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

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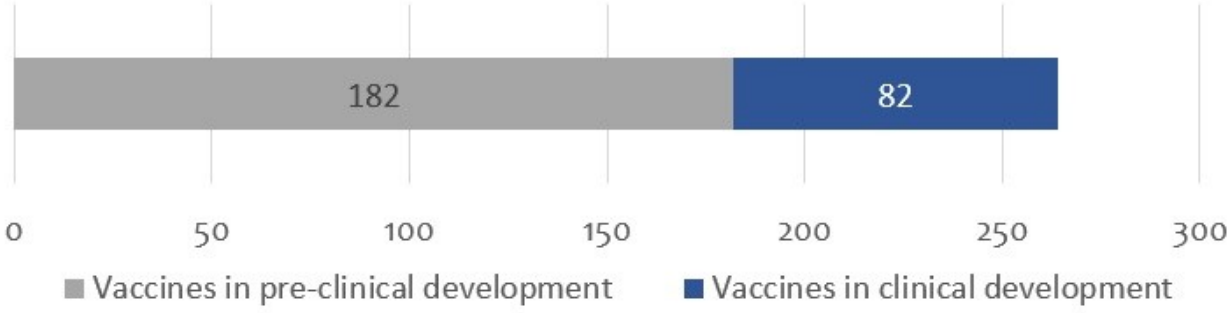
Resumen de la información publicada por la OMS sobre los candidatos vacunales contra la COVID-19 en desarrollo a nivel mundial

Última actualización por la OMS: 16 de marzo de 2021.

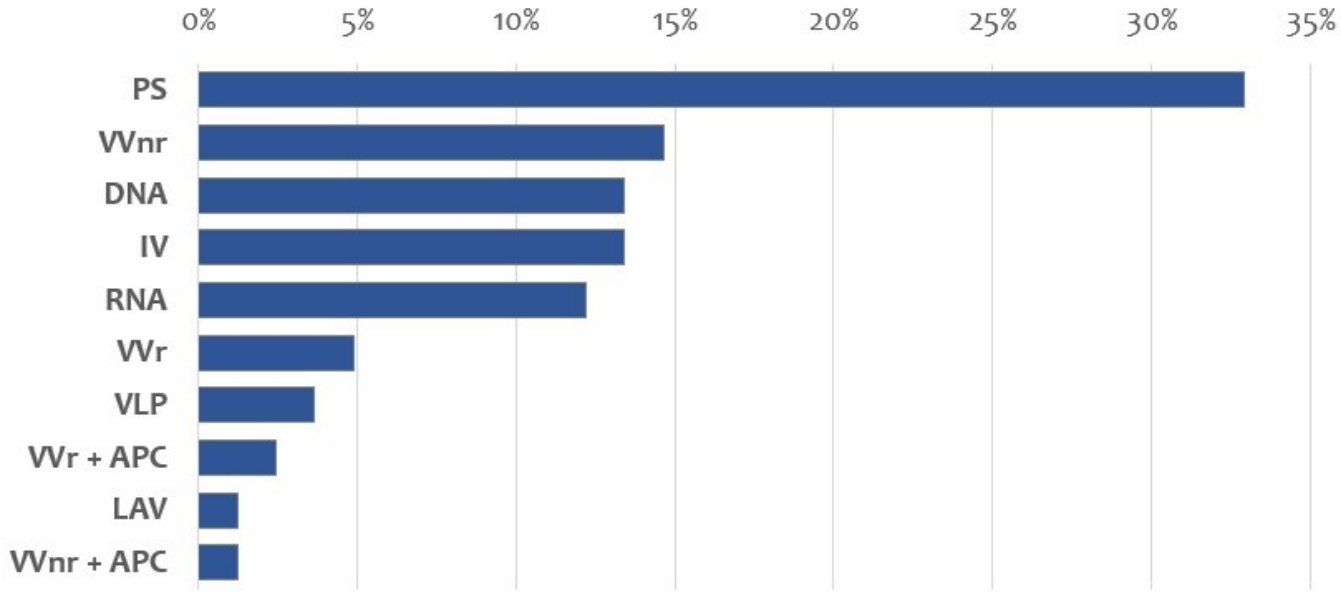
Fuente de información utilizada: World Health Organization | R&DBlueprint Powering research to prevent epidemics

82 candidatos vacunales en evaluación clínica y 182 en evaluación preclínica.



