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...vacunar es prevenir.

Análisis bibliométrico sobre vacunas de ARN mensajero

Fuente de información utilizada:

WEB OF SCIENCE™

Estrategia de búsqueda:

TITLE: ("Self-amplifying mRNA vaccine ") 44 records

Periodo de estudio 1999-2020

Las variables utilizadas en el análisis fueron:

⇒ Productividad científica por año.

⇒ Autores con mayor productividad científica.

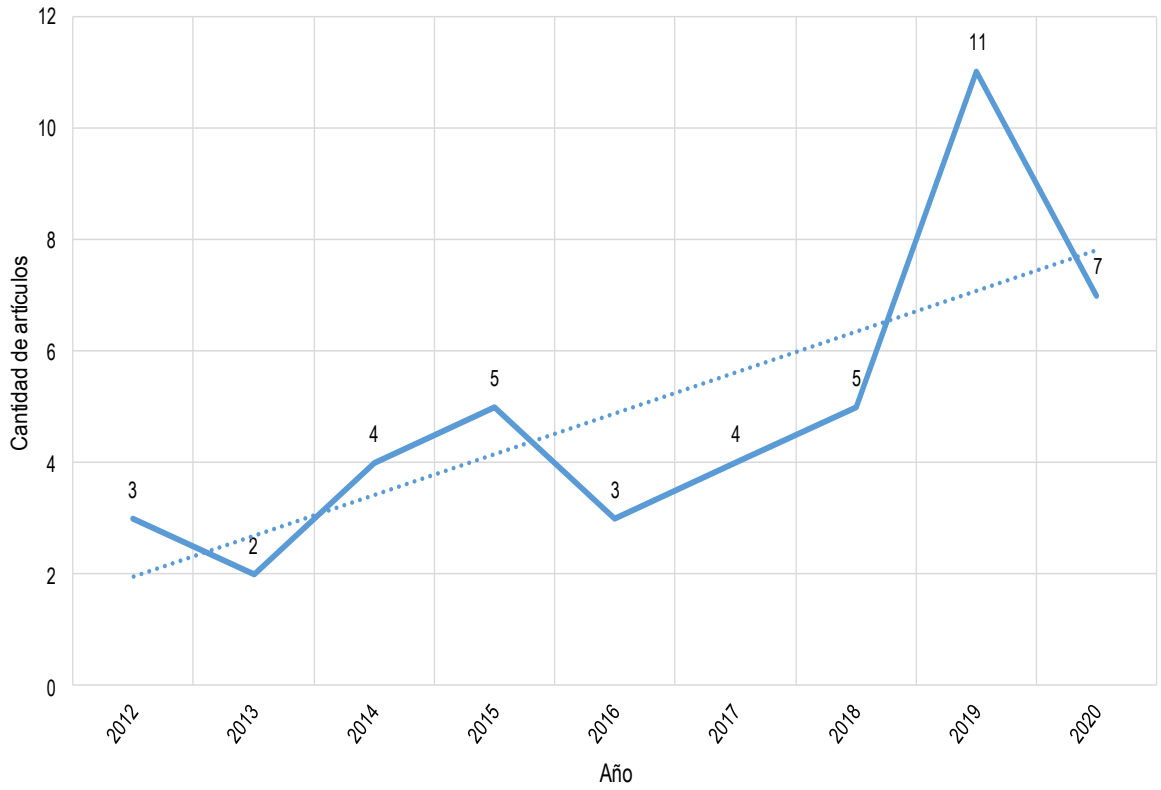
⇒ Revistas con mayor número de publicaciones sobre el tema.

⇒ Instituciones que han trabajado el tema de estudio.

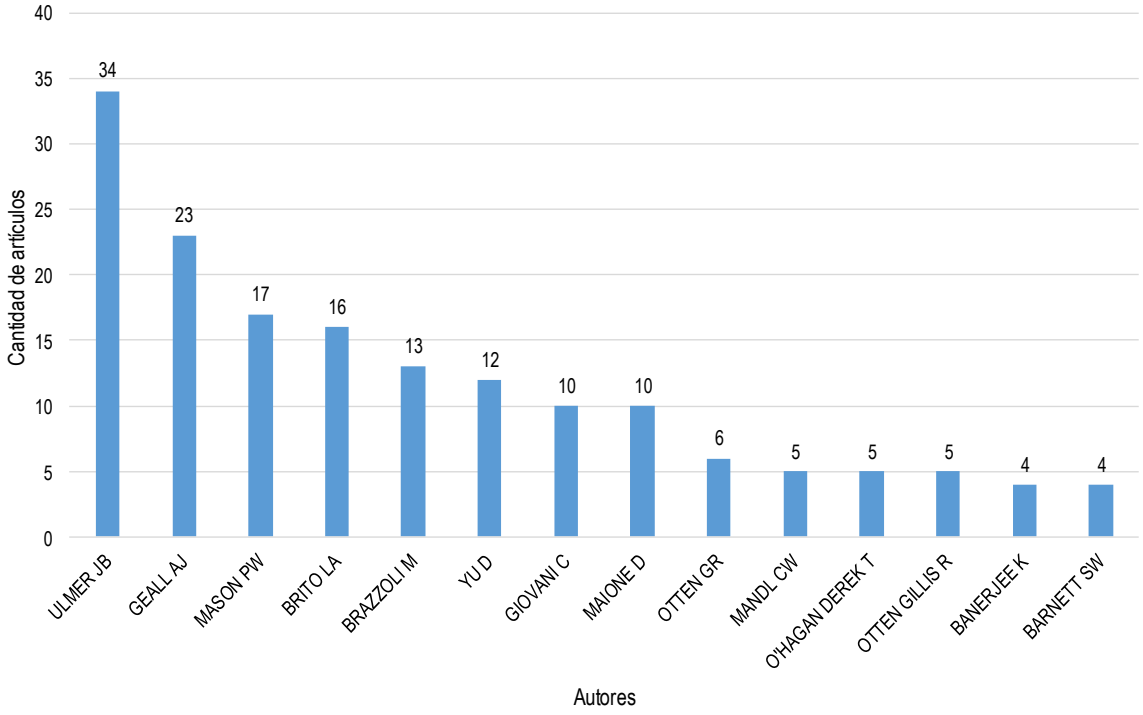
⇒ Países a la vanguardia sobre el tema.

