Med J Aust. 2020 Jun 14. doi: 10.5694/mja2.50650. Online ahead of print.
PMID: 32535928

302. Synthesis, admetSAR predictions, DPPH radical scavenging activity and potent anti-mycobacterial studies of hydrazones of substituted 4-(anilinomethyl)benzohydrazides (Part 2).
Desale VJ, Mali SN, Thorat BR, Yamgar RS. Curr Comput Aided Drug Des. 2020 Jun 15. doi: 10.2174/1573409916666200615141047. Online ahead of print.
PMID: 32538732

303. Measuring the cellular memory B cell response after vaccination in patients after allogeneic stem cell transplantation.
Winkler J, Tittlbach H, Schneider A, Buchstaller C, Mayr A, Vasova I, Roesler W, Mach M, Mackensen A, Winkler TH. Ann Hematol. 2020 Jun 9. doi: 10.1007/s00277-020-04072-9. Online ahead of print.
PMID: 32519092

304. Immunopotentiation of the engineered low-molecular-weight pilin targeting Pseudomonas aeruginosa: A combination of immunoinformatics investigation and active immunization.
Ahmadbeigi Y, Chirani AS, Soleimani N, Mahdavi M, Goudarzi M. Mol Immunol. 2020 Jun 12;124:70-82. doi: 10.1016/j.molimm.2020.05.009. Online ahead of print.
PMID: 32540517

305. Coupling Microscopy and Flow Cytometry for a Comprehensive Characterization of Nanoparticle Production in Insect Cells.
Puente-Massaguer E, Saccardo P, Ferrer-Miralles N, Lecina M, Gòdia F. Cytometry A. 2020 Jun 9. doi: 10.1002/cyto.a.24033. Online ahead of print.
PMID: 32515126

306. Varying starch to fat ratios in pelleted diets: I. Effects on nutrient digestibility and production performance in *Eimeria*-challenged broiler chickens.
Itani K, Granstad S, Kaldhusdal M, Mydland LT, Svihus B. Br Poult Sci. 2020 Jun 15. doi: 10.1080/00071668.2020.1782349. Online ahead of print.
PMID: 32538137

307. Is it time to re-evaluate the priority for a WN vaccine.
Barrett ADT. Clin Infect Dis. 2020 Jun 11:ciaa744. doi: 10.1093/cid/ciaa744. Online ahead of print.
PMID: 32526009

308. Assessment of risk of intussusception after pilot rollout of rotavirus vaccine in the Indian public health system.
Early Rollout of ROTAVAC®India Network. Vaccine. 2020 Jun 15:S0264-410X(20)30760-X. doi: 10.1016/j.vaccine.2020.05.093. Online ahead of print.
PMID: 32553493

309. Using negative control outcomes to assess the comparability of treatment groups among women with osteoporosis in the United States.
McGrath LJ, Spangler L, Curtis JR, Ehrenstein V, Sørensen HT, Saul B, Levintow SN, Reams D, Bradbury BD, Brookhart MA. Pharmacoepidemiol Drug Saf. 2020 Jun 14. doi: 10.1002/pds.5037. Online ahead of print.
PMID: 32537883

310. Adjuvant selection impacts the correlates of vaccine protection against Ebola infection.
Stronsky SM, Cooper CL, Steffens J, Van Tongeren S, Bavari S, Martins KA, Petrovsky N. Vaccine. 2020 Jun 15;38(29):4601-4608. doi: 10.1016/j.vaccine.2020.05.009. Epub 2020 May 6.
PMID: 32418798

311. Evaluation of cell surface reactive immuno-adjuvant in combination with immunogenic cell death inducing drug for in situ chemo-immunotherapy.
Walters AA, Wang JT, Al-Jamal KT. J Control Release. 2020 Jun 10;322:519-529. doi: 10.1016/j.jconrel.2020.03.029. Epub 2020 Mar 31.
PMID: 32243973

312. Surgical Oncologists and the COVID-19 Pandemic: Guiding Cancer Patients Effectively through Turbulence and Change.
Hwang ES, Balch CM, Balch GC, Feldman SM, Golshan M, Grobmyer SR, Libutti SK, Margenthaler JA, Sasidhar M, Turaga KK, Wong SL, McMasters KM, Tanabe KK. Ann Surg Oncol. 2020 Jun 14:1-14. doi: 10.1245/s10434-020-08673-6. Online ahead of print.
PMID: 32535870

313. Surface display of spring viremia of carp virus glycoprotein on Lactococcus lactis and its protection efficacy in common carp (Cyprinus carpio L.).
Zhang C, Guo S, Zhao Z, Guo ZR, Ma R, Wang GX, Zhu B. Fish Shellfish Immunol. 2020 Jun 10;104:262-268. doi: 10.1016/j.fsi.2020.06.021. Online ahead of print.
PMID: 32534229

314. Present Scenario Of M-Cell Targeting Ligands For Oral Mucosal Immunization.
Saraf S, Jain S, Sahoo RN, Mallick S. Curr Drug Targets. 2020 Jun 9. doi: 10.2174/1389450121666200609113252. Online ahead of print.
PMID: 32516099

315. A Novel Chemically Differentiated Mouse Embryonic Stem Cell-Based Model to Study Liver Stages of Plasmodium berghei.
Tripathi J, Segeritz CP, Griffiths G, Bushell W, Vallier L, Skarnes WC, Mota MM, Billker O. Stem Cell Reports. 2020 Jun 9;14(6):1123-1134. doi: 10.1016/j.stemcr.2020.04.010. Epub 2020 May 21.
PMID: 32442532

316. Antigen-Specific IFN-γ/IL-17-Co-Producing CD4(+) T-Cells Are the Determinants for Protective Efficacy of Tuberculosis Subunit **Vaccine**.
Choi HG, Kwon KW, Choi S, Back YW, Park HS, Kang SM, Choi E, Shin SJ, Kim HJ. Vaccines (Basel). 2020 Jun 11;8(2):E300. doi: 10.3390/vaccines8020300.
PMID: 32545304

317. Phosphate starvation enhances phagocytosis of Mycobacterium bovis/BCG by macrophages.
Espinosa-Cueto P, Magallanes-Puebla A, Mancilla R. BMC Immunol. 2020 Jun 9;21(1):34. doi: 10.1186/s12865-020-00364-x.
PMID: 32517651

318. Non-sterilizing, Infection-Permissive Vaccination With Inactivated Influenza Virus **Vaccine** Reshapes Subsequent Virus Infection-Induced Protective Heterosubtypic Immunity From Cellular to Humoral Cross-Reactive Immune Responses.
Choi A, Ibañez LI, Strohmeier S, Krammer F, García-Sastre A, Schotsaert M. Front Immunol. 2020 Jun 9;11:1166. doi: 10.3389/fimmu.2020.01166. eCollection 2020.
PMID: 32582220

319. The health and economic burden of respiratory syncytial virus associated hospitalizations in adults.
Prasad N, Newbern EC, Trenholme AA, Thompson MG, McArthur C, Wong CA, Jelley L, Aminisani N, Huang QS, Grant CC. PLoS One. 2020 Jun 11;15(6):e0234235. doi: 10.1371/journal.pone.0234235. eCollection 2020.
PMID: 32525898

320. Cancer immunotherapy: dawn of the death of cancer?
Jain S, Kumar S. Int Rev Immunol. 2020 Jun 12:1-18. doi: 10.1080/08830185.2020.1775827. Online ahead of print.
PMID: 32530336

321. Immunogenicity of the hepatitis A vaccine 20 years after infant immunization.
Mosites E, Seeman S, Negus S, Homan C, Morris J, Nelson NP, Spradling PR, Bruce M, McMahon B. Vaccine. 2020 Jun 10:S0264-410X(20)30724-6. doi: 10.1016/j.vaccine.2020.05.069. Online ahead of print.
PMID: 32535018

322. Structural basis of a public antibody response to SARS-CoV-2.
Yuan M, Liu H, Wu NC, Lee CD, Zhu X, Zhao F, Huang D, Yu W, Hua Y, Tien H, Rogers TF, Landais E, Sok D, Jardine JG, Burton DR, Wilson IA. bioRxiv. 2020 Jun 9:2020.06.08.141267. doi: 10.1101/2020.06.08.141267. Preprint.
PMID: 32577642

