FINLAY
EDICIONES

BOLETÍN VACCIENCIA

No. 14 (1-8 julio/2020)

VaCyT

SiViFinlay

IFV INSTITUTO FINLAY DE VACUNAS

...vacunar es prevenir.

Análisis bibliométrico sobre vacunas de ácidos nucleicos

Fuente de información utilizada:

WEB OF SCIENCE™

Estrategia de búsqueda:

TOPIC: ("Nucleic acid vaccines") 153 records

Periodo de estudio 1999-2020

Las variables utilizadas en el análisis fueron:

⇒ Productividad científica por año.

⇒ Autores con mayor productividad científica.

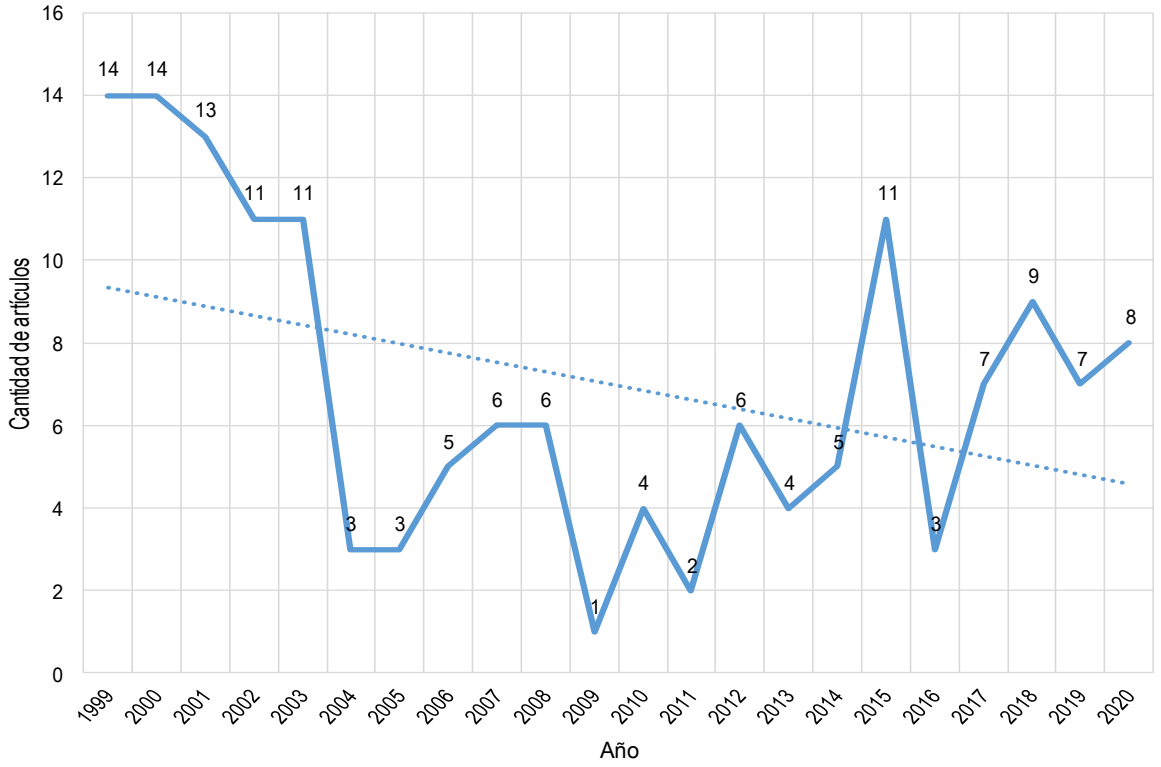
⇒ Revistas con mayor número de publicaciones sobre el tema.

⇒ Instituciones que han trabajado el tema de estudio.

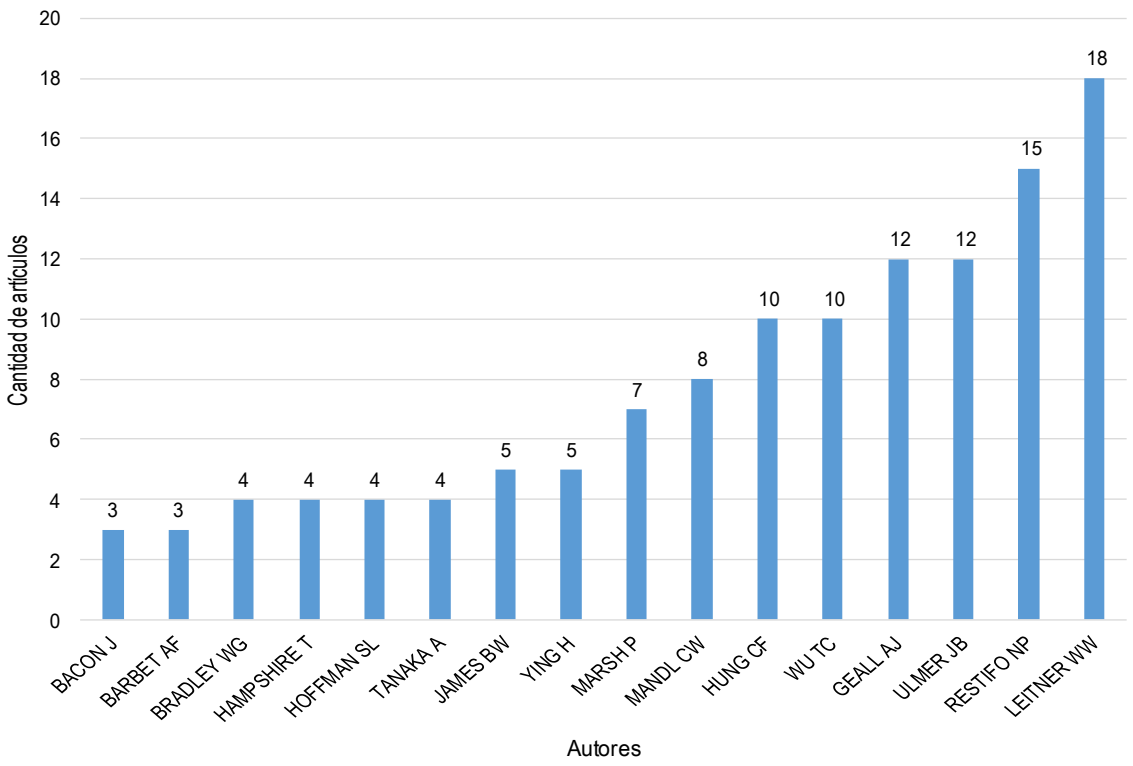
⇒ Países a la vanguardia sobre el tema.

EN ESTE NÚMERO

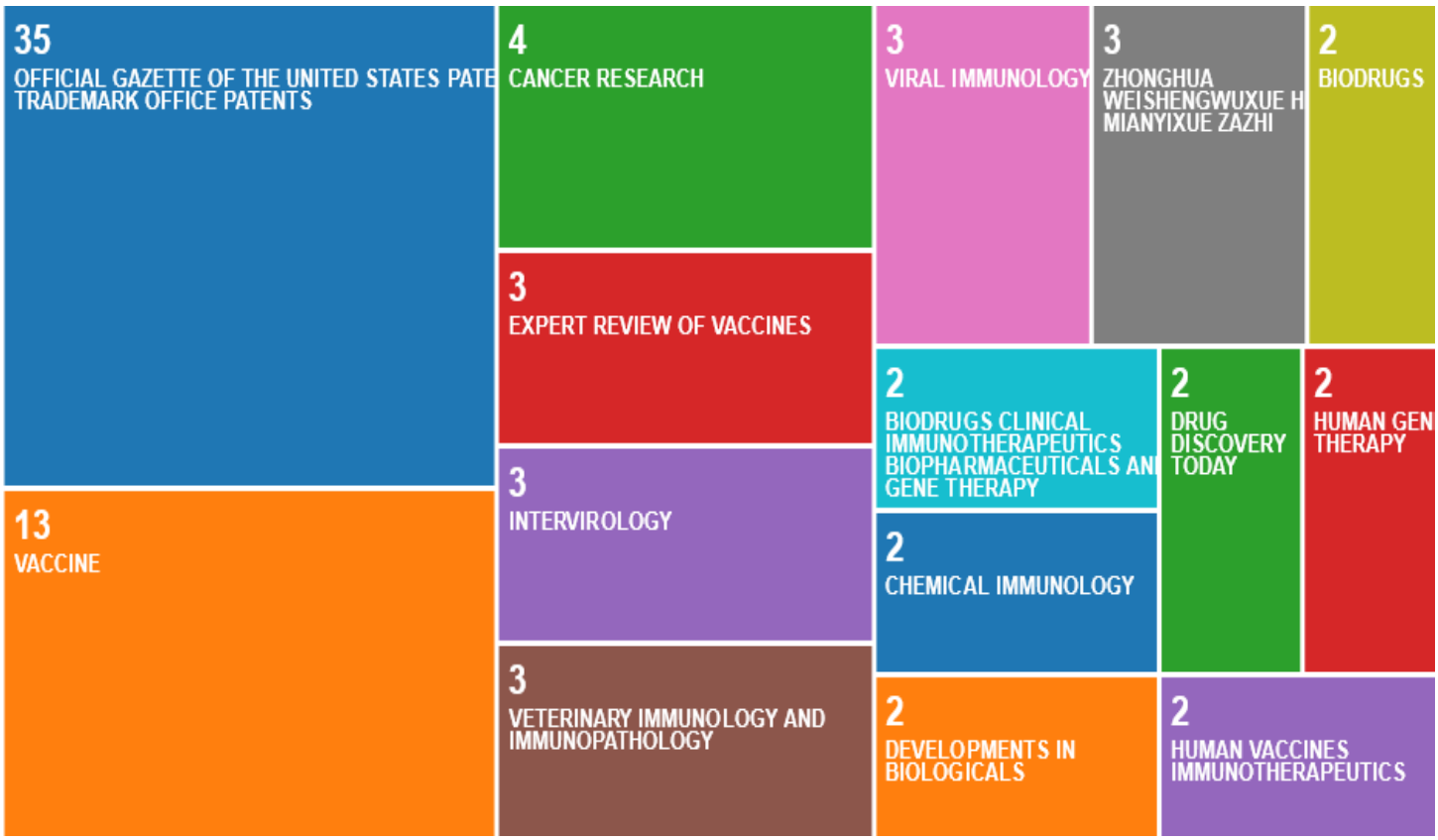
Productividad científica por año



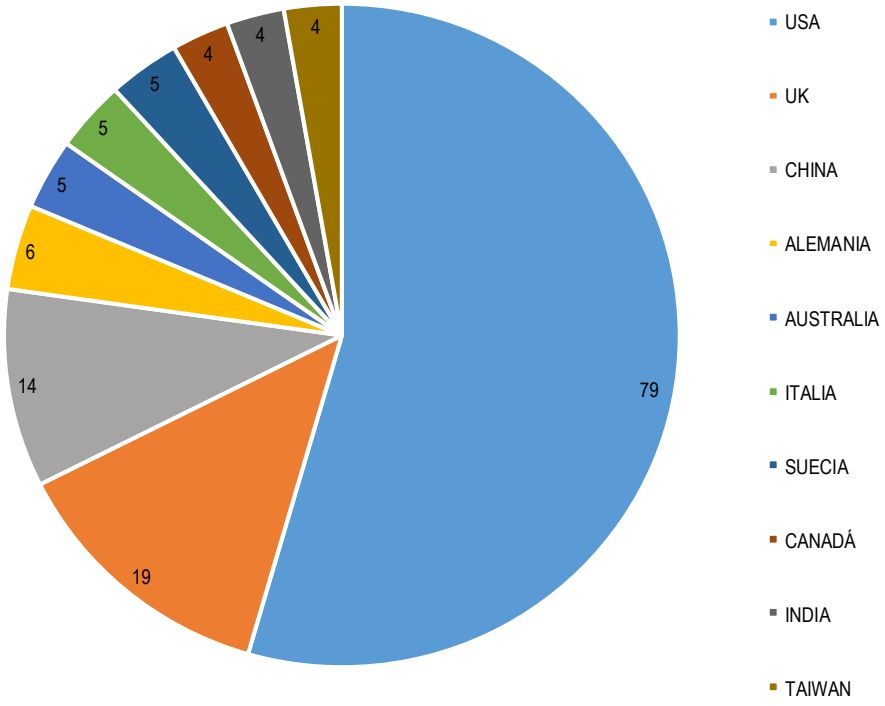
Autores con mayor productividad científica



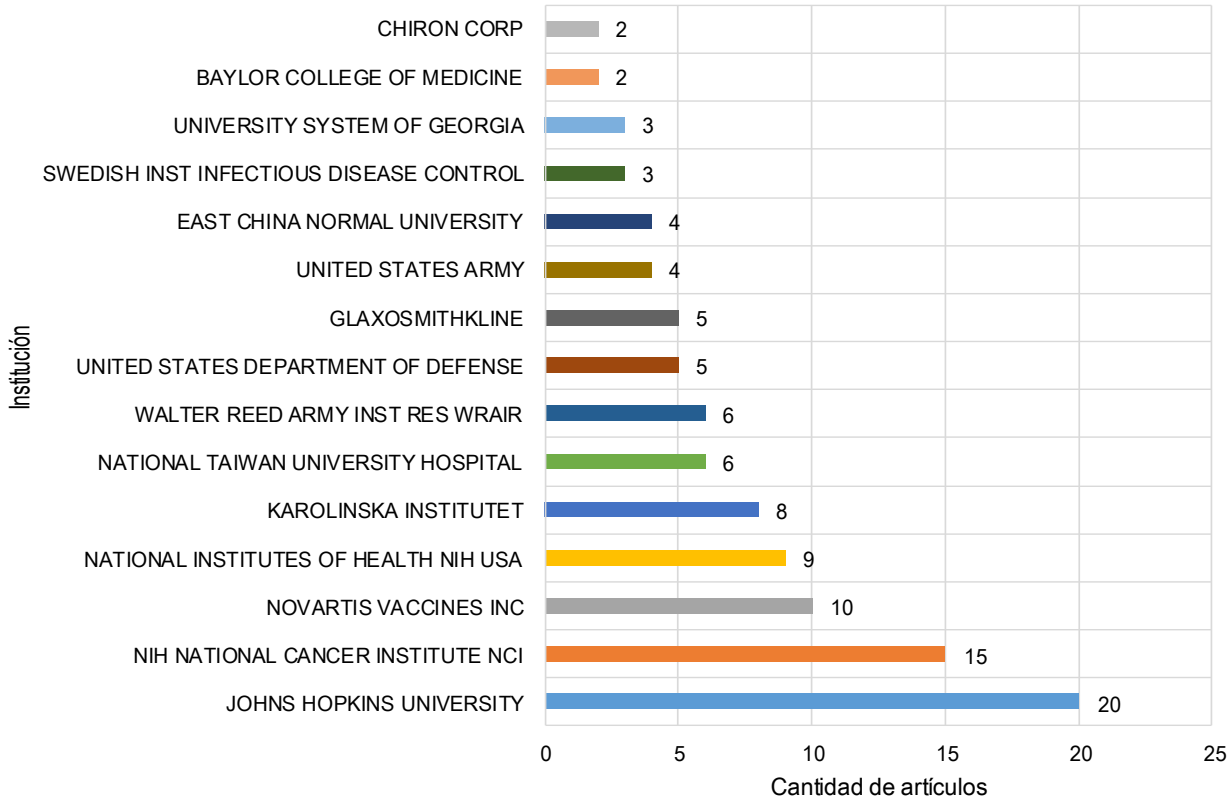
Revistas científicas que han publicado sobre el tema (2019-2020)



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



Instituciones que han trabajado el tema de estudio



Noticias en la Web

¿Qué hay de cierto en que la mutación del nuevo coronavirus lo volvería mas infeccioso?

1 jul. Científicos identifican la mutación del virus SARS-CoV-2 que hoy se presenta con una mayor proporción y afecta a los alveolos pulmonares con más fuerza. Lo explica el doctor José Fernández, académico de la Universidad de Miami.

La estructura molecular del SARS-Cov-2, el virus causante de la COVID-19, cambió a su llegada a Estados Unidos y Europa. Uno de sus aminoácidos cambió al salir de China, es decir, mutó. ¿Lo hace más peligroso esta alteración? El doctor Elmer Huerta comenta al respecto.

Un virus es en esencia una gran molécula central de ácido nucleico que puede ser de ADN o de ARN (el nuevo coronavirus es de este tipo), el cual está protegido por una cápsula compuesta por grasas, azúcares y proteínas.

Esta cápsula es muy importante en el ciclo evolutivo del virus porque en ella se encuentran las moléculas o llaves que le permiten entrar a las células.

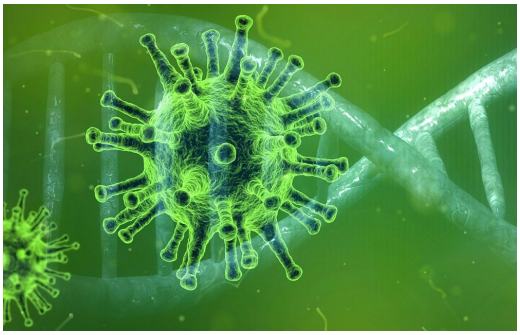
Tengamos presente las imágenes sobre el nuevo coronavirus. Esas proyecciones como patitas o antenitas se llaman espigas y son las que usa el virus para ingresar a las células que tienen los receptores ACE2.

En otras palabras, las espigas del nuevo coronavirus son como llaves que van tras las cerraduras o receptores celulares ACE2 para ingresar, buscar el aparato reproductor y multiplicarse.

Lo interesante, y ya entrando al tema de las mutaciones del virus, es que esa espiga es en realidad una proteína, cuya cadena está compuesta por aproximadamente 1.300 aminoácidos, los cuales tienen un orden muy específico.

La noticia, publicada en The Washington Post, es que el aminoácido que ocupa el lugar 614 en la cadena, que cuando apareció en China era el aminoácido D o ácido aspártico, al llegar a Europa y luego a Estados Unidos, cambió al aminoácido G o glicina. En la actualidad, el 95 % de los virus secuenciados en el laboratorio de un investigador en Estados Unidos, tiene esa nueva mutación.

Ese simple cambio, de aminoácido D a aminoácido G, que en el lenguaje de los virólogos se conoce como mutación D614G, es lo que preocupa a los expertos, porque



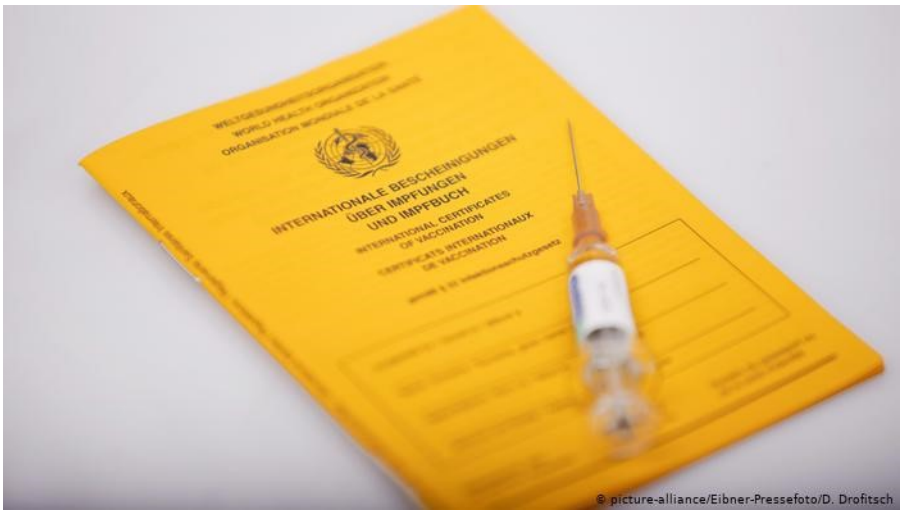
de acuerdo con algunos experimentos, y cuyas publicaciones aun no han sido revisadas por pares, haría que el virus tenga hasta 10 veces mas facilidad para contagiarse.

Sin embargo, si hay algo en lo que son muy enfáticos los investigadores, y que quiero repetir para no levantar alarma, es que esa mutación D614G no hace que el virus sea un supervirus, más letal o mortífero, sino que hace que el virus pueda contagiarse con más facilidad.

Al parecer, aunque hay otras teorías, esa mutación D614G haría que la espiga del virus sea más estable y no se rompa al tratar de penetrar la célula. Esto hace que la infección de las células sea más eficiente, lo cual explicaría, según varios investigadores, la rápida diseminación de la enfermedad por Europa, Estados Unidos y ahora América Latina.

Fuente: CNN en Español. Disponible en https://cutt.ly/IpG71Mt

OMS advierte que ninguna vacuna contra el COVID-19 está suficientemente avanzada



3 jul. Experto de la organización llamó, por ello, a no bajar los brazos y a adoptar medidas incluso de confinamiento. “Debemos iniciar el combate ahora, parar a este virus ahora”, sostuvo.

El director de emergencias sanitarias de la Organización Mundial de la Salud (OMS), Mike Ryan, advirtió este viernes (03.07.2020) que ninguna de las decenas de vacunas que se están investigando para frenar el avance del COVID-19, o de las 17 que están en ensayos clínicos, está lo suficientemente avanzada como para pronosticar cuándo podría empezar a producirse una inoculación eficaz y segura.

"Sería poco inteligente predecir cuándo tendremos una vacuna lista”, sostuvo Ryan, quien, sin embargo, estima que para finales de este año se podrían tener resultados sobre la eficacia de las vacunas candidatas. En ese caso se podría empezar con vacunaciones a principios del próximo año, pero ello dependerá de que haya una capacidad de producción suficiente, agregó.

Por lo mismo, el experto pidió a los países no bajar los brazos en el combate contra la pandemia, en momentos en que en distintos lugares del mundo comienzan a surgir rebrotes tras reaperturas prematuras. "La OMS comprende perfectamente que hay buenas razones para que los países quieran relanzar sus economías, pero no se puede ignorar tampoco el problema, no va a desaparecer como por acto de magia”, señaló.

Confinar más, si es necesario

Ryan sostuvo que el desafío estará en reforzar la capacidad de producción al mismo tiempo que se avanza con los ensayos clínicos, lo que -confirmó- varios grupos farmacéuticos planean hacer. Los especialistas también están buscando tratamientos que permitan reducir la tasa de mortalidad. "Estamos viendo con nuevos antivirales o con combinaciones (en tratamientos) de antivirales con antiinflamatorios para aumentar la respuesta inmunitaria", comentó Ryan.

De cualquier modo, el representante de la OMS hizo un llamado a las autoridades. "Ya es hora de que los países miren las cifras. Por favor, no ignoren lo que les dicen los números. La gente debe despertar. Las cifras no mienten y la situación en el terreno no miente", añadió. Subrayó que "nunca es demasiado tarde, en una epidemia, para tomar el control. Debemos iniciar el combate ahora. Debemos parar este virus ahora".

Ryan dijo que los países "deben absolutamente romper las cadenas de transmisión", inclusive adoptando medidas de confinamiento "si no hay alternativa".

Fuente: DW. Disponible en https://cutt.ly/ja14upl

China's COVID-19 complex to produce over 100M vaccine

3 jul. China has completed the construction of a research laboratory and workshop complex in the city of Wuhan for producing vaccines to combat COVID-19 or coronavirus pandemic, the state-run media said on Friday.

While the laboratory is capable to research and study pathogenic virus vaccines, the workshop will produce over 100 million doses of the COVID-19 vaccine annually, reported Xinhua news agency, quoting the China National Pharmaceutical Group (Sinopharm).

The complex was earlier hit by the coronavirus pandemic, which first

emerged in Wuhan city located in Central China's Hubei province last December.

China National Biotec Group has also built another workshop in the capital Beijing which will also produce the anti-COVID-19 vaccines.

"The total annual production capacity of inactivated COVID-19 vaccines is expected to exceed 200 million doses, which will help ensure adequate supply," the report cited Yang Xiaoming, president of the group, as saying.

Wuhan Institute of Biological Products had started the clinical trials of the vaccine to combat COVID-19 in April. So far it has been tested on 1,120 volunteers, aged between 18-59.

The report claimed, citing no officials, that the results of the trails "showed a good safety record" as "no severe adverse reactions were found."

It noted that the vaccine receivers "were inoculated two injections under different procedures and doses."

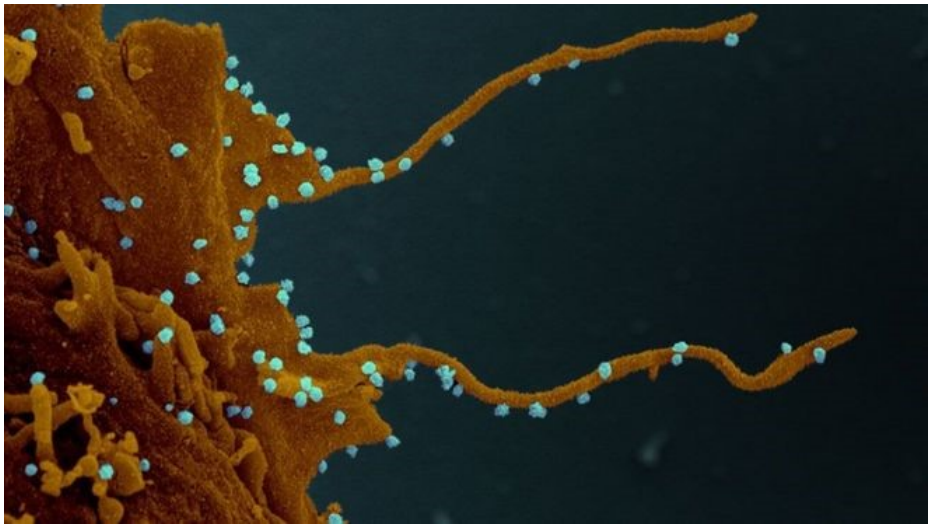
"For those receiving two injections at an interval of 28 days, the seroconversion rate of neutralizing antibodies reached 100 percent," claimed the repot.

According to China's National Health Commission, the country reported five new cases, including three imported and two indigenous, both from capital Beijing as the city has seen another wave of infections since the second week of June.

China so far recorded 83,542 pandemic cases with 4,634 deaths. As many as 78,499

Fuente: AA Asia-Pacific. Disponible en https://cutt.ly/ya15luP

Consecuencias del coronavirus: la "siniestra" transformación que el SARS-CoV-2 provoca en las células humanas infectadas



3 jul. Desde el inicio de la pandemia de COVID-19 una pregunta que ha obsesionado a varios científicos alrededor del mundo es: ¿cómo este coronavirus invade y reprograma a las células humanas para provocar la infección y causar la muerte?

Conocer la respuesta es crucial en la búsqueda de medicamentos capaces de frenar al virus antes de que lleve a cabo esos procesos.

Un equipo internacional de científicos que ha estado explorando esta interacción descubrió varias claves de cómo el SARS-CoV-2 infecta las células.

El hallazgo más sorprendente -que lograron comprobar con extraordinarias imágenes- es que las células humanas infectadas por el coronavirus sufren una "siniestra" transformación.

Las células, siguiendo las instrucciones del virus, desarrollan largos filamentos, similares a tentáculos, que, se cree, podrían ayudar a la rápida propagación por el organismo.

"Lo que descubrimos es que el virus induce a la célula a crear estas protuberancias, que son como largas ramas o tentáculos", le dijo a BBC Mundo uno de los autores del estudio, el profesor Pedro Beltrao, investigador del Instituto Europeo de Bioinformática del Laboratorio Europeo de Biología Molecular (EBI-EMBL), en Cambridge, Inglaterra.

"En otros virus se ha visto que (estas protuberancias) desempeñan un papel en la rápida propagación de la

infección porque le ayudan al virus a invadir células cercanas", agrega el investigador.

El estudio, en el que también participaron investigadores de la Universidad de California, San Francisco, y la Escuela Icahn de Medicina de Monte Sinaí, Nueva York, ambas en Estados Unidos, el Instituto Pasteur en Francia y la Universidad de Friburgo en Alemania, encontró también que varios medicamentos existentes podrían ser buenos candidatos para frenar la infección.

Estos medicamentos, muchos de los cuales fueron diseñados como tratamientos para cáncer, parecen bloquear las señales químicas que activan la creación de estas protuberan-cias.

Replicación

Pero los investigadores también encontraron que el virus, además de provocar la creación de estos "tentáculos", lleva a cabo otras conductas dentro de la célula infectada.

"La finalidad principal del estudio fue tratar de encontrar fármacos que puedan evitar que el virus lleve a cabo cambios en la célula humana", explica Pedro Beltrao.

"Pero para lograr eso, necesitábamos primero entender cómo el virus toma control de los mecanismos de la célula para poder llevar a cabo su propia replicación", agrega.

El principal objetivo de un virus en el organismo humano es crear copias de sí mismo para para poder propagar la infección.

Pero el virus no puede crear estas copias por sí solo. Necesita entrar a una célula, tomar el control de la maquinaria celular y manipularla para reproducirse.

"El virus no se puede replicar solo porque tiene un número muy pequeño de proteínas, así que tiene que tomar control de las proteínas de la célula humana", explica el investigador.

Entre estas proteínas hay varias que son clave, las llamadas enzimas quinasas, que son capaces de llevar a cabo modificaciones a otras proteínas que ya se ha producido.

Entonces el virus toma control de estas enzimas quinasas para llevar a cabo modificaciones en la célula y regular la actividad de esas enzimas.

Al alterar los patrones de las proteínas celulares, el virus puede promover su propia transmisión a otras células y avanzar su propagación.

Filopodios

Tras analizar las modificaciones que el virus lleva a cabo, los científicos encontraron tres conductas principales en la célula infectada.

"Una de estas conductas es la creación de las protuberancias, los largos tentáculos", le dice a BBC Mundo Pedro Beltrao.

Estas protuberancias, llamadas filopodios, no son muy comunes pero ya se han visto que ocurren con otros virus, como el de Marburgo, explica el investigador.

En el pasado se ha visto que otros virus las utilizan tanto para salir de la célula afectada como para infectar otras células cercanas y acelerar así la infección.

Aunque en este estudio no se demostró cuál es la función de los filopodios, los investigadores creen que hay una "alta probabilidad" de que el SARS-CoV-2 también esté usando estos tentáculos para acelerar su propagación.

Lo que sí logró esta investigación es producir unas imágenes impresionantes de la célula infectada, que la muestran como nunca se había visto antes, donde se ven las extrañas estructuras de los filopodios creados por el coronavirus.

Las fotografías, captadas por la doctora Elizabeth Fischer de la Unidad de Microscopía de los Laboratorios Rocky Mountain en Estados Unidos, y científicos de la Universidad de Friburgo, Alemania, revelan cómo el virus brota de los filopodios que se expanden en múltiples ramificaciones.

Pero además de la creación de filopodios, el virus provoca otras modificaciones importantes en la célula infectada.

"Otra conducta que vimos es que la célula deja de dividirse en cierto punto particular del ciclo de división y pensamos que esto crea un

ambiente propicio para que el virus se replique", le explica a BBC Mundo Pedro Beltrao.

"Y la tercera conducta que detectamos es una mayor producción de citoquinas, responsables de la respuesta inflamatoria".

"Esto es importante, porque creemos que este es uno de los factores que pueden estar causando la exagerada inflamación en las etapas avanzadas de la enfermedad de COVID-19", agrega el investigador.

Las principales responsables: las quinasas

Los científicos descubrieron que las enzimas quinasas son las principales responsables de estas modificaciones en la célula.

El estudio investigó cómo el coronavirus reprograma a las células humanas para provocar la infección.

Y la buena noticia, dicen los investigadores, es que ya existen muchos fármacos que podrían regular la actividad de las quinasas y, por lo tanto, podrían ser utilizados para tratar la COVID-19.

Los científicos probaron cerca de 70 fármacos existentes e identificaron siete, principalmente tratamientos anticancerosos y antiinflamatorios, que demostraron tener un efecto para inhibir la actividad de las quinasas.

En pruebas de laboratorio con líneas celulares, los fármacos lograron evitar la respuesta inflamatoria y detener la replicación del virus.

Ahora los investigadores esperan poder empezar ensayos clínicos para probar los tratamientos en humanos.

El estudio, publicado en la revista Cell, demostró una vez más cómo la pandemia de coronavirus está acercando a investigadores de todo el mundo para trabajar juntos.

Y cómo la necesidad para entender más sobre este virus está acelerando los hallazgos científicos.

"Para mí, en lo personal, fue un proyecto científico fantástico, porque no todos los días puedes colaborar con tantos investigadores brillantes de diferentes partes del mundo", le dice a BBC Mundo Pedro Beltrao.

"Este fue un proyecto que en otra época hubiera tomado entre tres y cinco años, y se hizo en tres meses. Esto, para mi, fue algo increíble", agrega el científico.

Fuente: BBC News. Disponible en https://cutt.ly/9a0o9xu

Brasil autorizó ensayos de una vacuna contra la COVID-19 producida por una empresa china

4 jul. Unos nueve mil brasileños participarán de los ensayos del producto de la compañía Sinovac. Anteriormente, autoridades locales habían habilitado las pruebas con la potencial vacuna de la Universidad de Oxford.

Brasil, epicentro latinoamericano de la pandemia, aprobó los ensayos de la potencial vacuna contra el coronavirus desarrollada por la empresa china Sinovac y que se aplicará a 9.000 voluntarios en el país.

La Agencia Nacional de Vigilancia Sanitaria (Anvisa), vinculada al Ministerio de Salud, indicó en una nota que las pruebas de la potencial vacuna, elaborada a partir de "cepas inactivas" del patógeno, servirán para "evaluar su seguridad y eficacia" en la inmunización contra la COVID-19.

Los ensayos se realizarán, según la previsión inicial, a 9.000 personas en los estados de Sao Paulo, el más azotado de Brasil por la pandemia, Rio Grande do Sul, Minas Gerais y Paraná, además de en Brasilia, la capital del país.

El centro de investigación Instituto Butantan de Sao Paulo coordinará los estudios tras llegar a un acuerdo con el laboratorio chino para ejecutar la tercera y última fase de pruebas clínicas de la posible vacuna.

Esta es la segunda vez que las autoridades sanitarias brasileñas permiten probar la eficacia de

una vacuna candidata contra el nuevo coronavirus en el país, tras autorizar en junio pasado los ensayos de la fabricada por la Universidad de Oxford junto con la farmacéutica AstraZeneca.

Los test de esta última ya han empezado en un grupo de 2.000 personas y son conducidos por la Universidad Federal de Sao Paulo (Unifesp), con el apoyo financiero de la Fundación Lemann, del multimillonario brasileño Jorge Paulo Lemann.

El Ministerio de Salud anunció la semana pasada un acuerdo con la Universidad de Oxford y AstraZeneca que le permitirá producir esa vacuna.

El acuerdo compromete a Brasil con un desembolso de 288 millones de dólares por adquirir 100 millones de dosis y la transferencia de tecnología para su producción de forma autónoma en el país.

La cartera reconoció que se trata de una inversión de riesgo debido a que la vacuna, aunque es una de las más prometedoras, aún está en su tercera fase de pruebas clínicas y su eficacia y seguridad aún no han sido comprobadas.

Brasil, con 63.174 muertes, de las que 1.290 se registraron el último día, y 1,5 millones de casos, es el segundo país más afectado en el mundo, después de Estados Unidos, y el epicentro latinoamericano de la pandemia.

El viernes, la OMS advirtió que ninguna de las decenas de vacunas para el COVID-19 que se están investigando o de las 17 que están en etapa de ensayos clínicos está lo suficientemente avanzada como para pronosticar cuando podría empezar a producirse una vacuna eficaz y segura.

"Sería poco inteligente predecir cuando una vacuna estará lista", dijo el director de Emergencias Sanitarias de la OMS, Mike Ryan, quien, sin embargo, estima que para finales de este año se podrían tener resultados sobre la eficacia de las vacunas candidatas.

En ese caso se podría empezar con vacunaciones a principios del próximo año, pero ello dependerá de que haya una capacidad de producción suficiente, agregó.

Fuente: infobae. Disponible en https://cutt.ly/fa0Ozg2

Cuba cuenta con varios candidatos vacunales contra la COVID-19

4 jul. Tenemos varios candidatos vacunales y un grupo multidisciplinario que trabaja de forma acelerada para encontrar la vacuna contra la COVID-19, afirmó hoy el doctor Eduardo Martínez, presidente de BioCubaFarma.

Durante su comparecencia en el programa radio-televisivo de la Mesa Redonda, el especialista explicó que en la actualidad hay 205 vacunas registradas en el mundo, 21 de ellas en ensayos clínicos.

Agregó que en el caso de Cuba al llegar la pandemia con mayor retraso que en naciones como China, se comenzó a trabajar en la vacuna después y para ello debían tener la información genética del virus y la secuencia.

En el país -dijo- existen personas con una amplia experiencia y se está trabajando de forma acelerada para cumplir todos los pasos, y estamos creando condiciones para producirla a gran escala, explicó.

Añadió que a lo mejor no somos los primeros en tener la vacuna a nivel mundial, pero si vamos a ser de los primeros en lograr una amplia cobertura de vacunación a la población, estamos convencidos que va a ocurrir así, enfatizó Martínez.

Varias instituciones trabajan con candidatos vacunales

A su vez mencionó que el Instituto Finlay de Vacunas, el Centro de Inmunología Molecular y el Centro Ingeniería Genética y Biotecnología son los que llevan la delantera en el país en esa labor, aunque se irán incorporando otras instituciones para brindar su apoyo en esa importante tarea.

En otro momento de su intervención, el presidente de BioCubaFarma habló sobre las causas multifactoriales que inciden en la escasez de medicamentos, no solo en Cuba, sino a nivel mundial.

Aquí en el país -expresó- se nos adicionan problemas para adquirir materias primas, reactivos y piezas de repuesto, sobre todo debido al cruel bloqueo económico, comercial y financiero de Estados Unidos.

No obstante buscamos alternativas y podemos decir que nosotros también exportamos medicamentos y los ingresos son aprovechados en la propia producción de medicinas muy necesarias para el pueblo, destacó.

Situación actual de los medicamentos en Cuba

Asimismo se refirió a las afectaciones con las navieras habituales, provocando excesivos tiempos logísticos; mientras puso como ejemplo que un barco demoró dos meses en llegar al país con 22 tipos de medicamentos.

Explicó que se nos ha ido agotando la materia prima y eso ha influido igualmente en el desabastecimiento existente en los meses recientes. Además, resaltó que los medicamentos por lo general requieren de más de 10 componentes y si solo falta uno se dificulta la elaboración de estos.

Al referirse a los de mayor afectación, habló de los antiasmáticos, antihipertensivos y antialérgicos; así como los antibióticos que han estado muy afectados por falta de materias primas traídas de China y la India, puntualizó.

Agregó que se sigue trabajando buscando de manera permanente nuevos proveedores y tratando de agilizar la llegada de materias primas.

Fuente: tele pinar. Disponible en https://cutt.ly/Ea2eJg7

Los misterios sin respuesta del coronavirus y la covid-19

6 jul. Hace seis meses el mundo comenzó a conocer la aparición del nuevo coronavirus SARS-CoV-2 en Wuhan (China), una ciudad de 11 millones de habitantes. Este virus fue relacionado de manera inmediata con el ya conocido SARS, que en el 2003 causó la muerte de 800 personas.