EN ESTE NÚMERO

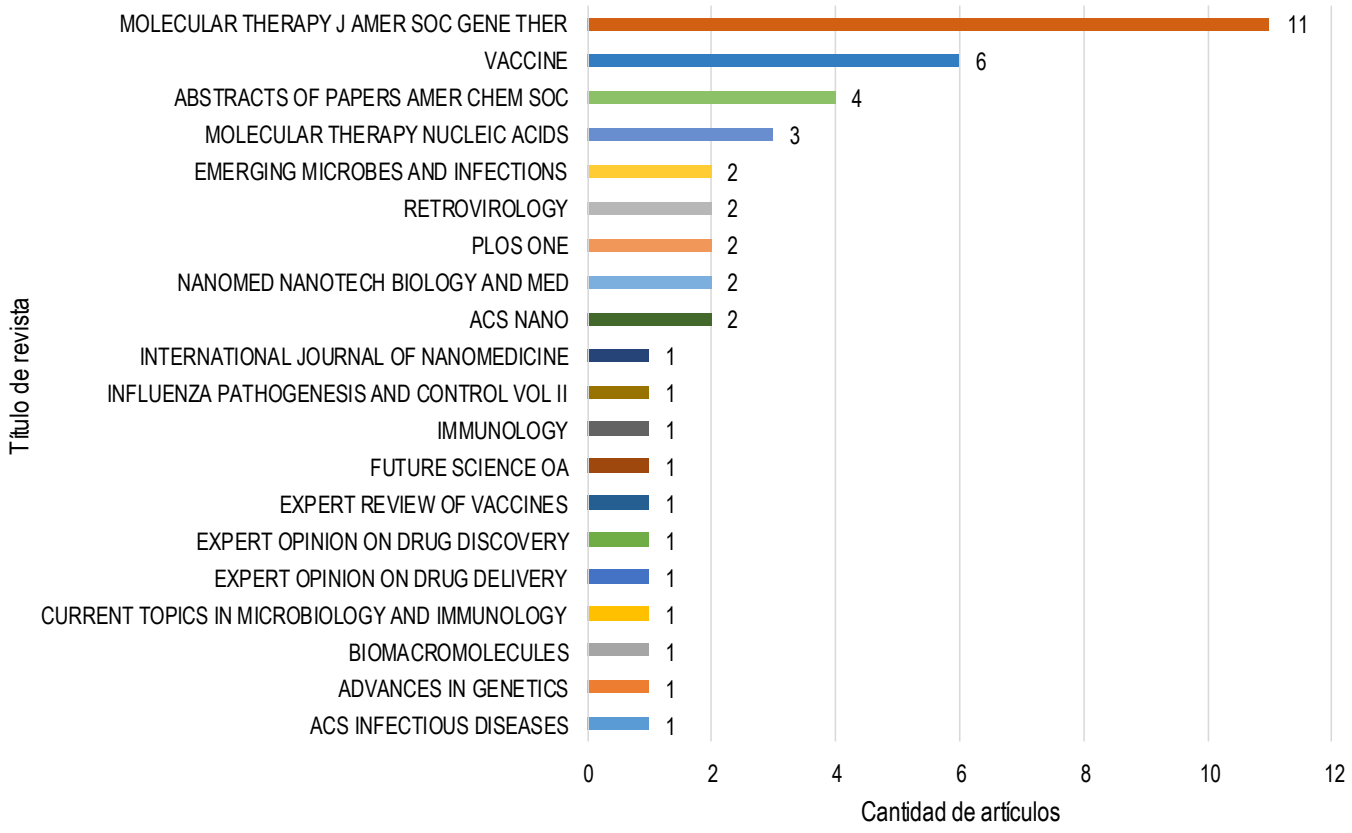
Productividad científica por año



Autores con mayor productividad científica

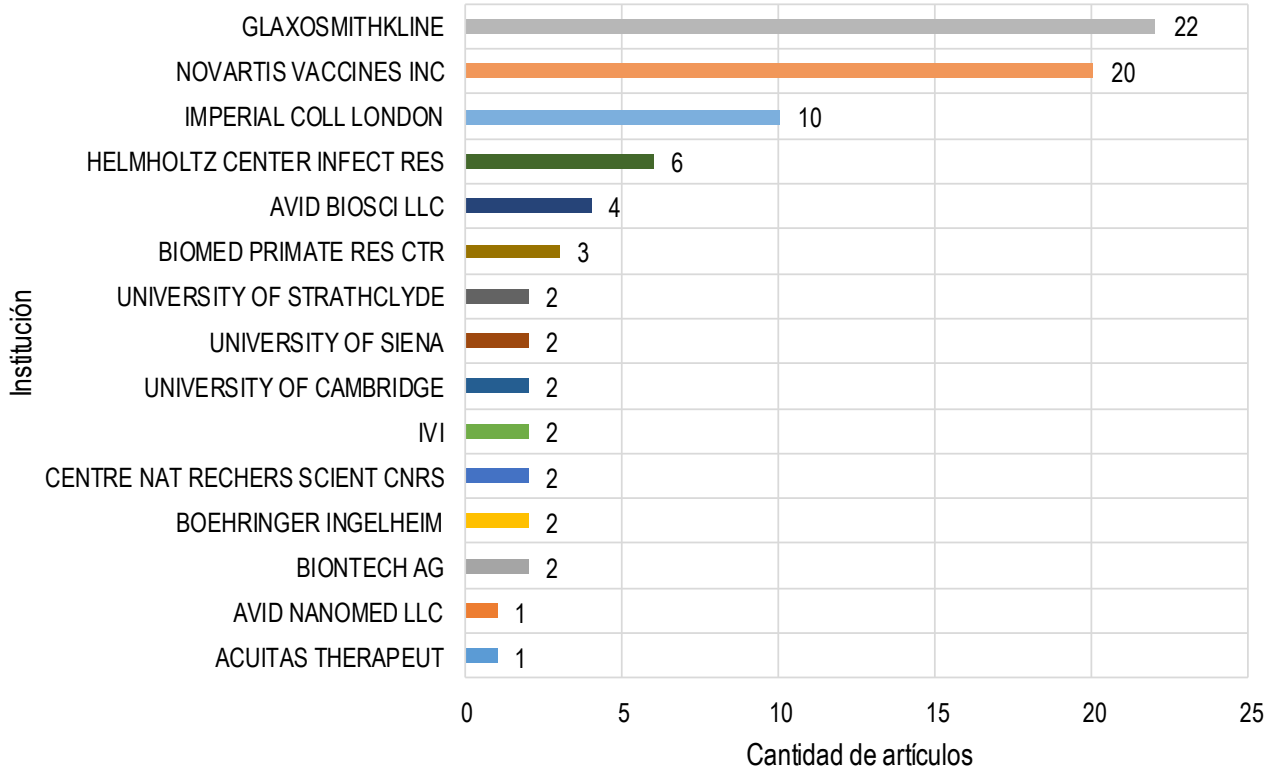


Revistas científicas que han publicado sobre el tema (2019-2020)



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

Instituciones que han trabajado el tema de estudio



Noticias en la Web

La curva de contagios de coronavirus de Brasil puede ser la clave de una vacuna global

18 jul. A medida que la pandemia de coronavirus arrasa con Brasil, los investigadores y las compañías farmacéuticas están recurriendo al gigante sudamericano en busca de una vacuna.

Brasil, donde el número de casos ha superado los 2 millones, es uno de los pocos sitios para probar vacunas experimentales de coronavirus. Ofrece una combinación inusual y atractiva para la investigación: una tasa de transmisión vertiginosa, así como centros de investigación respetados internacionalmente y un sistema de salud pública con experiencia en la creación y distribución de vacunas.

Según la Organización Mundial de la Salud, hasta el 14 de julio, se estaban desarrollando 163 vacunas COVID-19 en todo el mundo, y 23 de ellas habían comenzado ensayos clínicos con seres humanos. Pero solo dos han alcanzado la Fase 3, la última etapa científica antes de la aprobación para su comercialización, que requiere ensayos a gran escala con miles de personas para evaluar la eficacia y la seguridad de la vacuna.

Ambas pruebas de la Fase 3 incluirán a Brasil y están programadas para involucrar al menos a 14.000 brasileños. También se están llevando a cabo conversaciones avanzadas para lanzar tres ensayos de vacunas más en el país, según los institutos brasileños consultados por CNN.

¿Por qué probar la vacuna en Brasil?

Si bien el presidente de Brasil, Jair Bolsonaro, ha minimizado repetidamente el virus como una «pequeña gripe» y ha sido criticado por expertos por su falta de voluntad para implementar medidas de contención en todo el país, la investigación de vacunas que se está llevando a cabo ahora dentro de las fronteras de Brasil podría ser un elemento clave a medida que el hemisferio norte se prepara para una posible segunda ola en el invierno.

Julio Barbosa, un técnico de enfermería de 42 años que ya perdió a cinco colegas por el coronavirus, se ofreció como voluntario para participar en uno de los ensayos de vacunación masiva, realizado por la Universidad de Oxford y la compañía farmacéutica AstraZeneca. La fase 3 de prueba involucrará a 50.000 voluntarios en todo el mundo.

Después de tomar la inyección, Barbosa dice que tenía fiebre leve y dolor muscular leve que desapareció a la mañana siguiente. En el ensayo, que involucra principalmente a trabajadores de la salud, la mitad de los voluntarios reciben la vacuna COVID-19 de prueba y la otra mitad recibe una vacuna contra la meningitis, que puede provocar síntomas similares.

«Esta vacuna tiene que salir pronto para que podamos descansar en el hospital. No he dejado de trabajar en los últimos cuatro meses», dijo a CNN después de recibir una inyección en un depósito médico erigido en Sao Paulo para el ensayo médico.

La compañía china de biotecnología Sinovac también está comenzando una prueba de Fase 3 en Brasil, en colaboración con el Instituto Butantan de Brasil en Sao Paulo. Su vacuna de prueba CoronaVac utiliza células virales inactivadas para estimular una respuesta inmune en pacientes. Las pruebas comenzarán el próximo lunes con 9.000 voluntarios en cinco estados brasileños más la capital.

Al igual que la vacuna Oxford, CoronaVac se administrará principalmente a profesionales de la salud. Ricardo Palacios, director médico de investigación en Butantan, dice que el instituto también está en «conversaciones muy avanzadas con otras dos vacunas en desarrollo» y en conversaciones con docenas de compañías farmacéuticas sobre los estudios de investigación del COVID-19.

Fuente: CNN en Español. Disponible en https://cnn.it/2DFS7gX

Un proteína del SARS-CoV-2 tiene un papel en debilitar la respuesta inmune

18 jul. Una proteína del SARS-CoV-2 juega un papel en el debilitamiento de la respuesta inmune antiviral del huésped porque detiene la producción de proteínas relacionadas con su sistema inmunológico, según un estudio que publica hoy Science.

