FINLAY
EDICIONES

BOLETÍN VACCIENCIA

No. 12 (16 junio - 22 junio/2020)

VaCyT

SiViFinlay

IFV INSTITUTO FINLAY DE VACUNAS

...vacunar es prevenir.

Análisis bibliométrico sobre vacunas recombinantes

Fuente de información utilizada:

WEB OF SCIENCE™

Estrategia de búsqueda:

TITLE: ("recombinant vaccine") 2613 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.

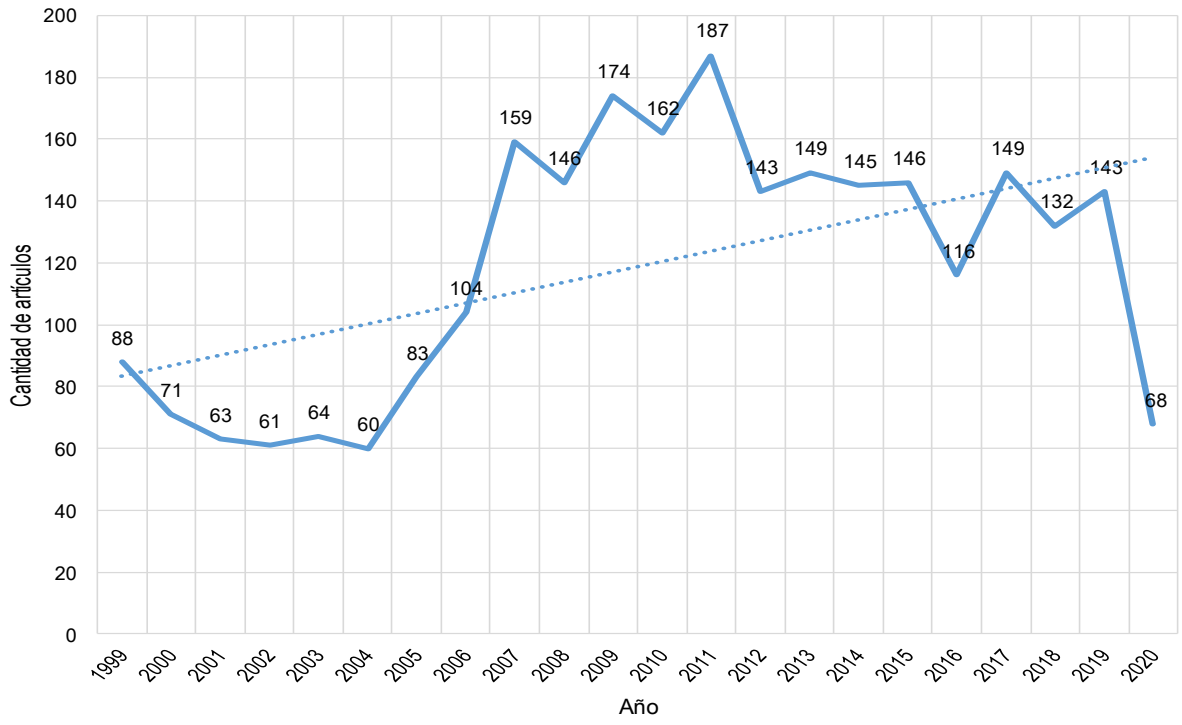
⇒ Instituciones que han trabajado el tema de estudio.

⇒ Países a la vanguardia sobre el tema.

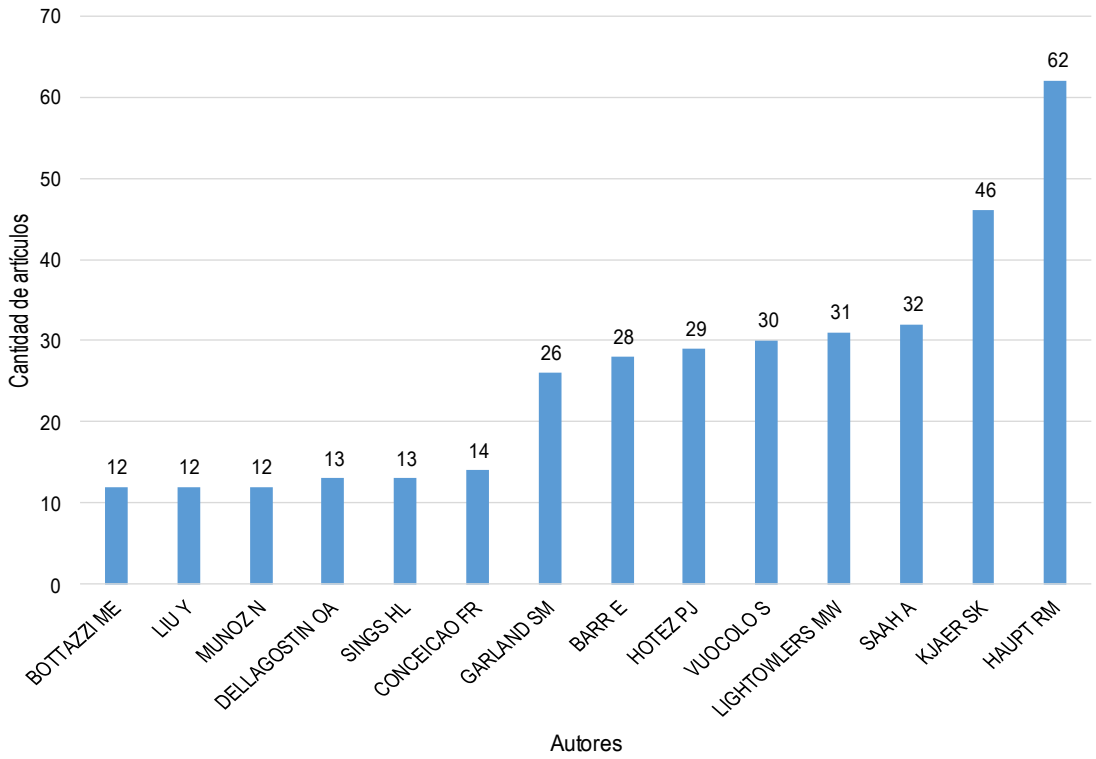
EN ESTE NÚMERO

* Análisis bibliométrico vacunas recombinantes
* Noticias en la Web sobre vacunas
* Artículos científicos más recientes Medline sobre vacunas
* Patentes más recientes PatentScope sobre vacunas
* Patentes más recientes USPTO sobre vacunas

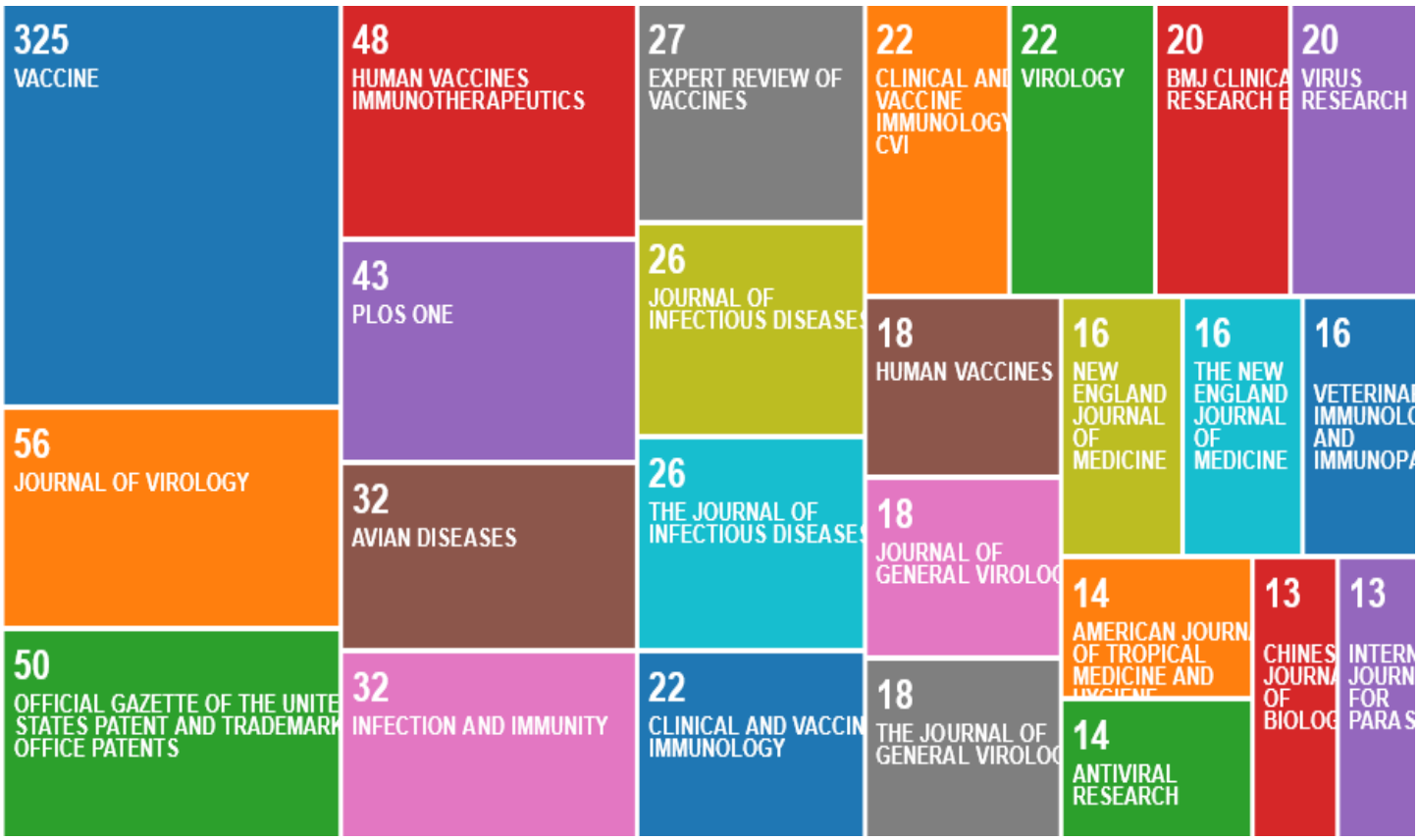
Productividad científica por año



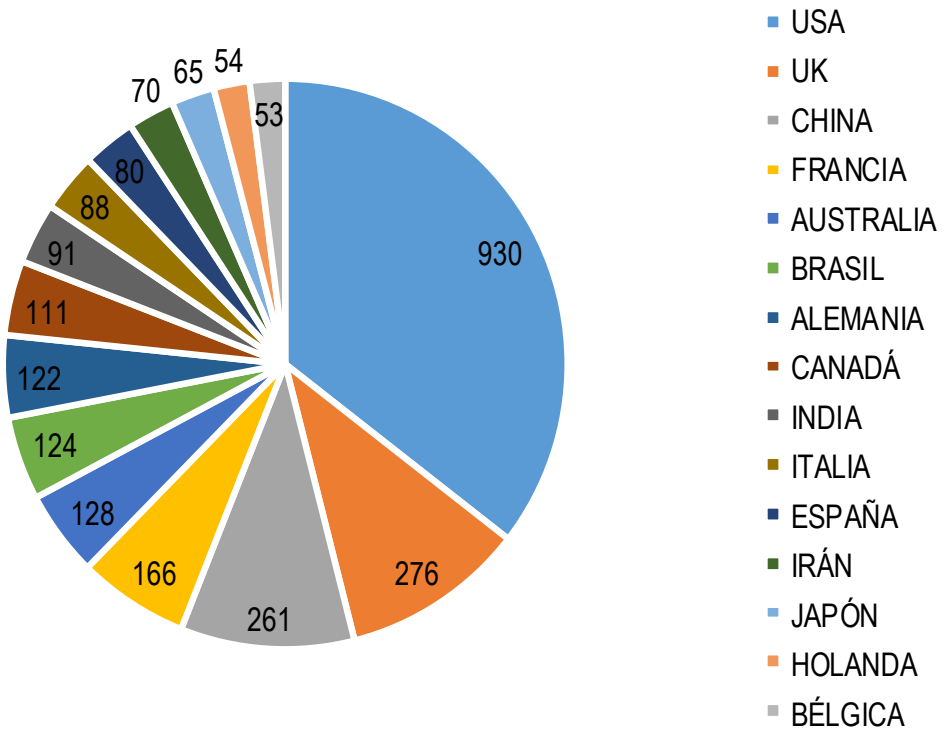
Autores con mayor productividad científica



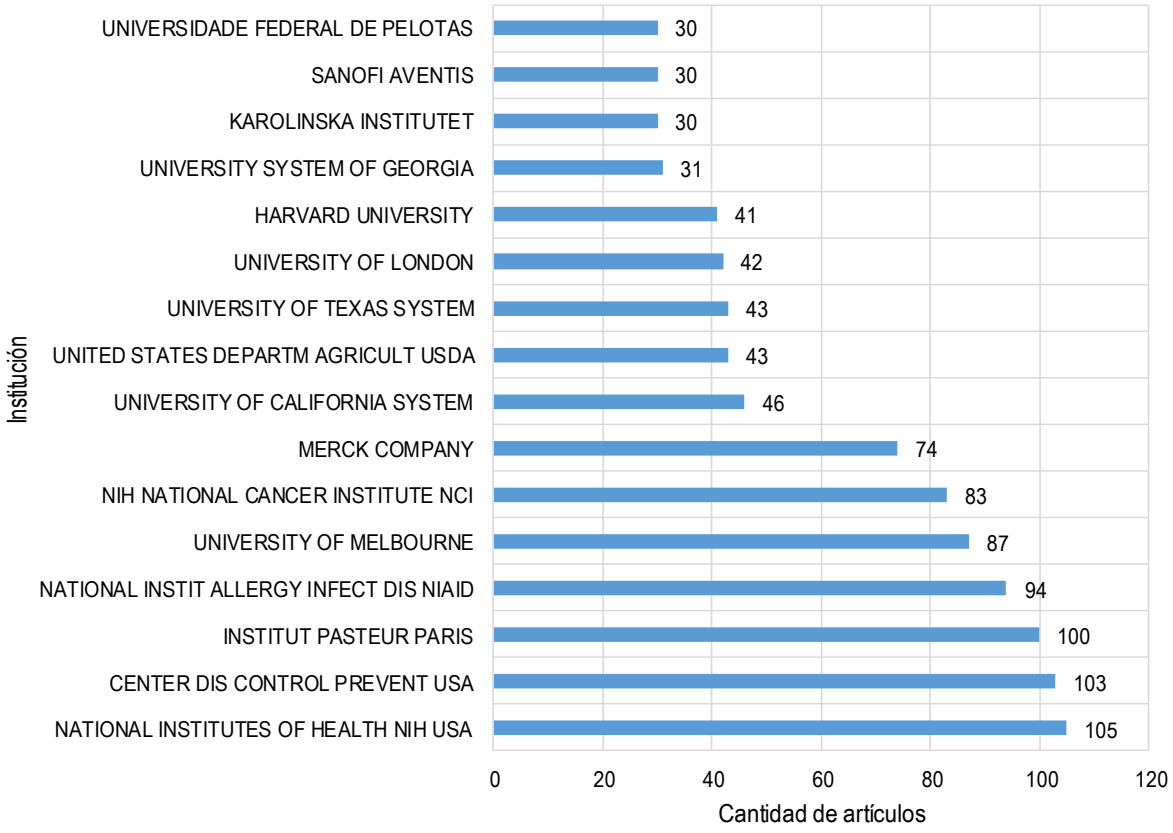
Revistas científicas que han publicado sobre el tema



Producción científica por países registrada en Web of Science



Instituciones que han trabajado el tema de estudio



Noticias en la Web

Cleveland Clinic develops coronavirus prediction model

16 jun. Cleveland Clinic researchers have developed one of the first risk prediction models that allows healthcare providers to predict a patient's likelihood of contracting COVID-19, and how likely the patient is to recover.

Risk for the coronavirus was reduced in those who had a pneumococcal polysaccharide or influenza vaccine, or were on melatonin, paroxetine, or carvedilol, according to Clinic research.

The research was recently published in the peer-reviewed medical journal Chest.

The Clinic's risk prediction model, called a nomogram, shows how age, race, gender, socioeconomic status, vaccination history and current medications affects a person's risk of contracting COVID-19. The risk prediction model provides a more scientific approach to COVID-19 testing, the Clinic said in a statement.

Clinic researchers developed the risk prediction model using data from nearly 12,000 patients enrolled in the health system's COVID-19 registry before April 2. The registry includes electronic medical record data from all patients tested at Clinic for the disease, whether they test positive or negative, the Clinic said.

"The ability to accurately predict whether or not a patient is likely to test positive for COVID-19, as well as potential outcomes including disease severity and hospitalization, will be paramount in effectively managing our resources and triaging care," Dr. Lara Jehi, the Clinic's chief research information officer, said in the statement.

Jehi is a corresponding author on the study. Michael Kattan, chair of Lerner Research Institute's Department of Quantitative Health Sciences, is a co-author.

The risk calculator is available here.

The risk calculator study found that patients who received the pneumococcal polysaccharide vaccine (PPSV23) and flu vaccine were less likely to test positive for COVID-19 than those who didn't receive the vaccinations.

Pneumococcal polysaccharide vaccine (PPSV23) protects against 23 types of pneumococcal bacteria and helps prevent meningitis and bacteremia, according to the Centers for Disease Control and Prevention.

Those who take melatonin as an over-the-counter sleep aid, the heart medication carvedilol or the anti-depressant paroxetine are less likely to test positive than patients who don't take those medications, the study suggested.

Patients of low socioeconomic status (as measured in this study by zip code) are more likely to test positive than patients of a higher socioeconomic category, and Asian patients are less likely than white patients to test positive, the study said.

"Further validation and research are needed into these initial insights, but these correlations are extremely intriguing," Jehi said.

Fuente: Cleveland. Disponible en https://bit.ly/38kFxyA

Vacuna china para Covid-19 muestra resultados alentadores en pruebas en humanos

16 jun. China National Biotec Group (CNBG) dijo el martes que su vacuna experimental contra el coronavirus ha desencadenado anticuerpos en pruebas clínicas y que la compañía planea realizar pruebas avanzadas en humanos en otros países.

No se ha demostrado fehacientemente que ninguna vacuna sea capaz de proteger eficazmente contra el virus que ha matado a más de 400,000 personas, pero hay múltiples candidatas que se encuentran en diversas etapas de desarrollo en todo el mundo.

Se descubrió que la vacuna, desarrollada por un instituto de investigación con sede en Wuhan afiliado a la empresa matriz de CNBG, Sinopharm, había inducido la producción de anticuerpos en todas las personas inoculadas sin efectos secundarios adversos, según datos preliminares de una prueba clínica en la que participaron 1,120 personas sanas.

CNBG dijo que está buscando proactivamente oportunidades para pruebas de fase 3 en el extranjero en etapas tardías y a gran escala.

"Hemos garantizado la intención de cooperar con empresas e institutos de muchos países", dijo la empresa en un comunicado.

Los medios de comunicación estatales informaron que la candidata a vacuna, junto con una inyección experimental diferente desarrollada por la unidad de Sinopharm, se ha ofrecido a empleados chinos de firmas estatales que viajan al extranjero ya que los desarrolladores buscan más datos sobre su eficacia.

China tiene cinco vacunas candidatas para Covid-19 en pruebas con humanos, la mayor cantidad en cualquier país.

El fabricante de vacunas chino Sinovac Biotech (Sinovac) publicó durante el fin de semana resultados preliminares positivos de su potencial candidato a vacuna, que se espera que sea probada en un ensayo de fase 3 en Brasil.

Fuente: Forbes México. Disponible en https://bit.ly/2VCRnze

Gran Bretaña inicia ensayos de posible vacuna de coronavirus

16 jun. Científicos del Imperial College de Londres empezarán a inmunizar a gente en Gran Bretaña esta semana con su vacuna experimental contra el coronavirus. En tanto, la farmacéutica Sanofi y el gobierno francés anunciaron una inversión de más de 800 millones de euros (890 millones de dólares) como parte de la carrera mundial para obtener una vacuna eficaz.

Según un comunicado del gobierno británico, 300 personas sanas recibirán dos dosis de la posible vacuna contra la COVID -19 desarrollada en el centro, que ha recibido 41 millones de libras (51 millones de dólares) de fondos gubernamentales.

Por el momento, la vacuna desarrollada por el Imperial College ha sido probada únicamente en animales y en el laboratorio, donde produjo niveles de anticuerpos mucho más altos de los habituales en personas infectadas.

Muchos científicos han advertido que la pandemia sólo podría detenerse con una vacuna efectiva, que normalmente tarda años en desarrollarse.

El gobierno británico dijo en un comunicado que se inmunizará a 300 personas con dos dosis de la vacuna experimental contra la COVID-19 desarrollada por el Imperial College, la que ha recibido 41 millones de libras (51 millones de dólares) en fondos oficiales.

Robin Shattock, que encabeza la investigación en el Imperial, dijo que la ventaja de su vacuna es que requiere una cantidad pequeña: la dosis es la centésima parte de la que ensayan en Estados Unidos los Institutos Nacionales de la Salud (NIH por sus siglas en inglés) y Moderna Inc. Esto significa que se podrían fabricar millones de dosis en

relativamente poco tiempo.

"Si el gobierno del Reino Unido quiere comprar suficientes vacunas para la población del país, ya tenemos montada la infraestructura para entregarlas en los primeros dos trimestres del año próximo", dijo.

En tanto, Sanofi trabaja en una vacuna que espera ensayar en seres humanos en los próximos meses y obtener la aprobación el año entrante.

La empresa prometió el martes invertir 610 millones de euros (680 millones de dólares) en una planta de producción de vacunas y un centro de investigaciones en Francia para poder producir en mayor escala para futuros riesgos de pandemia".

El presidente francés Emmanuel Macron visitó un laboratorio de Sanofi junto con el CEO de la empresa, Paul Hudson, y anunció que su gobierno invertirá 200 millones de euros para reducir la dependencia francesa de otros países en materia de vacunas y otros medicamentos.

Macron ha propuesto que se considere a las vacunas un "bien común" de la humanidad no sujeto a las presiones del mercado.

La vacuna del Imperial emplea filamentos sintéticos de código genético basados en el virus. Una vez inyectada en el músculo, las propias células del cuerpo reciben instrucciones para realizar copias de una proteína en el coronavirus. Esto debería desencadenar una respuesta inmune para que el cuerpo pueda combatir cualquier futura infección con COVID-19.

El doctor Doug Brown, presidente de la Sociedad Británica de Inmunología, dijo que en teoría la tecnología empleada por el Imperial College debería conducir a la inmunidad a largo plazo contra el coronavirus, pero que por ahora se la debe someter a pruebas rigurosas. Brown no participó de las pruebas.

La Universidad de Oxford inició recientemente un estudio avanzado con 10.000 voluntarios y Estados Unidos se apresta a realizar en julio estudios con 30.000 personas en quienes se pondrán a prueba diversas posibles vacunas, incluidas la de Oxford y la de los INH y Moderna Inc.

Los científicos nunca han creado tan rápidamente vacunas a partir de cero y dista de estar claro si alguna de ellas resultará segura y efectiva. Con todo, Gran Bretaña, Francia, Holanda, Alemania, Estados Unidos y otros países han pedido millones de dosis por adelantado.

Shattock dijo que, en caso de ser eficaz, la licencia para fabricar la vacuna del Imperial no será otorgada a un laboratorio farmacéutico en particular, sino que varios socios en el mundo recibirán permiso para producirla como parte de un "negocio social" sin fines de lucro.

"No podemos proveerla sin costo porque su fabricación cuesta dinero", dijo. "La proveeremos al costo con un pequeño porcentaje y ese pequeño porcentaje variará de acuerdo con la situación económica del país".

La Organización Mundial de la Salud observó el lunes que se han reportado 100.000 infecciones nuevas cada día durante las últimas dos semanas y que la mitigación de las restricciones en muchos países ha provocado un nuevo pico.

Fuente: Lancaster Online. Disponible en https://cutt.ly/loEgQuu

Científico hondureño Salvador Moncada participa en hallazgo de nuevo tratamiento para COVID-19

16 jun. El científico hondureño Salvador Moncada, junto a un equipo investigador, han descubierto un nuevo tratamiento enfocado en proteger y fortalecer los pulmones para hacer frente al virus que provoca la COVID-19.

El sitio web STAT, especializado en noticias de salud, publicó el 10 de junio un artículo con entrevistas a varios científicos, entre ellos Moncada, para indicar el posible uso de la enzima ACE2 como tratamiento de la COVID-19.

El trabajo en la revista científica Circulation explica todo el mecanismo que usaron los investigadores para llegar a la conclusión del nuevo tratamiento.

El artículo indicó que cuando una persona se infecta del virus,

los síntomas más graves aparecen en los pulmones debido a que ingresa a través de ACE2.

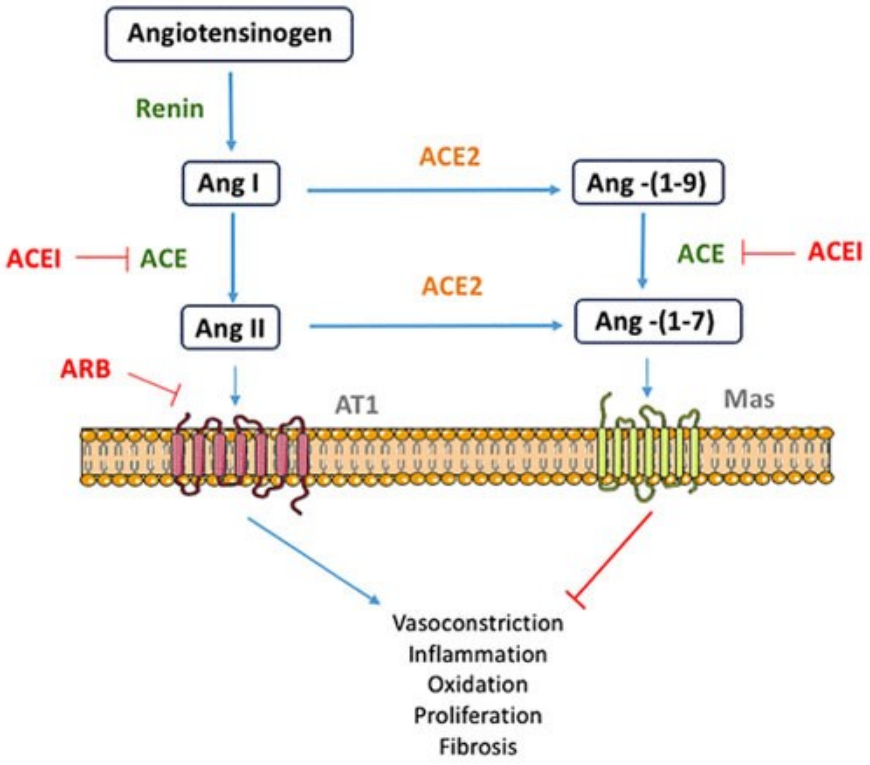
Los científicos presumen que la ACE2 podría indicar el camino hacia un tratamiento necesario para la pandemia debido que la enzima sirte como un árbitro en el sistema renina-angiotensina que sirve como regulador de la presión arterial.

“Cuando la angiotensina II, un péptido que constriñe los vasos sanguíneos, se eleva demasiado, ACE2 interviene y la convierte en angiotensina- (1-7), un galante en su Goofus que relaja los vasos y reduce la inflamación”, cita el artículo.

El científico hondureño, Salvador Moncada, señala en la publicación que "el sistema parece funcionar en un equilibrio en el que la angiotensina- (1-7) es protectora y la angiotensina II es el malo".

A criterio de la profesora de farmacología de la Universidad Autónoma de Madrid, Concepción Peiró, la angiotensina- (1-7) ha demostrado proteger contra la formación de coágulos sanguíneos, la oxidación y la muerte celular prematura.

La publicación menciona que Moncada y Peiró coescribieron una carta a la revista Circulation argumentando la hipótesis que la angotensina- (1-7) puede proteger a los pulmones de los peores síntomas de la COVID-19.



Moncada recibió un correo electrónico del CEO de la compañía Constant Therapeutics, Rick Franklin, explicándole que desarrollaron el medicamento intravenoso “TXA127”, es una versión farmacéutica del péptido natural angiotensina- (1-7), que fue desarrollado como un tratamiento para enfermedades en las que el sistema renina-angiotensina no funcionaba.

Al momento de la declaracion del COVID como pandemia, Rick Franklin vio el TXA127 podria ser un tratamiento para el huésped y no para el virus, dando tiempo a los pacientes al replicar los efectos de ACE2 según la publicación hasta que la enzima salga del coronavirus

"No fue ningún genio de nuestra parte reconstruir esta historia. Es solo que lo habíamos estado mirando durante tanto tiempo que se hizo evidente para nosotros", dijo Franklin.

La compañía Constant comenzó a escuchar de centros académicos de todo el mundo con la esperanza de estudiar la droga en el virus.

El primer ensayo patrocinado por la Universidad de Columbia, está programado para comenzar este mes inscribiendo a 100 pacientes con COVID-19 moderado y comparando una dosis diaria de TXA127 con placebo.

Los objetivos principales son la seguridad y la prevención de la insuficiencia pulmonar, con medidas secundarias de supervivencia, inflamación y la necesidad de asistencia respiratoria.

La compañía mapea un ensayo de fase 2 propio que involucraría aproximadamente siete sitios e

inscribiría a más de 200 pacientes con el virus pero que aún no requieren cuidados intensivos.

Salvador Moncada menciona en el artículo que tiene “sentido biológico” como tratamiento de COVID-19, el TXA127 en ensayos clínicos puede ser un arduo proceso.

“Un porcentaje significativo de personas que contraen la enfermedad se recuperan sin desarrollar síntomas pulmonares graves. Eso significa que, para demostrar el potencial de TXA127, Constant necesitará inscribir a un gran número de pacientes o descubrir cómo detectar los casos de COVID-19 que probablemente se beneficien del medicamento”, comentó.

El enfoque de la compañía parece prometedor, dijo Ankit Patel, nefrólogo del Hospital Brigham and Women en Boston. “Pero ACE2 hace más que solo crear angiotensina- (1-7), y replicar sus efectos beneficiosos puede requerir más que simplemente infundir más péptido”, dijo.

"Definitivamente parece que existe esta angiotensina II sin oposición en COVID-19, y tratar de revertirla parece ser una buena técnica para abordar parte de la patología pulmonar que vemos", añadió Patel.

El ceo de Constant considera un diseño de prueba que reclutaría pacientes que necesitan oxígeno pero que aún no están en la UCI, apostando que TXA127 puede diferenciarse del placebo cuando se trata de prevenir el daño pulmonar.

El papel de ACE2 en COVID-19 es ampliamente aceptado, y el potencial de la angiotensina- (1-7) es claro para los expertos de todo el mundo, expresó Franklin.

Fuente: Proceso Digital. Disponible en https://cutt.ly/VoElEXV

Pneumonia vaccine price drops dramatically for lower-income countries thanks to the Gavi pneumococcal Advance Market Commitment

16 jun. Lower-income countries across the world will now be able to access life-saving pneumococcal conjugate vaccines, which protect against the leading cause of pneumonia, for US$ 2 per dose, thanks to a new supply agreement between UNICEF, Gavi’s procurement partner, and the Serum Institute of India (SII). The new price represents a 43 per cent reduction from the Gavi price of US$3.50 at the start of the Advance Market Commitment (AMC). The supply agreement is the eighth to take place under the Vaccine Alliance’s Advance Market Commitment (AMC) mechanism, and the first to

include a developing country manufacturer. Under the agreement, the Indian manufacturer will provide ten million PCV doses to Gavi-supported countries each year for the next ten years. The pneumococcus bacterium is the leading cause of severe pneumonia and is a major cause of morbidity and mortality worldwide. Most of these deaths occur in lower-income countries and include a disproportionate

number of children under the age of two.

The AMC, which is set to end this year, was launched by Gavi in 2009 – with the support of donors Italy, the United Kingdom, Canada, Russia, Norway and the Bill & Melinda Gates Foundation – to solve a clear example of market failure: complex vaccines like PCV would normally reach low-income countries, where the disease burden is often highest, ten to 15 years after their introduction in industrialised countries. The AMC mechanism incentivised research and development (R&D), particularly for vaccines suitable for developing country epidemiological contexts, and an expansion in manufacturing capacity to meet demand from lower-income countries while maintaining an affordable price per dose.

A decade later the results are clear: the PCV vaccine has now been introduced in 60 lower-income countries, where coverage rates, at 48%, are now higher than the global average of 47%. Estimates indicate that more than 225 million children will have been vaccinated, and that over 700,000 deaths will have been prevented by the end of 2020. In that time, the AMC has catalysed a steady decrease in PCV prices and thanks to this eighth supply agreement will be closing this year having facilitated the entry of a new manufacturer to the market as well as a record-setting low price for Gavi-supported countries that will result in an estimated millions of dollars in savings for both Gavi and lower income countries' vaccine budgets.

"This is fantastic news, which will make this highly effective, lifesaving vaccine even more affordable for the world's poorest countries, and is a testament to the success of Gavi's Pneumococcal AMC mechanism, which as now achieved everything it set out to do," said Aurelia Nguyen, Gavi's Managing Director for Vaccines and Sustainability. "Thanks to this visionary model we have a healthy PCV market that is producing enough vaccines to supply both rich and poor countries and, as a result, hundreds of millions of children are now protected against one of the world's deadliest diseases."

"Pneumonia is the biggest single killer of children, claiming the life of a child every 39 seconds. By being able to provide this quality-assured pneumococcal conjugate vaccine at an such an affordable price, we can save millions of children's lives," said Etleva Kadilli, Director of UNICEF's supply and procurement headquarters. "Our innovative approach has incentivized industry to bring this vaccine at scale to the market. The result means more countries – including middle-income countries – that have not yet introduced this vaccine into their routine immunization due to previously prohibitive pricing, will have an affordable option to accelerate access for all children."

"It is incredible to see that Gavi's commitment to developing innovative mechanisms – and our donors' commitment to supporting them – has had such a dramatic and positive impact on the lives of the most vulnerable children around the world," said Marie-Ange Saraka-Yao, Gavi's Managing Director for Resource Mobilisation, Private Sector Partnerships & Innovative Finance. "This successful mechanism will now be used as a model to help ensure the world's poorest countries get access to COVID-19 vaccines at the same time as the wealthiest, making it integral to the global effort to defeat this pandemic."

At last week's Global Vaccine Summit, Gavi launched the Gavi Advance Market Commitment for COVID-19 Vaccines (Gavi Covax AMC), a new financing instrument aimed at incentivising vaccine manufacturers to produce sufficient quantities of eventual COVID-19 vaccines, and to ensure access for developing countries.

Fuente: UNICEF. Disponible en https://cutt.ly/HoEvP2U

Singapore to start human trials of Covid-19 vaccine in August

16 jun. Singapore scientists testing a Covid-19 vaccine from US firm Arcturus Therapeutics plan to start human trials in August after promising initial responses in mice.

More than 100 vaccines are being developed globally, including several already in human trials from the likes of AstraZeneca and Pfizer, to try and control a disease that has infected more than 8 million people and killed over 430,000 worldwide.

The vaccine being evaluated by Singapore's Duke-NUS Medical School works on the relatively-untested Messenger RNA (mRNA) technology, which instructs human cells to make specific coronavirus proteins that produce an immune response.

"The fact that it replicates and triggers a very balanced immune response, both in terms of the antibody and killer cells - those are welcome properties," Ooi Eng Eong, deputy director of the school's emerging infectious diseases programme, told Reuters on Tuesday.

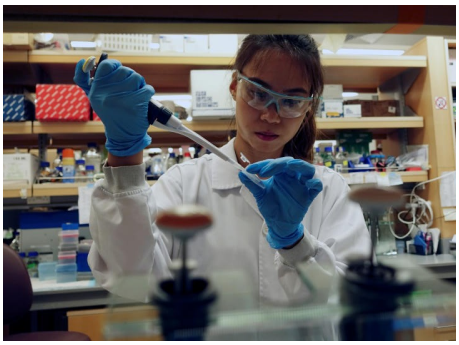
Antibodies stick to the virus and prevent it from infecting cells, while killer cells, another arm of the immune system, recognise infected cells and destroy them, he said.

The mRNA approach has not yet been approved for any medicine so its backers, which also include US biotech firm Moderna , are treading uncharted territory.

Because of that, Ooi said longer studies were needed to ensure its safety.

"The most optimistic case is that it's about this time next year, that we will have a vaccine," Ooi said.

Ooi is also working on a monoclonal antibody treatment for Covid-19 and will begin safety trials on healthy people this week, before testing on Covid-19 patients in the coming months.



Ooi said potential deployment of the treatment could be faster than the vaccine, without giving an exact timeline.

Antibodies are generated in the body to fight off infection. Monoclonal antibodies mimic natural antibodies and can be isolated and manufactured in large quantities to treat diseases.

Tiny city-state Singapore has one of the highest infection tallies in Asia, with more than 40,000 cases, largely due to mass outbreaks in dormitories for its migrant workers.