323. Full-Genome Sequences of Two Newcastle Disease Virus Strains Isolated in West Java, Indonesia.
Pandarangga P, Cahyono MI, McAllister MM, Peaston AE, Tearle R, Low WY, Doan PTK, Rabiei M, Ignjatovic J, Dharmayanti NPI, Indriani R, Tarigan S, Hemmatzadeh F. Microbiol Resour Announc. 2020 Jun 11;9(24):e00221-20. doi: 10.1128/MRA.00221-20.
PMID: 32527784

324. Effectiveness of 'catch-up' human papillomavirus vaccination to prevent cervical neoplasia in immunosuppressed and non-immunosuppressed women.
Silverberg MJ, Leyden WA, Lam JO, Chao CR, Gregorich SE, Huchko MJ, Kulasingam S, Kuppermann M, Smith-McCune KK, Sawaya GF. Vaccine. 2020 Jun 15;38(29):4520-4523. doi: 10.1016/j.vaccine.2020.05.004. Epub 2020 May 20.
PMID: 32446836

325. SARS-CoV-2 mRNA Vaccine Development Enabled by Prototype Pathogen Preparedness.
Corbett KS, Edwards D, Leist SR, Abiona OM, Boyoglu-Barnum S, Gillespie RA, Himansu S, Schäfer A, Ziwawo CT, DiPiazza AT, Dinnon KH, Elbashir SM, Shaw CA, Woods A, Fritch EJ, Martinez DR, Bock KW, Minai M, Nagata BM, Hutchinson GB, Bahl K, Garcia-Dominguez D, Ma L, Renzi I, Kong WP, Schmidt SD, Wang L, Zhang Y, Stevens LJ, Phung E, Chang LA, Loomis RJ, Altaras NE, Narayanan E, Metkar M,

Presnyak V, Liu C, Louder MK, Shi W, Leung K, Yang ES, West A, Gully KL, Wang N, Wrapp D, Doria-Rose NA, Stewart-Jones G, Bennett H, Nason MC, Ruckwardt TJ, McLellan JS, Denison MR, Chappell JD, Moore IN, Morabito KM, Mascola JR, Baric RS, Carfi A, Graham BS. bioRxiv. 2020 Jun 11:2020.06.11.145920. doi: 10.1101/2020.06.11.145920. Preprint.
PMID: 32577634

326. A single dose of ChAdOx1 MERS provides protective immunity in rhesus macaques.
van Doremalen N, Haddock E, Feldmann F, Meade-White K, Bushmaker T, Fischer RJ, Okumura A, Hanley PW, Saturday G, Edwards NJ, Clark MHA, Lambe T, Gilbert SC, Munster VJ. Sci Adv. 2020 Jun 10;6(24):eaba8399. doi: 10.1126/sciadv.aba8399. eCollection 2020 Jun.
PMID: 32577525
Free PMC article.

327. One step closer to African swine fever vaccine.
Vet Rec. 2020 Jun 13;186(18):585. doi: 10.1136/vr.m2342.
PMID: 32527882

328. Underperformed and Underreported Testing for Persistent Oropharyngeal Poliovirus Infections in Primary Immune Deficient Patients-Risk for Reemergence of Polioviruses.
Shulman LM, Weil M, Somech R, Stauber T, Indenbaum V, Rahav G, Mendelson E, Sofer D. J Pediatric Infect Dis Soc. 2020 Jun 15:piaa053. doi: 10.1093/jpids/piaa053. Online ahead of print.
PMID: 32538431

329. Improving Influenza Prevention: Modest Changes With Large Effects.
Walter EB, Atmar RL. Clin Infect Dis. 2020 Jun 10;70(12):2503-2504. doi: 10.1093/cid/ciz683.
PMID: 31344224

330. Group B Streptococcal Disease: Interim Prevention at 50 Years and Counting.
Edwards MS, Baker CJ. Clin Infect Dis. 2020 Jun 10;70(12):2580-2581. doi: 10.1093/cid/ciz738.
PMID: 31394571

331. Game-Theoretical Model of Retroactive Hepatitis B Vaccination in China.
Chouhan A, Maiwand S, Ngo M, Putalapattu V, Rychtář J, Taylor D. Bull Math Biol. 2020 Jun 15;82(6):80. doi: 10.1007/s11538-020-00748-5.
PMID: 32542575

332. Master manipulators: how herpesviruses alter immune responses to RSV.
Gurczynski SJ, Moore BB. Mucosal Immunol. 2020 Jun 11:1-2. doi: 10.1038/s41385-020-0313-7. Online ahead of print.
PMID: 32528182

333. Yellow Fever Vaccine: The Conundrum of 2 Doses, One Dose, or One-Fifth Dose to Induce and Maintain Protective Immunity.
Barrett ADT. J Infect Dis. 2020 Jun 11;221(12):1922-1924. doi: 10.1093/infdis/jiz379.
PMID: 31545366

334. Vaccination using inactivated Mycoplasma pneumoniae induces detrimental infiltration of neutrophils after subsequent infection in mice.
Tamiya S, Yoshikawa E, Ogura M, Kuroda E, Suzuki K, Yoshioka Y. Vaccine. 2020 Jun 11:S0264-410X(20)30729-5. doi: 10.1016/j.vaccine.2020.05.074. Online ahead of print.
PMID: 32536549

335. e-Membranome: a Database for Genome-Wide Analysis of Escherichia coli Outer Membrane Proteins.
Lee KM, Cho SH, Kim CH, Kim JH, Kim SS. Curr Pharm Biotechnol. 2020 Jun 9. doi: 10.2174/1389201021666200610105549. Online ahead of print.
PMID: 32520685

336. Transient intestinal colonization by a live-attenuated oral cholera vaccine induces protective immune responses in streptomycin-treated mice.
Fakoya B, Sit B, Waldor MK. J Bacteriol. 2020 Jun 15:JB.00232-20. doi: 10.1128/JB.00232-20. Online ahead of print.
PMID: 32540930

337. Rethinking Flu Vaccine Messaging.
de St Maurice A, Edwards K. Pediatrics. 2020 Jun 15:e20201770. doi: 10.1542/peds.2020-1770. Online ahead of print.
PMID: 32540984

338. Epidemiology of a workplace measles outbreak dominated by modified measles cases at Kansai international airport, Japan, during august-september 2016.
Kobayashi A, Shimada T, Tanaka-Taya K, Kanai M, Okuno H, Kinoshita M, Matsui T, Oishi K. Vaccine. 2020 Jun 10:S0264-410X(20)30722-2. doi: 10.1016/j.vaccine.2020.05.067. Online ahead of print.
PMID: 32535017

339. Adverse events following immunization with the live-attenuated recombinant Japanese encephalitis vaccine (IMOJEV®) in Taiwan, 2017-18.
Ma HY, Lai CC, Chiu NC, Lee PI. Vaccine. 2020 Jun 13:S0264-410X(20)30769-6. doi: 10.1016/j.vaccine.2020.06.008. Online ahead of print.
PMID: 32546414

340. The HLA-DP peptide repertoire from human respiratory syncytial virus is focused on major structural proteins with the exception of the viral polymerase.

Lorente E, Barnea E, Mir C, Admon A, López D. J Proteomics. 2020 Jun 15;221:103759. doi: 10.1016/j.jprot.2020.103759. Epub 2020 Mar 31.
PMID: 32244010

341. *Orf Virus*-Based Vaccine Vector D1701-V Induces Strong CD8+ T Cell Response against the Transgene but Not against ORFV-Derived Epitopes.

Reguzova A, Ghosh M, Müller M, Rziha HJ, Amann R. Vaccines (Basel). 2020 Jun 10;8(2):E295. doi: 10.3390/vaccines8020295.
PMID: 32531997

342. Electronic immunization registers - A tool for mitigating outbreaks of vaccine-preventable diseases in the Pacific.

Sheel M, Tippins A, Glass K, Kirk M, Lau CL. Vaccine. 2020 Jun 9;38(28):4395-4398. doi: 10.1016/j.vaccine.2020.04.071. Epub 2020 May 12.
PMID: 32414655

343. Effectiveness of the Live Attenuated Influenza Vaccine: Was the Addition of the Second Type B Lineage a Step Too Far?

Monto AS. Clin Infect Dis. 2020 Jun 10;70(12):2514-2516. doi: 10.1093/cid/ciz722.
PMID: 31408517

344. Long-term maintenance of lung resident memory T cells is mediated by persistent antigen.

Uddbäck I, Cartwright EK, Schøller AS, Wein AN, Hayward SL, Lobby J, Takamura S, Thomsen AR, Kohlmeier JE, Christensen JP. Mucosal Immunol. 2020 Jun 9. doi: 10.1038/s41385-020-0309-3. Online ahead of print.
PMID: 32518368

345. Corrigendum to "Virus-like particle vaccines expressing Toxoplasma gondii rhoptry protein 18 and microneme protein 8 provide enhanced protection" [Vaccine 36 (2018) 5692-5700].