Para entonces, pocos dimensionaban que este nuevo agente que causa la enfermedad COVID-19 fuera el generador de la más grave crisis de salud pública en más de 100 años y que a la fecha, después de convertirse en una pandemia, ha matado a más de medio millón de personas y ha comprometido la salud de al menos 10 millones de personas en todo el mundo.

Y si bien durante este tiempo el virus ha impulsado procesos de investigación para tratar de comprender la dinámica viral, sus efectos y sus posibles tratamientos, aun quedan preguntas sin responder que inquietan a la ciencia y sin un reto para el conocimiento acumulado que tiene como objetivo librarse de sus negativos efectos lo más pronto posible.

La revista científica Nature acaba de publicar un artículo en el que recoge y analiza los principales cuestionamientos sobre el SARS-CoV-2 y sobre los cuales los investigadores no tienen respuesta todavía.

¿Por qué las personas responden de manera diferente al virus?

Las estadísticas demuestran que los afectados por COVID-19 tienen marcadas diferencias en los efectos de la enfermedad. De hecho, algunas nunca desarrollan síntomas mientras que otras, incluso aparentemente sanas, producen neumonías graves y hasta mueren.

De acuerdo con Kari Stephansson, director ejecutivo de DeCODE Genetics en Islandia, las diferencias dramáticas pueden estar fundamentadas en variaciones determinadas por los genes humanos que no han sido analizadas en profundidad en razón a que aún no se cuenta con la suficiente cantidad de análisis.

Sin embargo, hay orientaciones que demuestran, por ejemplo, cómo en Italia quienes desarrollaron insuficiencia respiratoria grave tenían la posibilidad de portar una o dos variantes genéticas particulares al compararlos con quienes no tenían la

enfermedad. Una de estas variantes estaría en el genoma que determina el tipo de sangre ABO. Hay que decir, en todo caso, que no es el tipo de sangre el que determina la severidad o no sino las características generales de las personas con ciertos grupos de sangre.

La otra variación estaría cerca de varios genes que codifican una proteína que interactúa con el receptor que facilita la entrada del virus a las células; y otros que determinan la respuesta inmunológica contra los patógenos, agrega Stephansson en la revista Nature.

Hoy este tema se sigue investigando a través de búsquedas con análisis de genomas completos en personas sanas y que hayan tenido casos graves.

¿Existe la inmunidad contra el coronavirus?

La respuesta a esta pregunta tiene el acelerador puesto en todos los grupos de investigación inmunológica en razón a que la duración de las defensas que deja el virus en el cuerpo es determinante no solo para definir la evolución de la pandemia sino también para la potencial elaboración de tratamientos o vacunas.

Los estudios han encontrado que los niveles de anticuerpos contra el SARS-CoV-2 permanecen altos durante algunas semanas después de la infección, pero luego empiezan a disminuir. Llama la atención que estas defensas pueden permanecer altas por más tiempo en personas que habían padecido enfermedades graves. “Mientras más virus, más anticuerpos que más durarán”, dice en *Nature* el inmunólogo George Kassiotis, del Instituto Francis Crick de Londres, sobre un patrón que se ha observado en otras infecciones virales como las del Sars.

En esos casos se demostró que la mayoría de las personas perdieron sus anticuerpos en los primeros años, pero quienes tuvieron las formas más graves los mantuvieron incluso después de 12 años. Y si bien los investigadores aún desconocen las reacciones inmunológicas específicas contra el SARS-CoV-2, se cree que la inmunidad va más allá de los anticuerpos y están mediadas también por células (linfocitos-T), importantes en las defensas a largo plazo, aunque aún no hay un marcador claro y medible.

¿El nuevo coronavirus ha mutado de manera preocupante?

Todos los virus mutan a medida que infectan a las personas, y el SARS-CoV-2 no es la excepción, recuerda Nature. De hecho, los investigadores moleculares han rastreado estas mutaciones para seguir la propagación del virus a nivel mundial, pero además se buscan cambios estructurales sustanciales que puedan generar linajes más agresivos o con mayor capacidad de transmisión.

David Robertson, biólogo computacional de la Universidad de Glasgow, le dijo a esta revista que al tratarse de un virus nuevo es importante saber si se torna más peligroso. Todo esto porque dichos cambios tienen la posibilidad de disminuir la efectividad de las vacunas, algo que complicaría la situación.

Por ahora, la mayoría de las mutaciones encontradas no tienen impacto, por lo que los investigadores buscan si hay cambios en otra dirección. En ese sentido, Nature aclara que las variaciones encontradas en algunos lugares y que en un comienzo fueron clasificadas como más letales no tienen consistencia académica.

¿Cómo actuaría la vacuna?

De acuerdo con *Nature*, las vacunas efectivas podrían ser la única forma para salir de la pandemia. Actualmente hay 200 proyectos en desarrollo y 20 ya se encuentran en ensayos clínicos.

Ya hay algunos datos en animales y humanos sobre estas etapas tempranas y estos sugieren que las vacunas podrían ser efectivas para prevenir la infección pulmonar, pero no en otras partes. De hecho, la vacuna de la Universidad de Oxford podría prevenir el desarrollo de las formas graves, pero no la propagación del virus, según datos en monos.

Y aunque los datos en humanos son escasos y se ha encontrado que algunas promueven la creación de potentes anticuerpos, no se tiene claro si son suficientemente altos para detener nuevas infecciones y si persisten en el tiempo.

Lo cierto es que, según Dave OconCon, virólogo de la Universidad de Wisconsin, citado por Nature, se podrían tener vacunas clínicas útiles dentro de 12 o 18 meses, que tendrían que mejorarse progresivamente.

¿Cuál es el origen del virus?

Nature indica que la mayoría de los investigadores coinciden que el SARS-CoV-2 puede estar relacionado con murciélagos, específicamente en la especie herradura, que alberga dos coronavirus estrechamente relacionados con este nuevo virus: el RATG-13 y el RmYM02, que comparten el 93 por ciento de la secuencia.

La revista aclara que después de analizar 1.200 coronavirus en murciélagos de China se sugiere que probablemente su origen sea en murciélagos de la provincia de Yunnan, pero no de otros países.

Los investigadores también aislaron coronavirus en pangolines de Malasia y estos comparten el 92 por ciento de su genoma con el SARS-CoV-2, aunque no se ha comprobado que haya saltado de estos animales a los humanos. *Nature* insiste que para rastrear inequívocamente el paso de los animales a las personas es necesario encontrar una especie que albergue una versión genética que comparta más del 99 por ciento del genoma del SARS-CoV-2, algo que no por ahora no se considera fácil.

Zhang Zhigang, microbiólogo evolutivo de la Universidad de Yunnan, dice que con base en esta premisa las investigaciones han aislado virus de animales domésticos y silvestres en todo el sudeste asiático. Ese sigue siendo otro de los misterios alrededor del coronavirus.

Fuente: EL TIEMPO. Disponible en https://cutt.ly/ra2fqFG

Pneumonia vaccine indirectly strengthens body vs COVID-19, says expert

8 jul. Vaccination against pneumonia helps the body indirectly strengthen itself against the coronavirus disease 2019 (COVID-19), according to a pediatric specialist.

Dr. John Ong urged the Philippines to continue using the pneumococcal conjugate vaccine (PCV) 13 as the country grapples with the coronavirus menace.

"If you are inoculated for pneumonia, you are indirectly strengthening your body's defenses against COVID-19," he said in a radio interview.

Pneumonia is one of the potential complications of COVID-19.

Ong said the Philippines must stick to the broad-spectrum PCV 13, which combats 13 pneumococcal strains, rather than the PCV 10 because it is "more cost-effective."

He also cited a Department of Health study showing that, with PCV 13, the country had "fewer cases of pneumonia, we had fewer deaths."

"So, our experience shows that it's still better if we use the more effective, rather than the cheaper, vaccine," Ong added.

A health expert from El Salvador earlier urged the Philippines to continue using the "superior" PCV13.

Fuente: GMA NEWS ONLINE. Disponible en https://cutt.ly/3a2hD03

FINLAY EDICIONES

VACCIMONITOR

VacciMonitor es una revista con más de 25 años de difundir los resultados científicos sobre vacunas de instituciones nacionales e internacionales y así coadyuvar a la visibilidad de este sector de la ciencia en Cuba y otros países, principalmente de Hispanoamérica. **http://vaccimonitor.finlay.edu.cu**

Está dedicada a la Vacunología y se incluyen temáticas de Inmunología, Adyuvantes, Infectología, Microbiología, Epidemiología, Programas de Vacunaciones, Estudios Preclínicos y Clínicos, Biología molecular, Bioinformática, Biomodelos Experimentales, Inmunodiagnosticadores, Tecnologías de Producción, Validación, Aseguramiento de la Calidad y Aspectos regulatorios.

Arbitrada, de acceso abierto y bajo la Licencia Creative Commons está indexada en:

EBSCO Information Services

Scopus

DOAJ DIRECTORY OF OPEN ACCESS JOURNALS

SciELO

redalyc.org

WEB OF SCIENCE™

HINARI Research in Health

latindex Sistema Regional de Información en Línea para Revistas Científicas de América Latina, el Caribe, España y Portugal

SeCiMed

Visite también nuestra página @vaccimonitor

Artículos científicos publicados en Medline

Filters activated: Publication date from 2020/07/01 to 2020/07/08. "Vaccine" (Mesh)

593 Resultados

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

Candidate drugs against SARS-CoV-2 and COVID-19.
McKee DL, Sternberg A, Stange U, Laufer S, Naujokat C. Pharmacol Res. 2020 Jul;157:104859. doi: 10.1016/j.phrs.2020.104859. Epub 2020 Apr 29.
PMID: 32360480

The Science Underlying COVID-19: Implications for the Cardiovascular System.
Liu PP, Blet A, Smyth D, Li H. Circulation. 2020 Jul 7;142(1):68-78. doi: 10.1161/CIRCULATIONAHA.120.047549. Epub 2020 Apr 15.
PMID: 32293910

Current epidemiological and clinical features of COVID-19; a global perspective from China.
Tu H, Tu S, Gao S, Shao A, Sheng J. J Infect. 2020 Jul;81(1):1-9. doi: 10.1016/j.jinf.2020.04.011. Epub 2020 Apr 18.
PMID: 32315723

Current status of potential therapeutic candidates for the COVID-19 crisis.
Zhang J, Xie B, Hashimoto K. Brain Behav Immun. 2020 Jul;87:59-73. doi: 10.1016/j.bbi.2020.04.046. Epub 2020 Apr 22.
PMID: 32334062

Dengue: Status of current and under-development vaccines.
Redoni M, Yacoub S, Rivino L, Giacobbe DR, Luzzati R, Di Bella S. Rev Med Virol. 2020 Jul;30(4):e2101. doi: 10.1002/rmv.2101. Epub 2020 Feb 26.
PMID: 32101634

Mathematical assessment of the impact of non-pharmaceutical interventions on curtailing the 2019 novel Coronavirus.
Ngonghala CN, Iboi E, Eikenberry S, Scotch M, MacIntyre CR, Bonds MH, Gumel AB. Math Biosci. 2020 Jul;325:108364. doi: 10.1016/j.mbs.2020.108364. Epub 2020 May 1.
PMID: 32360770

Prevention and treatment of COVID-19 disease by controlled modulation of innate immunity.
Schijns V, Lavelle EC. Eur J Immunol. 2020 Jul;50(7):932-938. doi: 10.1002/eji.202048693. Epub 2020 Jun 15.
PMID: 32438473

Development of an inactivated **vaccine** candidate for SARS-CoV-2.
Gao Q, Bao L, Mao H, Wang L, Xu K, Yang M, Li Y, Zhu L, Wang N, Lv Z, Gao H, Ge X, Kan B, Hu Y, Liu J, Cai F, Jiang D, Yin Y, Qin C, Li J, Gong X, Lou X, Shi W, Wu D, Zhang H, Zhu L, Deng W, Li Y, Lu J, Li C, Wang X, Yin W, Zhang Y, Qin C. Science. 2020 Jul 3;369(6499):77-81. doi: 10.1126/science.abc1932. Epub 2020 May 6.
PMID: 32376603

The early landscape of coronavirus disease 2019 **vaccine** development in the UK and rest of the world.
Sharpe HR, Gilbride C, Allen E, Belij-Rammerstorfer S, Bissett C, Ewer K, Lambe T. Immunology. 2020 Jul;160(3):223-232. doi: 10.1111/imm.13222.
PMID: 32460358

Tuberculosis **vaccine**: A journey from BCG to present.
Fatima S, Kumari A, Das G, Dwivedi VP. Life Sci. 2020 Jul 1;252:117594. doi: 10.1016/j.lfs.2020.117594. Epub 2020 Apr 16.
PMID: 32305522

Key steps in **vaccine** development.
Stern PL. Ann Allergy Asthma Immunol. 2020 Jul;125(1):17-27. doi: 10.1016/j.anai.2020.01.025. Epub 2020 Feb 7.
PMID: 32044451

Towards effective COVID-19 vaccines: Updates, perspectives and challenges (Review).
Calina D, Docea AO, Petrakis D, Egorov AM, Ishmukhametov AA, Gabibov AG, Shtilman MI, Kostoff R, Carvalho F, Vinceti M, Spandidos DA, Tsatsakis A. Int J Mol Med. 2020 Jul;46(1):3-16. doi: 10.3892/ijmm.2020.4596. Epub 2020 May 6.
PMID: 32377694

A Mouse Model of SARS-CoV-2 Infection and Pathogenesis.
Sun SH, Chen Q, Gu HJ, Yang G, Wang YX, Huang XY, Liu SS, Zhang NN, Li XF, Xiong R, Guo Y, Deng YQ, Huang WJ, Liu Q, Liu QM, Shen YL, Zhou Y, Yang X, Zhao TY, Fan CF, Zhou YS, Qin CF, Wang YC. Cell Host Microbe. 2020 Jul 8;28(1):124-133.e4. doi: 10.1016/j.chom.2020.05.020. Epub 2020 May 27.
PMID: 32485164

COVID-19 vaccines: Knowing the unknown.
Lv H, Wu NC, Mok CKP. Eur J Immunol. 2020 Jul;50(7):939-943. doi: 10.1002/eji.202048663. Epub 2020 Jun 24.
PMID: 32437587

Emergence of novel coronavirus and progress toward treatment and **vaccine**.
Khan MM, Noor A, Madni A, Shafiq M. Rev Med Virol. 2020 Jul;30(4):e2116. doi: 10.1002/rmv.2116. Epub 2020 Jun 4.
PMID: 32495979

Hepatitis B **Vaccine**.
Hodgens A, Marathi R. 2020 Jul 2. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 32119287

The journey to a respiratory syncytial virus **vaccine**.
Mejias A, Rodríguez-Fernández R, Oliva S, Peeples ME, Ramilo O. Ann Allergy Asthma Immunol. 2020 Jul;125(1):36-46. doi: 10.1016/j.anai.2020.03.017. Epub 2020 Mar 23.
PMID: 32217187

Microstructure, pathophysiology, and potential therapeutics of COVID-19: A comprehensive review.
Singh SP, Pritam M, Pandey B, Yadav TP. J Med Virol. 2020 Jul 3:10.1002/jmv.26254. doi: 10.1002/jmv.26254. Online ahead of print.
PMID: 32617987

Epiglottitis.
Guerra AM, Waseem M. 2020 Jul 5. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 28613691

A candidate multi-epitope **vaccine** against SARS-CoV-2.
Kar T, Narsaria U, Basak S, Deb D, Castiglione F, Mueller DM, Srivastava AP. Sci Rep. 2020 Jul 2;10(1):10895. doi: 10.1038/s41598-020-67749-1.
PMID: 32616763

Molecular Aspects of COVID-19 Differential Pathogenesis.
Rothan HA, Acharya A, Reid SP, Kumar M, Byrareddy SN. Pathogens. 2020 Jul 6;9(7):E538. doi: 10.3390/pathogens9070538.
PMID: 32640525

Physicochemical properties of SARS-CoV-2 for drug targeting, virus inactivation and attenuation, **vaccine** formulation and quality control.
Scheller C, Krebs F, Minkner R, Astner I, Gil-Moles M, Wätzig H. Electrophoresis. 2020 Jul;41(13-14):1137-1151. doi: 10.1002/elps.202000121. Epub 2020 Jun 8.
PMID: 32469436

Beta human papillomaviruses infection and skin carcinogenesis.
Bandolin L, Borsetto D, Fussey J, Da Mosto MC, Nicolai P, Menegaldo A, Calabrese L, Tommasino M, Boscolo-Rizzo P. Rev Med Virol. 2020 Jul;30(4):e2104. doi: 10.1002/rmv.2104. Epub 2020 Mar 30.
PMID: 32232924

Control of avian influenza in China: Strategies and lessons.
Liu S, Zhuang Q, Wang S, Jiang W, Jin J, Peng C, Hou G, Li J, Yu J, Yu X, Liu H, Sun S, Yuan L, Chen J. Transbound Emerg Dis. 2020 Jul;67(4):1463-1471. doi: 10.1111/tbed.13515. Epub 2020 Mar 1.
PMID: 32065513

Considering how biological sex impacts immune responses and COVID-19 outcomes.
Scully EP, Haverfield J, Ursin RL, Tannenbaum C, Klein SL. Nat Rev Immunol. 2020 Jul;20(7):442-447. doi: 10.1038/s41577-020-0348-8. Epub 2020 Jun 11.
PMID: 32528136

Challenges at the Time of COVID-19: Opportunities and Innovations in Antivirals from Nature.
Hensel A, Bauer R, Heinrich M, Spiegler V, Kayser O, Hempel G, Kraft K. Planta Med. 2020 Jul;86(10):659-664. doi: 10.1055/a-1177-4396. Epub 2020 May 20.
PMID: 32434254

Bioinformatic prediction of potential T cell epitopes for SARS-Cov-2.
Kiyotani K, Toyoshima Y, Nemoto K, Nakamura Y. J Hum Genet. 2020 Jul;65(7):569-575. doi: 10.1038/s10038-020-0771-5. Epub 2020 May 6.
PMID: 32372051

COVID-19 Comes 40 Years After AIDS - Any Lesson?
Soriano V, Barreiro P, Ramos JM, Eirós JM, de Mendoza C. AIDS Rev. 2020 Jul 8;22(2):63-77. doi: 10.24875/AIDSRev.M20000030.
PMID: 32412509

Measles.
Kondamudi NP, Waymack JR. 2020 Jul 2. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 28846330

Host immune response-inspired development of the influenza **vaccine**.
Choi A, García-Sastre A, Schotsaert M. Ann Allergy Asthma Immunol. 2020 Jul;125(1):28-35. doi: 10.1016/j.anai.2020.04.008. Epub 2020 Apr 20.
PMID: 32325117

Diagnosis and treatment of coronavirus disease 2019 (COVID-19): Laboratory, PCR, and chest CT imaging findings.
Abbasi-Oshaghi E, Mirzaei F, Farahani F, Khodadadi I, Tayebinia H. Int J Surg. 2020 Jul;79:143-153. doi: 10.1016/j.ijsu.2020.05.018. Epub 2020 May 15.
PMID: 32422384

Crystal structure of Nsp15 endoribonuclease NendoU from SARS-CoV-2.
Kim Y, Jedrzejczak R, Maltseva NI, Wilamowski M, Endres M, Godzik A, Michalska K, Joachimiak A. Protein Sci. 2020 Jul;29(7):1596-1605. doi: 10.1002/pro.3873. Epub 2020 May 2.
PMID: 32304108

Areas of academic research with the impact of COVID-19.
Haleem A, Javaid M, Vaishya R, Deshmukh SG. Am J Emerg Med. 2020 Jul;38(7):1524-1526. doi: 10.1016/j.ajem.2020.04.022. Epub 2020 Apr 15.
PMID: 32317202

Hydroxychloroquine and Covid-19: A Cellular and Molecular Biology Based Update.
Pal A, Pawar A, Goswami K, Sharma P, Prasad R. Indian J Clin Biochem. 2020 Jul;35(3):274-284. doi: 10.1007/s12291-020-00900-x. Epub 2020 Jun 10.
PMID: 32641874

Antibody signature induced by SARS-CoV-2 spike protein immunogens in rabbits.
Ravichandran S, Coyle EM, Klenow L, Tang J, Grubbs G, Liu S, Wang T, Golding H, Khurana S. Sci Transl Med. 2020 Jul 1;12(550):eabc3539. doi: 10.1126/scitranslmed.abc3539. Epub 2020 Jun 8.
PMID: 32513867

Safety and immunogenicity of a candidate Middle East respiratory syndrome coronavirus viral-vectored **vaccine**: a dose-escalation, open-label, non-randomised, uncontrolled, phase 1 trial.
Folegatti PM, Bittaye M, Flaxman A, Lopez FR, Bellamy D, Kupke A, Mair C, Makinson R, Sheridan J, Rohde C, Halwe S, Jeong Y, Park YS, Kim JO, Song M, Boyd A, Tran N, Silman D, Poulton I, Datoo M, Marshall J, Themistocleous Y, Lawrie A, Roberts R, Berrie E, Becker S, Lambe T, Hill A, Ewer K, Gilbert S. Lancet Infect Dis. 2020 Jul;20(7):816-826. doi: 10.1016/S1473-3099(20)30160-2. Epub 2020 Apr 21. PMID: 32325038

Defining Essential Services for Deaf and Hard of Hearing Children during the COVID-19 Pandemic.
Pattisapu P, Evans SS, Noble AR, Norton SJ, Ou HC, Sie KCY, Horn DL. Otolaryngol Head Neck Surg. 2020 Jul;163(1):91-93. doi: 10.1177/0194599820925058. Epub 2020 May 5.
PMID: 32366178

Development and serology based efficacy assessment of a trivalent foot-and-mouth disease **vaccine**.
Al Amin M, Ali MR, Islam MR, Alam ASMRU, Shill DK, Rahman MS, Siddique MA, Sultana M, Hossain MA. Vaccine. 2020 Jul 6;38(32):4970-4978. doi: 10.1016/j.vaccine.2020.05.079. Epub 2020 Jun 10.
PMID: 32535015

The role of anti-flavivirus humoral immune response in protection and pathogenesis.
Hurtado-Monzón AM, Cordero-Rivera CD, Farfan-Morales CN, Osuna-Ramos JF, De Jesús-González LA, Reyes-Ruiz JM, Del Ángel RM. Rev Med Virol. 2020 Jul;30(4):e2100. doi: 10.1002/rmv.2100. Epub 2020 Feb 26.
PMID: 32101633

IFNL3-adjuvanted HCV DNA **vaccine** reduces regulatory T cell frequency and increases virus-specific T cell responses.
Han JW, Sung PS, Hong SH, Lee H, Koh JY, Lee H, White S, Maslow JN, Weiner DB, Park SH, Jeong M, Heo J, Ahn SH, Shin EC. J Hepatol. 2020 Jul;73(1):72-83. doi: 10.1016/j.jhep.2020.02.009. Epub 2020 Feb 21.
PMID: 32088322

Phase I Trial of a Modified Vaccinia Ankara Priming **Vaccine** Followed by a Fowlpox Virus Boosting **Vaccine** Modified to Express Brachyury and Costimulatory Molecules in Advanced Solid Tumors.
Collins JM, Donahue RN, Tsai YT, Manu M, Palena C, Gatti-Mays ME, Marté JL, Madan RA, Karzai F, Heery CR, Strauss J, Abdul-Sater H, Cordes L, Schlom J, Gulley JL, Bilusic M. Oncologist. 2020 Jul;25(7):560-e1006. doi: 10.1634/theoncologist.2019-0932. Epub 2019 Dec 26.
PMID: 31876334

Impact of Routine Rotavirus Vaccination in Germany: Evaluation Five Years After Its Introduction.
Marquis A, Koch J. Pediatr Infect Dis J. 2020 Jul;39(7):e109-e116. doi: 10.1097/INF.0000000000002656.
PMID: 32187139

In situ antitumor vaccination: Targeting the tumor microenvironment.
Li H, Yu J, Wu Y, Shao B, Wei X. J Cell Physiol. 2020 Jul;235(7-8):5490-5500. doi: 10.1002/jcp.29551. Epub 2020 Feb 6.
PMID: 32030759

Ebola virus glycoprotein stimulates IL-18-dependent natural killer cell responses.
Wagstaffe HR, Clutterbuck EA, Bockstal V, Stoop JN, Luhn K, Douoguih M, Shukarev G, Snape MD, Pollard AJ, Riley EM, Goodier MR. J Clin Invest. 2020 Jul 1;130(7):3936-3946. doi: 10.1172/JCI132438.

PMID: 32315287

Rabies.
Koury R, Warrington SJ. 2020 Jul 3. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 28846292

Influenza **vaccine** effectiveness among outpatients in the US Influenza **Vaccine** Effectiveness Network by study site 2011-2016.
Balasubramani GK, Nowalk MP, Sax TM, Suyama J, Bobyock E, Rinaldo CR Jr, Martin ET, Monto AS, Jackson ML, Gaglani MJ, Flannery B, Chung JR, Zimmerman RK. Influenza Other Respir Viruses. 2020 Jul;14(4):380-390. doi: 10.1111/irv.12741. Epub 2020 Apr 16.
PMID: 32298048

Immunogenicity and protective potency of Norovirus GII.17 virus-like particle-based **vaccine**.
Chen W, Kang T, Yuan R, Shao C, Jing S. Biotechnol Lett. 2020 Jul;42(7):1211-1218. doi: 10.1007/s10529-020-02837-w. Epub 2020 Feb 22.
PMID: 32088791

Parents' Perspectives about **Vaccine** Hesitancies and **Vaccine** Rejection, in the West of Turkey.
Akbas Gunes N. J Pediatr Nurs. 2020 Jul-Aug;53:e186-e194. doi: 10.1016/j.pedn.2020.04.001. Epub 2020 Apr 27.
PMID: 32354456

Impact of checkpoint blockade on cancer **vaccine**-activated CD8+ T cell responses.
Santos PM, Adamik J, Howes TR, Du S, Vujanovic L, Warren S, Gambotto A, Kirkwood JM, Butterfield LH. J Exp Med. 2020 Jul 6;217(7):e20191369. doi: 10.1084/jem.20191369.
PMID: 32369107

Safety and immunogenicity of a parenteral trivalent P2-VP8 subunit rotavirus **vaccine**: a multisite, randomised, double-blind, placebo-controlled trial.
Groome MJ, Fairlie L, Morrison J, Fix A, Koen A, Masenya M, Jose L, Madhi SA, Page N, McNeal M, Dally L, Cho I, Power M, Flores J, Cryz S. Lancet Infect Dis. 2020 Jul;20(7):851-863. doi: 10.1016/S1473-3099(20)30001-3. Epub 2020 Apr 3.
PMID: 32251641

The Challenge of Maintaining Metabolic Health During a Global Pandemic.
King AJ, Burke LM, Halson SL, Hawley JA. Sports Med. 2020 Jul;50(7):1233-1241. doi: 10.1007/s40279-020-01295-8.
PMID: 32449141

Effect of the Phytochemical Agents Against the SARS-CoV and Selected Some of them for Application to COVID-19: A Mini-Review.
Idrees M, Khan S, Memon NH, Zhang Z. Curr Pharm Biotechnol. 2020 Jul 3. doi: 10.2174/1389201021666200703201458. Online ahead of print.
PMID: 32619167

NUMBER OF CASES OF VARICELLA AND HOSPITALIZATION IN A PEDIATRIC REFERENCE HOSPITAL IN BRAZIL AFTER INTRODUCING THE **VACCINE**.
Silva HBAE, Pinto ICT, Ribeiro JGL, Resende LS, Carvalho LK, Maia MMM, Araújo RFA, Diniz LMO. Rev Paul Pediatr. 2021;39:e2019215. doi: 10.1590/1984-0462/2021/39/2019215. Epub 2020 Jul 3.
PMID: 32638948

The early detection of cervical cancer. The current and changing landscape of cervical disease detection.
Shiraz A, Crawford R, Egawa N, Griffin H, Doorbar J. Cytopathology. 2020 Jul;31(4):258-270. doi: 10.1111/cyt.12835.
PMID: 32301535

Elimination of hepatitis C in Europe: can WHO targets be achieved?
Matičič M, Lombardi A, Mondelli MU, Colombo M; ESCMID Study Group for Viral Hepatitis (ESGVH). Clin Microbiol Infect. 2020 Jul;26(7):818-823. doi: 10.1016/j.cmi.2020.01.014. Epub 2020 Jan 21.
PMID: 31978546

Effectiveness of the AS04-adjuvanted HPV-16/18 **vaccine** in reducing oropharyngeal HPV infections in young females-Results from a community-randomized trial.
Lehtinen M, Apter D, Eriksson T, Harjula K, Hokkanen M, Lehtinen T, Natunen K, Damaso S, Soila M, Bi D, Struyf F. Int J Cancer. 2020 Jul 1;147(1):170-174. doi: 10.1002/ijc.32791. Epub 2019 Dec 14.
PMID: 31736068

Waning immunity and re-emergence of measles and mumps in the **vaccine** era.
Yang L, Grenfell BT, Mina MJ. Curr Opin Virol. 2020 Jul 4;40:48-54. doi: 10.1016/j.coviro.2020.05.009. Online ahead of print.
PMID: 32634672

Immunogenicity and safety of a DTaP-IPV/Hib pentavalent **vaccine** given as primary and booster vaccinations in healthy infants and toddlers in Japan.
Nakayama T, Vidor E, Tsuzuki D, Nishina S, Sasaki T, Ishii Y, Mizukami H, Tsuge H. J Infect Chemother. 2020 Jul;26(7):651-659. doi: 10.1016/j.jiac.2019.11.012. Epub 2020 Apr 16.
PMID: 32307307

Development of a Synthetic Poxvirus-Based SARS-CoV-2 **Vaccine**.
Chiuppesi F, Salazar MD, Contreras H, Nguyen VH, Martinez J, Park S, Nguyen J, Kha M, Iniguez A, Zhou Q, Kaltcheva T, Levytskyy R, Ebelt ND, Kang TH, Wu X, Rogers T, Manuel ER, Shostak Y, Diamond DJ, Wussow F. bioRxiv. 2020 Jul 2:2020.07.01.183236. doi: 10.1101/2020.07.01.183236. Preprint.
PMID: 32637957

Factors in B cell competition and immunodominance.
Abbott RK, Crotty S. Immunol Rev. 2020 Jul;296(1):120-131. doi: 10.1111/imr.12861. Epub 2020 Jun 1.
PMID: 32483855

T Cells Modified with CD70 as an Alternative Cellular **Vaccine** for Antitumor Immunity.
Lee SE, Shin AR, Sohn HJ, Cho HI, Kim TG. Cancer Res Treat. 2020 Jul;52(3):747-763. doi: 10.4143/crt.2019.721. Epub 2020 Feb 14.
PMID: 32065848

Pandemic Paradox.
Lyon D. Oncol Nurs Forum. 2020 Jul 1;47(4):371-372. doi: 10.1188/20.ONF.371-372.
PMID: 32555550

Japan's Ongoing Crisis on HPV Vaccination.
Sekine M, Kudo R, Yamaguchi M, Hanley SJB, Hara M, Adachi S, Ueda Y, Miyagi E, Ikeda S, Yagi A, Enomoto T. Vaccines (Basel). 2020 Jul 6;8(3):E362. doi: 10.3390/vaccines8030362.
PMID: 32640691

The biological characteristics of SARS-CoV-2 spike protein Pro330-Leu650.
Su QD, Yi Y, Zou YN, Jia ZY, Qiu F, Wang F, Yin WJ, Zhou WT, Zhang S, Yu PC, Bi SL, Shen LP, Wu GZ. Vaccine. 2020 Jul 6;38(32):5071-5075. doi: 10.1016/j.vaccine.2020.04.070. Epub 2020 Apr 30.
PMID: 32513514

SAFETY, IMMUNOGENICITY, AND EFFICACY OF INTRAMUSCULAR AND ORAL DELIVERY OF ERA-G333 RECOMBINANT RABIES VIRUS **VACCINE** TO BIG BROWN BATS (EPTESICUS FUSCUS).
Gilbert AT, Wu X, Jackson FR, Franka R, McCracken GF, Rupprecht CE. J Wildl Dis. 2020 Jul;56(3):620-630. doi: 10.7589/2019-04-108. Epub 2020 Jan 2.
PMID: 31895645

Pathways to COVID-19 'community protection'.
Marais BJ, Sorrell TC. Int J Infect Dis. 2020 Jul;96:496-499. doi: 10.1016/j.ijid.2020.05.058. Epub 2020 May 18.
PMID: 32425642

Understanding factors associated with **vaccine** uptake and **vaccine** hesitancy in patients with rheumatoid arthritis: a scoping literature review.
Boucher VG, Pelaez S, Gemme C, Labbe S, Lavoie KL. Clin Rheumatol. 2020 Jul 3. doi: 10.1007/s10067-020-05059-7. Online ahead of print.
PMID: 32621081

Induction of systemic immune responses and reversion of immunosuppression in the tumor microenvironment by a therapeutic **vaccine** for cervical cancer.
Che Y, Yang Y, Suo J, An Y, Wang X. Cancer Immunol Immunother. 2020 Jul 1. doi: 10.1007/s00262-020-02651-3. Online ahead of print.
PMID: 32607768

The role of host genetics in the immune response to SARS-CoV-2 and COVID-19 susceptibility and severity.
Ovsyannikova IG, Haralambieva IH, Crooke SN, Poland GA, Kennedy RB. Immunol Rev. 2020 Jul;296(1):205-219. doi: 10.1111/imr.12897. Epub 2020 Jul 13.
PMID: 32658335

Preserved Cellular Immunity Upon Influenza Vaccination in Most Patients with Common Variable Immunodeficiency.
Friedmann D, Goldacker S, Peter HH, Warnatz K. J Allergy Clin Immunol Pract. 2020 Jul-Aug;8(7):2332-2340.e5. doi: 10.1016/j.jaip.2020.04.019. Epub 2020 Apr 21.
PMID: 32330665

Effect of Haemophilus influenzae type b and 13-valent pneumococcal conjugate vaccines on childhood pneumonia hospitalizations and deaths in Botswana.
Congdon M, Hong H, Young RR, Cunningham CK, Enane LA, Arscott-Mills T, Banda FM, Chise M, Motlhatlhedi K, Feemster K, Patel SM, Boiditswe S, Leburu T, Shah SS, Steenhoff AP, Kelly MS. Clin Infect Dis. 2020 Jul 8:ciaa919. doi: 10.1093/cid/ciaa919. Online ahead of print.
PMID: 32634831

No similarities between the Wakefield report on measles, mumps and rubella **vaccine** and the Swedish report on traumatic shaking.
Lynøe N, Eriksson A. Acta Paediatr. 2020 Jul;109(7):1326-1329. doi: 10.1111/apa.15122. Epub 2019 Dec 26.
PMID: 31803948

Vaccines Against Dengue and West Nile Viruses in India: The Need of the Hour.
Gore MM. Viral Immunol. 2020 Jul/Aug;33(6):423-433. doi: 10.1089/vim.2019.0122. Epub 2020 Apr 22.
PMID: 32320353

A Phase 1 Trial Assessing the Safety and Tolerability of a Therapeutic DNA Vaccination Against HPV16 and HPV18 E6/E7 Oncogenes After Chemoradiation for Cervical Cancer.
Hasan Y, Furtado L, Tergas A, Lee N, Brooks R, McCall A, Golden D, Jolly S, Fleming G, Morrow M, Kraynyak K, Sylvester A, Arif F, Levin M, Schwartz D, Boyer J, Skolnik J, Esser M, Kumar R, Bagarazzi M, Weichselbaum R, Spiotto M. Int J Radiat Oncol Biol Phys. 2020 Jul 1;107(3):487-498. doi: 10.1016/j.ijrobp.2020.02.031. Epub 2020 Mar 7.
PMID: 32151670

SARS-CoV-2/COVID-19: a primer for cardiologists.
de Vries AAF. Neth Heart J. 2020 Jul;28(7-8):366-383. doi: 10.1007/s12471-020-01475-1.
PMID: 32671650

HPV **vaccine** acceptance and hesitancy - lessons learned during 8 years of regional HPV prophylaxis program in Wroclaw, Poland.
Ludwikowska KM, Biela M, Szenborn L. Eur J Cancer Prev. 2020 Jul;29(4):346-349. doi: 10.1097/CEJ.0000000000000556.
PMID: 31770346

Haemato-immunological responses and effectiveness of feed-based bivalent **vaccine** against Streptococcus iniae and Aeromonas hydrophila infections in hybrid red tilapia (Oreochromis mossambicus × O. niloticus).
Monir MS, Yusoff SBM, Zulperi ZBM, Hassim HBA, Mohamad A, Ngoo MSBMH, Ina-Salwany MY. BMC Vet Res. 2020 Jul 2;16(1):226. doi: 10.1186/s12917-020-02443-y.
PMID: 32615969

Predominance of influenza virus A(H3N2) 3C.2a1b and A(H1N1)pdm09 6B.1A5A genetic subclades in the WHO European Region, 2018-2019.
Melidou A, Hungnes O, Pereyaslov D, Adlhoch C, Segaloff H, Robesyn E, Penttinen P, Olsen SJ; European Region influenza surveillance network. Vaccine. 2020 Jul 31;38(35):5707-5717. doi: 10.1016/j.vaccine.2020.06.031. Epub 2020 Jul 3.
PMID: 32624252

Generation and evaluation of a **vaccine** candidate of attenuated and heat-resistant genotype VIII Newcastle disease virus.
Ruan B, Liu Q, Chen Y, Niu X, Wang X, Zhang C, Guo M, Zhang X, Cao Y, Wu Y. Poult Sci. 2020 Jul;99(7):3437-3444. doi: 10.1016/j.psj.2020.01.034. Epub 2020 Apr 23.
PMID: 32616237

BCG **vaccine** and COVID-19: implications for infection prophylaxis and cancer immunotherapy.
Koti M, Morales A, Graham CH, Siemens DR. J Immunother Cancer. 2020 Jul;8(2):e001119. doi: 10.1136/jitc-2020-001119.
PMID: 32636240

The newly emerged COVID-19 disease: a systemic review.
Abebe EC, Dejenie TA, Shiferaw MY, Malik T. Virol J. 2020 Jul 8;17(1):96. doi: 10.1186/s12985-020-01363-5.
PMID: 32641059

Vaccine distrust: Investigation of the views and attitudes of parents in regard to vaccination of their children.
Caudal H, Briend-Godet V, Caroff N, Moret L, Navas D, Huon JF. Ann Pharm Fr. 2020 Jul;78(4):294-302. doi: 10.1016/j.pharma.2020.03.003. Epub 2020 Apr 2.
PMID: 32434681

Review of data and knowledge gaps regarding yellow fever **vaccine**-induced immunity and duration of protection.
Staples JE, Barrett ADT, Wilder-Smith A, Hombach J. NPJ Vaccines. 2020 Jul 6;5:54. doi: 10.1038/s41541-020-0205-6. eCollection 2020.
PMID: 32655896

Reasons for not receiving the HPV **vaccine** among eligible adults: Lack of knowledge and of provider recommendations contribute more than safety and insurance concerns.
Fokom Domgue J, Cunningham SA, Yu RK, Shete S. Cancer Med. 2020 Jul;9(14):5281-5290. doi: 10.1002/cam4.3192. Epub 2020 Jun 1.
PMID: 32483891

Prospects and Challenges in the Development of Universal Influenza Vaccines.
Madsen A, Cox RJ. Vaccines (Basel). 2020 Jul 6;8(3):E361. doi: 10.3390/vaccines8030361.
PMID: 32640619

Viral antigens elicit augmented immune responses in primary Sjögren's syndrome.
Björk A, Thorlacius GE, Mofors J, Richardsdotter Andersson E, Ivanchenko M, Tingström J, James T, Brokstad KA, Cox RJ, Jonsson R, Kvarnström M, Wahren-Herlenius M. Rheumatology (Oxford). 2020 Jul 1;59(7):1651-1661. doi: 10.1093/rheumatology/kez509.
PMID: 31665501

HPV Vaccination: The Position Paper of the Italian Society of Colposcopy and Cervico-Vaginal Pathology (SICPCV).
Ciavattini A, Giannella L, De Vincenzo R, Di Giuseppe J, Papiccio M, Lukic A, Delli Carpini G, Perino A, Frega A, Sopracordevole F, Barbero M, Gultekin M. Vaccines (Basel). 2020 Jul 2;8(3):E354. doi: 10.3390/vaccines8030354.
PMID: 32630772

Unsolved problems and new medical approaches to otitis media.
Principi N, Esposito S. Expert Opin Biol Ther. 2020 Jul;20(7):741-749. doi: 10.1080/14712598.2020.1740677. Epub 2020 Apr 20.
PMID: 32178551

An Efficient Double-Layer Blockchain Method for **Vaccine** Production Supervision.
Peng S, Hu X, Zhang J, Xie X, Long C, Tian Z, Jiang H. IEEE Trans Nanobioscience. 2020 Jul;19(3):579-587. doi: 10.1109/TNB.2020.2999637.
PMID: 32603300

γδ T cells in livestock: Responses to pathogens and **vaccine** potential.
Baldwin CL, Yirsaw A, Gillespie A, Le Page L, Zhang F, Damani-Yokota P, Telfer JC. Transbound Emerg Dis. 2020 Jul;67 Suppl 2:119-128. doi: 10.1111/tbed.13328. Epub 2019 Sep 12.
PMID: 31515956

Polyomavirus-driven Merkel cell carcinoma: Prospects for therapeutic **vaccine** development.
Tabachnick-Cherny S, Pulliam T, Church C, Koelle DM, Nghiem P. Mol Carcinog. 2020 Jul;59(7):807-821. doi: 10.1002/mc.23190. Epub 2020 Mar 27.
PMID: 32219902

Vaccinology: time to change the paradigm?
Benn CS, Fisker AB, Rieckmann A, Sørup S, Aaby P. Lancet Infect Dis. 2020 Jul 6:S1473-3099(19)30742-X. doi: 10.1016/S1473-3099(19)30742-X. Online ahead of print.
PMID: 32645296

Reduction of Postweaning Multisystemic Wasting Syndrome-Associated Clinical Symptoms by Virus-Like Particle **Vaccine** Against Porcine Parvovirus and Porcine Circovirus Type 2.
Liu G, Qiao X, Chang C, Hua T, Wang J, Tang B, Zhang D. Viral Immunol. 2020 Jul/Aug;33(6):444-456. doi: 10.1089/vim.2019.0201. Epub 2020 Apr 7.
PMID: 32255758

Immunotherapy in Prostate Cancer.
Fay EK, Graff JN. Cancers (Basel). 2020 Jul 1;12(7):E1752. doi: 10.3390/cancers12071752.
PMID: 32630247 Review.