Un equipo de investigadores alemanes ha determinado cómo el coronavirus inhibe la síntesis de proteínas en las células infectadas y "desarma eficazmente" el sistema inmunitario innato del cuerpo. Los autores del estudio esperan que estos resultados permitan encontrar formas de neutralizar el nuevo coronavirus, y así mitigar la gravedad de la enfermedad respiratoria que causa.

La proteína Nsp1 codificada por el SARS-CoV-2 tiene "un efecto devastador en las células a las que infecta, indica en un comunicado la Universidad Ludwig-Maximilians (LMU) de Alemania.

Esta proteína es, de hecho, una de las armas centrales usadas por el virus que causa la covid-19 para asegurar su replicación y propagación en el huésped humano.

La Nsp1 ya se identificó como un factor de virulencia tras el brote del coronavirus SARS hace casi 20 años, cuando se demostró que inhibía la síntesis de proteínas en las células infectadas.

Investigadores del LMU y del Hospital Universitario de Ulm han descubierto qué hace que la Nsp1 sea tan potente y han descrito la forma en que actúa.

En las células, la tarea de sintetizar proteínas se realiza mediante complejas máquinas moleculares conocidas como ribosomas, las cuales interactúan con el ARN mensajero (ARNm) -el ácido ribonucleico que contiene la información genética procedente del ADN y que interviene en la síntesis de las proteínas-.

Los ribosomas contienen dos subunidades distintas y el estudio muestra que un extremo de la proteína Nsp1 se une a la más pequeña, la subunidad 40S, de manera que impide su unión al ARNm.

El equipo del Hospital Universitario de ULM demostró, por su parte, que la interrupción de la síntesis de proteínas "lleva a un colapso casi completo de una de las principales líneas de defensa del cuerpo contra el virus", explica la nota .

Fuente: infobae. Disponible en https://bit.ly/3kwdfae

Coronavirus: La mayoría de pacientes de Covid-19 registran síntomas hasta dos meses después de ser dados de alta

18 jul. Un estudio reciente realizado en Italia reveló que 87.4 por ciento de personas que padecieron COVID-19 y obtuvieron el alta médica sigue presentando síntomas de la enfermedad, al menos, hasta dos meses después de haberse recuperado, con diferentes afecciones en los casos analizados.

Estas conclusiones son el resultado del primer seguimiento a personas que recibieron el alta médica tras padecer la enfermedad producida por el virus SARS- CoV-2, el cual se centró en el monitoreo de 143 pacientes italianos durante 60 días.

¿Cuáles son los síntomas más comunes después de superar la COVID-19?

Las personas que participaron en este ejercicio señalaron que los principales síntomas que persisten tras el proceso de recuperación son fatiga, dolores en articulaciones y pecho, tos, alteración del olfato y disnea (falta de aire). Sólo una persona de diez consultadas afirmó que no presentaba ninguna afección.

"Los médicos e investigadores se han centrado en la fase aguda de la COVID-19. Pero es necesario un seguimiento continuo después del alta, para detectar los efectos duraderos", explicaron los especialistas Angelo Carfi, Roberto Bernabei y Francesco Landi, cercanos a este estudio publicado en 'Journal of the American Medical

Association'.
Este seguimiento se impulsó en gran medida luego de que se difundiera el caso Paul Garner, un profesor de la Escuela de Medicina Tropical de Liverpool, quien, en una columna en 'The British Journal of Medicines', reveló que la COVID-19 que había padecido y superado sin mayores complicaciones seguía afectando su organismo, pese a que nunca había tenido síntomas graves.

¿Cuánto dura el coronavirus?

Los vigentes resultados de estudios sobre el coronavirus señalan que éste permanece en el organismo alrededor de 14 días, tiempo que se recomienda estar en aislamiento para evitar que se propague.

No obstante, dado que la enfermedad arroja nuevas pistas y características todo el tiempo, algunos especialistas han destacado que el virus SARS-CoV-2 puede mantenerse en el cuerpo por varios días más.

¿Cuánto tiempo se considera recuperación tardía?

Dado el no menor número de casos que reporta síntomas de coronavirus tras dos semanas de aislamiento, los especialistas trabajan en conocer comportamientos desconocidos del virus en el cuerpo, así como los factores que provocan que éste se mantenga por más tiempo. Estos casos se han denominado como de recuperación tardía, la cual se declara cuando un paciente de COVID-19 supera la enfermedad después de 21 o hasta 30 días.

¿Qué es es la COVID a largo plazo?

Esta ha sido la forma en la que se ha denominado a algunos casos atípicos de COVID-19, pues aunque no se presenten síntomas graves, las personas presentan algunos leves por más de 14 días, incluso después de 30. En un principio, esto se denominó como una reinfección (lo que puso en duda la inmunidad tras sufrir la enfermedad), aunque otros especialistas señalan que pueden ser casos de falsos positivos o negativos.

Fuente: MARCA Claro. Disponible en https://bit.ly/2PHRQwA

Las vacunas de Oxford y China generan una buena respuesta inmune en los ensayos iniciales

20 jul. La vacuna diseñada por la Universidad de Oxford, en cuyo desarrollo participa AstraZeneca y que ya está inmersa en la fase III de estudio, es una vacuna atenuada que utiliza un adenovirus de chimpancé (ChAdOx1) recombinante sin capacidad de replicación, que expresa la proteína S ("Spike") del SARS-CoV-2.

Los resultados del ensayo de fase I/II que se ha llevado a cabo con 1.077 adultos sanos revelan que la vacuna indujo fuertes respuestas inmunitarias, tanto celular (con células T, capaces de encontrar y atacar a las células infectadas por el coronavirus), como humoral (a través de los anticuerpos, que pueden detectar y atacar al virus cuando circula por la sangre o el sistema linfático). Las respuestas inmunitarias se mantuvieron hasta el día 56 del ensayo en curso. Los investigadores no descartan en que estas respuestas sean incluso mayores tras una segunda dosis, tal como sugiere un subgrupo de 10 individuos que la recibieron en el estudio.

Sobre la capacidad de la vacuna de inducir ambas respuestas inmunitarias (celular y humoral), el director de esta investigación y profesor de la Universidad de Oxford, Andrew Pollard, asegura que "esperamos que esto signifique que el sistema inmunitario recordará al virus, de modo que nuestra vacuna protegerá a las personas durante un período prolongado. Sin embargo, necesitamos más investigación antes de poder confirmar que la vacuna protege eficazmente contra la infección por SARS-CoV-2 y cuánto tiempo dura cualquier protección".

Una vacuna ideal contra el SARS-CoV-2 debería ser efectiva después de una o dos dosis; funcionar en poblaciones especialmente vulnerables al coronavirus, en este caso, las personas mayores y con patologías previas; conferir protección durante un mínimo de seis meses, y reducir la transmisión del virus a los contactos. Esta fase

del ensayo clínico es aún demasiado temprana para confirmar si la candidata a vacuna cumple con estos requisitos, algo que se sabrá en la siguiente fase del estudio, que se completará en Reino Unido, Brasil y Sudáfrica.

Los resultados que se presentan ahora proceden de 1.077 adultos sanos de entre 18 y 55 años sin antecedentes de Covid-19, de cinco hospitales del Reino Unido entre el 23 de abril y el 21 de mayo de 2020. La vacuna contra el coronavirus se comparó frente a un grupo de individuos que sirvió de control, a los que se administró la vacuna de la meningitis.

Efectos secundarios: fatiga y dolor de cabeza

La inmunización contra el SARS-CoV-2 causó efectos secundarios leves (fatiga y dolor de cabeza) con más frecuencia que los observados en el grupo control, pero en general podían controlarse bien con paracetamol. Además, 10 personas recibieron otra dosis de la vacuna contra el Covid-19; los efectos secundarios fueron menos habituales tras esa segunda dosis.

Las respuestas de las células T dirigidas a la proteína del SARS-CoV-2 aumentaron alcanzando su máximo a los 14 días después de la vacunación; el nivel disminuyó ligeramente en el día 56 del ensayo. Los anticuerpos, en cambio, alcanzaron su punto máximo de respuesta en el día 28, cuando se detectaron anticuerpos neutralizantes contra el coronavirus en más del 90% de los individuos analizados, y se mantuvieron elevados hasta la medición en el día 56 en el ensayo. Esta respuesta se impulsó además tras la dosis de refuerzo.