Lee SH, Kang HJ, Lee DH, Kang SM, Quan FS. Vaccine. 2020 Jun 15;38(29):4649. doi: 10.1016/j.vaccine.2020.05.034. Epub 2020 May 21.
PMID: 32448622

346. Influenza Vaccination Experiences of Pregnant Women as a Predictor of the Intention to Become Vaccinated in Future Pregnancies in Spain.

Rodríguez-Blanco N, Tuells J, Nolasco A. Vaccines (Basel). 2020 Jun 9;8(2):E291. doi: 10.3390/vaccines8020291.
PMID: 32527002

347. Hospitalizations for lower respiratory tract infections in children in relation to the sequential use of three pneumococcal vaccines in Quebec.
Zhou Z, Gilca R, Deceuninck G, Boucher F, De Wals P. Can J Public Health. 2020 Jun 11. doi: 10.17269/s41997-020-00329-y. Online ahead of print. PMID: 32529553

348. Plasma from recovered COVID19 subjects inhibits spike protein binding to ACE2 in a microsphere-based inhibition assay.
Gniffke EP, Harrington WE, Dambrauskas N, Jiang Y, Trakhimets O, Vigdorovich V, Frenkel L, Sather DN, Smith SEP. medRxiv. 2020 Jun 11:2020.06.09.20127050. doi: 10.1101/2020.06.09.20127050. Preprint. PMID: 32577669

349. Antibody-Dependent Cellular Phagocytosis of HIV-1-Infected Cells Is Efficiently Triggered by IgA Targeting HIV-1 Envelope Subunit gp41.
Duchemin M, Tudor D, Cottignies-Calamarte A, Bomsel M. Front Immunol. 2020 Jun 9;11:1141. doi: 10.3389/fimmu.2020.01141. eCollection 2020.
PMID: 32582208

350. Amantadine Treatment for People with COVID-19.
Araújo R, Aranda-Martínez JD, Aranda-Abreu GE. Arch Med Res. 2020 Jun 12:S0188-4409(20)30917-6. doi: 10.1016/j.arcmed.2020.06.009. Online ahead of print.
PMID: 32571606

351. 2-((4-Arylpiperazin-1-yl)methyl)benzonitrile Derivatives as Orally Available Inhibitors of Hepatitis C Virus with a Novel Mechanism of Action.
Jiang X, Tan J, Wang Y, Chen J, Li J, Jiang Z, Quan Y, Jin J, Li Y, Cen S, Li Y, Peng Z, Li Z. J Med Chem. 2020 Jun 11;63(11):5972-5989. doi: 10.1021/acs.jmedchem.0c00232. Epub 2020 May 20.
PMID: 32378892

352. The effect of BCG vaccination on alveolar macrophages obtained from induced sputum from healthy volunteers.
Koeken VACM, van der Pasch ES, Leijte GP, Mourits VP, de Bree LCJ, Moorlag SJCFM, Budnick I, Idh N, Lerm M, Kox M, van Laarhoven A, Netea MG, van Crevel R. Cytokine. 2020 Jun 10;133:155135. doi: 10.1016/j.cyto.2020.155135. Online ahead of print.
PMID: 32534356

353. The risk of Kawasaki disease after pneumococcal conjugate & meningococcal B vaccine in England: A self-controlled case-series analysis.
Stowe J, Andrews NJ, Turner PJ, Miller E. Vaccine. 2020 Jun 11:S0264-410X(20)30756-8. doi: 10.1016/j.vaccine.2020.05.089. Online ahead of print.
PMID: 32536544

354. A unique algorithm for the determination of peptide-carrier protein conjugation ratio by amino acid analysis using intrinsic internal standard.
Yang GJ, Yang Y, Shaddeau A, Cai CX, Li Y, Gulla K, Zhang Y, Ou L, Cooper JW, Lei QP. Vaccine. 2020 Jun 15;38(29):4507-4511. doi: 10.1016/j.vaccine.2020.04.080. Epub 2020 May 22.
PMID: 32448620

355. Specific Antibodies Induced by Immunization with Hepatitis B Virus-Like Particles Carrying Hepatitis C Virus Envelope Glycoprotein 2 Epitopes Show Differential Neutralization Efficiency.
Czarnota A, Offersgaard A, Pihl AF, Prentoe J, Bukh J, Gottwein JM, Bieńkowska-Szewczyk K, Grzyb K. Vaccines (Basel). 2020 Jun 10;8(2):E294. doi: 10.3390/vaccines8020294.
PMID: 32532076

356. Interleukin-22 Inhibits Respiratory Syncytial Virus Production by Blocking Virus-Mediated Subversion of Cellular Autophagy.
Das S, St Croix C, Good M, Chen J, Zhao J, Hu S, Ross M, Myerburg MM, Pilewski JM, Williams J, Wenzel SE, Kolls JK, Ray A, Ray P. iScience. 2020 Jun 10;23(7):101256. doi: 10.1016/j.isci.2020.101256. Online ahead of print.
PMID: 32580124

357. Cross-sectional evaluation of humoral responses against SARS-CoV-2 Spike.
Prévost J, Gasser R, Beaudoin-Bussières G, Richard J, Duerr R, Laumaea A, Anand SP, Goyette G, Ding S, Medjahed H, Lewin A, Perreault J, Tremblay T, Gendron-Lepage G, Gauthier N, Carrier M, Marcoux D, Piché A, Lavoie M, Benoit A, Loungnarath V, Brochu G, Desforges M, Talbot PJ, Gould Maule GT, Côté M, Therrien C, Serhir B, Bazin R, Roger M, Finzi A. Version 2. bioRxiv. 2020 Jun 10:2020.06.08.140244. doi: 10.1101/2020.06.08.140244. Preprint.
PMID: 32577637

358. Suspected adverse reaction to erysipelas vaccine in sheep.
Bidewell C, Carson A, Diesel G, Floyd T. Vet Rec. 2020 Jun 13;186(18):610-611. doi: 10.1136/vr.m1482.
PMID: 32527900

Patentes registradas en Patent Google

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Dose reduced povlio virus vaccine compositions and methods for its production
WO EP US CN JP KR AU BR CA CU EA MX PE PH SG EP3663396A1 Rajeev Mhalasakant DHERE Serum Institute Of India Private Limited

Priority 2014-10-07 • Filed 2015-10-06 • Published 2020-06-10

Pertussis booster vaccine
WO2020117618A1 Nicolas Burdin Sanofi Pasteur Inc.

Priority 2018-12-05 • Filed 2019-11-29 • Published 2020-06-11

Hepatitis b nanoparticle-based vaccine for influenza virus
WO EP CN EP3661549A1 Audray K. HARRIS The U.S.A. As Represented By The Secretary, Department Of Health And Human …

Priority 2017-08-02 • Filed 2018-08-02 • Published 2020-06-10

Swine mycoplasmal pneumonia attenuated live vaccine and use thereof
WO EP US EP3098301B1 Guoqinq SHAO Jiangsu Academy of Agricultural Sciences

Priority 2014-01-26 • Filed 2014-01-26 • Granted 2020-06-10 • Published 2020-06-10

A vaccine for protection against streptococcus suis
WO EP CN EP3661546A1 Antonius Arnoldus Christiaan Jacobs Intervet International B.V.

Priority 2017-08-03 • Filed 2018-08-02 • Published 2020-06-10

A vaccine comprising a pcv2 orf2 protein of genotype 2b
WO EP EP3661548A1 Melanie SNO Intervet International B.V.

Priority 2017-08-03 • Filed 2018-08-02 • Published 2020-06-10

Vaccine composition

EP US CN JP KR CA IN RU EP3662927A2 Daisuke Asari Nitto Denko Corporation

Priority 2013-02-05 • Filed 2014-01-29 • Published 2020-06-10

A recombinant koi herpesvirus (khv) and a diva vaccine for preventing and/or …
EP EP3662929A1 Walter Fuchs IDT Biologika GmbH

Priority 2018-12-07 • Filed 2018-12-07 • Published 2020-06-10

Nanoparticle platform for antibody and vaccine delivery
WO EP CA EP3661968A1 Jean-Philippe Julien The Hospital for Sick Children

Priority 2017-08-04 • Filed 2018-08-03 • Published 2020-06-10

Cross-protective arenavirus vaccines and their method of use
WO EP US CN JP KR AU CA ES EP3662935A1 Kate Broderick Inovio Pharmaceuticals, Inc.