Candidatos vacunales en evaluación clínica por plataforma

Platform		Candidate vaccines (no. and %)	
PS	Protein subunit	27	33%
VVnr	Viral Vector (non-replicating)	12	15%
DNA	DNA	11	13%
IV	Inactivated Virus	11	13%
RNA	RNA	10	12%
VVr	Viral Vector (replicating)	4	5%
VLP	Virus Like Particle	3	4%
VVr + APC	VVr + Antigen Presenting Cell	2	2%
LAV	Live Attenuated Virus	1	1%
VVnr + APC	VVnr + Antigen Presenting Cell	1	1%
		82	



CUBA

Candidatos vacunales más avanzados a nivel global

Desarrollador de la vacuna/fabricante/país	Plataforma de la vacuna	Fase
Sinovac/China	Virus Inactivado	4
Wuhan Institute of Biological Products/Sinopharm/China	Virus Inactivado	3
Beijing Institute of Biological Products/Sinopharm/China	Virus Inactivado	3
University of Oxford/AstraZeneca/Reino Unido	Vector viral no replicativo	4
CanSino Biological Inc./Beijing Institute Biotechnology/China	Vector viral no replicativo	3
Gamaleya Research Institute/Rusia	Vector viral no replicativo	3
Janssen Pharmaceutical Companies/Estados Unidos	Vector viral no replicativo	3
Novavax/Estados Unidos	Subunidad proteica	3
Moderna/NIAID/Estados Unidos	ARN	4
BioNTech/Fosun Pharma/Pfizer/Estados Unidos	ARN	4
Anhui Zhifei Longcom Biopharmac./Inst. Microbiology, Chinese Academy Sciences	Subunidad proteica	3
CureVac AG/Alemania	ARN	3
Institute of Medical Biology/Chinese Academy of Medical Sciences	Virus inactivado	3
Research Institute for Biological Safety Problems, Republic of Kazakhstan	Virus inactivado	3
Zydus Cadila Healthcare Ltd./India	ADN	3
Bharat Biotech/India	Virus Inactivado	3
Sanofi Pasteur + GSK/Francia/Gran Bretaña	Subunidad proteica	3
Instituto Finlay de Vacunas/Cuba	Subunidad proteica	3
Federal Budgetary Research Institution State Research Center of Virology and Biotechnology "Vector"/Rusia	Subunidad proteica	3

Candidatos vacunales mucosales en evaluación clínica

Desarrollador de la vacuna/fabricante/país	Plataforma de la vacuna	Vía de adminsitración	Fase
Vaxart/Estados Unidos	Vector viral no replicativo	Oral	1
Univ. Hong Kong, Xiamen Univ./Beiging Wantai Biol. Pharm./China	Vector viral no replicativo	Oral	2
Symvivo/Canadá	Vector viral no replicativo	Oral	1
ImmunityBio, Inc./Estados Unidos	Vector viral no replicativo	Oral	1
Codagenix/Serum Institute of India	Virus vivo atenuado	Intranasal	1
Center for Genetic Engineering and Biotechnology (CIGB)/Cuba	Subunidad proteica	Intranasal	1/2
Altimmune, Inc./Estados Unidos	Vector viral no replicativo	Intranasal	1
Razi Vaccine and Serum Research Institute	Subunidad proteica	IM e IN	1
Bharat Biotech International Limited/India	Vector viral no replicativo	Intranasal	1