Fuente: Bangkok Post. Disponible en https://cutt.ly/NoEQaoI

Identifican anticuerpos neutralizantes contra el SARS-CoV-2

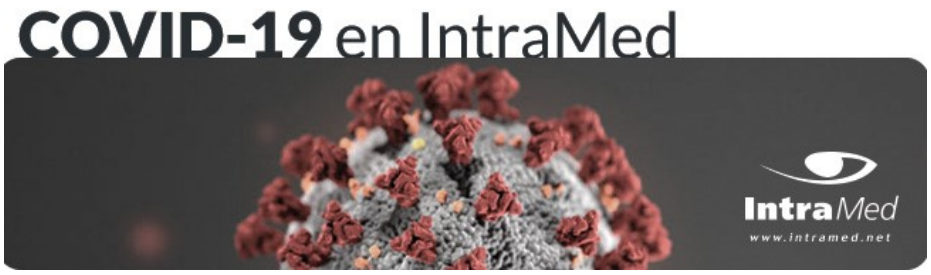
16 jun. Tres nuevos estudios describen varios anticuerpos humanos recientemente descubiertos que se dirigen al virus SARS-CoV-2, aislado de los sobrevivientes de infección por SARS-CoV-2 y SARS -CoV.

Varios de estos anticuerpos mostraron capacidades protectoras y neutralizantes, ofreciendo pistas terapéuticas prometedoras, y se descubrió que ocho anticuerpos de un análisis reaccionan de forma cruzada con un coronavirus específico de murciélago relacionado, con implicaciones para la identificación de anticuerpos ampliamente neutralizantes para proteger contra un posible coronavirus nuevo brotes en el futuro.

Philip Brouwer y sus colegas aislaron 403 anticuerpos monoclonales de 3 pacientes convalecientes de COVID-19, lo que demuestra que los pacientes tenían fuertes respuestas inmunes contra el pico viral, un complejo de proteínas que se une al receptor ACE2 para facilitar la entrada en las células huésped humanas.

Un subconjunto de estos anticuerpos neutralizó el virus

atacando diversos epítopos en la espiga, con los dos más potentes dirigidos al dominio que une el receptor del huésped. En otro estudio, Thomas Rogers y sus colegas utilizaron una tubería de alto rendimiento para aislar y caracterizar los anticuerpos monoclonales de donantes convalecientes, seleccionando los anticuerpos que se unen al pico viral.
Varios de los anticuerpos aislados se unieron al dominio de unión al receptor (RBD) y demostraron capacidades neutralizantes, y los más potentes se unieron en un sitio que se superpone al sitio de unión de ACE2. Dos de estos anticuerpos neutralizantes dieron protección contra la infección por SARS-CoV-2 cuando se probaron en hámsters sirios.



En un tercer estudio para identificar anticuerpos ampliamente reactivos de reacción cruzada, Anna Wec y sus colegas aislaron y caracterizaron cientos de anticuerpos contra el pico viral de SARS-CoV-2 de las células B de memoria de un sobreviviente de SARS-CoV.
Ambos virus estrechamente relacionados dependen de la espiga para obtener la entrada de la célula huésped al unirse al receptor ACE2. De nueve anticuerpos que mostraron una fuerte neutralización cruzada de ambos virus, ocho se dirigen al dominio que se une al receptor ACE2, y también neutralizaron una especie estrechamente relacionada de coronavirus de murciélago.
Tomados en conjunto, el trío de estudios ofrece varios anticuerpos humanos nuevos para ayudar a informar el diseño de medicamentos terapéuticos y vacunas contra el SARS-CoV-2, así como el diseño de vacunas ampliamente protectoras contra una variedad de coronavirus relacionados.

Fuente: Intra*Med*. Disponible en https://cutt.ly/voESIIW

Médicos ecuatorianos tienen criterios diferentes sobre uso de dexametasona

17 jun. En contagiados muy graves, la nueva cepa de coronavirus produce una inflamación total del cuerpo, conocida como tormenta de citoquinas. Esta reacción puede provocar la muerte. Frente a eso, científicos probaron con dosis de dexametasona, para combatir este tipo de reacción. El fármaco fue estudiado por un grupo de investigadores de la Universidad de Oxford, en Reino Unido. Concluyeron que actúa como unas hormonas que sirven para desinflamar y que están presentes en el cuerpo humano.

El estudio se hizo con 2 000 pacientes en estado grave. Los primeros resultados dieron cuenta de que el medicamento redujo las muertes en el 35%; mientras que la mortalidad bajó a la quinta parte

entre quienes recibían oxígeno. "Creo que en Ecuador debemos ser pacientes, esperar y no precipitarnos. Hay que recordar lo ocurrido con la hidroxicloroquina; ha provocado más revisiones de pares", comentó Edgar Samaniego, autor de un libro sobre Fundamentos de la Farmacología y quien por décadas dio esa cátedra en la Universidad Central. Además, el médico y exrector, reiteró que hay que pedirle a la población "no cometer la barbaridad de probar este medicamento antiguo y muy barato. Los investigadores de Oxford advirtieron que lo aplican únicamente con quienes están muy graves, hospitalizados". La dexametasona se usa contra enfermedades autoinmunes, para evitar rechazo de trasplante de órganos, artritis reumatoidea y procesos alérgicos agudos, entre otras, indicó Edgar Samaniego. Entre otros efectos indeseables, dijo, puede producir, retención de líquidos, es decir edema; alteraciones de distribución de la grasa, que causan la cara de luna llena o hinchazón. Descarta que provoquen a los tratados por covid-19 osteoporosis o insuficiencia suprarrenal aguda pues eso pasa cuando se usa a largo plazo. En Oxford lo utilizan por 10 días. Por otro lado, Enrique Terán, médico especialista en farmacología, sí utilizaría este medicamento que pertenece al grupo de los glucocorticoides solo en pacientes que estén en condición de gravedad, en cuidados intensivos. Lo haría con "mucho cuidado", ya que es importante disminuir la inflamación producto del SARS-CoV-2. Pero -alerta- los médicos deben monitorear constantemente al paciente para descartar infecciones bacterianas. Esto debido a que el medicamento produce inmunosupresión, es decir, una baja de las defensas, por lo que la persona puede contagiarse con otros microorganismos que le pueden provocar la muerte. Una de las más comunes es la pseudomona, una bacteria intrahospitalaria. En el Consenso Interino Multidisciplinario Informado en la Evidencia sobre el Tratamiento de covid-19, que se actualizó en mayo y estuvo a cargo de gremios médicos y el Ministerio de Salud, no se indica el uso de estos fármacos para cualquier paciente, ya que aún no se ha probado su efectividad para neumonía grave.

Fuente: EL COMERCIO. Disponible en https://cutt.ly/noRyht1

La dexametasona es prometedora contra la COVID-19, pero solo para pacientes muy concretos

18 jun. Esta semana, la Universidad de Oxford (Reino Unido) aseguró mediante una nota de prensa que la dexametasona reduce el riesgo de muerte en pacientes de COVID-19 con complicaciones respiratorias. Aunque todavía no se ha publicado estudio alguno, el anuncio despertó expectación por formar parte del ensayo RECOVERY, cuyo objetivo es evaluar la eficacia de diferentes fármacos contra el coronavirus.

La dexametasona pertenece a la familia de los corticoides (o corticosteroides), que tienen propiedades antiinflamatorias, inmunosupresoras y antialérgicas. Estos fármacos son esenciales en el manejo de patologías como el asma, la enfermedad pulmonar obstructiva crónica (EPOC), el distrés respiratorio agudo, las alergias broncopulmonares, nasales, cutáneas y oculares. También se usan para los choques anafilácticos, la artritis reumatoide, la esclerosis múltiple, el edema cerebral e incluso reducir los efectos secundarios de la quimioterapia, entre otros trastornos.

La historia de los corticoides se remonta al año 1843, cuando el médico inglés Thomas Addison describió por primera vez algunos casos de insuficiencia suprarrenal en pacientes que presentaban "un estado general de languidez y debilidad, desfallecimiento en la acción del corazón, irritabilidad en el estómago y un cambio peculiar en la piel". Estos, inevitablemente, fallecían.

Posteriormente, en 1935, Edward Calvin Kendall y sus colaboradores de la Cínica Mayo (EE. UU.) aislaron, a partir de glándulas suprarrenales de buey, seis sustancias desconocidas. Una de ellas fue denominada como "compuesto E": para no confundirla con la vitamina E, cambiaron su nombre por

"cortisona". Este fue el primer corticoide de origen natural.

El descubrimiento les valió el Premio Nobel de Fisiología o Medicina en 1950. Durante los años siguientes se obtuvieron otros compuestos sintéticos, derivados de la cortisona, mediante cambios en su estructura química. Así se mejoraron sus propiedades farmacocinéticas y, sobre todo, su potencia.

¿Qué propiedades aporta la dexametasona?

Uno de estos corticoides sintéticos es la dexametasona. Esta tiene una gran potencia, pero sin muchos de los efectos adversos de corticoides naturales como la cortisona. Es muy liposoluble, lo que aumenta su absorción en el tubo digestivo y su penetración en los tejidos, lo que mejora su eficacia terapéutica. Por todo ello, supuso una novedad en su momento.

La dexametasona actúa como un potente antiinflamatorio e inmunosupresor: disminuye o elimina la respuesta de los tejidos a la inflamación. Sin embargo, aunque reduce los síntomas asociados a este proceso, no trata la causa que lo genera.

En otras palabras, este fármaco impide la acumulación de células inflamatorias como macrófagos y leucocitos, la fagocitosis, la liberación de enzimas lisosomales y de mediadores de la inflamación. El tiempo de acción es prolongado y su efecto es 7,5 veces superior al de otros corticoides como la prednisona y la prednisolona, y 30 veces mayor que el de la hidrocortisona.

COVID-19: la tormenta perfecta

La inflamación es un mecanismo que se desencadena ante una amenaza, infecciosa o no, y cuya finalidad es mantener la homeostasis de nuestro cuerpo. Sin embargo, es necesario que esta respuesta sea regulada de forma precisa, tanto en intensidad como en duración, para que sea beneficiosa.

En caso contrario puede surgir el "síndrome de liberación de citoquinas". Esta "tormenta de citoquinas" es causada por una respuesta inflamatoria sistémica aguda, mediada por unas sustancias naturales proinflamatorias que fabrica nuestro organismo; las citoquinas. Puede desencadenarse por una amplia variedad de factores, como infecciones y reacciones a algunos medicamentos.

En pacientes afectados por la COVID-19, cuando la repuesta del sistema inmune no es capaz de controlar eficazmente al coronavirus, como puede suceder en personas mayores, el virus se propaga de forma más agresiva. Esto produce daño en los tejidos pulmonares, lo que activa a los macrófagos y granulocitos y conduce a la liberación masiva de citoquinas proinflamatorias.

Todo este proceso inflamatorio puede complicarse, lo que da lugar a la "tormenta de citoquinas" observada de forma frecuente en pacientes graves de COVID-19. También aumentan los neutrófilos y se ve reducido el número de linfocitos totales. Otros marcadores inflamatorios también han sido detectados en sangre a niveles elevados en pacientes de COVID-19.

¿Por qué los corticoides?

Dada su potencia antiinflamatoria, los corticoides son muy utilizados para el tratamiento de la COVID-19 en sus estadíos más graves. Pero no hay que olvidar que suprimen el funcionamiento del sistema inmunológico, por lo que no se pueden emplear en las etapas iniciales de la enfermedad: solo son útiles en la etapa inflamatoria.

Así, la desametaxona se usa en estos pacientes para detener parte del daño producido cuando el sistema inmunológico se sobreactiva en esta tormenta de citoquinas, mientras el organismo intenta luchar contra el coronavirus.

El uso de corticoides en pacientes COVID-19 positivos ya se ha planteado en protocolos de diferentes países, incluida España, sobre todo en pacientes adultos graves ingresados en UCI. Sin embargo, aún no se ha estandarizado una dosis ni una pauta terapéutica concreta. De forma habitual se utiliza en dosis bajas y durante cortos periodos de tiempo, con el objetivo de minimizar el riesgo de efectos adversos.

Aunque la evidencia científica es escasa, los primeros datos aportados por la Universidad de Oxford son muy alentadores. Parecen confirmar que la dexametasona, en dosis de 6 mg una vez al día durante diez días, reduce la mortalidad en un tercio de los pacientes que necesitaron ventilación artificial y en un quinto de los pacientes que recibieron oxígeno.

Sin embargo, no se han apreciado beneficios entre aquellos pacientes

que no requirieron asistencia respiratoria. Según estos resultados, la dexametasona podría evitar una muerte de cada ocho pacientes tratados que requieran ventilación, y una muerte de cada 25 entre aquellos que reciben oxígeno.

Aunque se trata de datos preliminares, los investigadores trabajan en la obtención de los datos definitivos de este ensayo en el menor tiempo posible.

España también investiga los corticoides

Los datos aportados, aunque provisionales y sin publicar, son muy prometedores, tal como han comunicado recientemente responsables de la Organización Mundial de la Salud. Parecen confirmar una notable reducción de la mortalidad y de las complicaciones asociadas a la infección.

También en España se investiga el uso de corticoides en ensayos clínicos ya autorizados y en fase de reclutamiento de pacientes en estadíos avanzados.

La dexametasona puede convertirse en el estándar de atención en este grupo concreto de pacientes de COVID-19 pues, además, es muy económica, su disponibilidad es absoluta y se puede usar de inmediato para salvar vidas en todo el mundo.

Pero no se debe confundir el hecho de que este fármaco pueda ser prometedor para pacientes concretos con su uso generalizado en todos ellos, ni para tratar o prevenir esta enfermedad. El empleo de corticoides sin control médico es sumamente peligroso, debido al desarrollo de efectos adversos graves, como la inmunosupresión y la insuficiencia adrenal aguda por la supresión brusca del tratamiento.

Fuente: HUFF POST. Disponible en https://cutt.ly/QoRo3K7

El enigma de la vacuna contra el coronavirus: fechas que ya barajan la OMS, China y Europa

20 jun. La llegada de la vacuna contra el coronavirus que asola al mundo es la noticia esperada por todos. La única solución sanitaria real a una pandemia que deja millones de infectados y que se ha cobrado cientos de miles de vidas humanas en todo el mundo. Dar una respuesta a cuándo llegará comienza a ser una obsesión para la que no hay una respuesta concreta, aunque sí cada vez más clara.

La vacuna que China está desarrollando para hacer frente a la Covid-19 podría tardar más de un año en estar disponible para la venta debido a la falta de nuevos infectados con los que realizar ensayos clínicos, tal y como ha informado la agencia de noticias CNS.

Actualmente se están realizando más de una decena de ensayos clínicos de posibles vacunas en diversos países, pero ninguna de ellas ha pasado aún a la tercera fase de pruebas, que requiere la participación de miles de personas para garantizar su efectividad.

China, donde se detectó el virus por vez primera a finales de 2019, registró menos de diez casos de coronavirus al día a lo largo del mes de mayo, lo que ha dificultado los ensayos.

"Esperamos que podamos cooperar a nivel internacional y realizar una fase tres a nivel clínico de forma múltiple para lograr así que la vacuna llegue al mercado", ha explicado el vicepresidente del Grupo Nacional de Biotecnología Chino (CNBG), Zhang Yutao.

"La vacuna no llegará al mercado al menos hasta el año que viene tal y como avanzan las investigaciones", ha aseverado en una entrevista a la citada agencia. Un nuevo brote ha dejado numerosos infectados en Pekín, la capital china, si bien Yang ha aseverado que el número de pacientes en comparación con la densidad poblacional es demasiado bajo como para propiciar un "ambiente de ensayo ideal".

La previsión de la OMS, algo más optimista

La Organización Mundial de la Salud (OMS) ha informado por su parte de que espera que a finales de año ya estén disponibles "millones de dosis" de vacunas y que en 2021 estén disponibles otros 2.000 millones.

Actualmente hay unas 300 vacunas en ensayos y tres ya están cerca de comenzar la fase final de las pruebas con personas, la de la Universidad de Oxford, la vacuna RNA de la compañía

Moderna y otra más que se está desarrollando en China.

No obstante, la jefa de científicos de la OMS, Soumya Swaminathan, ha avisado de que esta hipótesis "no son certeras" ya depende del resultado final de los ensayos, si bien ha recordado que el organismo de Naciones Unidas trabaja con esos supuestos para la adquisición, distribución y reparto justo.

"Tengo esperanza, soy optimista, pero el desarrollo de una vacuna es una tarea compleja, viene con mucha incertidumbre. Lo bueno de esto es que tenemos muchas vacunas y plataformas para que, incluso si la primera o la segunda falla no perdamos la esperanza y no nos rindamos. Si tenemos suerte habrá una o dos vacunas exitosas a finales de año", ha detallado la experta.

La estrategia de la UE con la vacuna

La Comisión Europea ha desvelado esta semana su estrategia para garantizar en todo el bloque vacunas "seguras, eficaces y de calidad" para la Covid-19 en un plazo de entre 12 y 18 meses y que estará basada en un sistema centralizado de compras anticipadas a fabricantes con capacidad de producción en la UE.

La comisaria de Salud, Stella Kyriakides, ya trasladó las características principales de esta estrategia a los ministros de Sanidad de los Veintisiete en la reunión telemática que tuvo lugar hace una semana. El ministro español, Salvador Illa, mostró horas después su apoyo a la iniciativa.

La estrategia persigue un triple objetivo: garantizar vacunas seguras, eficaces y de calidad", asegurar un "acceso rápido" a las mismas por parte de los Estados miembros y sus poblaciones y conseguir que además sea "justo y asequible".

El plan de Bruselas se basa además en dos pilares y el primero de ellos pasa por adaptar el marco legislativo vigente a la "urgencia actual" y utilizar toda la flexibilidad posible para "acelerar el desarrollo, la autorización y la disponibilidad de vacunas" mientras se mantienen los estándares de calidad y seguridad.

El segundo pilar de la estrategia representa el núcleo de la misma y persigue garantizar la producción de las futuras vacunas en el bloque y un "suministro suficiente" para todos los socios comunita-rios. El Ejecutivo comunitario sugiere hacer a través de Acuerdos de Compra Anticipados (APA, por sus siglas en inglés).

En virtud de este mecanismo, la Comisión negociará y cerrará acuerdos con fabricantes de vacunas en nombre de los Estados miembros. Bruselas financiará con 2.400 millones de euros parte de los costes en los que incurran estas compañías a través del presupuesto del Instrumento de Ayuda de Emergencia (ESI).

Estos pagos se concebirán como un anticipo por la compra de dosis de vacunas que posteriormente tendrán que pagar los países de la UE como los productores que hayan sido seleccionados por el Ejecutivo comunitario cuando exista una vacuna.

Fuente: 20 minutos. Disponible en https://cutt.ly/joRBcVd

Estudian la destrucción del material genético del SARS-COV-2 mediante la herramienta CRISPR

20 jun. El profesor de la Universidad Pablo de Olavide, Miguel Ángel Moreno Mateos, investigador Ramón y Cajal en el Centro Andaluz de Biología del Desarrollo (CABD),co-lidera un proyecto de investigación financiado por el Consejo Superior de Investigaciones Científicas (España) cuyo objetivo es destruir el genoma del coronavirus SARS–CoV-2 empleando la herramienta de edición genética de última generación CRISPR–Cas13d.

El SARS-CoV-2 es un virus cuyo genoma está formado por una única cadena de ácido ribonucleico (ARN), una molécula que, al igual que el ácido desoxirribonucleico (ADN), es esencial para la vida de los organismos. Está repleto de instrucciones genéticas para hacer millones de copias de sí mismo y estas instrucciones están codificadas en 30.000 ‘letras’ de ARN que la célula infectada lee y traduce a las distintas proteínas virales que promueven la replicación viral.

“La tecnología CRISPR-Cas es

una revolución comparable a la acontecida en los años 70 y 80 con el DNA recombinante y los inicios de la ingeniería genética. Básicamente, ahora podemos ir de manera dirigida a cualquier lugar de un genoma (de ADN o de ARN como es el del SARS-CoV-2) y manipularlo a nuestro antojo", afirma el profesor Miguel Ángel Moreno, experto en esta tecnología. Esta herramienta tiene muchas variantes y en este proyecto el equipo de investigación emplea la proteína Cas13d, que, como explica el investigador de la UPO, "es capaz de encaminarse de manera precisa y dirigida al ARN viral, lo que es el cerebro del virus de donde salen todas sus instrucciones, y cortarlo, como si fuera unas tijeras, llevándolo a su eliminación y evitando su propagación".

El investigador de la UPO lidera la primera fase del proyecto, que consiste en la selección de las formulaciones CRISPR-Cas13d más eficientes para el SARS-CoV-2 y otros virus de RNA relacionados con éste, empleando embriones de pez cebra como sistema modelo *in vivo*. "Somos pioneros en la optimización de la tecnología CRISPR-Cas13 *in vivo*, y lo que estamos haciendo es preparar las formulaciones más eficientes con unos modelos artificiales, usando determinados RNAs del SARS-CoV-2 y otros virus similares pero de forma independiente, que no generan ningún peligro ni necesitan un laboratorio de alta seguridad. Estas formulaciones se probarán después en modelos reales", explica Miguel Ángel Moreno.

Tras evaluar su funcionalidad y su no toxicidad, estos reactivos se testarán en el Centro Nacional de Biotecnología. Las formulaciones más eficientes serán entonces probadas en modelos celulares de infección in vitro donde se podrá analizar la capacidad de eliminación por parte de dichas formulaciones de virus similares al SARS-CoV-2 pero menos peligrosos. De este modo, se optimizarán las condiciones de eliminación antiviral con las formulaciones más eficientes previamente probadas. Finalmente, en un laboratorio con la bioseguridad adecuada, se probarán en modelos de infección de SARS-CoV-2 *in vitro* e *in vivo* usando todas las optimizaciones anteriores.

"Podríamos tener una terapia muy flexible y podría, por ejemplo, ser adaptada fácilmente a distintas versiones mutantes del SARS-CoV -2 y otros virus de RNA de forma relativamente sencilla, aunque debemos tener cautela porque estamos empezando. Como se suele decir, la paciencia es la madre de la ciencia", señala Moreno.

El proyecto agrupa a investigadores de perfiles diversos pero complementarios: Miguel Ángel Moreno Mateos (UPO-CABD), biólogo del desarrollo y experto en la optimización de sistemas CRISPR-Cas *in vivo*; Dolores Rodríguez (CNB-CSIC), viróloga experta en el manejo y caracterización de diferentes tipos de virus; y Almudena Fernández (CIBER-ISCII) y Lluís Montoliu (CNB-CSIC), genetistas, expertos en el uso de las herramientas CRISPR de edición genética para la generación de modelos animales de enfermedades raras.

"Contar con un equipo multidisciplinar para este proyecto ha sido crítico. La ciencia sin una colaboración fluida no va a ningún sitio", afirma Miguel Ángel Moreno Mateos. Actualmente las colaboraciones y el equipo continúan creciendo y también se han incorporado recientemente Manuel Collado y Pablo del Pino, desde Instituto de Investigaciones Sanitarias de Santiago (IDIS) y la Universidad de Santiago de Compostela, respectivamente.

El estudio está financiado por el CSIC a través de la Plataforma de Salud Global, que engloba más de 200 grupos de investigación de diferentes especialidades, desde biotecnología y nanotecnología hasta demografía e inteligencia artificial, para abordar los retos que plantea la epidemia del coronavirus SARS-CoV-2 con el objetivo de plantear soluciones a corto, medio y sobre todo largo plazo. (Fuente: CSIC/DICYT)

Fuente: NCYT Noticias de la Ciencia y la Tecnología. Disponible en https://cutt.ly/GoR0L6J

IMSS desarrolla vacuna contra coronavirus a partir de anticuerpos de pacientes

20 jun. El Instituto Mexicano del Seguro Social (IMSS) desarrolla una vacuna basada en proteínas del coronavirus SARS CoV-2, a partir del estudio de los anticuerpos producidos por sus primeros 300 pacientes covid-19 y mediante el uso de un potenciador de la respuesta inmunitaria ya patentado por la institución. Lo anterior lo reveló Constantino López Macías, jefe de la Unidad de Investigación Médica e Inmunoquímica (UIMIQ) de la Unidad Médica de Alta Especialidad (UMAE) Hospital de Especialidades del Centro Médico Nacional Siglo XXI.

"Para saber cómo inducir protección necesitamos saber qué significa esa protección, con los conocimientos modernos de inmunología vemos cómo es que el organismo se protege contra la infección y ya que sabemos cuál es la respuesta de anticuerpos necesaria de linfocitos T y la inmunidad innata, es decir, los componentes de la protección, entonces sabemos cómo podemos inducirlos", señaló Constantino López Macías en entrevista exclusiva con MILENIO.

Un protocolo clínico desarrollado en esa unidad médica en el que se estudió la respuesta inmune de 300 pacientes covid-19 y sus contactos, permitió identificar las proteínas virales para diseñar el antígeno de la vacuna del IMSS que funciona con un adyuvante -un potenciador de la respuesta inmune- desarrollado hace algunos años en la misma unidad de investigación con base en proteínas de salmonella, y que ya está patentando por el IMSS. "Lo que se hizo fue identificar cuáles son los fragmentos del virus que reconoce el sistema inmune y que pueden usarse como vacuna, es vacuna de subunidades la que estamos haciendo en el IMSS--; sin embargo, estas subunidades no son tan inmunogénicas, hay que ponerle algún potenciador -se llaman adyuvantes- y se mezclan con sustancias que ayudan a potenciar la respuesta inmune, como es el caso del adyuvante que se desarrolló en el IMSS que lo vamos a ocupar para esta vacuna".

En términos simples, el investigador médico explicó que al infectarse, el organismo humano emprende una batalla para defenderse del virus, por lo que al identificar a los anticuerpos vencedores, "a los que ganaron esa guerra les preguntamos: cómo le hiciste para ganarle, y entonces con esa información, lo usamos para entrenar al sistema inmune de los demás", pero requieren de un adyuvante para ayudar a reclutar más células. ¿Cómo funciona la vacuna? En la primera entrevista que concede, el doctor Constantino López explicó que al ingresar al organismo, el antígeno diseñado para la vacuna estimula la respuesta inmune innata a través de células dendríticas, éstas son las células presentadoras de antígeno más potentes que existen y con capacidad de activar los linfocitos T, que son células del sistema inmune que juegan un papel como mediadores de la respuesta inmune contra el virus.

"El antígeno es captado por estas células dendríticas y es presentado a los linfocitos T para producir citocinas y por otro lado el antígeno es liberado y es reconocido por los linfocitos B y producen anticuerpos. Esta es una manera en la que el sistema innato y los linfocitos T y B son entrenados a través de la vacuna para producir esos anticuerpos y células T que son de los principales actores en la defensa, de esa manera se entrenan y cuando llega el virus que causa la enfermedad ya están entrenados para reconocerlo, atacarlo y destruirlo", explicó. Además, dijo que el adyuvante ayuda a que se recluten más de las células de la respuesta innata, que "haya un ambiente que promueva la activación más eficiente en las células T y B para producir estas células con características adecuadas para que se induzca una respuesta para que no solo actúe en un tiempo corto, sino que actúe a larga plazo".

¿En qué fase se encuentra el desarrollo de la vacuna?

López Macías dijo que se encuentran en la fase de producción de los antígenos para comenzar los ensayos preclínicos en ratones; explicó que tras las pruebas en laboratorio, el siguiente paso es producirla y garantizar que puede escalarse; de ahí que la importancia de formar parte del grupo de científicos que representa a México ante la Coalición para la Innovación en la Preparación de Epidemias (CEPI).

"Estamos haciendo los estudios de producción y escalamiento y en el grupo CEPI están convergiendo entidades académicas que tiene plantas piloto que permiten hacer los escalamientos y de ahí ya se puede hacer a que se produzcan a nivel industrial. Estamos colaborando con la UNAM y el IPN, entonces estaríamos haciendo esto muy probablemente en los próximos meses para que estemos evaluando estos candidatos en los modelos preclínicos".

Fuente: MILENIO. Disponible en https://cutt.ly/RoRLKyZ

Clover lanza sexto ensayo de una vacuna china para la COVID-19

20 jun. Clover Biopharmaceuticals se convirtió el viernes en el sexto desarrollador chino de una posible vacuna para la COVID-19 en pasar a ensayos en humanos, lanzando un estudio en Australia que probará su fórmula de inmunización con refuerzos.

China y Estados Unidos se han enfrentado a la crisis de salud y están impulsando esfuerzos paralelos para lograr que las vacunas se aprueben y se produzcan a gran escala a finales de este año.

Actualmente no hay vacunas o tratamientos aprobados para la enfermedad causada por el nuevo coronavirus, pero alrededor de una docena de vacunas se están probando en todo el mundo.

El virus surgió en la ciudad china de Wuhan a fines del año pasado y desde entonces se ha extendido a nivel mundial, matando a más de 450.000 personas.

Un aumento en los casos en la capital de China, Pekín, ha obligado a las autoridades a estudiar el genoma de una posible nueva cepa. [nL8N2DW11K]

Las pruebas de Clover, que está reclutando a unos 150 pacientes adultos y ancianos, evaluará dos refuerzos diferentes, o adyuvantes, de la británica GSK y la estadounidense Dynavax en combinación con su vacuna candidata, SCB-2019, dijo la compañía china.

La también china CanSino Biological, Sinopharm y el Instituto de Productos Biológicos Wuhan se encuentran entre los que ya están probando vacunas, al igual que AstraZeneca, Moderna y CureVac de Alemania.

Clover dijo que los datos iniciales de seguridad de su estudio se esperan para agosto, y que su objetivo sería comenzar estudios más amplios para fin de año. Su vacuna se basa en proteínas llamadas antígenos que se tomarán en combinación con los adyuvantes.

Fuente: infobae. Disponible en https://cutt.ly/roRZ9F0

Científicos reclaman más investigación sobre el SARS-CoV-2 en animales para minimizar riesgos

22 jun. A medida que aumenta la evidencia de la posibilidad de que el SARS-CoV-2 infecte a varios animales, los científicos del University College de Londres (UCL) dicen que se necesita un esfuerzo global para reducir el riesgo de que el virus regrese más tarde a las personas.

En un comentario para 'The Lancet Microbe', los investigadores escriben que si el virus se vuelve común en una población animal que vive cerca de personas, como mascotas o ganado, existe el riesgo de que ocurra otro brote incluso si el virus se erradica en las personas en el área.

Los autores piden más investigación sobre qué animales son susceptibles al SARS-CoV-2, el virus que causa la enfermedad de COVID-19, y sugieren implementar programas de vigilancia para evaluar regularmente a los animales que podrían presentar los mayores riesgos de transmisión.

La coautora, la profesora Joanne Santini, del UCL Structural & Molecular Biology, recuerda que "cada vez hay más pruebas de que algunos animales pueden contraer el SARS-CoV-2 de las personas y posteriormente pueden transmitirlo a otras personas, pero no sabemos exactamente cómo esto es un gran riesgo, ya que es un área de estudio que aún no ha sido priorizada".

"Necesitamos desarrollar estrategias de vigilancia para asegurarnos de que no nos tome por sorpresa un gran brote en animales, que podría representar una amenaza no solo para la salud animal sino también para la salud humana", añade.

A su juicio, "la transmisión del virus en poblaciones animales podría volverse irreversible si no se controla, y puede amenazar el éxito de las medidas de salud pública existentes si las personas continúan contagiando el virus de una población infectada de animales".

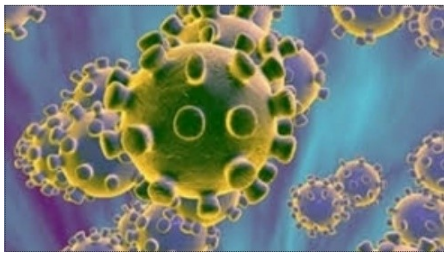
Los autores escriben que la inmensa escala de la pandemia de COVID-19 aumenta la posibilidad de que suficientes animales se conviertan en 'reservorios' del virus, lo que podría ser más probable que en epidemias pasadas, como el brote de SARS-CoV-1 más contenido en 2002-2003.

El profesor Santini y la coautora profesora Sarah Edwards, del UCL Science & Technology Studies, revisaron la evidencia de estudios de casos, experimentos que prueban la infección en pequeños grupos de animales, así como estudios de laboratorio y modelos que describen mecanismos probables de infección.

Los estudios de modelado y de laboratorio sugieren que el SARS-CoV-2 podría, en teoría, transmitirse a numerosos animales, según los hallazgos de que la proteína espiga del virus se adhiere a las células huésped, utilizando una proteína que se encuentra en muchas especies diferentes.

El documento de investigación informa de que, una vez que los científicos identifiquen qué animales podrían infectarse, deben averiguar si se sentirán mal o si no serán asintomáticos, y si una persona infectada puede transmitir el virus a otros animales o incluso a los humanos.

En particular, ha habido casos recientes en los Países Bajos de visón de granja infectado con SARS-CoV-2, lo que llevó a dos personas a contraer el virus de estos animales, en un brote que ha provocado la eliminación de miles de visones. Los investigadores dicen que este ejemplo resalta no solo el riesgo para la salud humana, sino también las preocupaciones sobre el bienestar animal y la posible pérdida de medios de vida en el sector agrícola.



El profesor Edwards comenta que "existe una necesidad urgente de una vigilancia generalizada, mediante el análisis de muestras, preferentemente no invasivas, de un gran número de animales, en particular mascotas, ganado y fauna silvestre que se encuentran muy cerca de las poblaciones humanas".

A su juicio, "es poco probable que más experimentos de laboratorio con pequeñas cantidades de animales nos den las pruebas necesarias para estar seguros de que ciertas especies son totalmente seguras, lo que hace que el trabajo de vigilancia importante sea la única opción real en este caso".

"Necesitamos más información, al mismo tiempo que tomamos medidas de precaución simples, especialmente con las especies que tienen el potencial de propagar rápidamente el virus en el medio silvestre --continúa--. Una evaluación de riesgos robusta también requeriría revisar nuestra capacidad para manejar un brote en esos animales, es decir, nuestra capacidad para aislar, proteger o contener diferentes animales".

Fuente: alicante plaza. Disponible en https://cutt.ly/joR4NmT

Pfizer Announces Start of Four Phase 3 Clinical Trials for Investigational Vaccines

22 jun. First subjects recently administered immunizations in two studies of 20-valent pneumococcal conjugate vaccine candidate in infants; a pentavalent meningococcal vaccine candidate in adolescents; and a respiratory syncytial virus vaccine candidate in pregnant women.

Two studies (NCT04382326 and NCT04379713) of the 20-valent pneumococcal polysaccharide conjugate vaccine candidate, 20vPnC, evaluating a four-dose series in infants starting at 2 months of age. Both studies will expand the data on the safety and tolerability of the investigational vaccine in infants and include a control group of Prevnar 13® (Pneumococcal 13-valent Conjugate Vaccine [Diphtheria CRM197 Protein]). Study NCT04382326 has the goal of determining immunologic noninferiority between 20vPnC and Prevnar 13®, a critical requirement for vaccine licensure.

One study (NCT04424316) of the respiratory syncytial virus (RSV) vaccine candidate, RSVpreF, in pregnant women to evaluate the safety and efficacy of RSVpreF in infants born to immunized pregnant women as compared to placebo.

One study (NCT04440163) of the pentavalent meningococcal vaccine candidate, MenABCWY, in adolescents and young adults to assess the safety, tolerability, and immunogenicity of the MenABCWY vaccine candidate compared to licensed meningococcal vaccines, with the goal of determining immunologic noninferiority.

"The start of four Phase 3 studies across our portfolio of investigational vaccines is a testament to the talented and dedicated colleagues working throughout Pfizer, and the continued commitment to unlock the potential promise and value that vaccines hold for our world," said Kathrin U. Jansen, Ph.D., Senior Vice President and Head of Vaccine Research & Development at Pfizer Inc. "If approved, all three vaccine candidates could help prevent serious, possibly deadly infectious diseases that negatively impact millions of people of all ages globally."

About 20vPnC Pediatric

Approximately 3,500 infants will be enrolled in total for these two studies. In both studies, infants will be vaccinated with either 20vPnC or Prevnar 13® (13vPnC) at 2, 4, 6, and 12-15 months of age, along with other routine infant vaccines according to the current CDC recommended schedule. Additional information can be found at www.clinicaltrials.gov under the identifiers NCT04382326 and NCT04379713. The results of the descriptive Phase 2 infant study with 20vPnC (NCT03512288) have been submitted for presentation at ID Week 2020.

In May 2017 the FDA granted Fast Track status for a pediatric indication for 20vPnC.1

Global Burden of Pneumococcal disease

Pfizer's 20vPnC vaccine candidate includes 13 serotypes already included in Prevnar 13® (13vPnC). Together, the 20 serotypes included in 20vPnC are responsible for the majority of currently circulating pneumococcal disease in the U.S. and globally.2,3,4,5,6,7,8

About RSVpreF

The Phase 3 trial of RSVpreF is a global, double-blind, placebo-controlled study that will enroll 6,900 pregnant women ages 18 through 49 and their infants. Additional information about the study can be found at www.clinicaltrials.gov under the identifier NCT04424316.