Priority 2011-07-11 • Filed 2012-07-11 • Published 2020-06-10

A DNA plasmid **vaccine** of any one of claims 1 to 4 for use in a method of inducing a protective immune response against LASV in a subject. The DNA plasmid **vaccine** for use as claimed in claim 5 wherein the DNA **vaccine** is administered by electroporation. The DNA plasmid **vaccine** for use as claimed in …

Mesoporous silica compositions for modulating immune responses
WO EP US CN JP AU CA DK HK HU LT PT EP3662896A1 Jaeyun Kim President and Fellows of Harvard College

Priority 2012-04-16 • Filed 2013-04-16 • Published 2020-06-10

A composition comprising mesoporous silica rods comprising an immune cell recruitment compound and an immune cell activation compound, and optionally comprising an antigen such as a tumor lysate. The composition is used to elicit an immune response to a **vaccine** antigen.

Induction of protective immunity against antigens
WO EP CN EP3661547A1 Roy Curtiss Iii University of Florida Research Foundation, Incorporated

Priority 2017-08-04 • Filed 2018-08-03 • Published 2020-06-10

85. Clifton-Hadley FA, Breslin M, Venables LM, Sprigings KA, Cooles SW, Houghton S, Woodward MJ. 2002. A laboratory study of an inactivated bivalent iron restricted Salmonella enterica serovars Enteritidis and Typhimurium dual **vaccine** against Typhimurium challenge in chickens. Vet Microbiol 89: 167 …

Compositions comprising jak inhibitors and haart drugs for use in the …

WO EP US CN AU BR CA MX EP2785184B1 Christina GAVEGNANO Emory University

Priority 2011-11-30 • Filed 2012-11-30 • Granted 2020-06-10 • Published 2020-06-10

d) AZT, and e) a NNRTI or a protease inhibitor, optionally wherein the NNRTI is Sustiva or the protease inhibitor is Kaletra, or wherein the JAK inhibitor, HAART, and **vaccine** or immunostimulatory compound are administered in combination or alternation. The medicament for use according to claim 3, …

Surrogate therapeutic endpoint for anti-ctla-4 based immunotherapy of disease

WO EP US CN JP AU CA IL MX NO NZ ZA EP1639010B1 Israel Lowy E. R. Squibb & Sons, L.L.C.

Priority 2003-05-30 • Filed 2004-05-28 • Granted 2020-06-10 • Published 2020-06-10

). In these instances, non-immunogenic tumors, such as the B16 melanoma, have been rendered susceptible to destruction by the immune system. The tumor cell **vaccine** may also be modified to express other immune activators such as IL2, and costimulatory molecules, among others. The study of gene …

Novel peptides and combination of peptides for use in immunotherapy against …

WO EP US CN JP KR AU BR CA CL CO CR EA GB HK IL MA MX PE PH ZA EP3322717B1 Heiko Schuster immatics biotechnologies GmbH

Priority 2015-07-15 • Filed 2016-07-14 • Granted 2020-06-10 • Published 2020-06-10

In an especially preferred embodiment, the pharmaceutical compositions comprise the peptides as salts of acetic acid (acetates), trifluoro acetates or hydrochloric acid (chlorides). Preferably, the medicament of the present invention is an immunotherapeutics such as a **vaccine**. It may be …

Formulation and delivery of modified nucleoside, nucleotide, and nucleic acid …

WO EP US EP2971010B1 Stephen G. HOGE ModernaTX, Inc.

Prioity 2013-03-14 • Filed 2014-03-14 • Granted 2020-06-10 • Published 2020-06-10

An mRNA for use in a therapeutic method of increasing the duration of protein expression from said mRNA in a mammalian cell or tissue of a mammal, said method comprising administering said mRNA via electroporation; wherein administration comprises the steps of (a) injecting the mammal with mRNA, …

Combination therapies

WO EP US CN JP KR AU BR CA EA MX EP3662903A2 Zhu Alexander CAO Novartis AG

Priority 2014-10-03 • Filed 2015-10-02 • Published 2020-06-10

Nestle, F. et al. (1998) Nature Medicine 4: 328-332). DCs may also be transduced by genetic means to express these tumor antigens as well. DCs have also been fused directly to tumor cells for the purposes of **immunization** (Kugler, A. et al. (2000) Nature Medicine 6:332-336). As a method of …

Means and methods for the prediction of treatment response of a cancer patient

WO EP US EP2619576B1 Niels Grabe Niels Grabe

Priority 2010-09-24 • Filed 2011-09-20 • Granted 2020-06-10 • Published 2020-06-10

tositumomab-iodine 131; treosulfan; tretinoin; trilostane; trimetrexate; triptorelin; tumor necrosis factor alpha natural; ubenimex; bladder cancer **vaccine**; Maruyama **vaccine**; melanoma lysate **vaccine**; valrubicin; verteporfin; virulizin; zinostatin stimalamer; abarelix; AE 941 (Aeterna); ambamustine;

Compositions comprising bacterial strains

WO EP US CN JP KR AU CA CL CO DK EA ES HR HU IL LT MD MX PE PL PT RS SG SI TW EP3662917A1 Alex STEVENSON 4D Pharma Research Limited

Priority 2015-06-15 • Filed 2016-06-15 • Published 2020-06-10

21. A food product comprising the composition of any preceding embodiment, for the use of any preceding embodiment. 22. A **vaccine** composition comprising the composition of any preceding embodiment, for the use of any preceding embodiment. 23. A method of treating or preventing a disease or …

Human anti-tau antibodies

WO EP US CN JP KR AU BR CA EA HK IL MX PH SG ZA EP2935326B1 Paul H. Weinreb Biogen MA Inc.

Priority 2012-12-21 • Filed 2013-12-20 • Granted 2020-06-10 • Published 2020-06-10

In the wake of the success of Abeta-based **immunization** therapy in transgenic animal models, the concept of active immunotherapy was expanded to the tau protein. Active vaccination of wild type mice using the tau protein was however found to induce the formation of neurofibrillary tangles, axonal …

Aav vectors targeted to oligodendrocytes

WO EP US CN JP AU CA EP2900686B1 Thomas MCCOWN The University of North Carolina At Chapel Hill

Priority 2012-09-28 • Filed 2013-09-27 • Granted 2020-06-10 • Published 2020-06-10

The virus vectors of the invention can further be administered to a subject to elicit an immunogenic response (e . g ., as a **vaccine**). Typically, vaccines of the present invention comprise an effective amount of virus in combination with a pharmaceutically acceptable carrier. Optionally, the dosage is …

Continuous processing methods for biological products

WO EP US CN JP KR BR EP2649016B1 Thomas C. Ransohoff Pall Corporation

Priority 2010-12-06 • Filed 2011-12-06 • Granted 2020-06-10 • Published 2020-06-10

… ., Worcester, MA (US)), have made it possible to convert separation process steps that were traditionally operated in batch mode into SMB processes that can be run continuously, taking a clarified feed and purifying in a continuous fashion a target molecule such as a monoclonal antibody or a **vaccine** …

Methods and compositions for production of vaccina virus

WO EP US CN JP KR AU BR CA EP2739293B1 David Kirn SillaJen Biotherapeutics, Inc.

Priority 2011-08-05 • Filed 2012-08-03 • Granted 2020-06-10 • Published 2020-06-10

P. D. Ellner, Infection 26, 263 (Sep-Oct, 1998). 12. F. Fenner, Prog Med Virol 23, 1 (1977). 13. A. W. Artenstein et al., **Vaccine** 23, 3301 (May 9, 2005). 14. T. P. Monath et al., Int J Infect Dis 8 Suppl 2, S31 (Oct, 2004). 15. Z. S. Guo, D. L. Bartlett, Expert Opin Biol Ther 4, 901 (Jun, 2004 …

Methods for the treatment of ocular disease in human subjects

WO EP US CN JP KR AU BR CA EA HK IL MX PH SG EP2916827B1 Vladimir ZARNITSYN Clearside Biomedical Inc.