Human papillomavirus **vaccine**-associated premature ovarian insufficiency and related adverse events: data mining of **Vaccine** Adverse Event Reporting System.
Gong L, Ji HH, Tang XW, Pan LY, Chen X, Jia YT. Sci Rep. 2020 Jul 1;10(1):10762. doi: 10.1038/s41598-020-67668-1.
PMID: 32612121

Protecting people with multiple sclerosis through vaccination.
Reyes S, Ramsay M, Ladhani S, Amirthalingam G, Singh N, Cores C, Mathews J, Lambourne J, Marta M, Turner B, Gnanapavan S, Dobson R, Schmierer K, Giovannoni G. Pract Neurol. 2020 Jul 6:practneurol-2020-002527. doi: 10.1136/practneurol-2020-002527. Online ahead of print.
PMID: 32632038

Epitope based peptide **vaccine** against SARS-COV2: an immune-informatics approach.
Bhatnager R, Bhasin M, Arora J, Dang AS. J Biomol Struct Dyn. 2020 Jul 3:1-16. doi: 10.1080/07391102.2020.1787227. Online ahead of print.
PMID: 32619134

Parental Hesitancy About Routine Childhood and Influenza Vaccinations: A National Survey.
Kempe A, Saville AW, Albertin C, Zimet G, Breck A, Helmkamp L, Vangala S, Dickinson LM, Rand C, Humiston S, Szilagyi PG. Pediatrics. 2020 Jul;146(1):e20193852. doi: 10.1542/peds.2019-3852. Epub 2020 Jun 15.
PMID: 32540985

Immunogenicity and safety of two-visit, intradermal pre-exposure rabies prophylaxis simultaneously administrated with chimeric live-attenuated Japanese encephalitis **vaccine** in children living in rabies and Japanese encephalitis endemic country.
Angsuwatcharakon P, Ratananpinit N, Yoksan S, Saengseesom W, Sriaksorn R, Raksahket N, Tantawichien T. Vaccine. 2020 Jul 6;38(32):5015-5020. doi: 10.1016/j.vaccine.2020.05.054. Epub 2020 Jun 7.
PMID: 32522414

Dynamics of G2P[4] strain evolution and rotavirus vaccination: A review of evidence for Rotarix.
Bibera GL, Chen J, Pereira P, Benninghoff B. Vaccine. 2020 Jul 31;38(35):5591-5600. doi: 10.1016/j.vaccine.2020.06.059. Epub 2020 Jul 7.
PMID: 32651115

Nurses' Perspectives on the Dismissal of **Vaccine**-Refusing Families From Pediatric and Family Care Practices.
Deem MJ, Kronk RA, Staggs VS, Lucas D. Am J Health Promot. 2020 Jul;34(6):622-632. doi: 10.1177/0890117120906971. Epub 2020 Feb 20.
PMID: 32077306

Modulation of immune responses using adjuvants to facilitate therapeutic vaccination.
Schijns V, Fernández-Tejada A, Barjaktarović Ž, Bouzalas I, Brimnes J, Chernysh S, Gizurarson S, Gursel I, Jakopin Ž, Lawrenz M, Nativi C, Paul S, Pedersen GK, Rosano C, Ruiz-de-Angulo A, Slütter B, Thakur A, Christensen D, Lavelle EC. Immunol Rev. 2020 Jul;296(1):169-190. doi: 10.1111/imr.12889. Epub 2020 Jun 28.
PMID: 32594569

Cellular immunotherapies for cancer.
Hayes C. Ir J Med Sci. 2020 Jul 1:1-17. doi: 10.1007/s11845-020-02264-w. Online ahead of print.
PMID: 32607912

A future vaccination campaign against COVID-19 at risk of **vaccine** hesitancy and politicisation.
COCONEL Group. Lancet Infect Dis. 2020 Jul;20(7):769-770. doi: 10.1016/S1473-3099(20)30426-6. Epub 2020 May 20.
PMID: 32445713

Latent Class Analysis of Maternal **Vaccine** Attitudes and Beliefs.
Dudley MZ, Limaye RJ, Salmon DA, Omer SB, O'Leary ST, Ellingson MK, Spina CI, Brewer SE, Bednarczyk RA, Malik F, Frew PM, Chamberlain AT. Health Educ Behav. 2020 Jul 8:1090198120939491. doi: 10.1177/1090198120939491. Online ahead of print.
PMID: 32639167

Chitosan, N,N,N-trimethyl chitosan (TMC) and 2-hydroxypropyltrimethyl ammonium chloride chitosan (HTCC): The potential immune adjuvants and nano carriers.
Zhao J, Li J, Jiang Z, Tong R, Duan X, Bai L, Shi J. Int J Biol Macromol. 2020 Jul 1;154:339-348. doi: 10.1016/j.ijbiomac.2020.03.065. Epub 2020 Mar 14.
PMID: 32184144

A ferritin nanoparticle **vaccine** for foot-and-mouth disease virus elicited partial protection in mice.
Chen Y, Hu Y, Chen H, Li X, Qian P. Vaccine. 2020 Jul 31;38(35):5647-5652. doi: 10.1016/j.vaccine.2020.06.063. Epub 2020 Jul 3.
PMID: 32624251

Bacillus Calmette-Guérin **vaccine**, antimalarial, age and gender relation to COVID-19 spread and mortality.
Osama El-Gendy A, Saeed H, Ali AMA, Zawbaa HM, Gomaa D, Harb HS, Madney YM, Osama H, Abdelrahman MA, Abdelrahim MEA. Vaccine. 2020 Jul 31;38(35):5564-5568. doi: 10.1016/j.vaccine.2020.06.083. Epub 2020 Jul 3.
PMID: 32654907

A systematic review of **vaccine** availability at the national, district, and health facility level in the WHO African Region.
Iwu CJ, Ngcobo N, Jaca A, Wiyeh A, Pienaar E, Chikte U, Wiysonge CS. Expert Rev Vaccines. 2020 Jul 1. doi: 10.1080/14760584.2020.1791088. Online ahead of print.
PMID: 32605395

Human papillomavirus genotype contribution to cervical cancer and precancer: Implications for screening and vaccination in Japan.
Onuki M, Matsumoto K, Iwata T, Yamamoto K, Aoki Y, Maenohara S, Tsuda N, Kamiura S, Takehara K, Horie K, Tasaka N, Yahata H, Takei Y, Aoki Y, Kato H, Motohara T, Nakamura K, Ishikawa M, Kato T, Yoshida H, Matsumura N, Nakai H, Shigeta S, Takahashi F, Noda K, Yaegashi N, Yoshikawa H. Cancer Sci. 2020 Jul;111(7):2546-2557. doi: 10.1111/cas.14445. Epub 2020 May 21.
PMID: 32372453

Designing a multi-component intervention (P3-MumBubVax) to promote vaccination in antenatal care in Australia.
Kaufman J, Attwell K, Hauck Y, Leask J, Omer SB, Regan A, Danchin M. Health Promot J Austr. 2020 Jul 3. doi: 10.1002/hpja.382. Online ahead of print.
PMID: 32619032

Barriers and facilitators to seasonal influenza vaccination uptake among nurses: A mixed methods study.
Flanagan P, Dowling M, Gethin G. J Adv Nurs. 2020 Jul;76(7):1746-1764. doi: 10.1111/jan.14360. Epub 2020 Apr 15.
PMID: 32202315

Seroprevalence of antibodies against diphtheria, tetanus, and pertussis among healthy Thai adolescents.
Hanvatananukul P, Prasarakee C, Sarachai S, Aurpibul L, Sintupat K, Khampan R, Saheng J, Sudjaritruk T. Int J Infect Dis. 2020 Jul;96:422-430. doi: 10.1016/j.ijid.2020.04.088. Epub 2020 May 6.
PMID: 32387447

Lignin nanoparticles as a promising **vaccine** adjuvant and delivery system for ovalbumin.
Alqahtani MS, Kazi M, Ahmad MZ, Syed R, Alsenaidy MA, Albraiki SA. Int J Biol Macromol. 2020 Jul 6:S0141-8130(20)33773-9. doi: 10.1016/j.ijbiomac.2020.07.026. Online ahead of print.
PMID: 32645499

Multimodality treatment including ONCEPT for canine oral melanoma: A retrospective analysis of 131 dogs.
Turek M, LaDue T, Looper J, Nagata K, Shiomitsu K, Keyerleber M, Buchholz J, Gieger T, Hetzel S. Vet Radiol Ultrasound. 2020 Jul;61(4):471-480. doi: 10.1111/vru.12860. Epub 2020 Apr 22.
PMID: 32323424

Attitudes Toward Influenza Vaccination Administration in the Emergency Department Among Health Care Providers: A Cross-Sectional Survey.
Ozog N, Steenbeek A, Curran J, Kelly N, Campbell S. J Emerg Nurs. 2020 Jul 8:S0099-1767(20)30131-8. doi: 10.1016/j.jen.2020.04.009. Online ahead of print.
PMID: 32653157

Yeast-Based Aβ1-15 **Vaccine** Elicits Strong Immunogenicity and Attenuates Neuropathology and Cognitive Deficits in Alzheimer's Disease Transgenic Mice.
Liu DQ, Lu S, Zhang L, Huang YR, Ji M, Sun XY, Liu XG, Liu RT. Vaccines (Basel). 2020 Jul 1;8(3):E351. doi: 10.3390/vaccines8030351.
PMID: 32630299

Improving HPV Vaccination Rates: A Stepped-Wedge Randomized Trial.
Perkins RB, Legler A, Jansen E, Bernstein J, Pierre-Joseph N, Eun TJ, Biancarelli DL, Schuch TJ, Leschly K, Fenton ATHR, Adams WG, Clark JA, Drainoni ML, Hanchate A. Pediatrics. 2020 Jul;146(1):e20192737. doi: 10.1542/peds.2019-2737. Epub 2020 Jun 15. PMID: 32540986

Digital pathology and artificial intelligence will be key to supporting clinical and academic cellular pathology through COVID-19 and future crises: the PathLAKE consortium perspective.
Browning L, Colling R, Rakha E, Rajpoot N, Rittscher J, James JA, Salto-Tellez M, Snead DRJ, Verrill C. J Clin Pathol. 2020 Jul 3:jclinpath-2020-206854. doi: 10.1136/jclinpath-2020-206854. Online ahead of print.
PMID: 32620678 Review.

[Economic evaluation of the introduction of 4CMenB (Bexsero®) in the national **vaccine** schedule in Spain].
Ruiz-Montero R, Epstein D, Guzmán Herrador B, Espín Balbino J. Gac Sanit. 2020 Jul-Aug;34(4):318-325. doi: 10.1016/j.gaceta.2019.08.007. Epub 2019 Nov 24.
PMID: 31776044

A comparative evaluation of serum biochemistry profile and antigenic relatedness among velogenic and mesogenic Avian avulavirus 1 infection in chickens and pigeons.
Ul-Rahman A, Shabbir MAB, Ahmed M, Shabbir MZ. Trop Anim Health Prod. 2020 Jul;52(4):1977-1984. doi: 10.1007/s11250-020-02215-8. Epub 2020 Jan 24.
PMID: 31981052

WHO working group meeting to develop WHO Recommendations to assure the quality, safety and efficacy of enterovirus 71 vaccines.
Lei D, Griffiths E, Martin J. Vaccine. 2020 Jul 6;38(32):4917-4923. doi: 10.1016/j.vaccine.2020.05.001. Epub 2020 May 4.
PMID: 32418797

Human Papillomavirus (HPV) Vaccination Initiation and Completion Among Adult Males in the United States.
Guo Y, Bowling J. J Am Board Fam Med. 2020 Jul-Aug;33(4):592-599. doi: 10.3122/jabfm.2020.04.190464.
PMID: 32675270

A prospective trial of **vaccine** to prevent hepatitis B virus reactivation after hematopoietic stem cell transplantation.
Nishikawa K, Kimura K, Kanda Y, Sugiyama M, Kakihana K, Doki N, Ohashi K, Bae SK, Takahashi K, Ishihara Y, Mizuno I, Onishi Y, Onozawa M, Onizuka M, Yamamoto M, Ishikawa T, Inoue K, Kusumoto S, Hashino S, Saito H, Kanto T, Sakamaki H, Mizokami M. Bone Marrow Transplant. 2020 Jul;55(7):1388-1398. doi: 10.1038/s41409-020-0833-5. Epub 2020 Feb 18.
PMID: 32071416

Current use and management of commercial fish vaccines in Korea.
Hwang JY, Kwon MG, Seo JS, Hwang SD, Jeong JM, Lee JH, Jeong AR, Jee BY. Fish Shellfish Immunol. 2020 Jul;102:20-27. doi: 10.1016/j.fsi.2020.04.004. Epub 2020 Apr 6.
PMID: 32272258

Ethical considerations for epidemic **vaccine** trials.
Monrad JT. J Med Ethics. 2020 Jul;46(7):465-469. doi: 10.1136/medethics-2020-106235. Epub 2020 May 15.
PMID: 32414757

Geographical disparities in human papillomavirus herd protection.
Berenson AB, Hirth JM, Chang M. Cancer Med. 2020 Jul;9(14):5272-5280. doi: 10.1002/cam4.3125. Epub 2020 Jun 1.
PMID: 32483924

Modeling the impact of mass influenza vaccination and public health interventions on COVID-19 epidemics with limited detection capability.
Li Q, Tang B, Bragazzi NL, Xiao Y, Wu J. Math Biosci. 2020 Jul;325:108378. doi: 10.1016/j.mbs.2020.108378. Epub 2020 May 16.
PMID: 32507746

Improvement of organisms by biomimetic mineralization: A material incorporation strategy for biological modification.
Zhao Y, Tang R. Acta Biomater. 2020 Jul 3:S1742-7061(20)30368-8. doi: 10.1016/j.actbio.2020.06.038. Online ahead of print.
PMID: 32629191

Data mining and analysis of scientific research data records on Covid-19 mortality, immunity, and **vaccine** development - In the first wave of the Covid-19 pandemic.
Radanliev P, De Roure D, Walton R. Diabetes Metab Syndr. 2020 Jul 4;14(5):1121-1132. doi: 10.1016/j.dsx.2020.06.063. Online ahead of print.
PMID: 32659695

A bivalent B-cell epitope dendrimer peptide can confer long-lasting immunity in swine against foot-and-mouth disease.
Cañas-Arranz R, Forner M, Defaus S, Rodríguez-Pulido M, de León P, Torres E, Bustos MJ, Borrego B, Sáiz M, Blanco E, Andreu D, Sobrino F. Transbound Emerg Dis. 2020 Jul;67(4):1614-1622. doi: 10.1111/tbed.13497. Epub 2020 Feb 12.
PMID: 31994334

While We Wait for a **Vaccine** Against SARS-CoV-2, Why Not Think About Available Drugs?
Barrantes FJ. Front Physiol. 2020 Jul 3;11:820. doi: 10.3389/fphys.2020.00820. eCollection 2020.
PMID: 32719619

COVID-19 vaccines: neutralizing antibodies and the alum advantage.
Hotez PJ, Corry DB, Strych U, Bottazzi ME. Nat Rev Immunol. 2020 Jul;20(7):399-400. doi: 10.1038/s41577-020-0358-6.
PMID: 32499636

Molecular characterization of Influenza A pandemic H1N1 viruses circulating in eastern India during 2017-19: Antigenic diversity in comparison to the **vaccine** strains.
Saha P, Biswas M, Gupta R, Majumdar A, Mitra S, Banerjee A, Mukherjee A, Dutta S, Chawla-Sarkar M. Infect Genet Evol. 2020 Jul;81:104270. doi: 10.1016/j.meegid.2020.104270. Epub 2020 Mar 3.
PMID: 32142936

Seroprevalence of Measles, Rubella, Tetanus, and Diphtheria Antibodies among Children in Haiti, 2017.
Minta AA, Andre-Alboth J, Childs L, Nace D, Rey-Benito G, Boncy J, Adrien P, François J, Phaïmyr Jn Charles N, Blot V, Vanden Eng J, Priest JW, Rogier E, Tohme RA. Am J Trop Med Hyg. 2020 Jul 6. doi: 10.4269/ajtmh.20-0112. Online ahead of print.
PMID: 32618256

Pneumolysin: Pathogenesis and Therapeutic Target.
Nishimoto AT, Rosch JW, Tuomanen EI. Front Microbiol. 2020 Jul 2;11:1543. doi: 10.3389/fmicb.2020.01543. eCollection 2020.
PMID: 32714314

Roles of IL-2 in bridging adaptive and innate immunity, and as a tool for cellular immunotherapy.
Bendickova K, Fric J. J Leukoc Biol. 2020 Jul;108(1):427-437. doi: 10.1002/JLB.5MIR0420-055R. Epub 2020 Jun 1.
PMID: 32480431

A Multi-Targeting, Nucleoside-Modified mRNA Influenza Virus **Vaccine** Provides Broad Protection in Mice.
Freyn AW, Ramos da Silva J, Rosado VC, Bliss CM, Pine M, Mui BL, Tam YK, Madden TD, de Souza Ferreira LC, Weissman D, Krammer F, Coughlan L, Palese P, Pardi N, Nachbagauer R. Mol Ther. 2020 Jul 8;28(7):1569-1584. doi: 10.1016/j.ymthe.2020.04.018. Epub 2020 Apr 19.
PMID: 32359470

Cationic Nanostructures for Vaccines Design.
Carmona-Ribeiro AM, Pérez-Betancourt Y. Biomimetics (Basel). 2020 Jul 7;5(3):E32. doi: 10.3390/biomimetics5030032.
PMID: 32645946

Human papillomavirus vaccination: Good clinical practice recommendations from the Federation of Obstetric and Gynecological Societies of India.
Bhatla N, Meena J, Gupta K, Pal B, Divakar H, Bhalerao S, Peedicayil A, Srivastava S, Basu P, Purandare CN; FOGSI Expert Group. J Obstet Gynaecol Res. 2020 Jul 6. doi: 10.1111/jog.14345. Online ahead of print.
PMID: 32627278

T-Cell Infiltration and Adaptive Treg Resistance in Response to Androgen Deprivation With or Without Vaccination in Localized Prostate Cancer.
Obradovic AZ, Dallos MC, Zahurak ML, Partin AW, Schaeffer EM, Ross AE, Allaf ME, Nirschl TR, Liu D, Chapman CG, O'Neal T, Cao H, Durham JN, Guner G, Baena-Del Valle JA, Ertunc O, De Marzo AM, Antonarakis ES, Drake CG. Clin Cancer Res. 2020 Jul 1;26(13):3182-3192. doi: 10.1158/1078-0432.CCR-19-3372. Epub 2020 Mar 15.
PMID: 32173650

Rapid and sensitive direct detection and identification of poliovirus from stool and environmental surveillance samples using nanopore sequencing.
Shaw AG, Majumdar M, Troman C, O'Toole Á, Benny B, Abraham D, Praharaj I, Kang G, Sharif S, Alam MM, Shaukat S, Angez M, Khurshid A, Mahmood N, Arshad Y, Rehman L, Mujtaba G, Akthar R, Salman M, Klapsa D, Hajarha Y, Asghar H, Bandyopadhyay A, Rambaut A, Martin J, Grassly N. J Clin Microbiol. 2020 Jul 1:JCM.00920-20. doi: 10.1128/JCM.00920-20. Online ahead of print.
PMID: 32611795

Effect of Herpes Zoster **Vaccine** and Antiviral Treatment on Risk of Ischemic Stroke.
Yang Q, George MG, Chang A, Tong X, Merritt R, Hong Y. Neurology. 2020 Jul 7:10.1212/WNL.0000000000010028. doi: 10.1212/WNL.0000000000010028. Online ahead of print.
PMID: 32636330

Patterns and Disparities in Human Papillomavirus (HPV) **Vaccine** Uptake for Young Female Adolescents among U.S. States: NIS-Teen (2008-2016).
Yoo W, Koskan A, Scotch M, Pottinger H, Huh WK, Helitzer D. Cancer Epidemiol Biomarkers Prev. 2020 Jul;29(7):1458-1467. doi: 10.1158/1055-9965.EPI-19-1103. Epub 2020 Apr 28.
PMID: 32345710

Hepatitis B **Vaccine**: Assessment of Immunologic Response, Coverage Rate, and Factors Influencing Seroreactivity.
Khafagy A, AlJahdaly I, Goweda R. Clin Lab. 2020 Jul 1;66(7). doi: 10.7754/Clin.Lab.2019.191202.
PMID: 32658415

Timing of Vaccination after Training: Immune Response and Side Effects in Athletes.
Stenger T, Ledo A, Ziller C, Schub D, Schmidt T, Enders M, GÄrtner BC, Sester M, Meyer T. Med Sci Sports Exerc. 2020 Jul;52(7):1603-1609. doi: 10.1249/MSS.0000000000002278.
PMID: 31977634

Angiotensin converting enzyme-2 as therapeutic target in COVID-19.
Roshanravan N, Ghaffari S, Hedayati M. Diabetes Metab Syndr. 2020 Jul-Aug;14(4):637-639. doi: 10.1016/j.dsx.2020.05.022. Epub 2020 May 12.
PMID: 32428864

A Review on the Prevalence of *Toxoplasma gondii* in Humans and Animals Reported in Malaysia from 2008-2018.
Nasiru Wana M, Mohd Moklas MA, Watanabe M, Nordin N, Zasmy Unyah N, Alhassan Abdullahi S, Ahmad Issa Alapid A, Mustapha T, Basir R, Abd Majid R. Int J Environ Res Public Health. 2020 Jul 3;17(13):4809. doi: 10.3390/ijerph17134809.
PMID: 32635389

Pneumococci Can Become Virulent by Acquiring a New Capsule From Oral Streptococci.
Nahm MH, Brissac T, Kilian M, Vlach J, Orihuela CJ, Saad JS, Ganaie F. J Infect Dis. 2020 Jul 6;222(3):372-380. doi: 10.1093/infdis/jiz456.
PMID: 31605125

COVID-19 Coronavirus **Vaccine** Design Using Reverse Vaccinology and Machine Learning.
Ong E, Wong MU, Huffman A, He Y. Front Immunol. 2020 Jul 3;11:1581. doi: 10.3389/fimmu.2020.01581. eCollection 2020.
PMID: 32719684

Combination therapy with liposomal doxorubicin and liposomal **vaccine** containing E75, an HER-2/neu-derived peptide, reduces myeloid-derived suppressor cells and improved tumor therapy.
Zamani P, Navashenaq JG, Teymouri M, Karimi M, Mashreghi M, Jaafari MR. Life Sci. 2020 Jul 1;252:117646. doi: 10.1016/j.lfs.2020.117646. Epub 2020 Apr 7.
PMID: 32272178

Interplay between alveolar epithelial and dendritic cells and Mycobacterium tuberculosis.
Rodrigues TS, Conti BJ, Fraga-Silva TFC, Almeida F, Bonato VLD. J Leukoc Biol. 2020 Jul 3. doi: 10.1002/JLB.4MR0520-112R. Online ahead of print.
PMID: 32620048

Immunoinformatic Analysis of T- and B-Cell Epitopes for SARS-CoV-2 **Vaccine** Design.
Wang D, Mai J, Zhou W, Yu W, Zhan Y, Wang N, Epstein ND, Yang Y. Vaccines (Basel). 2020 Jul 3;8(3):E355. doi: 10.3390/vaccines8030355.
PMID: 32635180

COVID-19: Current Trends in Invitro Diagnostics.
Arun Krishnan R, Elizabeth Thomas R, Sukumaran A, Paul JK, Vasudevan DM. Indian J Clin Biochem. 2020 Jul;35(3):285-289. doi: 10.1007/s12291-020-00906-5. Epub 2020 Jun 27.
PMID: 32641875

Bacillus Calmette Guérin (BCG) vaccination use in the fight against COVID-19 - what's old is new again?
O'Connor E, Teh J, Kamat AM, Lawrentschuk N. Future Oncol. 2020 Jul;16(19):1323-1325. doi: 10.2217/fon-2020-0381. Epub 2020 May 14.
PMID: 32406253

Cumulative inactivated **vaccine** exposure and allergy development among children: a birth cohort from Japan.
Yamamoto-Hanada K, Pak K, Saito-Abe M, Yang L, Sato M, Mezawa H, Sasaki H, Nishizato M, Konishi M, Ishitsuka K, Matsumoto K, Saito H, Ohya Y; Japan Environment and Children's Study (JECS) Group. Environ Health Prev Med. 2020 Jul 7;25(1):27. doi: 10.1186/s12199-020-00864-7.
PMID: 32635895

Family factors associated with emerging adults' human papillomavirus **vaccine** behavior.
Quinn DA, Lewin A. J Am Coll Health. 2020 Jul;68(5):528-535. doi: 10.1080/07448481.2019.1583240. Epub 2019 Mar 25.
PMID: 30908148

Immunization Strategies to Span the Spectrum of Immunocompromised Adults.
Whitaker JA. Mayo Clin Proc. 2020 Jul;95(7):1530-1548. doi: 10.1016/j.mayocp.2019.09.002. Epub 2020 Feb 14.
PMID: 32067801

Analysis of virulence and immunogenic factors in Aeromonas hydrophila: Towards the development of live vaccines.
Zhao XL, Wu G, Chen H, Li L, Kong XH. J Fish Dis. 2020 Jul;43(7):747-755. doi: 10.1111/jfd.13174. Epub 2020 Jun 1.
PMID: 32478415

Protective efficacy of a bivalent inactivated reassortant H1N1 influenza virus **vaccine** against European avian-like and classical swine influenza H1N1 viruses in mice.
Ruan BY, Yao Y, Wang SY, Gong XQ, Liu XM, Wang Q, Yu LX, Zhu SQ, Wang J, Shan TL, Zhou YJ, Tong W, Zheng H, Li GX, Gao F, Kong N, Yu H, Tong GZ. Vet Microbiol. 2020 Jul;246:108724. doi: 10.1016/j.vetmic.2020.108724. Epub 2020 May 19.
PMID: 32605742

Implication of a High Risk of Type 2 **Vaccine**-Derived Poliovirus Emergence and Transmission after the Switch from tOPV to bOPV.
Yan D, Wang D, Zhang Y, Li X, Tang H, Guan J, Song Y, Zhu S, Xu W. J Infect Dis. 2020 Jul 4:jiaa386. doi: 10.1093/infdis/jiaa386. Online ahead of print.
PMID: 32621746

Pertussis vaccination in mixed markets: Recommendations from the Global Pertussis Initiative.
Chitkara AJ, Pujadas Ferrer M, Forsyth K, Guiso N, Heininger U, Hozbor DF, Muloiwa R, Tan TQ, Thisyakorn U, Wirsing von König CH. Int J Infect Dis. 2020 Jul;96:482-488. doi: 10.1016/j.ijid.2020.04.081. Epub 2020 May 12.
PMID: 32413606

A microneedle patch for measles and rubella vaccination: a game changer for achieving elimination.
Prausnitz MR, Goodson JL, Rota PA, Orenstein WA. Curr Opin Virol. 2020 Jul 1;41:68-76. doi: 10.1016/j.coviro.2020.05.005. Online ahead of print.
PMID: 32622318 Review.

Measles is Back - Considerations for laboratory diagnosis.
Dunn JJ, Baldanti F, Puchhammer E, Panning M, Perez O, Harvala H; Pan American Society for Clinical Virology (PASCV) Clinical Practice and Public Policy Committee and the European Society for Clinical Virology (ESCV) Executive Committee. J Clin Virol. 2020 Jul;128:104430. doi: 10.1016/j.jcv.2020.104430. Epub 2020 May 13.
PMID: 32454430

Anaplasma marginale outer membrane protein **vaccine** candidates are conserved in North American and South African strains.
Hove P, Brayton KA, Liebenberg J, Pretorius A, Oosthuizen MC, Noh SM, Collins NE. Ticks Tick Borne Dis. 2020 Jul;11(4):101444. doi: 10.1016/j.ttbdis.2020.101444. Epub 2020 Apr 18.
PMID: 32336660

Administration with Vaccinia Virus Encoding Canine Parvovirus 2 *vp2* Elicits Systemic Immune Responses in Mice and Dogs.
Zhao W, Wang X, Li Y, Li Y. Viral Immunol. 2020 Jul/Aug;33(6):434-443. doi: 10.1089/vim.2019.0164. Epub 2020 May 4.
PMID: 32364832

Safety and immunogenicity of the tetravalent, live-attenuated dengue **vaccine** Butantan-DV in adults in Brazil: a two-step, double-blind, randomised placebo-controlled phase 2 trial.
Kallas EG, Precioso AR, Palacios R, Thomé B, Braga PE, Vanni T, Campos LMA, Ferrari L, Mondini G, da Graça Salomão M, da Silva A, Espinola HM, do Prado Santos J, Santos CLS, Timenetsky MDCST, Miraglia JL, Gallina NMF, Weiskopf D, Sette A, Goulart R, Salles RT, Maestri A, Sallum AME, Farhat SCL, Sakita NK, Ferreira JCOA, Silveira CGT, Costa PR, Raw I, Whitehead SS, Durbin AP, Kalil J. Lancet Infect Dis. 2020 Jul;20(7):839-850. doi: 10.1016/S1473-3099(20)30023-2. Epub 2020 Mar 24.
PMID: 32220283

Bovine Respiratory Disease Vaccination: What Is the Effect of Timing?
Richeson JT, Falkner TR. Vet Clin North Am Food Anim Pract. 2020 Jul;36(2):473-485. doi: 10.1016/j.cvfa.2020.03.013.
PMID: 32451036

Two-Dose Hepatitis B **Vaccine** (Heplisav-B) Results in Better Seroconversion Than Three-Dose **Vaccine** (Engerix-B) in Chronic Liver Disease.
Amjad W, Alukal J, Zhang T, Maheshwari A, Thuluvath PJ. Dig Dis Sci. 2020 Jul 2. doi: 10.1007/s10620-020-06437-6. Online ahead of print. PMID: 32617767

IgY - turning the page toward passive immunization in COVID-19 infection (Review).
Constantin C, Neagu M, Diana Supeanu T, Chiurciu V, A Spandidos D. Exp Ther Med. 2020 Jul;20(1):151-158. doi: 10.3892/etm.2020.8704. Epub 2020 Apr 30.
PMID: 32536989

Shingles Vaccination of U.S. Adults Aged 50-59 Years and ≥60 Years Before Recommendations for Use of Recombinant Zoster **Vaccine**.
Lu PJ, Hung MC, Srivastav A, Williams WW, Dooling KL. Am J Prev Med. 2020 Jul;59(1):21-31. doi: 10.1016/j.amepre.2020.01.017. Epub 2020 May 7.
PMID: 32389533

Glycomics and glycoproteomics of viruses: Mass spectrometry applications and insights toward structure-function relationships.
Cipollo JF, Parsons LM. Mass Spectrom Rev. 2020 Jul;39(4):371-409. doi: 10.1002/mas.21629. Epub 2020 Apr 29.
PMID: 32350911

Reasons for non-vaccination against influenza among older adults with hypertension in Brazil: a cross-sectional study.
Bacurau AGM, Francisco PMSB. Sao Paulo Med J. 2020 Jul 3:S1516-31802020005013202. doi: 10.1590/1516-3180.2020.0042.r1.15052020. Online ahead of print.
PMID: 32638940

Applying next-generation sequencing to unravel the mutational landscape in viral quasispecies.
Lu IN, Muller CP, He FQ. Virus Res. 2020 Jul 2;283:197963. doi: 10.1016/j.virusres.2020.197963. Epub 2020 Apr 9.
PMID: 32278821

Pasteurella multocida **Vaccine** Candidates: A Systematic Review.
Mostaan S, Ghasemzadeh A, Sardari S, Shokrgozar MA, Nikbakht Brujeni G, Abolhassani M, Ehsani P, Asadi Karam MR. Avicenna J Med Biotechnol. 2020 Jul-Sep;12(3):140-147.
PMID: 32695276

Co-immunizing with PD-L1 induces $CD8^+$ DCs-mediated anti-tumor immunity in multiple myeloma.
Guo S, Xiao P, Li B, Wang W, Wang S, Lv T, Xu X, Chen C, Huang L, Li Z, Tang L, Peng L, Wang H. Int Immunopharmacol. 2020 Jul;84:106516. doi: 10.1016/j.intimp.2020.106516. Epub 2020 Apr 22.
PMID: 32334387

BCG as a game-changer to prevent the infection and severity of COVID-19 pandemic?
Sharma AR, Batra G, Kumar M, Mishra A, Singla R, Singh A, Singh RS, Medhi B. Allergol Immunopathol (Madr). 2020 Jul 3:S0301-0546(20)30106-3. doi: 10.1016/j.aller.2020.05.002. Online ahead of print.
PMID: 32653224

Age-related factors that affect B cell responses to vaccination in mice and humans.
Frasca D, Blomberg BB, Garcia D, Keilich SR, Haynes L. Immunol Rev. 2020 Jul;296(1):142-154. doi: 10.1111/imr.12864. Epub 2020 Jun 2.
PMID: 32484934

Hepatitis C virus **vaccine** design: focus on the humoral immune response.
Sepulveda-Crespo D, Resino S, Martinez I. J Biomed Sci. 2020 Jul 6;27(1):78. doi: 10.1186/s12929-020-00669-4.
PMID: 32631318

Herpesvirus of turkey vectored avian influenza **vaccine** offers cross-protection against antigenically drifted H5Nx highly pathogenic avian influenza virus strains.
Nassif S, Zaki F, Mourad A, Fouad E, Saad A, Setta A, Felföldi B, Mató T, Kiss I, Palya V. Avian Pathol. 2020 Jul 2:1-25. doi: 10.1080/03079457.2020.1790502. Online ahead of print.
PMID: 32615785

Willingness to Participate in Hypothetical HIV **Vaccine** Trial and Associated Factors among People Who Inject Drugs in Dar es Salaam, Tanzania.
Iseselo MK, Tarimo EAM, Sandstrom E, Kulane A. Biomed Res Int. 2020 Jul 2;2020:8507981. doi: 10.1155/2020/8507981. eCollection 2020.
PMID: 32714988

Recombinant tandem epitope vaccination provides cross protection against Actinobacillus pleuropneumoniae challenge in mice.
Xiao J, Liu J, Bao C, Zhu R, Gu J, Sun C, Feng X, Du C, Han W, Li Y, Lei L. AMB Express. 2020 Jul 8;10(1):123. doi: 10.1186/s13568-020-01051-1.
PMID: 32642871

Porcine Parvovirus 7: Evolutionary Dynamics and Identification of Epitopes toward **Vaccine** Design.
Wang D, Mai J, Yang Y, Wang N. Vaccines (Basel). 2020 Jul 5;8(3):E359. doi: 10.3390/vaccines8030359.
PMID: 32635618

Influenza vaccination strategies targeting the hemagglutinin stem region.
Fukuyama H, Shinnakasu R, Kurosaki T. Immunol Rev. 2020 Jul;296(1):132-141. doi: 10.1111/imr.12887. Epub 2020 Jun 16.
PMID: 32542739

HPV **vaccine** coverage and acceptability among a national sample of sexual minority women ages 18-45.
Reiter PL, Bustamante G, McRee AL. Vaccine. 2020 Jul 6;38(32):4956-4963. doi: 10.1016/j.vaccine.2020.06.001. Epub 2020 Jun 11.
PMID: 32536546

SARS-CoV-2: Virology, epidemiology, immunology and **vaccine** development.
Baay M, Lina B, Fontanet A, Marchant A, Saville M, Sabot P, Duclos P, Vandeputte J, Neels P. Biologicals. 2020 Jul;66:35-40. doi: 10.1016/j.biologicals.2020.06.005. Epub 2020 Jun 23.
PMID: 32600951 Free PMC article.