Respecto a estos buenos resultados, el primer ministro de Reino Unido, Boris Jonhson, ha comentado en su cuenta de Twitter: "Esta es una noticia muy positiva. Un gran agradecimiento a nuestros brillantes científicos e investigadores líderes mundiales en @UniofOxford. No hay garantías, todavía no hemos llegado y serán necesarios más ensayos, pero este es un paso importante en la dirección correcta".

Resultados positivos también con la vacuna de China

The Lancet publica también resultados alentadores de la fase II con la candidata a vacuna que desarrollan el Instituto de Biotecnología y el Centro Provincial para el Control y Prevención de Enfermedades de Jiangsu (China), en la que participa la compañía CanSino Biologics. Se trata también de una vacuna atenuada con un adenovirus, en este caso, humano (Ad5), recombinante con baja capacidad de replicación, que expresa la proteína S del nuevo coronavirus.

La vacuna se ha probado en 508 participantes divididos en tres grupos: dos recibieron una dosis baja y otra elevada, mientras que al tercero se le administró un placebo. Un 60% de los voluntarios tenían entre 18 y 44 años; un 25%, tenían entre 45 y 54 años, y resto, tenían 55 años o más.

El 95% de los participantes en el grupo que recibió la dosis alta y el 91% del grupo de dosis baja mostraron respuestas inmunes de células T o de anticuerpos al día 28 después de la vacunación.

La vacuna indujo una respuesta de anticuerpos neutralizantes en el 59% y el 47% de estos dos grupos. Los participantes en el grupo del placebo no mostraron un aumento de anticuerpos. También se encontraron respuestas de células T en el 90% y el 88% de los participantes que recibieron la vacuna en dosis altas y bajas, respectivamente.

En cuanto a la seguridad, el 74% de las personas que recibieron la dosis baja de vacuna presentaron reacciones leves o moderadas, como fiebre, fatiga y dolor en la zona de la inyección; lo mismo ocurrió en el 72% del grupo que recibió dosis altas, y en el 37% del placebo.

El investigador principal del estudio, el profesor Wei Chen, del Instituto de Biotecnología de Pekín, afirma que "dado que las personas mayores tienen un alto riesgo de enfermedades graves e incluso de muerte asociadas con la infección por Covid-19 son una población objetivo importante para una vacuna Covid-19. Es posible que se necesite una dosis adicional para inducir una respuesta inmune más fuerte en la población de edad avanzada, pero se están realizando más investigaciones para evaluarlo".

Fuente: EL MUNDO. Disponible en https://bit.ly/3afhD8Y

Three Coronavirus Vaccine Developers Report Promising Initial Results

20 jul. The race for a vaccine against the coronavirus intensified on Monday as three competing laboratories released promising results from early trials in humans.

Now comes the hard part: proving that any of the vaccines protects against the virus, and establishing how much immunity they provide — and for how long.

“What this means is that each of these vaccines is worth taking all the way through to a Phase III study,” said Dr. Peter Jay Hotez, a vaccine researcher at the Baylor College of Medicine. “That is it. All it means is ‘worth pursuing.’” Phase III trials test how well a drug works.

“They all look really good,” said Prof. Stacey Schultz-Cherry of the St. Jude Children’s Research Hospital, arguing that more than one vaccine would be necessary to address the needs of varying demographic groups.

All of the developers asserted that their vaccines elicited antibody levels similar to those seen in patients who have recovered from Covid-19.

But scientists cautioned that the antibody responses in convalescing patients varied widely, and that even matching those responses did not necessarily guarantee any degree of immunity.

“It does not really tell you whether the vaccine is going to protect,” said Prof. John P. Moore of Weill Cornell Medical College.

The developers who announced their early results Monday all indicated that any immunity was likely to require a second, booster dose of its vaccine.

The partnership between Oxford and AstraZeneca may be the most closely watched vaccine effort.

The United States, Britain and several other governments and nonprofit groups have already agreed to pay hundreds of millions of dollars for a total of two billion doses even before the vaccine’s efficacy has been proven. And British and American officials believe Russia sought to spy on the Oxford research.

It was also the first vaccine to enter Phase III trials.

More than 10,000 participants in Britain, Brazil and South Africa have already received doses. Another Phase III test involving 30,000 participants in the United States is set to begin next week, along with a parallel test of the Moderna vaccine.

The Oxford study released on Monday analyzed a few hundred participants who had received the vaccine in an earlier safety trial. Of those, only 10 received a booster shot, and they showed the most promising immune response.

“There is still a long way to go,” said Prof. Sarah Gilbert of Oxford, who is leading development of the vaccine.

The CanSino vaccine, tested in a trial of about 500 participants in China, appeared least likely to be effective, based on the early results released so far, scientists said. “Pretty weak compared to other vaccine candidates (to the extent that comparisons are possible),” Professor Moore noted in a summary of the results.

Both the Oxford and CanSino vaccines work by altering the genes of another common virus — the adenovirus — so that it harmlessly mimics the coronavirus and induces an immune response.

The Oxford vaccine exploits an adenovirus found in chimps; humans do not already have antibodies against it. The CanSino vaccine, on the other hand, travels on the back of a widespread adenovirus that causes the common cold in humans, and so pre-existing defenses against that adenovirus in many people appear to thwart the vaccine, scientists said.

The preliminary results released Monday by the Pfizer-BioNTech partnership, based on a trial with 60 participants in Germany at various dosage levels, appeared able to produce a strong immune response. The vaccine uses the same kind of

specially engineered genetic material, mRNA, as the Moderna vaccine, and the early results from Pfizer-BioNTech may suggest an even stronger immune response, scientists said.

But the scientists cautioned that no response in a lab test guarantees that a vaccine will prevent a disease. And comparing the immune responses ascribed to the various vaccines is almost impossible because the reports are not standardized.

"It's like judging a beautiful baby photo contest when every mom uses a different Instagram filter," Professor Moore said.

What's more, none of the trials has been able to measure results over more than a few weeks, raising questions about the longer term effects of the vaccines.

Professor Hotez argued that the eagerness of vaccine developers to promote such inconclusive results may actually undermine more immediate public health efforts to control the virus, like wearing masks and social distancing.

"All the hype makes it seem like a miracle is around the corner," he said, "and that is just not the case. This is not going to be a quick fix. This is going to take years to sort out."

Fuente: The New York Times. Disponible en https://cutt.ly/zfymqYJ

Ocho académicos de Cuba asesorarán enfrentamiento de la COVID-19 en el mundo

20 jul. Como reconocimiento a la exitosa labor de Cuba en el enfrentamiento al SARS-CoV- 2, ocho prestigiosos científicos y académicos cubanos, han sido invitados para integrar el Grupo Asesor COVID-19 del Panel de Inter- Academias del mundo.

La nominación constituye una muestra de respeto y consideración a la labor desarrollada por la ciencia cubana y sus especialistas, en el combate a la pandemia que ha afectado a más de 14 millones de personas en el mundo, ocasionando la muerte a más de 590 000 seres humanos, de los cuales solo 87 han sido cubanos.

De acuerdo con una nota divulgada por la Academia de Ciencias de Cuba, los científicos y académicos cubanos que fueron seleccionados para integrar el prestigioso colectivo, de los 60 que componen el selecto Grupo Asesor, son Luis Velázquez Pérez, neurocientífico, Académico Titular, presidente ACC; Pedro Mas Bermejo, epidemiólogo, Académico de mérito, IPK-MINSAP; y Luis Herrera Martínez, biotecnólogo, Académico de Mérito, Asesor BioCubaFarma.

Asimismo, componen el selecto grupo Luis Carlos Silva Aycaguer, estadístico-matemático, Académico de Mérito, Escuela Nacional de Salud Pública; Tania Crombet Ramos, inmunóloga, Académica Titular, Centro de Inmunología Molecular–BioCubaFarma; Guadalupe Guzmán Tirado, viróloga, Académica de Mérito, IPK-MINSAP; Rafael Bello Pérez, Ciencias de la Computación-Inteligencia Artificial de la Universidad Central Marta Abreu de Las Villas; y Jorge Núñez Jover, Ciencias Sociales, Cátedra CTS, Universidad de La Habana.

De igual manera pudo conocerse que la Académica Titular Dra.C. Tania Crombet Ramos, del Centro de Inmunología Molecular de BioCubaFarma, ha sido elegida para participar en el Panel Internacional de expertos como Grupo Asesor para el enfrentamiento de la COVID-19 en el mundo, el cual estará integrado por un selecto grupo de solo 20 integrantes de las Academias.

El objetivo central del Panel multidisciplinario, será proveer a otras Academias y a los Gobiernos nacionales de información confiable sobre la COVID-19 y sus implicaciones en los diferentes países.