In April 2020, positive top-line results were achieved for a Phase 2b proof-of-concept study of RSVpreF, which evaluated the safety, tolerability and immunogenicity of RSVpreF in vaccinated pregnant women ages 18 through 49 and their infants. Detailed results from the study will be shared at a future medical conference. In November 2018, the

FDA granted Fast Track status to RSVpreF for prevention of RSV-associated lower respiratory tract illness in infants by active immunization of pregnant women.

Global Burden of RSV

RSV is a virus that can cause severe respiratory disease in infants and older adults.9,10 Globally, there are an estimated 33 million cases of RSV annually in children less than 5 years of age, with about 3 million hospitalized and approximately 120,000 dying each year from complications associated with the infection. Nearly half of these pediatric hospitalizations and deaths occur in infants less than 6 months of age.11 The medical community is limited to offering only supportive care for those with the illness.

About MenABCWY

The Phase 3 trial will enroll approximately 2,413 adolescents and young adults (10 through 25 years of age) from the United States and Europe. Additional information about the study can be found at www.clinicaltrials.gov under the identifier NCT04440163.

Initiation of the Phase 3 trial is based on positive results from a proof-of-concept study (NCT03135834) in 543 adolescents and young adults. Detailed results from the proof-of-concept study have been submitted for presentation at ID Week 2020.

Pfizer's pentavalent meningococcal vaccine candidate combines its two approved meningococcal vaccines, Nimenrix™ (meningococcal group A, C, W-135, and Y conjugate vaccine) and Trumenba® (meningococcal group B vaccine). Approvals of Nimenrix™ and Trumenba® vary by country.

Global Burden of Meningococcal Disease

Meningococcal disease is an uncommon but serious disease that can attack without warning12,13 and lead to meningitis and serious blood infections.14,15 The majority of invasive meningococcal disease cases worldwide can be attributed to five Neisseria meningitidis groups (A, B, C, W and Y).16 Together, these meningococcal groups account for 96% of all invasive meningococcal disease (IMD), with group B accounting for the majority of disease in adolescents and young adults in the U.S. and Europe.

Fuente: Pzifer. Disponible en https://cutt.ly/hoBwxg6

Vacuna contra coronavirus COVID-19: La propuesta israelí pasa la prueba con roedores

22 jun. A raíz de la crisis de sanidad que estamos viviendo en la actualidad, varios grupos de científicos han tomado la labor de buscar una vacuna que pueda prevenir que una enfermedad que se propaga tan rápido como el COVID-19 vuelva a tener un brote que sea tan devastador como el actual.

Entre este grupo de científicos, este fin de semana del 21 de junio destacaron los israelíes y los chinos por haber anunciado avances importantes en las vacunas trabajadas desde que empezó la pandemia.

El Instituto de Israel para la Investigación Biotecnológica probó con éxito una posible vacuna en roedores, cuyos experimentos son clave para el desarrollo de la medicina dado que si funcionan, pueden continuar con otros animales y en última instancia con humanos, según los investigadores en su informe por el medio digital Sin Embargo.

Hubo dos grupos de hámsters infectados dentro del experimento: los que recibieron la vacuna con "dosis única" y los que no. Los roedores inmunizados dejaron de perder peso corporal, mientras que los pulmones de aquellos sin vacunar sufrieron daños extensos en sus tejidos y vías respiratorias, a diferencia del otro grupo cuyos efectos colaterales fueron menores…

Fuente: Yahoo finanzas. Disponible en https://cutt.ly/YoBuPFt

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Severe Acute Respiratory Syndrome Coronavirus 2-Specific Antibody Responses in Coronavirus Disease Patients.
Okba NMA, Müller MA, Li W, Wang C, GeurtsvanKessel CH, Corman VM, Lamers MM, Sikkema RS, de Bruin E, Chandler FD, Yazdanpanah Y, Le Hingrat Q, Descamps D, Houhou-Fidouh N, Reusken CBEM, Bosch BJ, Drosten C, Koopmans MPG, Haagmans BL. Emerg Infect Dis. 2020 Jul;26(7):1478-1488. doi: 10.3201/eid2607.200841. Epub 2020 Jun 21.
PMID: 32267220

Convergent antibody responses to SARS-CoV-2 in convalescent individuals.
Robbiani DF, Gaebler C, Muecksch F, Lorenzi JCC, Wang Z, Cho A, Agudelo M, Barnes CO, Gazumyan A, Finkin S, Hägglöf T, Oliveira TY, Viant C, Hurley A, Hoffmann HH, Millard KG, Kost RG, Cipolla M, Gordon K, Bianchini F, Chen ST, Ramos V, Patel R, Dizon J, Shimeliovich I, Mendoza P, Hartweger H, Nogueira L, Pack M, Horowitz J, Schmidt F, Weisblum Y, Michailidis E, Ashbrook AW, Waltari E, Pak JE, Huey-Tubman KE, Koranda N, Hoffman PR, West AP Jr, Rice CM, Hatziioannou T, Bjorkman PJ, Bieniasz PD, Caskey M, Nussenzweig MC. Nature. 2020 Jun 18. doi: 10.1038/s41586-020-2456-9. Online ahead of print.
PMID: 32555388

Progress and Challenges in the Development of COVID-19 **Vaccines** and Current Understanding of SARS-CoV-2- Specific Immune Responses.
Kim KD, Hwang I, Ku KB, Lee S, Kim SJ, Kim C. J Microbiol Biotechnol. 2020 Jun 16. doi: 10.4014/jmb.2006.06006. Online ahead of print.
PMID: 32627758

Hepatitis.
Mehta P, Reddivari AKR. 2020 Jun 18. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 32119436

Detection of SARS-CoV-2-Specific Humoral and Cellular Immunity in COVID-19 Convalescent Individuals.
Ni L, Ye F, Cheng ML, Feng Y, Deng YQ, Zhao H, Wei P, Ge J, Gou M, Li X, Sun L, Cao T, Wang P, Zhou C, Zhang R, Liang P, Guo H, Wang X, Qin CF, Chen F, Dong C. Immunity. 2020 Jun 16;52(6):971-977.e3. doi: 10.1016/j.immuni.2020.04.023. Epub 2020 May 3.
PMID: 32413330

Immunotherapy.

Justiz Vaillant AA, Nessel TA, Zito PM. 2020 Jun 22. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 30085588

COVID-19: The Potential Treatment of Pulmonary Fibrosis Associated with SARS-CoV-2 Infection.
Lechowicz K, Drożdżal S, Machaj F, Rosik J, Szostak B, Zegan-Barańska M, Biernawska J, Dabrowski W, Rotter I, Kotfis K. J Clin Med. 2020 Jun 19;9(6):E1917. doi: 10.3390/jcm9061917.
PMID: 32575380

Aluminum Hydroxide.
Shon NN, Yarbrough T, Shah AD. 2020 Jun 21. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 31536275

Vaccines against Coronaviruses: The State of the Art.
Conte C, Sogni F, Affanni P, Veronesi L, Argentiero A, Esposito S. Vaccines (Basel). 2020 Jun 17;8(2):E309. doi: 10.3390/vaccines8020309.
PMID: 32560340

Neurological manifestations and neuro-invasive mechanisms of the severe acute respiratory syndrome coronavirus type 2.
Vonck K, Garrez I, De Herdt V, Hemelsoet D, Laureys G, Raedt R, Boon P. Eur J Neurol. 2020 Aug;27(8):1578-1587. doi: 10.1111/ene.14329. Epub 2020 Jun 16.
PMID: 32416028

SARS-CoV-2-Positive Sputum and Feces After Conversion of Pharyngeal Samples in Patients With COVID-19.
Chen C, Gao G, Xu Y, Pu L, Wang Q, Wang L, Wang W, Song Y, Chen M, Wang L, Yu F, Yang S, Tang Y, Zhao L, Wang H, Wang Y, Zeng H, Zhang F. Ann Intern Med. 2020 Jun 16;172(12):832-834. doi: 10.7326/M20-0991. Epub 2020 Mar 30.
PMID: 32227141

Vaccine (**Vaccination**).
Justiz Vaillant AA, Grella MJ. 2020 Jun 16. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 30422490

Vaccine development and therapeutic design for 2019-nCoV/SARS-CoV-2: Challenges and chances.
Ghaebi M, Osali A, Valizadeh H, Roshangar L, Ahmadi M. J Cell Physiol. 2020 Jun 18:10.1002/jcp.29771. doi: 10.1002/jcp.29771. Online ahead of print.
PMID: 32557648

Human Leukocyte Antigen Susceptibility Map for Severe Acute Respiratory Syndrome Coronavirus 2.
Nguyen A, David JK, Maden SK, Wood MA, Weeder BR, Nellore A, Thompson RF. J Virol. 2020 Jun 16;94(13):e00510-20. doi: 10.1128/JVI.00510-20. Print 2020 Jun 16.
PMID: 32303592

Autoinflammatory and autoimmune conditions at the crossroad of COVID-19.
Rodríguez Y, Novelli L, Rojas M, De Santis M, Acosta-Ampudia Y, Monsalve DM, Ramírez-Santana C, Costanzo A, Ridgway WM, Ansari AA, Gershwin ME, Selmi C, Anaya JM. J Autoimmun. 2020 Jun 16:102506. doi: 10.1016/j.jaut.2020.102506. Online ahead of print.
PMID: 32563547

Early smallpox **vaccine** manufacturing in the United States: Introduction of the "animal **vaccine**" in 1870, establishment of "**vaccine** farms", and the beginnings of the **vaccine** industry.
Esparza J, Lederman S, Nitsche A, Damaso CR. Vaccine. 2020 Jun 19;38(30):4773-4779. doi: 10.1016/j.vaccine.2020.05.037. Epub 2020 May 27.
PMID: 32473878

Safety and Immunogenicity of the Respiratory Syncytial Virus **Vaccine** RSV/ΔNS2/Δ1313/I1314L in RSV-Seronegative Children.
Karron RA, Luongo C, Mateo JS, Wanionek K, Collins PL, Buchholz UJ. J Infect Dis. 2020 Jun 16;222(1):82-91. doi: 10.1093/infdis/jiz408.
PMID: 31605113

COVID-19 Diagnostics, Tools, and Prevention.
Allam M, Cai S, Ganesh S, Venkatesan M, Doodhwala S, Song Z, Hu T, Kumar A, Heit J, Study Group C, Coskun AF. Diagnostics (Basel). 2020 Jun 16;10(6):409. doi: 10.3390/diagnostics10060409.
PMID: 32560091

Syrian hamsters as a small animal model for SARS-CoV-2 infection and countermeasure development.
Imai M, Iwatsuki-Horimoto K, Hatta M, Loeber S, Halfmann PJ, Nakajima N, Watanabe T, Ujie M, Takahashi K, Ito M, Yamada S, Fan S, Chiba S, Kuroda M, Guan L, Takada K, Armbrust T, Balogh A, Furusawa Y, Okuda M, Ueki H, Yasuhara A, Sakai-Tagawa Y, Lopes TJS, Kiso M, Yamayoshi S, Kinoshita N, Ohmagari N, Hattori SI, Takeda M, Mitsuya H, Krammer F, Suzuki T, Kawaoka Y. Proc Natl Acad Sci U S A. 2020 Jul 14;117(28):16587-16595. doi: 10.1073/pnas.2009799117. Epub 2020 Jun 22.
PMID: 32571934

The impact of the SARS-CoV-2 infection, with special reference to the hematological setting.
Sica A, Casale D, Rossi G, Casale B, Ciccozzi M, Fasano M, Ciotti M, Sagnelli E, Papa A, Sagnelli C. J Med Virol. 2020 Jun 19:10.1002/jmv.26197. doi: 10.1002/jmv.26197. Online ahead of print.
PMID: 32558961

Hepatitis A.

Iorio N, John S. 2020 Jun 18. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 29083664

Asymptomatic and symptomatic SARS-CoV-2 infections in close contacts of COVID-19 patients: a seroepidemiological study.
Zhang HJ, Su YY, Xu SL, Chen GQ, Li CC, Jiang RJ, Liu RH, Ge SX, Zhang J, Xia NS, Quan T. Clin Infect Dis. 2020 Jun 16:ciaa771. doi: 10.1093/cid/ciaa771. Online ahead of print.
PMID: 32544949

Neutralization of SARS-CoV-2 by Destruction of the Prefusion Spike.
Huo J, Zhao Y, Ren J, Zhou D, Duyvesteyn HME, Ginn HM, Carrique L, Malinauskas T, Ruza RR, Shah PNM, Tan TK, Rijal P, Coombes N, Bewley KR, Tree JA, Radecke J, Paterson NG, Supasa P, Mongkolsapaya J, Screaton GR, Carroll M, Townsend A, Fry EE, Owens RJ, Stuart DI. Cell Host Microbe. 2020 Jun 19:S1931-3128(20)30351-6. doi: 10.1016/j.chom.2020.06.010. Online ahead of print.
PMID: 32585135

Could an Unrelated Live Attenuated **Vaccine** Serve as a Preventive Measure To Dampen Septic Inflammation Associated with COVID-19 Infection?
Fidel PL Jr, Noverr MC. mBio. 2020 Jun 19;11(3):e00907-20. doi: 10.1128/mBio.00907-20.
PMID: 32561657

Pharmacists and COVID-19.
Elbeddini A, Prabaharan T, Almasalkhi S, Tran C. Version 2. J Pharm Policy Pract. 2020 Jun 19;13:36. doi: 10.1186/s40545-020-00241-3. eCollection 2020.
PMID: 32572350

Contribution of the Intestinal Microbiome and Gut Barrier to Hepatic Disorders.
Chopyk DM, Grakoui A. Gastroenterology. 2020 Jun 19:S0016-5085(20)34839-3. doi: 10.1053/j.gastro.2020.04.077. Online ahead of print.
PMID: 32569766

Coronavirus Occurrence and Transmission Over 8 Years in the HIVE Cohort of Households in Michigan.
Monto AS, DeJonge PM, Callear AP, Bazzi LA, Capriola SB, Malosh RE, Martin ET, Petrie JG. J Infect Dis. 2020 Jun 16;222(1):9-16. doi: 10.1093/infdis/jiaa161.
PMID: 32246136

Origin, transmission, diagnosis and management of coronavirus disease 2019 (COVID-19).
Umakanthan S, Sahu P, Ranade AV, Bukelo MM, Rao JS, Abrahao-Machado LF, Dahal S, Kumar H, Kv D. Postgrad Med J. 2020 Jun 20:postgradmedj-2020-138234. doi: 10.1136/postgradmedj-2020-138234. Online ahead of print.
PMID: 32563999

Strategies to Prevent SARS-CoV-2-Mediated Eosinophilic Disease in Association with COVID-19 **Vaccination** and Infection.
Simon HU, Karaulov AV, Bachmann MF. Int Arch Allergy Immunol. 2020 Jun 16:1-5. doi: 10.1159/000509368. Online ahead of print.
PMID: 32544911

Inactivating Three Interferon Antagonists Attenuates Pathogenesis of an Enteric Coronavirus.
Deng X, Buckley AC, Pillatzki A, Lager KM, Faaberg KS, Baker SC. J Virol. 2020 Jun 17:JVI.00565-20. doi: 10.1128/JVI.00565-20. Online ahead of print.
PMID: 32554697

Structural and Biochemical Characterization of the nsp12-nsp7-nsp8 Core Polymerase Complex from SARS-CoV-2.
Peng Q, Peng R, Yuan B, Zhao J, Wang M, Wang X, Wang Q, Sun Y, Fan Z, Qi J, Gao GF, Shi Y. Cell Rep. 2020 Jun 16;31(11):107774. doi: 10.1016/j.celrep.2020.107774. Epub 2020 May 30.
PMID: 32531208

Potential adjuvants for the development of a SARS-CoV-2 **vaccine** based on experimental results from similar coronaviruses.
Gupta T, Gupta SK. Int Immunopharmacol. 2020 Jun 18;86:106717. doi: 10.1016/j.intimp.2020.106717. Online ahead of print.
PMID: 32585611

Vaccines for COVID-19: The current state of play.
Koirala A, Joo YJ, Khatami A, Chiu C, Britton PN. Paediatr Respir Rev. 2020 Jun 18:S1526-0542(20)30095-6. doi: 10.1016/j.prrv.2020.06.010. Online ahead of print.
PMID: 32653463

Livestock and Poultry Production in Nepal and Current Status of **Vaccine** Development.
Poudel U, Dahal U, Upadhyaya N, Chaudhari S, Dhakal S. Vaccines (Basel). 2020 Jun 19;8(2):E322. doi: 10.3390/vaccines8020322.
PMID: 32575369

Routine **vaccination** during covid-19 pandemic response.
Saxena S, Skirrow H, Bedford H. BMJ. 2020 Jun 16;369:m2392. doi: 10.1136/bmj.m2392.
PMID: 32546575

A proposed role for the SARS-CoV-2 nucleocapsid protein in the formation and regulation of biomolecular condensates.
Cascarina SM, Ross ED. FASEB J. 2020 Jun 20:10.1096/fj.202001351. doi: 10.1096/fj.202001351. Online ahead of print.
PMID: 32562316

cGAS-STING, an important pathway in cancer immunotherapy.
Jiang M, Chen P, Wang L, Li W, Chen B, Liu Y, Wang H, Zhao S, Ye L, He Y, Zhou C. J Hematol Oncol. 2020 Jun 22;13(1):81. doi: 10.1186/s13045-020-00916-z.
PMID: 32571374

Eosinophil Response Against Classical and Emerging Respiratory Viruses: COVID-19.
Rodrigo-Muñoz JM, Sastre B, Cañas JA, Gil-Martínez M, Redondo N, Del Pozo V. J Investig Allergol Clin Immunol. 2020 Jun 16:0. doi: 10.18176/jiaci.0624. Online ahead of print.
PMID: 32540792

A Snapshot of the Global Race for **Vaccines** Targeting SARS-CoV-2 and the COVID-19 Pandemic.
Funk CD, Laferrière C, Ardakani A. Front Pharmacol. 2020 Jun 19;11:937. doi: 10.3389/fphar.2020.00937. eCollection 2020.
PMID: 32636754

Keep calm and carry on **vaccinating**: Is anti-**vaccination** sentiment contributing to declining **vaccine** coverage in England?
Edelstein M, Müller M, Ladhani S, Yarwood J, Salathé M, Ramsay M. Vaccine. 2020 Jul 14;38(33):5297-5304. doi: 10.1016/j.vaccine.2020.05.082. Epub 2020 Jun 16.
PMID: 32561120

A hidden vulnerable population: Young children up-to-date on **vaccine** series recommendations except influenza **vaccines**.
Bleser WK, Salmon DA, Miranda PY. PLoS One. 2020 Jun 18;15(6):e0234466. doi: 10.1371/journal.pone.0234466. eCollection 2020.
PMID: 32555653

Vaccines against gastroenteritis, current progress and challenges.
Seo H, Duan Q, Zhang W. Gut Microbes. 2020 Nov 1;11(6):1486-1517. doi: 10.1080/19490976.2020.1770666. Epub 2020 Jun 18.
PMID: 32552414

An insight into the epitope-based peptide **vaccine** design strategy and studies against COVID-19.
TopuzoĞullari M, Acar T, Pelİt Arayici P, UÇar B, UĞurel E, Abamor EŞ, ArasoĞlu T, Turgut-Balik D, Derman S. Turk J Biol. 2020 Jun 21;44(3):215-227. doi: 10.3906/biy-2006-1. eCollection 2020.
PMID: 32595358

Impact of Australian mandatory 'No Jab, No Pay' and 'No Jab, No Play' immunisation policies on immunisation services, parental attitudes to **vaccination** and **vaccine** uptake, in a tertiary paediatric hospital, the Royal Children's Hospital, Melbourne.

Armiento R, Hoq M, Kua E, Crawford N, Perrett KP, Elia S, Danchin M. Vaccine. 2020 Jul 14;38(33):5231-5240. doi: 10.1016/j.vaccine.2020.05.094. Epub 2020 Jun 17.
PMID: 32561122

Prevalence of COVID-19 Infection and Outcomes Among Symptomatic Healthcare Workers in Seattle, Washington.
Mani NS, Budak JZ, Lan KF, Bryson-Cahn C, Zelikoff A, Barker GEC, Grant CW, Hart K, Barbee CJ, Sandoval MD, Dostal CL, Corcorran M, Ungerleider HM, Gates JO, Olin SV, Bryan A, Hoffman NG, Marquis SR, Harvey ML, Nasenbeny K, Mertens K, Chew LD, Greninger AL, Jerome KR, Pottinger PS, Dellit TH, Liu C, Pergam SA, Neme S, Lynch JB, Kim HN, Cohen SA. Clin Infect Dis. 2020 Jun 16:ciaa761. doi: 10.1093/cid/ciaa761. Online ahead of print.
PMID: 32548613

Mining Physicians' Opinions on Social Media to Obtain Insights Into COVID-19: Mixed Methods Analysis.
Wahbeh A, Nasralah T, Al-Ramahi M, El-Gayar O. JMIR Public Health Surveill. 2020 Jun 18;6(2):e19276. doi: 10.2196/19276.
PMID: 32421686

A Bivalent Human Adenovirus Type 5 **Vaccine** Expressing the Rabies Virus Glycoprotein and Canine Distemper Virus Hemagglutinin Protein Confers Protective Immunity in Mice and Foxes.
Yan L, Zhao Z, Xue X, Zheng W, Xu T, Liu L, Tian L, Wang X, He H, Zheng X. Front Microbiol. 2020 Jun 16;11:1070. doi: 10.3389/fmicb.2020.01070. eCollection 2020.
PMID: 32612580

Anti-dengue **Vaccines**: From Development to Clinical Trials.
Pinheiro-Michelsen JR, Souza RDSO, Santana IVR, da Silva PS, Mendez EC, Luiz WB, Amorim JH. Front Immunol. 2020 Jun 18;11:1252. doi: 10.3389/fimmu.2020.01252. eCollection 2020.
PMID: 32655561

Withanone and Withaferin-A are predicted to interact with transmembrane protease serine 2 (TMPRSS2) and block entry of SARS-CoV-2 into cells.
Kumar V, Dhanjal JK, Bhargava P, Kaul A, Wang J, Zhang H, Kaul SC, Wadhwa R, Sundar D. J Biomol Struct Dyn. 2020 Jun 16:1-13. doi: 10.1080/07391102.2020.1775704. Online ahead of print.
PMID: 32469279

Identification and Characterization of a Small-Molecule Rabies Virus Entry Inhibitor.
Du Pont V, Wirblich C, Yoon JJ, Cox RM, Schnell MJ, Plemper RK. J Virol. 2020 Jun 16;94(13):e00321-20. doi: 10.1128/JVI.00321-20. Print 2020 Jun 16.
PMID: 32321812

Infectious Bronchitis Virus Evolution, Diagnosis and Control.

Legnardi M, Tucciarone CM, Franzo G, Cecchinato M. Vet Sci. 2020 Jun 22;7(2):E79. doi: 10.3390/vetsci7020079.
PMID: 32580381

Challenges in Dengue **Vaccines** Development: Pre-existing Infections and Cross-Reactivity.
Izmirly AM, Alturki SO, Alturki SO, Connors J, Haddad EK. Front Immunol. 2020 Jun 16;11:1055. doi: 10.3389/fimmu.2020.01055. eCollection 2020.
PMID: 32655548

Hospitalized COVID-19 patients treated with Convalescent Plasma in a mid-size city in the midwest.
Hartman W, Hess AS, Connor JP. medRxiv. 2020 Jun 22:2020.06.19.20135830. doi: 10.1101/2020.06.19.20135830. Preprint.
PMID: 32607514

Technological Approaches for Improving **Vaccination** Compliance and Coverage.
Lemoine C, Thakur A, Krajišnik D, Guyon R, Longet S, Razim A, Górska S, Pantelić I, Ilić T, Nikolić I, Lavelle EC, Gamian A, Savić S, Milicic A. Vaccines (Basel). 2020 Jun 16;8(2):E304. doi: 10.3390/vaccines8020304.
PMID: 32560088

A qualitative study examining pediatric clinicians' perceptions of delayed **vaccine** schedules.
Butler AM, Grabinski VF, Boloker GD, Newland JG, Politi MC. Vaccine. 2020 Jun 19;38(30):4740-4746. doi: 10.1016/j.vaccine.2020.05.015. Epub 2020 May 15.
PMID: 32418792

Fighting Persistence: How Chronic Infections with Mycobacterium tuberculosis Evade T Cell-Mediated Clearance and New Strategies To Defeat Them.
Ankley L, Thomas S, Olive AJ. Infect Immun. 2020 Jun 22;88(7):e00916-19. doi: 10.1128/IAI.00916-19. Print 2020 Jun 22.
PMID: 32094248

Antiviral Natural Products for Arbovirus Infections.
Goh VSL, Mok CK, Chu JJH. Molecules. 2020 Jun 17;25(12):E2796. doi: 10.3390/molecules25122796.
PMID: 32560438

The potential for **vaccines** against scour worms of small ruminants.
Britton C, Emery DL, McNeilly TN, Nisbet AJ, Stear MJ. Int J Parasitol. 2020 Jun 19:S0020-7519(20)30150-8. doi: 10.1016/j.ijpara.2020.04.003. Online ahead of print.
PMID: 32569640

Microbiota Modulating Nutritional Approaches to Countering the Effects of Viral Respiratory Infections Including SARS-CoV-2 through Promoting Metabolic and Immune Fitness with Probiotics and Plant Bioactives.

Shinde T, Hansbro PM, Sohal SS, Dingle P, Eri R, Stanley R. Microorganisms. 2020 Jun 18;8(6):E921. doi: 10.3390/microorganisms8060921.
PMID: 32570850

Immunogenicity of Hepatitis B **Vaccine** in Preterm or Low Birth Weight Infants: A Meta-Analysis.
Fan W, Zhang M, Zhu YM, Zheng YJ. Am J Prev Med. 2020 Jun 18:S0749-3797(20)30150-1. doi: 10.1016/j.amepre.2020.03.009. Online ahead of print.
PMID: 32564973

Improving measles **vaccine** uptake rates in Nigeria: An RCT evaluating the impact of incentive sizes and reminder calls on **vaccine** uptake.
Brownstone S, Connor A, Stein D. PLoS One. 2020 Jun 18;15(6):e0233149. doi: 10.1371/journal.pone.0233149. eCollection 2020.
PMID: 32555681

Core proteome mediated therapeutic target mining and multi-epitope **vaccine** design for Helicobacter pylori.
Rahman N, Ajmal A, Ali F, Rastrelli L. Genomics. 2020 Sep;112(5):3473-3483. doi: 10.1016/j.ygeno.2020.06.026. Epub 2020 Jun 17.
PMID: 32562830

Rapid differentiation of PEDV wild-type strains and classical attenuated **vaccine** strains by fluorescent probe-based reverse transcription recombinase polymerase amplification assay.
Wang Z, Li X, Shang Y, Wu J, Dong Z, Cao X, Liu Y, Lan X. Version 2. BMC Vet Res. 2020 Jun 22;16(1):208. doi: 10.1186/s12917-020-02424-1.
PMID: 32571305

Shared decision-making for **vaccines**.
Angelo LB. J Am Pharm Assoc (2003). 2020 Jun 22:S1544-3191(20)30246-6. doi: 10.1016/j.japh.2020.05.010. Online ahead of print.
PMID: 32586718

Immunogenicity of an Escherichia coli-produced bivalent human papillomavirus **vaccine** under different **vaccination** intervals.
Yu XJ, Li J, Lin ZJ, Zhao H, Lin BZ, Qiao YL, Hu YM, Wei LH, Li RC, Huang WD, Wu T, Huang SJ, Li CG, Pan HR, Zhang J. Hum Vaccin Immunother. 2020 Jun 16:1-6. doi: 10.1080/21645515.2020.1761202. Online ahead of print.
PMID: 32544361

Timeliness of childhood **vaccinations** in Armenia, 2015-2016.
Agopian A, Young H, Quinlan S, Rice MM. Vaccine. 2020 Jun 19;38(30):4671-4678. doi: 10.1016/j.vaccine.2020.05.032. Epub 2020 May 21.
PMID: 32448619

Review of COVID-19 Antibody Therapies.
Chen J, Gao K, Wang R, Nguyen DD, Wei GW. ArXiv. 2020 Jun 18:arXiv:2006.10584v1. Preprint.
PMID: 32601601

Dietary Regulation of Memory T Cells.
Collins N. Int J Mol Sci. 2020 Jun 19;21(12):E4363. doi: 10.3390/ijms21124363.
PMID: 32575427

Impairment of the DeISGylation Activity of Foot-and-Mouth Disease Virus Lpro Causes Attenuation *In Vitro* and *In Vivo*.
Medina GN, Azzinaro P, Ramirez-Medina E, Gutkoska J, Fang Y, Diaz-San Segundo F, de Los Santos T. J Virol. 2020 Jun 16;94(13):e00341-20. doi: 10.1128/JVI.00341-20. Print 2020 Jun 16.
PMID: 32295921

Prospects of and Barriers to the Development of Epitope-Based **Vaccines** against Human Metapneumovirus.
Stepanova E, Matyushenko V, Rudenko L, Isakova-Sivak I. Pathogens. 2020 Jun 18;9(6):481. doi: 10.3390/pathogens9060481.
PMID: 32570728

Acceptability of **vaccination** against human papillomavirus among women aged 20 to 45 in rural Hunan Province, China: A cross-sectional study.
Qin S, Fu JX, Chen MZ, Meng YT, Xu C, Luo Y. Vaccine. 2020 Jun 19;38(30):4732-4739. doi: 10.1016/j.vaccine.2020.05.017. Epub 2020 May 26.
PMID: 32471777

Immunogenicity, safety and inter-lot consistency of a meningococcal conjugate **vaccine** (MenACYW-TT) in adolescents and adults: A Phase III randomized study.
Dhingra MS, Peterson J, Hedrick J, Pan J, Neveu D, Jordanov E. Vaccine. 2020 Jul 14;38(33):5194-5201. doi: 10.1016/j.vaccine.2020.06.013. Epub 2020 Jun 19.
PMID: 32565344

Combating the Coronavirus Pandemic: Early Detection, Medical Treatment, and a Concerted Effort by the Global Community.
Luo Z, Ang MJY, Chan SY, Yi Z, Goh YY, Yan S, Tao J, Liu K, Li X, Zhang H, Huang W, Liu X. Research (Wash D C). 2020 Jun 16;2020:6925296. doi: 10.34133/2020/6925296. eCollection 2020.
PMID: 32607499

Bioinformatics analysis reveals four major hexon variants of human adenovirus type-3 (HAdV-3) as the potential strains for development of **vaccine** and siRNA-based therapeutics against HAdV-3 respiratory infections.

Panda S, Banik U, Adhikary AK. Infect Genet Evol. 2020 Jun 23;85:104439. doi: 10.1016/j.meegid.2020.104439. Online ahead of print.
PMID: 32585339

Virtual screening-driven drug discovery of SARS-CoV2 enzyme inhibitors targeting viral attachment, replication, post-translational modification and host immunity evasion infection mechanisms.
Quimque MTJ, Notarte KIR, Fernandez RAT, Mendoza MAO, Liman RAD, Lim JAK, Pilapil LAE, Ong JKH, Pastrana AM, Khan A, Wei DQ, Macabeo APG. J Biomol Struct Dyn. 2020 Jun 16:1-18. doi: 10.1080/07391102.2020.1776639. Online ahead of print.
PMID: 32476574

Persistence of Varicella-Zoster Virus-Specific Plasma Cells in Adult Human Bone Marrow following Childhood **Vaccination**.
Eberhardt CS, Wieland A, Nasti TH, Grifoni A, Wilson E, Schmid DS, Pulendran B, Sette A, Waller EK, Rouphael N, Ahmed R. J Virol. 2020 Jun 16;94(13):e02127-19. doi: 10.1128/JVI.02127-19. Print 2020 Jun 16.
PMID: 32321817

Coronavirus Outbreak and Stress in Iranians.
Maarefvand M, Hosseinzadeh S, Farmani O, Safarabadi Farahani A, Khubchandani J. Int J Environ Res Public Health. 2020 Jun 20;17(12):4441. doi: 10.3390/ijerph17124441.
PMID: 32575763

Final analysis of a 14-year long-term follow-up study of the effectiveness and immunogenicity of the quadrivalent human papillomavirus **vaccine** in women from four nordic countries.
Kjaer SK, Nygård M, Sundström K, Dillner J, Tryggvadottir L, Munk C, Berger S, Enerly E, Hortlund M, Ágústsson ÁI, Bjelkenkrantz K, Fridrich K, Guðmundsdóttir I, Sørbye SW, Bautista O, Group T, Luxembourg A, Marshall JB, Radley D, Yang YS, Badshah C, Saah A. EClinicalMedicine. 2020 Jun 20;23:100401. doi: 10.1016/j.eclinm.2020.100401. eCollection 2020 Jun.
PMID: 32637895

Microneedle-Based Delivery: An Overview of Current Applications and Trends.
Guillot AJ, Cordeiro AS, Donnelly RF, Montesinos MC, Garrigues TM, Melero A. Pharmaceutics. 2020 Jun 19;12(6):E569. doi: 10.3390/pharmaceutics12060569.
PMID: 32575392

Polymer-mediated delivery of **vaccines** to treat opioid use disorders and to reduce opioid-induced toxicity.
Gradinati V, Baruffaldi F, Abbaraju S, Laudenbach M, Amin R, Gilger B, Velagaleti P, Pravetoni M. Vaccine. 2020 Jun 19;38(30):4704-4712. doi: 10.1016/j.vaccine.2020.05.027. Epub 2020 May 19.
PMID: 32439214

A Single-Cycle Glycoprotein D Deletion Viral **Vaccine** Candidate, ΔgD-2, Elicits Polyfunctional Antibodies That Protect against Ocular Herpes Simplex Virus.

Ramsey NLM, Visciano M, Hunte R, Loh LN, Burn Aschner C, Jacobs WR Jr, Herold BC. J Virol. 2020 Jun 16;94(13):e00335-20. doi: 10.1128/JVI.00335-20. Print 2020 Jun 16.
PMID: 32295919

Vaccines and Therapies in Development for SARS-CoV-2 Infections.
Wu D, Koganti R, Lambe UP, Yadavalli T, Nandi SS, Shukla D. J Clin Med. 2020 Jun 16;9(6):E1885. doi: 10.3390/jcm9061885.
PMID: 32560227

OMV **Vaccines** and the Role of TLR Agonists in Immune Response.
Mancini F, Rossi O, Necchi F, Micoli F. Int J Mol Sci. 2020 Jun 21;21(12):E4416. doi: 10.3390/ijms21124416.
PMID: 32575921

Field Trial of Primary and Booster Dose of Inactivated **Vaccine** Against Bovine Respiratory Bacteria in Young Holstein Calves.
Mori K, Kato T, Yokota O, Ohtsuka H. J Vet Res. 2020 Jun 16;64(2):223-230. doi: 10.2478/jvetres-2020-0042. eCollection 2020 Jun.
PMID: 32587908

Epidemiology of respiratory syncytial virus across five influenza seasons among adults and children one year of age and older - Washington State, 2011/12 - 2015/16.
Jackson ML, Scott E, Kuypers J, Nalla AK, Roychoudury P, Chu HY. J Infect Dis. 2020 Jun 19:jiaa331. doi: 10.1093/infdis/jiaa331. Online ahead of print.
PMID: 32556287

Deep mutational scanning of SARS-CoV-2 receptor binding domain reveals constraints on folding and ACE2 binding.
Starr TN, Greaney AJ, Hilton SK, Crawford KHD, Navarro MJ, Bowen JE, Tortorici MA, Walls AC, Veesler D, Bloom JD. bioRxiv. 2020 Jun 17:2020.06.17.157982. doi: 10.1101/2020.06.17.157982. Preprint.
PMID: 32587970

Recent progress in designing protein-based supramolecular assemblies.
Hansen WA, Khare SD. Curr Opin Struct Biol. 2020 Jun 19;63:106-114. doi: 10.1016/j.sbi.2020.05.001. Online ahead of print.
PMID: 32569994

Who or What Influences the Individuals' Decision-Making Process Regarding **Vaccinations**?
Czajka H, Czajka S, Biłas P, Pałka P, Jędrusik S, Czapkiewicz A. Int J Environ Res Public Health. 2020 Jun 21;17(12):4461. doi: 10.3390/ijerph17124461.
PMID: 32575879

Vaccine implementation factors affecting maternal tetanus immunization in low- and middle-income countries: Results of the Maternal Immunization and Antenatal Care Situational Analysis (MIACSA) project.
Giles ML, Mantel C, Muñoz FM, Moran A, Roos N, Yusuf N, Diaz T, Ahun M, Nic Lochlainn LM, Wootton E, Pathirana J, Rendell S, Tuncalp O, Perut M, Hombach J, Merten S, Lambach P. Vaccine. 2020 Jul 14;38(33):5268-5277. doi: 10.1016/j.vaccine.2020.05.084. Epub 2020 Jun 22.
PMID: 32586763

Circulating Antibody-Secreting Cell Response During Mycoplasma pneumoniae Childhood Pneumonia.
Meyer Sauteur PM, Trück J, van Rossum AMC, Berger C. J Infect Dis. 2020 Jun 16;222(1):136-147. doi: 10.1093/infdis/jiaa062.
PMID: 32034406

Preliminary information on prevention of infections caused by SARS-COV-2 virus in endoscopic laboratories.
Gruszecka J, Filip R. Ann Agric Environ Med. 2020 Jun 19;27(2):171-174. doi: 10.26444/aaem/122137. Epub 2020 May 16.
PMID: 32588589

Biomarkers and Associated Immune Mechanisms for Early Detection and Therapeutic Management of Sepsis.
Trzeciak A, Pietropaoli AP, Kim M. Immune Netw. 2020 Jun 22;20(3):e23. doi: 10.4110/in.2020.20.e23. eCollection 2020 Jun.
PMID: 32655971

Evidence of combined effect of amino acid substitutions within G-H and B-C loops of VP1 conferring serological heterogeneity in foot-and-mouth disease virus serotype A.
Islam MR, Rahman MS, Amin MA, Alam ASMRU, Siddique MA, Sultana M, Hossain MA. Transbound Emerg Dis. 2020 Jun 16. doi: 10.1111/tbed.13687. Online ahead of print.
PMID: 32543041

A safe non-toxic Brucella abortus ghosts induce immune responses and confer protection in BALB/c mice.
Wang S, Li Z, Zhang J, Xi L, Cui Y, Zhang W, Zhang J, Zhang H. Mol Immunol. 2020 Aug;124:117-124. doi: 10.1016/j.molimm.2020.06.002. Epub 2020 Jun 16.
PMID: 32559678

Calling for an exponential escalation scheme in **vaccine** development for COVID-19.
Wehling M. Eur J Clin Pharmacol. 2020 Jun 16:1-2. doi: 10.1007/s00228-020-02933-w. Online ahead of print.
PMID: 32548679

Congenic expression of poly-GA but not poly-PR in mice triggers selective neuron loss and interferon responses found in C9orf72 ALS.
LaClair KD, Zhou Q, Michaelsen M, Wefers B, Brill MS, Janjic A, Rathkolb B, Farny D, Cygan M, de Angelis MH, Wurst W, Neumann M, Enard W, Misgeld T, Arzberger T, Edbauer D. Acta Neuropathol. 2020 Aug;140(2):121-142. doi: 10.1007/s00401-020-02176-0. Epub 2020 Jun 19.