Priority 2012-11-08 • Filed 2013-11-08 • Granted 2020-06-10 • Published 2020-06-10

In one embodiment, the drug is selected from a suitable oligonucleotide (e.g ., antisense oligonucleotide agents), polynucleotide (e.g ., therapeutic DNA), ribozyme, dsRNA, siRNA, RNAi, gene therapy vectors, and/or **vaccine**. In a further embodiment, the drug is an aptamer (e.g ., an oligonucleotide or …

Compositions and methods for immunotherapy

WO EP US CN JP KR AU BR CA HK IL MX PH RU SG EP2961831B1 Renier J. BRENTJENS Memorial Sloan Kettering Cancer Center

Priority 2013-02-26 • Filed 2014-02-26 • Granted 2020-06-10 • Published 2020-06-10

). Augmenting the immunogenicity of cancer cells through the CD40L/CD40 pathway has been shown to induce an endogenous anti-tumor response in previously published **vaccine** studies using the infusion of autologous CLL tumor cells transduced with an adenovirus vector encoding CD40L (Ad-CD40L CLL cells) …

Magnet recycling to create nd-fe-b magnets with improved or restored magnetic …

WO EP US CN JP AU BR HK TW EP3011573B1 Miha Zakotnik Urban Mining Technology Company, LLC

Priority 2013-06-17 • Filed 2014-06-17 • Granted 2020-06-10 • Published 2020-06-10

Magnet coatings may be completely removed by cleaning the surfaces with an abrasive jet that removes a portion, or all, of the surface of the magnets by ablation. In some implementations, the abrasive can be steel **shot**, tungsten carbide, ceramic, or steel grit. The size of the particles may be …

Activation of resident memory t cells for the treatment of cancer

WO EP CA EP3661550A2 Vaiva D. VEZYS Regents of the University of Minnesota

Priority 2017-08-03 • Filed 2018-08-03 • Published 2020-06-10

1 1. The method of any one of the preceding claims, wherein the composition comprises at least one antigenic peptide from a **vaccine**. 12. The method of claim 1 1, wherein the **vaccine** is selected from the group consisting of a chickenpox **vaccine**, a polio **vaccine**, a German measles **vaccine**, a mumps …

Crystalline forms of ethyl ((s)-((((2r,5r)-5-(6-amino-9h-purin-9-yl)-4-fluoro- …

WO EP US AR TW EP3661937A1 Olga Viktorovna Lapina Gilead Sciences, Inc.

Priority 2017-08-01 • Filed 2018-07-30 • Published 2020-06-10

[0203] Examples of HIV vaccines include peptide vaccines, recombinant subunit protein vaccines, live vector vaccines, DNA vaccines, CD4-derived peptide vaccines, **vaccine** combinations, rgpl20 (AIDSVAX), ALVAC HIV (vCP1521)/AIDSVAX B/E (gpl20) (RV144), monomeric gpl20 HIV-1 subtype C **vaccine**, Remune, …

Anti-il-17 antibodies

WO EP US CN JP KR AU BR CA CY DK EA ES HK HR HU IL LT LU NO PL PT RS SI EP1963368B3 Barrett Allan Eli Lilly And Company

Priority 2005-12-13 • Filed 2006-12-05 • Granted 2020-06-10 • Published 2020-06-10

Other suitable methods of producing or isolating antibodies of the invention, including human or artificial antibodies, can be used, including, for example, methods which select a recombinant antibody (e.g., single chain Fv or Fab) from a library, or which rely upon **immunization** of transgenic …

Human antigen binding proteins that bind beta-klotho, fgf receptors and …

WO EP US CN JP KR AR AU BR CA CL CR CY DK EA ES HR HU IL LT MA ME MX NZ PE PL PT RS SG SI TN TW UA UY ZA EP3202787B1 Shaw-Fen Sylvia Hu Amgen Inc.

Priority 2009-12-07 • Filed 2010-12-03 • Granted 2020-06-10 • Published 2020-06-10

In one embodiment, all of the variable and constant domains are derived from human immunoglobulin sequences (a fully human antibody). These antibodies can be prepared in a variety of ways, examples of which are described below, including through the **immunization** with an antigen of interest of a …

Anti-influenza antibody

WO EP US CA EP2931747B1 Xavier Saelens Vib Vzw

Priority 2012-12-11 • Filed 2013-12-11 • Granted 2020-06-10 • Published 2020-06-10

Example 2: **Immunization** and VHH phage library construction N1rec was next used as an immunogen for the generation and selection of NA-specific VHH. An alpaca (Vicunia pacos) was immunized at day 0 with 125 µg of N1rec, followed by 6 weekly boosts. One week after the last **immunization**, blood was …

Heterocyclic compound and application thereof

WO EP EP3663281A1 Tatsuhiko Fujimoto Takeda Pharmaceutical Company Limited

Priority 2017-08-03 • Filed 2018-08-02 • Published 2020-06-10

Examples of the antibody drug and **vaccine** preparation include **vaccine** preparation against angiotensin II, **vaccine** preparation against CETP, CETP antibody, antibody against TNFα antibody and other cytokines, amyloid β **vaccine** preparation, **vaccine** for type 1 diabetes (e.g., DIAPEP-277 of Peptor), …

Genetic products which are differentially expressed in tumours and use thereof

WO EP US JP AU CA DE ES EP3095791B1 Özlem TÜRECI BioNTech SE

Priority 2003-09-10 • Filed 2004-09-10 • Granted 2020-06-10 • Published 2020-06-10

(1) In the first case, peptides conjugated to KLH (keyhole limpet hemocyanin) (length: 8-12 amino acids) are synthesized using a standardized in vitro method and these peptides are used for **immunization**. As a rule, 3 **immunizations** are carried out with a concentration of 5-1000 µg / **immunization**.

Nuclear transport modulators and uses thereof

WO EP US CN JP KR AU BR CA CL CO CY DK EA ES HK HR HU IN LT MX NZ PE PL PT RS SG SI UA EP3663291A1 Vincent P. SANDANAYAKA Biogen MA Inc.

Priority 2012-05-09 • Filed 2013-05-09 • Published 2020-06-10

… . Contemporary methods for generating an immune response against tumors include intravesicular BCG immunotherapy for superficial bladder cancer, prostate cancer **vaccine** Provenge, and use of interferons and other cytokines to induce an immune response in renal cell carcinoma and melanoma patients.

Means and methods for determining t cell recognition

WO EP US JP AU CA EP3152569B1 Carsten LINNEMANN AIMM Therapeutics B.V.

Priority 2014-06-05 • Filed 2015-06-05 • Granted 2020-06-10 • Published 2020-06-10

Preferably, T cells are used that are from an individual who has been exposed to said pathogen before, so that memory T cells will be present. If one or more test peptides appear to be recognized by T cells, these peptides are candidates for a **vaccine** against said pathogen. Again, the sensitivity …

Virucidal disinfection composition

EP PL EP1685854B2 Andreas Arndt B. Braun Medical AG

Priority 2005-01-28 • Filed 2006-01-27 • Granted 2020-06-10 • Published 2020-06-10

) and is effective within a minute against adenovirus type 5, strain Adenoid 75, papovavirus [Simianvirus 40 (SV40), strain 777], poliovirus (polio **vaccine** strain type I, strain LSc-2ab) and vaccinia virus (strain Elstree). In addition, it was found that the agents according to the invention are …

Method of culturing segmented filamentous bacteria in vitro

WO EP US CN JP AU CA EP3237602B1 Gérard EBERL Institut Pasteur

Priority 2014-12-23 • Filed 2015-12-23 • Granted 2020-06-10 • Published 2020-06-10

Said SFB strain can be in the form of a filament, an intracellular offspring or a spore, preferably a spore. The terms "immunogenic composition" and "**vaccine** composition" are used interchangeably herein. In some embodiments, the present invention relates to the genetically modified SFB strain as …

Antibody binding active alpha-synuclein

WO EP CN KR AU CA EP3661961A1 Ariel Louwrier Stressmarq Biosciences Inc.