Una vez más la ciencia cubana es reconocida internacionalmente y demuestra que está en condiciones de aportar las excelentes experiencias y resultados obtenidos por nuestro país, que a pesar de estar bloqueado, gracias a sus certeras políticas y decisiones está haciendo posible la contención del epidemia.

Fuente: Radio Habana Cuba. Disponible en https://cutt.ly/zfyWOS2

Brasil inicia nuevo ensayo de vacuna contra coronavirus

21 jul. Las autoridades brasileñas de salud comenzaron el martes una prueba de tres meses a una nueva vacuna contra el coronavirus producida por la compañía farmacéutica china Sinovac, una de las pocas empresas en el mundo que están en las etapas finales de las pruebas de vacunas para demostrar su efectividad.

Si la vacuna resulta segura y efectiva, Brasil recibirá 120 millones de dosis de China a principios del próximo año, lo que permitirá la vacunación de 30 millones de brasileños, dijo en una conferencia de prensa Dimas Covas, presidente del Instituto Butantan, que coordina el estudio.

Es una de casi una veintena de vacunas potenciales que se encuentran en diversas etapas de ensayo en seres humanos en todo el mundo.

Las fuertes tasas de contagio de COVID-19 en Brasil lo hacen útil para hacer pruebas, pues la presencia generalizada del nuevo coronavirus demostraría que la potencial vacuna funciona. El ministerio de Salud federal informó el lunes que Brasil ha registrado más de 2 millones de casos confirmados de COVID-19 y 80.120 muertes.

Brasil también está ayudando en los ensayos de una vacuna contra el coronavirus producida por una asociación de la Universidad de Oxford y la compañía farmacéutica AstraZeneca. Adicionalmente, las autoridades federales autorizaron el martes las pruebas de una tercera vacuna producida por Pfizer y BioNTech.

Las pruebas de Sinovac —que se realizarán en 9.000 voluntarios, todos profesionales de la salud, en seis estados brasileños— están siendo coordinadas por Butantan, un instituto científico del estado de Sao Paulo que ha estado produciendo vacunas durante más de un siglo.

La mitad de los voluntarios recibirá dos dosis de la vacuna a partir de esta semana, mientras que la otra mitad recibirá dos dosis de un placebo.

Fuente: The San Diego Union Tribune. Disponible en https://cutt.ly/rfyxTkD

Una vacuna atenuada frente a Bordetella Pertussis puede generar inmunidad esterilizante

22 jul. Se han publicado en la revista The Lancet Infectious Diseases los resultados de la fase 1b de una vacuna atenuada frente a Bordetella pertussis de administración intranasal. El ensayo tuvo lugar en el Karolinsksa University Hospital de Estocolmo con 48 participantes de 18 a 32 años. Se midió la seguridad, inmunogenicidad sérica (IgG e IgA) y colonización nasofaríngea por la cepa vacunal BPZE1. La vacuna en sus tres dosificaciones se mostró segura, con respuesta inmune sérica frente a cuatro antígenos de Bordetella y con colonización en el 81% de los vacunados.

Esta vacuna podría abrir un nuevo horizonte en la lucha frente a la tos ferina, ya que puede evitar la infección y colonización nasofaríngea, por lo que al contrario de las actuales vacunas de célula entera o acelulares, podría evitar la transmisión generando inmunidad humoral, además de poder utilizarse como priming o como booster en adolescentes-adultos pero sin los componentes tetánicos o diftéricos.

Fuente: Asociación Española de Vacunología. Disponible en https://cutt.ly/dfyOc3R

Vacuna rusa contra Covid-19 supera con éxito pruebas clínicas en humanos

23 jul. 30.000 personas ya se han ofrecido y 150 científicos, entre ellos varios premios Nobel, piden que se permita contagiar a personas jóvenes sanas con el virus tras suministrarles la vacuna, con el objetivo de acelerar su desarrollo.

Infectar intencionadamente a personas con coronavirus. Es lo que 150 científicos, entre ellos 15 premios Nobel, piden al director de Salud Pública de EEUU: quieren que se permitan los contagios intencionados de voluntarios sanos para acelerar el desarrollo de la vacuna.

Argumentan que, "si el contagio intencionado puede acelerar de manera segura y efectiva el desarrollo de una vacuna, existe un buen motivo para usarlo, que requeriría un motivo ético muy potente para desecharlo".

Dicha práctica consiste en inyectar a los voluntarios la candidata a vacuna que se quiere probar. Pasadas unas horas, se les rocía la nariz con el virus con la intención de que se contagien.

Después, a la persona "hay que tenerla aislada durante un tiempo", por lo que "estos ensayos podrían hacerse, como mucho, en cientos de personas, pero no en miles", según explica Isabel Sola, codirectora del laboratorio de coronavirus del CSIC.

Ninguna de las vacunas contra el coronavirus que se están desarrollando actualmente están utilizando los contagios intencionados. Sí se han usado con otras en el pasado, como la del cólera o la fiebre tifoidea, pero esta técnica dejó de emplearse hace años por considerar que es muy peligrosa.

Por este motivo, los requisitos para participar es que los voluntarios sean jóvenes, sanos y conozcan plenamente lo que se va a hacer con ellos. A cambio de asumir los riesgos, se les promete recibir el mejor tratamiento en caso de enfermar y se les garantiza una cama de hospital si llegan a necesitarla.

Diferentes opiniones sobre las implicaciones éticas

Más de 30.000 personas se han ofrecido ya a ser contagiadas. Sin embargo, más allá del procedimiento científico, esta cuestión plantea un debate ético: ¿justifica la pandemia que la ciencia tome este posible atajo?

En mayo, la OMS afirmaba al respecto que "existe consenso entre los expertos en ética, que han reflexionado sobre el tema y consideran que la infección intencional puede ser éticamente aceptable bajo ciertas condiciones". No obstante, Sola opina que es "excesivamente arriesgado, precisamente porque no tenemos una cura frente a este virus".

En este mismo sentido se pronuncia el profesor de la Escuela Andaluza de Salud Pública José Martínez Olmos, que advierte de que "en el ámbito de la Biomedicina puede estar saltándose alguno de los criterios que actualmente se mantiene para hacer posible la investigación biomédica".

Fuente: La Sexta. Disponible en https://cutt.ly/RfySPqh

Examinan expertos rusos y cubanos oportunidades de cooperación frente a la COVID-19

24 jul. Con la participación de alrededor de 30 entidades rusas y de importantes centros de investigación de Cuba tuvo lugar la videoconferencia "La medicina cubana en la lucha contra la COVID-19".

El foro, organizado por el Comité Nacional para la Cooperación Económica con América Latina y el Grupo Empresarial de la Industria Biofarmacéutica BioCubaFarma, devino fructífero intercambio en busca de nuevas oportunidades de cooperación, publica el sitio web del Ministerio de Relaciones Exteriores de la nación caribeña.

Representantes de agencias regulatorias, entidades de

desarrollo e innovación de regiones rusas, institutos de investigación, clústeres y empresas del sector biofarmacéutico en el gigante euroasiático compartieron la agenda con sus pares en el Centro de Ingeniería Genética y Biotecnología, el Centro de Inmunología Molecular, y el Centro Nacional de Biopreparados de la Isla.

Estuvieron presentes la representación de la Oficina de BioCuba-Farma en la Federación de Rusia y de la Embajada cubana en ese país.

Fuente: Agencia Cubana de Noticias. Disponible en https://cutt.ly/DfyJV3W

La interacción de una proteína del SARS-CoV-2 con ARN abre una posible vía de tratamiento frente al coronavirus

24 jul. La interacción de una proteína del SARS-CoV-2 con ARN abre una posible vía de tratamiento frente al coronavirus, según un estudio realizado por investigadores del Instituto de Química Andrés del Río de la Universidad de Alcalá de Henares (UAH), expertos en métodos de simulación molecular con ordenadores, lo que permite conocer las características del virus de una forma "más rápida y segura".

En concreto, en este trabajo han estudiado la proteína que constituye el Dominio Único de la SARS (llamada SUD por sus siglas en inglés: SARS Unique Domain). "Se eligió esta proteína por ser la que siempre aparece en los virus de tipo SARS sin apenas modificaciones, lo que nos hace pensar que, aunque el virus mute, esta proteína seguirá intacta, por lo que los fármacos que se desarrollen contra ella seguirán siendo eficaces. De ahí la importancia de estudiarla", ha indicado Cristina García, co-autora del estudio.