PMID: 32562018

Immunogenicity and protection induced by recombinant Toxocara canis proteins in a murine model of toxocariasis.
Salazar Garcés LF, Santiago LF, Santos SPO, Jaramillo Hernández DA, da Silva MB, Alves VDS, Silveira EF, Barrouin-Melo SM, Cooper PJ, Pacheco LGC, Pinheiro CDS, Alcantara-Neves NM. Vaccine. 2020 Jun 19;38(30):4762-4772. doi: 10.1016/j.vaccine.2020.04.072. Epub 2020 May 23.
PMID: 32451213

Delivering prenatal pertussis **vaccine** through maternity services in England: What is the impact on **vaccine** coverage?
Llamas A, Amirthalingam G, Andrews N, Edelstein M. Vaccine. 2020 Jul 14;38(33):5332-5336. doi: 10.1016/j.vaccine.2020.05.068. Epub 2020 Jun 17.
PMID: 32563605

Identifying **vaccination** rates of adult patients in ambulatory care clinics.
Darr AY, Gottfried S. SAGE Open Med. 2020 Jun 20;8:2050312120935461. doi: 10.1177/2050312120935461. eCollection 2020.
PMID: 32612828

Intellectual humility's association with **vaccine** attitudes and intentions.
Senger AR, Huynh HP. Psychol Health Med. 2020 Jun 16:1-10. doi: 10.1080/13548506.2020.1778753. Online ahead of print.
PMID: 32543215

Vaccination with Recombinant Subolesin Antigens Provides Cross-Tick Species Protection in Bos indicus and Crossbred Cattle in Uganda.
Kasaija PD, Contreras M, Kabi F, Mugerwa S, de la Fuente J. Vaccines (Basel). 2020 Jun 18;8(2):E319. doi: 10.3390/vaccines8020319.
PMID: 32570925

Breakthrough concepts in immune-oncology: Cancer **vaccines** at the bedside.
Roy S, Sethi TK, Taylor D, Kim YJ, Johnson DB. J Leukoc Biol. 2020 Jun 18. doi: 10.1002/JLB.5BT0420-585RR. Online ahead of print.
PMID: 32557857

Dissecting the Interaction between Coronavirus Disease 2019 and Diabetes Mellitus.
Chee YJ, Tan SK, Yeoh E. J Diabetes Investig. 2020 Jun 18:10.1111/jdi.13326. doi: 10.1111/jdi.13326. Online ahead of print.
PMID: 32558211

Network-Based Analysis of OMICs Data to Understand the HIV-Host Interaction.

Ivanov S, Lagunin A, Filimonov D, Tarasova O. Front Microbiol. 2020 Jun 17;11:1314. doi: 10.3389/fmicb.2020.01314. eCollection 2020.
PMID: 32625189

Vaccination coverage rates of military personnel worldwide: a systematic review of the literature.
Arnold JN, Gundlach N, Böckelmann I, Sammito S. Int Arch Occup Environ Health. 2020 Jun 19. doi: 10.1007/s00420-020-01559-w. Online ahead of print.
PMID: 32561973

On the influenza **vaccination** policy through mathematical modeling.
Ho BS, Chao KM. Int J Infect Dis. 2020 Jun 16:S1201-9712(20)30478-1. doi: 10.1016/j.ijid.2020.06.043. Online ahead of print.
PMID: 32561427

Fifteen Years of Sm-p80-Based **Vaccine** Trials in Nonhuman Primates: Antibodies From **Vaccinated** Baboons Confer Protection in vivo and in vitro From Schistosoma mansoni and Identification of Putative Correlative Markers of Protection.
Zhang W, Le L, Ahmad G, Molehin AJ, Siddiqui AJ, Torben W, Karmakar S, Rojo JU, Sennoune S, Lazarus S, Khatoon S, Freeborn J, Sudduth J, Rezk AF, Carey D, Wolf RF, Papin JF, Damian R, Gray SA, Marks F, Carter D, Siddiqui AA. Front Immunol. 2020 Jun 19;11:1246. doi: 10.3389/fimmu.2020.01246. eCollection 2020.
PMID: 32636844

Epidemiology, **vaccine** effectiveness, and risk factors for mortality for pneumococcal disease among hospitalised adults in Singapore: a case-control study.
Chan T, Tay MZ, Kyaw WM, Chow A, Ho HJ. BMC Infect Dis. 2020 Jun 17;20(1):423. doi: 10.1186/s12879-020-05140-1.
PMID: 32552726

A practical approach to the management of breast cancer in the COVID-19 era and beyond.
Luther A, Agrawal A. Ecancermedicalscience. 2020 Jun 17;14:1059. doi: 10.3332/ecancer.2020.1059. eCollection 2020.
PMID: 32582374

An HIV **vaccine** targeting the V2 region of Envelope induces a highly durable polyfunctional Fc-mediated antibody response in rhesus macaques.
Powell RL, Weiss S, Fox A, Liu X, Itri V, Jiang X, Luo CC, Spencer DA, Pandey S, Cheever T, Fuller DH, Totrov M, Hessell AJ, Haigwood NL, Kong XP, Zolla-Pazner S. J Virol. 2020 Jun 17:JVI.01175-20. doi: 10.1128/JVI.01175-20. Online ahead of print.
PMID: 32554699

Development of a 3Mut-Apex-Stabilized Envelope Trimer That Expands HIV-1 Neutralization Breadth When Used To Boost Fusion Peptide-Directed **Vaccine**-Elicited Responses.
Chuang GY, Lai YT, Boyington JC, Cheng C, Geng H, Narpala S, Rawi R, Schmidt SD, Tsybovsky Y, Verardi R, Xu K, Yang Y, Zhang B, Chambers M, Changela A, Corrigan AR, Kong R, Olia AS, Ou L, Sarfo EK, Wang S, Wu W, Doria-Rose NA, McDermott AB, Mascola JR, Kwong PD. J Virol. 2020 Jun 16;94(13):e00074-20. doi: 10.1128/JVI.00074-20. Print 2020 Jun 16.
PMID: 32295908

Influenza **vaccination** strategies targeting the hemagglutinin stem region.
Fukuyama H, Shinnakasu R, Kurosaki T. Immunol Rev. 2020 Jun 16:10.1111/imr.12887. doi: 10.1111/imr.12887. Online ahead of print.
PMID: 32542739

Human Norovirus Proteins: Implications in the Replicative Cycle, Pathogenesis, and the Host Immune Response.
Campillay-Véliz CP, Carvajal JJ, Avellaneda AM, Escobar D, Covián C, Kalergis AM, Lay MK. Front Immunol. 2020 Jun 16;11:961. doi: 10.3389/fimmu.2020.00961. eCollection 2020.
PMID: 32612600

Advanced vaccinology education: Landscaping its growth and global footprint.
Asturias EJ, Duclos P, MacDonald NE, Nohynek H, Lambert PH; Global Vaccinology Training Collaborative. Vaccine. 2020 Jun 19;38(30):4664-4670. doi: 10.1016/j.vaccine.2020.05.038. Epub 2020 May 29.
PMID: 32475535

Atherosclerosis and inflammation. New therapeutic approaches.
Pedro-Botet J, Climent E, Benaiges D. Med Clin (Barc). 2020 Jun 19:S0025-7753(20)30314-6. doi: 10.1016/j.medcli.2020.04.024. Online ahead of print.
PMID: 32571617

Implementing sequence-based antigenic distance calculation into immunological shape space model.
Anderson CS, Sangster MY, Yang H, Mariani TJ, Chaudhury S, Topham DJ. Version 2. BMC Bioinformatics. 2020 Jun 19;21(1):256. doi: 10.1186/s12859-020-03594-3.
PMID: 32560624

Peli1 signaling blockade attenuates congenital zika syndrome.
Luo H, Li G, Wang B, Tian B, Gao J, Zou J, Shi S, Zhu S, Peng BH, Adam A, Martinez A, Hein K, Winkelmann ER, Mahmoud Y, Zhou X, Shan C, Rossi S, Weaver S, Barrett ADT, Sun SC, Zhang W, Shi PY, Wu P, Wang T. PLoS Pathog. 2020 Jun 16;16(6):e1008538. doi: 10.1371/journal.ppat.1008538. eCollection 2020 Jun.
PMID: 32544190

Combined Nucleic Acid Assays for Diagnosis of A19 **Vaccine**-Caused Human Brucellosis.

Baoshan L, Yinbo Y, Jingbo Z, Yi Z, Jianghua Y, Dawei C, Chi M, Donghai Y, Bohan Y, Rongnian Z, Sheng F, Jun Z, Han X, Chen Z. Transbound Emerg Dis. 2020 Jun 16. doi: 10.1111/tbed.13685. Online ahead of print.
PMID: 32543112

Prevention and control of HPV infection and HPV-related cancers in Colombia- a meeting report.
Vorsters A, Bosch FX, Bonanni P, Franco EL, Baay M, Simas C, Waheed DE, Castro C, Murillo R, Trujillo L, Wiesner C, Muñoz N. BMC Proc. 2020 Jun 22;14(Suppl 9):8. doi: 10.1186/s12919-020-00192-2. eCollection 2020.
PMID: 32577128

The evaluation of attenuated Neospora caninum by long-term passages on murine macrophage cell line in prevention of vertical transmission in mice.
Amini L, Namavari M, Khodakaram-Tafti A, Divar MR, Hosseini SMH. Vet Parasitol. 2020 Jun 20;283:109171. doi: 10.1016/j.vetpar.2020.109171. Online ahead of print.
PMID: 32623187

BCG **Vaccination** and Mother-to-Infant Transmission of HIV.
Kilapandal Venkatraman SM, Sivanandham R, Pandrea I, Apetrei C. J Infect Dis. 2020 Jun 16;222(1):1-3. doi: 10.1093/infdis/jiz385.
PMID: 31605531

Exploring the role of mass immunisation in influenza pandemic preparedness: A modelling study for the UK context.
Grieco L, Panovska-Griffiths J, van Leeuwen E, Grove P, Utley M. Vaccine. 2020 Jul 14;38(33):5163-5170. doi: 10.1016/j.vaccine.2020.06.032. Epub 2020 Jun 20.
PMID: 32576461

Ca^{2+} Ions Promote Fusion of Middle East Respiratory Syndrome Coronavirus with Host Cells and Increase Infectivity.
Straus MR, Tang T, Lai AL, Flegel A, Bidon M, Freed JH, Daniel S, Whittaker GR. J Virol. 2020 Jun 16;94(13):e00426-20. doi: 10.1128/JVI.00426-20. Print 2020 Jun 16.
PMID: 32295925

3M-052, a synthetic TLR-7/8 agonist, induces durable HIV-1 envelope-specific plasma cells and humoral immunity in nonhuman primates.
Kasturi SP, Rasheed MAU, Havenar-Daughton C, Pham M, Legere T, Sher ZJ, Kovalenkov Y, Gumber S, Huang JY, Gottardo R, Fulp W, Sato A, Sawant S, Stanfield-Oakley S, Yates N, LaBranche C, Alam SM, Tomaras G, Ferrari G, Montefiori D, Wrammert J, Villinger F, Tomai M, Vasilakos J, Fox CB, Reed SG, Haynes BF, Crotty S, Ahmed R, Pulendran B. Sci Immunol. 2020 Jun 19;5(48):eabb1025. doi: 10.1126/sciimmunol.abb1025.
PMID: 32561559

Extracellular Vesicles Mediate B Cell Immune Response and Are a Potential Target for Cancer Therapy.
Kato T, Fahrmann JF, Hanash SM, Vykoukal J. Cells. 2020 Jun 22;9(6):1518. doi: 10.3390/cells9061518.
PMID: 32580358

Molecular evidence for **vaccine**-induced canine distemper virus and canine adenovirus 2 coinfection in a fennec fox.
Tamukai K, Minami S, Kurihara R, Shimoda H, Mitsui I, Maeda K, Une Y. J Vet Diagn Invest. 2020 Jun 19:1040638720934809. doi: 10.1177/1040638720934809. Online ahead of print.
PMID: 32560597

T-cell responses following Natural Influenza Infection or **Vaccination** in Solid Organ Transplant Recipients.
L'Huillier AG, Ferreira VH, Hirzel C, Nellimarla S, Ku T, Natori Y, Humar A, Kumar D. Sci Rep. 2020 Jun 22;10(1):10104. doi: 10.1038/s41598-020-67172-6.
PMID: 32572168

Multiple Acyl-CoA Dehydrogenase Deficiency.
Prasun P. 2020 Jun 18. In: Adam MP, Ardinger HH, Pagon RA, Wallace SE, Bean LJH, Stephens K, Amemiya A, editors. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993–2020.
PMID: 32550677

The impact of maternal RSV **vaccine** to protect infants in Gavi-supported countries: Estimates from two models.
Baral R, Li X, Willem L, Antillon M, Vilajeliu A, Jit M, Beutels P, Pecenka C. Vaccine. 2020 Jul 14;38(33):5139-5147. doi: 10.1016/j.vaccine.2020.06.036. Epub 2020 Jun 22.
PMID: 32586761

A Multistage Formulation Based on Full-Length CSP and AMA-1 Ectodomain of *Plasmodium vivax* Induces High Antibody Titers and T-cells and Partially Protects Mice Challenged with a Transgenic *Plasmodium berghei* Parasite.
Lima LC, Marques RF, Gimenez AM, Françoso KS, Aliprandini E, Camargo TM, Aguiar ACC, Pereira DB, Renia L, Amino R, Soares IS. Microorganisms. 2020 Jun 17;8(6):E916. doi: 10.3390/microorganisms8060916.
PMID: 32560380

Safety and immunogenicity of three seasonal inactivated influenza **vaccines** among pregnant women and antibody persistence in their infants.
Munoz FM, Patel SM, Jackson LA, Swamy GK, Edwards KM, Frey SE, Petrie CR, Sendra EA, Keitel WA. Vaccine. 2020 Jul 14;38(33):5355-5363. doi: 10.1016/j.vaccine.2020.05.059. Epub 2020 Jun 19.
PMID: 32571718

Cost-effectiveness analysis of a gender-neutral human papillomavirus **vaccination** program in the Netherlands.

Simons JJM, Vida N, Westra TA, Postma MJ. Vaccine. 2020 Jun 19;38(30):4687-4694. doi: 10.1016/j.vaccine.2020.05.031. Epub 2020 May 23.
PMID: 32451211

Reverse genetic approaches for the development of Zika **vaccines** and therapeutics.
Fontes-Garfias CR, Baker CK, Shi PY. Curr Opin Virol. 2020 Jun 18;44:7-15. doi: 10.1016/j.coviro.2020.05.002. Online ahead of print.
PMID: 32563700

The Role of **Vaccination** Interventions to Promote HPV **Vaccine** Uptake Rates in a College-Aged Population: a Systematic Review.
Ou L, Youngstedt SD. J Cancer Educ. 2020 Jun 21. doi: 10.1007/s13187-020-01806-1. Online ahead of print.
PMID: 32564253

Characterization of Plaque Variants and the Involvement of Quasi-Species in a Population of EV-A71.
Mandary MB, Masomian M, Ong SK, Poh CL. Viruses. 2020 Jun 17;12(6):E651. doi: 10.3390/v12060651.
PMID: 32560288

The immune adjuvant effect of Astragalus polysaccharide on in ovo injection of Newcastle disease **vaccine**.
Xue L, Wang D, Zhang D, Ju A, Duan A, Xing J, Qin Y, Yang S, Luan W. J Anim Physiol Anim Nutr (Berl). 2020 Jun 17. doi: 10.1111/jpn.13388. Online ahead of print.
PMID: 32557888

Coronavirus Disease 2019 (COVID-19): A Short Review on Hematological Manifestations.
Słomka A, Kowalewski M, Żekanowska E. Pathogens. 2020 Jun 20;9(6):493. doi: 10.3390/pathogens9060493.
PMID: 32575786

Biosafety and biosecurity approaches to restrain/contain and counter SARS-CoV-2/COVID-19 pandemic: a rapid-review.
Ahmad T, Haroon, Dhama K, Sharun K, Khan FM, Ahmed I, Tiwari R, Musa TH, Khan M, Bonilla-Aldana DK, J Rodriguez-Morales A, Hui J. Turk J Biol. 2020 Jun 21;44(3):132-145. doi: 10.3906/biy-2005-63. eCollection 2020.
PMID: 32595350

Prevalence of high-risk human papillomavirus after HPV-**vaccination** in Denmark.
Lynge E, Thamsborg L, Larsen LG, Christensen J, Johansen T, Hariri J, Christiansen S, Rygaard C, Andersen B. Int J Cancer. 2020 Jun 16. doi: 10.1002/ijc.33157. Online ahead of print.
PMID: 32542644

Innate Immune Response against Hepatitis C Virus: Targets for **Vaccine** Adjuvants.

Sepulveda-Crespo D, Resino S, Martinez I. Vaccines (Basel). 2020 Jun 17;8(2):E313. doi: 10.3390/vaccines8020313.
PMID: 32560440

Classical Swine Fever Virus Biology, Clinicopathology, Diagnosis, **Vaccines** and a Meta-Analysis of Prevalence: A Review from the Indian Perspective.
Malik YS, Bhat S, Kumar ORV, Yadav AK, Sircar S, Ansari MI, Sarma DK, Rajkhowa TK, Ghosh S, Dhama K. Pathogens. 2020 Jun 22;9(6):500. doi: 10.3390/pathogens9060500.
PMID: 32580503

Acceptance and use of the Information System of the National Immunization Program.
Oliveira VC, Guimarães EAA, Amaral GG, Silva TIM, Fabriz LA, Pinto IC. Rev Lat Am Enfermagem. 2020 Jun 19;28:e3307. doi: 10.1590/1518-8345.3360.3307. eCollection 2020.
PMID: 32578757

Epidemiological and Clinical Evidence for the Role of Toxins in *S. aureus* Human Disease.
Bennett MR, Thomsen IP. Toxins (Basel). 2020 Jun 19;12(6):E408. doi: 10.3390/toxins12060408.
PMID: 32575633

Factors associated with occurrence of salmonellosis among children living in Mukuru slum, an urban informal settlement in Kenya.
Mbae C, Mwangi M, Gitau N, Irungu T, Muendo F, Wakio Z, Wambui R, Kavai S, Onsare R, Wairimu C, Ngetich R, Njeru F, Van Puyvelde S, Clemens J, Dougan G, Kariuki S. BMC Infect Dis. 2020 Jun 17;20(1):422. doi: 10.1186/s12879-020-05134-z.
PMID: 32552753

A phase 2 study of the bivalent VLP norovirus **vaccine** candidate in older adults; impact of MPL adjuvant or a second dose.
Treanor J, Sherwood J, Cramer JP, Le Cam Bouveret N, Lin S, Baehner F, Borkowski A; NOR-204 investigators. Vaccine. 2020 Jun 17:S0264-410X(20)30772-6. doi: 10.1016/j.vaccine.2020.06.011. Online ahead of print.
PMID: 32563606

HIV-1 genetic diversity and high prevalence of pretreatment drug resistance in Tianjin, China.
Zeng R, Ren D, Gong X, Wei M, Gao L, Yu A, Zhang D, Ma P, Mi Y. AIDS Res Hum Retroviruses. 2020 Jun 16. doi: 10.1089/AID.2020.0056. Online ahead of print.
PMID: 32539490

An updated analysis of variations in SARS-CoV-2 genome.
Ugurel OM, Ata O, Turgut-Balik D. Turk J Biol. 2020 Jun 21;44(3):157-167. doi: 10.3906/biy-2005-111. eCollection 2020.
PMID: 32595352

Recurrent urinary tract infections: from pathogenesis to prevention.
Pigrau C, Escolà-Vergé L. Med Clin (Barc). 2020 Jun 17:S0025-7753(20)30316-X. doi: 10.1016/j.medcli.2020.04.026. Online ahead of print.
PMID: 32561190

The efficacy and safety of influenza **vaccination** in older people: An umbrella review of evidence from meta-analyses of both observational and randomized controlled studies.
Demurtas J, Celotto S, Beaudart C, Sanchez-Rodriguez D, Balci C, Soysal P, Solmi M, Celotto D, Righi E, Smith L, Lopalco PL, Noventa V, Michel JP, Torbahn G, Di Gennaro F, Pizzol D, Veronese N, Maggi S. Ageing Res Rev. 2020 Jun 18;62:101118. doi: 10.1016/j.arr.2020.101118. Online ahead of print.
PMID: 32565328

In silico prediction of potential inhibitors for the Main protease of SARS-CoV-2 using molecular docking and dynamics simulation based drug-repurposing.
Kumar Y, Singh H, Patel CN. J Infect Public Health. 2020 Jun 16:S1876-0341(20)30526-8. doi: 10.1016/j.jiph.2020.06.016. Online ahead of print.
PMID: 32561274

Activation of OX40 and CD27 Costimulatory Signalling in Sheep through Recombinant Ovine Ligands.
Rojas JM, Alejo A, Avia JM, Rodríguez-Martín D, Sánchez C, Alcamí A, Sevilla N, Martín V. Vaccines (Basel). 2020 Jun 22;8(2):333. doi: 10.3390/vaccines8020333.
PMID: 32580486

Optimizing safety surveillance for COVID-19 **vaccines**.
Chandler RE. Nat Rev Immunol. 2020 Jun 17:1-2. doi: 10.1038/s41577-020-0372-8. Online ahead of print.
PMID: 32555401

HPV Catch-up **Vaccination** Reduces the Prevalence of HPV 16 and 18 Infections and Cervical Disease: A Retrospective Study.
Hallam N, Parker J. J Low Genit Tract Dis. 2020 Jun 18. doi: 10.1097/LGT.0000000000000550. Online ahead of print.
PMID: 32569020

Transgenic T-cell receptor immunotherapy for cancer: building on clinical success.
Oppermans N, Kueberuwa G, Hawkins RE, Bridgeman JS. Ther Adv Vaccines Immunother. 2020 Jun 22;8:2515135520933509. doi: 10.1177/2515135520933509. eCollection 2020.
PMID: 32613155

Implementation of the Standards for adult immunization practice: A survey of U.S. Health care providers.
Granade CJ, Parker Fiebelkorn A, Black CL, Lutz CS, Srivastav A, Bridges CB, Ball SW, Devlin RG, Cloud AJ, Kim DK. Vaccine. 2020 Jul 14;38(33):5305-5312. doi: 10.1016/j.vaccine.2020.05.073. Epub 2020 Jun 22.

PMID: 32586760

The African Swine Fever Virus (ASFV) Topoisomerase II as a Target for Viral Prevention and Control.
Coelho J, Leitão A. Vaccines (Basel). 2020 Jun 17;8(2):E312. doi: 10.3390/vaccines8020312.
PMID: 32560397

Post-marketing surveillance study of the DTaP2-IPV-HB-Hib (Hexyon) **vaccine** administered in preterm infants in the Apulia region, Italy, in 2017.
Martinelli D, Fortunato F, Del Matto G, Iannelli G, Prato R. Vaccine. 2020 Jul 14;38(33):5148-5153. doi: 10.1016/j.vaccine.2020.06.033. Epub 2020 Jun 22.
PMID: 32586764

Strain coverage of Bexsero **vaccine** assessed by whole-genome sequencing over a cohort of invasive meningococci of serogroups B and W isolated in Switzerland.
Leo S, Lazarevic V, Girard M, Getaz-Jimenez Velasco GC, Gaïa N, Renzi G, Cherkaoui A, Hong E, Taha MK, Schrenzel J. Vaccine. 2020 Jul 14;38(33):5324-5331. doi: 10.1016/j.vaccine.2020.05.071. Epub 2020 Jun 16.
PMID: 32561121

Factors limiting data quality in the expanded programme on immunization in low and middle-income countries: A scoping review.
Harrison K, Rahimi N, Carolina Danovaro-Holliday M. Vaccine. 2020 Jun 19;38(30):4652-4663. doi: 10.1016/j.vaccine.2020.02.091. Epub 2020 May 20.
PMID: 32446834

The adjuvant effect of melanin is superior to incomplete Freund's adjuvant in subunit/peptide **vaccines** in mice.
Cuzzubbo S, Banissi C, Rouchon MS, Tran T, Tanchot C, Tartour E, Carpentier AF. Cancer Immunol Immunother. 2020 Jun 19. doi: 10.1007/s00262-020-02631-7. Online ahead of print.
PMID: 32561966

Prevalence of pneumococcal nasopharyngeal colonization and serotypes circulating in Cameroonian children after the 13-valent pneumococcal conjugate **vaccine** introduction.
Libwea JN, Gröndahl-Yli-Hannuksela K, Kobela M, Toropainen M, Nyholm O, Ndombo PK, Koulla-Shiro S, Nohynek H, Nuorti JP, Vuopio J, Palmu AA. Int J Infect Dis. 2020 Jun 17:S1201-9712(20)30483-5. doi: 10.1016/j.ijid.2020.06.048. Online ahead of print.
PMID: 32562849

Synergistic antiviral effects against SARS-CoV-2 by plant-based molecules.
Prasad A, Muthamilarasan M, Prasad M. Plant Cell Rep. 2020 Jun 19:1-6. doi: 10.1007/s00299-020-02560-w. Online ahead of print.
PMID: 32561979

Global governance for COVID-19 **vaccines**.
The Lancet. Lancet. 2020 Jun 20;395(10241):1883. doi: 10.1016/S0140-6736(20)31405-7.
PMID: 32563355

The impact of frost-damage on the quality and quantity of the secreted antigen-specific IgG repertoire.
Rybczynska M, Baudry J, Klaus E. Vaccine. 2020 Jul 14;38(33):5337-5342. doi: 10.1016/j.vaccine.2020.05.066. Epub 2020 Jun 20.
PMID: 32571724

Protein-based, but not viral vector alone, HIV **vaccine** boosting drives an IgG1-biased polyfunctional humoral immune response.
Fischinger S, Shin S, Boudreau CM, Ackerman M, Rerks-Ngarm S, Pitisuttithum P, Nitayaphan S, Kim JH, Robb ML, Michael NL, O'Connell RJ, Vasan S, Streeck H, Alter G. JCI Insight. 2020 Jun 18;5(12):135057. doi: 10.1172/jci.insight.135057.
PMID: 32554928

Expression, purification, and characterization of the recombinant exo-1,3-β-glucanase (Exo1) of the pathogenic oomycete *Pythium insidiosum*.
Rotchanapreeda T, Kumsang Y, Sae-Chew P, Rujirawat T, Lohnoo T, Yingyong W, Payattikul P, Reamtong O, Krajaejun T. Heliyon. 2020 Jun 19;6(6):e04237. doi: 10.1016/j.heliyon.2020.e04237. eCollection 2020 Jun.
PMID: 32596527

ELISA-Based Assay for Studying Major and Minor Group Rhinovirus-Receptor Interactions.
Pazderova P, Waltl EE, Niederberger-Leppin V, Flicker S, Valenta R, Niespodziana K. Vaccines (Basel). 2020 Jun 18;8(2):E315. doi: 10.3390/vaccines8020315.
PMID: 32570763

gp96 Is Critical for both Human Herpesvirus 6A (HHV-6A) and HHV-6B Infections.
Ma J, Jia J, Jiang X, Xu M, Guo J, Tang T, Xu X, Wu Z, Hu B, Yao K, Li L, Tang H. J Virol. 2020 Jun 16;94(13):e00311-20. doi: 10.1128/JVI.00311-20. Print 2020 Jun 16.
PMID: 32295911

Comparative safety of high-dose versus standard-dose influenza **vaccination** in patients with end-stage renal disease.
Layton JB, McGrath LJ, Sahrmann JM, Ma Y, Dharnidharka VR, O'Neil C, Weber DJ, Butler AM. Vaccine. 2020 Jul 14;38(33):5178-5186. doi: 10.1016/j.vaccine.2020.06.020. Epub 2020 Jun 19.
PMID: 32565346

Control of foreign Ag-specific Ab responses by Treg and Tfr.
Wing JB, Lim EL, Sakaguchi S. Immunol Rev. 2020 Jun 20. doi: 10.1111/imr.12888. Online ahead of print.
PMID: 32564426

Modulation of Anti-Tumour Immune Responses by Probiotic Bacteria.
Aindelis G, Chlichlia K. Vaccines (Basel). 2020 Jun 21;8(2):E329. doi: 10.3390/vaccines8020329.
PMID: 32575876

Revisiting respiratory syncytial virus's interaction with host immunity, towards novel therapeutics.
Efstathiou C, Abidi SH, Harker J, Stevenson NJ. Cell Mol Life Sci. 2020 Jun 16:1-14. doi: 10.1007/s00018-020-03557-0. Online ahead of print.
PMID: 32556372

Prevalence, risk factors, and clinical characteristics of rotavirus and adenovirus among Lebanese hospitalized children with acute gastroenteritis.
Zaraket R, Salami A, Bahmad M, El Roz A, Khalaf B, Ghssein G, Bahmad HF. Heliyon. 2020 Jun 20;6(6):e04248. doi: 10.1016/j.heliyon.2020.e04248. eCollection 2020 Jun.
PMID: 32613122

Optimising treatments for sexually transmitted infections: surveillance, pharmacokinetics and pharmacodynamics, therapeutic strategies, and molecular resistance prediction.
Seña AC, Bachmann L, Johnston C, Wi T, Workowski K, Hook EW 3rd, Hocking JS, Drusano G, Unemo M. Lancet Infect Dis. 2020 Jun 19:S1473-3099(20)30171-7. doi: 10.1016/S1473-3099(20)30171-7. Online ahead of print.
PMID: 32569625

Sars-cov-2 host entry and replication inhibitors from Indian ginseng: an *in-silico* approach.
Chikhale RV, Gurav SS, Patil RB, Sinha SK, Prasad SK, Shakya A, Shrivastava SK, Gurav NS, Prasad RS. J Biomol Struct Dyn. 2020 Jun 22:1-12. doi: 10.1080/07391102.2020.1778539. Online ahead of print.
PMID: 32568012

Epitope-based sieve analysis of Plasmodium falciparum sequences from a FMP2.1/AS02(A) **vaccine** trial is consistent with differential **vaccine** efficacy against immunologically relevant AMA1 variants.
Ouattara A, Niangaly A, Adams M, Coulibaly D, Kone AK, Traore K, Laurens MB, Tolo Y, Kouriba B, Diallo DA, Doumbo OK, Plowe CV, Djimdé A, Thera MA, Laufer MK, Takala-Harrison S, Silva JC. Vaccine. 2020 Jun 20:S0264-410X(20)30821-5. doi: 10.1016/j.vaccine.2020.06.035. Online ahead of print.
PMID: 32571720

Report of the 1st African Enteric Viruses Genome Initiative (AEVGI) Data and Bioinformatics Workshop on whole-genome analysis of some African rotavirus strains held in Bloemfontein, South Africa.
Nyaga MM, Sabiu S, Ndze VN, Dennis FE, Jere KC. Vaccine. 2020 Jul 22;38(34):5402-5407. doi: 10.1016/j.vaccine.2020.06.010. Epub 2020 Jun 17.
PMID: 32561119

Early Pandemic Evaluation and Enhanced Surveillance of COVID-19 (EAVE II): protocol for an observational study using linked Scottish national data.

Simpson CR, Robertson C, Vasileiou E, McMenamin J, Gunson R, Ritchie LD, Woolhouse M, Morrice L, Kelly D, Stagg HR, Marques D, Murray J, Sheikh A. BMJ Open. 2020 Jun 21;10(6):e039097. doi: 10.1136/bmjopen-2020-039097.
PMID: 32565483

Fungal arthritis with adjacent osteomyelitis caused by Candida pelliculosa: a case report.
Song KY, Park C, Byun JH, Chun HS, Choi JH, Han EH, Lee SO, Jeong Y, Kim YJ, Kim SH. BMC Infect Dis. 2020 Jun 22;20(1):438. doi: 10.1186/s12879-020-05171-8.
PMID: 32571233

Recombinant ferritin nanoparticles can induce dendritic cell maturation through TLR4/NF-κB pathway.
Qu Z, Guo Y, Li M, Cao C, Wang J, Gao M. Biotechnol Lett. 2020 Jun 22. doi: 10.1007/s10529-020-02944-8. Online ahead of print.
PMID: 32567013

Safety and immunogenicity of experimental stand-alone trivalent, inactivated Sabin-strain polio **vaccine** formulations in healthy infants: A randomized, observer-blind, controlled phase 1/2 trial.
Cramer JP, Jimeno J, Han HH, Lin S, Hartmann K, Borkowski A, Sáez-Llorens X. Vaccine. 2020 Jul 14;38(33):5313-5323. doi: 10.1016/j.vaccine.2020.05.081. Epub 2020 Jun 17.
PMID: 32563609

Feasibility of **vaccination** against Macrobrachium rosenbergii nodavirus infection in giant freshwater prawn.
Chen-Fei L, Chou-Min C, Jiun-Yan L. Fish Shellfish Immunol. 2020 Jun 21:S1050-4648(20)30461-7. doi: 10.1016/j.fsi.2020.06.039. Online ahead of print.
PMID: 32580003

Molecular Epidemiology of B3 and D8 Measles Viruses through Hemagglutinin Phylogenetic History.
Bianchi S, Canuti M, Ciceri G, Gori M, Colzani D, Dura M, Pennati BM, Baggieri M, Magurano F, Tanzi E, Amendola A. Int J Mol Sci. 2020 Jun 22;21(12):4435. doi: 10.3390/ijms21124435.
PMID: 32580384

Tolerogenic **vaccines** for the treatment of cardiovascular diseases.
Vigario FL, Kuiper J, Slütter B. EBioMedicine. 2020 Jun 20;57:102827. doi: 10.1016/j.ebiom.2020.102827. Online ahead of print.
PMID: 32574952

The Connection Between Social Determinants of Health and Human Papillomavirus Testing Knowledge Among Women in the USA.
Garg A, Galvin AM, Matthes S, Maness SB, Thompson EL. J Cancer Educ. 2020 Jun 20. doi: 10.1007/s13187-020-01798-y. Online ahead of print.
PMID: 32564250

Patient-Level Factors Associated With Lack of Health Care Provider Recommendation for the Human Papillomavirus **Vaccine** Among Young Cancer Survivors.
York JM, Klosky JL, Chen Y, Connelly JA, Wasilewski-Masker K, Giuliano AR, Robison LL, Wong FL, Hudson MM, Bhatia S, Landier W. J Clin Oncol. 2020 Jun 18:JCO1902026. doi: 10.1200/JCO.19.02026. Online ahead of print.
PMID: 32552278

Building immunization decision-making capacity within the World Health Organization European Region.
Mosina L, Sankar Datta S, Shefer A, Cavallaro KF, Henaff L, Steffen CA, Jacques-Carroll L. Vaccine. 2020 Jul 14;38(33):5109-5113. doi: 10.1016/j.vaccine.2020.05.077. Epub 2020 Jun 17.
PMID: 32563604

Pediatric cancer research: Surviving COVID-19.
Auletta JJ, Adamson PC, Agin JE, Kearns P, Kennedy S, Kieran MW, Ludwinski DM, Knox LJ, McKay K, Rhiner P, Thiele CJ, Cripe TP. Pediatr Blood Cancer. 2020 Jun 18:e28435. doi: 10.1002/pbc.28435. Online ahead of print.
PMID: 32558190

Low **vaccination** in rural Sindh, Pakistan: A case of refusal, ignorance or access?
Jamal D, Zaidi S, Husain S, Orr DW, Riaz A, Farrukhi AA, Najmi R. Vaccine. 2020 Jun 19;38(30):4747-4754. doi: 10.1016/j.vaccine.2020.05.018. Epub 2020 May 25.
PMID: 32467011

Vaccines in older age: moving from current practice to optimal coverage-a multidisciplinary consensus conference.
Antonelli Incalzi R, Bernabei R, Bonanni P, Conversano M, Ecarnot F, Gabutti G, Maggi S, Paolini D, Sandri F. Aging Clin Exp Res. 2020 Jun 22. doi: 10.1007/s40520-020-01622-z. Online ahead of print.
PMID: 32572796

Covid-19: current knowledge, disease potential, prevention and clinical advances.
Alam A, Siddiqui MF, Imam N, Ali R, Mushtaque M, Ishrat R. Turk J Biol. 2020 Jun 21;44(3):121-131. doi: 10.3906/biy-2005-29. eCollection 2020.
PMID: 32595349

The Nucleocapsid Protein of SARS-CoV-2: a Target for **Vaccine** Development.
Dutta NK, Mazumdar K, Gordy JT. J Virol. 2020 Jun 16;94(13):e00647-20. doi: 10.1128/JVI.00647-20. Print 2020 Jun 16.
PMID: 32546606

Hepatitis B Virus Core Particles Containing a Conserved Region of the G Protein Combined with Interleukin-35 Protected Mice against Respiratory Syncytial Virus Infection without **Vaccine**-Enhanced Immunopathology.