Phenotypically defined subpopulations of circulating follicular helper T cells in common variable immunodeficiency.
Yesillik S, Gupta S. Immun Inflamm Dis. 2020 Jul 2. doi: 10.1002/iid3.326. Online ahead of print.
PMID: 32618135

Recombinant zoster **vaccine** (Shingrix(®)): a new option for the prevention of herpes zoster and postherpetic neuralgia.
Singh G, Song S, Choi E, Lee PB, Nahm FS. Korean J Pain. 2020 Jul 1;33(3):201-207. doi: 10.3344/kjp.2020.33.3.201.
PMID: 32606264

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 Jul;32(4):598-603. doi: 10.1177/1040638720934809. Epub 2020 Jun 19.
PMID: 32560597

Non-Human Primate-Derived Adenoviruses for Future Use as Oncolytic Agents?
Bots STF, Hoeben RC. Int J Mol Sci. 2020 Jul 8;21(14):E4821. doi: 10.3390/ijms21144821.
PMID: 32650405

Construction and immunogenic studies of a mFc fusion receptor binding domain (RBD) of spike protein as a subunit **vaccine** against SARS-CoV-2 infection.
Qi X, Ke B, Feng Q, Yang D, Lian Q, Li Z, Lu L, Ke C, Liu Z, Liao G. Chem Commun (Camb). 2020 Jul 2. doi: 10.1039/d0cc03263h. Online ahead of print.
PMID: 32613971

Malaria: Paving the way to developing peptide-based vaccines against invasion in infectious diseases.
Reyes C, Molina-Franky J, Aza-Conde J, Suárez CF, Pabón L, Moreno-Vranich A, Patarroyo MA, Patarroyo ME. Biochem Biophys Res Commun. 2020 Jul 5;527(4):1021-1026. doi: 10.1016/j.bbrc.2020.05.025. Epub 2020 May 18.
PMID: 32439169

Histophilus somni: Antigenic and Genomic Changes Relevant to Bovine Respiratory Disease.
Shirbroun RM. Vet Clin North Am Food Anim Pract. 2020 Jul;36(2):279-295. doi: 10.1016/j.cvfa.2020.02.003. Epub 2020 Apr 21.
PMID: 32327251

The European response to the WHO call to eliminate cervical cancer as a public health problem.
Arbyn M, Gultekin M, Morice P, Nieminen P, Cruickshank M, Poortmans P, Kelly D, Poljak M, Bergeron C, Ritchie D, Schmidt D, Kyrgiou M, Van den Bruel A, Bruni L, Basu P, Bray F, Weiderpass E. Int J Cancer. 2020 Jul 7. doi: 10.1002/ijc.33189. Online ahead of print.
PMID: 32638362

Evaluation of Poly(I:C) and combination of CpG ODN plus Montanide ISA adjuvants to enhance the efficacy of outer membrane vesicles as an acellular **vaccine** against Brucella melitensis infection in mice.
Golshani M, Amani M, Amirzadeh F, Nazeri E, Davar Siadat S, Nejati-Moheimani M, Arsang A, Bouzari S. Int Immunopharmacol. 2020 Jul;84:106573. doi: 10.1016/j.intimp.2020.106573. Epub 2020 May 23.
PMID: 32454410

Current updates on dental perspectives of leprosy - Revisited.
Bommanavar S, Hosmani J, Khan S, Bhandi S, Patil S, Alamir AWH, Sarode S, Awan KH. Dis Mon. 2020 Jul;66(7):100918. doi: 10.1016/j.disamonth.2019.100918. Epub 2019 Dec 6.
PMID: 31813526

Realist Synthesis of the International Theory and Evidence on Strategies to Improve Childhood Vaccination in Low- and Middle-Income Countries: Developing Strategies for the Nigerian Healthcare System.
Omoniyi OS, Williams I. Int J Health Policy Manag. 2020 Jul 1;9(7):274-285. doi: 10.15171/ijhpm.2019.120.
PMID: 32613799

Molecular pathogenesis of the hyaluronic acid capsule of Pasteurella multocida.
Guan L, Zhang L, Xue Y, Yang J, Zhao Z. Microb Pathog. 2020 Jul 6:104380. doi: 10.1016/j.micpath.2020.104380. Online ahead of print.
PMID: 32645423

Avian leukosis virus contamination in live vaccines: A retrospective investigation in China.
Mao Y, Su Q, Li J, Jiang T, Wang Y. Vet Microbiol. 2020 Jul;246:108712. doi: 10.1016/j.vetmic.2020.108712. Epub 2020 May 11.
PMID: 32605749

Progresses on bacterial secretomes enlighten research on Mycoplasma secretome.
Zubair M, Khan FA, Menghwar H, Faisal M, Ashraf M, Rasheed MA, Marawan MA, Dawood A, Chen Y, Chen H, Guo A. Microb Pathog. 2020 Jul;144:104160. doi: 10.1016/j.micpath.2020.104160. Epub 2020 Mar 17.
PMID: 32194181

Reduced Ebola **vaccine** responses in CMV+ young adults is associated with expansion of CD57+KLRG1+ T cells.
Bowyer G, Sharpe H, Venkatraman N, Ndiaye PB, Wade D, Brenner N, Mentzer A, Mair C, Waterboer T, Lambe T, Dieye T, Mboup S, Hill AVS, Ewer KJ. J Exp Med. 2020 Jul 6;217(7):e20200004. doi: 10.1084/jem.20200004.
PMID: 32413101

Vaccine handling and administration errors should be addressed to improve **vaccine** program safety.
Hampton LM. Vaccine. 2020 Jul 6;38(32):4933-4934. doi: 10.1016/j.vaccine.2020.05.092. Epub 2020 Jun 11.
PMID: 32536550

Suboptimal uptake of meningococcal vaccines among older adolescents: Barriers, solutions, and future research directions.
Niccolai LM, Hansen CE. Hum Vaccin Immunother. 2020 Jul 2:1-5. doi: 10.1080/21645515.2020.1754052. Online ahead of print.
PMID: 32614695

Dual-targeted therapeutic strategy combining CSC-DC-based **vaccine** and cisplatin overcomes chemo-resistance in experimental mice model.
El-Ashmawy NE, Salem ML, Khedr EG, El-Zamarany EA, Ibrahim AO. Clin Transl Oncol. 2020 Jul;22(7):1155-1165. doi: 10.1007/s12094-019-02242-4. Epub 2019 Nov 20.
PMID: 31748959

The 3Ds in virus-like particle based-vaccines: "Design, Delivery and Dynamics".
Mohsen MO, Augusto G, Bachmann MF. Immunol Rev. 2020 Jul;296(1):155-168. doi: 10.1111/imr.12863. Epub 2020 May 30.
PMID: 32472710

Plant Molecular Farming: A Viable Platform for Recombinant Biopharmaceutical Production.
Shanmugaraj B, I Bulaon CJ, Phoolcharoen W. Plants (Basel). 2020 Jul 4;9(7):E842. doi: 10.3390/plants9070842.
PMID: 32635427

Tetravalent Immunogen Assembled from Conserved Regions of HIV-1 and Delivered as mRNA Demonstrates Potent Preclinical T-Cell Immunogenicity and Breadth.
Moyo N, Wee EG, Korber B, Bahl K, Falcone S, Himansu S, Wong AL, Dey AK, Feinberg M, Hanke T. Vaccines (Basel). 2020 Jul 6;8(3):E360. doi: 10.3390/vaccines8030360.
PMID: 32640600

Immune response and onset of protection from Bovine viral diarrhea virus 2 infection induced by modified-live virus vaccination concurrent with injectable trace minerals administration in newly received beef calves.
Bittar JHJ, Palomares RA, Hurley DJ, Hoyos-Jaramillo A, Rodriguez A, Stoskute A, Hamrick B, Norton N, Adkins M, Saliki JT, Sanchez S, Lauber K. Vet Immunol Immunopathol. 2020 Jul;225:110055. doi: 10.1016/j.vetimm.2020.110055. Epub 2020 Apr 27.
PMID: 32438245

Estimation of the primary, secondary and composite effects of malaria vaccines using data on multiple clinical malaria episodes.
Cheung YB, Ma X, Lam KF, Milligan P. Vaccine. 2020 Jul 6;38(32):4964-4969. doi: 10.1016/j.vaccine.2020.05.086. Epub 2020 Jun 12.
PMID: 32536547

Immunomodulatory effect of ginseng stem-leaf saponins and selenium on Harderian gland in immunization of chickens to Newcastle disease **vaccine**.
Ma X, Chi X, Yuan L, Wang Y, Li Z, Xu W, Rajput ZI, Hu S. Vet Immunol Immunopathol. 2020 Jul;225:110061. doi: 10.1016/j.vetimm.2020.110061. Epub 2020 May 12.
PMID: 32422443

Staphylococcus pseudintermedius 5'-nucleotidase suppresses canine phagocytic activity.
Abouelkhair MA, Frank LA, Bemis DA, Giannone RJ, Kania SA. Vet Microbiol. 2020 Jul;246:108720. doi: 10.1016/j.vetmic.2020.108720. Epub 2020 May 16.
PMID: 32605759

First report on molecular characterization and phylogenetic analysis of Reticuloendotheliosis virus in Sudan.
Alfaki SH, Hussien MO, Osman NA, Enan KA, El Hussein ARM. Trop Anim Health Prod. 2020 Jul;52(4):2073-2078. doi: 10.1007/s11250-020-02235-4. Epub 2020 Feb 10.
PMID: 32040658

How did we get here? Short history of COVID-19 and other coronavirus-related epidemics.
Lango MN. Head Neck. 2020 Jul;42(7):1535-1538. doi: 10.1002/hed.26275. Epub 2020 May 23.
PMID: 32445249

Profile of adverse events following immunization with measles rubella **vaccine** at a tertiary care hospital in East Delhi, India.
Bhowmik E, Singh A, Sachan R. Ther Adv Vaccines Immunother. 2020 Jul 7;8:2515135520940131. doi: 10.1177/2515135520940131. eCollection 2020.
PMID: 32685913

Safety and immunogenicity of a modified vaccinia virus Ankara vector **vaccine** candidate for Middle East respiratory syndrome: an open-label, phase 1 trial.
Koch T, Dahlke C, Fathi A, Kupke A, Krähling V, Okba NMA, Halwe S, Rohde C, Eickmann M, Volz A, Hesterkamp T, Jambrecina A, Borregaard S, Ly ML, Zinser ME, Bartels E, Poetsch JSH, Neumann R, Fux R, Schmiedel S, Lohse AW, Haagmans BL, Sutter G, Becker S, Addo MM. Lancet Infect Dis. 2020 Jul;20(7):827-838. doi: 10.1016/S1473-3099(20)30248-6. Epub 2020 Apr 21.
PMID: 32325037

Cell fusion induced by a fusion-active form of human cytomegalovirus glycoprotein B is inhibited by antibodies directed at AD-5 in the ectodomain of gB.
Reuter N, Kropff B, Schneiderbanger JK, Alt M, Krawczyk A, Sinzger C, Winkler TH, Britt WJ, Mach M, Thomas M. J Virol. 2020 Jul 8:JVI.01276-20. doi: 10.1128/JVI.01276-20. Online ahead of print.
PMID: 32641474

Cost-effectiveness of pneumococcal vaccination for elderly in Sweden.
Wolff E, Storsaeter J, Örtqvist Å, Naucler P, Larsson S, Lepp T, Roth A. Vaccine. 2020 Jul 6;38(32):4988-4995. doi: 10.1016/j.vaccine.2020.05.072. Epub 2020 Jun 11.
PMID: 32536548

Cost analysis of supplemental immunization activities to deliver measles immunization to children in Anambra state, south-east Nigeria.
Sibeudu FT, Onwujekwe OE, Okoronkwo IL. Vaccine. 2020 Jul 7:S0264-410X(20)30875-6. doi: 10.1016/j.vaccine.2020.06.072. Online ahead of print.
PMID: 32651114

Nanoengineered targeting strategy for cancer immunotherapy.
Yin WM, Li YW, Gu YQ, Luo M. Acta Pharmacol Sin. 2020 Jul;41(7):902-910. doi: 10.1038/s41401-020-0417-3. Epub 2020 May 12.
PMID: 32398683

Signals 1, 2 and B cell fate or: Where, when and for how long?
Turner JS, Benet ZL, Grigorova IL. Immunol Rev. 2020 Jul;296(1):9-23. doi: 10.1111/imr.12865. Epub 2020 May 29.
PMID: 32470215

Bioinformatics analysis of HPV-68 E6 and E7 oncoproteins for designing a therapeutic epitope **vaccine** against HPV infection.
Dong D, Zhu Y, Aili Z, Chen Z, Ding J. Infect Genet Evol. 2020 Jul;81:104266. doi: 10.1016/j.meegid.2020.104266. Epub 2020 Feb 27.
PMID: 32114254

Cancer Associated Endogenous Retroviruses: Ideal Immune Targets for Adenovirus-Based Immunotherapy.
Vergara Bermejo A, Ragonnaud E, Daradoumis J, Holst P. Int J Mol Sci. 2020 Jul 8;21(14):E4843. doi: 10.3390/ijms21144843.
PMID: 32650622

Immunization of mice against alpha, beta, and epsilon toxins of Clostridium perfringens using recombinant rCpa-b-x expressed by Bacillus subtilis.
Wang Y, Miao Y, Hu LP, Kai W, Zhu R. Mol Immunol. 2020 Jul;123:88-96. doi: 10.1016/j.molimm.2020.05.006. Epub 2020 May 22.
PMID: 32447084

Understanding and implementing alternative solutions to address the COVID-19 pandemic in the sense of public health emergencies.
Bhole RP, Sarode VI, Bonde CG. Eur Rev Med Pharmacol Sci. 2020 Jul;24(13):7485-7493. doi: 10.26355/eurrev_202007_21920.
PMID: 32706088

[Comment] Treatment strategies to fight the new coronavirus SARS-CoV-2: A challenge for a Rubik's Cube solver.
Tsitoura E, Bibaki E, Bolaki M, Vasarmidi E, Trachalaki A, Symvoulakis EK, Spandidos DA, Antoniou KM. Exp Ther Med. 2020 Jul;20(1):147-150. doi: 10.3892/etm.2020.8692. Epub 2020 Apr 28.
PMID: 32536988

Prospective cohort study of influenza **vaccine** effectiveness among healthcare personnel in Lima, Peru: Estudio Vacuna de Influenza Peru, 2016-2018.
Wesley MG, Soto G, Arriola CS, Gonzales M, Newes-Adeyi G, Romero C, Veguilla V, Levine MZ, Silva M, Ferdinands JM, Dawood FS, Reynolds SB, Hirsch A, Katz M, Matos E, Ticona E, Castro J, Castillo M, Bravo E, Cheung A, Phadnis R, Martin ET, Tinoco Y, Neyra Quijandria JM, Azziz-Baumgartner E, Thompson MG; VIP Cohort Study Working Group. Influenza Other Respir Viruses. 2020 Jul;14(4):391-402. doi: 10.1111/irv.12737. Epub 2020 Apr 5.
PMID: 32249553

Effect of zinc oxide nanoparticles on broilers' performance and health status.
Mahmoud UT, Abdel-Mohsein HS, Mahmoud MAM, Amen OA, Hassan RIM, Abd-El-Malek AM, Rageb SMM, Waly HSA, Othman AA, Osman MA. Trop Anim Health Prod. 2020 Jul;52(4):2043-2054. doi: 10.1007/s11250-020-02229-2. Epub 2020 Feb 3.
PMID: 32016879

Lithium chloride confers protection against viral myocarditis via suppression of coxsackievirus B3 virus replication.
Zhao Y, Yan K, Wang Y, Cai J, Wei L, Li S, Xu W, Li M. Microb Pathog. 2020 Jul;144:104169. doi: 10.1016/j.micpath.2020.104169. Epub 2020 Mar 20. PMID: 32205210

Assessing barriers and increasing use of immunization information systems in independent community pharmacies: Study protocol for a randomized controlled trial.
Hastings TJ, Ha D, Fox BI, Qian J, Lakin J, Westrick SC. Res Social Adm Pharm. 2020 Jul;16(7):987-992. doi: 10.1016/j.sapharm.2019.10.007. Epub 2019 Oct 9.
PMID: 31628019

Safety and immunogenicity of the quadrivalent human papillomavirus **vaccine** in patients with childhood systemic lupus erythematosus: a real-world interventional multi-centre study.
Rotstein Grein IH, Pinto NF, Lobo A, Groot N, Sztajnbok F, da Silva CAA, Paim Marques LB, Appenzeller S, Islabão AG, Magalhães CS, de Almeida RG, Bica B, Fraga M, da Fraga ACM, Dos Santos MC, Robazzi T, Terreri MTR, Bandeira M, Pasmans H, Schepp R, van der Klis F, de Roock S, Wulffraat N, Pileggi G. Lupus. 2020 Jul;29(8):934-942. doi: 10.1177/0961203320928406. Epub 2020 Jun 5.
PMID: 32501172

Rubella transmissibility and reproduction number (Ro): A critical appraisal of the prospects for its control in Nigeria.
Durowade KA, Musa OI, Osagbemi GK. Niger Postgrad Med J. 2020 Jul-Sep;27(3):156-162. doi: 10.4103/npmj.npmj_84_20.
PMID: 32687113

Evaluation of Chimpanzee Adenovirus and MVA Expressing TRAP and CSP from *Plasmodium cynomolgi* to Prevent Malaria Relapse in Nonhuman Primates.
Kim YC, Dema B, Rodriguez-Garcia R, López-Camacho C, Leoratti FMS, Lall A, Remarque EJ, Kocken CHM, Reyes-Sandoval A. Vaccines (Basel). 2020 Jul 6;8(3):E363. doi: 10.3390/vaccines8030363.
PMID: 32640702

Updates on **Vaccine** Safety and Post-Licensure Surveillance for Adverse Events Following Immunization in South Korea, 2005-2017.
Yoon D, Kim JH, Lee H, Shin JY. Yonsei Med J. 2020 Jul;61(7):623-630. doi: 10.3349/ymj.2020.61.7.623.
PMID: 32608206

A hybrid of two major Blomia tropicalis allergens as an allergy **vaccine** candidate.
da Silva ES, Aglas L, Pinheiro CS, de Andrade Belitardo EMM, Silveira EF, Huber S, Torres RT, Wallner M, Briza P, Lackner P, Laimer J, Pacheco LGC, Cruz ÁA, Alcântara-Neves NM, Ferreira F. Clin Exp Allergy. 2020 Jul;50(7):835-847. doi: 10.1111/cea.13611. Epub 2020 May 13.
PMID: 32314444

Control of foreign Ag-specific Ab responses by Treg and Tfr.
Wing JB, Lim EL, Sakaguchi S. Immunol Rev. 2020 Jul;296(1):104-119. doi: 10.1111/imr.12888. Epub 2020 Jun 20.
PMID: 32564426

Latent pseudorabies virus infection in medulla oblongata from quarantined pigs.
Lu JJ, Yuan WZ, Zhu YP, Hou SH, Wang XJ. Transbound Emerg Dis. 2020 Jul 2. doi: 10.1111/tbed.13712. Online ahead of print.
PMID: 32615031

Characteristics of Adverse Events Following Immunization Reporting in Children: The Japanese Adverse Drug Event Report Database.
Noda A, Sakai T, Tsuchiya M, Oyanagi G, Obara T, Mano N. Vaccines (Basel). 2020 Jul 3;8(3):E357. doi: 10.3390/vaccines8030357.
PMID: 32635349

Impact of the herpes zoster vaccination programme on hospitalised and general practice consulted herpes zoster in the 5 years after its introduction in England: a population-based study.
Andrews N, Stowe J, Kuyumdzhieva G, Sile B, Yonova I, de Lusignan S, Ramsay M, Amirthalingam G. BMJ Open. 2020 Jul 7;10(7):e037458. doi: 10.1136/bmjopen-2020-037458.
PMID: 32641364

Maternal knowledge of the risk of vertical transmission and offspring acquisition of hepatitis B.
Lisker-Melman M, Khalili M, Belle SH, Terrault NA, Lin HS, Smith CI, Chung RT, Tsai N, Bzowej NH, Tran TT, Schwarzenberg SJ; Hepatitis B Research Network (HBRN). Ann Hepatol. 2020 Jul-Aug;19(4):388-395. doi: 10.1016/j.aohep.2020.04.006. Epub 2020 May 20.
PMID: 32507734

Probabilistic reconstruction of measles transmission clusters from routinely collected surveillance data.
Robert A, Kucharski AJ, Gastañaduy PA, Paul P, Funk S. J R Soc Interface. 2020 Jul;17(168):20200084. doi: 10.1098/rsif.2020.0084. Epub 2020 Jul 1.
PMID: 32603651

Opinions and attitudes of Italian healthcare workers towards recommended but not compulsory rotavirus vaccination.
Amadori F, Terracciano E, Gennaio I, Mita V, Gargano D, Zaratti L, Franco E, Arigliani R. Hum Vaccin Immunother. 2020 Jul 2:1-6. doi: 10.1080/21645515.2020.1776546. Online ahead of print.
PMID: 32614732

Tumor-associated antigen-based personalized dendritic cell **vaccine** in solid tumor patients.
Wang QT, Nie Y, Sun SN, Lin T, Han RJ, Jiang J, Li Z, Li JQ, Xiao YP, Fan YY, Yuan XH, Zhang H, Zhao BB, Zeng M, Li SY, Liao HX, Zhang J, He YW. Cancer Immunol Immunother. 2020 Jul;69(7):1375-1387. doi: 10.1007/s00262-020-02496-w. Epub 2020 Feb 20.
PMID: 32078016

Occurrence of severe rotavirus gastroenteritis in children younger than three years of age before and after the introduction of rotavirus **vaccine**: a prospective observational study in four pediatric clinics in Shibata City, Niigata Prefecture, Japan.
Oishi T, Matsunaga M, Nakano T, Sudo S, Kuwajima H, Tokuriki S, Study SR. Hum Vaccin Immunother. 2020 Jul 1:1-7. doi: 10.1080/21645515.2020.1720435. Online ahead of print.
PMID: 32609565

TETANUS **VACCINE** DURING PREGNANCY: DATA OF A TERTIARY HOSPITAL IN TURKEY.
DaĞdevİren G, ÖrgÜl G, YÜcel A, Şahİn D. Turk J Med Sci. 2020 Jul 6. doi: 10.3906/sag-2001-77. Online ahead of print.
PMID: 32628436

Avian Metapneumovirus subtype B around Europe: a phylodynamic reconstruction.
Franzo G, Legnardi M, Mescolini G, Tucciarone CM, Lupini C, Quaglia G, Catelli E, Cecchinato M. Vet Res. 2020 Jul 8;51(1):88. doi: 10.1186/s13567-020-00817-6.
PMID: 32641149

Dimerization of dengue virus E-subunits impacts antibody function and domain focus.
Thomas A, Thiono DJ, Kudlacek ST, Forsberg J, Premkumar L, Tian S, Kuhlman B, de Silva AM, Metz SW. J Virol. 2020 Jul 1:JVI.00745-20. doi: 10.1128/JVI.00745-20. Online ahead of print.
PMID: 32611757

Absence of Long-Term Protection in Domestic Pigs Immunized with Attenuated African Swine Fever Virus Isolate OURT88/3 or BeninΔMGF Correlates with Increased Levels of Regulatory T Cells and Interleukin-10.
Sánchez-Cordón PJ, Jabbar T, Chapman D, Dixon LK, Montoya M. J Virol. 2020 Jul 1;94(14):e00350-20. doi: 10.1128/JVI.00350-20. Print 2020 Jul 1.
PMID: 32376618

Melioidosis: A Neglected Cause of Community-Acquired Pneumonia.
Virk HS, Mukhopadhyay C, Wiersinga WJ. Semin Respir Crit Care Med. 2020 Aug;41(4):496-508. doi: 10.1055/s-0040-1710570. Epub 2020 Jul 6.
PMID: 32629488

Bacterial protein azurin and derived peptides as potential anti-SARS-CoV-2 agents: insights from molecular docking and molecular dynamics simulations.
Sasidharan S, Selvaraj C, Singh SK, Dubey VK, Kumar S, Fialho AM, Saudagar P. J Biomol Struct Dyn. 2020 Jul 3:1-16. doi: 10.1080/07391102.2020.1787864. Online ahead of print.
PMID: 32619162

Cost effectiveness of trivalent and quadrivalent influenza vaccines in 50- to 64-year-old adults in Korea.
Choi EJ, Park JH, Chun BC. Vaccine. 2020 Jul 6;38(32):5002-5008. doi: 10.1016/j.vaccine.2020.05.065. Epub 2020 Jun 10. PMID: 32532543

Evolution of protective human antibodies against Plasmodium falciparum circumsporozoite protein repeat motifs.
Murugan R, Scally SW, Costa G, Mustafa G, Thai E, Decker T, Bosch A, Prieto K, Levashina EA, Julien JP, Wardemann H. Nat Med. 2020 Jul;26(7):1135-1145. doi: 10.1038/s41591-020-0881-9. Epub 2020 May 25.
PMID: 32451496

Human papillomavirus genotyping on Reunion Island: A cross-sectional study of stored tissue samples.
Tran PL, Zafindraibe N, Ah-You N, Fernandez C, Arrivets P, Gérardin P, Michault A, Boukerrou M, Bertolotti A. Eur J Obstet Gynecol Reprod Biol. 2020 Jul 2;252:294-299. doi: 10.1016/j.ejogrb.2020.07.001. Online ahead of print.
PMID: 32650188

Pharmacies on the Frontline: Responding to the COVID-19 Pandemic.
McElhiney LF. Int J Pharm Compd. 2020 Jul-Aug;24(4):287-295.
PMID: 32649301

Revisiting aminocoumarins for the treatment of melioidosis.
Willcocks SJ, Cia F, Francisco AF, Wren BW. Int J Antimicrob Agents. 2020 Jul;56(1):106002. doi: 10.1016/j.ijantimicag.2020.106002. Epub 2020 Apr 30.
PMID: 32361027

Deficits in the IgG$^+$ memory B-cell recovery after anthracycline treatment is confined to the spleen of rhesus macaques.
Lasaviciute G, Bricaud AL, Hellgren F, Ingelman-Sundberg HM, Eksborg S, Jonker M, Haanstra KG, Hed Myrberg I, Sverremark-Ekström E, Loré K, Saghafian-Hedengren S, Nilsson A. Clin Transl Immunology. 2020 Jul 2;9(7):e1150. doi: 10.1002/cti2.1150. eCollection 2020.
PMID: 32642064

Characterization of SAT2 foot-and-mouth disease 2013/2014 outbreak viruses at the wildlife-livestock interface in South Africa.
Blignaut B, van Heerden J, Reininghaus B, Fosgate GT, Heath L. Transbound Emerg Dis. 2020 Jul;67(4):1595-1606. doi: 10.1111/tbed.13493. Epub 2020 Feb 12.
PMID: 31984622

Measuring **vaccine** effectiveness against persistent HPV infections: a comparison of different statistical approaches.
Donken R, Hoes J, Knol MJ, Ogilvie GS, Dobson S, King AJ, Singer J, Woestenberg PJ, Bogaards JA, Meijer CJLM, de Melker HE. BMC Infect Dis. 2020 Jul 8;20(1):482. doi: 10.1186/s12879-020-05083-7.
PMID: 32640998

Developmental outcomes following **vaccine**-proximate febrile seizures in children.
Deng L, Wood N, Macartney K, Gold M, Crawford N, Buttery J, Richmond P, Barton B. Neurology. 2020 Jul 21;95(3):e226-e238. doi: 10.1212/WNL.0000000000009876. Epub 2020 Jul 1.
PMID: 32611632

Immunogenicity and protective efficacy of an EB66(®) cell culture-derived duck Tembusu virus **vaccine**.
Yang Z, Wang J, Wang X, Duan H, He P, Yang G, Liu L, Cheng H, Wang X, Pan J, Zhao J, Yu H, Yang B, Liu Y, Lin J. Avian Pathol. 2020 Jul 2:1-9. doi: 10.1080/03079457.2020.1763914. Online ahead of print.
PMID: 32374185

Bladder Cancer at the time of COVID-19 Outbreak.
Esperto F, Pang KH, Albisinni S, Papalia R, Scarpa RM. Int Braz J Urol. 2020 Jul;46(suppl.1):62-68. doi: 10.1590/S1677-5538.IBJU.2020.S107.
PMID: 32549074 Review.

Why have nanotechnologies been underutilized in the global uprising against the coronavirus pandemic?
Uskoković V. Nanomedicine (Lond). 2020 Jul;15(17):1719-1734. doi: 10.2217/nnm-2020-0163. Epub 2020 May 28.
PMID: 32462968

Updated Characterization of Post-OPV Cessation Risks: Lessons from 2019 Serotype 2 Outbreaks and Implications for the Probability of OPV Restart.
Kalkowska DA, Pallansch MA, Cochi SL, Kovacs SD, Wassilak SGF, Thompson KM. Risk Anal. 2020 Jul 6. doi: 10.1111/risa.13555. Online ahead of print.
PMID: 32632925

Economic evaluation of rotavirus vaccination in children of Bhutan.
Pempa, Luz ACG, Luangasanatip N, Kingkaew P, Adhikari D, Isaranuwatchai W, Choiphel D, Pecenka C, Debellut F. Vaccine. 2020 Jul 6;38(32):5049-5059. doi: 10.1016/j.vaccine.2020.05.035. Epub 2020 Jun 7.
PMID: 32522415

Response to Horse ATG (Thymogam, Bharat Serums and **Vaccine**, India) and Cyclosporine in Aplastic Anemia: A Single Centre, Retrospective Study of 60 Patients from Southern India.
Amalnath DS. Indian J Hematol Blood Transfus. 2020 Jul;36(3):473-476. doi: 10.1007/s12288-019-01137-2. Epub 2019 May 20.
PMID: 32647420

An EdU-based flow cytometry assay to evaluate chicken T lymphocyte proliferation.
Alvarez KLF, Poma-Acevedo A, Fernández-Sánchez M, Fernández-Díaz M. BMC Vet Res. 2020 Jul 6;16(1):230. doi: 10.1186/s12917-020-02433-0.
PMID: 32631319

Lessons on causality assessment and communications from the 2019 South-East Asia Regional (SEAR) workshop on inter-country expert review of selected Adverse Events Following Immunization (AEFI) cases.
MacDonald NE, Guichard S, Arora N, Menning L, Wilhelm E; 2019 Inter-country SEAR Workshop Participants, Communication Experts. Vaccine. 2020 Jul 6;38(32):4924-4932. doi: 10.1016/j.vaccine.2019.09.109. Epub 2019 Oct 11.
PMID: 31611095

Green synthesis of nanometal impregnated biomass - antiviral potential.
Choudhary S, Kumar R, Dalal U, Tomar S, Reddy SN. Mater Sci Eng C Mater Biol Appl. 2020 Jul;112:110934. doi: 10.1016/j.msec.2020.110934. Epub 2020 Apr 6.
PMID: 32409081

Varicella seroepidemiology and immunization in a cohort of future healthcare workers in the pre-vaccination era.
Trevisan A, Nicolli A, De Nuzzo D, Lago L, Artuso E, Maso S. Int J Infect Dis. 2020 Jul;96:228-232. doi: 10.1016/j.ijid.2020.04.082. Epub 2020 May 5.
PMID: 32387376

Prevalence of High-risk Nonavalent **Vaccine**-type Human Papillomavirus Infection Among Unvaccinated, Sexually Active Asian Female Adolescents With and Without Perinatally Acquired HIV Infection.
Sricharoenchai S, Kerr SJ, Gatechompol S, Hansudewechakul R, Dang HLD, Tran DNH, Teeratakulpisarn N, Chalermchockcharoenkit A, Achalapong J, Teeraananchai S, Singtoroj T, Phanuphak N, Sohn AH, Chokephaibulkit K; Steering Committee of the HPV in Adolescents Study. Pediatr Infect Dis J. 2020 Jul;39(7):615-619. doi: 10.1097/INF.0000000000002659.
PMID: 32282527

Demand for BCG **Vaccine** Due to Unproven Claims of its Role in Preventing COVID-19 Is Causing Shortages of Vaccines for Infants in Japan.
Kuroda N. Pediatr Infect Dis J. 2020 Jul;39(7):e159-e160. doi: 10.1097/INF.0000000000002724.
PMID: 32379194

A randomized phase 4 study of immunogenicity and safety following monovalent oral type 2 Sabin polio **vaccine** challenge in IPV-vaccinated children in Lithuania.
Bandyopadhyay AS, Gast C, Brickley EB, Rüttimann R, Clemens R, Oberste MS, Weldon WC, Ackerman ME, Connor RI, Wieland-Alter WF, Wright P, Usonis V. J Infect Dis. 2020 Jul 4:jiaa390. doi: 10.1093/infdis/jiaa390. Online ahead of print.
PMID: 32621741

An Eye Tracking Approach to Understanding Misinformation and Correction Strategies on Social Media: The Mediating Role of Attention and Credibility to Reduce HPV **Vaccine** Misperceptions.
Kim SC, Vraga EK, Cook J. Health Commun. 2020 Jul 7:1-10. doi: 10.1080/10410236.2020.1787933. Online ahead of print. PMID: 32633151

Increased protection of earlier use of immunoprophylaxis in preventing perinatal transmission of hepatitis B virus.
Huang H, Xu C, Liu L, Chen L, Zhu X, Chen J, Feng J, Chen T, Xu B, Yang J, Xu B, Pan M, Dai Y, Hu Y, Zhou YH. Clin Infect Dis. 2020 Jul 8:ciaa898. doi: 10.1093/cid/ciaa898. Online ahead of print.
PMID: 32634824

Water-soluble N-2-Hydroxypropyl trimethyl ammonium chloride chitosan enhanced the immunogenicity of inactivated porcine parvovirus **vaccine** vaccination on sows against porcine parvovirus infection.
Zhou M, Qu W, Sun Y, Liang L, Jin Z, Cui S, Zhao K. Immunol Lett. 2020 Jul;223:26-32. doi: 10.1016/j.imlet.2020.04.014. Epub 2020 Apr 22.
PMID: 32333964

Epitope-based peptide vaccines predicted against novel coronavirus disease caused by SARS-CoV-2.
Lin L, Ting S, Yufei H, Wendong L, Yubo F, Jing Z. Virus Res. 2020 Jul 1:198082. doi: 10.1016/j.virusres.2020.198082. Online ahead of print.
PMID: 32621841

The challenges of modeling and forecasting the spread of COVID-19.
Bertozzi AL, Franco E, Mohler G, Short MB, Sledge D. Proc Natl Acad Sci U S A. 2020 Jul 21;117(29):16732-16738. doi: 10.1073/pnas.2006520117. Epub 2020 Jul 2.
PMID: 32616574

Opsonization-Enhanced Antigen Presentation by MR1 Activates Rapid Polyfunctional MAIT Cell Responses Acting as an Effector Arm of Humoral Antibacterial Immunity.
Boulouis C, Gorin JB, Dias J, Bergman P, Leeansyah E, Sandberg JK. J Immunol. 2020 Jul 1;205(1):67-77. doi: 10.4049/jimmunol.2000003. Epub 2020 May 20.
PMID: 32434941

Autopsy Services and Emergency Preparedness of a Tertiary Academic Hospital Mortuary for the COVID-19 Public Health Emergency: The Yale Plan.
McGuone D, Sinard J, Gill JR, Masters A, Liu C, Morotti R, Parkash V. Adv Anat Pathol. 2020 Jul 6. doi: 10.1097/PAP.0000000000000274. Online ahead of print.
PMID: 32649315

A global agenda for older adult immunization in the COVID-19 era: A roadmap for action.
Privor-Dumm LA, Poland GA, Barratt J, Durrheim DN, Deloria Knoll M, Vasudevan P, Jit M, Bonvehí PE, Bonanni P; International Council on Adult Immunization. Vaccine. 2020 Jul 3:S0264-410X(20)30885-9. doi: 10.1016/j.vaccine.2020.06.082. Online ahead of print.
PMID: 32703743

Campylobacter-derived ligands induce cytokine and chemokine expression in chicken macrophages and cecal tonsil mononuclear cells.
Taha-Abdelaziz K, Astill J, Shojadoost B, Borrelli S, A Monteiro M, Sharif S. Vet Microbiol. 2020 Jul;246:108732. doi: 10.1016/j.vetmic.2020.108732. Epub 2020 May 24.
PMID: 32605752

The chronicle of COVID-19: possible strategies to curb the pandemic.
Kumar R, Harilal S, Al-Sehemi AG, Mathew GE, Carradori S, Mathew B. Curr Med Chem. 2020 Jul 2. doi: 10.2174/0929867327666200702151018. Online ahead of print.
PMID: 32614740

Uptrend prevalence of varicella parallel with low serum antibodies and low second-dose rate among children 10-14 years old in Wenzhou, China.
Liu Q, Yu J, Wei J, Zhang H, Jin J, Zheng W, Ruan Y, Yu J, Chen Y. Hum Vaccin Immunother. 2020 Jul 2:1-9. doi: 10.1080/21645515.2020.1775458. Online ahead of print.
PMID: 32614651

The geography of memory B cell reactivation in **vaccine**-induced immunity and in autoimmune disease relapses.
Dhenni R, Phan TG. Immunol Rev. 2020 Jul;296(1):62-86. doi: 10.1111/imr.12862. Epub 2020 May 30.
PMID: 32472583 Review.