Cantidad de dosis propuestas para los candidatos vacunales en evaluación clínica

Number of doses & schedule	Candidate vaccines (no. and %)	
1 dose	**12**	**15%**
Day 0	12	
2 doses	**50**	**61%**
Day 0 + 14	6	
Day 0 + 21	18	
Day 0 + 28	26	
3 doses	**1**	**1%**
Day 0 + 28 + 56	1	
TBD / No Data (ND)	**19**	**23%**

Noticias en la Web

Cuba's Contributions in the Fight Against the COVID-19 Pandemic

11 mar. The COVID-19 pandemic has revealed the failure of most Western capitalist countries in their public health policies. Decades of neoliberal austerity, of cuts in health and education programs induced by restructuring programs by the IMF and the World Bank, are now showing their results in alarming numbers of contagion and deaths spreading throughout Latin America, Europe and the USA.

In the West, Cuba has set an example of efficiency and shown that another way is possible in the fight against the pandemic. The numbers speak for themselves; we only need to compare Cuba with other countries or even big cities with similar populations to get a very clear picture of the difference in results. With a population of about 11,350,000, Cuba has had – as of February 21 – 45,361 cumulative cases of COVID-19 with 300 deaths. The Greater New York City area, with a population of about 18,800,00, has a cumulative total of 700,815 cases with 28,888 deaths. Switzerland, with a smaller population than Cuba, about 8,600,000 people, has 550,224 cumulative cases of COVID-19 with 9,226 deaths. How to explain that a country that has far fewer resources than a city like New York or a country like Switzerland can be so much more efficient in its fight against the pandemic?

The answer is simple: the Cuban Revolution of 1959 focused the few resources available in the country on building a healthcare system that would serve the needs of the people first, and not the interests of the various sectors of privatized medicine, such as medical insurance plans, big pharmaceutical companies and the expensive 'high-tech' medicine of which the developed countries are so proud. After the Revolution, almost half of the Cuban doctors left the country, greatly limiting the new government's ability to meet the health needs of its population. The revolutionary government decision was to invest in the training of new health professionals – in people – and to expand access to medical care to the rural population and especially to black Cubans, who had hitherto been left out. In this way, Cuba was able to increase the number of nurses from 2,500 in 1958 to 4,300 a decade later.

Investment in People

Through its massive vaccination campaigns, Cuba eliminated polio in 1962, malaria in 1967, neonatal tetanus in 1972, diphtheria in 1979, congenital rubella syndrome in 1989, post-cause meningitis in 1993, rubella in 1995, and tuberculous meningitis in 1997. Today, Cuba's infant mortality rate is lower than that of the United States and less than half that of the black population in the United States. By 1983, just over two decades after the Revolution, life expectancy in Cuba had increased to 73.8 years, when in the previous period it had been only 58.8 years.

"They have discovered smart weapons. We have discovered something more important: people think and feel" Fidel Castro."

While many public health experts often attribute the chronic shortage of healthcare in Latin America to lack of resources, the Cuban Revolution has shown that when limited resources are distributed equitably and with an emphasis on people and prevention, public health outcomes previously unimaginable can be achieved. Neoliberalism, imposed by force in many Southern countries, and chosen by northern economic elites as the preferred policy in their own countries, led to a path opposite to the Cuban one. And the COVID-19 pandemic is showing very clearly which path was the right one.

In the rich countries of the north, neoliberal austerity has for decades caused successive reductions in health budgets, with cuts especially in the number of qualified personnel available. Cuba, by contrast, has invested in the training of an ever-increasing number of health professionals. When the pandemic arrived, it was clear that Cuba already had the necessary personnel and resource allocation capacity to face such a situation. In the wealthy countries of the north, by contrast, the lack of personnel and public infrastructure was compounded by an inability to take the right measures when these conflicted with established private interests. Consequently, for the first time, Cuba was asked to bring its aid to some rich and developed Northern countries, such as Italy. Cuban doctors and other health professionals also took their aid to Andorra and to France's ultra-marine Caribbean departments of Martinique and Guadeloupe. One cannot imagine a greater demonstration of the bankruptcy of the neoliberal model.