Yang J, Ma C, Zhao Y, Fan A, Zou X, Pan Z. J Virol. 2020 Jun 16;94(13):e00007-20. doi: 10.1128/JVI.00007-20. Print 2020 Jun 16.
PMID: 32321805

Cross-protection of a live-attenuated Flavobacterium psychrophilum immersion **vaccine** against novel Flavobacterium spp. and Chryseobacterium spp. strains.
Bruce TJ, Ma J, Knupp C, Loch TP, Faisal M, Cain KD. J Fish Dis. 2020 Aug;43(8):915-928. doi: 10.1111/jfd.13201. Epub 2020 Jun 18.
PMID: 32557714

Influenza **vaccination** in the COVID-19 era.
Grech V, Borg M. Early Hum Dev. 2020 Jun 18;148:105116. doi: 10.1016/j.earlhumdev.2020.105116. Online ahead of print.
PMID: 32604011

A **vaccine** cold chain temperature monitoring study in the United Mexican States.
Falcón VC, Porras YVV, Altamirano CMG, Kartoglu U. Vaccine. 2020 Jul 14;38(33):5202-5211. doi: 10.1016/j.vaccine.2020.06.014. Epub 2020 Jun 22.
PMID: 32586762

Reviving the "Moore Swab": a Classic Environmental Surveillance Tool Involving Filtration of Flowing Surface Water and Sewage Water To Recover Typhoidal *Salmonella* Bacteria.
Sikorski MJ, Levine MM. Appl Environ Microbiol. 2020 Jun 17;86(13):e00060-20. doi: 10.1128/AEM.00060-20. Print 2020 Jun 17.
PMID: 32332133

Tackling SARS-CoV-2: proposed targets and repurposed drugs.
Joshi S, Joshi M, Degani MS. Future Med Chem. 2020 Jun 22:10.4155/fmc-2020-0147. doi: 10.4155/fmc-2020-0147. Online ahead of print.
PMID: 32564623

Seroprevalence of chronic hepatitis B virus infection and immunity to measles, rubella, tetanus and diphtheria among schoolchildren aged 6-7 years old in the Solomon Islands, 2016.
Breakwell L, Anga J, Cooley G, Ropiti L, Gwyn S, Wannemuehler K, Woodring J, Ogaoga D, Martin D, Patel M, Tohme RA. Vaccine. 2020 Jun 19;38(30):4679-4686. doi: 10.1016/j.vaccine.2020.05.029. Epub 2020 May 28.
PMID: 32473876

Targeting the Heme-Heme Oxygenase System to Prevent Severe Complications Following COVID-19 Infections.
Wagener FADTG, Pickkers P, Peterson SJ, Immenschuh S, Abraham NG. Antioxidants (Basel). 2020 Jun 19;9(6):540. doi: 10.3390/antiox9060540.

PMID: 32575554

Adverse drug reactions in adolescents: a review of reporting to a national pharmacovigilance system.
Rebelo Gomes E, Ribeiro-Vaz I, Santos CC, Herdeiro MT. Expert Opin Drug Saf. 2020 Jun 22:1-8. doi: 10.1080/14740338.2020.1771305. Online ahead of print.
PMID: 32422079

Measles, mumps, rubella, and varicella-zoster virus serology and infections in solid organ transplant recipients during the first year post-transplantation.
Rezahosseini O, Sørensen SS, Perch M, Ekenberg C, Møller DL, Knudsen AD, Kirkby N, Lundgren J, Lodding IP, Wareham NE, Gustafsson F, Rasmussen A, Nielsen SD. Clin Infect Dis. 2020 Jun 21:ciaa824. doi: 10.1093/cid/ciaa824. Online ahead of print.
PMID: 32564061

Discovery of New Hydroxyethylamine Analogs against $3CL^{pro}$ Protein Target of SARS-CoV-2: Molecular Docking, Molecular Dynamics Simulation, and Structure-Activity Relationship Studies.
Kumar S, Sharma PP, Shankar U, Kumar D, Joshi SK, Pena L, Durvasula R, Kumar A, Kempaiah P, Poonam, Rathi B. J Chem Inf Model. 2020 Jun 18:acs.jcim.0c00326. doi: 10.1021/acs.jcim.0c00326. Online ahead of print.
PMID: 32551639

Epigenetic Regulation of the Human Papillomavirus Life Cycle.
Mac M, Moody CA. Pathogens. 2020 Jun 18;9(6):483. doi: 10.3390/pathogens9060483.
PMID: 32570816

Evaluation of Boron's Adjuvant Activity in Inactive Bacterin **Vaccines** Using the Mice Model.
Sayın Z, Uslu A, Erganiş O, Başoglu A, Özdemir Ö, Sakmanoğlu A, Uçan US, Aras Z. Biol Trace Elem Res. 2020 Jun 17. doi: 10.1007/s12011-020-02233-5. Online ahead of print.
PMID: 32557105

Helping koalas battle disease - Recent advances in Chlamydia and Koala Retrovirus (KoRV) disease understanding and treatment in koalas.
Quigley BL, Timms P. FEMS Microbiol Rev. 2020 Jun 18:fuaa024. doi: 10.1093/femsre/fuaa024. Online ahead of print.
PMID: 32556174

Impairment in neurocognitive function following experimental neonatal guinea pig cytomegalovirus infection.
Fernández-Alarcón C, Meyer LE, McVoy MA, Lokensgard JR, Hu S, Benneyworth MA, Anderholm KM, Janus BC, Schleiss MR. Pediatr Res. 2020 Jun 17. doi: 10.1038/s41390-020-1010-7. Online ahead of print.
PMID: 32555536

Letter to the Editor.

Wolff GG. Vaccine. 2020 Jun 19;38(30):4651. doi: 10.1016/j.vaccine.2020.04.016. Epub 2020 May 26.
PMID: 32471778

Corrigendum to "The induction of CD80 and apoptosis on B cells and CD40L in CD4+ T cells in response to seasonal influenza **vaccination** distinguishes responders versus non-responders in healthy controls and aviremic ART-treated HIV-infected individuals" [**Vaccine** 35 (2017) 831-841].
Powell AM, Luo Z, Martin L, Wan Z, Ma L, Liao G, Song Y, Li X, Michael Kilby J, Huang L, Jiang W. Vaccine. 2020 Jun 19;38(30):4780-4781. doi: 10.1016/j.vaccine.2020.05.040. Epub 2020 May 27.
PMID: 32473877

Progress Toward Rubella Elimination - Western Pacific Region, 2000-2019.
Knapp JK, Mariano KM, Pastore R, Grabovac V, Takashima Y, Alexander JP Jr, Reef SE, Hagan JE. MMWR Morb Mortal Wkly Rep. 2020 Jun 19;69(24):744-750. doi: 10.15585/mmwr.mm6924a4.
PMID: 32555136

Genome re-sequencing and reannotation of the Escherichia coli ER2566 strain and transcriptome sequencing under overexpression conditions.
Zhou L, Yu H, Wang K, Chen T, Ma Y, Huang Y, Li J, Liu L, Li Y, Kong Z, Zheng Q, Wang Y, Gu Y, Xia N, Li S. Version 2. BMC Genomics. 2020 Jun 16;21(1):407. doi: 10.1186/s12864-020-06818-1.
PMID: 32546194

Alternative New Mono-scaled Quantitative Benefit-Risk Assessment of Human Papillomavirus **Vaccine** in Japan.
Matsumoto T, Matsumaru N, Scuffham P, Neels P, Tsukamoto K. Ther Innov Regul Sci. 2020 Jun 22. doi: 10.1007/s43441-020-00189-1. Online ahead of print.
PMID: 32572770

Modeling mosquito-borne and sexual transmission of Zika virus in an enzootic host, the African green monkey.
Haddow AD, Perez-Sautu U, Wiley MR, Miller LJ, Kimmel AE, Principe LM, Wollen-Roberts SE, Shamblin JD, Valdez SM, Cazares LH, Pratt WD, Rossi FD, Lugo-Roman L, Bavari S, Palacios GF, Nalca A, Nasar F, Pitt MLM. PLoS Negl Trop Dis. 2020 Jun 22;14(6):e0008107. doi: 10.1371/journal.pntd.0008107. eCollection 2020 Jun.
PMID: 32569276

HTNV Sensitizes Host Toward TRAIL-Mediated Apoptosis-A Pivotal Anti-hantaviral Role of TRAIL.
Chen QZ, Wang X, Luo F, Li N, Zhu N, Lu S, Zan YX, Zhong CJ, Wang MR, Hu HT, Zhang YZ, Xiong HR, Hou W. Front Immunol. 2020 Jun 19;11:1072. doi: 10.3389/fimmu.2020.01072. eCollection 2020.
PMID: 32636833

WSSV proteins and DNA genome released by ultrasonic rupture can infect crayfish as effectively as intact virions.

Lai Y, Zhu F, Xu Y. J Virol Methods. 2020 Sep;283:113917. doi: 10.1016/j.jviromet.2020.113917. Epub 2020 Jun 21.
PMID: 32579894

A Novel Synthetic Dual Agonistic Liposomal TLR4/7 Adjuvant Promotes Broad Immune Responses in an Influenza **Vaccine** With Minimal Reactogenicity.
Sato-Kaneko F, Yao S, Lao FS, Shpigelman J, Messer K, Pu M, Shukla NM, Cottam HB, Chan M, Chu PJ, Burkhart D, Schoener R, Matsutani T, Carson DA, Corr M, Hayashi T. Front Immunol. 2020 Jun 19;11:1207. doi: 10.3389/fimmu.2020.01207. eCollection 2020.
PMID: 32636840

Evaluation of a standardised Vi poly-l-lysine ELISA for serology of Vi capsular polysaccharide antibodies.
Rigsby P, Beamish E, Hockley J, Atkinson E, Hitri K, Jones E, Yang JS, Qadri F, Bachtiar NS, Elias SC, Goel A, Mishra R, Dugyala R, Pasetti MF, Meiring JE, Mbewe M, Gordon MA, Pollard AJ, Logan A, Rijpkema S; anti-Vi IgG working group. Biologicals. 2020 Jun 20:S1045-1056(20)30060-9. doi: 10.1016/j.biologicals.2020.05.002. Online ahead of print.
PMID: 32571662

Detection of New Leptospira Genotypes Infecting Symptomatic Dogs: Is a New **Vaccine** Formulation Needed?
Bertasio C, Boniotti MB, Lucchese L, Ceglie L, Bellinati L, Mazzucato M, Furlanello T, D'Incau M, Natale A. Pathogens. 2020 Jun 18;9(6):484. doi: 10.3390/pathogens9060484.
PMID: 32570803

Remdesivir (GS-5734) as a therapeutic option of 2019-nCOV main protease - *in silico* approach.
Naik VR, Munikumar M, Ramakrishna U, Srujana M, Goudar G, Naresh P, Kumar BN, Hemalatha R. J Biomol Struct Dyn. 2020 Jun 22:1-14. doi: 10.1080/07391102.2020.1781694. Online ahead of print.
PMID: 32568620

Influenza B outbreak at an adult cystic fibrosis centre - Clinical impact and factors influencing spread.
Dennis JB, Jones AM, Davies EA, Welfare W, Barry PJ, Collier L, Turner A, Bright-Thomas RJ. J Cyst Fibros. 2020 Jun 19:S1569-1993(20)30124-7. doi: 10.1016/j.jcf.2020.04.011. Online ahead of print.
PMID: 32565192

Human Natural Antibodies to Mammalian Carbohydrate Antigens as Unsung Heroes Protecting against Past, Present, and Future Viral Infections.
Galili U. Antibodies (Basel). 2020 Jun 22;9(2):25. doi: 10.3390/antib9020025.
PMID: 32580274

Cancer incidence and cancer control in Bangkok, Thailand: Results from the cancer registry 2011-15 and projections to 2035.
Sangrajrang S, Laversanne M, Bausom R, Mery L, Bray F. Cancer Epidemiol. 2020 Jun 22;67:101765. doi: 10.1016/j.canep.2020.101765. Online ahead of print.

PMID: 32585431

Characterization of Escherichia coli isolates potentially covered by ExPEC4V and ExPEC10V, that were collected from post-transrectal ultrasound-guided prostate needle biopsy invasive urinary tract and bloodstream infections.
Saade E, Gravenstein S, Donskey CJ, Wilson B, Spiessens B, Abbanat D, Poolman J, de Palacios PI, Hermans P. Vaccine. 2020 Jul 14;38(33):5100-5104. doi: 10.1016/j.vaccine.2020.06.024. Epub 2020 Jun 16.
PMID: 32561123

Protective effect of fungal extracellular vesicles against murine candidiasis.
Vargas G, Honorato L, Guimarães AJ, Rodrigues ML, Reis FCG, Vale AM, Ray A, Nosanchuk JD, Nimrichter L. Cell Microbiol. 2020 Jun 18:e13238. doi: 10.1111/cmi.13238. Online ahead of print.
PMID: 32558196

Tuberculosis screening of asylum seekers in Finland, 2015-2016.
Räisänen PE, Soini H, Tiittala P, Snellman O, Ruutu P, Nuorti JP, Lyytikäinen O. BMC Public Health. 2020 Jun 19;20(1):969. doi: 10.1186/s12889-020-09122-5.
PMID: 32560720

Pulmonary Mycobacterium tuberculosis control associates with CXCR3- and CCR6-expressing antigen-specific Th1 and Th17 cell recruitment.
Shanmugasundaram U, Bucsan AN, Ganatra SR, Ibegbu C, Quezada M, Blair RV, Alvarez X, Velu V, Kaushal D, Rengarajan J. JCI Insight. 2020 Jun 16:137858. doi: 10.1172/jci.insight.137858. Online ahead of print.
PMID: 32554933

Harnessing Drug Repurposing for Exploration of New Diseases: An Insight to Strategies and Case Studies.
Jain P, Jain SK, Jain M. Curr Mol Med. 2020 Jun 19. doi: 10.2174/1566524020666200619125404. Online ahead of print.
PMID: 32560606

Genetic diversity of the ATAQ gene in Rhipicephalus microplus collected in Mexico and implications as anti-tick **vaccine**.
Lugo-Caro Del Castillo SM, Hernández-Ortiz R, Gómez-Romero N, Martínez-Velázquez M, Castro-Saines E, Lagunes-Quintanilla R. Parasitol Res. 2020 Jun 22:1-7. doi: 10.1007/s00436-020-06773-6. Online ahead of print.
PMID: 32572573

Vesicular stomatitis virus and DNA **vaccines** expressing Zika virus nonstructural protein 1 (NS1) induce substantial but not sterilizing protection against Zika virus infection.
Li A, Xue M, Attia Z, Yu J, Lu M, Shan C, Liang X, Gao TZ, Shi PY, Peeples ME, Boyaka PN, Liu SL, Li J. J Virol. 2020 Jun 17:JVI.00048-20. doi: 10.1128/JVI.00048-20. Online ahead of print.
PMID: 32554698

Innate Lymphocyte Th1 and Th17 Responses in Elderly Hospitalised Patients with Infection and Sepsis.
Coakley JD, Breen EP, Moreno-Olivera A, Al-Harbi AI, Melo AM, O'Connell B, McManus R, Doherty DG, Ryan T. Vaccines (Basel). 2020 Jun 17;8(2):E311. doi: 10.3390/vaccines8020311.
PMID: 32560376

Use of Typhoid Vi-Polysaccharide **Vaccine** as a **Vaccine** Probe to Delineate Clinical Criteria for Typhoid Fever.
Islam T, Im J, Ahmmed F, Kim DR, Khan AI, Zaman K, Ali M, Marks F, Qadri F, Kim J, Clemens JD. Am J Trop Med Hyg. 2020 Jun 22. doi: 10.4269/ajtmh.19-0968. Online ahead of print.
PMID: 32588803

Human papillomavirus epidemiology in populations with normal or abnormal cervical cytology or cervical cancer in the Middle East and North Africa: A systematic review and meta-analysis.
Obeid DA, Almatrrouk SA, Alfageeh MB, Al-Ahdal MNA, Alhamlan FS. J Infect Public Health. 2020 Jun 18:S1876-0341(20)30522-0. doi: 10.1016/j.jiph.2020.06.012. Online ahead of print.
PMID: 32564935

Inhibitory antibodies identify unique sites of therapeutic vulnerability in rhinovirus and other enteroviruses.
Meng B, Lan K, Xie J, Lerner RA, Wilson IA, Yang B. Proc Natl Acad Sci U S A. 2020 Jun 16;117(24):13499-13508. doi: 10.1073/pnas.1918844117. Epub 2020 May 28.
PMID: 32467165

Co-delivery of antigen and dual adjuvants by aluminum hydroxide nanoparticles for enhanced immune responses.
Hou Y, Wang Y, Tang Y, Zhou Z, Tan L, Gong T, Zhang L, Sun X. J Control Release. 2020 Jun 22;326:120-130. doi: 10.1016/j.jconrel.2020.06.021. Online ahead of print.
PMID: 32585230

PD-1 Immune Checkpoint Blockade Promotes Therapeutic Cancer **Vaccine** to Eradicate Lung Cancer.
Kadam P, Sharma S. Vaccines (Basel). 2020 Jun 18;8(2):E317. doi: 10.3390/vaccines8020317.
PMID: 32570793

Meditation and Yoga Practices as Potential Adjunctive Treatment of SARS-CoV-2 Infection and COVID-19: A Brief Overview of Key Subjects.
Bushell W, Castle R, Williams MA, Brouwer KC, Tanzi RE, Chopra D, Mills PJ. J Altern Complement Med. 2020 Jul;26(7):547-556. doi: 10.1089/acm.2020.0177. Epub 2020 Jun 22.
PMID: 32579021

Post-**vaccination** anti-HBs testing among healthcare workers: More economical than post-exposure management for Hepatitis B.

Souza CL, Salgado TA, Sardeiro TL, Galdino Junior H, Itria A, Tipple AFV. Rev Lat Am Enfermagem. 2020 Jun 19;28:e3278. doi: 10.1590/1518-8345.3534.3278. eCollection 2020.
PMID: 32578749

Combined drug repurposing and virtual screening strategies with molecular dynamics simulation identified potent inhibitors for SARS-CoV-2 main protease (3CLpro).
Khan A, Ali SS, Khan MT, Saleem S, Ali A, Suleman M, Babar Z, Shafiq A, Khan M, Wei DQ. J Biomol Struct Dyn. 2020 Jun 18:1-12. doi: 10.1080/07391102.2020.1779128. Online ahead of print.
PMID: 32552361

Sustained maternal antibody and cellular immune responses in pregnant women infected with Zika virus and mother to infant transfer of Zika-specific antibodies.
Collier AY, Borducchi EN, Chandrashekar A, Moseley E, Peter L, Teodoro NS, Nkolola J, Abbink P, Barouch DH. Am J Reprod Immunol. 2020 Jun 17:e13288. doi: 10.1111/aji.13288. Online ahead of print.
PMID: 32557984

Expanding access to HPV **vaccination** in South Carolina through community pharmacies: A geospatial analysis.
Zahnd WE, Harrison SE, Stephens HC, Messersmith AR, Brandt HM, Hastings TJ, Eberth JM. J Am Pharm Assoc (2003). 2020 Jun 21:S1544-3191(20)30239-9. doi: 10.1016/j.japh.2020.05.005. Online ahead of print.
PMID: 32580908

Overcoming Tumor Resistance to Oncolyticvaccinia Virus with Anti-PD-1-Based Combination Therapy by Inducing Antitumor Immunity in the Tumor Microenvironment.
Yoo SY, Badrinath N, Jeong SN, Woo HY, Heo J. Vaccines (Basel). 2020 Jun 19;8(2):E321. doi: 10.3390/vaccines8020321.
PMID: 32575351

Antigen Receptor Specificity and Cell Location Influence the Diversification and Selection of the B-1a Cell Pool with Age.
Tsuji N, Rothstein TL, Holodick NE. J Immunol. 2020 Aug 1;205(3):741-759. doi: 10.4049/jimmunol.1901302. Epub 2020 Jun 19.
PMID: 32561570

Immunization with a recombinant BibA surface protein confers immunity and protects mice against group B Streptococcus (GBS) vaginal colonization.
Dos Santos NFB, da Silva LR, Costa FJMD, de Mattos DM, de Carvalho E, Ferreira LCS, Ferreira RCC. Vaccine. 2020 Jul 14;38(33):5286-5296. doi: 10.1016/j.vaccine.2020.05.076. Epub 2020 Jun 19.
PMID: 32571719

Novel gene Merlot inhibits differentiation and promotes apoptosis of osteoclasts.

Yamakawa T, Okamatsu N, Ishikawa K, Kiyohara S, Handa K, Hayashi E, Sakai N, Karakawa A, Chatani M, Tsuji M, Inagaki K, Kiuchi Y, Negishi-Koga T, Takami M. Bone. 2020 Jun 20;138:115494. doi: 10.1016/j.bone.2020.115494. Online ahead of print.
PMID: 32569872

Attachment impacts cortisol awakening response in chronically depressed individuals.
Adams GC, Wrath AJ, von Dewitz B, Marciniuk K, Roesler A, Napper S. Psychoneuroendocrinology. 2020 Jun 18;120:104778. doi: 10.1016/j.psyneuen.2020.104778. Online ahead of print.
PMID: 32585509

BCG Infection due to MPT64-Negative Strain: A Diagnostic Challenge.
Suresh P, Biswas L, Prasad V, Kumar A, Sivadas S, Khan S, Biswas R. Am J Trop Med Hyg. 2020 Jun 16. doi: 10.4269/ajtmh.19-0853. Online ahead of print.
PMID: 32539913

Amplifying RNA **Vaccine** Development.
Fuller DH, Berglund P. N Engl J Med. 2020 Jun 18;382(25):2469-2471. doi: 10.1056/NEJMcibr2009737.
PMID: 32558474

Prevalence and Clinical Management of Non-malarial Febrile Illnesses among Outpatients in the Era of Universal Malaria Testing in Malawi.
Kapito-Tembo A, Mathanga D, Bauleni A, Nyirenda O, Pensulo P, Ali D, Valim C, Taylor TE, Laufer MK. Am J Trop Med Hyg. 2020 Jun 22. doi: 10.4269/ajtmh.18-0800. Online ahead of print.
PMID: 32588795

Molecular characterization of Brucella species detected in humans and domestic ruminants of pastoral areas in Kagera ecosystem, Tanzania.
Ntirandekura JB, Makene VA, Kasanga CJ, Matemba LE, Kimera SI, Muma JB, Karimuribo ED. Vet Med Sci. 2020 Jun 21. doi: 10.1002/vms3.298. Online ahead of print.
PMID: 32567249

A phase 2b/3b MenACWY-TT study of long-term antibody persistence after primary **vaccination** and immunogenicity and safety of a booster dose in individuals aged 11 through 55 years.
Borja-Tabora CFC, Peyrani P, Webber C, Van der Wielen M, Cheuvart B, De Schrevel N, Bianco V, Aris E, Cutler M, Li P, Perez JL. BMC Infect Dis. 2020 Jun 18;20(1):426. doi: 10.1186/s12879-020-05104-5.
PMID: 32552685

IMRAS-A clinical trial of mosquito-bite immunization with live, radiation-attenuated P. falciparum sporozoites: Impact of immunization parameters on protective efficacy and generation of a repository of immunologic reagents.
Hickey B, Teneza-Mora N, Lumsden J, Reyes S, Sedegah M, Garver L, Hollingdale MR, Banania JG, Ganeshan H, Dowler M, Reyes A, Tamminga C, Singer A, Simmons A, Belmonte M, Belmonte A, Huang J,

Inoue S, Velasco R, Abot S, Vasquez CS, Guzman I, Wong M, Twomey P, Wojnarski M, Moon J, Alcorta Y, Maiolatesi S, Spring M, Davidson S, Chaudhury S, Villasante E, Richie TL, Epstein JE. PLoS One. 2020 Jun 17;15(6):e0233840. doi: 10.1371/journal.pone.0233840. eCollection 2020.
PMID: 32555601

Enzyme-Antibody-Modified Gold Nanoparticle Probes for the Ultrasensitive Detection of Nucleocapsid Protein in SFTSV.
Duan Y, Wu W, Zhao Q, Liu S, Liu H, Huang M, Wang T, Liang M, Wang Z. Int J Environ Res Public Health. 2020 Jun 19;17(12):4427. doi: 10.3390/ijerph17124427.
PMID: 32575570

Influenza-associated excess mortality in the Philippines, 2006-2015.
Cheng KJG, Rivera AS, Lam HY, Ulitin AR, Nealon J, Dizon R, Wu DB. PLoS One. 2020 Jun 17;15(6):e0234715. doi: 10.1371/journal.pone.0234715. eCollection 2020.
PMID: 32555618

Blockade of CTLA-4 increases anti-tumor response inducing potential of dendritic cell **vaccine**.
Esmaily M, Masjedi A, Hallaj S, Nabi Afjadi M, Malakotikhah F, Ghani S, Ahmadi A, Sojoodi M, Hassannia H, Atyabi F, Namdar A, Azizi G, Ghalamfarsa G, Jadidi-Niaragh F. J Control Release. 2020 Jun 21;326:63-74. doi: 10.1016/j.jconrel.2020.06.017. Online ahead of print.
PMID: 32580042

A model for establishment, maintenance and reactivation of the immune response after **vaccination** against Ebola virus.
Balelli I, Pasin C, Prague M, Crauste F, Effelterre TV, Bockstal V, Solforosi L, Thiébaut R. J Theor Biol. 2020 Jun 21;495:110254. doi: 10.1016/j.jtbi.2020.110254. Epub 2020 Mar 21.
PMID: 32205143

Associations between IFI44L gene variants and rates of respiratory tract infections during early childhood.
Lempainen J, Korhonen LS, Kantojärvi K, Heinonen S, Toivonen L, Räty P, Ramilo O, Mejias A, Laine AP, Vuorinen T, Waris M, Karlsson L, Karlsson H, Paunio T, Peltola V. J Infect Dis. 2020 Jun 19:jiaa341. doi: 10.1093/infdis/jiaa341. Online ahead of print.
PMID: 32561935

Comparison of proteome alterations during aging in the temporal lobe of humans and rhesus macaques.
Wang X, Chen K, Pan M, Ge W, He Z. Exp Brain Res. 2020 Jun 22. doi: 10.1007/s00221-020-05855-2. Online ahead of print.
PMID: 32572507

Recent successes in therapeutics for Ebola virus disease: no time for complacency.
Iversen PL, Kane CD, Zeng X, Panchal RG, Warren TK, Radoshitzky SR, Kuhn JH, Mudhasani RR, Cooper CL, Shurtleff AC, Nasar F, Sunay MM, Duplantier AJ, Eaton BP, Zumbrun EE, Bixler SL, Martin S, Meinig JM,

Chiang CY, Sanchez-Lockhart M, Palacios GF, Kugelman JR, Martins KA, Pitt ML, Crozier I, Saunders DL. Lancet Infect Dis. 2020 Jun 18:S1473-3099(20)30282-6. doi: 10.1016/S1473-3099(20)30282-6. Online ahead of print.
PMID: 32563280

The Superior Ability of Human BDCA3^{+} (CD141^{+}) Dendritic Cells (DCs) to Cross-Present Antigens Derived From Necrotic Lung Cancer Cells.
Gu FF, Zhang K, Ma LL, Liu YY, Li C, Hu Y, Yang QF, Liang JY, Zeng YL, Wang Y, Liu L. Front Immunol. 2020 Jun 19;11:1267. doi: 10.3389/fimmu.2020.01267. eCollection 2020.
PMID: 32655564

Binding of elastase-1 and enterocytes facilitates Trichinella spiralis larval intrusion of the host's intestinal epithelium.
Hu CX, Zeng J, Yang DQ, Yue X, Dan Liu R, Long SR, Zhang X, Jiang P, Cui J, Wang ZQ. Acta Trop. 2020 Jun 18;211:105592. doi: 10.1016/j.actatropica.2020.105592. Online ahead of print.
PMID: 32565198

Clinical practice guidelines for the diagnosis and management of acute otitis media in children-2018 update.
Hayashi T, Kitamura K, Hashimoto S, Hotomi M, Kojima H, Kudo F, Maruyama Y, Sawada S, Taiji H, Takahashi G, Takahashi H, Uno Y, Yano H. Auris Nasus Larynx. 2020 Jun 20:S0385-8146(20)30138-3. doi: 10.1016/j.anl.2020.05.019. Online ahead of print.
PMID: 32576390

An Insight into the Potential Parasitological Effect of *Schistosoma mansoni* Antigens in Infected Mice: Prophylactic Role of Cercarial Antigen.
Abdel-Hakeem SS, Abdel-Samiee MA, Abed GH. Microsc Microanal. 2020 Jun 22:1-9. doi: 10.1017/S1431927620001695. Online ahead of print.
PMID: 32624059

Transient Immune Activation in BCG-**Vaccinated** Infant Rhesus Macaques Is Not Sufficient to Influence Oral Simian Immunodeficiency Virus Infection.
Wood MP, Wood LF, Templeton M, Fisher B, Lippy A, Jones CI, Lindestam Arlehamn CS, Sette A, Fuller JT, Murapa P, Jaspan HB, Fuller DH, Sodora DL. J Infect Dis. 2020 Jun 16;222(1):44-53. doi: 10.1093/infdis/jiz382.
PMID: 31605528

Risk1, a Phosphatidylinositol 3-Kinase Effector, Promotes Rickettsia typhi Intracellular Survival.
Voss OH, Gillespie JJ, Lehman SS, Rennoll SA, Beier-Sexton M, Rahman MS, Azad AF. mBio. 2020 Jun 16;11(3):e00820-20. doi: 10.1128/mBio.00820-20.
PMID: 32546622

Poliomyelitis (Polio).