State-of-the-art in host-derived biomarkers of Chagas disease prognosis and early evaluation of anti-Trypanosoma cruzi treatment response.
Cortes-Serra N, Losada-Galvan I, Pinazo MJ, Fernandez-Becerra C, Gascon J, Alonso-Padilla J. Biochim Biophys Acta Mol Basis Dis. 2020 Jul 1;1866(7):165758. doi: 10.1016/j.bbadis.2020.165758. Epub 2020 Mar 10.
PMID: 32169507

Immunogenicity and safety of a 12-valent pneumococcal conjugate **vaccine** in infants aged 6-10 weeks: a randomized double-blind active-controlled trial.
Shin J, Teeratakulpisarn J, Puthanakit T, Theerawit T, Ryu JH, Shin J, Lee S, Lee H, An K, Kim H. Clin Exp Pediatr. 2020 Jul;63(7):265-271. doi: 10.3345/cep.2019.01067. Epub 2019 Dec 6.
PMID: 32024323

Insights into the molecular diversity of Plasmodium vivax merozoite surface protein-3γ (pvmsp3γ), a polymorphic member in the msp3 multi-gene family.
Kuamsab N, Putaporntip C, Pattanawong U, Jongwutiwes S. Sci Rep. 2020 Jul 3;10(1):10977. doi: 10.1038/s41598-020-67222-z.
PMID: 32620822

The Emergence of Spatial Clustering in Medical **Vaccine** Exemptions Following California Senate Bill 277, 2015-2018.
Gromis A, Liu KY. Am J Public Health. 2020 Jul;110(7):1084-1091. doi: 10.2105/AJPH.2020.305607. Epub 2020 May 21.
PMID: 32437268

Generation of multiepitope cancer vaccines based on large combinatorial libraries of survivin-derived mutant epitopes.
Domínguez-Romero AN, Martínez-Cortés F, Munguía ME, Odales J, Gevorkian G, Manoutcharian K. Immunology. 2020 Jul 3. doi: 10.1111/imm.13233. Online ahead of print.
PMID: 32619293

Hybrid clinical trials to generate real-world evidence: design considerations from a sponsor's perspective.
Zhu M, Sridhar S, Hollingsworth R, Chit A, Kimball T, Murmello K, Greenberg M, Gurunathan S, Chen J. Contemp Clin Trials. 2020 Jul;94:105856. doi: 10.1016/j.cct.2019.105856. Epub 2019 Oct 24.
PMID: 31669449

Poly (butylene succinate) and derivative copolymer filled with Dendranthema grandiflora biolarvicide extract.
Borges GR, Aboelkheir MG, de Souza Junior FG, Waldhelm KC, Kuster RM. Environ Sci Pollut Res Int. 2020 Jul;27(19):23575-23585. doi: 10.1007/s11356-020-08679-3. Epub 2020 Apr 15.
PMID: 32297111

Viral vectored hepatitis C virus vaccines generate pan-genotypic T cell responses to conserved subdominant epitopes.
Donnison T, von Delft A, Brown A, Swadling L, Hutchings C, Hanke T, Chinnakannan S, Barnes E. Vaccine. 2020 Jul 6;38(32):5036-5048. doi: 10.1016/j.vaccine.2020.05.042. Epub 2020 Jun 9.
PMID: 32532545

Immunotherapy of anogenital warts with measles, mumps, and rubella **vaccine**.
Kansal NK. Dermatol Ther. 2020 Jul 8:e13987. doi: 10.1111/dth.13987. Online ahead of print.
PMID: 32638481

Inclusion of PD-L1 into a recombinant profilin antigen enhances immunity against Babesia microti in a murine model.
Wei N, Lu J, Gong H, Xu Z, Zhang H, Cui L, Zhou J, Lin Z. Ticks Tick Borne Dis. 2020 Jul;11(4):101446. doi: 10.1016/j.ttbdis.2020.101446. Epub 2020 Apr 19.
PMID: 32340913

Urinary tract infections in the elderly: a review of disease characteristics and current treatment options.
Rodriguez-Mañas L. Drugs Context. 2020 Jul 8;9:2020-4-13. doi: 10.7573/dic.2020-4-13. eCollection 2020.
PMID: 32699546

Effect of aging on immunogenicity and efficacy of inactivated influenza vaccines in cotton rats *Sigmodon hispidus*.
Boukhvalova MS, Mortensen E, Mbaye A, McKay J, Blanco JCG. Hum Vaccin Immunother. 2020 Jul 2:1-13. doi: 10.1080/21645515.2020.1766334. Online ahead of print.
PMID: 32614696

Identification of conserved peptides containing B-cell epitopes of Babesia bovis AMA-1 and their potential as diagnostics candidates.
Barreda D, Hidalgo-Ruiz M, Hernandez-Ortiz R, Ramos JA, Galindo-Velasco E, Mosqueda J. Transbound Emerg Dis. 2020 Jul;67 Suppl 2:60-68. doi: 10.1111/tbed.13213. Epub 2019 Jun 24.
PMID: 31231975

Replacing the decoy epitope of PCV2 capsid protein with epitopes of GP3 and/or GP5 of PRRSV enhances the immunogenicity of bivalent vaccines in mice.
Jung BK, Kim HR, Jang H, Chang KS. J Virol Methods. 2020 Jul 7;284:113928. doi: 10.1016/j.jviromet.2020.113928. Online ahead of print.
PMID: 32650038

Regulatory Considerations on the Development of mRNA Vaccines.
Naik R, Peden K. Curr Top Microbiol Immunol. 2020 Jul 8. doi: 10.1007/82_2020_220. Online ahead of print.
PMID: 32638114

Atypical Aeromonas salmonicida vapA type V and Vibrio spp. are predominant bacteria recovered from ballan wrasse Labrus bergylta in Scotland.
Papadopoulou A, Wallis T, Ramirez-Paredes JG, Monaghan SJ, Davie A, Migaud H, Adams A. Dis Aquat Organ. 2020 Jul 2;140:47-54. doi: 10.3354/dao03489.
PMID: 32614330

Public perceptions of non-pharmaceutical interventions for influenza and mosquito-borne illnesses - a statewide survey in Arizona.
Pogreba-Brown K, Austhof E, Okello A, Weiss J, Lira R, Ernst K. Perspect Public Health. 2020 Jul;140(4):214-221. doi: 10.1177/1757913919886605. Epub 2019 Nov 22.
PMID: 31755813

The efficacy and performance impact of Fostera PRRS in a Vietnamese commercial pig farm naturally challenged by a highly pathogenic PRRS virus.
Do DT, Nguyen TT, Nguyen NTH, Nguyen MHP, Le HT, Nguyen NTT, Nguyen NTP, Chae C, Mah CK. Trop Anim Health Prod. 2020 Jul;52(4):1725-1732. doi: 10.1007/s11250-019-02177-6. Epub 2020 Jan 2.
PMID: 31898019

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

The remaining unknowns: a mixed methods study of the current and global health research priorities for COVID-19.
Norton A, De La Horra Gozalo A, Feune de Colombi N, Alobo M, Mutheu Asego J, Al-Rawni Z, Antonio E, Parker J, Mwangi W, Adhiambo Wesonga C, Marsh K, Tufet M, Piot P, Lang T. BMJ Glob Health. 2020 Jul;5(7):e003306. doi: 10.1136/bmjgh-2020-003306.
PMID: 32727843

Mycoplasma bovis in Spanish Cattle Herds: Two Groups of Multiresistant Isolates Predominate, with One Remaining Susceptible to Fluoroquinolones.
García-Galán A, Nouvel LX, Baranowski E, Gómez-Martín Á, Sánchez A, Citti C, de la Fe C. Pathogens. 2020 Jul 7;9(7):E545. doi: 10.3390/pathogens9070545.
PMID: 32645913

The immune protection induced by a serine protease from the Trichinella spiralis adult administered as DNA and protein **vaccine**.
Xu D, Tang B, Wang Y, Zhang L, Qu Z, Shi W, Wang X, Sun Q, Sun S, Liu M. Acta Trop. 2020 Jul 6;211:105622. doi: 10.1016/j.actatropica.2020.105622. Online ahead of print.
PMID: 32645301

Exploring the acceptability of controlled human infection with SARSCoV2-a public consultation.
Gbesemete D, Barker M, Lawrence WT, Watson D, de Graaf H, Read RC. BMC Med. 2020 Jul 7;18(1):209. doi: 10.1186/s12916-020-01670-2.
PMID: 32635912

Surface Modification of Mobile Composition of Matter (MCM)-41 Type Silica Nanoparticles for Potential Oral Mucosa **Vaccine** Delivery.
Amin MK, Boateng JS. J Pharm Sci. 2020 Jul;109(7):2271-2283. doi: 10.1016/j.xphs.2020.03.021. Epub 2020 Mar 30.
PMID: 32240692

Learning from similarities between **vaccine** responses and SLE.
Wahren-Herlenius M, Rönnblom L. Nat Rev Rheumatol. 2020 Jul;16(7):355-356. doi: 10.1038/s41584-020-0421-5.
PMID: 32303707

Effective inhibition of tumor in vivo with a novel DNA **vaccine** targeting chimeric G250.
Li TR, Peng C, Zhong LJ, Jian L, Jian GZ, Jun BX, Hui FL. Eur Rev Med Pharmacol Sci. 2020 Jul;24(13):7454-7461. doi: 10.26355/eurrev_202007_21914.
PMID: 32706085

Electronic immunization information systems: a case report of lessons learned from implementation in Pakistan.
Sullivan E, Masood T, Javed W, Bagshaw K, Ollis S, Regmi P, Gardezi SMA. Mhealth. 2020 Jul 5;6:31. doi: 10.21037/mhealth.2020.01.07. eCollection 2020.
PMID: 32632369

Gold nanoparticles enhance immune responses in mice against recombinant classical swine fever virus E2 protein.
Li Y, Jin Q, Ding P, Zhou W, Chai Y, Li X, Wang Y, Zhang G. Biotechnol Lett. 2020 Jul;42(7):1169-1180. doi: 10.1007/s10529-020-02853-w. Epub 2020 Mar 5.
PMID: 32140883

Four-step approach to efficiently develop capillary gel electrophoresis methods for viral **vaccine** protein analysis.
Geurink L, van Tricht E, Dudink J, Pajic B, van de Griend CES. Electrophoresis. 2020 Jul 8:10.1002/elps.202000107. doi: 10.1002/elps.202000107. Online ahead of print.
PMID: 32640046

Polymeric nanostructure vaccines: applications and challenges.
Simón-Vázquez R, Peleteiro M, González-Fernández Á. Expert Opin Drug Deliv. 2020 Jul;17(7):1007-1023. doi: 10.1080/17425247.2020.1776259. Epub 2020 Jun 10.
PMID: 32476491

An Engineered Biomimetic MPER Peptide **Vaccine** Induces Weakly HIV Neutralizing Antibodies in Mice.
Shao S, Huang WC, Lin C, Hicar MD, LaBranche CC, Montefiori DC, Lovell JF. Ann Biomed Eng. 2020 Jul;48(7):1991-2001. doi: 10.1007/s10439-019-02398-8. Epub 2019 Dec 12.
PMID: 31832930

Cell-Mediated Immune Responses to COVID-19 Infection.
Guihot A, Litvinova E, Autran B, Debré P, Vieillard V. Front Immunol. 2020 Jul 3;11:1662. doi: 10.3389/fimmu.2020.01662. eCollection 2020.
PMID: 32719687

Safety and Immunogenicity of an AS03(B)-Adjuvanted Inactivated Tetravalent Dengue Virus **Vaccine** Administered on Varying Schedules to Healthy U.S. Adults: A Phase 1/2 Randomized Study.
Lin L, Lyke KE, Koren M, Jarman RG, Eckels KH, Lepine E, McArthur MA, Currier JR, Friberg H, Moris P, Keiser PB, De La Barrera R, Vaughn DW, Paris RM, Thomas SJ, Schmidt AC. Am J Trop Med Hyg. 2020 Jul;103(1):132-141. doi: 10.4269/ajtmh.19-0738. Epub 2020 Apr 23.
PMID: 32342848

Experimental immunization of mice with a recombinant bovine enterovirus **vaccine** expressing BVDV E0 protein elicits a long-lasting serologic response.
Ren X, Zhang S, Gao X, Guo X, Xin T, Zhu H, Jia H, Hou S. Virol J. 2020 Jul 1;17(1):88. doi: 10.1186/s12985-020-01338-6.
PMID: 32611446

Assessment of Knowledge, Attitudes, and Practices towards New Coronavirus (SARS-CoV-2) of Health Care Professionals in Greece before the Outbreak Period.
Papagiannis D, Malli F, Raptis DG, Papathanasiou IV, Fradelos EC, Daniil Z, Rachiotis G, Gourgoulianis KI. Int J Environ Res Public Health. 2020 Jul 8;17(14):E4925. doi: 10.3390/ijerph17144925.
PMID: 32650614

Genomic characterization of classical swine fever virus LOM variants with 3'-UTR INDELs from pigs on Jeju Island, South Korea.
Jang G, Kim JA, Yoo H, Yang K, Yang HS, Park C, Jeong K, Park CK, Lyoo YS, Lee C. Arch Virol. 2020 Jul;165(7):1691-1696. doi: 10.1007/s00705-020-04651-1. Epub 2020 May 11.
PMID: 32394293

Evaluating use cases for human challenge trials in accelerating SARS-CoV-2 **vaccine** development.
Nguyen LC, Bakerlee CW, McKelvey TG, Rose SM, Norman AJ, Joseph N, Manheim D, McLaren MR, Jiang S, Barnes CF, Kinniment M, Foster D, Darton TC, Morrison J; 1Day Sooner Research Team. Clin Infect Dis. 2020 Jul 6:ciaa935. doi: 10.1093/cid/ciaa935. Online ahead of print.
PMID: 32628748

Isotype-specific outcomes in Fc gamma receptor targeting of PspA using fusion proteins as a vaccination strategy against Streptococcus pneumoniae infection.
Wiedinger K, McCauley J, Bitsaktsis C. Vaccine. 2020 Jul 31;38(35):5634-5646. doi: 10.1016/j.vaccine.2020.06.067. Epub 2020 Jul 7.
PMID: 32646816

A heat-shocked melanoma cell lysate **vaccine** enhances tumor infiltration by prototypic effector T cells inhibiting tumor growth.
Gleisner MA, Pereda C, Tittarelli A, Navarrete M, Fuentes C, Ávalos I, Tempio F, Araya JP, Becker MI, González FE, López MN, Salazar-Onfray F. J Immunother Cancer. 2020 Jul;8(2):e000999. doi: 10.1136/jitc-2020-000999. PMID: 32690772

Exploring HCV genome to construct multi-epitope based subunit **vaccine** to battle HCV infection: Immunoinformatics based approach.
Khalid H, Ashfaq UA. J Biomed Inform. 2020 Jul 1;108:103498. doi: 10.1016/j.jbi.2020.103498. Online ahead of print.
PMID: 32621883

Citizens' juries give verdict on whether private practice veterinarians should attend unvaccinated Hendra virus suspect horses.
Annand EJ, Reid PA, Johnson J, Gilbert GL, Taylor M, Walsh M, Ward MP, Wilson A, Degeling C. Aust Vet J. 2020 Jul;98(7):273-279. doi: 10.1111/avj.12957. Epub 2020 Jun 11.
PMID: 32529687

Unique transcriptome changes in peripheral B-cells revealed by comparing age groups from naive or vaccinated mice, including snoRNA and Cdkn2a.
Baudier RL, Zwezdaryk KJ, Czarny-Ratajczak M, Kodroff LH, Sullivan DE, Norton EB. J Gerontol A Biol Sci Med Sci. 2020 Jul 1:glaa165. doi: 10.1093/gerona/glaa165. Online ahead of print.
PMID: 32609344

Pathogenic characteristics of a QX-like infectious bronchitis virus strain SD in chickens exposed at different ages and protective efficacy of combining live homologous and heterologous vaccination.
Shao L, Zhao J, Li L, Huang X, Yang H, Cheng J, Liu C, Zhang G. Vet Res. 2020 Jul 8;51(1):86. doi: 10.1186/s13567-020-00811-y.
PMID: 32641162

Cost-efficiency analysis of voluntary vaccination against n-serovar diseases using antibody-dependent enhancement: A game approach.
Kabir KMA, Tanimoto J. J Theor Biol. 2020 Jul 2;503:110379. doi: 10.1016/j.jtbi.2020.110379. Online ahead of print.
PMID: 32622789

U-Omp19 from Brucella abortus increases dmLT immunogenicity and improves protection against Escherichia coli heat-labile toxin (LT) oral challenge.
Coria LM, Martinez FL, Bruno LA, Pasquevich KA, Cassataro J. Vaccine. 2020 Jul 6;38(32):5027-5035. doi: 10.1016/j.vaccine.2020.05.039. Epub 2020 Jun 11.
PMID: 32536545

Lipopolysaccharide derived alginate coated Hepatitis B antigen loaded chitosan nanoparticles for oral mucosal immunization.
Saraf S, Jain S, Sahoo RN, Mallick S. Int J Biol Macromol. 2020 Jul 1;154:466-476. doi: 10.1016/j.ijbiomac.2020.03.124. Epub 2020 Mar 16.
PMID: 32194106

Genetic evolution analysis of novel recombinant pseudorabies virus strain in Sichuan, China.
Huang J, Zhu L, Zhao J, Yin X, Feng Y, Wang X, Sun X, Zhou Y, Xu Z. Transbound Emerg Dis. 2020 Jul;67(4):1428-1432. doi: 10.1111/tbed.13484. Epub 2020 Feb 12.
PMID: 31968152

Cholesterol Constrains the Antigenic Configuration of the Membrane-Proximal Neutralizing HIV-1 Epitope.
Torralba J, de la Arada I, Carravilla P, Insausti S, Rujas E, Largo E, Eggeling C, Arrondo JLR, Apellániz B, Nieva JL. ACS Infect Dis. 2020 Jul 8. doi: 10.1021/acsinfecdis.0c00243. Online ahead of print.
PMID: 32584020

Health systems constraints and facilitators of human papillomavirus immunization programmes in sub-Saharan Africa: a systematic review.
Amponsah-Dacosta E, Kagina BM, Olivier J. Health Policy Plan. 2020 Jul 1;35(6):701-717. doi: 10.1093/heapol/czaa017.
PMID: 32538437

A virion-based assay for glycoprotein thermostability reveals key determinants of filovirus entry and its inhibition.
Bortz RH 3rd, Wong AC, Grodus MG, Recht HS, Pulanco MC, Lasso G, Anthony SJ, Mittler E, Jangra RK, Chandran K. J Virol. 2020 Jul 1:JVI.00336-20. doi: 10.1128/JVI.00336-20. Online ahead of print.
PMID: 32611759

Live attenuated Salmonella Typhimurium with monophosphoryl lipid A retains ability to induce T-cell and humoral immune responses against heterologous polysaccharide of Shigella flexneri 2a.
Liu Q, Su H, Bian X, Wang S, Kong Q. Int J Med Microbiol. 2020 Jul;310(5):151427. doi: 10.1016/j.ijmm.2020.151427. Epub 2020 May 15.
PMID: 32654768

Is Covid-19 sowing the seeds for future litigation?
Riley-Smith Qc T, Heppinstall A, Foster F. Med Leg J. 2020 Jul;88(2):90-97. doi: 10.1177/0025817220926943. Epub 2020 Jun 3.
PMID: 32490743

Equine influenza vaccination as reported by horse owners and factors influencing their decision to vaccinate or not.
Bambra W, Daly JM, Kendall NR, Gardner DS, Brennan M, Kydd JH. Prev Vet Med. 2020 Jul;180:105011. doi: 10.1016/j.prevetmed.2020.105011. Epub 2020 May 12.
PMID: 32438206

Peptide vaccination directed against IDO1-expressing immune cells elicits $CD8^+$ and $CD4^+$ T-cell-mediated antitumor immunity and enhanced anti-PD1 responses.
Dey S, Sutanto-Ward E, Kopp KL, DuHadaway J, Mondal A, Ghaban D, Lecoq I, Zocca MB, Merlo LMF, Mandik-Nayak L, Andersen MH, Pedersen AW, Muller AJ. J Immunother Cancer. 2020 Jul;8(2):e000605. doi: 10.1136/jitc-2020-000605.
PMID: 32690770

Therapeutic peptides for the treatment of systemic lupus erythematosus: a place in therapy.
Talotta R, Atzeni F, Laska MJ. Expert Opin Investig Drugs. 2020 Jul 7:1-23. doi: 10.1080/13543784.2020.1777983. Online ahead of print.
PMID: 32500750

Epitope Selection for Fighting Visceral Leishmaniosis: Not All Peptides Function the Same Way.
Martínez-Rodrigo A, Mas A, Álvarez-Campos D, Orden JA, Domínguez-Bernal G, Carrión J. Vaccines (Basel). 2020 Jul 1;8(3):E352. doi: 10.3390/vaccines8030352.
PMID: 32630347

"We are fierce, independent thinkers and intelligent": Social capital and stigma management among mothers who refuse vaccines.
Reich JA. Soc Sci Med. 2020 Jul;257:112015. doi: 10.1016/j.socscimed.2018.10.027. Epub 2018 Oct 30.
PMID: 30442504

Toxocara canis infection may impair bovine herpesvirus type 5 immunization.
Menegon YA, Pinheiro NB, Santos LM, Rodrigues PRC, Avila LFC, Conceição FR, Leite FPL. Res Vet Sci. 2020 Jul 4;132:268-270. doi: 10.1016/j.rvsc.2020.06.022. Online ahead of print.
PMID: 32693251

Mucosal Vaccination with UV-Inactivated *Chlamydia suis* in Pre-Exposed Outbred Pigs Decreases Pathogen Load and Induces CD4 T-Cell Maturation into IFN-γ^+ Effector Memory Cells.
Amaral AF, Rahman KS, Kick AR, Cortes LM, Robertson J, Kaltenboeck B, Gerdts V, O'Connell CM, Poston TB, Zheng X, Liu C, Omesi SY, Darville T, Käser T. Vaccines (Basel). 2020 Jul 2;8(3):E353. doi: 10.3390/vaccines8030353.
PMID: 32630694

Flexor Compartment Infection Secondary to Bovine Injection Needlestick Injury: A Case Report.
Reasoner K, Gebhart SS, Lee DH. JBJS Case Connect. 2020 Jul-Sep;10(3):e2000081. doi: 10.2106/JBJS.CC.20.00081.
PMID: 32668137

Efficacy of favipiravir (T-705) against Crimean-Congo hemorrhagic fever virus infection in cynomolgus macaques.
Hawman DW, Haddock E, Meade-White K, Nardone G, Feldmann F, Hanley PW, Lovaglio J, Scott D, Komeno T, Nakajima N, Furuta Y, Gowen BB, Feldmann H. Antiviral Res. 2020 Jul 6:104858. doi: 10.1016/j.antiviral.2020.104858. Online ahead of print.
PMID: 32645335

In vivo Characterization of Plasmodium berghei P47 (Pbs47) as a Malaria Transmission-Blocking **Vaccine** Target.
Yenkoidiok-Douti L, Canepa GE, Barletta ABF, Barillas-Mury C. Front Microbiol. 2020 Jul 3;11:1496. doi: 10.3389/fmicb.2020.01496. eCollection 2020.
PMID: 32719666

COVID-19: test, trace and isolate-new epidemiological data.
Brüssow H. Environ Microbiol. 2020 Jul;22(7):2445-2456. doi: 10.1111/1462-2920.15118. Epub 2020 Jun 27.
PMID: 32510748

Short communication: J-5 Escherichia coli vaccination does not influence severity of an Escherichia coli intramammary challenge in primiparous cows.
Vangroenweghe F, Duchateau L, Burvenich C. J Dairy Sci. 2020 Jul;103(7):6692-6697. doi: 10.3168/jds.2019-17799. Epub 2020 Apr 22.
PMID: 32331898

The Improbability of the Rapid Development of a **Vaccine** for SARS-CoV-2.
Morris KV. Mol Ther. 2020 Jul 8;28(7):1548-1549. doi: 10.1016/j.ymthe.2020.06.005. Epub 2020 Jun 12.
PMID: 32533920

Candidate HPV genotypes not included in the 9-valent **vaccine** for prevention of CIN 2-3.
Gonzalez-Bosquet E, Gibert M, Serra M, Hernandez-Saborit A, Gonzalez-Fernandez A. Int J Gynecol Cancer. 2020 Jul;30(7):954-958. doi: 10.1136/ijgc-2019-001069. Epub 2020 May 28.
PMID: 32467333

Impact of 13-valent pneumococcal conjugate **vaccine** on the incidence of hospitalizations for all-cause pneumonia among children aged less than 5 years in Burkina Faso: An interrupted time-series analysis.
Kaboré L, Ouattara S, Sawadogo F, Gervaix A, Galetto-Lacour A, Karama R, Traoré AT, Méda B, Tall H, Essoh AT, Gessner BD, Moïsi JC. Int J Infect Dis. 2020 Jul;96:31-38. doi: 10.1016/j.ijid.2020.03.051. Epub 2020 Mar 28.
PMID: 32234344

When development is at stake: Fear the disease, not the **vaccine**.
Joshi C, Thio LL. Neurology. 2020 Jul 21;95(3):103-104. doi: 10.1212/WNL.0000000000009882. Epub 2020 Jul 1. PMID: 32611630

Measles (Rubeola): An Update.
Crecelius EM, Burnett MW. J Spec Oper Med. 2020 Summer;20(2):136-138.
PMID: 32573751

Dendritic cell vaccination and CD40-agonist combination therapy licenses T cell-dependent antitumor immunity in a pancreatic carcinoma murine model.
Lau SP, van Montfoort N, Kinderman P, Lukkes M, Klaase L, van Nimwegen M, van Gulijk M, Dumas J, Mustafa DAM, Lievense SLA, Groeneveldt C, Stadhouders R, Li Y, Stubbs A, Marijt KA, Vroman H, van der Burg SH, Aerts J, van Hall T, Dammeijer F, van Eijck CHJ. J Immunother Cancer. 2020 Jul;8(2):e000772. doi: 10.1136/jitc-2020-000772.
PMID: 32690771

Determining Which of Several Simultaneously Administered Vaccines Increase Risk of an Adverse Event.
Wang SV, Stefanini K, Lewis E, Newcomer SR, Fireman B, Daley MF, Glanz JM, Duffy J, Weintraub E, Kulldorff M. Drug Saf. 2020 Jul 1. doi: 10.1007/s40264-020-00967-8. Online ahead of print.
PMID: 32613596

Staphylococcus aureus Lipase 1 Enhances Influenza A Virus Replication.
Goncheva MI, Conceicao C, Tuffs SW, Lee HM, Quigg-Nicol M, Bennet I, Sargison F, Pickering AC, Hussain S, Gill AC, Dutia BM, Digard P, Fitzgerald JR. mBio. 2020 Jul 7;11(4):e00975-20. doi: 10.1128/mBio.00975-20.
PMID: 32636247

The Case for Why Africa Should Host COVID-19 Candidate **Vaccine** Trials.
Singh JA. J Infect Dis. 2020 Jul 6;222(3):351-355. doi: 10.1093/infdis/jiaa303.
PMID: 32492144

Two approaches for the stabilization of *Bacillus anthracis* recombinant protective antigen.
Ryabchevskaya EM, Evtushenko EA, Granovskiy DL, Ivanov PA, Atabekov JG, Kondakova OA, Nikitin NA, Karpova OV. Hum Vaccin Immunother. 2020 Jul 2:1-6. doi: 10.1080/21645515.2020.1772632. Online ahead of print.
PMID: 32614657

Impact of state weights on national vaccination coverage estimates from household surveys in Nigeria.
Dong TQ, Rhoda DA, Mercer LD. Vaccine. 2020 Jul 6;38(32):5060-5070. doi: 10.1016/j.vaccine.2020.05.026. Epub 2020 Jun 10.
PMID: 32532542

Activity of vitamin D receptor agonists against dengue virus.
Jaratsittisin J, Xu B, Sornjai W, Weng Z, Kuadkitkan A, Li F, Zhou GC, Smith DR. Sci Rep. 2020 Jul 2;10(1):10835. doi: 10.1038/s41598-020-67783-z.
PMID: 32616772

Visual storytelling enhances knowledge dissemination in biomedical science.
Botsis T, Fairman JE, Moran MB, Anagnostou V. J Biomed Inform. 2020 Jul;107:103458. doi: 10.1016/j.jbi.2020.103458. Epub 2020 May 21.
PMID: 32445856

Potency evaluation of rabies **vaccine** for human use: The impact of reducing the number of animals per dilution - Part 2.
Machado NS, Moreira WC, Freitas JFS, Almeida AECC, Moura WC. Biologicals. 2020 Jul;66:30-34. doi: 10.1016/j.biologicals.2020.05.001. Epub 2020 May 22.
PMID: 32448736

Importance of early precautionary actions in avoiding the spread of COVID-19: Saudi Arabia as an Example.
Alshammari TM, Altebainawi AF, Alenzi KA. Saudi Pharm J. 2020 Jul;28(7):898-902. doi: 10.1016/j.jsps.2020.05.005. Epub 2020 May 22.
PMID: 32641902

Fine Needle Aspiration Biopsy of Peripheral Lymph Nodes in Children: Practical Experience in a Tertiary Hospital.
Richardson C, Redfern A, Sher-Locketz CL, Schubert PT, Schaaf HS. J Trop Pediatr. 2020 Jul 4:fmaa040. doi: 10.1093/tropej/fmaa040. Online ahead of print.
PMID: 32621489

The potential impact of human visceral leishmaniasis vaccines on population incidence.
Le Rutte EA, Coffeng LE, Malvolti S, Kaye PM, de Vlas SJ. PLoS Negl Trop Dis. 2020 Jul 2;14(7):e0008468. doi: 10.1371/journal.pntd.0008468. eCollection 2020 Jul.
PMID: 32614857

Reversal of the immunosuppressive tumor microenvironment by nanoparticle-based activation of immune-associated cells.
Qi FL, Wang MF, Li BZ, Lu ZF, Nie GJ, Li SP. Acta Pharmacol Sin. 2020 Jul;41(7):895-901. doi: 10.1038/s41401-020-0423-5. Epub 2020 May 28.
PMID: 32467568

Timeliness of data entry in Wisconsin Immunization Registry by Wisconsin pharmacies.
Engstrom K, Sill DN, Schauer S, Malinowski M, Martin E, Hayney MS. J Am Pharm Assoc (2003). 2020 Jul-Aug;60(4):618-623. doi: 10.1016/j.japh.2019.11.031. Epub 2020 Jan 15.
PMID: 31953117

Bovine Respiratory Disease Vaccination Against Viral Pathogens: Modified-Live Versus Inactivated Antigen Vaccines, Intranasal Versus Parenteral, What Is the Evidence?
Chamorro MF, Palomares RA. Vet Clin North Am Food Anim Pract. 2020 Jul;36(2):461-472. doi: 10.1016/j.cvfa.2020.03.006. PMID: 32451035

Flexible Phase I-II design for partially ordered regimens with application to therapeutic cancer vaccines.
Wages NA, Slingluff CL Jr. Stat Biosci. 2020 Jul;12(2):104-123. doi: 10.1007/s12561-019-09245-3. Epub 2019 Jun 4.
PMID: 32550936

COVID-19: Measures to prevent hospital contagion. What do urologists need to know?
Castro EIB, Secchi GL, Gómez CD, Gómez JT, Clark O, Alonso IAM, Salcedo JGC. Int Braz J Urol. 2020 Jul;46(suppl.1):113-119. doi: 10.1590/S1677-5538.IBJU.2020.S117.
PMID: 32550704

Organisation of preventive child health services: Key to socio-economic equity in **vaccine** uptake?
Arat A, Norredam M, Baum U, Jónsson SH, Gunlaugsson G, Wallby T, Hjern A. Scand J Public Health. 2020 Jul;48(5):491-494. doi: 10.1177/1403494819850430. Epub 2019 May 17.
PMID: 31096860

Globo H-KLH **vaccine** adagloxad simolenin (OBI-822)/OBI-821 in patients with metastatic breast cancer: phase II randomized, placebo-controlled study.
Huang CS, Yu AL, Tseng LM, Chow LWC, Hou MF, Hurvitz SA, Schwab RB, L Murray J, Chang HK, Chang HT, Chen SC, Kim SB, Hung JT, Ueng SH, Lee SH, Chen CC, Rugo HS. J Immunother Cancer. 2020 Jul;8(2):e000342. doi: 10.1136/jitc-2019-000342.
PMID: 32718986

Influenza Vaccination-associated Acute Thrombocytopenia and Diffuse Alveolar Hemorrhage.
Yamamoto Y, Ohara Y, Iwai A, Hara R, Matsuki T, Fukushima K, Oshitani Y, Kagawa H, Tsujino K, Yoshimura K, Miki M, Miki K, Mori M, Kida H. Intern Med. 2020 Jul 1;59(13):1633-1637. doi: 10.2169/internalmedicine.3991-19. Epub 2020 Mar 19.
PMID: 32188805

Nanomedicines based on nanoscale metal-organic frameworks for cancer immunotherapy.
Zhong XF, Sun X. Acta Pharmacol Sin. 2020 Jul;41(7):928-935. doi: 10.1038/s41401-020-0414-6. Epub 2020 Apr 30.
PMID: 32355277

Anatomical distribution of respiratory tract leukocyte cell subsets in neonatal calves.
Kolar QK, Waddell LA, Raper A, Rocchi MS, Shaw DJ, Corbishley A, Hope JC. Vet Immunol Immunopathol. 2020 Jul 2;227:110090. doi: 10.1016/j.vetimm.2020.110090. Online ahead of print.
PMID: 32663724

The Long and Winding Road to Eradicate **Vaccine**-Related Polioviruses.
Cochi SL, Pallansch MA. J Infect Dis. 2020 Jul 5:jiaa393. doi: 10.1093/infdis/jiaa393. Online ahead of print.
PMID: 32621744

Safety and efficacy of rice seed-based oral allergy **vaccine** for Japanese cedar pollinosis in Japanese monkeys.
Saito S, Takagi H, Wakasa Y, Ozawa K, Takaiwa F. Mol Immunol. 2020 Jul 7;125:63-69. doi: 10.1016/j.molimm.2020.06.019. Online ahead of print.
PMID: 32650161

Prediction, mapping and validation of tick glutathione S-transferase B-cell epitopes.
Ndawula C Jr, Amaral Xavier M, Villavicencio B, Cortez Lopes F, Juliano MA, Parizi LF, Verli H, da Silva Vaz I Jr, Ligabue-Braun R. Ticks Tick Borne Dis. 2020 Jul;11(4):101445. doi: 10.1016/j.ttbdis.2020.101445. Epub 2020 Apr 23.
PMID: 32354639

Genome-wide core proteome analysis of Brucella melitensis Strains for Potential Drug Target Prediction.
Rahman N, Shah M, Muhammad I, Khan H, Imran M. Mini Rev Med Chem. 2020 Jul 7. doi: 10.2174/1389557520666200707133347. Online ahead of print.
PMID: 32634082

Inference on treatment effect modification by biomarker response in a three-phase sampling design.
Juraska M, Huang Y, Gilbert PB. Biostatistics. 2020 Jul 1;21(3):545-560. doi: 10.1093/biostatistics/kxy074.
PMID: 30590450

A benchmark dataset of protein antigens for antigenicity measurement.
Qiu T, Qiu J, Yang Y, Zhang L, Mao T, Zhang X, Xu J, Cao Z. Sci Data. 2020 Jul 6;7(1):212. doi: 10.1038/s41597-020-0555-y.
PMID: 32632108

Novel SARS-CoV-2 specific antibody and neutralization assays reveal wide range of humoral immune response during COVID-19.
Dogan M, Kozhaya L, Placek L, Gunter C, Yigit M, Hardy R, Plassmeyer M, Coatney P, Lillard K, Bukhari Z, Kleinberg M, Hayes C, Arditi M, Klapper E, Merin N, Liang BT, Gupta R, Alpan O, Unutmaz D. medRxiv. 2020 Jul 8:2020.07.07.20148106. doi: 10.1101/2020.07.07.20148106. Preprint.
PMID: 32676617

Epidemiological Impact of Novel Preventive and Therapeutic HSV-2 Vaccination in the United States: Mathematical Modeling Analyses.
Ayoub HH, Chemaitelly H, Abu-Raddad LJ. Vaccines (Basel). 2020 Jul 8;8(3):E366. doi: 10.3390/vaccines8030366.
PMID: 32650385

PD-L1 upregulation by IFN-α/γ-mediated Stat1 suppresses anti-HBV T cell response.
Liu L, Hou J, Xu Y, Qin L, Liu W, Zhang H, Li Y, Chen M, Deng M, Zhao B, Hu J, Zheng H, Li C, Meng S. PLoS One. 2020 Jul 6;15(7):e0228302. doi: 10.1371/journal.pone.0228302. eCollection 2020. PMID: 32628668

Case Manifestations and Public Health Response for Outbreak of Meningococcal W Disease, Central Australia, 2017.
Sudbury EL, O'Sullivan S, Lister D, Varghese D, Satharasinghe K. Emerg Infect Dis. 2020 Jul;26(7):1355-1363. doi: 10.3201/eid2607.181941.
PMID: 32568047

Dendrigraft poly-L-lysines delivery of DNA **vaccine** effectively enhances the immunogenic responses against H9N2 avian influenza virus infection in chickens.
Zhao K, Rong G, Teng Q, Li X, Lan H, Yu L, Yu S, Jin Z, Chen G, Li Z. Nanomedicine. 2020 Jul;27:102209. doi: 10.1016/j.nano.2020.102209. Epub 2020 Apr 16.
PMID: 32305593

Epitope Mapping and Computational Analysis of Anti-HPV16 E6 and E7 Antibodies in Single-Chain Format for Clinical Development as Antitumor Drugs.
Amici C, Donà MG, Chirullo B, Di Bonito P, Accardi L. Cancers (Basel). 2020 Jul 6;12(7):E1803. doi: 10.3390/cancers12071803.
PMID: 32640530

A competing-risks model explains hierarchical spatial coupling of measles epidemics en route to national elimination.
Lau MSY, Becker AD, Korevaar HM, Caudron Q, Shaw DJ, Metcalf CJE, Bjørnstad ON, Grenfell BT. Nat Ecol Evol. 2020 Jul;4(7):934-939. doi: 10.1038/s41559-020-1186-6. Epub 2020 Apr 27.
PMID: 32341514

Plasmodium vivax AMA1: Implications of distinct haplotypes for immune response.
Bittencourt NC, Silva ABIED, Virgili NS, Schappo AP, Gervásio JHDB, Pimenta TS, Kujbida Junior MA, Ventura AMRS, Libonati RMF, Silva-Filho JL, Dos Santos HG, Lopes SCP, Lacerda MVG, Machado RLD, Costa FTM, Albrecht L. PLoS Negl Trop Dis. 2020 Jul 8;14(7):e0008471. doi: 10.1371/journal.pntd.0008471. eCollection 2020 Jul.
PMID: 32639964

Engineering and combining oncolytic measles virus for cancer therapy.
Leber MF, Neault S, Jirovec E, Barkley R, Said A, Bell JC, Ungerechts G. Cytokine Growth Factor Rev. 2020 Jul 3:S1359-6101(20)30149-0. doi: 10.1016/j.cytogfr.2020.07.005. Online ahead of print.
PMID: 32718830

Impact of Influenza Vaccination on Mortality in the Oldest Old: A Propensity Score-Matched Cohort Study.
Walzer P, Estève C, Barben J, Menu D, Cuenot C, Manckoundia P, Putot A. Vaccines (Basel). 2020 Jul 3;8(3):E356. doi: 10.3390/vaccines8030356.
PMID: 32635210

Etiology and prognosis of encephalitis in French Guianese children: a retrospective record-based study.
Elenga N, Roux A, Cuadro-Alvarez E, Martin E, Kallel H, Defo A. J Infect Public Health. 2020 Jul;13(7):1051-1053. doi: 10.1016/j.jiph.2020.01.315. Epub 2020 Apr 10.
PMID: 32284196

An approach to the influenza chimeric subunit **vaccine** (3M2e-HA2-NP) provides efficient protection against lethal virus challenge.
Saleh M, Nowroozi J, Farahmand B, Fotouhi F. Biotechnol Lett. 2020 Jul;42(7):1147-1159. doi: 10.1007/s10529-020-02822-3. Epub 2020 Mar 9.
PMID: 32152828

20-Year Synthetic Biology Research Roadmap: Implications for **Vaccine** Development and Future Research.
Frith KH. Nurs Educ Perspect. 2020 Jul/Aug;41(4):267-268. doi: 10.1097/01.NEP.0000000000000698.
PMID: 32569115

Current therapies under investigation for COVID-19: potential COVID-19 treatments.
Weisberg E, Sattler M, Yang PL, Parent A, Gray N, Griffin JD. Can J Physiol Pharmacol. 2020 Jul 8:483-489. doi: 10.1139/cjpp-2020-0286. Online ahead of print.
PMID: 32640179

Oral immunization of trout fry with recombinant Lactococcus lactis NZ3900 expressing G gene of viral hemorrhagic septicaemia virus (VHSV).
Naderi-Samani M, Soltani M, Dadar M, Taheri-Mirghaed A, Zargar A, Ahmadivand S, Hassanzadeh R, Goudarzi LM. Fish Shellfish Immunol. 2020 Jul 6;105:62-70. doi: 10.1016/j.fsi.2020.07.007. Online ahead of print.