Internationalism

The Cuban Revolution, from its very beginning and despite all the material difficulties faced by the new government, did everything possible to help other countries. In 1963, only four years after the Revolution, still struggling with enormous internal problems, Cuba sent its first medical aid mission to Algeria, a nation devastated after decades of a bloody war of independence against France. In 1966, with the help of 200,000 doses of polio vaccine donated by the Soviet Union, Cuba and its medical personnel, in collaboration with the government of Congo, coordinated the vaccination of more than 61,000 children in what was the first mass vaccination campaign in Africa. To date, Cuba has sent some 124,000 health professionals to provide medical care in more than 154 countries.

Besides this impressive aid brought by its own medical personnel to various parts of the world, another important contribution of Cuba is the training of health professionals, mainly from poor countries, at its Escuela Latino Americana de Medicina (ELAM – Latin American School of Medicine). Founded in 1999, ELAM trains students according to the Cuban model of Medicina General Integral (MGI), focusing mainly on public health and primary care, with a holistic approach to understanding health, including disciplines such as biology, sociology, and politics. ELAM's foreign students have all expenses paid by the Cuban state, except for airfare. By 2020, ELAM had graduated 30,000 new doctors from over 100 countries, mainly from Africa but including from the poorest areas of the United States. Many of these students would have no chance of studying medicine in their home countries, and upon their return provide an invaluable and sometimes previously unavailable service to their fellow citizens, including, now, care related to the pandemic. According to ELAM, there are about 52,000 health professionals from Cuba working in 92 countries, which means that Cuba has more doctors working abroad than all the health professional contributions of the G-8 countries combined.

Owing to their commitment to the health of people, especially the poorest and most disadvantaged, and not to a privatized health system in which profit determines where and how to allocate resources, Cuban doctors are frequent targets of attacks from the far right in the countries where they work. In Brazil, following the coup d'état against elected president Dilma Rousseff and the illegal ascension to power of Jair

Bolsonaro, Cuban doctors had to leave the country. The same occurred in Bolivia after the coup against President Evo Morales and in Honduras after the coup against President Zelaya. In all these cases, it was the poor who suffered the most, for Cuban medical professionals were the only ones providing care previously unavailable to them. In 1979 Cuba sent a medical mission to Grenada, and by 1982 this country saw a 25% reduction in its infant mortality rate, thanks mainly to the work done by Cuban professionals. But the United States invaded Grenada in 1983, and the Cuban health workers were expelled.

Regarding the pandemic of COVID-19, however, the example that perhaps best reveals the disastrous consequences that the combined effect of sending away the Cuban doctors and imposed structural readjustments can cause in a country is the case of Ecuador. Following the election of President Lenin Moreno in 2017, the Cuban health professionals working in this country with the support of the previous President Rafael Correa had to leave, and the International Monetary Fund recommended a 36% cut in the health budget, a measure adopted by President Moreno. These two actions left the country with virtually no healthcare system, hence no defense in the face of the COVID-19 pandemic. As a result, the city of Guayaquil alone, Ecuador's largest, with about 2,700 million inhabitants, had an estimated 7,600 deaths due to the pandemic, a number more than 25 times higher than that of all of Cuba.

The medical brigades and ELAM have so far been Cuba's two greatest contributions in the fight against the COVID-19 pandemic. But another extremely important one is on the way: the Sovereign II vaccine, produced by the Finlay Vaccine Institute in Havana. Cuba hopes to immunize its entire population with its own vaccine later this year. Once again, Cuba's socialist approach to vaccine production differs radically from that adopted by the world's capitalist nations. The result of Cuba's international experience, accumulated through its many missions conducted in various parts of the world, the Cuban vaccine is a hope for the poor nations since, again, Cuba's international solidarity can be counted on. According to an article by W. T. Whitney, Jr:

"100 million doses of Sovereign II are being prepared, enough to immunize all 11 million Cubans, beginning in March or April. The 70 million remaining doses will go to Vietnam, Iran, Pakistan, India, Venezuela, Bolivia, and Nicaragua. Sovereign II 'will be the vaccine of ALBA' explained Venezuelan Vice President Delcy Rodríguez, referring to the solidarity alliance established in 2004 by Venezuelan President Hugo Chavez and Cuba's Fidel Castro."