Wolbert JG, Higginbotham K. 2020 Jun 22. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 32644370

Seasonal influenza **vaccination** in older people: A systematic review and meta-analysis of the determining factors.
Okoli GN, Lam OLT, Racovitan F, Reddy VK, Righolt CH, Neilson C, Chit A, Thommes E, Abou-Setta AM, Mahmud SM. PLoS One. 2020 Jun 18;15(6):e0234702. doi: 10.1371/journal.pone.0234702. eCollection 2020.
PMID: 32555628

Time trends in the incidence and survival of vaginal squamous cell carcinoma and high-grade vaginal intraepithelial neoplasia in Denmark - A nationwide population-based study.
Bertoli HK, Baandrup L, Aalborg GL, Kjaer AK, Thomsen LT, Kjaer SK. Gynecol Oncol. 2020 Jun 19:S0090-8258(20)31927-2. doi: 10.1016/j.ygyno.2020.05.683. Online ahead of print.
PMID: 32571683

Comparative study of α-helical and β-sheet self-assembled peptide nanofiber **vaccine** platforms: influence of integrated T-cell epitopes.
Wu Y , Kelly SH , Sanchez-Perez L , Sampson JH , Collier JH . Biomater Sci. 2020 Jun 21;8(12):3522-3535. doi: 10.1039/d0bm00521e. Epub 2020 May 26.
PMID: 32452474

SARS-CoV-2 isolation and propagation from Turkish COVID-19 patients.
TaŞtan C, Yurtsever B, Sir KarakuŞ G, Dİlek KanÇaĞi D, Demİr S, Abanuz S, Seyİs U, Yildirim M, Kuzay R, Elİbol Ö, Arbak S, AÇikel Elmas M, BİrdoĞan S, Sezerman OU, KocagÖz AS, YalÇin K, Ovali E. Turk J Biol. 2020 Jun 21;44(3):192-202. doi: 10.3906/biy-2004-113. eCollection 2020.
PMID: 32595356

A randomized controlled trial of antibody response to 2018-19 cell-based vs. egg-based quadrivalent inactivated influenza **vaccine** in children.
Moehling KK, Zimmerman RK, Nowalk MP, Jeng Lin C, Martin JM, Alcorn JF, Susick M, Burroughs A, Holiday C, Flannery B, Levine MZ. Vaccine. 2020 Jul 14;38(33):5171-5177. doi: 10.1016/j.vaccine.2020.06.023. Epub 2020 Jun 21.
PMID: 32580919

Identification of novel **vaccine** candidate against Salmonella enterica serovar Typhi by reverse vaccinology method and evaluation of its immunization.
Esmailnia E, Amani J, Gargari SLM. Genomics. 2020 Sep;112(5):3374-3381. doi: 10.1016/j.ygeno.2020.06.022. Epub 2020 Jun 19.
PMID: 32565239

A Lactococcus lactis-vectored oral **vaccine** induces protective immunity of mice against enterotoxigenic Escherichia coli lethal challenge.
Song J, Zhao L, Song M. Immunol Lett. 2020 Jun 20;225:57-63. doi: 10.1016/j.imlet.2020.06.007. Online ahead of print.
PMID: 32569608

Mucosal-associated invariant T (MAIT) cells provide B-cell help in **vaccinated** and subsequently SIV-infected Rhesus Macaques.
Rahman MA, Ko EJ, Bhuyan F, Enyindah-Asonye G, Hunegnaw R, Helmold Hait S, Hogge CJ, Venzon DJ, Hoang T, Robert-Guroff M. Sci Rep. 2020 Jun 22;10(1):10060. doi: 10.1038/s41598-020-66964-0.
PMID: 32572140

Increased risk of cervical dysplasia in females with autoimmune conditions-Results from an Australia database linkage study.
Foster E, Malloy MJ, Jokubaitis VG, Wrede CDH, Butzkueven H, Sasadeusz J, Van Doornum S, Macrae F, Unglik G, Brotherton JML, van der Walt A. PLoS One. 2020 Jun 18;15(6):e0234813. doi: 10.1371/journal.pone.0234813. eCollection 2020.
PMID: 32555638

Global mapping of cholera Vibrio and outbreaks in the Pre-Millennium Development Goals (MDG)/Sustainable Development Goals (SDG) and MDGs/SDGs era of 1990-2019.
Igere BE, Ekundayo CT. Microb Pathog. 2020 Jun 21;149:104319. doi: 10.1016/j.micpath.2020.104319. Online ahead of print.
PMID: 32579993

Preparation and qualification of internal rabies reference standards for use in the rabies rapid fluorescent focus inhibition test.
Timiryasova TM, Hodge SA, Zheng L, Singer A, Vincent D, Rahman M, Petit C, Brown M. Sci Rep. 2020 Jun 18;10(1):9893. doi: 10.1038/s41598-020-66754-8.
PMID: 32555434

Challenge infection model for MERS-CoV based on naturally infected camels.
Alharbi NK, Ibrahim OH, Alhafufi A, Kasem S, Aldowerij A, Albrahim R, Abu-Obaidah A, Alkarar A, Bayoumi FA, Almansour AM, Aldubaib M, Al-Abdely HM, Balkhy HH, Qasim I. Version 2. Virol J. 2020 Jun 17;17(1):77. doi: 10.1186/s12985-020-01347-5.
PMID: 32552831

Canine parvovirus prevention-What influence do socioeconomics, remoteness, caseload and demographics have on veterinarians' perceptions and behaviors?
Kelman M, Barrs VR, Norris JM, Ward MP. Prev Vet Med. 2020 Jun 21;181:105065. doi: 10.1016/j.prevetmed.2020.105065. Online ahead of print.
PMID: 32599371

Liver Stiffness Hinders Normalization of Systemic Inflammation and Endothelial Activation after Hepatitis C Virus (HCV) Eradication in HIV/HCV Coinfected Patients.
Álvarez B, Restrepo C, García M, Navarrete-Muñoz MA, Jiménez-Sousa MA, Prieto L, Cabello A, Nistal S, Resino S, Górgolas M, Rallón N, Benito JM. Vaccines (Basel). 2020 Jun 19;8(2):E323. doi: 10.3390/vaccines8020323.
PMID: 32575428

Phenotypic and Genotypic Characterization of Virulence Factors and Susceptibility to Antibiotics in *Salmonella* Infantis Strains Isolated from Chicken Meat: First Findings in Chile.
Lapierre L, Cornejo J, Zavala S, Galarce N, Sánchez F, Benavides MB, Guzmán M, Sáenz L. Animals (Basel). 2020 Jun 18;10(6):1049. doi: 10.3390/ani10061049.
PMID: 32570768

Defining Elimination of Genital Warts-A Modified Delphi Study.
Khawar L, Machalek DA, Regan DG, Donovan B, McGregor S, Guy RJ. Vaccines (Basel). 2020 Jun 18;8(2):E316. doi: 10.3390/vaccines8020316.
PMID: 32570787

Limited Cross-Protection against Infectious Bronchitis Provided by Recombinant Infectious Bronchitis Viruses Expressing Heterologous Spike Glycoproteins.
Keep S, Sives S, Stevenson-Leggett P, Britton P, Vervelde L, Bickerton E. Vaccines (Basel). 2020 Jun 22;8(2):E330. doi: 10.3390/vaccines8020330.
PMID: 32580371

Tocilizumab in patients with symptomatic Kaposi sarcoma herpesvirus-associated multicentric Castleman disease.
Ramaswami R, Lurain K, Peer CJ, Serquiña A, Wang V, Widell A, Goncalves P, Steinberg SM, Marshall V, George J, Figg WD, Whitby D, Ziegelbauer J, Uldrick TS, Yarchoan R. Blood. 2020 Jun 18;135(25):2316-2319. doi: 10.1182/blood.2019004602.
PMID: 32276276

Anticipating SARS-CoV-2 **Vaccine** Testing, Licensure, and Recommendations for Use.
Edwards KM, Orenstein WA. J Pediatr. 2020 Jun 18:S0022-3476(20)30751-4. doi: 10.1016/j.jpeds.2020.06.048. Online ahead of print.
PMID: 32565096

Current Resources for Evidence-Based Practice, July 2020.
Bovbjerg ML, Cheyney M. J Obstet Gynecol Neonatal Nurs. 2020 Jul;49(4):391-404. doi: 10.1016/j.jogn.2020.06.002. Epub 2020 Jun 20.
PMID: 32574584

Identification of a novel dual-target scaffold for 3CLpro and RdRp proteins of SARS-CoV-2 using 3D-similarity search, molecular docking, molecular dynamics and ADMET evaluation.
Aouidate A, Ghaleb A, Chtita S, Aarjane M, Ousaa A, Maghat H, Sbai A, Choukrad M, Bouachrine M, Lakhlifi T. J Biomol Struct Dyn. 2020 Jun 18:1-14. doi: 10.1080/07391102.2020.1779130. Online ahead of print.
PMID: 32552534

Distinct infection process of SARS-CoV-2 in human bronchial epithelial cells line.
Liao Y, Li X, Mou T, Zhou X, Li D, Wang L, Zhang Y, Dong X, Zheng H, Guo L, Liang Y, Jiang G, Fan S, Xu X, Xie Z, Chen H, Liu L, Li Q. J Med Virol. 2020 Jun 19:10.1002/jmv.26200. doi: 10.1002/jmv.26200. Online ahead of print.
PMID: 32558946

Fabrication and Characterization of Tumor Nano-Lysate as a Preventative **Vaccine** for Breast Cancer.
Dombroski JA, Jyotsana N, Crews DW, Zhang Z, King MR. Langmuir. 2020 Jun 16;36(23):6531-6539. doi: 10.1021/acs.langmuir.0c00947. Epub 2020 Jun 5.
PMID: 32437619

Evolutionary epidemiology of Streptococcus iniae: Linking mutation rate dynamics with adaptation to novel immunological landscapes.
Silayeva O, Engelstädter J, Barnes AC. Infect Genet Evol. 2020 Jun 19;85:104435. doi: 10.1016/j.meegid.2020.104435. Online ahead of print.
PMID: 32569744

Sunflower seed oil combined with ginseng stem-leaf saponins as an adjuvant to enhance the immune response elicited by Newcastle disease **vaccine** in chickens.
Yuan L, Wang Y, Ma X, Cui X, Lu M, Guan R, Chi X, Xu W, Hu S. Vaccine. 2020 Jul 14;38(33):5343-5354. doi: 10.1016/j.vaccine.2020.05.063. Epub 2020 Jun 19.
PMID: 32571723

Multivariate time-series analysis of biomarkers from a dengue cohort offers new approaches for diagnosis and prognosis.
Vasey B, Shankar AH, Herrera BB, Becerra A, Xhaja K, Echenagucia M, Machado SR, Caicedo D, Miller J, Amedeo P, Naumova EN, Bosch I; Norma Blumenfeld deBosch. PLoS Negl Trop Dis. 2020 Jun 16;14(6):e0008199. doi: 10.1371/journal.pntd.0008199. Online ahead of print.
PMID: 32544159

Search of Potential **Vaccine** Candidates against Trueperella pyogenes Infections through Proteomic and Bioinformatic Analysis.
Galán-Relaño Á, Gómez-Gascón L, Rodríguez-Franco A, Luque I, Huerta B, Tarradas C, Rodríguez-Ortega MJ. Vaccines (Basel). 2020 Jun 17;8(2):E314. doi: 10.3390/vaccines8020314.
PMID: 32560444

Expression of the Reverse Transcriptase Domain of Telomerase Reverse Transcriptase Induces Lytic Cellular Response in DNA-Immunized Mice and Limits Tumorigenic and Metastatic Potential of Murine Adenocarcinoma 4T1 Cells.
Jansons J, Bayurova E, Skrastina D, Kurlanda A, Fridrihsone I, Kostyushev D, Kostyusheva A, Artyuhov A, Dashinimaev E, Avdoshina D, Kondrashova A, Valuev-Elliston V, Latyshev O, Eliseeva O, Petkov S, Abakumov M, Hippe L, Kholodnyuk I, Starodubova E, Gorodnicheva T, Ivanov A, Gordeychuk I, Isaguliants M. Vaccines (Basel). 2020 Jun 18;8(2):E318. doi: 10.3390/vaccines8020318.
PMID: 32570805

DNA **vaccine** encoding heat shock protein 90 protects from murine lupus.
Liu A, Shi FD, Cohen IR, Castaldo G, Matarese G, Quintana FJ, La Cava A. Arthritis Res Ther. 2020 Jun 22;22(1):152. doi: 10.1186/s13075-020-02246-4.
PMID: 32571400

Insights into the protective effects of influenza **vaccination**: More hospitalizations but lower follow-up mortality during the 2014/15 influenza season in a Swiss cohort.
Ulyte A, Wei W, Gruebner O, Bähler C, Brüngger B, Blozik E, Dressel H, Schwenkglenks M, von Wyl V. Vaccine. 2020 Jul 14;38(33):5187-5193. doi: 10.1016/j.vaccine.2020.06.019. Epub 2020 Jun 19.
PMID: 32571721

Design, Synthesis, and Preliminary Immunological Studies of MUC1-Based Antitumor **Vaccines** Adjuvanted with R- and S-FSL-1.
Liu Y, Yan B, Wang Z, Zhu H, Yin X, Wang K, Wang M, Zhao W. ACS Med Chem Lett. 2020 Jun 22;11(7):1371-1376. doi: 10.1021/acsmedchemlett.9b00579. eCollection 2020 Jul 9.
PMID: 32676142

Serotonergic Drugs Inhibit Chikungunya Virus Infection at Different Stages of the Cell Entry Pathway.
Bouma EM, van de Pol DPI, Sanders ID, Rodenhuis-Zybert IA, Smit JM. J Virol. 2020 Jun 16;94(13):e00274-20. doi: 10.1128/JVI.00274-20. Print 2020 Jun 16.
PMID: 32321803

SARS-CoV-2 viral loads and serum IgA/IgG immune responses in critically ill COVID-19 patients.
Fourati S, Hue S, Pawlotsky JM, Mekontso-Dessap A, de Prost N. Intensive Care Med. 2020 Jun 22:1-3. doi: 10.1007/s00134-020-06157-5. Online ahead of print.
PMID: 32572527

Impact of extending the timing of maternal pertussis **vaccination** on hospitalized infant pertussis in England, 2014 - 2018.
Tessier E, Campbell H, Ribeiro S, Fry NK, Brown C, Stowe J, Andrews N, Ramsay M, Amirthalingam G. Clin Infect Dis. 2020 Jun 22:ciaa836. doi: 10.1093/cid/ciaa836. Online ahead of print.
PMID: 32569365

Why communities must be at the centre of the Coronavirus disease 2019 response: Lessons from Ebola and human immunodeficiency virus in Africa.
Johnson O, Goronga T. Afr J Prim Health Care Fam Med. 2020 Jun 22;12(1):e1-e3. doi: 10.4102/phcfm.v12i1.2496.
PMID: 32634005

Hepatitis in children with tuberculosis: a case report and review of the literature.
Sanchez-Codez M, Hunt WG, Watson J, Mejias A. BMC Pulm Med. 2020 Jun 16;20(1):173. doi: 10.1186/s12890-020-01215-6.
PMID: 32546255

Evaluation of human resources needed and comparison with human resources available to implement emergency **vaccination** in case of foot and mouth disease outbreaks in Tunisia.
Marsot M, Durand B, Ben Hammouda W, Hadj Ammar H, Zrelli M, Khorchani R. Epidemiol Infect. 2020 Jun 18;148:e128. doi: 10.1017/S0950268820001284.
PMID: 32618526

BALB/c Mouse Is a Potential Animal Model System for Studying Acute and Chronic Genotype 4 Hepatitis E Virus Infection.
Li Y, Long F, Yang C, Hao X, Wu J, Situ J, Chen S, Qian Z, Huang F, Yu W. Front Microbiol. 2020 Jun 16;11:1156. doi: 10.3389/fmicb.2020.01156. eCollection 2020.
PMID: 32612582 Free PMC article.

Virus-like particle **vaccine** with B-cell epitope from porcine epidemic diarrhea virus (PEDV) incorporated into hepatitis B virus core capsid provides clinical alleviation against PEDV in neonatal piglets through lactogenic immunity.
Lu Y, Clark-Deener S, Gillam F, Heffron CL, Tian D, Sooryanarain H, LeRoith T, Zoghby J, Henshaw M, Waldrop S, Pittman J, Meng XJ, Zhang C. Vaccine. 2020 Jul 14;38(33):5212-5218. doi: 10.1016/j.vaccine.2020.06.009. Epub 2020 Jun 19.
PMID: 32565343

Trends, Coverage and Influencing Determinants of Influenza **Vaccination** in the Elderly: A Population-Based National Survey in Spain (2006-2017).
Portero de la Cruz S, Cebrino J. Vaccines (Basel). 2020 Jun 19;8(2):E327. doi: 10.3390/vaccines8020327.
PMID: 32575497

Molecular and biochemical characterization of enolase from Dermanyssus gallinae.
Li H, Huang Y, Wang J, Yu H, Zhao J, Wan Q, Qi X, Li H, Wang C, Pan B. Gene. 2020 Jun 20;756:144911. doi: 10.1016/j.gene.2020.144911. Online ahead of print.
PMID: 32574756

Assessing the completeness of infant and childhood immunizations within a provincial registry populated by parental reporting: A study using linked databases in Ontario, Canada.
Wilson SE, Wilton AS, Young J, Candido E, Bunko A, Buchan SA, Crowcroft NS, Deeks SL, Guttmann A, Halperin SA, Kwong JC, Wilson K, Tu K. Vaccine. 2020 Jul 14;38(33):5223-5230. doi: 10.1016/j.vaccine.2020.06.003. Epub 2020 Jun 20.
PMID: 32571722

Stable HEV IgG seroprevalence in Belgium between 2006 and 2014.
Ho E, Schenk J, Hutse V, Suin V, Litzroth A, Blaizot S, Herzog SA, Verburgh V, Jacques M, Rahman A, Michielsen P, Van Damme P, Van Gucht S, Theeten H, Hens N, Vanwolleghem T. J Viral Hepat. 2020 Jun 21. doi: 10.1111/jvh.13347. Online ahead of print.
PMID: 32564516

Thermal Injection Measurement (TIM) Adds Accuracy to Injections and Can Assess Cold Chain Management.
Gilliam EA, Zuber SM, Grikscheit TC. J Surg Res. 2020 Jun 19;255:261-266. doi: 10.1016/j.jss.2020.05.055. Online ahead of print.
PMID: 32570129

Towards new horizons: characterization, classification and implications of the tumour antigenic repertoire.
Haen SP, Löffler MW, Rammensee HG, Brossart P. Nat Rev Clin Oncol. 2020 Jun 22:1-16. doi: 10.1038/s41571-020-0387-x. Online ahead of print.
PMID: 32572208

The use of proteomics for the identification of promising **vaccine** and diagnostic biomarkers in Plasmodium falciparum.
Mansouri R, Ali-Hassanzadeh M, Shafiei R, Savardashtaki A, Karimazar M, Anvari E, Nguewa P, Rashidi S. Parasitology. 2020 Jun 19:1-36. doi: 10.1017/S003118202000102X. Online ahead of print.
PMID: 32618524

Retrospective study of immunization errors reported in an online Information System.
Barboza TC, Guimarães RA, Gimenes FRE, Silva AEBC. Rev Lat Am Enfermagem. 2020 Jun 19;28:e3303. doi: 10.1590/1518-8345.3343.3303. eCollection 2020.
PMID: 32578753

The genetic polymorphism down-regulating HLA-DRB1 enhancer activity facilitates HBV persistence, evolution and hepatocarcinogenesis in the Chinese Han population.
Deng Y, Li P, Liu W, Pu R, Yang F, Song J, Yin J, Han X, Li C, Zhao J, Wang H, Cao G. J Viral Hepat. 2020 Jun 22. doi: 10.1111/jvh.13353. Online ahead of print.
PMID: 32568442

Anti-retroviral therapy does not reduce tuberculosis reactivation in a tuberculosis-HIV co-infection model.

Ganatra SR, Bucsan AN, Alvarez X, Kumar S, Chatterjee A, Quezada M, Fish AI, Singh DK, Singh B, Sharan R, Lee TH, Shanmugasundaram U, Velu V, Khader SA, Mehra S, Rengarajan J, Kaushal D. J Clin Invest. 2020 Jun 16:136502. doi: 10.1172/JCI136502. Online ahead of print.
PMID: 32544085

Genomic characterization of pestiviruses isolated from bovine, ovine and caprine foetuses in Turkey: A potentially new genotype of Pestivirus I species.
Şevik M. Transbound Emerg Dis. 2020 Jun 21. doi: 10.1111/tbed.13691. Online ahead of print.
PMID: 32564510

Seroprevalence of Neutralizing Antibodies against Japanese Encephalitis Virus among Adolescents and Adults in Korea: A Prospective Multicenter Study.
Kwak BO, Kwon YS, Hong YJ, Nahm CH, Jang W, Uh Y, Cho YG, Kim J, Kim M, Kim DH. Vaccines (Basel). 2020 Jun 19;8(2):E328. doi: 10.3390/vaccines8020328.
PMID: 32575597

An Alternative Perfusion Approach for the Intensification of Virus-Like Particle Production in HEK293 Cultures.
Lavado-García J, Cervera L, Gòdia F. Front Bioeng Biotechnol. 2020 Jun 19;8:617. doi: 10.3389/fbioe.2020.00617. eCollection 2020.
PMID: 32637402

Innate Intracellular Antiviral Responses Restrict the Amplification of Defective Virus Genomes of Parainfluenza Virus 5.
Wignall-Fleming EB, Vasou A, Young D, Short JAL, Hughes DJ, Goodbourn S, Randall RE. J Virol. 2020 Jun 16;94(13):e00246-20. doi: 10.1128/JVI.00246-20. Print 2020 Jun 16.
PMID: 32295916

Comparative analysis of coronavirus genomic RNA structure reveals conservation in SARS-like coronaviruses.
Sanders W, Fritch EJ, Madden EA, Graham RL, Vincent HA, Heise MT, Baric RS, Moorman NJ. bioRxiv. 2020 Jun 16:2020.06.15.153197. doi: 10.1101/2020.06.15.153197. Preprint.
PMID: 32587967

Conserved T-cell epitopes of respiratory syncytial virus (RSV) delivered by recombinant live attenuated influenza **vaccine** viruses efficiently induce RSV-specific lung-localized memory T cells and augment influenza-specific resident memory T-cell responses.
Matyushenko V, Kotomina T, Kudryavtsev I, Mezhenskaya D, Prokopenko P, Matushkina A, Sivak K, Muzhikyan A, Rudenko L, Isakova-Sivak I. Antiviral Res. 2020 Jun 22:104864. doi: 10.1016/j.antiviral.2020.104864. Online ahead of print.
PMID: 32585323

Using recombination-dependent lethal mutations to stabilize reporter flaviviruses for rapid serodiagnosis and drug discovery.

Baker C, Xie X, Zou J, Muruato A, Fink K, Shi PY. EBioMedicine. 2020 Jun 20;57:102838. doi: 10.1016/j.ebiom.2020.102838. Online ahead of print.
PMID: 32574959

Convergent Evolution of Neutralizing Antibodies to Staphylococcus aureus γ-Hemolysin C That Recognize an Immunodominant Primary Sequence-Dependent B-Cell Epitope.
Hernandez DN, Tam K, Shopsin B, Radke EE, Law K, Cardozo T, Torres VJ, Silverman GJ. mBio. 2020 Jun 16;11(3):e00460-20. doi: 10.1128/mBio.00460-20.
PMID: 32546616

Descriptive epidemiology of classical swine fever outbreaks in the period 2013-2018 in Colombia.
Pineda P, Deluque A, Peña M, Diaz OL, Allepuz A, Casal J. PLoS One. 2020 Jun 17;15(6):e0234490. doi: 10.1371/journal.pone.0234490. eCollection 2020.
PMID: 32555613

Comparing the impact of high-dose versus standard dose influenza **vaccines** on hospitalization cost for cardiovascular and respiratory diseases: Economic assessment in the US Veteran population during 5 respiratory seasons using an instrumental variable method.
van Aalst R, Russo EM, Neupane N, Mahmud SM, Wilschut J, Samson SI, Chit A, Postma M, Young-Xu Y. Vaccine. 2020 Jun 20:S0264-410X(20)30735-0. doi: 10.1016/j.vaccine.2020.05.080. Online ahead of print.
PMID: 32576459

Non-specific effects of rabies **vaccine** on the incidence of common infectious disease episodes: study protocol for a randomized controlled trial.
Knobel D, Odita CI, Conan A, Barry D, Smith-Anthony M, Battice J, England S, Gessner BD. Version 2. Trials. 2020 Jun 16;21(1):534. doi: 10.1186/s13063-020-04467-z.
PMID: 32546199

HLA antibody repertoire in infants suggests selectivity in transplacental crossing.
Savulescu DM, Groome M, Malfeld SCK, Madhi S, Koen A, Jones S, Duxbury V, Scheuermaier K, De Assis Rosa D, Suchard M. Am J Reprod Immunol. 2020 Aug;84(2):e13264. doi: 10.1111/aji.13264. Epub 2020 Jun 16.
PMID: 32395838

Immunogenicity Measures of Influenza **Vaccines**: A Study of 1164 Registered Clinical Trials.
Domnich A, Manini I, Panatto D, Calabrò GE, Montomoli E. Vaccines (Basel). 2020 Jun 19;8(2):E325. doi: 10.3390/vaccines8020325.
PMID: 32575440

Threat of COVID-19 **Vaccine** Hesitancy in Pakistan: The Need for Measures to Neutralize Misleading Narratives.

Khan YH, Mallhi TH, Alotaibi NH, Alzarea AI, Alanazi AS, Tanveer N, Hashmi FK. Am J Trop Med Hyg. 2020 Jun 22. doi: 10.4269/ajtmh.20-0654. Online ahead of print.
PMID: 32588810

[Strategies and challenges of immunotherapy for hepatocellular carcinoma].
Zhang HH, Chen HS. Zhonghua Gan Zang Bing Za Zhi. 2020 Jun 20;28(6):457-460. doi: 10.3760/cma.j.cn501113-20200602-00288.
PMID: 32660170

Respiratory Syncytial Virus-Associated Hospitalizations Among Young Children: 2015-2016.
Rha B, Curns AT, Lively JY, Campbell AP, Englund JA, Boom JA, Azimi PH, Weinberg GA, Staat MA, Selvarangan R, Halasa NB, McNeal MM, Klein EJ, Harrison CJ, Williams JV, Szilagyi PG, Singer MN, Sahni LC, Figueroa-Downing D, McDaniel D, Prill MM, Whitaker BL, Stewart LS, Schuster JE, Pahud BA, Weddle G, Avadhanula V, Munoz FM, Piedra PA, Payne DC, Langley G, Gerber SI. Pediatrics. 2020 Jul;146(1):e20193611. doi: 10.1542/peds.2019-3611. Epub 2020 Jun 16.
PMID: 32546583

Recurrent outbreaks of mumps in Lothian and the impact of waning immunity.
Waugh CJ, Willocks LJ, Templeton K, Stevenson J. Epidemiol Infect. 2020 Jun 18;148:e131. doi: 10.1017/S0950268820001296.
PMID: 32616093

Impact of a single-age cohort human papillomavirus **vaccination** strategy in Catalonia, Spain: Population-based analysis of anogenital warts in men and women.
Brotons M, Monfil L, Roura E, Duarte-Salles T, Casabona J, Urbiztondo L, Cabezas C, Bosch FX, de Sanjosé S, Bruni L. Prev Med. 2020 Sep;138:106166. doi: 10.1016/j.ypmed.2020.106166. Epub 2020 Jun 18.
PMID: 32565118

A Novel Method to Identify Pneumonia through Analyzing Chest Radiographs Employing a Multichannel Convolutional Neural Network.
Nahid AA, Sikder N, Bairagi AK, Razzaque MA, Masud M, Z Kouzani A, Mahmud MAP. Sensors (Basel). 2020 Jun 19;20(12):E3482. doi: 10.3390/s20123482.
PMID: 32575656

A missense mutation in the MLKL brace region promotes lethal neonatal inflammation and hematopoietic dysfunction.
Hildebrand JM, Kauppi M, Majewski IJ, Liu Z, Cox AJ, Miyake S, Petrie EJ, Silk MA, Li Z, Tanzer MC, Brumatti G, Young SN, Hall C, Garnish SE, Corbin J, Stutz MD, Di Rago L, Gangatirkar P, Josefsson EC, Rigbye K, Anderton H, Rickard JA, Tripaydonis A, Sheridan J, Scerri TS, Jackson VE, Czabotar PE, Zhang JG, Varghese L, Allison CC, Pellegrini M, Tannahill GM, Hatchell EC, Willson TA, Stockwell D, de Graaf CA, Collinge J, Hilton A, Silke N, Spall SK, Chau D, Athanasopoulos V, Metcalf D, Laxer RM, Bassuk AG, Darbro BW, Fiatarone Singh MA, Vlahovich N, Hughes D, Kozlovskaia M, Ascher DB, Warnatz K, Venhoff N, Thiel J,

Biben C, Blum S, Reveille J, Hildebrand MS, Vinuesa CG, McCombe P, Brown MA, Kile BT, McLean C, Bahlo M, Masters SL, Nakano H, Ferguson PJ, Murphy JM, Alexander WS, Silke J. Nat Commun. 2020 Jun 19;11(1):3150. doi: 10.1038/s41467-020-16819-z.
PMID: 32561755

The Brighton Collaboration standardized template for collection of key information for benefit-risk assessment of nucleic acid (RNA and DNA) **vaccines**.
Kim D, Robertson JS, Excler JL, Condit RC, Fast PE, Gurwith M, Pavlakis G, Monath TP, Smith J, Wood D, Smith ER, Chen RT, Kochhar S; Brighton Collaboration Viral Vector Vaccines Safety Working Group (V3SWG). Vaccine. 2020 Jul 22;38(34):5556-5561. doi: 10.1016/j.vaccine.2020.06.017. Epub 2020 Jun 19.
PMID: 32571717

Advanced Live Attenuated **Vaccines** for the Prevention of Respiratory Syncytial Virus Infections in Young Children.
Ramilo O, Rodriguez-Fernandez R, Peeples ME, Mejias A. J Infect Dis. 2020 Jun 16;222(1):4-6. doi: 10.1093/infdis/jiz409.
PMID: 31549154

Virus harvesting in perfusion culture: Choosing the right type of hollow fiber membrane.
Nikolay A, de Grooth J, Genzel Y, Wood JA, Reichl U. Biotechnol Bioeng. 2020 Jun 22. doi: 10.1002/bit.27470. Online ahead of print.
PMID: 32568408

Is the worship of celebrities associated with resistance to **vaccinations**? Relationships between celebrity admiration, anti-**vaccination** attitudes, and beliefs in conspiracy.
Martinez-Berman L, McCutcheon L, Huynh HP. Psychol Health Med. 2020 Jun 18:1-10. doi: 10.1080/13548506.2020.1778754. Online ahead of print.
PMID: 32551900

Toll-Like Receptor Ligand Based Adjuvant, PorB, Increases Antigen Deposition on Germinal Center Follicular Dendritic Cells While Enhancing the Follicular Dendritic Cells Network.
Lisk C, Yuen R, Kuniholm J, Antos D, Reiser ML, Wetzler LM. Front Immunol. 2020 Jun 19;11:1254. doi: 10.3389/fimmu.2020.01254. eCollection 2020.
PMID: 32636846

Chemokine (C-X-C motif) Ligand 4 is a Restrictor of Respiratory Syncytial Virus Infection and an Indicator of Clinical Severity.
Han Z, Rao J, Xie Z, Wang C, Xu B, Qian S, Wang Y, Zhu J, Yang B, Xu F, Lei X, Guo F, Zhao Z, Ren L, Wang J. Am J Respir Crit Care Med. 2020 Jun 16. doi: 10.1164/rccm.201908-1567OC. Online ahead of print.
PMID: 32543879

Adrenoleukodystrophy Newborn Screening in the Netherlands (SCAN Study): The X-Factor.

Barendsen RW, Dijkstra IME, Visser WF, Alders M, Bliek J, Boelen A, Bouva MJ, van der Crabben SN, Elsinghorst E, van Gorp AGM, Heijboer AC, Jansen M, Jaspers YRJ, van Lenthe H, Metgod I, Mooij CF, van der Sluijs EHC, van Trotsenburg ASP, Verschoof-Puite RK, Vaz FM, Waterham HR, Wijburg FA, Engelen M, Dekkers E, Kemp S. Front Cell Dev Biol. 2020 Jun 17;8:499. doi: 10.3389/fcell.2020.00499. eCollection 2020.
PMID: 32626714

In silico integrative analysis predicts relevant properties of exotoxin-derived peptides for the design of **vaccines** against Pseudomonas aeruginosa.
Terra ACG, Salvador EA. Infect Genet Evol. 2020 Jun 16;85:104424. doi: 10.1016/j.meegid.2020.104424. Online ahead of print.
PMID: 32561294

Dissection of two drug-targeted regions of Hepatitis C virus subtype 4a infecting Egyptian patients.
El-Tahan RR, Ghoneim AM, Zaghloul H. Virus Genes. 2020 Jun 22:1-18. doi: 10.1007/s11262-020-01776-y. Online ahead of print.
PMID: 32572756

Baculovirus AcMNPV induces type I interferons and NK/NKT cells-mediated protection against foot-and-mouth disease virus in mice.
Nicolás MG, Marco C, Inés GM, Oscar T, Paula M. Antiviral Res. 2020 Jun 20;180:104850. doi: 10.1016/j.antiviral.2020.104850. Online ahead of print.
PMID: 32574690

Leishmania infantum pyridoxal kinase evaluated in a recombinant protein and DNA **vaccine** to protects against visceral leishmaniasis.
Oliveira-da-Silva JA, Lage DP, Ramos FF, Machado AS, Tavares GSV, Mendonça DVC, Pereira IAG, Martins VT, Carvalho LM, Ludolf F, Santos TTO, Reis TAR, Oliveira CS, Bandeira RS, Silva AM, Costa LE, Oliveira JS, Duarte MC, Menezes-Souza D, Roatt BM, Teixeira AL, Coelho EAF. Mol Immunol. 2020 Aug;124:161-171. doi: 10.1016/j.molimm.2020.06.010. Epub 2020 Jun 22.
PMID: 32585510

Unsaturation Elements and Other Modifications of Phospholipids in Bacteria: New Insight from Ultraviolet Photodissociation Mass Spectrometry.
Blevins MS, James VK, Herrera CM, Purcell AB, Trent MS, Brodbelt JS. Anal Chem. 2020 Jul 7;92(13):9146-9155. doi: 10.1021/acs.analchem.0c01449. Epub 2020 Jun 16.
PMID: 32479092

E. coli-Produced Monophosphoryl Lipid a Significantly Enhances Protective Immunity of Pandemic H1N1 **Vaccine**.
Nguyen QT, Kim E, Yang J, Lee C, Ha DH, Lee CG, Lee YR, Poo H. Vaccines (Basel). 2020 Jun 16;8(2):E306. doi: 10.3390/vaccines8020306.
PMID: 32560094

Serological response to influenza **vaccine** in patients with autoimmune inflammatory diseases: Results of RIER study.
Richi P, Martín MD, Andreu-Vázquez C, Jiménez-Diaz A, Steiner M, Muñoz-Fernández S. Med Clin (Barc). 2020 Jun 19:S0025-7753(20)30315-8. doi: 10.1016/j.medcli.2020.04.025. Online ahead of print.
PMID: 32571618

Nanomedicine in Non-Small Cell Lung Cancer: From Conventional Treatments to Immunotherapy.
García-Fernández C, Fornaguera C, Borrós S. Cancers (Basel). 2020 Jun 18;12(6):1609. doi: 10.3390/cancers12061609.
PMID: 32570729

Study of the immunogenicity of the VP2 protein of canine parvovirus produced using an improved Baculovirus expression system.
Chang D, Liu Y, Chen Y, Hu X, Burov A, Puzyr A, Bondar V, Yao L. BMC Vet Res. 2020 Jun 18;16(1):202. doi: 10.1186/s12917-020-02422-3.
PMID: 32552679

Serological diversity in Flavobacterium psychrophilum: A critical update using isolates retrieved from Chilean salmon farms.
Avendaño-Herrera R, Tapia-Cammas D, Duchaud E, Irgang R. J Fish Dis. 2020 Aug;43(8):877-888. doi: 10.1111/jfd.13199. Epub 2020 Jun 21.
PMID: 32567047

Preclinical data from SARS-CoV-2 mRNA **vaccine**.
Vabret N. Nat Rev Immunol. 2020 Jun 22:1. doi: 10.1038/s41577-020-0377-3. Online ahead of print.
PMID: 32572246

Pausing the Fight Against Malaria to Combat the COVID-19 Pandemic in Africa: Is the Future of Malaria Bleak?
Nghochuzie NN, Olwal CO, Udoakang AJ, Amenga-Etego LN, Amambua-Ngwa A. Front Microbiol. 2020 Jun 18;11:1476. doi: 10.3389/fmicb.2020.01476. eCollection 2020.
PMID: 32625198

Development of a live attenuated duck hepatitis A virus type 3 **vaccine** (strain SD70).
Wu F, Lu F, Fan X, Pan Q, Zhao S, Sun H, Zhang J, Liu C, Chao J, Zhang X. Vaccine. 2020 Jun 19;38(30):4695-4703. doi: 10.1016/j.vaccine.2020.05.030. Epub 2020 May 20.
PMID: 32446833

Upper airways colonisation of Streptococcus pneumoniae in adults aged 60 years and older: A systematic review of prevalence and individual participant data meta-analysis of risk factors.