Yellow Fever **Vaccine** Safety Perception of Pregnant Women in Emergency Response Mass Vaccination in Uganda.
Huebl L, Nnyombi A, Walakira E, Kutalek R. Am J Trop Med Hyg. 2020 Jul;103(1):160-163. doi: 10.4269/ajtmh.19-0439. Epub 2020 May 21.
PMID: 32458783

Learning context-aware structural representations to predict antigen and antibody binding interfaces.
Pittala S, Bailey-Kellogg C. Bioinformatics. 2020 Jul 1;36(13):3996-4003. doi: 10.1093/bioinformatics/btaa263.
PMID: 32321157

DNA vaccination with the Mycobacterium marinum MMAR_4110 antigen inhibits reactivation of a latent mycobacterial infection in the adult Zebrafish.
Niskanen M, Myllymäki H, Rämet M. Vaccine. 2020 Jul 31;38(35):5685-5694. doi: 10.1016/j.vaccine.2020.06.053. Epub 2020 Jul 3.
PMID: 32624250

Prevention of Hepatitis A Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices, 2020.
Nelson NP, Weng MK, Hofmeister MG, Moore KL, Doshani M, Kamili S, Koneru A, Haber P, Hagan L, Romero JR, Schillie S, Harris AM. MMWR Recomm Rep. 2020 Jul 3;69(5):1-38. doi: 10.15585/mmwr.rr6905a1.
PMID: 32614811

Procedures for Flow Cytometry-Based Sorting of Unfixed Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infected Cells and Other Infectious Agents.
Reifel KM, Swan BK, Jellison ER, Ambrozak D, Baijer J, Nguyen R, Monard S, Lyon G, Fontes B, Perfetto SP. Cytometry A. 2020 Jul;97(7):674-680. doi: 10.1002/cyto.a.24040. Epub 2020 Jun 3.
PMID: 32488957

Stemming cholera tides in Zimbabwe through mass vaccination.
Mukandavire Z, Manangazira P, Nyabadza F, Cuadros DF, Musuka G, Morris JG Jr. Int J Infect Dis. 2020 Jul;96:222-227. doi: 10.1016/j.ijid.2020.03.077. Epub 2020 May 1.
PMID: 32371191

Rethinking Flu **Vaccine** Messaging.
de St Maurice A, Edwards K. Pediatrics. 2020 Jul;146(1):e20201770. doi: 10.1542/peds.2020-1770. Epub 2020 Jun 15.
PMID: 32540984

Enhancement of a biotechnological platform for the purification and delivery of a human papillomavirus supercoiled plasmid DNA **vaccine**.
Almeida AM, Costa D, Simões AR, Queiroz JA, Sousa F, Sousa Â. N Biotechnol. 2020 Jul 2;59:1-9. doi: 10.1016/j.nbt.2020.04.003. Online ahead of print.
PMID: 32622863

Adaptive immunity in the postpartum uterus: Potential use of vaccines to control metritis.
Machado VS, Silva TH. Theriogenology. 2020 Jul 1;150:201-209. doi: 10.1016/j.theriogenology.2020.01.040. Epub 2020 Jan 20.

Influenza or Meningococcal Immunization During Pregnancy and Mortality in Women and Infants: A Pooled Analysis of Randomized Controlled Trials.
Clark DR, Omer SB, Tapia MD, Nunes MC, Cutland CL, Tielsch JM, Wairagkar N, Madhi SA; for BMGF Supported Maternal Influenza Immunization Trials Investigators Group. Pediatr Infect Dis J. 2020 Jul;39(7):641-644. doi: 10.1097/INF.0000000000002629.
PMID: 32379201

Immunizations in immunocompromised patients: a guide for dermatologists.
Mohme S, Schmalzing M, Müller CSL, Vogt T, Goebeler M, Stoevesandt J. J Dtsch Dermatol Ges. 2020 Jul;18(7):699-723. doi: 10.1111/ddg.14156.
PMID: 32713146

Earliest infections predict the age distribution of seasonal influenza A cases.
Arevalo P, McLean HQ, Belongia EA, Cobey S. Elife. 2020 Jul 7;9:e50060. doi: 10.7554/eLife.50060.
PMID: 32633233

Double trouble: Influenza and pneumococcal **vaccine** exacerbation of psoriasis in a new-onset polycythemia vera patient.
Grafanaki K, Vryzaki E, Georgiou S, Liga M. J Dermatol. 2020 Jul;47(7):e263-e264. doi: 10.1111/1346-8138.15389. Epub 2020 May 18.
PMID: 32424958

Liposomes as tunable platform to decipher the antitumor immune response triggered by TLR and NLR agonists.
Jacoberger-Foissac C, Saliba H, Wantz M, Seguin C, Flacher V, Frisch B, Heurtault B, Fournel S. Eur J Pharm Biopharm. 2020 Jul;152:348-357. doi: 10.1016/j.ejpb.2020.05.026. Epub 2020 May 29.
PMID: 32479782

[Functional immunoassays in the setting of infectious risk and immunosuppressive therapy of non-HIV immunocompromised patients].
Boccard M, Albert-Vega C, Mouton W, Durieu I, Brengel-Pesce K, Venet F, Trouillet-Assant S, Ader F. Rev Med Interne. 2020 Jul 3:S0248-8663(20)30124-7. doi: 10.1016/j.revmed.2020.04.008. Online ahead of print.
PMID: 32624260

Intravesical Bacillus Calmette-Guérin versus mitomycin C for Ta and T1 bladder cancer: Abridged summary of the Cochrane Review.
Schmidt S, Kunath F, Coles B, Draeger DL, Krabbe LM, Dersch R, Kilian S, Jensen K, Dahm P, Meerpohl JJ. Investig Clin Urol. 2020 Jul;61(4):349-354. doi: 10.4111/icu.2020.61.4.349. Epub 2020 Jun 29.
PMID: 32665991

A novel **vaccine** target for malaria.
Wrighton KH. Nat Rev Microbiol. 2020 Jul;18(7):361. doi: 10.1038/s41579-020-0380-5. PMID: 32377016

Reconfiguring health knowledges? Contemporary modes of self-care as 'everyday fringe medicine'.
Vuolanto P, Bergroth H, Nurmi J, Salmenniemi S. Public Underst Sci. 2020 Jul;29(5):508-523. doi: 10.1177/0963662520934752. Epub 2020 Jun 27.
PMID: 32597366

Association of a Public Health Campaign About Coronavirus Disease 2019 Promoted by News Media and a Social Influencer With Self-reported Personal Hygiene and Physical Distancing in the Netherlands.
Yousuf H, Corbin J, Sweep G, Hofstra M, Scherder E, van Gorp E, Zwetsloot PP, Zhao J, van Rossum B, Jiang T, Lindemans JW, Narula J, Hofstra L. JAMA Netw Open. 2020 Jul 1;3(7):e2014323. doi: 10.1001/jamanetworkopen.2020.14323.
PMID: 32639569

Envisioning the Post-COVID-19, Pre-**Vaccine** Emergency Department.
Natsui S, Silvestri DM, Salway RJ, Iavicoli L, Birnbaum A, Flaherty C, Gonzalez O, Bouton M, Mendez K, Dibari D, Albertson P, Wei EK. Health Secur. 2020 Jul 8. doi: 10.1089/hs.2020.0090. Online ahead of print.
PMID: 32640849

Blood Targets of Adjuvant Drugs Against COVID19.
Di Micco P, Di Micco G, Russo V, Poggiano MR, Salzano C, Bosevski M, Imparato M, Fontanella L, Fontanella A. J Blood Med. 2020 Jul 2;11:237-241. doi: 10.2147/JBM.S256121. eCollection 2020.
PMID: 32694923

A chemical conjugate of the tick P0 peptide is efficacious against Amblyomma mixtum.
Rodríguez-Mallon A, Encinosa Guzmán PE, Bello Soto Y, Rosales Perdomo K, Montero Espinosa C, Vargas M, Estrada García MP. Transbound Emerg Dis. 2020 Jul;67 Suppl 2:175-177. doi: 10.1111/tbed.13455. Epub 2020 Jan 23.
PMID: 31975511

A forensic evaluation of plague - a re-emerging infectious disease with biowarfare potential.
Byard RW. Med Sci Law. 2020 Jul;60(3):200-205. doi: 10.1177/0025802420908483. Epub 2020 Mar 19.
PMID: 32192402

Developing a SARS-CoV-2 **Vaccine** at Warp Speed.
O'Callaghan KP, Blatz AM, Offit PA. JAMA. 2020 Jul 6. doi: 10.1001/jama.2020.12190. Online ahead of print.
PMID: 32628244

Negligible effect of chicken cytokine IL-12 integration into recombinant fowlpox viruses expressing avian influenza virus neuraminidase N1 on host cellular immune responses.
Majid NN, Omar AR, Mariatulqabtiah AR. J Gen Virol. 2020 Jul;101(7):772-777. doi: 10.1099/jgv.0.001428.
PMID: 32427095

Passive immunization: Paradoxical and traditional method for new pandemic challenge COVID-19.
Iftikhar A, Jabeen F, Manzoor M, Younis T, Shaheen M. Acta Microbiol Immunol Hung. 2020 Jul 2. doi: 10.1556/030.2020.01199. Online ahead of print.
PMID: 32619190

Structural study of the flagellar junction protein FlgL from Legionella pneumophila.
Song WS, Hong HJ, Yoon SI. Biochem Biophys Res Commun. 2020 Aug 20;529(2):513-518. doi: 10.1016/j.bbrc.2020.06.012. Epub 2020 Jul 4.
PMID: 32703460

Burden and Cost of Hospitalization for Respiratory Syncytial Virus in Young Children, Singapore.
Tam CC, Yeo KT, Tee N, Lin R, Mak TM, Thoon KC, Jit M, Yung CF. Emerg Infect Dis. 2020 Jul;26(7):1489-1496. doi: 10.3201/eid2607.190539.
PMID: 32568036

Mandatory **vaccine** policies associated with increased vaccination rates and decreased measles incidence.
Bozzola E, Bonci E. J Pediatr. 2020 Jul;222:253-257. doi: 10.1016/j.jpeds.2020.04.024.
PMID: 32586529

Reply: Suspicions of possible **vaccine** harms must be scrutinised openly and independently to ensure confidence.
Head MG, Wind-Mozley M, Flegg PJ. NPJ Vaccines. 2020 Jul 6;5:56. doi: 10.1038/s41541-020-0203-8. eCollection 2020.
PMID: 32655898

Are unexplained adverse health events following HPV vaccination associated with infectious mononucleosis? - A Danish nationwide matched case-control study.
Krogsgaard LW, Helmuth IG, Bech BH, Plana-Ripoll O, Lützen TH, Vestergaard HT, Bjerre KD, Thomsen RW, Mølbak K, Rytter D. Vaccine. 2020 Jul 31;38(35):5678-5684. doi: 10.1016/j.vaccine.2020.06.057. Epub 2020 Jul 2.
PMID: 32624249

A Review on 2019 Novel Coronavirus Pneumonia in Ophthalmology.
Bagheri M, Rashe Z, Jafari A. Ocul Immunol Inflamm. 2020 Jul 7:1-7. doi: 10.1080/09273948.2020.1766084. Online ahead of print.
PMID: 32634041

Suspicions of possible **vaccine** harms must be scrutinised openly and independently to ensure confidence.
Juhl Jørgensen K, Auken M, Brinth L, Chandler R, Gøtzsche PC, Jefferson T. NPJ Vaccines. 2020 Jul 6;5:55. doi: 10.1038/s41541-020-0202-9. eCollection 2020.
PMID: 32655897

Ex vivo pulsed dendritic cell vaccination against cancer.
Gu YZ, Zhao X, Song XR. Acta Pharmacol Sin. 2020 Jul;41(7):959-969. doi: 10.1038/s41401-020-0415-5. Epub 2020 May 4.
PMID: 32366940

Health-education to prevent COVID-19 in schoolchildren: a call to action.
Gray DJ, Kurscheid J, Mationg ML, Williams GM, Gordon C, Kelly M, Wangdi K, McManus DP. Infect Dis Poverty. 2020 Jul 1;9(1):81. doi: 10.1186/s40249-020-00695-2.
PMID: 32611385

Potential of Bacteriocins from Lactobacillus taiwanensis for Producing Bacterial Ghosts as a Next Generation **Vaccine**.
Kim SW, Ha YJ, Bang KH, Lee S, Yeo JH, Yang HS, Kim TW, Lee KP, Bang WY. Toxins (Basel). 2020 Jul 1;12(7):E432. doi: 10.3390/toxins12070432.
PMID: 32630253

A cross-sectional survey of measles preparedness in critical-access hospitals of Idaho.
Kanwar A, Heppler S, Donskey C, Brown CK. Am J Infect Control. 2020 Jul;48(7):795-797. doi: 10.1016/j.ajic.2019.11.015. Epub 2019 Dec 12.
PMID: 31839277

Decline in child vaccination coverage during the COVID-19 pandemic - Michigan Care Improvement Registry, May 2016-May 2020.
Bramer CA, Kimmins LM, Swanson R, Kuo J, Vranesich P, Jacques-Carroll LA, Shen AK. Am J Transplant. 2020 Jul;20(7):1930-1931. doi: 10.1111/ajt.16112.
PMID: 32596921

Continuous flexibility analysis of SARS-CoV-2 Spike prefusion structures.
Melero R, Sorzano COS, Foster B, Vilas JL, Martínez M, Marabini R, Ramírez-Aportela E, Sanchez-Garcia R, Herreros D, Del Caño L, Losana P, Fonseca-Reyna YC, Conesa P, Wrapp D, Chacon P, McLellan JS, Tagare HD, Carazo JM. bioRxiv. 2020 Jul 8:2020.07.08.191072. doi: 10.1101/2020.07.08.191072. Preprint.
PMID: 32676604

Abrogation of Marek's disease virus replication using CRISPR/Cas9.
Hagag IT, Wight DJ, Bartsch D, Sid H, Jordan I, Bertzbach LD, Schusser B, Kaufer BB. Sci Rep. 2020 Jul 2;10(1):10919. doi: 10.1038/s41598-020-67951-1.
PMID: 32616820

The prevalence and antimicrobial susceptibility of Streptococcus pneumoniae isolated from patients at Jikei University Hospitals after the implementation of the pneumococcal vaccination program in Japan.
Ando T, Masaki T, Kono M, Nagano Y, Sakamoto K, Tamura T, Abe M, Matsushima M, Nakada K, Matsuura T. J Infect Chemother. 2020 Jul;26(7):769-774. doi: 10.1016/j.jiac.2020.04.018. Epub 2020 May 14.

PMID: 32417263

Internalization and antigen presentation by mouse dendritic cells of rotavirus VP6 preparations differing in nanostructure.
Tamminen K, Heinimäki S, Gröhn S, Blazevic V. Mol Immunol. 2020 Jul;123:26-31. doi: 10.1016/j.molimm.2020.04.001. Epub 2020 May 7.
PMID: 32388275

Circulating follicular helper T cells and subsets are associated with immune response to hepatitis B vaccination.
Yin M, Xiong Y, Huang L, Liu G, Yu Z, Zhao Y, Zhao J, Zhang Y, Lian T, Huang J, Liang D, Zeng J, Ni J. Hum Vaccin Immunother. 2020 Jul 2:1-9. doi: 10.1080/21645515.2020.1775457. Online ahead of print.
PMID: 32614645

The line starts to form for a coronavirus **vaccine**.
Cohen J. Science. 2020 Jul 3;369(6499):15-16. doi: 10.1126/science.369.6499.15.
PMID: 32631874

[EPIDEMIOLOGICAL AND CLINICAL ASPECTS OF SMALLPOX IN THE LIGHT OF JEWISH SOURCES IN THE PERIOD PRIOR TO MODERN VACCINATION].
Lerman Y, Sinclair D. Harefuah. 2020 Jul;159(7):516-520.
PMID: 32720770

Editorial: Immunity to *Neisseria gonorrhoeae*.
Russell MW, Gray-Owen SD, Jerse AE. Front Immunol. 2020 Jul 2;11:1375. doi: 10.3389/fimmu.2020.01375. eCollection 2020.
PMID: 32714334

Human papillomavirus vaccination 2020 guideline update: American Cancer Society guideline adaptation.
Saslow D, Andrews KS, Manassaram-Baptiste D, Smith RA, Fontham ETH; American Cancer Society Guideline Development Group. CA Cancer J Clin. 2020 Jul 8. doi: 10.3322/caac.21616. Online ahead of print.
PMID: 32639044

Unique Features of Hospitalized Children with Alveolar Pneumonia Suggest Frequent Viral-Bacterial Coinfections.
Gavrieli H, Dagan R, Givon-Lavi N, Ben-Shimol S, Greenberg D. Pediatr Infect Dis J. 2020 Jul;39(7):586-590. doi: 10.1097/INF.0000000000002639.
PMID: 32176184

Lipid-encapsulated oral therapeutic peptide vaccines reduce tumour growth in an orthotopic mouse model of colorectal cancer.
Naciute M, Niemi V, Kemp RA, Hook S. Eur J Pharm Biopharm. 2020 Jul;152:183-192. doi: 10.1016/j.ejpb.2020.04.020. Epub 2020 May 4.
PMID: 32380167

Identification of CD4+ T cell epitopes on glyceraldehyde-3-phosphate dehydrogenase-C of Staphylococcus aureus in Babl/c mice.
Yang S, Li W, Fan Z, Zhai L, Chen J, Xiao X, Ma J, Song B, Ma J, Tong C, Yu L, Yu Y, Cao W, Cui Y. Microb Pathog. 2020 Jul;144:104167. doi: 10.1016/j.micpath.2020.104167. Epub 2020 Mar 25.
PMID: 32222538

Original antigenic sin priming of influenza virus hemagglutinin stalk antibodies.
Arevalo CP, Le Sage V, Bolton MJ, Eilola T, Jones JE, Kormuth KA, Nturibi E, Balmaseda A, Gordon A, Lakdawala SS, Hensley SE. Proc Natl Acad Sci U S A. 2020 Jul 21;117(29):17221-17227. doi: 10.1073/pnas.1920321117. Epub 2020 Jul 6.
PMID: 32631992

Construction of atomic models of full hepatitis B **vaccine** particles at different stages of maturation.
Berthier L, Brass O, Deleage G, Terreux R. J Mol Graph Model. 2020 Jul;98:107610. doi: 10.1016/j.jmgm.2020.107610. Epub 2020 Apr 9.
PMID: 32302938

Effect of thermal ballast loading on temperature stability of domestic refrigerators used for **vaccine** storage.
Chojnacky M, Rodriguez AL. PLoS One. 2020 Jul 8;15(7):e0235777. doi: 10.1371/journal.pone.0235777. eCollection 2020.
PMID: 32639973

Elucidating the Pivotal Role of Immune Players in the Management of COVID-19: Focus on Mesenchymal Stem Cells and Inflammation.
Richard SA, Kampo S, Sackey M, Hechavarria ME, Buunaaim ADB, Kuugbee ED, Anabah TW. Curr Stem Cell Res Ther. 2020 Jul 5. doi: 10.2174/1574888X15666200705213751. Online ahead of print.
PMID: 32628591

A pH-dependent switch mediates conformational masking of SARS-CoV-2 spike.
Zhou T, Tsybovsky Y, Olia AS, Gorman J, Rapp MA, Cerutti G, Katsamba PS, Nazzari A, Schon A, Wang PD, Bimela J, Shi W, Teng IT, Zhang B, Boyington JC, Chuang GY, Sampson JM, Sastry M, Stephens T, Stuckey J, Wang S, Friesner RA, Ho DD, Mascola JR, Shapiro L, Kwong PD. bioRxiv. 2020 Jul 4:2020.07.04.187989. doi: 10.1101/2020.07.04.187989. Preprint.
PMID: 32637958

Public Health Role of Academic Medical Center in Community Outbreak of Hepatitis A, San Diego County, California, USA, 2016-2018.
Kang M, Horman SF, Taplitz RA, Clay B, Millen M, Sitapati A, Myers FE, McDonald EC, Abeles SR, Wallace DR, Stous S, Torriani FJ. Emerg Infect Dis. 2020 Jul;26(7):1374-1381. doi: 10.3201/eid2607.191352.
PMID: 32568038

BNIP3L Is a New Autophagy Related Prognostic Biomarker for Melanoma Patients Treated With AGI-101H.
Kazimierczak U, Kolenda T, Kowalczyk D, Mackiewicz J, Mackiewicz A. Anticancer Res. 2020 Jul;40(7):3723-3732. doi: 10.21873/anticanres.14361.
PMID: 32620611

Why Challenge Trials of SARS-CoV-2 Vaccines Could Be Ethical Despite Risk of Severe Adverse Events.
Eyal N. Ethics Hum Res. 2020 Jul;42(4):24-34. doi: 10.1002/eahr.500056. Epub 2020 May 22.
PMID: 32441894

Immunogenicity of the hepatitis A **vaccine** 20 years after infant immunization.
Mosites E, Seeman S, Negus S, Homan C, Morris J, Nelson NP, Spradling PR, Bruce M, McMahon B. Vaccine. 2020 Jul 6;38(32):4940-4943. doi: 10.1016/j.vaccine.2020.05.069. Epub 2020 Jun 10.
PMID: 32535018

[Evaluation of a meningococcal ACWY catch-up vaccination program for adolescents on Community of Madrid.].
Sánchez-Gómez A, Esteban-Vasallo MD, Morey Montalvo M, Santos Sanz S, Cañellas Llabrés S, Lasheras Carbajo MD. Rev Esp Salud Publica. 2020 Jul 8;94:e202007077.
PMID: 32636356

[Sick after tropical stay: This can also be dengue fever].
Beißner M, Löscher T, Bretzel G. MMW Fortschr Med. 2020 Jul;162(13):54-59. doi: 10.1007/s15006-020-0700-8.
PMID: 32661994

Cash-based maternal health interventions can improve childhood vaccination-Evidence from India.
De PK, Timilsina L. Health Econ. 2020 Jul 7. doi: 10.1002/hec.4129. Online ahead of print.
PMID: 32638454

The role of hepatitis B **vaccine** challenge dose in patients with underlying health conditions.
Sticchi L, Iavarone IG, Durando P, Di Biagio A, Schiavetti I, Murgia F, Icardi G. Hum Vaccin Immunother. 2020 Jul 2:1-5. doi: 10.1080/21645515.2020.1777058. Online ahead of print.
PMID: 32614653

A classical swine fever virus E2 fusion protein produced in plants elicits a neutralizing humoral immune response in mice and pigs.
Park Y, Lee S, Kang H, Park M, Min K, Kim NH, Gu S, Kim JK, An DJ, Choe S, Sohn EJ. Biotechnol Lett. 2020 Jul;42(7):1247-1261. doi: 10.1007/s10529-020-02892-3. Epub 2020 Apr 22.
PMID: 32323080

A Toxoplasma gondii patatin-like phospholipase contributes to host cell invasion.
Wilson SK, Heckendorn J, Martorelli Di Genova B, Koch LL, Rooney PJ, Morrissette N, Lebrun M, Knoll LJ. PLoS Pathog. 2020 Jul 6;16(7):e1008650. doi: 10.1371/journal.ppat.1008650. eCollection 2020 Jul.
PMID: 32628723

The risk of Kawasaki disease after pneumococcal conjugate & meningococcal B **vaccine** in England: A self-controlled case-series analysis.
Stowe J, Andrews NJ, Turner PJ, Miller E. Vaccine. 2020 Jul 6;38(32):4935-4939. doi: 10.1016/j.vaccine.2020.05.089. Epub 2020 Jun 11.
PMID: 32536544

Atomic-Scale Description of Interfaces between Antigen and Aluminum-Based Adjuvants Used in Vaccines by Dynamic Nuclear Polarization (DNP) Enhanced NMR Spectroscopy.
Viger-Gravel J, Paruzzo FM, Cazaux C, Jabbour R, Leleu A, Canini F, Florian P, Ronzon F, Gajan D, Lesage A. Chemistry. 2020 Jul 22;26(41):8976-8982. doi: 10.1002/chem.202001141. Epub 2020 Jul 8.
PMID: 32428253

A case of toxigenic, pharyngeal diphtheria in Australia.
Grigg S, Hogan D, Hosein FS, Johns D, Jennison A, Subedi S. Med J Aust. 2020 Jul;213(2):64-65.e1. doi: 10.5694/mja2.50566. Epub 2020 Mar 30.
PMID: 32227479

Balanced immunity is key for a successful dengue **vaccine**.
Reyes-Sandoval A. Lancet Infect Dis. 2020 Jul;20(7):761-762. doi: 10.1016/S1473-3099(20)30082-7. Epub 2020 Mar 24.
PMID: 32220286

Ecto-NTPDase CD39 is a negative checkpoint that inhibits follicular helper cell generation.
Cao W, Fang F, Gould T, Li X, Kim C, Gustafson C, Lambert S, Weyand CM, Goronzy JJ. J Clin Invest. 2020 Jul 1;130(7):3422-3436. doi: 10.1172/JCI132417.
PMID: 32452837

Response to Shami et al. 'Evaluating the cost-effectiveness of a sequential pneumococcal vaccination compared to single dose vaccination strategy for adults in Hong Kong' (Hum Vacc Immunother 2020).
Buchwald UK, Folaranmi T, Weiss T. Hum Vaccin Immunother. 2020 Jul 2:1-3. doi: 10.1080/21645515.2020.1764828. Online ahead of print. PMID: 32614654

Pityriasis lichenoides et varioliformis acuta following measles rubella **vaccine**.
Shastry V, Ranugha PSS, Rangappa V, Sanjaykumar P. Indian J Dermatol Venereol Leprol. 2020 Jul-Aug;86(4):398-400. doi: 10.4103/ijdvl.IJDVL_48_18.
PMID: 32474500 No abstract available.

Covid-19: Indian doctors criticise directive to expedite **vaccine** trials.
[No authors listed] BMJ. 2020 Jul 8;370:m2742. doi: 10.1136/bmj.m2742.
PMID: 32641423

Envelope characteristics in individuals who developed neutralizing antibodies targeting different epitopes in HIV-1 subtype C infection.
Ndlovu B, Gounder K, Muema D, Raju N, Hermanus T, Mthethwa Q, Robertson K, Walker BD, Georgiev IS, Morris L, Moore PL, Ndung'u T. Virology. 2020 Jul;546:1-12. doi: 10.1016/j.virol.2020.03.003. Epub 2020 Mar 25.
PMID: 32275203

Early cytokine response to lethal challenge of Klebsiella pneumoniae averted the prognosis of pneumonia in FyuA immunized mice.
Kumar A, Harjai K, Chhibber S. Microb Pathog. 2020 Jul;144:104161. doi: 10.1016/j.micpath.2020.104161. Epub 2020 Mar 17.
PMID: 32194179

Bacille Calmette-Guérin (BCG) **vaccine** and the COVID-19 pandemic: responsible stewardship is needed.
Schaaf HS, du Preez K, Kruger M, Solomons R, Taljaard JJ, Rabie H, Seddon JA, Cotton MF, Tebruegge M, Curtis N, Hesseling AC. Int J Tuberc Lung Dis. 2020 Jul 1;24(7):732-734. doi: 10.5588/ijtld.20.0267.
PMID: 32718410

Clearance of recalcitrant warts in a pediatric patient following administration of the nine-valent human papillomavirus **vaccine**.
Kost Y, Zhu TH, Blasiak RC. Pediatr Dermatol. 2020 Jul;37(4):748-749. doi: 10.1111/pde.14150. Epub 2020 Mar 15.
PMID: 32173894

Strategies to increase timely uptake of hepatitis B **vaccine** birth dose.
Cui F. Lancet Glob Health. 2020 Jul;8(7):e869-e870. doi: 10.1016/S2214-109X(20)30257-6.
PMID: 32562641

COVIDep: a web-based platform for real-time reporting of **vaccine** target recommendations for SARS-CoV-2.
Ahmed SF, Quadeer AA, McKay MR. Nat Protoc. 2020 Jul;15(7):2141-2142. doi: 10.1038/s41596-020-0358-9.
PMID: 32555466

Comparative Assessment of a Single Dose and a 2-dose Vaccination Series of a Quadrivalent Meningococcal CRM-conjugate **Vaccine** (MenACWY-CRM) in Children 2-10 Years of Age: ERRATUM.
[No authors listed] Pediatr Infect Dis J. 2020 Jul;39(7):e162. doi: 10.1097/INF.0000000000002753.
PMID: 32379196

Expression of concern: "Could the multicomponent meningococcal serogroup B **vaccine** (4CMenB) control Neisseria meningitidis capsular group X outbreaks in Africa?" and "Bactericidal antibody against a representative epidemiological meningococcal serogroup".
Poland GA. Vaccine. 2020 Jul 31;38(35):5577. doi: 10.1016/j.vaccine.2020.06.048. Epub 2020 Jul 2.
PMID: 32624253

Epidemiology of a workplace measles outbreak dominated by modified measles cases at Kansai international airport, Japan, during august-september 2016.
Kobayashi A, Shimada T, Tanaka-Taya K, Kanai M, Okuno H, Kinoshita M, Matsui T, Oishi K. Vaccine. 2020 Jul 6;38(32):4996-5001. doi: 10.1016/j.vaccine.2020.05.067. Epub 2020 Jun 10.
PMID: 32535017

Talking to NICU Parents About Vaccination.
Discenza D. Neonatal Netw. 2020 Jul 1;39(4):238-240. doi: 10.1891/0730-0832.39.4.238.
PMID: 32675320

SARS-CoV-2 infection induces germinal center responses with robust stimulation of CD4 T follicular helper cells in rhesus macaques.
Elizaldi SR, Lakshmanappa YS, Roh JW, Schmidt BA, Carroll TD, Weaver KD, Smith JC, Deere JD, Dutra J, Stone M, Sammak RL, Olstad KJ, Reader JR, Ma ZM, Nguyen NK, Watanabe J, Usachaenko J, Immareddy R, Yee JL, Weiskopf D, Sette A, Hartigan-O'Connor D, McSorley SJ, Morrison JH, Tran NK, Simmons G, Busch MP, Kozlowski PA, Van Rompay KKA, Miller CJ, Iyer SS. bioRxiv. 2020 Jul 8:2020.07.07.191007. doi: 10.1101/2020.07.07.191007. Preprint.
PMID: 32676606

Second career of a biosynthetic enzyme: Lumazine synthase as a virus-like nanoparticle in **vaccine** development.
Ladenstein R, Morgunova E. Biotechnol Rep (Amst). 2020 Jul 6;27:e00494. doi: 10.1016/j.btre.2020.e00494. eCollection 2020 Sep.
PMID: 32714852

Making Sense of Mutation: What D614G Means for the COVID-19 Pandemic Remains Unclear.
Grubaugh ND, Hanage WP, Rasmussen AL. Cell. 2020 Jul 3:S0092-8674(20)30817-5. doi: 10.1016/j.cell.2020.06.040. Online ahead of print.
PMID: 32697970

Glycine significantly enhances bacterial membrane vesicle production: a powerful approach for isolation of LPS-reduced membrane vesicles of probiotic Escherichia coli.
Hirayama S, Nakao R. Microb Biotechnol. 2020 Jul;13(4):1162-1178. doi: 10.1111/1751-7915.13572. Epub 2020 Apr 29.
PMID: 32348028

A Measles outbreak in the Tel Aviv District, Israel, 2018-2019.
Salama M, Indenbaum V, Nuss N, Savion M, Mor Z, Amitai Z, Yoabob I, Sheffer R. Clin Infect Dis. 2020 Jul 3:ciaa931. doi: 10.1093/cid/ciaa931. Online ahead of print.
PMID: 32619227

Purification of Rabies Virus Glycoprotein produced in Drosophila melanogaster S2 cells: an efficient immunoaffinity method.
Pilatti L, Astray RM, Rocca MP, Barbosa FF, Jorge SAC, Butler M, de Fátima Pires Augusto E. Biotechnol Prog. 2020 Jul 6:e3046. doi: 10.1002/btpr.3046. Online ahead of print.
PMID: 32628317

The Age-Specific Cervical Cancer Incidence Differs Between Human Papillomavirus Types: Implications for Predicting the Impact of Elimination Programs.
Vänskä S, Luostarinen T, Lagheden C, Eklund C, Kleppe SN, Andrae B, Sparén P, Sundström K, Lehtinen M, Dillner J. Am J Epidemiol. 2020 Jul 8:kwaa121. doi: 10.1093/aje/kwaa121. Online ahead of print.
PMID: 32639531

Potential Implications of Testing an Experimental mRNA-Based **Vaccine** During an Emerging Infectious Disease Pandemic.
Nichol AA. Am J Bioeth. 2020 Jul;20(7):W2-W3. doi: 10.1080/15265161.2020.1763696. Epub 2020 May 14.
PMID: 32407254

Emerging Immunotherapies for Malignant Glioma: From Immunogenomics to Cell Therapy.
Dunn GP, Cloughesy TF, Maus MV, Prins RM, Reardon DA, Sonabend AM. Neuro Oncol. 2020 Jul 2:noaa154. doi: 10.1093/neuonc/noaa154. Online ahead of print.
PMID: 32615600

Application of an Inclined Settler for Cell Culture-Based Influenza A Virus Production in Perfusion Mode.
Coronel J, Gränicher G, Sandig V, Noll T, Genzel Y, Reichl U. Front Bioeng Biotechnol. 2020 Jul 2;8:672. doi: 10.3389/fbioe.2020.00672. eCollection 2020.
PMID: 32714908

Functional Recognition by CD8+ T Cells of Epitopes with Amino Acid Variations Outside Known MHC Anchor or T Cell Receptor Recognition Residues.
Wilson KL, Xiang SD, Plebanski M. Int J Mol Sci. 2020 Jul 1;21(13):4700. doi: 10.3390/ijms21134700.
PMID: 32630213

Generation and immunogenicity of virus-like particles based on mink enteritis virus capsid protein VP2 expressed in Sf9 cells.
Wu H, Jin H, Wang L, Huo N, Liu D, Ding H, Cao Y, Liu C, Xi X, Jiao C, Spibey N, Shi J, Liu Y, Tian K. Arch Virol. 2020 Jul 1. doi: 10.1007/s00705-020-04703-6. Online ahead of print.
PMID: 32613291

Disseminated herpes zoster with cauda equina symptoms.
Steinberg CJ, Moody AD, Yenior AL, Bertasi RAO, Kieneker L, Pujalte GGA. IDCases. 2020 Jul 4;21:e00902. doi: 10.1016/j.idcr.2020.e00902. eCollection 2020.
PMID: 32670796

RNA to the rescue: RNA is one of the most promising targets for drug development given its wide variety of uses.
Rinaldi A. EMBO Rep. 2020 Jul 3;21(7):e51013. doi: 10.15252/embr.202051013. Epub 2020 Jun 26.
PMID: 32588530

Pityriasis lichenoides triggered by measles-mumps-rubella **vaccine** injection.
Filippi F, Patrizi A, Sabattini E, Varotti E, Bertuzzi C, Pileri A. J Dtsch Dermatol Ges. 2020 Jul;18(7):758-760. doi: 10.1111/ddg.14153. Epub 2020 Jul 12.
PMID: 32656953

Author Correction: Prediction of the **Vaccine**-derived Poliovirus Outbreak Incidence: A Hybrid Machine Learning Approach.
Hemedan AA, Elaziz MA, Jiao P, Alavi AH, Bahgat M, Ostaszewski M, Schneider R, Ghazy HA, Ewees AA, Lu S. Sci Rep. 2020 Jul 6;10(1):11108. doi: 10.1038/s41598-020-67204-1.
PMID: 32632118

Taking steps to slow the upswing in oral and pharyngeal cancers.
Campos-Outcalt D. J Fam Pract. 2020 Jul/Aug;69(6):301-303.
PMID: 32724909

Officials gird for a war on **vaccine** misinformation.
Cornwall W. Science. 2020 Jul 3;369(6499):14-15. doi: 10.1126/science.369.6499.14.
PMID: 32631873

Corrigendum to 'Protection against filarial infection by 45-49 kDa molecules of Brugia malayi via IFN-γ-mediated iNOS induction' [**Vaccine** 33 (2015) 527-534].
Verma SK, Joseph SK, Verma R, Kushwaha V, Parmar N, Yadav PK, Thota JR, Kar S, Murthy PK. Vaccine. 2020 Jul 6;38(32):5076. doi: 10.1016/j.vaccine.2020.05.041. Epub 2020 Jun 7.
PMID: 32517851

Do we need empirical research on the use of trolley dilemmas in applied ethics? Reply to commentary by Heidi Matisonn.
Oftedal G, Ravn IH, Dahl FA. J Empir Res Hum Res Ethics. 2020 Jul 8:1556264620939805. doi: 10.1177/1556264620939805. Online ahead of print.
PMID: 32639898

Revisiting potential druggable targets against SARS-CoV-2 and repurposing therapeutics under preclinical study and clinical trials: A comprehensive review.
Sohag AAM, Hannan MA, Rahman S, Hossain M, Hasan M, Khan MK, Khatun A, Dash R, Uddin MJ. Drug Dev Res. 2020 Jul 6:10.1002/ddr.21709. doi: 10.1002/ddr.21709. Online ahead of print.
PMID: 32632960

In silico analysis and identification of promising hits against 2019 novel coronavirus 3C-like main protease enzyme.
Chatterjee S, Maity A, Chowdhury S, Islam MA, Muttinini RK, Sen D. J Biomol Struct Dyn. 2020 Jul 1:1-14. doi: 10.1080/07391102.2020.1787228. Online ahead of print.
PMID: 32608329

Evaluation of the immune response in conventionally weaned pigs infected with porcine deltacoronavirus.
Zhao D, Gao X, Zhou P, Zhang L, Zhang Y, Wang Y, Liu X. Arch Virol. 2020 Jul;165(7):1653-1658. doi: 10.1007/s00705-020-04590-x. Epub 2020 May 12.
PMID: 32399787

Artificial Intelligence (AI) applications for COVID-19 pandemic.
Vaishya R, Javaid M, Khan IH, Haleem A. Diabetes Metab Syndr. 2020 Jul-Aug;14(4):337-339. doi: 10.1016/j.dsx.2020.04.012. Epub 2020 Apr 14.
PMID: 32305024

Dysregulation of humoral immunity in chronic infection.
Cooper L, Good-Jacobson KL. Immunol Cell Biol. 2020 Jul;98(6):456-466. doi: 10.1111/imcb.12338. Epub 2020 May 5.
PMID: 32275789

Promising RNA-based cancer gene therapy using extracellular vesicles for drug delivery.
Xue VW, Wong SCC, Song G, Cho WCS. Expert Opin Biol Ther. 2020 Jul;20(7):767-777. doi: 10.1080/14712598.2020.1738377. Epub 2020 Mar 11.
PMID: 32125904

Updated emm-typing protocol for Streptococcus pyogenes.
Frost HR, Davies MR, Velusamy S, Delforge V, Erhart A, Darboe S, Steer A, Walker MJ, Beall B, Botteaux A, Smeesters PR. Clin Microbiol Infect. 2020 Jul;26(7):946.e5-946.e8. doi: 10.1016/j.cmi.2020.02.026. Epub 2020 Feb 28.
PMID: 32120034

PD-L1 upregulation by IFN-α/γ-mediated Stat1 suppresses anti-HBV T cell response.
Liu L, Hou J, Xu Y, Qin L, Liu W, Zhang H, Li Y, Chen M, Deng M, Zhao B, Hu J, Zheng H, Li C, Meng S. PLoS One. 2020 Jul 6;15(7):e0228302. doi: 10.1371/journal.pone.0228302. eCollection 2020.
PMID: 32628668