The article's author added:

"Cuba's strategy in commercializing the vaccine represents a combination of what's good for humankind and the impact on world health. We are not a multinational where a financial objective comes first,' says Vicente Vérez Bencomo, director of Cuba's Finlay Vaccine Institute. Income generated by vaccine sales abroad will pay for healthcare, education, and pensions in Cuba, just as is the case with exports of medical services and medicines."

In contrast to the Cuban approach, the author further wrote:

"According to forbes.com in November 2020, 'If Moderna's [vaccine] can get FDA approval and can make enough doses, its top line could be nearly $35-billion higher … than … in the last 12 months.' Another report suggests that, 'The companies (Pfizer and Moderna) stand to earn billions of dollars in profits from their COVID vaccines this year [and] there will be more profits in later years.' The companies 'claim the rights to vast amounts of intellectual property'.

"With corporations in charge, distribution of Covid-19 vaccines is skewed. As of January 27, 'some 66.83 million doses have been sent out, of which 93 percent were supplied to only 15 countries.' In Latin America, only Brazil, Argentina, Mexico, and Chile have secured purchase contracts adequate for immunizing entire populations. The companies' contracts with African nations allow for immunization of

only 30 percent of Africans in 2021. Meaningful immunization has yet to begin there.

"The wealth divide determines distribution. Epidemiologists at Duke University report that, 'While high-income countries represent only 16% of the world's population, they currently hold 60% of the vaccines for COVID-19 that have been purchased so far.' Cuban journalist Randy Alonso reports that only '27 percent of the total population of low and middle-income countries can be vaccinated this year'."

Since its revolution, Cuba has been under uninterrupted attack by the Empire and its accomplices. Economic sanctions and blockades make its population suffer and harm considerably Cuba's capacity to keep doing the international work. Even so, this small nation, always so stubborn and generous continues to be a source of hope for the world. Above all, Cuba points the way forward, with great firmness, detachment, courage, and an inexhaustible joy.

Fuente: SP THE BULLET. Disponible en https://cutt.ly/fxSEx8D

European Commission authorises fourth safe and effective vaccine against COVID-19

11 mar. The European Commission has granted a conditional marketing authorisation (CMA) for the COVID-19 vaccine developed by Janssen Pharmaceutica NV, one of the Janssen Pharmaceutical Companies of Johnson & Johnson, and the fourth COVID-19 vaccine authorised in the EU.

This authorisation follows a positive scientific recommendation based on a thorough assessment of the safety, effectiveness and quality of the vaccine by the European Medicines Agency (EMA) and is endorsed by the Member States.

The President of the European Commission, Ursula von der Leyen, said: "The Janssen vaccine is the fourth authorised vaccine of the EU's portfolio and will help us enhance the vaccination campaign in the second quarter of 2021. It only requires a single dose, which takes us another step closer to achieving our collective goal of vaccinating 70% of the adult population by the end of summer."

Stella Kyriakides, Commissioner for Health and Food Safety, said: "Our portfolio now contains four safe and effective COVID-19 vaccines that we are working tirelessly to deliver to citizens in Europe and beyond as soon as possible. A single dose vaccine can make a difference in the speed of rollout. The entry on the market of the Janssen vaccine ensures that we have access to a total of up to 1.8 billion doses of approved vaccines from different technology platforms – this is key to ensuring access to vaccinations for Europe and our international partners. We will continue to work tirelessly to support vaccine producers and ensure they deliver doses, as agreed in our contracts."