Para saber cómo es la proteína SUD, los investigadores la extraen del virus y la estudian a través de Rayos X. "Igual que los médicos los utilizan para ver los huesos, los químicos los usamos para ver las moléculas, y entre ellas también las proteínas, cuya estructura tridimensional es en general muy complicada de entender. Una vez conocida la forma de la proteína, ésta se reproduce en el ordenador y se comienzan las simulaciones, en las que se enfrenta a la proteína del virus con distintas moléculas de nuestro organismo para ver con qué y cómo interacciona", añade el también autor Marco Marazzi.

En este estudio, los investigadores observaron que la proteína SUD interacciona con ARN G4, que es un tipo de ácido ribonucleico presente en nuestras células que regula en cierta medida la respuesta del sistema inmune. El ARN G4 es atrapado por la proteína SUD, impidiéndole realizar su función. Ésa puede ser una de las causas por las que el sistema inmune no es capaz de enfrentarse a la Covid-19.

Este "atrapamiento" o unión es posible debido a que una zona de la proteína del virus tiene una gran concentración de carga positiva, atrayendo al ARN, que tiene carga negativa. Actúa como un imán, que atrae a su polo opuesto.

Además, la simulación muestra que la interacción es rápida y se mantiene estable a lo largo del tiempo. Tras este descubrimiento, los científicos han propuesto el diseño de fármacos que se unan a la molécula del virus, impidiendo que capturen el ARN G4. El grupo, del que forman parte también investigadores de la Université de Lorraine y CNRS (Francia) y de la Università degli Studi di Palermo (Italia), se plantea continuar su trabajo estudiando qué tipos de compuestos pueden impedir esta unión.

Fuente: Infosalus. Disponible en https://cutt.ly/lfyLhyv

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31 records

1.0002727258METHOD FOR INCREASING IMMUNOGENICITY OF VACCINE STRAIN OF PLAGUE MICROBE
RU - 21.07.2020
Clasificación Internacional C12N 1/20 Nº de solicitud 2019134748 Solicitante Inventor/a Щуковская Татьяна Николаевна (RU)
FIELD: medicine. SUBSTANCE: invention relates to microbiology and immunology and can be used for immunogenicity enhancement of vaccine strain of plague microbe for use in making medical immunobiological preparations. Method for increasing immunogenicity of a vaccine strain of a plague microbe

involves growing a lyophilised culture of the Y. pestis EV NIIEG 1 vaccine strain in vitro on LB agar culture medium, Miller pH 7.2 ± 0.1 with addition of polyoxydonium immunoadjuvant in final concentration of 60 mcg/ml at temperature 28 °C for 48 hours. EFFECT: invention simplifies the method of producing a vaccine strain of a plague microbe with high immunogenicity. 1 cl, 3 tbl, 3 ex

2.WO/2020/150152METHODS OF TREATING CANCER WITH A PD-1 AXIS BINDING ANTAGONIST AND AN RNA VACCINE
WO - 23.07.2020
Clasificación Internacional C07K 16/28 Nº de solicitud PCT/US2020/013353 Solicitante GENENTECH, INC. Inventor/a MUELLER, Lars
The present disclosure provides methods, uses, and kits for treating cancer in an individual. The methods comprise administering to the individual a PD-1 axis binding antagonist (such as an anti-PD-1 or anti-PD-L1 antibody) and an RNA vaccine (e.g., a personalized cancer vaccine that comprises one or more polynucleotides encoding one or more neoepitopes resulting from cancer-specific somatic mutations present in a tumor specimen obtained from the individual). Further provided herein are RNA molecules (e.g., a personalized RNA cancer vaccine that comprises one or more polynucleotides encoding one or more neoepitopes resulting from cancer-specific somatic mutations present in a tumor specimen obtained from the individual), as well as DNA molecules and methods useful for production or use of RNA vaccines.

3.WO/2020/148612RECOMBINANT VACCINIA VIRUS AND METHODS OF USE THEREOF
WO - 23.07.2020
Clasificación Internacional C07K 14/55 Nº de solicitud PCT/IB2020/050159 Solicitante IGNITE IMMUNOTHERAPY, INC. Inventor/a HANAHAN, Douglas
The present disclosure provides a replication-competent, recombinant oncolytic vaccinia virus; and compositions comprising the replication-competent, recombinant oncolytic vaccinia virus. The present disclosure also provides use of the vaccinia virus or composition for inducing oncolysis in an individual having a tumor.

4.0002727766METHOD FOR PRODUCING AN INACTIVATED ANIMAL DERMATOPHYTOSIS VACCINE
RU - 23.07.2020
Clasificación Internacional A61K 9/10 Nº de solicitud 2019141694 Solicitante Inventor/a Ханис Александр Юрьевич (RU)
FIELD: veterinary science; pharmaceutics. SUBSTANCE: invention relates to veterinary science and pharmaceutics, specifically to a method of producing an inactivated animal dermatophytosis vaccine, according to which one performs sowing and separate cultivation of fungi cultures Microsporum canis, Microsporum qypseum, Trichophyton mentagrophytes, suspensions are prepared from grown cultures, concentration of fungal elements in each suspension is subtracted to 20–50 million in 1 ml, obtaining suspensions with the same content of fungal elements, mixing suspensions Microsporum canis, Microsporum qypseum, Trichophyton mentagrophytes in volume ratio of 2:1:2, twice washed, vaccine is considered immunogenic with total content of 20–50 million elements of fungi in 1 ml. EFFECT: technical result consists in the immunogenicity and stability of the inactivated vaccine against animal dermatophytosis obtained using

the disclosed method without using additional components, such as immunomodulating substances. 1 cl, 13 ex

5.20200230230DENGUE VACCINE UNIT DOSE AND ADMINISTRATION THEREOF
US - 23.07.2020
Clasificación Internacional A61K 39/295 Nº de solicitud 16561953 Solicitante Takeda Vaccines, Inc. Inventor/a Derek WALLACE

The invention relates to a unit dose of a dengue vaccine composition and methods and uses for preventing dengue disease and methods for stimulating an immune response to all four dengue virus serotypes in a subject or subject population. The unit dose of a dengue vaccine composition includes constructs of each dengue serotype, such as TDV-1, TDV-2, TDV-3 and TDV-4, at various concentrations in order to improve protection from dengue infection.

6.2020204542Immunogenetic restriction on elicitation of antibodies
AU - 23.07.2020
Clasificación Internacional C07K 16/10 Nº de solicitud 2020204542 Solicitante Dana-Farber Cancer Institute, Inc. Inventor/a
The present invention provides structural determinants important for binding to the stem domain of the HA protein of influenza virus, and methods of use thereof for production of high affinity neutralizing influenza virus antibodies based upon these determinants. The present invention further provides tools for determining the efficacy of an influenza virus vaccine. The present invention further provides a molecular signature useful for determining the efficacy of an influenza virus vaccine in a subject, or for predicting prior immunologic exposure or antigen responsiveness to vaccine or influenza virus infection.

7.WO/2020/147015FOOT-AND-MOUTH DISEASE VIRUS-LIKE PARTICLE ANTIGEN, AND VACCINE COMPOSITION, PREPARATION METHOD, AND APPLICATION THEREOF
WO - 23.07.2020
Clasificación Internacional C07K 14/09 Nº de solicitud PCT/CN2019/071813 Solicitante PULIKE BIOLOGICAL ENGINEERING,INC. Inventor/a TIAN, Kegong
Provided is an O-type foot-and-mouth disease virus (FMDV)-like particle antigen; said O-type FMDV-like particle antigen is a CATHAY-type O-type FMDV-like particle antigen; said CATHAY-type O-type FMDV-like particle antigen is assembled from CATHAY-type O-type FMDV VP0, VP3, and VP1 antigen proteins. The O-type FMDV-like particle antigen has good immunogenicity, the prepared vaccine is administered once for immunity, and on the 14th day after immunization, complete protection against O-type FMDV is produced; the antibody titer produced is more potent than that of commercial inactivated vaccines, and the period of immune protection can be maintained for at least 133 days. Also provided are a prepared vaccine composition and preparation method and application thereof.

8.202048011654NOVEL IMMUNOTHERAPY AGAINST SEVERAL TUMORS, SUCH AS LUNG CANCER, INCLUDING NSCLC
IN - 24.07.2020
Clasificación Internacional A61K 38/17 Nº de solicitud 202048011654 Solicitante IMMATICS BIOTECHNOLOGIES GMBH Inventor/a WEINSCHENK, Toni
The present invention relates to peptides, nucleic acids and cells for use in immunotherapeutic methods. In particular, the present invention relates to the immunotherapy of cancer. The present invention furthermore relates to tumor-associated cytotoxic T cell (CTL) peptide epitopes, alone or in combination with other tumor-associated peptides that serve as active pharmaceutical ingredients of vaccine compositions that stimulate anti-tumor immune responses. The present invention relates to more than 70 novel peptide sequences and their variants derived from HLA class I and HLA class II molecules of human tumor cells that can be used in vaccine compositions for eliciting anti-tumor immune responses.