Priority 2017-08-02 • Filed 2018-08-02 • Published 2020-06-10

WHAT IS CLAIMED IS: 1. A monoclonal antibody 2F11 as deposited under ATCC PTA-124174. 2. A composition comprising the monoclonal antibody 2F11 defined in claim 1, in a pharmaceutically acceptable carrier, adjuvant, vehicle or excipient. 3. A **vaccine** comprising the monoclonal antibody 2F11 defined …

Pd-l1 promoter methylation in cancer

WO EP US CN JP KR AR AU CA IL MX EP3303619B1 Edward KADEL H. Hoffnabb-La Roche Ag

Priority 2015-05-29 • Filed 2016-05-27 • Granted 2020-06-10 • Published 2020-06-10

). In the hybridoma method, a mouse or other appropriate host animal, such as a hamster, is immunized as herein described to elicit lymphocytes that produce or are capable of producing antibodies that will specifically bind to the protein used for **immunization**. Alternatively, lymphocytes may be …

System and method for peer referencing in an online computer system

WO EP US CA EP3663999A1 Qin YE Medversant Technologies, LLC

Priority 2010-02-05 • Filed 2011-02-07 • Published 2020-06-10

FIG. 4 is an exemplary screen **shot** of a screen listing peers that are available for inviting into a user's peer network according to one embodiment of the invention. According to one embodiment, the resulting peers are peers who are in the user's virtual professional network who are deemed to be …

Unmanned aircraft system with swappable components

WO EP US AU EP3661847A1 Paul Perry Zipline International Inc.

Priority 2017-08-01 • Filed 2018-07-31 • Published 2020-06-10

For instance, if the payload is a **vaccine**, then the payload inventory management system may provide a refrigerated storage container for **vaccine** doses and may monitor and report the temperature in the storage container and the number of doses stored in the container to the logistics system 2008. …

Novel sulfonamide carboxamide compounds

WO EP CN KR AU CA IL SG TW UY EP3661925A1 Matthew Cooper Inflazome Limited

Priority 2017-07-07 • Filed 2018-07-04 • Published 2020-06-10

modification (e.g. protection of the 2'-0H with a methyl group or replacement of the 2'-OH by -F or -N 3). In some embodiments, the one or more cancer vaccines are selected from an HPV **vaccine**, a hepatitis B **vaccine**, Oncophage, and/or Provenge. In some embodiments, the one or more immunomodulatory …

Microfluidic systems with capillary pumps

WO EP EP3661649A1 Jaroslav Belotserkovsky Katholieke Universiteit Leuven

Priority 2017-08-04 • Filed 2018-08-06 • Published 2020-06-10

Figure 54: A pump activation and (micro)needle application "button". In one embodiment, the (iSIMPLE) microneedle drug or **vaccine** delivery device is designed such that the physical force, such as a finger push, that is applied used to activate the propulsion pump is also useful to provide the …

Antibodies binding to tumour associated carbohydrate antigens, pharmaceutical …

WO EP US CN JP KR AU BR CA CL IL PH RU SG TW ZA EP3662928A1 Jiann-Shiun Lai OBI Pharma Inc.

Priority 2014-04-10 • Filed 2015-04-10 • Published 2020-06-10

An "effective amount," as used herein, refers to a dose of the **vaccine** or pharmaceutical composition that is sufficient to reduce the symptoms and signs of cancer, such as weight loss, pain and palpable mass, which is detectable, either clinically as a palpable mass or radiologically through …

Therapeutic agent or prophylactic agent for dementia

WO EP US CN JP KR AR AU BR CA DK ES HK HR HU IL LT MX NZ PH PL PT RS RU SG SI TW ZA EP3662931A1 Hiroshi Mori Osaka City University

Priority 2012-05-31 • Filed 2013-05-30 • Published 2020-06-10

and Fig. 19 . To summarize, passive **immunization** with anti-pSer413 monoclonal antibody improved memory impairment in the model mice to a level of 50% or greater compared to non-Tg. The results of (4-1) and (4-2) confirmed a drug effect for pSer413 epitope monoclonal antibody even at a dose of 0.1 mg …

Biomimetic nanomaterials and uses thereof

WO EP EP3661563A1 Yizhou Dong The Ohio State Innovation Foundation

Priority 2017-07-31 • Filed 2018-07-31 • Published 2020-06-10

In certain embodiments, the drug is an antibiotic, anti-viral agent, anesthetic, steroidal agent, anti-inflammatory agent, anti -neoplastic agent, anti-cancer agent, antigen, **vaccine**, antibody, decongestant, antihypertensive, sedative, birth control agent, progestational agent, anticholinergic, …

Methods and systems for authenticating and tracking objects

WO EP US CN BR CA IN MX EP2761538B1 Nabil M. Lawandy Spectra Systems Corporation

Priority 2011-09-29 • Filed 2012-09-11 • Granted 2020-06-10 • Published 2020-06-10

The combination of authentication technology and QR codes call track and authenticate pharmaceuticals and other packaged products anywhere in the world. Figures 6A and 6B show a syringe that is preloaded with a **vaccine**. In Figure 6A the syringe has been coded by exposing it to the code forming …

Bicyclic peptide ligands specific for cd137

WO EP CN EP3661948A1 Liuhong CHEN BicycleTx Limited

Priority 2017-08-04 • Filed 2018-08-03 • Published 2020-06-10

… , where cross-reactivity with homologues or paralogues needs to be carefully controlled. In some applications, such as **vaccine** applications, the ability to elicit an immune response to predetermined ranges of antigens can be exploited to tailor a **vaccine** to specific diseases and pathogens.

Direct expression of antibodies

WO EP US EP3663315A1 Andrew Geall Novartis AG

Priority 2014-10-29 • Filed 2015-10-28 • Published 2020-06-10

The present invention relates to methods exogenous nucleic acid molecules, such as RNA, that encode an antibody or antigen-binding fragment of an antibody, and optionally encode a cellular modulation factor and/or a potentiation factor. The cellular modulation factor is a factor that results in …

Method for classification of a sample on the basis of spectral data and …

WO EP US CN JP IN NL RU EP2836958B1 René Raymond PARCHEN BiosparQ B.V.

Priority 2012-04-10 • Filed 2013-04-10 • Granted 2020-06-10 • Published 2020-06-10

The above example illustrates the problems of conventional methods of analyzing spectral data. These methods are incapable of dealing with single particle spectra directly, since they do not take the above **shot**-to-**shot** variations into account. Furthermore, they are incapable of dealing with …

Pharmaceutical product comprising mite allergen extract(s) and a method for the …

WO EP US CN JP KR AU CA MX RU ZA EP3662916A1 Heather Michelle Webster ALK-Abelló A/S

Priority 2010-06-03 • Filed 2011-06-03 • Published 2020-06-10

The inventon relates to a pharmaceutical product comprising an allergen extract or an allergoid thereof for the treatment and/or prevention of allergy and allergic asthma caused by house dust mites, which extract comprises at least one extract of mite bodies selected from the following groups a)-b …

Device for simulating a mortar

WO EP US KR AU BR CA DE SG EP3017267B1 Ernst Christians Rheinmetall Defence Electronics GmbH

Priority 2013-07-03 • Filed 2014-07-03 • Granted 2020-06-10 • Published 2020-06-10

… GNSS antennas can also be swiveled around at least one axis and can be fixed in a preferred position. The operation of the original weapon for firing the **shot** is not changed. The firing of the **shot** is detected on the mortar firing pin, the operation does not differ from the real firing of the **shot**.

Medical imaging apparatus and control method thereof

WO EP US KR EP3197363B1 Min-Cheol Park Samsung Electronics Co., Ltd.

Priority 2014-09-26 • Filed 2015-09-25 • Granted 2020-06-10 • Published 2020-06-10

A control method for a medical imaging apparatus (200), the control method comprising: radiating (1210) X-rays onto an object and onto a calibration phantom (215), according to a first irradiating condition for a pre-**shot**; and detecting (1220) the X-rays having passed through the object and through …

A method for diagnosing or monitoring kidney function

WO EP US CN JP CA DK ES HK PL RU TR EP3361260B1 Andreas Bergmann sphingotec GmbH

Priority 2012-10-02 • Filed 2013-10-01 • Granted 2020-06-10 • Published 2020-06-10

All antibodies bound the MRPENK peptide, comparable to the peptides which were used for **immunization**. Except for NT-MRPENK-antibody (10% cross reaction with EEDDSLANSSDLLK), no antibody showed a cross reaction with MR-PENK fragments not used for **immunization** of the individual antibody. Pro- …

Medical hollow needle assembly and method for manufacturing hollow needle

WO EP US CN JP EP3045194B1 Tetsuya Ooyauchi Terumo Kabushiki Kaisha

Priority 2013-09-11 • Filed 2014-09-10 • Granted 2020-06-10 • Published 2020-06-10

illustrates a syringe 1 with a fixed needle according to an embodiment of the present invention (medical hollow needle assembly). The syringe 1 with a fixed needle is used as a medical syringe for injecting a drug solution such as **vaccine** into a living body such as a human body, and includes a …

Compositions and methods for modulating an immune response

WO EP US JP CA EP3663763A1 Richard S. Blumberg The Brigham and Women's Hospital, Inc.