Smith EL, Wheeler I, Adler H, Ferreira DM, Sá-Leão R, Abdullahi O, Adetifa I, Becker-Dreps S, Esposito S, Farida H, Kandasamy R, Mackenzie GA, Nuorti JP, Nzenze S, Madhi SA, Ortega O, Roca A, Safari D, Schaumburg F, Usuf E, Sanders EAM, Grant LR, Hammitt LL, O'Brien KL, Gounder P, Bruden DJT, Stanton MC, Rylance J. J Infect. 2020 Jun 17:S0163-4453(20)30412-6. doi: 10.1016/j.jinf.2020.06.028. Online ahead of print.
PMID: 32562794

Intratumoral immune activation with TLR4 agonist synergizes with effector T cells to eradicate established murine tumors.
Albershardt TC, Leleux J, Parsons AJ, Krull JE, Berglund P, Ter Meulen J. NPJ Vaccines. 2020 Jun 16;5:50. doi: 10.1038/s41541-020-0201-x. eCollection 2020.
PMID: 32579133

Economic evaluation and budget impact analysis of dengue **vaccination** following pre-**vaccination** serological screening in India.
Krishnamoorthy Y, Majella MG. Vaccine. 2020 Jul 14;38(33):5154-5162. doi: 10.1016/j.vaccine.2020.06.028. Epub 2020 Jun 20.
PMID: 32576458

A complex between the Zika virion and the Fab of a broadly cross-reactive neutralizing monoclonal antibody revealed by cryo-EM and single particle analysis at 4.1 Å resolution.
Tyagi A, Ahmed T, Shi J, Bhushan S. J Struct Biol X. 2020 Jun 17;4:100028. doi: 10.1016/j.yjsbx.2020.100028. eCollection 2020.
PMID: 32647830

Assessing the Burden of Laboratory-Confirmed Respiratory Syncytial Virus Infection in a Population Cohort of Australian Children Through Record Linkage.
Moore HC, Lim FJ, Fathima P, Barnes R, Smith DW, de Klerk N, Blyth CC. J Infect Dis. 2020 Jun 16;222(1):92-101. doi: 10.1093/infdis/jiaa058.
PMID: 32031631

Unavailability of paid sick leave among parents is a barrier for children's utilization of nonemergency health services: Evidence from the National Health Interview Survey.
Seixas BV, Macinko J. Int J Health Plann Manage. 2020 Jun 21. doi: 10.1002/hpm.2988. Online ahead of print.
PMID: 32567169

A Decade of Varicella Screening Within a Paediatric Inflammatory Bowel Disease Population.
Harris RE, Curtis L, Hegde V, Garrick V, Gervais L, Armstrong L, Delahunty C, Eccleston A, Al-Hourani G, Flynn DM, Merrick V, Barclay AR, Tayler R, Hansen R, Russell RK. J Crohns Colitis. 2020 Jun 19;14(5):608-616. doi: 10.1093/ecco-jcc/jjz207.
PMID: 31889176

What can **vaccines** learn from aviation?
Gastineau T. Vaccine. 2020 Jul 14;38(33):5082-5084. doi: 10.1016/j.vaccine.2020.06.027. Epub 2020 Jun 18.
PMID: 32565341

Nanoparticles of Lovastatin: Design, Optimization and in vivo Evaluation.
Gaber DA. Int J Nanomedicine. 2020 Jun 17;15:4225-4236. doi: 10.2147/IJN.S241120. eCollection 2020.
PMID: 32606674

Response to the conjugate pneumococcal **vaccine** (PCV13) in patients with chronic lymphocytic leukemia (CLL).
Mauro FR, Giannarelli D, Galluzzo CM, Vitale C, Visentin A, Riemma C, Rosati S, Porrazzo M, Pepe S, Coscia M, Trentin L, Gentile M, Raponi S, Micozzi A, Gentile G, Baroncelli S. Leukemia. 2020 Jun 17. doi: 10.1038/s41375-020-0884-z. Online ahead of print.
PMID: 32555297

Characterization and Evolutionary Analysis of a Novel H3N2 Influenza A Virus Glycosylation Motif in Southern China.
Zeng Z, Yau LF, Lin Z, Xia X, Yang Z, Wang JR, Song W, Wang X. Front Microbiol. 2020 Jun 16;11:1318. doi: 10.3389/fmicb.2020.01318. eCollection 2020.
PMID: 32612596

Merit of an Ursodeoxycholic Acid Clinical Trial in COVID-19 Patients.
Subramanian S, Iles T, Ikramuddin S, Steer CJ. Vaccines (Basel). 2020 Jun 19;8(2):E320. doi: 10.3390/vaccines8020320.
PMID: 32575350

[Research progress on the clinical features and mechanisms of COVID-19 combined with liver injury].
Xie YB, Wang SY, Zhang C, Wang FS. Zhonghua Gan Zang Bing Za Zhi. 2020 Jun 20;28(6):523-527. doi: 10.3760/cma.j.cn501113-20200416-00190.
PMID: 32660185

The Effect of **Vaccination** with Live Attenuated Neethling Lumpy Skin Disease **Vaccine** on Milk Production and Mortality-An Analysis of 77 Dairy Farms in Israel.
Morgenstern M, Klement E. Vaccines (Basel). 2020 Jun 19;8(2):E324. doi: 10.3390/vaccines8020324.
PMID: 32575395

Structural and functional conservation of the programmed -1 ribosomal frameshift signal of SARS coronavirus 2 (SARS-CoV-2).
Kelly JA, Olson AN, Neupane K, Munshi S, San Emeterio J, Pollack L, Woodside MT, Dinman JD. J Biol Chem. 2020 Jun 22:jbc.AC120.013449. doi: 10.1074/jbc.AC120.013449. Online ahead of print.
PMID: 32571880

Replication of Equine arteritis virus is efficiently suppressed by purine and pyrimidine biosynthesis inhibitors.
Valle-Casuso JC, Gaudaire D, Martin-Faivre L, Madeline A, Dallemagne P, Pronost S, Munier-Lehmann H, Zientara S, Vidalain PO, Hans A. Sci Rep. 2020 Jun 22;10(1):10100. doi: 10.1038/s41598-020-66944-4.
PMID: 32572069

Human papillomavirus (HPV) **vaccine** utilization among adults (18-29 years), BRFSS 2015.
Wiener RC, Findley PA, Shen C, Dwibedi N, Sambamoorthi U. Vaccine. 2020 Jul 14;38(33):5119-5122. doi: 10.1016/j.vaccine.2020.05.056. Epub 2020 Jun 19.
PMID: 32565345

The combination of Brazilian red propolis and recombinant protein rCP01850 in the immunoprophylaxis of Corynebacterium pseudotuberculosis infection in mice.
Brilhante Bezerra FS, de Fátima Silva Rezende A, Thaís de Oliveira Silva M, Sena-Lopes Â, Ely MR, Pêgas Henriques JA, Padilha FF, Carvalho Azevedo VA, Dias Portela RW, Seixas FK, Collares TV, Savegnago L, Borsuk S. Microb Pathog. 2020 Jun 19:104354. doi: 10.1016/j.micpath.2020.104354. Online ahead of print.
PMID: 32569789

Explaining socioeconomic inequalities in immunisation coverage in India: new insights from the fourth National Family Health Survey (2015-16).
Srivastava S, Fledderjohann J, Upadhyay AK. BMC Pediatr. 2020 Jun 16;20(1):295. doi: 10.1186/s12887-020-02196-5.
PMID: 32546138

COVID-19 Clinical Trials: A Teachable Moment for Improving Our Research Infrastructure and Relevance.
Kimmel SE, Califf RM, Dean NE, Goodman SN, Ogburn EL. Ann Intern Med. 2020 Jun 16:M20-2959. doi: 10.7326/M20-2959. Online ahead of print.
PMID: 32543881

WHO informal consultation on the guidelines for evaluation of the quality, safety, and efficacy of DNA **vaccines**, Geneva, Switzerland, December 2019.
Sheets R, Kang HN, Meyer H, Knezevic I; WHO informal consultation on development of guidelines for assuring the quality, safety, and efficacy of DNA vaccine. NPJ Vaccines. 2020 Jun 18;5:52. doi: 10.1038/s41541-020-0197-2. eCollection 2020.
PMID: 32579135

The UK Veterinary Immunological Toolbox Website: promoting **vaccine** research by facilitating communication and removing reagent barriers.
Mwangi W, Maccari G, Hope JC, Entrican G, Hammond JA. Immunology. 2020 Jun 16. doi: 10.1111/imm.13227. Online ahead of print.
PMID: 32548865

Intranasal inoculations of naked or PLGA-PEI nanovectored DNA **vaccine** induce systemic and mucosal antibodies in pigs: A feasibility study.
Souci L, Jaunet H, Le Diguerher G, Guionnet JM, Béven V, Paboeuf F, Montier T, Dory D. Res Vet Sci. 2020 Jun 19;132:194-201. doi: 10.1016/j.rvsc.2020.06.018. Online ahead of print.
PMID: 32619800

A recombinant gp145 Env glycoprotein from HIV-1 expressed in two different cell lines: Effects on glycosylation and antigenicity.
González-Feliciano JA, Akamine P, Capó-Vélez CM, Delgado-Vélez M, Dussupt V, Krebs SJ, Wojna V, Polonis VR, Baerga-Ortiz A, Lasalde-Dominicci JA. PLoS One. 2020 Jun 19;15(6):e0231679. doi: 10.1371/journal.pone.0231679. eCollection 2020.
PMID: 32559193

Cross-reactive carbohydrate determinant-specific IgE obscures true atopy and exhibits α-1,3-fucose epitope-specific inverse associations with asthma.
Nkurunungi G, Mpairwe H, Versteeg SA, van Diepen A, Nassuuna J, Kabagenyi J, Nambuya I, Sanya RE, Nampijja M, Serna S, Reichardt NC, Hokke CH, Webb EL, van Ree R, Yazdanbakhsh M, Elliott AM. Allergy. 2020 Jun 22. doi: 10.1111/all.14469. Online ahead of print.
PMID: 32568414

MHC class II invariant chain-adjuvanted viral vectored **vaccines** enhances T cell responses in humans.
Esposito I, Cicconi P, D'Alise AM, Brown A, Esposito M, Swadling L, Holst PJ, Bassi MR, Stornaiuolo M, Mori F, Vassilev V, Li W, Donnison T, Gentile C, Turner B, von Delft A, Del Sorbo M, Barra F, Contino AM, Abbate A, Novellino E, Thomsen AR, Christensen JP, Lahm A, Grazioli F, Ammendola V, Siani L, Colloca S, Klenerman P, Nicosia A, Dorrell L, Folgori A, Capone S, Barnes E; PEACHI Consortium. Sci Transl Med. 2020 Jun 17;12(548):eaaz7715. doi: 10.1126/scitranslmed.aaz7715.
PMID: 32554708

Mitigating social and economic sources of trauma: The need for universal basic income during the coronavirus pandemic.
Johnson MT, Johnson EA, Webber L, Nettle D. Psychol Trauma. 2020 Aug;12(S1):S191-S192. doi: 10.1037/tra0000739. Epub 2020 Jun 18.
PMID: 32551770

How to expedite early-phase SARS-CoV-2 **vaccine** trials in pandemic setting-A practical perspective.
van der Plas JL, Roestenberg M, Cohen AF, Kamerling IMC. Br J Clin Pharmacol. 2020 Jun 19:10.1111/bcp.14435. doi: 10.1111/bcp.14435. Online ahead of print.
PMID: 32557771

The Survivor: A Clinical Case of Tetanus in a Non-Immunized, Parenteral Drug User, Former Female Convict with HIV and HCV.

Vicente-Alcalde N, Martín-Casquero T, Ruescas-Escolano E, Tuells J. Vaccines (Basel). 2020 Jun 17;8(2):E308. doi: 10.3390/vaccines8020308.
PMID: 32560315

Utilising animal models to evaluate oseltamivir efficacy against influenza A and B viruses with reduced in vitro susceptibility.
Farrukee R, Tai CM, Oh DY, Anderson DE, Gunalan V, Hibberd M, Lau GY, Barr IG, Messling VV, Maurer-Stroh S, Hurt AC. PLoS Pathog. 2020 Jun 18;16(6):e1008592. doi: 10.1371/journal.ppat.1008592. eCollection 2020 Jun.
PMID: 32555740

The pore size of mesoporous silica nanoparticles regulates their antigen delivery efficiency.
Hong X, Zhong X, Du G, Hou Y, Zhang Y, Zhang Z, Gong T, Zhang L, Sun X. Sci Adv. 2020 Jun 19;6(25):eaaz4462. doi: 10.1126/sciadv.aaz4462. eCollection 2020 Jun.
PMID: 32596445

Why do SARS-COV **vaccines** not exist? The pharma scientific intelligence and business model must be revisited!
Boudjelal M, Nehdi A, Islam I. Expert Opin Drug Discov. 2020 Jun 16:1-3. doi: 10.1080/17460441.2020.1777980. Online ahead of print.
PMID: 32543297

Respiratory viral coinfection in a birth cohort of infants in rural Nepal.
Emanuels A, Hawes SE, Newman KL, Martin ET, Englund JA, Tielsch JM, Kuypers J, Khatry SK, LeClerq SC, Katz J, Chu HY. Influenza Other Respir Viruses. 2020 Jun 22. doi: 10.1111/irv.12775. Online ahead of print.
PMID: 32567818

Faster waning of the rubella specific immune response in young pregnant women immunized with MMR at 15 months.
Kung WJ, Shih CT, Shih YL, Liu LY, Wang CH, Cheng YW, Liu HC, Lin CC. Am J Reprod Immunol. 2020 Jun 22:e13294. doi: 10.1111/aji.13294. Online ahead of print.
PMID: 32569402

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 Jul 14;38(33):5241-5248. doi: 10.1016/j.vaccine.2020.05.093. Epub 2020 Jun 16.
PMID: 32553493

Bcl-6 is the nexus transcription factor of T follicular helper cells via repressor-of-repressor circuits.
Choi J, Diao H, Faliti CE, Truong J, Rossi M, Bélanger S, Yu B, Goldrath AW, Pipkin ME, Crotty S. Nat Immunol. 2020 Jul;21(7):777-789. doi: 10.1038/s41590-020-0706-5. Epub 2020 Jun 22.
PMID: 32572238

Interest of bacterial pangenome analyses in clinical microbiology.
Anani H, Zgheib R, Hasni I, Raoult D, Fournier PE. Microb Pathog. 2020 Jun 17;149:104275. doi: 10.1016/j.micpath.2020.104275. Online ahead of print.
PMID: 32562810

Postnatal Outcomes and Risk Factors for In-Hospital Mortality among Asphyxiated Newborns in a Low-Resource Hospital Setting: Experience from North-Central Nigeria.
Ogunkunle TO, Odiachi H, Chuma JR, Bello SO, Imam A. Ann Glob Health. 2020 Jun 18;86(1):63. doi: 10.5334/aogh.2884.
PMID: 32587813

Respiratory Immunization With a Whole Cell Inactivated **Vaccine** Induces Functional Mucosal Immunoglobulins Against Tuberculosis in Mice and Non-human Primates.
Aguilo N, Uranga S, Mata E, Tarancon R, Gómez AB, Marinova D, Otal I, Monzón M, Badiola J, Montenegro D, Puentes E, Rodríguez E, Vervenne RAW, Sombroek CC, Verreck FAW, Martín C. Front Microbiol. 2020 Jun 18;11:1339. doi: 10.3389/fmicb.2020.01339. eCollection 2020.
PMID: 32625195

Active immunoprophylaxis with a synthetic DNA-encoded monoclonal anti-respiratory syncytial virus scFv-Fc fusion protein confers protection against infection and durable activity.
Schultheis K, Pugh HM, Oh J, Nguyen J, Yung B, Reed C, Cooch N, Chen J, Yan J, Muthumani K, Humeau LM, Weiner DB, Broderick KE, Smith TRF. Hum Vaccin Immunother. 2020 Jun 16:1-11. doi: 10.1080/21645515.2020.1748979. Online ahead of print.
PMID: 32544376

Immunogenicity and Efficacy of Zika Virus Envelope Domain III in DNA, Protein, and ChAdOx1 Adenoviral-Vectored **Vaccines**.
López-Camacho C, De Lorenzo G, Slon-Campos JL, Dowall S, Abbink P, Larocca RA, Kim YC, Poggianella M, Graham V, Findlay-Wilson S, Rayner E, Carmichael J, Dejnirattisai W, Boyd M, Hewson R, Mongkolsapaya J, Screaton GR, Barouch DH, Burrone OR, Patel AH, Reyes-Sandoval A. Vaccines (Basel). 2020 Jun 16;8(2):E307. doi: 10.3390/vaccines8020307.
PMID: 32560145

Risk Assessment and Virological Monitoring Following an Accidental Exposure to Concentrated Sabin Poliovirus Type 3 in France, November 2018.
Jeannoël M, Antona D, Lazarus C, Lina B, Schuffenecker I. Vaccines (Basel). 2020 Jun 22;8(2):E331. doi: 10.3390/vaccines8020331.
PMID: 32580378

Nitric Oxide Production and Fc Receptor-Mediated Phagocytosis as Functional Readouts of Macrophage Activity upon Stimulation with Inactivated Poultry **Vaccines** In Vitro.

van den Biggelaar RH, van Eden W, Rutten VP, Jansen CA. Vaccines (Basel). 2020 Jun 22;8(2):332. doi: 10.3390/vaccines8020332.
PMID: 32580391

Pregnant Women in Trials of Covid-19: A Critical Time to Consider Ethical Frameworks of Inclusion in Clinical Trials.
Farrell R, Michie M, Pope R. Ethics Hum Res. 2020 Jul;42(4):17-23. doi: 10.1002/eahr.500060. Epub 2020 Jun 20.
PMID: 32562594

Modelling the Measles Outbreak at Hong Kong International Airport in 2019: A Data-Driven Analysis on the Effects of Timely Reporting and Public Awareness.
Zhao S, Tang X, Liang X, Chong MKC, Ran J, Musa SS, Yang G, Cao P, Wang K, Zee BCY, Wang X, He D, Wang MH. Infect Drug Resist. 2020 Jun 17;13:1851-1861. doi: 10.2147/IDR.S258035. eCollection 2020.
PMID: 32606834

A double-blind randomized phase 2 controlled trial of intradermal hepatitis B **vaccination** with a topical Toll-like receptor 7 agonist imiquimod, in patients on dialysis.
Hung IF, Yap DY, Yip TP, Zhang RR, To KK, Chan KH, Tang SC, Lui SL, Levin Y, Kochba E, Lau JY, Yuen MF, Chan TM, Yuen KY. Clin Infect Dis. 2020 Jun 18:ciaa804. doi: 10.1093/cid/ciaa804. Online ahead of print.
PMID: 32556176

Pandemic **vaccines** are about to face the real test.
Cohen J. Science. 2020 Jun 19;368(6497):1295-1296. doi: 10.1126/science.368.6497.1295.
PMID: 32554572

B-cell epitope peptide cancer **vaccines**: a new paradigm for combination immunotherapies with novel checkpoint peptide **vaccine**.
Kaumaya PT. Future Oncol. 2020 Jun 21. doi: 10.2217/fon-2020-0224. Online ahead of print.
PMID: 32564612

Transdermal Composite Microneedle Composed of Mesoporous Iron Oxide Nanoraspberry and PVA for Androgenetic Alopecia Treatment.
Fang JH, Liu CH, Hsu RS, Chen YY, Chiang WH, Wang HD, Hu SH. Polymers (Basel). 2020 Jun 22;12(6):E1392. doi: 10.3390/polym12061392.
PMID: 32580298

A multiple drug-resistant Streptococcus pneumoniae of serotype 15A occurring from serotype 19A by capsular switching.
Savinova T, Brzhozovskaya E, Shagin D, Mikhaylova Y, Shelenkov A, Yanushevich Y, Mayanskiy N. Vaccine. 2020 Jul 14;38(33):5114-5118. doi: 10.1016/j.vaccine.2020.05.075. Epub 2020 Jun 18.
PMID: 32565342

pH-Responsive Biomimetic Polymeric Micelles as Lymph Node-Targeting **Vaccines** for Enhanced Antitumor Immune Responses.
Yang X, Yu T, Zeng Y, Lian K, Zhou X, Ke J, Li Y, Yuan H, Hu F. Biomacromolecules. 2020 Jul 13;21(7):2818-2828. doi: 10.1021/acs.biomac.0c00518. Epub 2020 Jun 16.
PMID: 32496052

IFN-I Independent Antiviral Immune Response to Vesicular Stomatitis Virus Challenge in Mouse Brain.
Mishra AR, Byrareddy SN, Nayak D. Vaccines (Basel). 2020 Jun 19;8(2):E326. doi: 10.3390/vaccines8020326.
PMID: 32575459

Mozambique's response to cyclone Idai: how collaboration and surveillance with water, sanitation and hygiene (WASH) interventions were used to control a cholera epidemic.
Lequechane JD, Mahumane A, Chale F, Nhabomba C, Salomão C, Lameira C, Chicumbe S, Semá Baltazar C. Infect Dis Poverty. 2020 Jun 16;9(1):68. doi: 10.1186/s40249-020-00692-5.
PMID: 32546268

A Low Fidelity Virus Shows Increased Recombination during the Removal of an Alphavirus Reporter Gene.
Kautz TF, Jaworski E, Routh A, Forrester NL. Viruses. 2020 Jun 19;12(6):E660. doi: 10.3390/v12060660.
PMID: 32575413

Next-generation Viral RNA/DNA in situ Hybridization Applications in Human Immunodeficiency Virus/Simian Immunodeficiency Virus Research.
Brands C, Morcock D, Estes J, Deleage C. J Vis Exp. 2020 Jun 17;(160). doi: 10.3791/60318.
PMID: 32628155

Clinically Relevant Chemotherapeutics Have the Ability to Induce Immunogenic Cell Death in Non-Small Cell Lung Cancer.
Flieswasser T, Van Loenhout J, Freire Boullosa L, Van den Eynde A, De Waele J, Van Audenaerde J, Lardon F, Smits E, Pauwels P, Jacobs J. Cells. 2020 Jun 16;9(6):E1474. doi: 10.3390/cells9061474.
PMID: 32560232

Mi Argentina/Mi Salud: The Argentinian Citizen Digital Health Portal.
Rizzato Lede DA, Pedernera FA, López E, Speranza CD, Maid JJ, Gassino F, Argibay O, Castiglione R, Pujadas G, Gonzalez Alvaredo E, Álvarez R, Markiewicz MB, Alegre F, Ferrareis L, Rolandi F, Ayala F, Abadie DA, Cejas CA, López Osornio A, Rubinstein A. Stud Health Technol Inform. 2020 Jun 16;270:1011-1015. doi: 10.3233/SHTI200314.
PMID: 32570534

Management of dengue hemorrhagic fever in a secondary level hospital in Bangladesh: A case report.
Jahan Y, Rahman A. IDCases. 2020 Jun 20;21:e00880. doi: 10.1016/j.idcr.2020.e00880. eCollection 2020.

PMID: 32642430

Data retrieved from in silico evaluation of **vaccine** potential of ZnuD protein in Acinetobacter baumannii.
Mobarak Qamsari M, Rasooli I, Darvish Alipour Astaneh S. Data Brief. 2020 Jun 20;31:105892. doi: 10.1016/j.dib.2020.105892. eCollection 2020 Aug.
PMID: 32637498

Malaria According to GARP: A New Trail towards Anti-disease **Vaccination**.
Hon C, Matuschewski K. Trends Parasitol. 2020 Aug;36(8):653-655. doi: 10.1016/j.pt.2020.05.012. Epub 2020 Jun 17.
PMID: 32563704

Serum neutralising antibody titres against a lineage 2 neuroinvasive West Nile Virus strain in response to **vaccination** with an inactivated lineage 1 **vaccine** in a European endemic area.
Fehér O, Bakonyi T, Barna M, Nagy A, Takács M, Szenci O, Joó K, Sárdi S, Korbacska-Kutasi O. Vet Immunol Immunopathol. 2020 Jun 20;227:110087. doi: 10.1016/j.vetimm.2020.110087. Online ahead of print.
PMID: 32629300

Ribotype Classification of *Clostridioides difficile* Isolates Is Not Predictive of the Amino Acid Sequence Diversity of the Toxin Virulence Factors TcdA and TcdB.
Li Z, Lee K, Rajyaguru U, Jones CH, Janezic S, Rupnik M, Anderson AS, Liberator P. Front Microbiol. 2020 Jun 19;11:1310. doi: 10.3389/fmicb.2020.01310. eCollection 2020.
PMID: 32636819

Lipidation of Pneumococcal Antigens Leads to Improved Immunogenicity and Protection.
Voß F, van Beek LF, Schwudke D, Ederveen THA, van Opzeeland FJ, Thalheim D, Werner S, de Jonge MI, Hammerschmidt S. Vaccines (Basel). 2020 Jun 17;8(2):E310. doi: 10.3390/vaccines8020310.
PMID: 32560374

Serostatus following polio-containing **vaccination** before and after liver transplantation.
Funaki T, Fukuda A, Sakamoto S, Kasahara M, Saitoh A, Miyairi I. Pediatr Transplant. 2020 Jun 18:e13766. doi: 10.1111/petr.13766. Online ahead of print.
PMID: 32558028

Engineering autologous tumor cell **vaccine** to locally mobilize antitumor immunity in tumor surgical bed.
Fang L, Zhao Z, Wang J, Zhang P, Ding Y, Jiang Y, Wang D, Li Y. Sci Adv. 2020 Jun 19;6(25):eaba4024. doi: 10.1126/sciadv.aba4024. eCollection 2020 Jun.
PMID: 32596457

Measles immunity gaps in an era of high **vaccination** coverage: A serology study from Taiwan.
Lee YC, Lee YH, Lu CW, Cheng SY, Yang KC, Huang KC. Travel Med Infect Dis. 2020 Jun 19:101804. doi: 10.1016/j.tmaid.2020.101804. Online ahead of print.

PMID: 32569810

SETE: Sequence-based Ensemble learning approach for TCR Epitope binding prediction.
Tong Y, Wang J, Zheng T, Zhang X, Xiao X, Zhu X, Lai X, Liu X. Comput Biol Chem. 2020 Jun 20;87:107281. doi: 10.1016/j.compbiolchem.2020.107281. Online ahead of print.
PMID: 32623023

Characterizing the BCG Induced Macrophage and Neutrophil Mechanisms for Defense Against *Mycobacterium tuberculosis*.
Bickett TE, McLean J, Creissen E, Izzo L, Hagan C, Izzo AJ, Silva Angulo F, Izzo AA. Front Immunol. 2020 Jun 18;11:1202. doi: 10.3389/fimmu.2020.01202. eCollection 2020.
PMID: 32625209

In vitro 3D culture lung model from expanded primary cystic fibrosis human airway cells.
Rayner RE, Wellmerling J, Osman W, Honesty S, Alfaro M, Peeples ME, Cormet-Boyaka E. J Cyst Fibros. 2020 Jun 18:S1569-1993(20)30151-X. doi: 10.1016/j.jcf.2020.05.007. Online ahead of print.
PMID: 32565193

Different genetic barriers for resistance to HA stem antibodies in influenza H3 and H1 viruses.
Wu NC, Thompson AJ, Lee JM, Su W, Arlian BM, Xie J, Lerner RA, Yen HL, Bloom JD, Wilson IA. Science. 2020 Jun 19;368(6497):1335-1340. doi: 10.1126/science.aaz5143.
PMID: 32554590

RPL-6: An Achilles Needle in the Malaria Haystack?
Drewry LL, Harty JT. Trends Parasitol. 2020 Aug;36(8):651-653. doi: 10.1016/j.pt.2020.06.001. Epub 2020 Jun 18.
PMID: 32565051

Near Real Time Feedback of Seasonal Influenza **Vaccination** and Virological Sampling: Dashboard Utilisation in a Primary Care Sentinel Network.
Liyanage H, Akinyemi O, Pathirannahelage S, Joy M, de Lusignan S. Stud Health Technol Inform. 2020 Jun 16;270:1339-1340. doi: 10.3233/SHTI200431.
PMID: 32570648

Harnessing Activin A Adjuvanticity to Promote Antibody Responses to BG505 HIV Envelope Trimers.
Carnathan DG, Kaushik K, Ellebedy AH, Enemuo CA, Gebru EH, Dhadvai P, Rasheed MAU, Pauthner MG, Ozorowski G, Ahmed R, Burton DR, Ward AB, Silvestri G, Crotty S, Locci M. Front Immunol. 2020 Jun 16;11:1213. doi: 10.3389/fimmu.2020.01213. eCollection 2020.
PMID: 32612608

Recombinant Lactaptin Induces Immunogenic Cell Death and Creates an Antitumor **Vaccination** Effect in Vivo with Enhancement by an IDO Inhibitor.

Troitskaya O, Varlamov M, Nushtaeva A, Richter V, Koval O. Molecules. 2020 Jun 17;25(12):E2804. doi: 10.3390/molecules25122804.
PMID: 32560527

'Secondary prevention' against female HPV infection: literature review of the role of carrageenan.
Calagna G, Maranto M, Paola C, Capra G, Perino A, Chiantera V, Cucinella G. Expert Rev Anti Infect Ther. 2020 Jun 19:1-10. doi: 10.1080/14787210.2020.1770082. Online ahead of print.
PMID: 32552158

Development of adaptive resistance to electric pulsed field treatment in CHO cell line in vitro.
Polajžer T, Miklavčič D. Sci Rep. 2020 Jun 19;10(1):9988. doi: 10.1038/s41598-020-66879-w.
PMID: 32561789

COVID-19 in jails and prisons: A neglected infection in a marginalized population.
Franco-Paredes C, Jankousky K, Schultz J, Bernfeld J, Cullen K, Quan NG, Kon S, Hotez P, Henao-Martínez AF, Krsak M. PLoS Negl Trop Dis. 2020 Jun 22;14(6):e0008409. doi: 10.1371/journal.pntd.0008409. eCollection 2020 Jun.
PMID: 32569274

Clostridioides difficile toxin testing and positivity in Manitoba, Canada.
Righolt CH, Zhang G, Hammond GW, Lagace-Wiens P, Mahmud SM. Infect Control Hosp Epidemiol. 2020 Jun 19:1-3. doi: 10.1017/ice.2020.264. Online ahead of print.
PMID: 32624038

New international guidance on quality, safety and efficacy of DNA **vaccines**.
Beasley DWC. NPJ Vaccines. 2020 Jun 18;5:53. doi: 10.1038/s41541-020-0199-0. eCollection 2020.
PMID: 32579137

A novel approach to display structural proteins of HCV quasispecies in patients reveals a key role of E2 HVR1 in viral evolution.
Tong Y, Li Q, Li R, Xu Y, Pan Y, Niu J, Zhong J. J Virol. 2020 Jun 17:JVI.00622-20. doi: 10.1128/JVI.00622-20. Online ahead of print.
PMID: 32554700

Factors associated with HIV serodiscordance among couples in Mozambique: Comparison of the 2009 INSIDA and 2015 IMASIDA surveys.
Juga AJC, Hens N, Osman N, Aerts M. PLoS One. 2020 Jun 16;15(6):e0234723. doi: 10.1371/journal.pone.0234723. eCollection 2020.
PMID: 32544170

An *in silico* approach for identification of novel inhibitors as potential therapeutics targeting COVID-19 main protease.

Havranek B, Islam SM. J Biomol Struct Dyn. 2020 Jun 16:1-12. doi: 10.1080/07391102.2020.1776158. Online ahead of print.
PMID: 32544024

Drug repurposing against SARS-CoV-2 using E-pharmacophore based virtual screening, molecular docking and molecular dynamics with main protease as the target.
Arun KG, Sharanya CS, Abhithaj J, Francis D, Sadasivan C. J Biomol Struct Dyn. 2020 Jun 22:1-12. doi: 10.1080/07391102.2020.1779819. Online ahead of print.
PMID: 32571168

A fentanyl **vaccine** constructed upon opsonizing antibodies specific for the Galα1-3Gal epitope.
Wang J , Ellis B , Zhou B , Eubanks LM , Blake S , Janda KD . Chem Commun (Camb). 2020 Jun 18;56(48):6551-6554. doi: 10.1039/d0cc02107e. Epub 2020 May 12.
PMID: 32396160

IFNγ Production Profile in Turkeys of Different Immunological Status after TRT **Vaccination**.
Śmiałek M, Tykałowski B, Dziewulska D, Kowalczyk J, Koncicki A. J Vet Res. 2020 Jun 16;64(2):239-245. doi: 10.2478/jvetres-2020-0040. eCollection 2020 Jun.
PMID: 32587910

Letter to the Editor: Venezuelan Equine Encephalitis virus 1B Invasion and Epidemic Control-South Texas, 1971.
McLean RG. Trop Med Infect Dis. 2020 Jun 22;5(2):104. doi: 10.3390/tropicalmed5020104.
PMID: 32580287

Predictors of antibody persistence to the 7-valent pneumococcal conjugate **vaccine** in healthy Fijian infants at 12 months of age.
Lindholm DE, Licciardi PV, Ratu FT, Kim Mulholland E, Nguyen CD, Russell FM. Vaccine. 2020 Jul 14;38(33):5095-5099. doi: 10.1016/j.vaccine.2020.06.025. Epub 2020 Jun 21.
PMID: 32580918

The four of structural genes sequences of a porcine epidemic diarrhea virus from domestic piglet in Fujian, China.
Dong B, Dai A, Li X, Yang X. Virol J. 2020 Jun 18;17(1):79. doi: 10.1186/s12985-020-01345-7.
PMID: 32552768

Entecavir Plus Pegylated Interferon and Sequential HBV **Vaccination** Increases HBsAg Seroclearance: A Randomized Controlled Proof-of-Concept Study.
Lee JH, Lee YB, Cho EJ, Yu SJ, Yoon JH, Kim YJ. Clin Infect Dis. 2020 Jun 18:ciaa807. doi: 10.1093/cid/ciaa807. Online ahead of print.
PMID: 32556157

Immune response to rabies post-exposure prophylaxis in patients with non-HIV secondary immunodeficiencies.
Parize P, Poujol P, Morineau Le Houssine P, Goesch J, Lucet C, Basuyau L, Cailhol J, Dacheux L, Bourhy H, Consigny PH. Vaccine. 2020 Jul 14;38(33):5091-5094. doi: 10.1016/j.vaccine.2020.06.037. Epub 2020 Jun 22.
PMID: 32586759

Coronavirus Disease 2019: Is Everything Lawful to Create an Effective **Vaccine**?
Cioffi A. J Infect Dis. 2020 Jun 16;222(1):169. doi: 10.1093/infdis/jiaa216.
PMID: 32348489

Virtual drug repurposing study against SARS-CoV-2 TMPRSS2 target.
DurdaĞi S. Turk J Biol. 2020 Jun 21;44(3):185-191. doi: 10.3906/biy-2005-112. eCollection 2020.
PMID: 32595355

A cross-reactive mouse monoclonal antibody against rhinovirus mediates phagocytosis in vitro.
Behzadi MA, Choi A, Duehr J, Feyznezhad R, Upadhyay C, Schotsaert M, Palese P, Nachbagauer R. Sci Rep. 2020 Jun 16;10(1):9750. doi: 10.1038/s41598-020-66600-x.
PMID: 32546721

Covid-19: Health and care workers will be "highest priority" for **vaccination**, says JCVI.
Wise J. BMJ. 2020 Jun 19;369:m2477. doi: 10.1136/bmj.m2477.
PMID: 32561527

A dose-response study in mice of a tetravalent recombinant dengue envelope domain III protein secreted from insect cells.
Shao L, Pang Z, Bi Y, Li Z, Lin W, Li G, Guo Y, Qi J, Niu G. Infect Genet Evol. 2020 Jun 18:104427. doi: 10.1016/j.meegid.2020.104427. Online ahead of print.
PMID: 32565359

Targeting Nuclear LSD1 to Reprogram Cancer Cells and Reinvigorate Exhausted T Cells via a Novel LSD1-EOMES Switch.
Tu WJ, McCuaig RD, Tan AHY, Hardy K, Seddiki N, Ali S, Dahlstrom JE, Bean EG, Dunn J, Forwood J, Tsimbalyuk S, Smith K, Yip D, Malik L, Prasanna T, Milburn P, Rao S. Front Immunol. 2020 Jun 16;11:1228. doi: 10.3389/fimmu.2020.01228. eCollection 2020.
PMID: 32612611

Genomic Analysis Reveals Antibiotic Susceptible Clones and Emerging Resistance in *Neisseria gonorrhoeae* (Saskatchewan, Canada).
Parmar NR, Singh R, Martin I, Perera SR, Demczuk W, Kusalik A, Minion J, Dillon JR. Antimicrob Agents Chemother. 2020 Jun 22:AAC.02514-19. doi: 10.1128/AAC.02514-19. Online ahead of print.
PMID: 32571818

Urine Tenofovir Levels Measured by a Novel Immunoassay Predict HIV Protection.
Stalter RM, Baeten JM, Donnell D, Spinelli MA, Glidden DV, Rodrigues WC, Wang G, Vincent M, Mugo N, Mujugira A, Marzinke M, Hendrix C, Gandhi M; Partners PrEP Study Team. Clin Infect Dis. 2020 Jun 22:ciaa785. doi: 10.1093/cid/ciaa785. Online ahead of print.
PMID: 32569370

Sensorineural hearing loss (SNHL) as an adverse event following immunization (AEFI): Case definition & guidelines for data collection, analysis, and presentation of immunization safety data.
Carol Liu YC, Ibekwe T, Kelso JM, Klein NP, Shehu N, Steuerwald W, Aneja S, Dudley MZ, Garry R, Munoz FM; Brighton Collaboration SNHL Working Group. Vaccine. 2020 Jun 19;38(30):4717-4731. doi: 10.1016/j.vaccine.2020.05.019. Epub 2020 May 15.
PMID: 32418788

The covalent SNAP tag for protein display quantification and low-pH protein engineering.
Jin W, Madan B, Mussman BK, Hailemariam AT, Fahad AS, Wolfe JR, Kwon YD, Zhang B, Shapiro L, Kwong PD, DeKosky BJ. J Biotechnol. 2020 Jun 16;320:50-56. doi: 10.1016/j.jbiotec.2020.06.011. Online ahead of print.
PMID: 32561362

Regional BCG **vaccination** policy in former East- and West Germany may impact on both severity of SARS-CoV-2 and incidence of childhood leukemia.
Hauer J, Fischer U, Auer F, Borkhardt A. Leukemia. 2020 Jun 18:1-3. doi: 10.1038/s41375-020-0871-4. Online ahead of print.
PMID: 32555367

CD4$^+$ T cells persist for years in the human small intestine and display a T_H1 cytokine profile.
Bartolomé-Casado R, Landsverk OJB, Chauhan SK, Sætre F, Hagen KT, Yaqub S, Øyen O, Horneland R, Aandahl EM, Aabakken L, Bækkevold ES, Jahnsen FL. Mucosal Immunol. 2020 Jun 22. doi: 10.1038/s41385-020-0315-5. Online ahead of print.
PMID: 32572129

Use of seasonal influenza and pneumococcal polysaccharide **vaccines** in older adults to reduce COVID-19 mortality.
Thindwa D, Garcia Quesada M, Liu Y, Bennett J, Cohen C, Knoll MD, von Gottberg A, Hayford K, Flasche S. Vaccine. 2020 Jul 22;38(34):5398-5401. doi: 10.1016/j.vaccine.2020.06.047. Epub 2020 Jun 19.
PMID: 32600911

Measuring the Burden of RSV in Children to Precisely Assess the Impact of Preventive Strategies.
Ramilo O, Mejias A. Pediatrics. 2020 Jul;146(1):e20201727. doi: 10.1542/peds.2020-1727. Epub 2020 Jun 16.
PMID: 32546584

Utilization of isoniazid prophylaxis therapy and its associated factors among HIV positive clients taking antiretroviral therapy at Fre Semaetat primary hospital, Hawzien districts, Tigrai, Northern Ethiopia.
Legese H, Degefa H, Gebrewahd A, Gebremedhin H. Trop Dis Travel Med Vaccines. 2020 Jun 17;6:11. doi: 10.1186/s40794-020-00106-2. eCollection 2020.
PMID: 32566242

Extending Timing of Immunization Against Pertussis During Pregnancy and Protection of Premature Infants from Whooping Cough Disease.
Abu-Raya B. Clin Infect Dis. 2020 Jun 22:ciaa831. doi: 10.1093/cid/ciaa831. Online ahead of print.
PMID: 32569371

Emergence of ST654 Pseudomonas aeruginosa co-harbouring bla_{NDM-1} and bla_{GES-5} in novel class I integron In1884 from Bulgaria.
Kostyanev T, Nguyen MN, Markovska R, Stankova P, Xavier BB, Lammens C, Marteva-Proevska Y, Velinov T, Cantón R, Goossens H, Malhotra-Kumar S. J Glob Antimicrob Resist. 2020 Jun 22:S2213-7165(20)30153-3. doi: 10.1016/j.jgar.2020.06.008. Online ahead of print.
PMID: 32585404

To boost or not to boost? The long-term protection of people **vaccinated** in infancy from the perspective of the healthcare worker.
Van Hooste W. Infect Dis (Lond). 2020 Sep;52(9):678-680. doi: 10.1080/23744235.2020.1780308. Epub 2020 Jun 17.
PMID: 32644028

A Phase 3, Randomised, Open-Label, Non-inferiority Trial Evaluating Anti-Rabies Monoclonal Antibody Cocktail (TwinrabTM) Against Human Rabies Immunoglobulin (HRIG).
Kansagra K, Parmar D, Mendiratta SK, Patel J, Joshi S, Sharma N, Parihar A, Bhoge S, Patel H, Kalita P, Munshi R, Kurmi P, Shah R, Gupta A, Bhalla H, Bekkalele H, Verma R, Agarwal D, Sharma S, Gawande A, Chhaya G. Clin Infect Dis. 2020 Jun 17:ciaa779. doi: 10.1093/cid/ciaa779. Online ahead of print.
PMID: 32556113

VISTA deficiency protects from immune complex-mediated glomerulonephritis by inhibiting neutrophil activation.
Tham EL, Freeley SJ, Bearder S, Barros FF, Cragg MS, Mócsai A, Robson MG. J Autoimmun. 2020 Jun 22:102501. doi: 10.1016/j.jaut.2020.102501. Online ahead of print.
PMID: 32586651

Correction: miR29a and miR378b Influence CpG-Stimulated Dendritic Cells and Regulate cGAS/STING Pathway.
Shah AU, Cao Y, Siddique N, Lin J, Yang Q. Vaccines (Basel). 2020 Jun 16;8(2):E305. doi: 10.3390/vaccines8020305.
PMID: 32560089

Ribavirin inhibits Chandipura virus replication in Vero cells.
Balakrishnan A, Mun AB. J Med Virol. 2020 Jun 16. doi: 10.1002/jmv.26184. Online ahead of print.
PMID: 32543712

Reply to "Health literacy, a crucial determinant of **vaccination** decision-making among pregnant women" by Castro-Sánchez et al.
Buchy P, Badur S, Kassianos G, Preiss S, Tam JS. Int J Infect Dis. 2020 Jun 20;97:380-381. doi: 10.1016/j.ijid.2020.05.083. Online ahead of print.
PMID: 32569837

Recommendations for **vaccination** in patients with multiple sclerosis who are eligible for immunosuppressive therapies: Spanish consensus statement.
Otero-Romero S, Rodríguez-García J, Vilella A, Ara JR, Brieva L, Calles C, Carmona O, Casanova V, Costa-Frossard L, Eichau S, García-Merino JA, Garcia-Vidal C, González-Platas M, Llaneza M, Martínez-Ginés M, Meca-Lallana JE, Prieto JM, Rodríguez-Antigüedad A, Tintoré M, Blanco Y, Moral E; en nombre del Grupo de enfermedades desmielizantes de la SEN. Neurologia. 2020 Jun 17:S0213-4853(20)30045-1. doi: 10.1016/j.nrl.2020.02.006. Online ahead of print.
PMID: 32561334

Anti-tumor efficacy of plasmid encoding emm55 in a murine melanoma model.
Bunch BL, Kodumudi KN, Scott E, Morse J, Weber AM, Berglund AE, Pilon-Thomas S, Markowitz J. Cancer Immunol Immunother. 2020 Jun 18. doi: 10.1007/s00262-020-02634-4. Online ahead of print.
PMID: 32556443

The effect of BCG **vaccination** on macrophage phenotype in a mouse model of intranasal Mycobacterium bovis challenge.
Civello AN, Spiropoulos J, Sánchez-Cordón PJ, Hicks DJ, Hogarth PJ, Birch C, Núñez A. Vaccine. 2020 Jun 19;38(30):4755-4761. doi: 10.1016/j.vaccine.2020.05.033. Epub 2020 May 22.
PMID: 32451209

Reminder sent by mail to increase adherence to influenza **vaccination**.
Silva N, Julio C, Ortigoza Á. Medwave. 2020 Jun 18;20(5):e7747. doi: 10.5867/medwave.2020.05.7746.
PMID: 32604400 English, Spanish.