9.20200229411INSECT PRODUCTION SYSTEMS AND METHODS
US - 23.07.2020
Clasificación Internacional A01K 67/033 Nº de solicitud 16823313 Solicitante Daniel Michael Leo Inventor/a Daniel Michael Leo

The present disclosure relates to the field of commercial scale production and processing of pharmaceutical liquid or solid compositions derived from insects, wherein the compositions include a purified recombinant protein, vaccine, antibody, peptide, or chemical, and where the virus includes a recombinant baculovirus. Systems and methods to produce the insects and a purified insect-derived recombinant protein, vaccine, antibody, peptide, insecticide, fungicide, or chemical within a bioreactor are also described.

10.201827030832PEPTIDE AGONISTS AND ANTAGONISTS OF TLR4 ACTIVATION
IN - 24.07.2020
Clasificación Internacional A61K 38/00 Nº de solicitud 201827030832 Solicitante PEPTICOM LTD Inventor/a MICHAELI, Amit
A group of peptides is provided which activate or inhibit toll-like receptor 4 (TLR4) and may be used to modulate inflammatory signaling and host defense pathways. The peptides were derived in silico and tested in vitro in cell cultures. These peptides may be used in the preparation of immunomodulatory compositions such as vaccine adjuvants and in pharmaceutical compositions for immunomodulation of the innate immune system such as vaccine adjuvants. The peptides may also be used in the preparation of TLR4 activators TLR4 inhibitors and MD2 labels e.g. for research purposes.

11.20200230220NEOANTIGEN VACCINE COMPOSITION FOR TREATMENT OF CANCER
US - 23.07.2020
Clasificación Internacional A61K 39/00 Nº de solicitud 16626750 Solicitante NOUSCOM AG Inventor/a Alfredo NICOSIA

The present invention provides a polypeptide comprising at least four different tumor-specific neo-antigens fused to, at least one T cell enhancer amino acid sequence, a nucleic acid sequence encoding such polypeptide, a vector comprising such nucleic acid sequence and a collection of vectors comprising such vectors. Further provided are compositions of matter comprising in admixture or separately a vaccine comprising the polypeptide, the nucleic acid sequence the vector or the collection of vectors of the invention and at least one modulator of a checkpoint molecule or another type of immunomodulator for use in treating cancer.

12.WO/2020/150149CD200AR LIGANDS FOR CANCER IMMUNOTHERAPY
WO - 23.07.2020
Clasificación Internacional A61K 38/17 Nº de solicitud PCT/US2020/013349 Solicitante REGENTS OF THE UNIVERSITY OF MINNESOTA Inventor/a OLIN, Michael
The present invention in certain embodiments provides a method of inhibiting PD-1 in a cell by administering a CD200 activation receptor ligand (CD200AR-L) to the cell. The present invention in certain embodiments provides a method of enhancing efficacy of a tumor lysate vaccine in a mammal comprising administering a CD200 activation receptor ligand (CD200AR-L) to the mammal prior to the administration of the tumor lysate vaccine.

13.201841027286MULTIVALENT PNEUMOCOCCAL CONJUGATE VACCINE COMPOSITIONS
IN - 24.07.2020
Clasificación Internacional A61K 1/00 Nº de solicitud 201841027286 Solicitante Biological E Limited Inventor/a Rajendar Burki
The present invention relates to multivalent pneumococcal polysaccharide-protein conjugates vaccine composition comprising pneumococcal capsular polysaccharide of one or more Streptococcus pneumoniae serotypes conjugated to one or more carrier proteins.

14.202047023672MICRONEEDLE SYSTEM FOR THE APPLICATION OF A HEPATITIS VACCINE
IN - 24.07.2020
Clasificación Internacional A61K 39/29 Nº de solicitud 202047023672 Solicitante LTS LOHMANN THERAPIE-SYSTEME AG Inventor/a HENNING, Andreas
The present invention relates to a microneedle system (MNS for short) for the intradermal application of a hepatitis vaccine, namely the antigen HBsAg.Figure 1

15.WO/2020/149615THREE-DIMENSIONAL EPITOPE OF HEPATITIS B SURFACE ANTIGEN AND ANTIBODY BINDING SPECIFICALLY THERETO
WO - 23.07.2020
Clasificación Internacional C07K 14/005 Nº de solicitud PCT/KR2020/000683 Solicitante GREEN CROSS CORPORATION Inventor/a KIM, Jung-Hwan

The present invention relates to a specific three-dimensional epitope of a hepatitis B surface antigen and a hepatitis B neutralizing antibody binding thereto. The epitope provided by the present invention has a specific three-dimensional structure. In addition, the three-dimensional epitope of the present application does not contain the 'a' determinant that may generate an escape mutation upon administration of conventional vaccines or HBIg. Thus, an antibody capable of binding to the three-dimensional epitope of the present application is highly unlikely to allow the emergence of a vaccine escape mutation, which is caused by conventional vaccines, and as such, can retain a sustained effect. Therefore, such an antibody or a vaccine composition can find effective applications in the prevention and treatment of HBV, having great economic value.

16.20200230164ACTIVATION OF iNKT CELLS
US - 23.07.2020
Clasificación Internacional A61K 31/7032 Nº de solicitud 16751638 Solicitante INSERM (INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE) Inventor/a Francois TROTTEIN

The present invention relates to particulate entity, such as a nanoparticle or conjugate, for use in particular as adjuvant in vaccine or immunotherapy. More specifically, the invention relates to a particulate entity comprising: iv. an iNKT cell agonist such as α Gal Car compound, and, v. one or more antigenic determinant(s) such as a tumour antigen(s) or pathogen-derived antigen(s), vi. a targeting agent that targets in vivo said iNKT cell agonist to dendritic cells, such as human BDCA3-dendritic cells.

17.3681534IMMUNOGENE ZUSAMMENSETZUNG FÜR HUMANES CYTOMEGALOVIRUS
EP - 22.07.2020
Clasificación Internacional A61K 39/245 Nº de solicitud 18765127 Solicitante SANOFI PASTEUR Inventor/a CHAUX PASCAL
The invention relates to an immunogenic composition comprising an HCMV gB antigen, an HCMV gH/gL/UL128/UL130/UL131 pentameric complex antigen and a Th1 -inducing adjuvant. If further relates to the immunogenic composition for use as an HCMV vaccine.

18.2020204594Target peptides for ovarian cancer therapy and diagnostics
AU - 23.07.2020
Clasificación Internacional A61K 39/395 Nº de solicitud 2020204594 Solicitante The Board of Regents of the University of Oklahoma Inventor/a
A set of target peptides are presented by HLA A*0201 on the surface of ovarian cancer cells. They are envisioned to among other things (a) stimulate an immune response to the proliferative disease, e.g., ovarian cancer, (b) function as immunotherapeutics in adoptive T-cell therapy or as a vaccine, (c) facilitate antibody recognition of tumor boundaries in surgical pathology samples, (d) act as biomarkers for early detection and/or diagnosis of the disease, and (e) act as targets in the generation antibody-like molecules which recognize the target-peptide/MHC complex.

19.20200230235ADJUVANT AND VACCINE COMPOSITIONS
US - 23.07.2020
Clasificación Internacional A61K 39/39 Nº de solicitud 16838879 Solicitante Advanced BioAdjuvants LLC Inventor/a Jay D. Gerber

Methods are provided for preparing and delivering an adjuvant for vaccines including lecithin, polymer and one or more additives. The polymer is preferably polyacrylic acid-based. The additive is preferably one or more of a glycoside and a sterol. The method of preparation includes hydrating lecithin and a polymer in saline or water and mixing the lecithin and polymer to form the adjuvant. Additives can be included prior to or after hydration of the lecithin and polymer.

20.20200230231TREATMENT OF INSECT BITE HYPERSENSITIVITY
US - 23.07.2020
Clasificación Internacional A61K 39/35 Nº de solicitud 16721847 Solicitante UNIVERSITÄT ZÜRICH Inventor/a Antonia FETTELSCHOSS

The present invention relates to compositions, immunogenic or vaccine compositions and pharmaceutical compositions for the prevention or treatment of insect bite hypersensitivity of equine mammals, preferably of horses. Furthermore, the invention provides methods for preventing or treating insect bite hypersensitivity of equine mammals, preferably of horses.