Priority 2013-11-26 • Filed 2014-11-25 • Published 2020-06-10

… nodules was carried out following lung inflation and fixation in 10% formalin. For DC **immunization** experiments, DC were isolated by collagenase digestion from the lung and draining lymph nodes of metastasis-bearing donor mice and 1x10 6 DC were injected s.c. into the hind footpad of recipient mice.

Large diameter slag wool, composition and method of making same

WO EP US CA MX TW EP3475233B1 Wenqi Luan USG Interiors, LLC

Priority 2016-06-22 • Filed 2017-06-19 • Granted 2020-06-10 • Published 2020-06-10

A slag wool produced using the composition of any one of claims 1 to 3, wherein the slag wool has a fiber diameter in a range of 4.0 microns to 10.0 microns. The slag wool of claim 4, wherein the slag wool has a **shot** content of 50% or less, 45% or less, 40% or less. A method for the manufacture of …

BENZO[b]THIOPHENE STING AGONISTS FOR CANCER TREATMENT

WO EP AU CA EP3661498A1 Saso CEMERSKI Merck Sharp & Dohme Corp.

Priority 2017-08-04 • Filed 2018-07-30 • Published 2020-06-10

Adjuvants, such as aluminum hydroxide or aluminum phosphate, can be added to increase the ability of the **vaccine** to trigger, enhance, or prolong an immune response. Additional materials, such as cytokines, chemokines, and bacterial nucleic acid sequences, like CpG, a toll-like receptor (TLR) 9 …

Bcma monoclonal antibody-drug conjugate

WO EP US CN KR AU CA CO SG TW EP3661963A1 Krista KINNEER MedImmune, LLC

Priority 2017-08-01 • Filed 2018-07-31 • Published 2020-06-10

EXAMPLE 1 [0061] This example describes the generation of a monoclonal antibody directed against B- cell maturation antigen (BCMA). [0062] Following the RIMMS **immunization** regime described in Kilpatrick et al. , Hybridoma, 16(4): 381-389 (1997), six week old female Ablexis transgenic mice (Ablexis, …

Generating an environment map around a mobile object with high accuracy

WO EP JP EP3662446A1 Takuto Motoyama Sony Corporation

Priority 2017-08-02 • Filed 2018-07-30 • Published 2020-06-10

<Superimposition of group of 3D points as measurement result of LiDAR on image> A measurement result of the LiDAR 301 is information indicating a group of points in a 3D space, and the measurement result is superimposed on an image **shot** by the camera 302 thereby to generate a distance image.

Medical device and method for limiting the use of the medical device

WO EP US CN JP EP2780059B1 Ilona Eggert Sanofi-Aventis Deutschland GmbH

Priority 2011-11-18 • Filed 2012-11-15 • Granted 2020-06-10 • Published 2020-06-10

wherein in one embodiment the pharmaceutically active compound has a molecular weight up to 1500 Da and/or is a peptide, a proteine, a polysaccharide, a **vaccine**, a DNA, a RNA, an enzyme, an antibody or a fragment thereof, a hormone or an oligonucleotide, or a mixture of the above-mentioned …

Compact high mechanical energy storage and low trigger force actuator for the …

WO EP AU CA EP3661587A1 Pierre Armand Vincent LEMAIRE Vaxxas Pty Limited

Priority 2017-08-04 • Filed 2018-08-03 • Published 2020-06-10

[0229] In an alternate embodiment of the present applicator devices of the invention the microprojections of the microprojection array may be uncoated and the membrane may be coated by a substance such as a **vaccine**. In this embodiment the applicator pushes the microprojections of the …

Veterinary product

WO EP CN AU CA EP3661603A1 Jeronimo Carnes Sanchez Laboratorios LETI, S.L. Unipersonal

Priority 2017-07-31 • Filed 2018-07-30 • Published 2020-06-10

There is provided a **vaccine** obtainable according to the process of the first aspect of the present invention. The **vaccine** may be for sub-cutaneous, sub-lingual or epicutaneous use. There is provided the use of a **vaccine** according to the present invention in the treatment of mite allergy or in the …

Transient silencing of argonaute1 and argonaute4 to increase recombinant …

WO EP CA EP3662067A1 Kiva FERRARO Plantform Corporation

Priority 2017-08-03 • Filed 2018-08-02 • Published 2020-06-10

19. The plant or plant cell of claim 16 or 17, wherein the recombinant protein is a therapeutic enzyme, optionally butyrylcholinesterase. 20. The plant or plant cell of claim 16 or 17, wherein the recombinant protein is a **vaccine** or a Virus Like Particle. 21 . An isolated nucleic acid molecule …

Hiv antibody compositions and methods of use

WO EP US CN JP KR AU BR CA IL MX PH RU EP3662930A1 Francois Vigneault AbVitro LLC

Priority 2015-09-24 • Filed 2016-09-24 • Published 2020-06-10

According to another embodiment, the present invention provides a **vaccine** comprising at least one antibody of the invention and a pharmaceutically acceptable carrier. According to one embodiment, the **vaccine** is a **vaccine** comprising at least one antibody described herein and a pharmaceutically …

Thiazolopyridine derivatives as adenosine receptor antagonists

WO EP CN KR AU CA SG TW EP3661941A1 Eva-Maria TANZER Merck Patent GmbH

Priority 2017-08-01 • Filed 2018-07-02 • Published 2020-06-10

Immunomodulators Interferon Dexosome therapy (Anosys) Oncophage (Antigenics) Pentrix (Australian Cancer GMK (Progenies) Technology) Adenocarcinoma **vaccine** JSF-154 (Tragen) (Biomira) Cancer **vaccine** (Intercell) CTP-37 (AVI BioPharma) Norelin (Biostar) JRX-2 (Immuno-Rx) BLP-25 (Biomira) PEP-005 (…

Compositions and methods for inhibition of mica/b shedding

WO EP US EP3661552A1 Lucas FERRARI DE ANDRADE Dana-Farber Cancer Institute, Inc.

Priority 2017-05-22 • Filed 2018-05-22 • Published 2020-06-10

An antigen may be MICA and/or MICB, or a fragment thereof. An antigen may also be a tumor antigen, against which protective or therapeutic immune responses are desired, e.g., antigens expressed by a tumor cell (e.g., in a **vaccine** in combination with an anti-MICA and/or anti-MICB antibody). [00135] …

Methods for activating immune cells

WO EP CN KR AU CA SG EP3661545A1 Phillip S. KIM Trutino Biosciences Inc.

Priority 2017-08-04 • Filed 2018-08-03 • Published 2020-06-10

[0060] The term "**vaccine**" refers to a biological composition that, when administered to a subject, has the ability to produce an acquired immunity to a particular pathogen or disease in the subject. Typically, one or more antigens, or fragments of antigens, that are associated with the pathogen or …

Drug compound and purification methods thereof

WO EP US CN KR AU CA SG EP3661522A2 Rajashree Joshi-Hangal Otsuka Pharmaceutical Co., Ltd.

Priority 2017-08-03 • Filed 2018-08-02 • Published 2020-06-10

[00223] In some embodiments, the lyophilized pharmaceutical composition described herein can be used in combination with a cancer **vaccine**, for example a cancer **vaccine** selected from a CTA cancer **vaccine**, such as a **vaccine** based on a CTA antigen selected from: NY- ESO-1, LAGE-1, MAGE-A1, -A2, -A3, - …

Methods for identifying and separating pro-allergic specific t cells

WO EP EP3662057A1 Eric WAMBRE Benaroya Research Institute at Virginia Mason

Priority 2017-08-01 • Filed 2018-07-31 • Published 2020-06-10

… , such as allergen-specific immunotherapy (ASIT; also referred to as allergen **vaccine** therapy). The theory of ASIT is that exposure to gradually increasing allergen exposure will decrease the population of reactive pathogenic T cells and increase the population of T cells that promote tolerance.

Device and method for multiple changes in the composition of a fluid

DE DE102018009597A1 Martin Leuthold Sartorius Stedim Biotech Gmbh

Priority 2018-12-07 • Filed 2018-12-07 • Published 2020-06-10

) reach. In addition, by using an ultrafiltration membrane with a pore size of 2 to 100 nm as the second filter medium (5 , 15) a **vaccine** contained in the fluid as a product is retained by the ultrafiltration membrane. Components of the fluid that the second filter medium (5 , 15) can pass (e.g …

Purification process for biological molecules such as plasmid dna using anionic …

EP EP3663401A1 Andreas Zurbriggen Lonza Limited

Priority 2019-02-28 • Filed 2019-02-28 • Published 2020-06-10

… pharmaceutically acceptable excipients. Plasmid DNA purified by the method of the present invention may be used as DNA-based **vaccine** or be used as a "prodrug" wherein the plasmid will then involve the cell's transcription and translation apparatus to biosynthesize the therapeutic entity in situ.