Antiviral effect of silymarin against Zika virus in vitro.
da Silva TF, Ferraz AC, Almeida LT, Caetano CCDS, Camini FC, Lima RLS, Andrade ACDSP, de Oliveira DB, Rocha KLS, Silva BM, de Magalhães JC, Magalhães CLB. Acta Trop. 2020 Jul 1;211:105613. doi: 10.1016/j.actatropica.2020.105613. Online ahead of print.
PMID: 32621935

Seasonal Bordetella pertussis pattern in the period from 2008 to 2018 in Germany.
Hitz DA, Tewald F, Eggers M. BMC Infect Dis. 2020 Jul 3;20(1):474. doi: 10.1186/s12879-020-05199-w.
PMID: 32620085

Coronavirus Disease 2019 (COVID-19): Clinical Perspectives and Ongoing Challenges.
Arawomo AO, Ajibade AI, Adeniyi B, Aigbirior J, Erhabor GE. West Afr J Med. 2020 Jul-Aug;37(3):295-316.
PMID: 32476126

Centers for Disease Control and Prevention's School Vaccination Assessment: Collaboration With US State, Local, and Territorial Immunization Programs, 2012-2018.
Mellerson JL, Street E, Knighton C, Calhoun K, Seither R, Underwood JM. Am J Public Health. 2020 Jul;110(7):1092-1097. doi: 10.2105/AJPH.2020.305643. Epub 2020 May 21.
PMID: 32437281

The role of B cell antigen presentation in the initiation of CD4+ T cell response.
Hua Z, Hou B. Immunol Rev. 2020 Jul;296(1):24-35. doi: 10.1111/imr.12859. Epub 2020 Apr 18.
PMID: 32304104

Site-specific MOF-based immunotherapeutic nanoplatforms via synergistic tumor cells-targeted treatment and dendritic cells-targeted immunomodulation.
Zhang H, Zhang J, Li Q, Song A, Tian H, Wang J, Li Z, Luan Y. Biomaterials. 2020 Jul;245:119983. doi: 10.1016/j.biomaterials.2020.119983. Epub 2020 Mar 20.
PMID: 32229333

Two cases of bacterial meningitis due to meropenem-resistant Streptococcus pneumoniae: A threat of serotype 35B, ST 558 lineage.
Yamada N, Nakamoto T, Takei H, Shoji T, Takahashi K, Sato J, Takeuchi N, Ohkusu M, Ishiwada N. J Infect Chemother. 2020 Jul;26(7):745-748. doi: 10.1016/j.jiac.2020.02.013. Epub 2020 Mar 12.
PMID: 32171658

Mechanisms of measles virus oncolytic immunotherapy.
Pidelaserra-Martí G, Engeland CE. Cytokine Growth Factor Rev. 2020 Jul 3:S1359-6101(20)30175-1. doi: 10.1016/j.cytogfr.2020.07.009. Online ahead of print.
PMID: 32660751

Implications of SARS-CoV-2 Mutations for Genomic RNA Structure and Host microRNA Targeting.
Hosseini Rad Sm A, McLellan AD. Int J Mol Sci. 2020 Jul 7;21(13):E4807. doi: 10.3390/ijms21134807.
PMID: 32645951

SARS-Cov-2 infection: Response of human immune system and possible implications for the rapid test and treatment.
di Mauro Gabriella, Cristina S, Concetta R, Francesco R, Annalisa C. Int Immunopharmacol. 2020 Jul;84:106519. doi: 10.1016/j.intimp.2020.106519. Epub 2020 Apr 16.
PMID: 32311668

Transcutaneous immunization with a highly active form of XCL1 as a **vaccine** adjuvant using a hydrophilic gel patch elicits long-term CD8(+) T cell responses.
Kamei M, Matsuo K, Imanishi H, Hara Y, Quen YS, Kamiyama F, Oiso N, Kawada A, Okada N, Nakayama T. J Pharmacol Sci. 2020 Jul;143(3):182-187. doi: 10.1016/j.jphs.2020.04.004. Epub 2020 Apr 10.
PMID: 32386904

SARS-CoV-2: Repurposed Drugs and Novel Therapeutic Approaches-Insights into Chemical Structure-Biological Activity and Toxicological Screening.
Dehelean CA, Lazureanu V, Coricovac D, Mioc M, Oancea R, Marcovici I, Pinzaru I, Soica C, Tsatsakis AM, Cretu O. J Clin Med. 2020 Jul 2;9(7):E2084. doi: 10.3390/jcm9072084.
PMID: 32630746

Histology, M Cell.
Sauls RS, Taylor BN. 2020 Jul 3. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2020 Jan–.
PMID: 30480965

A Review of Current Interventions for COVID-19 Prevention.
Pradhan D, Biswasroy P, Kumar Naik P, Ghosh G, Rath G. Arch Med Res. 2020 Jul;51(5):363-374. doi: 10.1016/j.arcmed.2020.04.020. Epub 2020 Apr 30.
PMID: 32409144

Imiquimod suppresses respiratory syncytial virus (RSV) replication via PKA pathway and reduces RSV induced-inflammation and viral load in mice lungs.
Salinas FM, Nebreda AD, Vázquez L, Gentilini MV, Marini V, Benedetti M, Nabaes Jodar MS, Viegas M, Shayo C, Bueno CA. Antiviral Res. 2020 Jul;179:104817. doi: 10.1016/j.antiviral.2020.104817. Epub 2020 May 6.
PMID: 32387475

Numerical simulation of blood flow inside an artery under applying constant heat flux using Newtonian and non-Newtonian approaches for biomedical engineering.
Foong LK, Shirani N, Toghraie D, Zarringhalam M, Afrand M. Comput Methods Programs Biomed. 2020 Jul;190:105375. doi: 10.1016/j.cmpb.2020.105375. Epub 2020 Jan 31.
PMID: 32036202

The Pneumococcal Polysaccharide-Tetanus Toxin Native C-Fragment Conjugate **Vaccine**: The Carrier Effect and Immunogenicity.
Yu R, Xu J, Hu T, Chen W. Mediators Inflamm. 2020 Jul 4;2020:9596129. doi: 10.1155/2020/9596129. eCollection 2020.
PMID: 32714092

HLA-Arena: A Customizable Environment for the Structural Modeling and Analysis of Peptide-HLA Complexes for Cancer Immunotherapy.
Antunes DA, Abella JR, Hall-Swan S, Devaurs D, Conev A, Moll M, Lizée G, Kavraki LE. JCO Clin Cancer Inform. 2020 Jul;4:623-636. doi: 10.1200/CCI.19.00123.
PMID: 32667823

Risk of recurrent herpes zoster in a population-based cohort study of older adults.
Qian J, Macartney K, Heywood AE, Sheridan S, Liu B. J Am Acad Dermatol. 2020 Jul 2:S0190-9622(20)32114-9. doi: 10.1016/j.jaad.2020.06.1013. Online ahead of print.
PMID: 32622890

GSMN-ML- a genome scale metabolic network reconstruction of the obligate human pathogen Mycobacterium leprae.
Borah K, Kearney JL, Banerjee R, Vats P, Wu H, Dahale S, Manjari Kasibhatla S, Joshi R, Bonde B, Ojo O, Lahiri R, Williams DL, McFadden J. PLoS Negl Trop Dis. 2020 Jul 6;14(7):e0007871. doi: 10.1371/journal.pntd.0007871. eCollection 2020 Jul.
PMID: 32628669

Cross-neutralization of SARS-CoV-2 by a human monoclonal SARS-CoV antibody.
Pinto D, Park YJ, Beltramello M, Walls AC, Tortorici MA, Bianchi S, Jaconi S, Culap K, Zatta F, De Marco A, Peter A, Guarino B, Spreafico R, Cameroni E, Case JB, Chen RE, Havenar-Daughton C, Snell G, Telenti A,

Virgin HW, Lanzavecchia A, Diamond MS, Fink K, Veesler D, Corti D. Nature. 2020 Jul;583(7815):290-295. doi: 10.1038/s41586-020-2349-y. Epub 2020 May 18.
PMID: 32422645

COVID-19 Crisis in Jordan: Response, Scenarios, Strategies, and Recommendations.
Alqutob R, Al Nsour M, Tarawneh MR, Ajlouni M, Khader Y, Aqel I, Kharabsheh S, Obeidat N. JMIR Public Health Surveill. 2020 Jul 7;6(3):e19332. doi: 10.2196/19332.

Liver Enzyme Elevations in *Plasmodium falciparum* Volunteer Infection Studies: Findings and Recommendations.
Chughlay MF, Akakpo S, Odedra A, Csermak-Renner K, Djeriou E, Winnips C, Leboulleux D, Gaur AH, Shanks GD, McCarthy J, Chalon S. Am J Trop Med Hyg. 2020 Jul;103(1):378-393. doi: 10.4269/ajtmh.19-0846. Epub 2020 Apr 16.
PMID: 32314694

Regulation of cancer-immunity cycle and tumor microenvironment by nanobiomaterials to enhance tumor immunotherapy.
Yang J, Zhang C. Wiley Interdiscip Rev Nanomed Nanobiotechnol. 2020 Jul;12(4):e1612. doi: 10.1002/wnan.1612. Epub 2020 Mar 1.
PMID: 32114718

Annual booster vaccination and the risk of equine influenza to Thoroughbred racehorses.
Gildea S, Lyons P, Lyons R, Gahan J, Garvey M, Cullinane A. Equine Vet J. 2020 Jul;52(4):509-515. doi: 10.1111/evj.13210. Epub 2020 Feb 12.
PMID: 31750956

Identification of potential inhibitors of three key enzymes of SARS-CoV2 using computational approach.
Iftikhar H, Ali HN, Farooq S, Naveed H, Shahzad-Ul-Hussan S. Comput Biol Med. 2020 Jul;122:103848. doi: 10.1016/j.compbiomed.2020.103848. Epub 2020 Jun 9.
PMID: 32658735

Oral bait preferences and feasibility of oral rabies vaccination in Bangladeshi dogs.
Bonwitt J, Bonaparte S, Blanton J, Gibson AD, Hoque M, Kennedy E, Islam K, Siddiqi UR, Wallace RM, Azam S. Vaccine. 2020 Jul 6;38(32):5021-5026. doi: 10.1016/j.vaccine.2020.05.047. Epub 2020 Jun 6. PMID: 32513512

Gene of the month: the 2019-nCoV/SARS-CoV-2 novel coronavirus spike protein.
Pillay TS. J Clin Pathol. 2020 Jul;73(7):366-369. doi: 10.1136/jclinpath-2020-206658. Epub 2020 May 6.
PMID: 32376714

In silico studies on therapeutic agents for COVID-19: Drug repurposing approach.
Shah B, Modi P, Sagar SR. Life Sci. 2020 Jul 1;252:117652. doi: 10.1016/j.lfs.2020.117652. Epub 2020 Apr 9.
PMID: 32278693

Comparative studies of rubella virus immunity of immunized and non-immunized pregnant women visiting Kogi State University Teaching Hospital, Anyigba, North Central Nigeria.
O Okolo ML, Omatola CA, Ogbonnaya O, Odama LE, Bello KE, Idache BM, Ekuma OU. J Immunoassay Immunochem. 2020 Jul 3;41(4):709-717. doi: 10.1080/15321819.2020.1741384. Epub 2020 Mar 19.
PMID: 32188320

Impact of COVID-19 on U.S. and Canadian neurologists' therapeutic approach to multiple sclerosis: a survey of knowledge, attitudes, and practices.
Mateen FJ, Rezaei S, Alakel N, Gazdag B, Kumar AR, Vogel A. J Neurol. 2020 Jul 7:1-9. doi: 10.1007/s00415-020-10045-9. Online ahead of print.
PMID: 32638107

Vaccination using inactivated Mycoplasma pneumoniae induces detrimental infiltration of neutrophils after subsequent infection in mice.
Tamiya S, Yoshikawa E, Ogura M, Kuroda E, Suzuki K, Yoshioka Y. Vaccine. 2020 Jul 6;38(32):4979-4987. doi: 10.1016/j.vaccine.2020.05.074. Epub 2020 Jun 11.
PMID: 32536549

WT1, PRAME, and PR3 mRNA Expression in Acute Myeloid Leukemia (AML).
Steger B, Floro L, Amberger DC, Kroell T, Tischer J, Kolb HJ, Schmetzer HM. J Immunother. 2020 Jul/Aug;43(6):204-215. doi: 10.1097/CJI.0000000000000322.
PMID: 32502139

Retrospective Study in Children With Necrotizing Pneumonia: Nine Years of Intensive Care Experience.
Blanco-Iglesias E, Oñoro G, Almodovar-Martín JL, García-Salido A, De Lama Caro-Patón G, Martínez de Azagra-Garde A, Serrano-González A, Casado-Flores J. Pediatr Infect Dis J. 2020 Jul;39(7):571-575. doi: 10.1097/INF.0000000000002633.
PMID: 32150006

At-birth vaccination timeliness: An analysis of inborns in the highlands of Jos, North-Central Nigeria.
Danjuma SD, Ibrahim AI, Shehu NY, Diala MU, Pam CV, Ogbodo CO. Niger Postgrad Med J. 2020 Jul-Sep;27(3):209-214. doi: 10.4103/npmj.npmj_44_20.
PMID: 32687121

COVID-19 pandemic: A global health burden.
Akande OW, Akande TM. Niger Postgrad Med J. 2020 Jul-Sep;27(3):147-155. doi: 10.4103/npmj.npmj_157_20.
PMID: 32687112

Influenza vaccination as a novel means of preventing coronary heart disease: Effectiveness in older adults.
Aidoud A, Marlet J, Angoulvant D, Debacq C, Gavazzi G, Fougère B. Vaccine. 2020 Jul 6;38(32):4944-4955. doi: 10.1016/j.vaccine.2020.05.070. Epub 2020 Jun 11.
PMID: 32536551

Potential usefulness of pentoxifylline, a non-specific phosphodiesterase inhibitor with anti-inflammatory, anti-thrombotic, antioxidant, and anti-fibrogenic properties, in the treatment of SARS-CoV-2.
González-Pacheco H, Amezcua-Guerra LM, Sandoval J, Arias-Mendoza A. Eur Rev Med Pharmacol Sci. 2020 Jul;24(13):7494-7496. doi: 10.26355/eurrev_202007_21921.
PMID: 32706089

Immunogenic Potency of Formalin and Heat Inactivated *E. coli* O157:H7 in Mouse Model Administered by Different Routes.
Arshadi N, Mousavi SL, Amani J, Nazarian S. Avicenna J Med Biotechnol. 2020 Jul-Sep;12(3):194-200.
PMID: 32695283

Vaccination coverage of recommended vaccines and determinants of vaccination in at-risk groups.
Boey L, Bosmans E, Ferreira LB, Heyvaert N, Nelen M, Smans L, Tuerlinckx H, Roelants M, Claes K, Derdelinckx I, Janssens W, Mathieu C, Van Cleemput J, Vos R, Vandermeulen C. Hum Vaccin Immunother. 2020 Jul 2:1-8. doi: 10.1080/21645515.2020.1763739. Online ahead of print.
PMID: 32614656

Risk of MS relapse after yellow fever vaccination: A self-controlled case series.
Huttner A, Eperon G, Lascano AM, Roth S, Schwob JM, Siegrist CA, Lalive PH. Neurol Neuroimmunol Neuroinflamm. 2020 May 1;7(4):e726. doi: 10.1212/NXI.0000000000000726. Print 2020 Jul.
PMID: 32358223

High genetic diversity and differentiation of the Babesia ovis population in Turkey.
Mira A, Unlu AH, Bilgic HB, Bakirci S, Hacilarlioglu S, Karagenc T, Carletti T, Weir W, Shiels B, Shkap V, Aktas M, Florin-Christensen M, Schnittger L. Transbound Emerg Dis. 2020 Jul;67 Suppl 2:26-35. doi: 10.1111/tbed.13174. Epub 2019 Jun 24.
PMID: 31231917

Genetic immunization against hepatitis B virus with calcium phosphate nanoparticles in vitro and in vivo.
Rojas-Sánchez L, Zhang E, Sokolova V, Zhong M, Yan H, Lu M, Li Q, Yan H, Epple M. Acta Biomater. 2020 Jul 1;110:254-265. doi: 10.1016/j.actbio.2020.04.021. Epub 2020 Apr 25.
PMID: 32344172

Safety of Influenza **Vaccine** in Patients With Cancer Receiving Pembrolizumab.
Failing JJ, Ho TP, Yadav S, Majithia N, Riaz IB, Shin JY, Schenk EL, Xie H. JCO Oncol Pract. 2020 Jul;16(7):e573-e580. doi: 10.1200/JOP.19.00495. Epub 2020 Feb 6. PMID: 32048920

The Outcome and Implications of Public Precautionary Measures in Taiwan-Declining Respiratory Disease Cases in the COVID-19 Pandemic.
Hsieh CC, Lin CH, Wang WYC, Pauleen DJ, Chen JV. Int J Environ Res Public Health. 2020 Jul 6;17(13):4877. doi: 10.3390/ijerph17134877.
PMID: 32640752

Suitability of testicular tissue fluid from castrated piglets to verify sow -vaccination status and herd monitoring.
Künzli F, Sydler T, Lewis F, Brugnera E, Sidler X. Schweiz Arch Tierheilkd. 2020 Jul;162(7):463-470. doi: 10.17236/sat00267.
PMID: 32618569

Association between Common Vaginal Infections and Cervical Non-HPV16/18 Infection in HPV-Vaccinated Women.
Hu SY, Tsang SH, Chen F, Pan QJ, Zhang WH, Hong Y, Sampson JN, Hildesheim A, Zhao FH, Kreimer AR. J Infect Dis. 2020 Jul 2:jiaa384. doi: 10.1093/infdis/jiaa384. Online ahead of print.
PMID: 32614401

Fine mapping of linear B cell epitopes on capsid protein of porcine circovirus 3.
Jiang M, Guo J, Zhang G, Jin Q, Liu Y, Jia R, Wang A. Appl Microbiol Biotechnol. 2020 Jul;104(14):6223-6234. doi: 10.1007/s00253-020-10664-2. Epub 2020 May 22.
PMID: 32445000

Does Simian Virus 40 (SV40) Have a Role in UK Malignant Pleural Mesothelioma? No Role is Identified in a Sensitive RNA In Situ Hybridization Study on Potentially Affected Birth Cohorts.
Alchami FS, Attanoos RL, Gibbs A, Morgan F, Jasani B. Appl Immunohistochem Mol Morphol. 2020 Jul;28(6):444-447. doi: 10.1097/PAI.0000000000000779.
PMID: 31205069

Elimination of Mother-to-Infant Transmission of Hepatitis B Virus: 35 Years of Experience.
Lu FT, Ni YH. Pediatr Gastroenterol Hepatol Nutr. 2020 Jul;23(4):311-318. doi: 10.5223/pghn.2020.23.4.311. Epub 2020 Jul 3.
PMID: 32704492 Free PMC article. Review.

Recombinant Epstein-Barr virus glycoprotein 350 as a serological antigen.
Persson Berg L, Thomsson E, Hasi G, Bäckström M, Bergström T. J Virol Methods. 2020 Jul 7;284:113927. doi: 10.1016/j.jviromet.2020.113927. Online ahead of print.
PMID: 32650039

A conceptual value-based incentivization model of adult immunization for community pharmacists.
Berenbrok LA, Renner HM, Somma McGivney MA, Coley KC. J Am Pharm Assoc (2003). 2020 Jul 3:S1544-3191(20)30238-7. doi: 10.1016/j.japh.2020.04.023. Online ahead of print.
PMID: 32631740

Characterization of neuraminidase inhibitor-resistant influenza virus isolates from immunocompromised patients in the Republic of Korea.
Kim HM, Lee N, Kim MS, Kang C, Chung YS. Virol J. 2020 Jul 6;17(1):94. doi: 10.1186/s12985-020-01375-1.
PMID: 32631440

The seventh nationwide surveillance of six otorhinolaryngological infectious diseases and the antimicrobial susceptibility patterns of the isolated pathogens in Japan.
Suzuki K, Kurono Y, Ikeda K, Hotomi M, Yano H, Watanabe A, Matsumoto T, Takahashi Y, Hanaki H. J Infect Chemother. 2020 Jul 1:S1341-321X(20)30183-5. doi: 10.1016/j.jiac.2020.05.020. Online ahead of print.
PMID: 32622623

Hospital-based surveillance of severe rotavirus gastroenteritis and rotavirus strains in young Taiwanese children.
Kung YH, Chi H, Liu CC, Huang YC, Huang YC, Wu FT, Huang LM; Taiwan Pediatric Infectious Disease Alliance. J Formos Med Assoc. 2020 Jul;119(7):1158-1166. doi: 10.1016/j.jfma.2020.03.019. Epub 2020 Apr 28.
PMID: 32359880

Pneumococcal vaccination reduces in-hospital mortality, length of stay and medical expenditure in hospitalized elderly patients.
Naito T, Suzuki M, Kanazawa A, Takahashi H, Fujibayashi K, Yokokawa H, Kuwatsuru R, Watanabe A. J Infect Chemother. 2020 Jul;26(7):715-721. doi: 10.1016/j.jiac.2020.03.016. Epub 2020 Apr 22.
PMID: 32334952

Chopping the tail: how preventing superspreading can help to maintain COVID-19 control.
Kain MP, Childs ML, Becker AD, Mordecai EA. medRxiv. 2020 Jul 3:2020.06.30.20143115. doi: 10.1101/2020.06.30.20143115. Preprint.
PMID: 32637966

African swine fever vaccines: a promising work still in progress.
Bosch-Camós L, López E, Rodriguez F. Porcine Health Manag. 2020 Jul 2;6:17. doi: 10.1186/s40813-020-00154-2. eCollection 2020.
PMID: 32626597

Influence of coccidiosis vaccination on nutrient utilization of corn, soybean meal, and distillers dried grains with solubles in broilers.
Gautier AE, Rochell SJ. Poult Sci. 2020 Jul;99(7):3540-3549. doi: 10.1016/j.psj.2020.03.035. Epub 2020 Apr 11.
PMID: 32616250

In silico identification of immunotherapeutic and diagnostic targets in the glycosylphosphatidylinositol metabolism of the coccidian Sarcocystis aucheniae.
Decker Franco C, Wieser SN, Soria M, de Alba P, Florin-Christensen M, Schnittger L. Transbound Emerg Dis. 2020 Jul;67 Suppl 2:165-174. doi: 10.1111/tbed.13438. Epub 2019 Dec 27.
PMID: 31880101

Seroprevalence of HBV, HCV and HIV-1 and Correlation with Molecular Markers among Multi-Transfused Thalassemia Patients in Western India.
Mishra K, Shah A, Patel K, Ghosh K, Bharadva S. Mediterr J Hematol Infect Dis. 2020 Jul 1;12(1):e2020038. doi: 10.4084/MJHID.2020.038. eCollection 2020.
PMID: 32670516

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 Jul;57:102838. doi: 10.1016/j.ebiom.2020.102838. Epub 2020 Jun 20.
PMID: 32574959

Organ-protective effect of angiotensin-converting enzyme 2 and its effect on the prognosis of COVID-19.
Cheng H, Wang Y, Wang GQ. J Med Virol. 2020 Jul;92(7):726-730. doi: 10.1002/jmv.25785. Epub 2020 Apr 5.
PMID: 32221983

Perceptions and acceptability of piloted Taenia solium control and elimination interventions in two endemic communities in eastern Zambia.
Hobbs EC, Mwape KE, Phiri AM, Mambwe M, Mambo R, Thys S, Zulu G, Chembensofu M, Trevisan C, Van Damme I, Phiri IK, Devleesschauwer B, Ketzis J, Dorny P, Willingham AL, Gabriël S. Transbound Emerg Dis. 2020 Jul;67 Suppl 2:69-81. doi: 10.1111/tbed.13214. Epub 2019 Jun 24.
PMID: 31231968

Short- and long-term impact of vaccination against cytomegalovirus: a modeling study.
Rozhnova G, E Kretzschmar M, van der Klis F, van Baarle D, Korndewal M, C Vossen A, van Boven M. BMC Med. 2020 Jul 2;18(1):174. doi: 10.1186/s12916-020-01629-3.
PMID: 32611419

Prevalent and persistent oncogenic HPV types in a cohort of women living with HIV prior to HPV vaccination.
McClymont E, Lee M, Raboud J, Coutlée F, Walmsley S, Lipsky N, Loutfy M, Trottier S, Smaill F, Klein MB, Harris M, Cohen J, Yudin MH, Wobeser W, Money D. Int J Gynaecol Obstet. 2020 Jul;150(1):108-115. doi: 10.1002/ijgo.13185. Epub 2020 Jun 3.
PMID: 32342504

Genetic signatures of the immune-escaping type 2 porcine reproductive and respiratory syndrome virus in farms with a robust vaccination program.
Saenglub W, Jantafong T, Mungkundar C, Romlamduan N, Pinitkiatisakul S, Lekcharoensuk P. Microb Pathog. 2020 Jul;144:104166. doi: 10.1016/j.micpath.2020.104166. Epub 2020 Mar 20.
PMID: 32205207

Comparative evaluation of herbal coccidiostat with chemotherapeutic coccidiostats on performance of broilers to control coccidiosis.
Srinivasu B, Preetam VC, Gurram S, Reddy AR. Trop Anim Health Prod. 2020 Jul;52(4):1985-1989. doi: 10.1007/s11250-020-02220-x. Epub 2020 Jan 24.
PMID: 31981055

The North American Layman's Understanding of COVID-19: Are We Doing Enough?
Salimi A, ElHawary H, Diab N, Smith L. Front Public Health. 2020 Jul 3;8:358. doi: 10.3389/fpubh.2020.00358. eCollection 2020.
PMID: 32719768

Conspiracy Beliefs Are Associated with Lower Knowledge and Higher Anxiety Levels Regarding COVID-19 among Students at the University of Jordan.
Sallam M, Dababseh D, Yaseen A, Al-Haidar A, Ababneh NA, Bakri FG, Mahafzah A. Int J Environ Res Public Health. 2020 Jul 8;17(14):E4915. doi: 10.3390/ijerph17144915.
PMID: 32650409

Use of controlled temperature chain and compact prefilled auto-disable devices to reach 2030 hepatitis B birth dose vaccination targets in LMICs: a modelling and cost-optimisation study.
Seaman CP, Morgan C, Howell J, Xiao Y, Spearman CW, Sonderup M, Lesi O, Andersson MI, Hellard ME, Scott N. Lancet Glob Health. 2020 Jul;8(7):e931-e941. doi: 10.1016/S2214-109X(20)30231-X.
PMID: 32562649

Cloning and characterization of tumor necrosis factor superfamily 15 in rock bream, Oplegnathus fasciatus; phylogenetic, in silico, and expressional analysis.
Lim J, Park T, Kim J, Hong S. Dev Comp Immunol. 2020 Jul;108:103685. doi: 10.1016/j.dci.2020.103685. Epub 2020 Mar 22.
PMID: 32213302

Phase II study of axalimogene filolisbac (ADXS-HPV) for platinum-refractory cervical carcinoma: An NRG oncology/gynecologic oncology group study.
Huh WK, Brady WE, Fracasso PM, Dizon DS, Powell MA, Monk BJ, Leath CA 3rd, Landrum LM, Tanner EJ, Crane EK, Ueda S, McHale MT, Aghajanian C. Gynecol Oncol. 2020 Jul 5:S0090-8258(20)32317-9. doi: 10.1016/j.ygyno.2020.06.493. Online ahead of print.
PMID: 32641240

Prevalence of HBV and HCV infections, Bhutan, 2017: Progress and next steps.
Tshering N, Dhakal GP, Wangchuk U, Wangdi S, Khandu L, Pelden S, Nogareda F, Patel MK, Hutin YJF, Wannemuehler K, Rewari BB, Wangchuk S. BMC Infect Dis. 2020 Jul 8;20(1):485. doi: 10.1186/s12879-020-05176-3.
PMID: 32641006

Association between mobility patterns and COVID-19 transmission in the USA: a mathematical modelling study.
Badr HS, Du H, Marshall M, Dong E, Squire MM, Gardner LM. Lancet Infect Dis. 2020 Jul 1:S1473-3099(20)30553-3. doi: 10.1016/S1473-3099(20)30553-3. Online ahead of print.
PMID: 32621869

Autonomously Replicating RNAs of Bungowannah Pestivirus: E^{RNS} Is Not Essential for the Generation of Infectious Particles.
Dalmann A, Reimann I, Wernike K, Beer M. J Virol. 2020 Jul 1;94(14):e00436-20. doi: 10.1128/JVI.00436-20. Print 2020 Jul 1.
PMID: 32404522

Impaired NK cell activation during acute dengue virus infection: A contributing factor to disease severity.
Shabrish S, Karnik N, Gupta V, Bhate P, Madkaikar M. Heliyon. 2020 Jul 4;6(7):e04320. doi: 10.1016/j.heliyon.2020.e04320. eCollection 2020 Jul.
PMID: 32671251

Identifying gaps across the cascade of care for the prevention of HBV mother-to-child transmission in Burkina Faso: Findings from the real world.
Guingané AN, Bougouma A, Sombié R, King R, Nagot N, Meda N, Van de Perre P, Tuaillon E. Liver Int. 2020 Jul 7. doi: 10.1111/liv.14592. Online ahead of print.
PMID: 32633864

Expression of Separate Heterologous Proteins from the Rotavirus NSP3 Genome Segment Using a Translational 2A Stop-Restart Element.
Philip AA, Patton JT. J Virol. 2020 Jul 1:JVI.00959-20. doi: 10.1128/JVI.00959-20. Online ahead of print.
PMID: 32611753

Financial Hardship, Healthcare Utilization, and Health Among U.S. Cancer Survivors.
Zheng Z, Han X, Zhao J, Banegas MP, Tucker-Seeley R, Rai A, Fedewa SA, Song W, Jemal A, Yabroff KR. Am J Prev Med. 2020 Jul;59(1):68-78. doi: 10.1016/j.amepre.2020.02.016.
PMID: 32564805

Rheumatologists' perspective on coronavirus disease 19 (COVID-19) and potential therapeutic targets.
Misra DP, Agarwal V, Gasparyan AY, Zimba O. Clin Rheumatol. 2020 Jul;39(7):2055-2062. doi: 10.1007/s10067-020-05073-9. Epub 2020 Apr 10. PMID: 32277367

Spring in London with Covid-19: a personal view.
Brahams D. Med Leg J. 2020 Jul;88(2):57-64. doi: 10.1177/0025817220923692. Epub 2020 Jun 9.
PMID: 32515258

A Machine Learning Approach to Management of Heart Failure Populations.
Jing L, Ulloa Cerna AE, Good CW, Sauers NM, Schneider G, Hartzel DN, Leader JB, Kirchner HL, Hu Y, Riviello DM, Stough JV, Gazes S, Haggerty A, Raghunath S, Carry BJ, Haggerty CM, Fornwalt BK. JACC Heart Fail. 2020 Jul;8(7):578-587. doi: 10.1016/j.jchf.2020.01.012. Epub 2020 May 6.
PMID: 32387064

Re-establishment of efficacy of tofacitinib, an oral JAK inhibitor, after temporary discontinuation in patients with rheumatoid arthritis.
Kaine J, Tesser J, Takiya L, DeMasi R, Wang L, Snyder M, Soma K, Fan H, Bandi V, Wollenhaupt J. Clin Rheumatol. 2020 Jul;39(7):2127-2137. doi: 10.1007/s10067-020-04956-1. Epub 2020 Feb 12.
PMID: 32048083

The Correlation of Comorbidities on the Mortality in Patients with COVID-19: an Observational Study Based on the Korean National Health Insurance Big Data.
Kim DW, Byeon KH, Kim J, Cho KD, Lee N. J Korean Med Sci. 2020 Jul 6;35(26):e243. doi: 10.3346/jkms.2020.35.e243.
PMID: 32627443

Treatment with hydroxychloroquine, azithromycin, and combination in patients hospitalized with COVID-19.
Arshad S, Kilgore P, Chaudhry ZS, Jacobsen G, Wang DD, Huitsing K, Brar I, Alangaden GJ, Ramesh MS, McKinnon JE, O'Neill W, Zervos M; Henry Ford COVID-19 Task Force. Int J Infect Dis. 2020 Aug;97:396-403. doi: 10.1016/j.ijid.2020.06.099. Epub 2020 Jul 2.
PMID: 32623082

Patentes registradas en PatentScope

Estrategia de búqueda: *Vaccine in the title or abstract AND 20200701:20200708 as the publication date*

50 records

1.WO/2020/134822VACCINE CONTAINER HAVING FAILURE INDICATOR AND FAILURE INDICATION METHOD THEREOF
WO - 02.07.2020
Clasificación Internacional G01K 11/16 Nº de solicitud PCT/CN2019/121406 Solicitante SHAANXI DINGWEI GEOTECHNICAL ENGINEERING CO., LTD. Inventor/a LIU, Yongqi

A vaccine container having a failure indicator (3) and a failure indication method thereof, the vaccine container comprising a vaccine bottle (1), the failure indicator (3) and a failure indicator box (4). The failure indicator box (4) has a sealed cavity structure, and the failure indicator (3) is placed in a cavity of the failure indicator box (4); and the failure indicator box (4) is fixedly connected to the vaccine bottle (1). The failure indicator (3) is obtained by uniformly mixing a component A and a component B; a raw material of the component A comprises a phase change heat storage material, an alkali solution and an emulsifier; a raw material of the component B comprises the same phase change heat storage material as the component A, a phenolphthalein indicator and an emulsifier; and the phase change temperature of the phase change heat storage material is 2-8°C. The vaccine container having the failure indicator (3) may absorb heat in the environment, control the temperature rise of a vaccine, and improve the stability of a vaccine transportation process, and when the temperature exceeds 8°C, the failure indicator (3) turns red, so that whether the vaccine fails or not may be indicated, and the safety of the vaccination is thus ensured.

2.WO/2020/139308INACTIVATED STAPHYLOCOCCAL LIQUID VACCINE
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000162 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych
The invention relates to vaccines for the treatment and prophylaxis of staphylococcal infection and can be used for a specific immunotherapy. The vaccine comprises: Staphylococcus aureus – 15 strains, Staphylococcus haemolyticus – 3 strains, Staphylococcus epidermidis – 3 strains. In accordance with the manufacturing method, an agar-grown bacterial culture is washed off the surface of a solid growth medium with pyrogen-free distilled water and placed into sterile containers; to remove growth medium impurities, the bacterial strains are washed with distilled water and subjected to centrifugation, following which the supernatant is discarded; the resulting pellet consisting of the biomass of the individually grown bacteriological strain culture is suspended in pyrogen-free distilled water for injection and standardised, wherein microorganism strains are taken in equal quantities; the standardised strain suspension is inactivated by autoclaving; equal quantities of a preparation of an embryonic origin or saline or water for injection are added to the containers with the inactivated bacteria. The vaccine is administered subcutaneously in the area of the inferior angle of the scapula, alternately in the right and left sides, the dose being increased at each subsequent injection. The invention makes it possible to increase the immunogenic effect of the vaccine and to enhance the immunological and clinical effects following vaccination while avoiding allergic reactions, and to reduce time required for producing the vaccine.

3.WO/2020/139309PSEUDOMONAS INACTIVATED VACCINE "PSEUDOPRIMAVAC" AGAINST PSEUDOMONAS
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000163 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych
The inventions relate to medical microbiology and the pharmaceutical industry, in particular to vaccine preparations, namely vaccines against Pseudomonas infection, methods for the production of said vaccines, and methods of treatment and prophylaxis, and can be used for therapeutic and prophylactic purposes in acute and chronic bacterial diseases of Pseudomonas etiology. A vaccine comprises at least 12 clinical pathogenic

strains of four types of bacteria of genus Pseudomonas, namely: 9 of Pseudomonas aeruginosa, 1 of Pseudomonas maltophilia, 1 of Pseudomonas alcaligenes and 1 of Pseudomonas stutzeri, isolated in various acute and chronic inflammatory diseases of bacterial etiology. The inventions increase the immunogenic effect of the vaccine, strengthen the immunological and clinical effect after vaccination without allergic reactions and provide a wide spectrum of application.

4.WO/2020/139312KLEBSIELLA- AND PROTEUS-BASED VACCINE "KLEPROPRIMAVAC" AGAINST KLEBSIELLA AND PROTEUS
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000166 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych
The inventions relate to medical microbiology, the pharmaceutical industry, and more particularly to vaccine preparations, namely vaccines against Klebsiella and Proteus, methods for production thereof and methods of treatment and prophylaxis, and can be used for the treatment and prophylaxis of localised and systemic, acute and chronic diseases of bacterial aetiology in children and adults. The vaccine comprises Klebsiella pneumonia, Klebsiella oxytoca, Proteus vulgaris, Proteus mirabilis, and Proteus peneri bacterial strains, no less than 2 Klebsiella species and 3 Proteus species in total, including 21 original bacterial strains, more particularly: Klebsiella pneumonia - 9, Klebsiella oxytoca - 3, Proteus vulgaris - 5, Proteus mirabilis - 3, and Proteus peneri – 1 of a specific location, which are isolated from various acute and chronic inflammatory diseases of bacterial aetiology in children and adults, which have various degrees of antibiotic resistance and include hospital strains having 100% antibiotic resistance. The inventions make it possible to increase the immunogenic effect of the vaccine, to enhance the immunological and clinical effects following the vaccination while avoiding allergic reactions, and to broaden the range of applications.

5.WO/2020/139313INACTIVATED STREPTOCOCCAL LIQUID VACCINE
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000167 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Artem Ihorovych
The invention relates to vaccines against Streptococcus and Staphylococcus and can be used for treatment of diseases of bacterial aetiology. The vaccine comprises no less than 4 Streptococcus species and 3 Staphylococcus species, including 21 Streptococcus and Staphylococcus strains. In accordance with the manufacturing method, an agar-grown bacterial culture is washed off the surface of a solid growth medium with pyrogen-free distilled water and placed into sterile containers; to remove growth medium impurities, the bacterial strains are washed with distilled water and subjected to centrifugation, following which the supernatant is discarded; the resulting pellet consisting of the biomass of the individually grown bacteriological strain culture is suspended in pyrogen-free distilled water for injection and standardised, wherein microorganism strains are taken in equal quantities; the standardised strain suspension is inactivated by autoclaving; equal quantities of a preparation of an embryonic origin or saline or water for injection are added to the containers with the inactivated bacteria; in order to control sterility, vaccine samples are plated on a nutrient broth, the plates are incubated in a thermostat, and in the absence of growth, a preservative is added and the vaccine is dispensed into sterile vials. The vaccination course consists of 10 to 12 injections which are administered every other day.

The invention makes it possible to increase the immunogenic effect of the vaccine and to enhance the systemic and local immunological and clinical effects following vaccination while avoiding allergic reactions.

6.2579856MHC Class I associated peptides for prevention and treatment of hepatitis B virus infection
GB - 08.07.2020
Clasificación Internacional A61K 39/29 Nº de solicitud 201820614 Solicitante EMERGEX VACCINES HOLDING LTD Inventor/a RAMILA PHILIP
A vaccine composition comprising a peptide comprising a CD8+ T-cell epitope as set out in SEQ ID No.s 1-43 as define herein. The CD8+ T cell epitope may be capable of interacting with two different HLA super-types. The vaccine composition may comprise two or more hepatitis B viral (HBV) peptides, each comprising a different CD8+ T cell epitope. The peptide or peptides may be attached to a nanoparticle. The vaccine composition may comprise a peptide comprising a CD4+ epitope. The CD4+ T cell epitope may be capable of interacting with all HLA class II subtypes. The vaccine composition may be used to treat a HBV infection of serotype adr, adw, ayr, or ayw. The vaccine composition may be used to treat a HBV infection of genotype A, B, C, D, E, F, G, H, I, or J.