21.WO/2020/149892INACTIVATION OF AFRICAN SWINE FEVER VIRUS USING A FEED ADDITIVE
WO - 23.07.2020
Clasificación Internacional C07D 401/14 Nº de solicitud PCT/US2019/052704 Solicitante KEMIN INDUSTRIES, INC. Inventor/a NIEDERWERDER, Megan
African swine fever virus (ASFV) is a very large complex DNA virus that is rapidly spreading through the largest pork producing country in the world, China. ASFV causes high mortality in pigs and is currently a foreign animal disease to North America and most European countries. There is currently no effective vaccine and the virus is known to be transmitted through the oral route via consumption of contaminated feed. ASFV is capable of surviving in feed and feed ingredients subjected to varying environmental conditions simulating transoceanic shipment. The present invention relates to a feed additive that is effective at mitigating ASFV in cell culture and in feed and feed ingredients.

22.20200230224METHODS AND COMPOSITIONS FOR RECOMBINANT DENGUE VIRUSES FOR VACCINE AND DIAGNOSTIC DEVELOPMENT
US - 23.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud 16555912 Solicitante The University of North Carolina at Chapel Hill Inventor/a Ralph Baric

The present invention provides compositions and methods of use comprising a chimeric dengue virus E glycoprotein comprising a dengue virus E glycoprotein backbone, which comprises amino acid substitutions that introduce an epitope that is recognized by an antibody from a dengue virus serotype that is different from the dengue virus serotype of the dengue virus E glycoprotein backbone.

23.20200230227Recombinant Antigen Derived From Zika Virus E Protein And Use Thereof
US - 23.07.2020
Clasificación Internacional A61K 39/12 Nº de solicitud 16708797 Solicitante Korea Center For Disease Control And Prevention Inventor/a You-Jin Kim

The present invention relates to a recombinant antigen derived from Zika virus E protein and use thereof. Specifically, the present invention provides a polynucleotide encoding Zika virus E protein domain III alone or repeatedly three times, a recombinant plasmid vector comprising the polynucleotide, and a DNA vaccine composition that may induce an immune response to Zika virus by expressing a Zika virus antigen protein effectively. In addition, the present invention provides a neutralizing antibody against Zika virus obtained using the polynucleotide and a method for preparing the neutralizing antibody.

24.20200230222Peptides and combination of peptides for use in immunotherapy against pancreatic cancer and other cancers
US - 23.07.2020
Clasificación Internacional A61K 39/00 Nº de solicitud 16839412 Solicitante Immatics Biotechnologies GmbH Inventor/a Toni Weinschenk

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.

25.WO/2020/150411SERUM-FREE MEDIUM FOR AVIAN VACCINE PRODUCTION AND USES THEREOF
WO - 23.07.2020
Clasificación Internacional C12N 5/00 Nº de solicitud PCT/US2020/013776 Solicitante BOEHRINGER INGELHEIM ANIMAL HEALTH USA INC. Inventor/a HUGHES, William, Troy
The present disclosure relates to a method for the cultivation of primary cells. The primary cells are cultivated in a serum free medium supplemented with peptides and peptones derived from plant or vegetable sources.

The method for the cultivation of primary cells may be one step in a method for the amplification of viruses, such as poxviruses.

26.3682897ZUSAMMENSETZUNGEN MIT CHIMÄREN OSPA-MOLEKÜLEN UND VERFAHREN ZU IHRER VERWENDUNG
EP - 22.07.2020
Clasificación Internacional A61K 39/02 Nº de solicitud 19211162 Solicitante BAXALTA GMBH Inventor/a BARRETT NOEL P
The invention relates to the development of chimeric OspA molecules for use in a new Lyme vaccine. More specifically, the chimeric OspA molecules comprise the proximal portion from one OspA serotype, together with the distal portion from another OspA serotype, while retaining antigenic properties of both of the parent polypeptides. The chimeric OspA molecules are delivered alone or in combination to provide protection against a variety ofBorreliagenospecies. The invention also provides methods for administering the chimeric OspA molecules to a subject in the prevention and treatment of Lyme disease or borreliosis.

27.20200230056NANOSTRUCTURED LIPID CARRIERS AND STABLE EMULSIONS AND USES THEREOF
US - 23.07.2020
Clasificación Internacional A61K 9/127 Nº de solicitud 16622908 Solicitante Infectious Disease Research Institute Inventor/a Christopher B. FOX

Provided herein are nanostructured lipid carrier compositions, and methods of making and using thereof. The compositions comprise a nanostructured lipid carrier (NLC), where the NLC comprises an oil core comprising a mixture of a liquid phase lipid and a solid phase lipid, a cationic lipid, a sorbitan ester, and a hydrophilic surfactant, and optionally a bioactive agent. The bioactive agent can be associated with the NLC. The compositions are capable of delivery of a biomolecule to a cell for the generation of an immune response, for example, for vaccine, therapeutic, or diagnostic uses. Compositions and methods related to making the compositions and using the compositions for stimulating an immune response are also provided.

28.20200230208COMBINATION IMMUNOTHERAPY DOSING REGIMEN FOR IMMUNE CHECKPOINT BLOCKADE
US - 23.07.2020
Clasificación Internacional A61K 38/20 Nº de solicitud 16692892 Solicitante Massachusetts Institute of Technology Inventor/a Chensu WANG

The present disclosure provides a method of treating cancer with a priming dose of combination immunotherapy comprising IL-2 (e.g., extended-PK IL-2), an immune checkpoint inhibitor, a tumor targeting antibody or integrin-binding polypeptide, and optional cancer vaccine, administered prior to maintenance doses of immune checkpoint inhibitor therapy. The methods of the disclosure can be used to treat a broad range of cancer types.

29.WO/2020/149766METHOD OF COMBINED THERAPY OF HUMAN PAPILLOMAVIRUS-ASSOCIATED CERVICAL DYSPLASIA
WO - 23.07.2020
Clasificación Internacional A61K 9/02 Nº de solicitud PCT/RU2019/000769 Solicitante KISELEV, Vsevolod Ivanovich Inventor/a KISELEV, Vsevolod Ivanovich
The invention relates to the field of medicine, and specifically concerns therapy of human papillomavirus-induced cervical dysplasias. A novel effective regimen for treating cervical dysplasias has been developed that is based on the current understanding of HPV-induced carcinogenesis and comprises systemic immunotherapy and local drug action on human papillomavirus (HPV)-affected foci. A method of treating HPV-associated cervical dysplasias consists in locally treating a patient with the aid of a medicinal agent containing diindolylmethane, and prior to starting the local treatment, giving the patient a single administration of a vaccine against human papillomavirus. Vaginal suppositories are used as the medicinal agent containing diindolylmethane.

30.3355933ADENINKONJUGATFORBINDELSER OG DERES ANVENDELSE SOM VACCINEADJUVANSER
DK - 20.07.2020
Clasificación Internacional A61K 47/54 Nº de solicitud 16782095 Solicitante Sumitomo Dainippon Pharma Co., Ltd. Inventor/a BAN, Hitoshi
The present specification relates to adenine conjugate compounds represented by the formula (1), wherein A, L1, L2, X1, R1, R2, R3, and m are as defined herein, or their pharmaceutically acceptable salts. Compounds of formula (1) have immunostimulating properties and may therefore be useful in therapy, for example as vaccine adjuvants. The present specification also relates to a process for preparing adenine conjugate compounds and pharmaceutically acceptable salts thereof, and to pharmaceutical compositions comprising adenine conjugate compounds and their pharmaceutically acceptable salts.

31.2020204568Peptides And Combination Of Peptides Of Non-Canonical Origin For Use In Immunotherapy Against Different Types Of Cancer
AU - 23.07.2020
Clasificación Internacional C07K 7/06 Nº de solicitud 2020204568 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/20200718->20200724)

8 resultados.

	PAT. NO.	Title
1	10,716,849	Methods of administering novel integrin activator vaccine compositions
2	10,716,848	Process for preparing pneumococcal polysaccharide-protein conjugates
3	10,716,847	Haemophilus influenzae fusion protein and construction method and use thereof
4	10,716,844	Vaccination of immunocompromised subjects
5	10,716,843	Immune enhancing recombinant dengue protein
6	10,716,841	Capsular polysaccharide solubilisation and combination vaccines
7	10,716,840	Compositions and methods of enhancing immune responses to enteric pathogens
8	10,716,839	Compositions and methods for producing bacterial conjugate vaccines

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