Shot peening shot peening

DE DE102018131530A1 Katrin Heider Schaeffler Technologies AG & Co. KG

Priority 2018-12-10 • Filed 2018-12-10 • Published 2020-06-10

Pressure piece for a synchronization gearbox with a heat-treated housing and cleaned by means of cleaning jets, characterized in that the pressure piece housing is treated by the cold-forming process of the **shot** peening. Method for increasing the strength of a housing of a pressure piece used in …

Methods for treating active eosinophilic esophagitis

EP CN KR AU CA EP3661551A1 Allen Radin Regeneron Pharmaceuticals, Inc.

Priority 2017-08-04 • Filed 2018-08-03 • Published 2020-06-10

(4) Treatment with a live (attenuated) **vaccine** (Chickenpox (varicella), FluMist-Influenza, Intranasal influenza, Measles (rubeola), Measles-mumps-rubella combination, Measles-mumps-rubella-varicella combination, Mumps, Oral polio (Sabin), Oral typhoid, Rubella, Smallpox (vaccinia), Yellow fever, …

Composition for gene therapy of the central nervous system, process of …

WO EP BR EP3662934A1 Roselena SILVESTRI SCHUH Universidade Federal Do Rio Grande Do Sul

Priority 2017-07-31 • Filed 2018-07-12 • Published 2020-06-10

… , especially due to their mucus adhesive properties, especially when the target is nasal administration aiming for the treatment of disorders of the central nervous system (Khatri, K. et al. Surface modified liposomes for nasal delivery of DNA **vaccine**. **Vaccine**, 2008, V. 26(18), p. 2225-33).

Use of immune cell-specific gene expression for prognosis of prostate cancer …

WO EP AU CA EP3662082A2 Elai Davicioni Decipher Biosciences, Inc.

Priority 2017-08-04 • Filed 2018-08-02 • Published 2020-06-10

Methods, systems, and kits for the diagnosis, prognosis and the determination of cancer progression of prostate cancer in a subject are disclosed. In particular, the disclosure relates to the use of immune cell-specific gene expression in determining prognosis and identifying individuals in need …

Drive-in machine

WO EP CN EP3663049A1 Toshinori Yasutomi Koki Holdings Co., Ltd.

Priority 2017-07-31 • Filed 2018-06-29 • Published 2020-06-10

When determining "YES" at the step S2, the microcomputer 63 determines whether the operator is selecting the continuous **shot** mode or not at a step S3. When determining "YES" at the step S3, the microcomputer 63 performs the regular driving operation corresponding to the continuous **shot** mode at a …

Method and computer program product for detecting objects in night shots and …

DE DE102018221313A1 Mark Schutera Zf Friedrichshafen Ag

Priority 2018-12-10 • Filed 2018-12-10 • Published 2020-06-10

Method for detecting objects in night shots (x1) by means of a detector (O2) which is trained to detect objects in day shots (x2) of an environment of an automatically operated vehicle (40), comprising the method steps: Providing a night **shot** (x1) (V1), Mapping the night **shot** (x1) onto a feature …

Holding device for a vehicle and method for mounting a holding device

DE DE102017007977B4 Martin Schoch Audi Ag

Priority 2017-08-23 • Filed 2017-08-23 • Granted 2020-06-10 • Published 2020-06-10

52 introduced. The clip 41 locked with the second **shot** 52 in a rest position. In a further step, the blocking agent 42 in the first **shot** 21st and in the second **shot** 52 inserted and locks the bracket 41 in the rest position. In the illustrated embodiment, the first **shot** 21st and the second **shot** 52

Injection molding machine and injection molding information processing device

EP CN JP EP3381647B1 Masahiro Abe Sumitomo Heavy Industries, Ltd.

Priority 2017-03-31 • Filed 2018-03-29 • Granted 2020-06-10 • Published 2020-06-10

The reference **shot** may be a past **shot** of other shots to be compared and may be selected on the operation screen. The reference **shot** may be a **shot** at the time of shipment inspection at the manufacturer of the injection molding machine or may be a **shot** at the time of the injection molding at the …

WO EP AU EP3661734A1 Owen Matthews Tyre Tuft Pty Ltd

Priority 2017-08-02 • Filed 2018-08-02 • Published 2020-06-10

18. The plug, kit or method of claim 15, wherein when the sealant is selected from the group consisting of Stans tire sealant, Tyre **Shot** sealant, Orange Seal sealant, Slime tire sealant, Continental sealant, Shimano sealant, Effetto Mariposa sealant, Tufo sealant, Mitas tyre sealant, …

Methods and compositions for viral-based gene editing in plants

WO EP US AR CA EP3661354A1 Xingpeng LI R. J. Reynolds Tobacco Company

Priority 2017-07-31 • Filed 2018-07-30 • Published 2020-06-10

These expression vectors have proven versatile with demonstrated expression of numerous heterologous proteins, including cytokines, interferon, bacterial and viral antigens, growth hormone, **vaccine** antigens, single chain antibodies and monoclonal antibodies (mAbs). These expression levels support …

COMBINATIONS OF PD-1 ANTAGONISTS AND BENZO[b

WO EP AU CA EP3661499A1 Saso CEMERSKI Merck Sharp & Dohme Corp.

Priority 2017-08-04 • Filed 2018-07-30 • Published 2020-06-10

Adjuvants, such as aluminum hydroxide or aluminum phosphate, can be added to increase the ability of the **vaccine** to trigger, enhance, or prolong an immune response. Additional materials, such as cytokines, chemokines, and bacterial nucleic acid sequences, like CpG, a toll-like receptor (TLR) 9 …

Compositions and methods for targeting masas to treat cancers with spliceosome …

WO EP EP3662064A2 William Brian DALTON The Johns Hopkins University

Priority 2017-07-31 • Filed 2018-07-31 • Published 2020-06-10

í'0β9β] As part of the process necessary to generate antibodies, which would be one therapeutic modality for targeting MASAs, immunogens representing the cryptic cell surface proteins to be targeted must be themselves created for **immunization** of animals and eventual screening of antibody …

Bispecific antibodies and uses thereof

WO EP KR EP3661555A1 Yue Liu Ab Studio Inc.

Priority 2017-08-01 • Filed 2018-08-01 • Published 2020-06-10

NY. Acad Sci. 569:86-103; Flexner et al, 1990, **Vaccine**, 8: 17-21; U.S. Pat. Nos. 4,603,112, 4,769,330, and 5,017,487; WO 89/01973; U.S. Pat. No. 4,777,127; GB 2,200,651 ; EP 0,345,242; WO 91/02805; Berkner-Biotechmques, 6:616-627, 1988; Rosenfeld et al., 1991, Science, 252:431-434; Kolls et al, …

Virus vaccinal pour thérapie par prodrogue activée par des enzymes exprimées …

WO EP US JP CA GB EP3010518B1 Richard Marais The Institute of Cancer Research: Royal Cancer Hospital

Priority 2013-06-19 • Filed 2014-06-18 • Granted 2020-06-10 • Published 2020-06-10

Virus de la **vaccine** à utiliser dans le traitement d'une tumeur selon l'une quelconque des revendications précédentes, dans lequel le procédé comprend l'administration du virus de la **vaccine** par injection intraveineuse ou intratumorale. Virus de la **vaccine** à utiliser dans le traitement d'une tumeur …

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

Results of Search in US Patent Collection db for: (ABST/vaccine AND ISD/20200526->20200601),

7 resultados.

	PAT. NO.	Title
1	10,676,511	Coronaviruses epitope-based vaccines
2	10,675,345	Recombinant influenza virus vaccines for influenza
3	10,675,344	Multi-CBV vaccine for preventing or treating type I diabetes
4	10,675,343	Vaccines and methods for creating a vaccine for inducing immunity to all dengue virus serotypes
5	10,675,341	Parenteral norovirus vaccine formulations
6	10,675,338	Peptides and combination of peptides for use in immunotherapy against breast cancer and other cancers
7	10,675,249	Vaccine delivery systems using yeast cell wall particles

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