Comparison of commercial realtime reverse transcription PCR assays for the detection of SARS-CoV-2.
Iglói Z, Leven M, Abdel-Karem Abou-Nouar Z, Weller B, Matheeussen V, Coppens J, Koopmans M, Molenkamp R. J Clin Virol. 2020 Jun 17;129:104510. doi: 10.1016/j.jcv.2020.104510. Online ahead of print.
PMID: 32570045

Author Correction: Distribution of Functional CD4 and CD8 T cell Subsets in Blood and Rectal Mucosal Tissues.

Amancha PK, Ackerley CG, Duphare C, Lee M, Hu YJ, Amara RR, Kelley CF. Sci Rep. 2020 Jun 17;10(1):10096. doi: 10.1038/s41598-020-67062-x.
PMID: 32546732

National policies for paediatric universal BCG **vaccination** were associated with decreased mortality due to COVID-19.
Ebina-Shibuya R, Horita N, Namkoong H, Kaneko T. Respirology. 2020 Jun 18:10.1111/resp.13885. doi: 10.1111/resp.13885. Online ahead of print.
PMID: 32558034

A game-theoretic model of Monkeypox to assess **vaccination** strategies.
Bankuru SV, Kossol S, Hou W, Mahmoudi P, Rychtář J, Taylor D. PeerJ. 2020 Jun 22;8:e9272. doi: 10.7717/peerj.9272. eCollection 2020.
PMID: 32607280

Double-Stranded Structure of the Polyinosinic-Polycytidylic Acid Molecule to Elicit TLR3 Signaling and Adjuvant Activity in Murine Intranasal A(H1N1)pdm09 Influenza **Vaccination**.
Nakano T, Ohara Y, Fujita H, Ainai A, Yamamura ET, Suzuki T, Hasegawa H, Sone T, Asano K. DNA Cell Biol. 2020 Jun 22. doi: 10.1089/dna.2019.5324. Online ahead of print.
PMID: 32580635

Modelling suggests that high human papilloma virus (HPV) **vaccination** coverage in combination with high uptake screening can lead to cervical cancer elimination in most low-income and lower-middle-income countries (LMICs) by the end of the century.
Moradi S. Evid Based Nurs. 2020 Jun 19:ebnurs-2020-103281. doi: 10.1136/ebnurs-2020-103281. Online ahead of print.
PMID: 32561676

Clinical efficacy of pneumococcal **vaccination** in multiple myeloma patients on novel agents: Results of a prospective clinical study.
Stoma I, Karpov I, Iskrov I, Lendina I, Uss A. Vaccine. 2020 Jun 19;38(30):4713-4716. doi: 10.1016/j.vaccine.2020.05.024. Epub 2020 May 14.
PMID: 32418789

Real-world management of infection during chemotherapy for acute leukemia in Japan: from the results of a nationwide questionnaire-based survey by the Japan Adult Leukemia Study Group.
Kimura SI, Fujita H, Handa H, Hiramoto N, Hosono N, Minamiguchi H, Takahashi T, Kato H, Ono T, Kanda Y, Kiyoi H, Matsumura I, Miyazaki Y; Japan Adult Leukemia Study Group (JALSG). Int J Hematol. 2020 Jun 18. doi: 10.1007/s12185-020-02921-x. Online ahead of print.
PMID: 32557124

Adeno-associated virus-binding antibodies detected in cats living in the Northeastern United States lack neutralizing activity.
Adachi K, Dissen GA, Lomniczi A, Xie Q, Ojeda SR, Nakai H. Sci Rep. 2020 Jun 22;10(1):10073. doi: 10.1038/s41598-020-66596-4.
PMID: 32572045

Correction to: Two Randomized Controlled Trials of Bacillus Calmette-Guérin **Vaccination** to reduce absenteeism among health care workers and hospital admission by elderly persons during the COVID-19 pandemic: A structured summary of the study protocols for two randomised controlled trials.
Ten Doesschate T, Moorlag SJCFM, van der Vaart TW, Taks E, Debisarun P, Ten Oever J, Bleeker-Rovers CP, Verhagen PB, Lalmohamed A, Ter Heine R, van Crevel R, van de Wijgert J, Janssen AB, Bonten MJ, van Werkhoven CH, Netea MG; BCG-CORONA study team#. Version 2. Trials. 2020 Jun 22;21(1):555. doi: 10.1186/s13063-020-04521-w.
PMID: 32571383

Corrigendum to "Seroprevalence of rubella antibodies and determinants of susceptibility to rubella in a cohort of pregnant women in Canada, 2008-2011" [**Vaccine** 35 (2017) 3050-3055].
Gilbert NL, Rotondo J, Shapiro J, Sherrard L, Fraser WD, Ward BJ. Vaccine. 2020 Jul 14;38(33):5387. doi: 10.1016/j.vaccine.2020.06.005. Epub 2020 Jun 20.
PMID: 32576460

Correction to: **Vaccine** Hesitancy as a Challenge or **Vaccine** Confidence as an Opportunity for Childhood Immunisation in India.
Agrawal A, Kolhapure S, Di Pasquale A, Rai J, Mathur A. Infect Dis Ther. 2020 Jun 18. doi: 10.1007/s40121-020-00309-2. Online ahead of print.
PMID: 32557221

Erratum for Pelegrin et al., "High-Risk International Clones of Carbapenem-Nonsusceptible Pseudomonas aeruginosa Endemic to Indonesian Intensive Care Units: Impact of a Multifaceted Infection Control Intervention Analyzed at the Genomic Level".
Pelegrin AC, Saharman YR, Griffon A, Palmieri M, Mirande C, Karuniawati A, Sedono R, Aditianingsih D, Goessens WHF, van Belkum A, Verbrugh HA, Klaassen CHW, Severin JA. mBio. 2020 Jun 16;11(3):e01372-20. doi: 10.1128/mBio.01372-20.
PMID: 32546610

Erratum: Author Correction: Immune cell profiling of COVID-19 patients in the recovery stage by single-cell sequencing.
Wen W, Su W, Tang H, Le W, Zhang X, Zheng Y, Liu X, Xie L, Li J, Ye J, Dong L, Cui X, Miao Y, Wang D, Dong J, Xiao C, Chen W, Wang H. Cell Discov. 2020 Jun 20;6:41. doi: 10.1038/s41421-020-00187-5. eCollection 2020.
PMID: 32595980

The potential impact of COVID-19 in refugee camps in Bangladesh and beyond: A modeling study.
Truelove S, Abrahim O, Altare C, Lauer SA, Grantz KH, Azman AS, Spiegel P. PLoS Med. 2020 Jun 16;17(6):e1003144. doi: 10.1371/journal.pmed.1003144. eCollection 2020 Jun.
PMID: 32544156

Low genetic diversity and strong immunogenicity within the apical membrane antigen-1 of plasmodium ovale spp. imported from africa to china.
Lei Y, Shen F, Zhu H, Zhu L, Chu R, Tang J, Yao W, Zhu G, Zhang D, Cao J, Cheng Y. Acta Trop. 2020 Jun 17;210:105591. doi: 10.1016/j.actatropica.2020.105591. Online ahead of print.
PMID: 32562621

Patentes registradas en PatentScope

Estrategia de búqueda: *Vaccine in the title or abstract AND 20200616:20200622 as the publication date*

38 records

1.20200188508PORCINE EPIDEMIC DIARRHEA VIRUS S PROTEIN AND SUBUNIT VACCINE THEREOF AS WELL AS METHOD FOR PREPARING SUBUNIT VACCINE AND APPLICATION THEREOF
US - 18.06.2020
Int.Class A61K 39/215 Appl.No 16600334 Applicant NOVO BIOTECH CORP. Inventor Hong QIAN
The disclosure discloses a porcine epidemic diarrhea virus S protein and a subunit vaccine thereof as well as a method for preparing the subunit vaccine and application thereof. The vaccine contains 30˜220 μg of a recombinant porcine epidemic diarrhea virus S protein and a pharmaceutically acceptable ISA 201 VG adjuvant. A method for preparing the subunit vaccine comprises the following steps: (1) cloning the recombinant porcine epidemic diarrhea virus S protein; (2) expressing and purifying the recombinant porcine epidemic diarrhea virus S protein; (3) preparing the recombinant porcine epidemic diarrhea virus S protein prepared in (2) into a water phase; (4) emulsifying the water phase and the ISA 201 VG adjuvant in a volume ratio of 46:54 to obtain a vaccine. The vaccine is high in safety, good in immunogenicity, stable in batches, low in production cost and strong in immunogenicity. On the other hand, CHO cell strains suspending and stably and efficiently expressing the PEDV-S protein are successfully constructed and screened for the first time. The CHO cell strain can express the PEDV-S protein in high yield, the yield can reach 1 g/L, and the expressed PEDV-S protein is easy to purify.

2.20200188507INFLUENZA VIRUS VACCINE AND METHOD OF MAKING
US - 18.06.2020
Int.Class A61K 39/145 Appl.No 16608662 Applicant Mississippi State University Inventor Xiu-Feng Wan

A composition for increasing vaccine yields due to increased virus growth in mutation comprising a vaccine strain bearing the Y161F mutation in hemagglutinin (HA). Y161F in HA increases HA thermostability without changing its original antigenic properties and enhances its binding affinity in the vaccine production platforms used in influenza vaccine manufacturing. A method for optimizing preparation of influenza vaccine seed strains which can further lower the cost of vaccines and increase profits for the vaccine companies, and also maintain antigenic stability during vaccine deliveries.

3.WO/2020/123759SUBUNIT VACCINE CONSTRUCTS FOR FLAVIVIRUSES
WO - 18.06.2020
Int.Class A61K 39/12 Appl.No PCT/US2019/065886 Applicant REGENTS OF THE UNIVERSITY OF MINNESOTA Inventor DAVID, Sunil A.
This disclosure describes a subunit vaccine for a flavivirus, methods of making the vaccine, and methods of using the vaccine. The flavivirus may include, is a mosquito-borne flavivirus, for example, Zika virus (ZIKV), dengue virus (DENV), Yellow Fever (YF) virus, and West Nile Virus (WNV). The subunit vaccine may be administered with an adjuvant.

4.3664838DIFFERENTIAL COATING OF MICROPROJECTIONS AND MICRONEEDLES ON ARRAYS
EP - 17.06.2020
Int.Class A61K 39/145 Appl.No 18844031 Applicant VAXXAS PTY LTD Inventor JUNGER MICHAEL CARL
The present invention relates to devices and methods for coating microprojection or microneedle arrays including arrays that contain vaccine formulations, more specifically to multivalent vaccine formulations where components of the multivalent vaccine might be incompatible. The present invention further relates to stable vaccine formulations for administration via a microprojection array in which the microprojections are densely packed and in which the vaccine formulations are sprayed on to the microprojections such that the formulations dry quickly.

5.WO/2020/123777RECOMBINANT MUMPS VIRUS VACCINE EXPRESSING GENOTYPE G FUSION AND HEMAGGLUTININ-NEURAMINIDASE PROTEINS
WO - 18.06.2020
Int.Class C12N 7/00 Appl.No PCT/US2019/065926 Applicant THE UNITED STATES OF AMERICA, AS REPRESENTED BY THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES Inventor RUBIN, Steven A.
A recombinant, attenuated mumps virus is described. The recombinant virus is based on the genotype A Jeryl Lynn vaccine strain, but is modified to express genotype G consensus fusion (F) and hemagglutinin-neuraminidase (HN) proteins. The recombinant virus optionally includes a mutation that prevents expression of viral protein V. The recombinant mumps virus can be used as a vaccine to inhibit mumps virus infection and the development of mumps disease.

6.WO/2020/121983VACCINE FOR PREVENTING OR TREATING CONGENITAL INFECTION WITH CYTOMEGALOVIRUS
WO - 18.06.2020
Int.Class A61K 39/245 Appl.No PCT/JP2019/047966 Applicant KM BIOLOGICS CO., LTD. Inventor TORIKAI Masaharu
The problem addressed by the present invention is to provide an effective vaccine for preventing or treating congenital infection with CMV. This vaccine for preventing or treating congenital infection with cytomegalovirus (CMV) contains a CMV envelope glycoprotein B (gB protein) antibody and a pentamer antibody.

7.WO/2020/122734PANCREAS DISEASE VIRUS MARKERS
WO - 18.06.2020
Int.Class C12Q 1/70 Appl.No PCT/NO2019/050274 Applicant PATOGEN AS Inventor DEVOLD, Magnus Andreas
The present invention relates to methods for detection of the Pancreatic Disease (PD) virus used for production of PD vaccines, use of primers and probes to differentiate PD virus used in a vaccine and infectious virus, and a kit for detection of PD virus used in a vaccine. The method includes nine SNP's and related methods that can be used to identify the virus in the vaccine.

8.202047022653FILOVIRUS VACCINE AND METHODS OF USE
IN - 19.06.2020

Int.Class A61K 39/12 Appl.No 202047022653 Applicant HAWAII BIOTECH, INC. Inventor CLEMENTS, David E.
The data reported herein describe the production and evaluation of a recombinant subunit filovirus vaccine using insect cell expressed surface glycoprotein (GP) and a highly effective adjuvant. The vaccine provides protection in humans against filovirus infection, including Ebola virus and Marburg virus.

9.20200188509ORF VIRUS-BASED PLATFORM FOR VACCINE DELIVERY
US - 18.06.2020
Int.Class A61K 39/275 Appl.No 16086894 Applicant South Dakota Board of Regents Inventor Diego G. Diel
The present invention is directed to novel vaccine delivery platform based on the Orf virus (ORFV) genome, which carry heterologous antigens, methods of making and methods of using the same for prevention of infections, diseases, and other conditions in animals.

10.20200188513COMPOSITIONS OF VACCINES AND ADJUVANTS AND METHODS FOR THE TREATMENT OF URINARY TRACT INFECTIONS
US - 18.06.2020
Int.Class A61K 39/39 Appl.No 16689027 Applicant Sequoia Vaccines, Inc Inventor Gary Eldridge
This invention describes novel adjuvant compositions and formulations with excellent stability at refrigerated and room temperatures and up to and about 37° C. that can be produced at remarkably low costs. This invention describes novel vaccine compositions and formulations to treat and prevent urinary tract infections caused by gram-negative bacteria including *Escherichia coli* and multi-drug resistant *E. coli*. This invention also describes methods of administration of said novel vaccine compositions and formulations and methods of treatment to prevent and treat urinary tract infections caused by gram-negative bacteria including *E. coli* and multi-drug resistant *E. coli.*

11.3106175Hidtil ukendt immunterapi mod flere forskellige tumorer, herunder nerve- og hjernetumorer
DK - 22.06.2020
Int.Class A61K 39/00 Appl.No 16179163 Applicant Immatics Biotechnologies GmbH Inventor HILF, Norbert
The present invention relates to peptides, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated cytotoxic T cell (CTL) peptide epitopes, alone or in combination with other tumor-associated peptides that serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses. The present invention relates to 30 peptide sequences and their variants derived from HLA class I and class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses.

12.WO/2020/123341HEPATITIS B VIRUS VACCINE AND USES THEREOF
WO - 18.06.2020
Int.Class A61K 39/29 Appl.No PCT/US2019/065151 Applicant SU, Zhuang Inventor SU, Zhuang
A hepatitis B vims (HBV) vaccine particle is described, including a recombinant HBV surface antigen including L surface protein; optionally M surface protein; and optionally S surface protein; wherein the molar percentage of L surface protein to the sum of L, M, and S surface proteins is at least about 1 mole %, 8 mole

%, 10 mole %, 20 mole %, 30 mole %, 40 mole %, or 50 mole %. Methods of making the same and methods of treating or preventing HBV infection in a subject using the same are also described.

13.3120870Hidtil ukendt immunterapi mod flere forskellige tumorer, herunder nerve- og hjernetumorer
DK - 22.06.2020
Int.Class A61K 39/00 Appl.No 16179226 Applicant Immatics Biotechnologies GmbH Inventor Schoor, Oliver
The present invention relates to peptides, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated cytotoxic T cell (CTL) peptide epitopes, alone or in combination with other tumor-associated peptides that serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses. The present invention relates to 30 peptide sequences and their variants derived from HLA class I and class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses.

14.20200188519REDUCED FOAMING VACCINE COMPOSITIONS
US - 18.06.2020
Int.Class A61K 47/26 Appl.No 16802089 Applicant Abic Biological Laboratories Ltd. Inventor Noel Yves Henri Jean Genin
The present invention relates to novel stable compressed vaccine composition comprising at least one anhydrous antigenic component comprising a stabilizer susceptible to foaming when the composition is mixed with liquid diluent; and an effective amount of a sugar alcohol.

15.3157549Hidtil ukendt immunterapi mod flere forskellige tumorer i blodet, navnlig kronisk lymfatisk leukæmi (CLL)
DK - 22.06.2020
Int.Class A61K 39/00 Appl.No 15730135 Applicant immatics biotechnologies GmbH Inventor STICKEL, Juliane
The present invention relates to peptides, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated cytotoxic T cell (CTL) peptide epitopes, alone or in combination with other tumor-associated peptides that serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses. The present invention relates to several novel peptide sequences and their variants derived from HLA class I and HLA class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses.

16.3120868Hidtil ukendt immunterapi mod flere forskellige tumorer, herunder nerve- og hjernetumorer
DK - 22.06.2020
Int.Class A61K 39/00 Appl.No 16179174 Applicant Immatics Biotechnologies GmbH Inventor HILF, Norbert
The present invention relates to peptides, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated cytotoxic T cell (CTL) peptide epitopes, alone or in combination with other tumor-associated peptides that serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses. The present invention relates to 30 peptide sequences and their variants

derived from HLA class I and class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses.

17.WO/2020/123296PREDICTING IMMUNOGENIC PEPTIDES USING STRUCTURAL AND PHYSICAL MODELING
WO - 18.06.2020
Int.Class G06F 19/16 Appl.No PCT/US2019/064959 Applicant UNIVERSITY OF NOTRE DAME DU LAC Inventor BAKER, Brian
Disclosed herein are methods for predicting immunogenicity of a candidate peptide. The method comprises obtaining a three-dimensional candidate structural representation of the candidate peptide bound to an antigen presenting molecule; obtaining a plurality of candidate measurements; and predicting, with an electronic processor, the immunogenicity of the candidate peptide based upon the plurality of candidate measurements. Further disclosed herein are methods for producing vaccines. The method for producing a vaccine comprises predicting immunogenicity of one or more candidate peptides using the methods described herein, and producing a vaccine comprising one or more peptides predicted to be immunogenic.

18.WO/2020/123912INHIBITION OF ASPH EXPRESSING TUMOR GROWTH AND PROGRESSION
WO - 18.06.2020
Int.Class A61K 39/00 Appl.No PCT/US2019/066174 Applicant RHODE ISLAND HOSPITAL Inventor WANDS, Jack, R.
Disclosed are compositions and methods for an immunotherapy in a subject containing a vaccine construct for an immunization against a purified tumor antigen and a checkpoint inhibitor for treating a tumor in the subject, in which the tumor is characterized as comprising a low frequency of neoantigen expression and the composition potentiates an anti-tumor immune response without inducing autoimmunity in the subject. A pharmaceutical composition containing the composition as an active component and a pharmaceutically acceptable carrier, and a combinatorial composition containing a vaccine construct for an immunization against a purified tumor antigen and an immune checkpoint inhibitor, in which the tumor is characterized as comprising a low frequency of neoantigen expression, are also described.

19.201811047503A RECOMBINANT PEPTIDE, AND APPLICATIONS THEREOF AGAINST ESCHERICHIA-RELATED INFECTIONS
IN - 19.06.2020
Int.Class A61K / Appl.No 201811047503 Applicant CHAIRMAN, DEFENCE RESEARCH & DEVELOPMENT ORGANISATION Inventor MANOHARAN, Renuka Ramalingam
The present disclosure discloses a recombinant DNA comprising a nucleic acid sequence as set forth in SEQ ID NO: 1, a recombinant protein encoded by the recombinant DNA, a recombinant vector comprising the recombinant DNA, and arecombinant host cell comprising the recombinant vector. The present disclosure furtherdiscloses a vaccine composition comprising the recombinant protein of the presentdisclosure against Escherichia-related infections. Also disclosed are the methods forproducing the recombinant protein and for preparing the vaccine composition of thepresent disclosure.

20.3666286UNIVERSAL INFLUENZA VACCINE
EP - 17.06.2020

Int.Class A61K 39/145 Appl.No 19215483 Applicant CAMBRIDGE TECH LLC Inventor HAUSE BEN
Immunogenic compositions for inducing a universal immune response to influenza, and particularly influenza A, by eliciting anti-neuraminidase antibodies which provide protection against heterologous influenza infection. Compositions comprising recombinant baculovirus expression vectors expressing neuraminidase in cultured insect cells dispersed in a pharmaceutically-acceptable carrier comprising insect cell culture media, and optional adjuvant. Methods of inducing immune responses against influenza, and particularly influenza A, by eliciting anti-neuraminidase antibodies in a host animal susceptible to infection.

21.WO/2020/123964LABYRINTHIN-BASED PEPTIDES FOR CANCER IMMUNOTHERAPIES AND USES THEREOF
WO - 18.06.2020
Int.Class C07K 14/47 Appl.No PCT/US2019/066264 Applicant LABYRX IMMUNOLOGIC THERAPEUTICS (USA) LIMITED Inventor RADOSEVICH, James A.
Antigenic compositions comprising one or more labyrinthin-derived peptides are described herein. In some embodiment, each peptide of the antigenic composition comprises a T-cell epitope and/or a B-cell epitope. In other aspects, the present disclosure provides, e.g., vaccine compositions comprising tin antigenic composition disclosed herein, including kits, medicines, and compositions (such as pharmaceutical compositions and unit dosages) thereof. Also provided are methods of using the compositions disclosed herein, such as methods of treatment thereof and methods of producing antibodies, and antibody compositions thereof, against the one or more labyrinthin-derived peptides or a portion thereof.

22.WO/2020/121273HETEROLOGOUS PRIME BOOST VACCINE COMPOSITIONS AND METHODS
WO - 18.06.2020
Int.Class A61K 39/12 Appl.No PCT/IB2019/060766 Applicant GLAXOSMITHKLINE BIOLOGICALS SA Inventor CAPONE, Stefania
Simian adenoviral vectors and RNA molecules, each encoding an immunogen of interest, can be sequentially administered to provide potent and long-lasting immunity.

23.WO/2020/123836HERBOXIDIENE SPLICING MODULATOR ANTIBODY-DRUG CONJUGATES AND METHODS OF USE
WO - 18.06.2020
Int.Class A61K 47/68 Appl.No PCT/US2019/066029 Applicant EISAI R&D MANAGEMENT CO., LTD. Inventor FISHKIN, Nathan
Linker-drug compounds and antibody-drug conjugates that bind to human oncology targets are disclosed. The linker-drug compounds and antibody-drug conjugates comprise a herboxidiene splicing modulator drug moiety. The disclosure further relates to methods and compositions for use in the treatment of neoplastic disorders by administering the antibody-drug conjugates provided herein. The herboxidiene itself is also claimed. Further claims are directed to its use, and to the use of a neoantigen, generated by the herboxidiene or its ADC, or a vaccine against this neoantigen.

24.20200188501BACTERIAL VACCINE COMPONENTS AND USES THEREOF
US - 18.06.2020

Int.Class A61K 39/085 Appl.No 16749556 Applicant SOCPRA - SCIENCES ET GENIE, s.e.c. Inventor FRANCOIS MALOUIN
Agents, compositions, methods and kits useful for the treatment and diagnosis of Staphylococcal intramammary infection are disclosed. The agents, compositions, methods and kits are derived from genes expressed during Staphylococcal intramammary infection, and more particularly genes SACOL0442, based on the gene nomenclature from the *Staphylococcus* aureus COL (SACOL) genome.

25.3666290A TELOMERASE ENCODING DNA VACCINE
EP - 17.06.2020
Int.Class A61K 48/00 Appl.No 19211063 Applicant INVECTYS Inventor LANGLADE DEMOYEN PIERRE
The invention provides a nucleic acid construct comprising a sequence that encodes a human telomerase reverse transcriptase (hTERT) protein which is devoid of telomerase catalytic activity and of a nucleolar localization signal. The construct is useful triggering an immune response in a subject, against cells that overexpress telomerase, preferably dysplasia cells or tumor cells.

26.20200188497TRANSFECTED T-CELLS AND T-CELL RECEPTORS FOR USE IN IMMUNOTHERAPY AGAINST CANCERS
US - 18.06.2020
Int.Class A61K 39/00 Appl.No 16802431 Applicant Immatics Biotechnologies GmbH Inventor Dominik MAURER
The present description relates to T-cell receptors (TCRs) binding to tumor-associated antigens (TAAs) for targeting cancer cells, T-cells expressing same, methods for producing same, and methods for treating cancers using same. In particular, the present description relates to TCRs and their variants that bind to HLA class I or II molecules with a peptide, such as IGF2BP3-001 have the amino acid sequence of KIQEILTQV (SEQ ID NO:1). The present description further relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present description relates to the immunotherapy of cancer. The present description furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T-cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

27.20200188496UNIVERSAL CANCER VACCINES AND METHODS OF MAKING AND USING SAME
US - 18.06.2020
Int.Class A61K 39/00 Appl.No 16617830 Applicant ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY Inventor Stephen Albert JOHNSTON
Disclosed herein are compositions comprising a universal cancer vaccine and methods of treating and preventing cancer using such compositions.

28.20200188500VACCINE COMPRISING CLOSTRIDIUM TOXOIDS
US - 18.06.2020
Int.Class A61K 39/08 Appl.No 16620846 Applicant HIPRA SCIENTIFIC, S.L.U. Inventor Xavier GIBERT PÉREZ

The present invention relates to an immunogenic composition comprising one or more *C. difficile* toxoid for use in a medicament for animals. The invention also encompasses an immunogenic composition comprising one or more *C. difficile* A toxoid and one or more *C. difficile* B toxoid and one or more *C. perfringens* Type A toxoid. The invention also encompasses vaccines comprising said immunogenic compositions, vaccines for use in the treatment and/or prevention of disease caused by *C. difficile* and *C. perfringens*, and kits thereof.

29.20200188504HEPATITIS C VIRUS GENE SEQUENCES AND METHODS OF USE THEREFOR
US - 18.06.2020
Int.Class A61K 39/12 Appl.No 16608308 Applicant VANDERBILT UNIVERSITY Inventor James E. CROWE, JR.
The present disclosure relates to compositions and methods for inducing an adaptive immune response against Hepatitis C virus (HCV) in a subject. In some embodiments, the present disclosure provides a composition comprising a nucleic acid molecule encoding a HCV antigen, an HCV antigen, an adjuvant, or a combination thereof. For example, in some embodiments, the composition comprises a vaccine comprising a nucleic acid molecule encoding a HCV antigen, an HCV antigen, an adjuvant, or a combination thereof.

30.WO/2020/123757UNIVERSAL INFLUENZA VACCINE
WO - 18.06.2020
Int.Class A61K 39/145 Appl.No PCT/US2019/065883 Applicant CAMBRIDGE TECHNOLOGIES LLC Inventor HAUSE, Ben
Immunogenic compositions for inducing a universal immune response to influenza, and particularly influenza A, by eliciting anti-neuraminidase antibodies which provide protection against heterologous influenza infection. Compositions comprising recombinant baculovirus expression vectors expressing neuraminidase in cultured insect cells dispersed in a pharmaceutically-acceptable carrier comprising insect cell culture media, and optional adjuvant. Methods of inducing immune responses against influenza, and particularly influenza A, by eliciting anti-neuraminidase antibodies in a host animal susceptible to infection.

31.20200188505UNIVERSAL INFLUENZA VACCINE
US - 18.06.2020
Int.Class A61K 39/12 Appl.No 16711873 Applicant Cambridge Technologies LLC Inventor Ben Hause
Immunogenic compositions for inducing a universal immune response to influenza, and particularly influenza A, by eliciting anti-neuraminidase antibodies which provide protection against heterologous influenza infection. Compositions comprising recombinant baculovirus expression vectors expressing neuraminidase in cultured insect cells dispersed in a pharmaceutically-acceptable carrier comprising insect cell culture media, and optional adjuvant. Methods of inducing immune responses against influenza, and particularly influenza A, by eliciting anti-neuraminidase antibodies in a host animal susceptible to infection.

32.20200190146METHODS OF DETECTION AND REMOVAL OF RHABDOVIRUSES FROM CELL LINES
US - 18.06.2020
Int.Class C07K 14/005 Appl.No 16662784 Applicant TAKEDA VACCINES, INC. Inventor Joel R. HAYNES
The present disclosure relates to compositions, methods, mixtures, and kits for detecting the presence of, and for removing, a virus from a product produced in an insect cell. The disclosure also relates to proteins, peptides, polypeptides, drug substances, biological products, vaccine antigens, and virus-like particles that

are produced in an insect cell and that are free or substantially free of a virus. The disclosure also relates to compositions, methods, assays, and kits for detecting a rhabdovirus in a sample.

33.201811047504A RECOMBINANT PEPTIDE, AND APPLICATIONS THEREOF AGAINST STAPHYLOCOCCUS AUREUS-RELATED INFECTIONS
IN - 19.06.2020
Int.Class A61K / Appl.No 201811047504 Applicant CHAIRMAN, DEFENCE RESEARCH & DEVELOPMENT ORGANISATION Inventor JAYAKRISHNAN, Achuth
The present disclosure discloses a recombinant DNA (comprising a nucleic acidsequence as set forth in SEQ ID NO: 1), a recombinant protein encoded by therecombinant DNA (comprising an amino acid sequence as set forth in SEQ ID NO: 2),a recombinant vector comprising the recombinant DNA, and a recombinant host cellcomprising the recombinant vector. The present disclosure further discloses a vaccinecomposition comprising the recombinant protein of the present disclosure for targetingStaphylococcus-related infections. Also disclosed are the methods for producing therecombinant protein and for preparing the vaccine composition of the present disclosure.

34.20200188438IMMUNOTHERAPY WITH B*08 RESTRICTED PEPTIDES AND COMBINATION OF PEPTIDES AGAINST CANCERS AND RELATED METHODS
US - 18.06.2020
Int.Class A61K 35/17 Appl.No 16717142 Applicant Immatics Biotechnologies GmbH Inventor Gisela SCHIMMACK
The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

35.3664839HEADLESS HEMAGGLUTIN INFLUENZA VACCINE
EP - 17.06.2020
Int.Class A61K 39/145 Appl.No 18864814 Applicant GEORGIA STATE UNIV RESEARCH FOUNDATION INC Inventor WANG BAOZHONG
Disclosed are universal influenza based on a truncated influenza hemagglutin (HA) protein lacking a head domain (hrHA). Also disclosed is a composition comprising a nanoparticle coated with a disclosed hrHA polypeptide. Also disclosed is a composition comprising a virus like particle (VLP) expressing on its surface a disclosed hrHA polypeptide.

36.20200190525Reducing the Toxicity of Agrobacterium Endotoxin
US - 18.06.2020
Int.Class C12N 15/74 Appl.No 16617971 Applicant ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY Inventor Qiang Chen

The present invention relates to the fields of genetically modified *Agrobacterium* strains, vaccine adjuvants, and generally molecular biology and immunology. Provided herein are modified *Agrobacterium* strains that produce lipopolysaccharide (LPS) having reduced toxicity or detoxified lipopolysaccharide, and methods of obtaining such strains for plant-based production of biologics. Also provided herein are uses of reduced or detoxified LPS as adjuvants suitable for clinical use.

37.20200190160PEPTIDES AND COMBINATION THEREOF FOR USE IN THE IMMUNOTHERAPY AGAINST CANCERS
US - 18.06.2020
Int.Class C07K 14/74 Appl.No 16799380 Applicant IMMATICS BIOTECHNOLOGIES GMBH Inventor Juliane Sarah WALZ
The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

38.WO/2020/120910PRODUCTION OF VIRAL VACCINES ON AN AVIAN CELL LINE
WO - 18.06.2020
Int.Class A61K 39/12 Appl.No PCT/FR2019/053036 Applicant UNIVERSITE CLAUDE BERNARD LYON 1 Inventor ROSA-CALATRAVA, Manuel
The invention relates to the use of the immortalised cell line ECACC 09070703, filed on 7 July 2009 with the European Collection Of Cell Cultures (ECACC, Salisbury, United Kingdom) under the number 09070703, for the production of a viral vaccine consisting of an attenuated strain derived from a human metapneumovirus.

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

Results of Search in US Patent Collection db for: (ABST/vaccine AND ISD/20200616->20200622),

9 resultados.

	PAT. NO.	Title
1	10,683,361	Anti-CD40 antibodies
2	10,683,337	Peptides, combination of peptides as targets and for use in immunotherapy against gallbladder cancer and cholangiocarcinoma and other cancers
3	10,682,426	Rabies vaccine

4	10,682,407	Constrained immunogenic compositions and uses therefor
5	10,682,406	Nucleic acid comprising or coding for a histone stem-loop and a poly(A) sequence or a polyadenylation signal for increasing the expression of an encoded pathogenic antigen
6	10,682,404	Targets of Acinetobacter baumannii
7	10,682,402	MSI-specific frameshift peptides (FSP) for prevention and treatment of cancer
8	10,682,399	Target peptides for colorectal cancer therapy and diagnostics
9	10,682,398	Yeast vaccine vector including immunostimulatory and antigenic polypeptides and methods of using the same

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