7.20200206340A VACCINE COMPRISING A PCV2 ORF2 PROTEIN OF GENOTYPE 2B
US - 02.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud 16634756 Solicitante Intervet Inc. Inventor/a Melanie SNO

The present invention pertains to a vaccine comprising an ORF2 encoded protein of porcine circo virus 2 (PCV2) and a pharmaceutically acceptable carrier, for use in a method to protect a pig against an infection with porcine circo virus type 2 by administering the vaccine to the pig, wherein the vaccine comprises less than 20 µg per dose of the ORF2 encoded protein, the protein being of a porcine circo virus of genotype 2b.

8.3673916IMPFSTOFF GEGEN LAWSONIA INTRACELLULARIS UND PORCINES CIRCOVIRUS2
EP - 01.07.2020
Clasificación Internacional A61K 39/02 Nº de solicitud 20153113 Solicitante INTERVET INT BV Inventor/a JACOBS ANTONIUS ARNOLDUS CHRISTIAAN
The present invention pertains to a vaccine comprising in combination killed whole cellLawsonia intracellularisbacteria and porcine circo virus 2 (PCV2) ORF2 protein for use in protecting a pig against an infection with Lawsonia intracellularis and PCV2 by an intradermal administration of the vaccine. The invention also pertains to a method to protect a swine against an infection withLawsonia intracellularisbacteria and PCV2.

9.WO/2020/139311"ECOPRIMAVAC" ESCERICHIA- AND ENTEROCOCCUS-BASED INACTIVATED LIQUID VACCINE AGAINST E. COLI AND ENTEROCOCCI, METHOD FOR PRODUCTION THEREOF, AND METHOD OF TREATMENT AND PROPHYLAXIS USING SAME
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000165 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych

The group of inventions relates to medical microbiology and the pharmaceutical industry, and more particularly to vaccine preparations, and even more particularly to vaccines against intestinal enterobacteriaceae and enterococci, methods for production thereof and methods of treatment and prophylaxis of localised and systemic, acute and chronic diseases of bacterial aetiology in children and adults. The EcoPrimavac Escerichia- and Enterococcus-based inactivated liquid vaccine against E. coli and Enterococcus comprises Escherichia coli, Enterococcus faecalis, Enterococcus faecium and Enterococcus durans bacterial strains, with no less than 22 bacterial strains in total, and more particularly: Escherichia coli - 9, Enterococcus faecalis - 8, Enterococcus faecium - 3, Enterococcus durans - 2 from specific locations, isolated from various acute and chronic inflammatory diseases of bacterial aetiology in children and adults, which have various degrees of antibiotic resistance and include hospital strains having 100% antibiotic resistance, inter alia, bacterial strains deposited at the Depository of the Institute of Microbiology and Virology of the National Academy of Sciences of Ukraine.

10.3673069BUNYAVIREN-VAKZIN
EP - 01.07.2020
Clasificación Internacional C12N 15/67 Nº de solicitud 18759922 Solicitante CUREVAC AG Inventor/a PETSCH BENJAMIN
The present invention is directed to an artificial nucleic acid, particularly to an artificial RNA, and to polypeptides suitable for use in treatment or prophylaxis of an infection with a virus of the order Bunyavirales, particularly Severe fever with thrombocytopenia syndrome virus (SFTSV), Rift Valley fever virus (RVFV), or Crimean-Congo hemorrhagic fever virus (CCHFV), or a disorder related to such an infection. The present invention further concerns a Bunyavirales vaccine, particularly a SFTSV, RVFV, or CCHFV vaccine. The present invention is directed to an artificial nucleic acid, polypeptides, compositions and vaccines comprising the artificial nucleic acid or the polypeptides. The invention further concerns a method of treating or preventing a disorder or a disease, first and second medical uses of the artificial nucleic acid, polypeptides, compositions and vaccines. Further, the invention is directed to a kit, particularly to a kit of parts, comprising the artificial nucleic acid, polypeptides, compositions and vaccines.

11.20200206336A VACCINE FOR PROTECTION AGAINST STREPTOCOCCUS SUIS
US - 02.07.2020
Clasificación Internacional A61K 39/09 Nº de solicitud 16634768 Solicitante Intervet Inc. Inventor/a Antonius Arnoldus Christiaan JACOBS
The present invention pertains to a vaccine comprising an IgM protease antigen of *Streptococcus suis*, for use in a method for protecting piglets having maternally derived anti-*Streptococcus suis* antibodies against *Streptococcus suis*, by administering the vaccine to the piglets at an age of at most 28 days, preferably before the piglets are weaned.

12.WO/2020/138761CHIMERIC VIRUS OF PORCINE REPRODUCTIVE AND RESPIRATORY SYNDROME VIRUS, AND VACCINE USING SAME
WO - 02.07.2020

Clasificación Internacional C07K 14/005 Nº de solicitud PCT/KR2019/017319 Solicitante BIOPOA, INC. Inventor/a CHO, Sun-Hee
The present invention relates to a chimeric virus of porcine reproductive and respiratory syndrome (PRRS) virus, the chimeric virus being usable as a vaccine. A PRRSV chimeric virus of the present invention is more attenuated than the parent strain thereof, and thus promotes the secretion of neutralizing antibodies while having low pathogenicity and high stability, thereby being usable as a vaccine in the effective prevention and treatment of PRRS diseases.

13.WO/2020/139310"CANDOPRIMAVAC" INACTIVATED LIQUID VACCINE AGAINST CANDIDIASIS, METHOD FOR PRODUCTION THEREOF AND METHOD OF TREATMENT AND PROPHYLAXIS USING SAME
WO - 02.07.2020
Clasificación Internacional A61K 36/06 Nº de solicitud PCT/UA2019/000164 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych
The group of inventions relates to medical microbiology and the pharmaceutical industry, and more particularly to vaccine preparations and to methods for the production and use thereof, and can be used for the treatment and prophylaxis of localised and systemic Candida-associated lesions. Moreover, the vaccine comprises no less than 14 strains of 3 species of Candida fungi, namely: Candida albicans - 7, Candida krusei - 4, Candida glabrata - 3 of different locations, isolated from various fungal lesions on the skin, mucosa and internal organs, inter alia, Candida fungi strains with various degrees of resistance to antifungal drugs, and which are deposited at the Depository of the Institute of Microbiology and Virology of the National Academy of Sciences of Ukraine.

14.3675891KOMBINATIONSKREBSTHERAPIE
EP - 08.07.2020
Clasificación Internacional A61K 38/17 Nº de solicitud 18851102 Solicitante MICROVAX LLC Inventor/a DEISSEROTH ALBERT B
A method and combination for treating a cancer patient by combining two distinct immuno-therapy solutions for administration to a patient within a common time period, comprising a checkpoint inhibitor antibody component such as a PD-1 or PD-L1 antibody administered by infusion, and a TAA/ecdCD40L vaccine component administered subcutaneously, wherein an initial antibody component administered is followed by at least several successive antibody boosts and an initial vaccine component administered is followed by at least several successive vaccine boosts, both the initial and boosts of each administered within at least said common time period, wherein the combined administration of said two distinct immuno-therapy solutions provides for an enhanced therapeutic effect, over that of the therapeutic effect of either of the two distinct immuno-therapy component solutions when administered alone as monotherapy.

15.WO/2020/139298CELLULAR AND HUMORAL IMMUNITY AUGMENTER MULTIPLE PHASE EMULSION VACCINE ADJUVANT AGAINST ANIMAL DISEASES
WO - 02.07.2020

Clasificación Internacional A61K 39/39 Nº de solicitud PCT/TR2019/051208 Solicitante REAKIM ENDUSTRIYEL PERFORMANS KATKILARI KIMYEVI MADDELER SANAYI VE TICARET LTD. STI. Inventor/a BUYUKBAYRAM, Muhammet
The invention relates to vaccine adjuvant used with the purpose of protection of animal health in the field of veterinary. The referred adjuvant shows cellular and humoral immunity augmenter effect in its use. The adjuvant being the subject of the invention also increases the shelf life of vaccines, and provides a much longer life cycle for the vaccines due to its multiple phase emulsion. The referred vaccine adjuvant contained pharmaceutical mineral oil, surface active agents, and purified lyophilized additives from plants.

16.2020204008Gastrointestinal site-specific oral vaccination formulations active on the ileum and appendix
AU - 02.07.2020
Clasificación Internacional A61K 9/48 Nº de solicitud 2020204008 Solicitante Therabiome, LLC Inventor/a
The invention provides oral vaccine formulations which deliver an antigen in the vicinity of the distal ileum and the area of the ileal Brake and/or the appendix. These vaccines are useful in the treatment and/or prevention of variety of disorders, including viral and bacterial infections and cancers. Related methods of treatment which use the oral vaccine formulations of the invention are also provided.

17.WO/2020/138217PREPARATION INCLUDING VACCINE ADJUVANT
WO - 02.07.2020
Clasificación Internacional A61K 39/00 Nº de solicitud PCT/JP2019/050947 Solicitante SUMITOMO DAINIPPON PHARMA CO., LTD. Inventor/a ONITA, Maiko
Provided is a composition that is useful as a vaccine adjuvant and has excellent storage stability and immunostimulatory activity. Specifically provided is a freeze-dried preparation that has high storage stability, said preparation containing a (4E, 8E, 12E, 16E, 20E)-N-{2-[{4-[(2-amino-4-{[(3S)-1-hydroxyhexane-3-yl]amino}-6-methylpyrimidine-5-yl)methyl]benzyl}(methyl)amino]ethyl}-4,8,12,17,21,25-hexamethylhexacosa-4,8,12,16,20,24-hexaenamide, squalene, a hydrophilic surfactant, and an oleophilic surfactant, and being characterized by containing an ascorbic acid-based antioxidant and an excipient.

18.WO/2020/135898DERIVADOS DE OLIGOSACÁRIDOS SINTÉTICOS COMO VACUNA CONTRA BORDETELLA PERTUSSIS
WO - 02.07.2020
Clasificación Internacional C07H 15/04 Nº de solicitud PCT/CU2019/050001 Solicitante INSTITUTO FINLAY DE VACUNAS Inventor/a VÉREZ BENCOMO, Vicente Guillermo
La presente invención proporciona fragmentos de oligosacáridos sintéticos provenientes del pentasacárido terminal del lipooligosacárido de Bordetella pertussis, un método para obtener los fragmentos de oligosacáridos sintéticos y los conjugados a partir de los mismos. También proporciona las composiciones vacunales que contienen tales glicoconjugados y que inducen una respuesta inmune capaz de reducir la colonización nasofaríngea de Bordetella pertussis.

19.WO/2020/136683ADAPTATION OF ENTEROVIRUS TO VERO CELLS AND VACCINE FORMULATIONS THEREOF
WO - 02.07.2020
Clasificación Internacional A61K 39/125 Nº de solicitud PCT/IN2019/050960 Solicitante BHARAT BIOTECH INTERNATIONAL LIMITED Inventor/a RAYCHOUDHURI, Amit
The present invention discloses Enterovirus D68 adapted to propagate to high titers in Vero cells and method of adaptation thereof. The present invention also discloses suitable vaccine composition comprising inactivated Enterovirus D68 antigen.

20.3672630HERSTELLUNG EINES GRIPPEIMPFSTOFFES IN MYCELIOPHTHORA THERMOPHILA
EP - 01.07.2020
Clasificación Internacional A61K 39/145 Nº de solicitud 18848087 Solicitante DYADIC INT INC Inventor/a EMALFARB MARK
Recombinant expression of influenza virus surface proteins in the fungus *Myceliophthora thermophila* strain C1 is provided. The recombinant proteins are for use in influenza vaccine compositions.

21.WO/2020/139316POLYVALENT, COMBINED, INACTIVATED LIQUID VACCINE “UROPRIMAVAK”, AND METHOD FOR THE PRODUCTION THEREOF
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000170 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych
The group of inventions relates to medical microbiology and the pharmaceutical industry, in particular to: vaccine preparations, more particularly to vaccines against bacterial and fungal agents; methods for the production thereof; and methods for treatment and prevention, and can be used to treat and prevent acute and chronic inflammatory diseases of the genitourinary system in children and adults, in men and women, caused by non-specific agents of bacterial and/or fungal etiology. A course of vaccinations consists of 10-12 injections which are given every other day, wherein on the first day a dose of 0.1 ml is given intracutaneously in the inner surface of the forearm to form “peau d’orange” skin, and the following injections are given subcutaneously in a cycle alternating between the right upper arm/thigh and the left thigh/upper arm with gradually increasing doses of the preparation. An enduring, positive clinical effect, and a more prolonged general and local immunostimulative effect are provided.

22.WO/2020/139315“PNEUMOPRIMAVAC” POLYVALENT COMBINED INACTIVATED LIQUID VACCINE
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000169 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych
The inventions relate to medical microbiology, and more particularly to vaccines against bacterial and fungal causative agents of bronchial and pulmonary diseases, as well as to methods for manufacturing same and to methods of treatment and prophylaxis, and can be used for the treatment and prophylaxis of local and systemic, acute and chronic diseases of bacterial and fungal origin in children and adults. The present vaccine contains strains of Klebsiella pneumoniae, Escherichia coli, Staphylococcus aureus, Staphylococcus haemolyticus, Streptococcus pyogenes, Streptococcus pneumonia, Streptococcus viridians, Enterococcus faecalis,

Enterococcus faecium, Enterococcus durans, Klebsiella oxytoca, Enterobacter aerogenes, Enterobacter cloacae, Proteus vulgaris, Proteus mirabilis, Citrobacter freundii, Alcaligenes faecalis, Morganella morganii, Pseudomonas aeruginosa, Pseudomonas alcaligenes, Candida albicans, Candida krusei, Candida glabrata, giving a total of no less than 20 species of bacteria and three species of Candida fungi, including not less than 38 strains of bacteria and five strains of fungi of the genus Candida, specifically: Staphylococcus aureus - 5, Staphylococcus haemolyticus - 3, Streptococcus pyogenes - 4, Streptococcus pneumonia - 2, Streptococcus viridians - 1, Enterococcus faecalis - 3, Enterococcus faecium - 1, Enterococcus durans - 1, Escherichia coli - 3, Klebsiella pneumonia - 2, Klebsiella oxytoca - 1, Enterobacter aerogenes - 2, Enterobacter cloacae - 1, Proteus vulgaris - 1, Proteus mirabilis - 1, Citrobacter freundii - 1, Alcaligenes faecalis - 1, Morganella morganii - 1, Pseudomonas aeruginosa - 3, Pseudomonas alcaligenes - 1, Candida albicans - 2, Candida krusei - 2, Candida glabrata - 1, isolated in the case of different acute and chronic inflammatory diseases of bacterial and fungal origin.

23.20200208134MEANS AND METHODS FOR PRODUCING PHOSPHATE CONTAINING CAPSULAR POLYSACCHARIDES
US - 02.07.2020
Clasificación Internacional C12N 15/03 Nº de solicitud 16632998 Solicitante MEDIZINISCHE HOCHSCHULE HANNOVER (MHH) Inventor/a Timm Fiebig
The present invention relates to a host cell, which comprises under the control of a heterologous promoter a polynucleotide comprising a nucleotide sequence encoding a polypeptide capable of synthesizing a polysaccharide consisting of a dimeric repeating unit as well as to a vaccine composition comprising such host cell. Furthermore, either such host cell or a polypeptide expressed by such host cell is used for the production of a polysaccharide consisting of a dimeric repeating unit which may be used as a glycoconjugate vaccine.

24.20200206329NUCLEOTIDE SEQUENCE EXPRESSING AN EXOSOME-ANCHORING PROTEIN FOR USE AS VACCINE
US - 02.07.2020
Clasificación Internacional A61K 39/00 Nº de solicitud 16341042 Solicitante ISTITUTO SUPERIORE DI SANITA' Inventor/a Maurizio Paolo Maria FEDERICO
The present invention concerns a nucleotide sequence expressing a fusion protein, said fusion protein comprising or consisting of an exosome-anchoring protein fused at its C-terminus with an antigen, or a DNA expression vector comprising said nucleotide sequence, for use as vaccine.

25.3677276IMPFSTOFFZUSAMMENSETZUNG
EP - 08.07.2020
Clasificación Internacional A61K 39/00 Nº de solicitud 18849767 Solicitante UNIV TOHOKU Inventor/a SATO YASUFUMI
The present invention provides a vaccine composition for treating or preventing cancer expressing VASH2, containing a peptide including an amino acid sequence represented by SEQ ID NO: 4.

26.WO/2020/139314ANTIBACTERIAL POLYVALENT COMBINED INACTIVATED LIQUID VACCINE
WO - 02.07.2020
Clasificación Internacional A61K 35/74 Nº de solicitud PCT/UA2019/000168 Solicitante MARKOV, Ihor Semenovych Inventor/a MARKOV, Ihor Semenovych
The inventions relate to medical microbiology, and more particularly to vaccines against bacterial and fungal causative agents, as well as to methods for manufacturing same and to methods of treatment and prophylaxis, and can be used for the treatment and prophylaxis of local and systemic, acute and chronic diseases of bacterial and fungal origin in children and adults. The present vaccine contains strains of Klebsiella pneumoniae, Escherichia coli, Staphylococcus aureus, Staphylococcus haemolyticus, Streptococcus pyogenes, Streptococcus pneumonia, Streptococcus viridians, Enterococcus faecalis, Enterococcus faecium, Enterococcus durans, Klebsiella oxytoca, Enterobacter aerogenes, Enterobacter cloacae, Proteus vulgaris, Proteus mirabilis, Citrobacter freundii, Alcaligenes faecalis, Morganella morganii, Pseudomonas aeruginosa, Pseudomonas alcaligenes, Candida albicans, Candida krusei, Candida glabrata, giving a total of no less than 20 species of bacteria and three species of Candida fungi, including not less than 38 strains of bacteria and five strains of fungi of the genus Candida, specifically: Staphylococcus aureus - 5, Staphylococcus haemolyticus - 3, Streptococcus pyogenes - 4, Streptococcus pneumonia - 2, Streptococcus viridians - 1, Enterococcus faecalis - 3, Enterococcus faecium - 1, Enterococcus durans - 1, Escherichia coli - 3, Klebsiella pneumonia - 2, Klebsiella oxytoca - 1, Enterobacter aerogenes - 2, Enterobacter cloacae - 1, Proteus vulgaris - 1, Proteus mirabilis - 1, Citrobacter freundii - 1, Alcaligenes faecalis - 1, Morganella morganii - 1, Pseudomonas aeruginosa - 3, Pseudomonas alcaligenes - 1, Candida albicans - 2, Candida krusei - 2, Candida glabrata - 1, isolated in the case of different acute and chronic inflammatory diseases of bacterial and fungal origin.

27.3675902ZUSAMMENSETZUNGEN UND VERFAHREN ZUR BEHANDLUNG VON KREBS UND INFEKTIONEN UNTER VERWENDUNG VON BAKTERIOPHAGEN UND DEREN MUTANTEN
EP - 08.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud 18850295 Solicitante UNIV MICHIGAN STATE Inventor/a HUANG XUEFEI
Provided herein are vaccine composition comprising an antigen conjugated to a capsid, wherein the capsid comprises wild type or native sequence. Provided herein are also vaccine composition comprising an antigen conjugated to a capsid, wherein said capsid comprises at least one mutation, such as a non-natural mutation. Such compositions are useful in the treatment and prevention of pathogenic infections, inflammatory diseases, and neurodegenerative disease, and cancer, among others.

28.WO/2020/138482MICRONEEDLE ARRAY FOR BCG VACCINE
WO - 02.07.2020
Clasificación Internacional A61M 37/00 Nº de solicitud PCT/JP2019/051571 Solicitante COSMED PHARMACEUTICAL CO., LTD. Inventor/a QUAN, Ying-shu
Because the needle tips do not come out of the tube in a conventional BCG vaccine tube needle, strength and technique were necessary and it was difficult to easily, evenly and reliably insert needles and perform a vaccination, which resulted in the problems that it was not possible to achieve the sufficient number of needle

marks that shows the inoculation effect and that the child being vaccinated experienced pain and distress. These problems are solved by adopting a microneedle patch case of a thermoplastic plastic as the BCG vaccination tube needle, and setting the needle length to 0.2-1.0 mm.

29.3672625SYNTHETISCHER IMPFSTOFF
EP - 01.07.2020
Clasificación Internacional A61K 39/00 Nº de solicitud 18755823 Solicitante MEDIZINISCHE HOCHSCHULE HANNOVER Inventor/a WIRTH THOMAS
The present invention relates to a pharmaceutical combination of compositions for use in the treatment or prevention of a disease having cells bearing a target antigen as a vaccine and to a method for vaccination of a mammal, especially of a human for raising a cellular immune response directed against cells of the mammalian recipient, especially human recipient, which cells express a target antigen. The target antigen can e.g. be an autoantigen like a malignant antigen, i.e. a tumour-specific antigen. The pharmaceutical combination of compositions comprises a first composition and a second composition, wherein the second composition is for administration to recipient subsequent to the administration of the first composition, e.g. 2 to 10 days after the first composition. The pharmaceutical combination of compositions has the advantage of raising an effective antigen-specific T-cell response against cells bearing a target antigen that can be a malignant autoantigen, e.g. for raising an antigen-specific T-cell response against cells bearing a tumour-antigen. A further advantage is that the pharmaceutical combination of compositions can raise an antigen-specific T-cell response within a comparatively short time.

30.3676285IMPFSTOFF ZUR VERWENDUNG BEI DER PROPHYLAXE UND/ODER BEHANDLUNG EINER KRANKHEIT
EP - 08.07.2020
Clasificación Internacional C07K 14/005 Nº de solicitud 18762507 Solicitante INPROTHER APS Inventor/a HOLST PETER
The present invention relates to an adenoviral vector capable of encoding a virus-like particle (VLP), said VLP displaying an inactive immune-suppressive domain (ISD). The vaccine of the invention shows an improved immune response from either of both of the response pathways initiated by CD4 T cells or CD8 T cells.

31.20200206342ENGINEERED VARIANTS OF HIV-1 ENV FOR PRESENTATION OF QUARTENARY EPITOPES
US - 02.07.2020
Clasificación Internacional A61K 39/21 Nº de solicitud 16631275 Solicitante THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ILLINOIS Inventor/a Erik PROCKO
Provided herein are HIV-1 Env proteins or fragments thereof comprising one or more amino acid mutations; and nucleic acid molecule encoding the same. Further provided is a method of screening a compound for binding to one or more mutant HIV-1 Env proteins; and methods for eliciting an immune response against an HIV-1 infected cell, comprising administering to a subject an amount of a mutant HIV-1 Env protein, a fragment thereof a mutant HIV-1 Env trimeric complex, or portion thereof, effective to elicit an immune response in the

subject. Further provided is a pharmaceutical composition, such as a vaccine, comprising the mutant HIV-1 Env protein or fragment thereof.

32.20200207831PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST LEUKEMIAS AND OTHER CANCERS
US - 02.07.2020
Clasificación Internacional C07K 14/74 Nº de solicitud 16805351 Solicitante Immatics Biotechnologies GmbH Inventor/a 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.

33.20200208108INTERFERON PRIMED PLASMACYTOID DENDRITIC CELLS
US - 02.07.2020
Clasificación Internacional C12N 5/0784 Nº de solicitud 16612441 Solicitante AARHUS UNIVERSITET Inventor/a Martin ROELSGAARD JAKOBSEN
A method is provided for producing a plasmacytoid dendritic cells (pDCs), wherein hematopoietic stem and progenitor cells (HSPCs) are provided and incubated in a first medium comprising cytokines and growth factor whereby the HSPCs are differentiated into precursor-pDCs and then adding interferons (IFNs) to the first medium to obtain a second medium whereby said precursor-pDCs are differentiated into pDCs. Furthermore, a technique is provided for producing genetically modified pDCs, by initially genetically modifying HSPCs using transfection methods, including electroporation, to deliver sgRNA and Cas9 protein Moreover, a pharmaceutical formulation and a vaccine is provided which comprises pDC or genetically modified pDCs obtained according to that method.

34.20200206338METHOD OF TREATING MAMMALS DISPLAYING SEVERE NEUROLOGICAL SYMPTOMS OF ADVANCED CANINE DISTEMPER VIRUS INFECTION USING NDV-INDUCED SERUM
US - 02.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud 16236258 Solicitante DANCLAY Properties, LLC Inventor/a Anupama Y. FIELDS
This application discloses methods, compositions, and articles of manufacture for using NDV-induced serum to treat non-human mammals, including dogs, displaying severe neurological symptoms of advanced canine distemper virus (CDV) infection. An off-the-shelf chicken vaccine is injected into two or-more healthy mammals, of the same species as the sick animal, to provoke an immune response. After allowing several hours for the immune response to develop, blood is drawn from the healthy mammals and centrifuged to obtain serum. This “NDV-induced serum” can be injected into a mammal of the same species displaying severe neurological

symptoms of advanced CDV infection on a prescribed schedule to bolster the sick animal's immune responses, preferably leading to clearance of the virus without the need for a spinal tap, which is the standard treatment for advanced CDV infection in mammals.

35.20200206268PEPTIDES AND COMBINATION OF PEPTIDES OF NON-CANONICAL ORIGIN FOR USE IN IMMUNOTHERAPY AGAINST DIFFERENT TYPES OF CANCERS
US - 02.07.2020
Clasificación Internacional A61K 35/17 Nº de solicitud 16814508 Solicitante Immatics Biotechnologies GmbH Inventor/a Heiko SCHUSTER
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.

36.20200206337LIVE ATTENUATED VACCINES
US - 02.07.2020
Clasificación Internacional A61K 39/104 Nº de solicitud 16684086 Solicitante SERVICIO GALEGO DE SAÚDE (SERGAS) Inventor/a Germán Bou Arévalo

The present invention refers to a method for the production of live attenuated bacterial strains, suitable as vaccine candidates, comprising the steps of:

- A. providing a bacterial strain capable of expressing glutamate racemase and possibly D-amino acid transaminase and comprising a peptidoglycan cell wall, and
- B. inactivating the gene or genes encoding for the glutamate racemase enzyme and, if needed, the gene or genes encoding for the enzyme D-amino acid transaminase in such way that the bacterial strain is no longer capable of expressing a functional glutamate racemase and/or a functional D-amino acid transaminase;
  wherein the inactivation of said genes causes said bacterial strain to be auxotrophic for D-glutamate.

37.3673917NOROVIRUS-IMPFSTOFF
EP - 01.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud 18248201 Solicitante THEMIS BIOSCIENCE GMBH Inventor/a TAUBER ERICH
The present invention provides immunogenic compositions, nucleic acid molecules and VLPs suitable as Norovirus vaccine candidates. Further provided are host cells for producing the biological material as well as methods for producing and/or purifying the immunogenic compositions and VLPs. Further provided is an immunogenic composition for use in methods of preventing/treating a Norovirus infection in a subject.

38.WO/2020/136282NOROVIRUS VACCINES
WO - 02.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud PCT/EP2019/087160 Solicitante THEMIS BIOSCIENCE GMBH Inventor/a TAUBER, Erich
The present invention provides immunogenic compositions, nucleic acid molecules and VLPs suitable as Norovirus vaccine candidates. Further provided are host cells for producing the biological material as well as methods for producing and/or purifying the immunogenic compositions and VLPs. Further provided is an immunogenic composition for use in methods of preventing/treating a Norovirus infection in a subject.

39.20200207811MALARIA VACCINE
US - 02.07.2020
Clasificación Internacional C07K 14/02 Nº de solicitud 16634099 Solicitante OXFORD UNIVERSITY INNOVATION LIMITED Inventor/a Adrian V.S. HILL
The invention relates to a composition comprising a polypeptide comprising, or consisting of, the amino acid sequence of SEQ ID NO: 1, or a sequence having at least 80%, 85%, 90%, 95%, 98%, or 99% sequence identity to SEQ ID NO: 1 (R21), wherein said polypeptide is in the form of a virus-like particle (VLP), wherein said particle comprises less than 10% free hepatitis B surface antigen protein, for use in the immunisation of a human subject susceptible to *Plasmodium falciparum* infection, characterised in that said composition is administered in a dosage regimen of at least one dose of 1 µg to 20 µg R21 per administration for a subject at least 18 years old, or at least one dose of 0.5 µg to 10 µg R21 per administration for a subject less than 18 years old. The invention also relates to kits, methods and uses.

40.20200206333COMPOSITIONS FOR INDUCING AN IMMUNE RESPONSE
US - 02.07.2020
Clasificación Internacional A61K 39/00 Nº de solicitud 16708218 Solicitante President and Fellows of Harvard College Inventor/a Nisarg J. Shah
Acute myeloid leukemia (AML) is a clonal disorder of hematopoietic stem and progenitor cells. It is a devastating disease with a poor prognosis and an average 5-year survival rate of about 30%. Disclosed herein are composition and methods for treating leukemia with a biomaterial comprising a polymer scaffold, a dendritic cell activating factor, a dendritic cell recruitment factor, and at least one leukemia antigen. The biomaterial-based vaccine disclosed herein promotes a potent, durable and transferable immune response against acute myeloid leukemia to prevent cell engraftment and synergizes with chemotherapy to prevent relapse.

41.20200207832NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST OVARIAN CANCER AND OTHER CANCERS
US - 02.07.2020
Clasificación Internacional C07K 14/74 Nº de solicitud 16815965 Solicitante immatics biotechnologies GmbH Inventor/a Heiko Schuster

The present invention relates to peptides, proteins, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated T-cell peptide epitopes, alone or in combination with other tumor-associated peptides that can for example serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses, or to stimulate T cells ex vivo and transfer into patients. Peptides bound to molecules of the major histocompatibility complex (MHC), or peptides as such, can also be targets of antibodies, soluble T-cell receptors, and other binding molecules.

42.3677279KONFORMATIONSSTABILISIERTE RSV-F-PRÄFUSIONSPROTEINE
EP - 08.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud 19213895 Solicitante CALDER BIOSCIENCES INC Inventor/a MARSHALL CHRISTOPHER PATRICK
In some embodiments, the present invention provides respiratory syncytial virus (RSV) F proteins, polypeptides and protein complexes that comprise one or more cross-links to stabilize the protein, polypeptide or protein complex in its pre-fusion conformation. In some embodiments the present invention provides RSV F proteins, polypeptides and protein complexes comprising one or more mutations to facilitate such cross-linking. In some embodiments the present invention provides compositions comprising such proteins, polypeptides or protein complexes, including vaccine compositions, and methods of making and using the same.

43.3677593MODIFIZIERTES HSV-GB-PROTEIN UND HSV-IMPFSTOFF DAMIT
EP - 08.07.2020
Clasificación Internacional C07K 14/035 Nº de solicitud 18851447 Solicitante KM BIOLOGICS CO LTD Inventor/a MORI HIROAKI
A modified protein of a herpes simplex virus (HSV) envelope glycoprotein B (gB), in which at least one non-neutralizing antibody-inducing epitope (non-neutralizing epitope) present in domain IV and domain I of wild-type HSV gB is inactivated (de-epitoped).

44.WO/2020/135471MONOCLONAL ANTIBODY AGAINST HUMAN INTERLEUKIN-4 RECEPTOR ALPHA AND USE THEREOF
WO - 02.07.2020
Clasificación Internacional C07K 16/28 Nº de solicitud PCT/CN2019/128156 Solicitante QYUNS THERAPEUTICS CO., LTD. Inventor/a QIU, Jiwan
Provided are antibodies and fragments against human interleukin-4 receptor alpha (hIL-4Rα) and uses thereof. The antibodies and fragments preferably have heavy chain complementary determining regions as set forth in SEQ ID NOs: 1-3 or 14-16 and light chain complementary determining regions as set forth in SEQ ID NOs: 4-6 or 17-19.

45.20200206331AN IMMUNOGENIC COMPOSITION HAVING IMPROVED STABILITY, ENHANCED IMMUNOGENICITY AND REDUCED REACTOGENICITY AND PROCESS FOR PREPARATION THEREOF
US - 02.07.2020

Clasificación Internacional A61K 39/00 Nº de solicitud 16631965 Solicitante SERUM INSTITUTE OF INDIA PVT LTD. Inventor/a Rakesh KUMAR
An immunogenic composition comprising of Diphtheria toxoid antigen (D), tetanus toxoid (T) antigen, Hepatitis B surface antigen (HBsAg), inactivated whole-cell *B. pertussis* (wP) antigen, *Haemophilus influenzae* type B (Hib) capsular saccharide conjugated to a carrier protein, Inactivated Polio Virus (IPV) antigen and additionally one or more antigens and the method of preparing the same. A fully liquid combination vaccine, showing improved immunogenicity, reduced reactogenicity and improved stability. Improved methods of formaldehyde inactivation, improved adsorption profile of Diphtheria toxoid antigen (D), tetanus toxoid (T) antigen and Hepatitis B (HepB) surface antigen adsorbed individually onto aluminium phosphate adjuvant, minimum total aluminum content (Al^{3+}) and optimized concentration of 2-phenoxyethanol (2-PE) as preservative.

46.3677592MODIFIZIERTES HSV-GD-PROTEIN UND IMPFSTOFF DAMIT
EP - 08.07.2020
Clasificación Internacional C07K 14/035 Nº de solicitud 18849655 Solicitante KM BIOLOGICS CO LTD Inventor/a MORI HIROAKI
The modified HSV gD protein of the present invention is a modified protein of a herpes simplex virus (HSV) envelope glycoprotein D (gD), wherein the modified HSV gD protein is derived from a wild-type HSV gD by modification of at least one of B cell epitopes having low or no neutralizing antibody-inducing activity compared to a B cell epitope present in a receptor-binding domain (RBD) (decotopes) in the ectodomain of the wild-type HSV gD, so that the modified epitope does not function as an epitope.

47.WO/2020/136235M2-DEFECTIVE POXVIRUS
WO - 02.07.2020
Clasificación Internacional A61K 39/275 Nº de solicitud PCT/EP2019/087063 Solicitante TRANSGENE SA Inventor/a KLEINPETER, Patricia
The present invention is in the field of oncolytic viruses. The invention provides new poxviruses which are engineered to be defective for the function encoded by the M2L locus (i.e., m2 function). Such poxviruses lack a functional m2 binding activity to at least one or both of CD80 and CD86 co-stimulatory antigens. Said oncolytic poxviruses are preferably vaccinia virus having a total or partial deletion of the M2L locus. The present invention also relates to cells and compositions comprising such poxviruses and their use for treating proliferative diseases such as cancers and for preventing diseases (vaccination, especially in veterinary field). More precisely, the invention provides an alternative to the existing oncolytic viruses which are largely used in virotherapy. The m2-defective poxviruses are particularly useful for the expression of immunomodulatory polypeptides such as anti-CTLA-4 antibodies with the purposes of stimulating or improve immune response.

48.3675903PARAMYXOVIRIDAE-EXPRESSIONSSYSTEM
EP - 08.07.2020
Clasificación Internacional A61K 39/155 Nº de solicitud 18769224 Solicitante BOEHRINGER INGELHEIM VETMEDICA GMBH Inventor/a NIKOLIN VELJKO
The present invention relates to the field of (vector) vaccines, and especially to an enhanced arrangement of nucleotide sequences for expressing a Paramyxoviridae virus containing an exogenous gene of interest. The

present invention further concerns related expression cassettes and vectors, which are suitable to express genes of interest, especially antigen encoding sequences. The viral vectors of the present invention are useful for producing an immunogenic composition or vaccine.

49.WO/2020/132770PARTÍCULAS TIPO-VIRUS (VLP) DEL VIRUS DE LA ANEMIA INFECCIOSA DEL SALMÓN (ISAV) COMPRENDIENDO LA PROTEÍNA DE MATRIZ Y UNA O MÁS PROTEÍNAS ANTIGÉNICAS SE DICHO VIRUS; MÉTODO DE OBTENCIÓN, COMPOSICIÓN, VACUNA Y ALIMENTO PARA PECES BACULOVIRUS RECOMBINANTE; Y KIT DE VACUNACIÓN
WO - 02.07.2020
Clasificación Internacional A61K 39/145 Nº de solicitud PCT/CL2019/050152 Solicitante UNIVERSIDAD DE SANTIAGO DE CHILE Inventor/a CORTEZ SAN MARTIN, Marcelo
El presente invento se refiere al campo de la medicina veterinaria, particularmente, con vacunas y sanidad animal en el ámbito de la acuicultura. El presente invento se relaciona con partículas tipo-virus (VLP, Virus Like Particles), formadas por complejos moleculares que comprenden proteínas del virus de la anemia infecciosa de salmón (ISAV) cuyos genes se expresan en célula de insectos, y que son utilizadas como vacunas en conjunto con cuerpos celulares inducidos como adyuvantes. Es también del ámbito del presente invento, las composiciones farmacéuticas, vacunas, alimento para peces y kit que comprenden los VLP, como también el uso de los VLP para preparar medicamentos.

50.2020203971NOVEL PEPTIDES AND COMBINATION OF PEPTIDES FOR USE IN IMMUNOTHERAPY AGAINST EPITHELIAL OVARIAN CANCER AND OTHER CANCERS
AU - 02.07.2020
Clasificación Internacional C07K 14/47 Nº de solicitud 2020203971 Solicitante Immatics Biotechnologies GmbH Inventor/a
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.

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

Results of Search in US Patent Collection db for: (ABST/vaccine AND ISD/20200701->20200708),

9 resultados.

	PAT. NO.	Title
1	10,703,795	Peptides and combination of peptides for use in immunotherapy against esophageal cancer and other cancers
2	10,703,777	Miniature protein scaffolds and methods for use thereof
3	10,702,596	Polysaccharide purification for vaccine production using lytic enzymes, tangential flow filtration, and multimode chromatography
4	10,702,595	Manufacture of vaccines and compositions for the prevention of Salmonella infections
5	10,702,594	Dried saponin liposomal composition
6	10,702,593	Peptides and combination of peptides for use in immunotherapy against NHL and other cancers
7	10,702,592	Peptides and combination of peptides for use in immunotherapy against NHL and other cancers
8	10,702,591	Therapeutic cancer vaccine targeted to HAAH (aspartyl-[asparaginyl]-beta-hydroxylase
9	10,702,553	Peptides and combination of peptides of non-canonical origin for use in immunotherapy against different types of cancers

***NOTA ACLARATORIA**: Las noticias y otras informaciones que aparecen en este boletín provienen de sitios públicos, debidamente referenciados mediante vínculos a Internet que permiten a los lectores acceder a las versiones electrónicas de sus fuentes originales. Hacemos el mayor esfuerzo por verificar de buena fe la objetividad, precisión y certeza de las opiniones, apreciaciones, proyecciones y comentarios que aparecen en sus contenidos, pero este boletín no puede garantizarlos de forma absoluta, ni se hace responsable de los errores u omisiones que pudieran contener. En este sentido, sugerimos a los lectores cautela y los alertamos de que asumen la total responsabilidad en el manejo de dichas informaciones; así como de cualquier daño o perjuicio en que incurran como resultado del uso de estas, tales como la toma de decisiones científicas, comerciales, financieras o de otro tipo.*

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

FINLAY
EDICIONES