The Janssen vaccine will be given in one dose to adults aged 18 years and older for preventing COVID-19. The vaccine is based on an adenovirus, a harmless virus which delivers the 'instructions' from the virus that causes COVID-19. This allows the body's own cells to make the protein unique to the COVID-19 virus. The person's immune system recognises that this unique protein should not be in the body and responds by producing natural defences against infection by COVID-19. The adenovirus in the vaccine cannot reproduce and does not cause disease.

On the basis of EMA's positive opinion, the Commission has verified all the elements supporting the marketing authorisation and consulted Member States before granting the conditional marketing authorisation.

Next steps

The Commission approved the contract with Janssen on 8 October 2020. With the conditional market authorisation, Janssen will be able

to deliver 200 million of their single dose COVID-19 vaccine to the EU starting in the second quarter of 2021. The contract allows Member States to purchase an additional 200 million doses. This will add to the total amount of 600 of the vaccine by BioNTech/Pfizer and the 460 million doses of the vaccine by Moderna, as well as the 400 million by AstraZeneca.

Background

A conditional marketing authorisation (CMA) is an authorisation of medicines on the basis of less complete data required for a normal marketing authorisation. Such a CMA may be considered if the benefit of a medicine's immediate availability to patients clearly outweighs the risk linked to the fact that not all the data are yet available. However, it also ensures that this COVID-19 vaccine meets the EU standards, as for all other vaccines and medicines.

Once a CMA has been granted, companies must provide within certain deadlines further data including from ongoing or new studies to confirm that the benefits continue to outweigh the risks. CMAs are foreseen in the EU legislation specifically for public health emergencies and is considered the most appropriate regulatory mechanism in this pandemic for granting access to all EU citizens and for underpinning mass vaccination campaigns.

Janssen submitted an application for a CMA for their vaccine to EMA on 16 February 2021. Such a short time for evaluation is only possible because EMA has already reviewed some data during a rolling review. During this phase, EMA assessed quality data and data from laboratory studies which looked at how well the vaccine triggers the production of antibodies and immune cells that target SARS-CoV-2 (the virus that causes COVID-19). The Agency also looked at clinical safety data on the viral vector used in the vaccine. This rolling review and the assessment of the CMA application allowed EMA to quickly conclude on the safety, effectiveness and quality of the vaccine. EMA recommended granting the conditional marketing authorisation as the benefits of the vaccine outweigh its risks.

The European Commission has verified whether all necessary elements – scientific justifications, product information, educational material to healthcare professionals, labelling, obligations to marketing authorisation holders, conditions for use, etc. - were clear and sound. The Commission also consulted the Member States, as they are responsible for the vaccines marketing and the use of the product in their countries. Following the Member States' endorsement and on the basis of its own analysis, the Commission decided to grant the conditional marketing authorisation.

Fuente: European Comission. Disponible en https://cutt.ly/rxSRRFx

Rusia empieza a probar la vacuna Sputnik V en enfermos de cáncer

14 mar. Rusia ha comenzado ya las pruebas clínicas de la vacuna contra la COVID-19, Sputnik V, en enfermos de cáncer, anunció Alexandr Gintsburg, director del Centro Gamaleya.

"De manera separada, ya han comenzado las investigaciones en enfermos oncológicos", dijo Gintsburg a la televisión pública rusa.

El científico subrayó que "en estos momentos no existe ninguna enfermedad oncológica que pudiera estar contraindicada contra esa vacuna".

"La única excepción son aquellos casos cuando el enfermo se encuentra bajo quimioterapia y toma fármacos que impiden la multiplicación de las células", matizó.

En dichos casos, precisó, "la vacuna no le hace nada malo, pero al mismo tiempo no se alcanza el efecto (deseado) de la vacunación".

Gintsburg también desaconsejó el empleo de Sputnik V en el caso de las personas que sufran complicaciones alérgicas graves.

El Centro Gamaleya colabora en el estudio de los efectos de la vacuna en los enfermos de cáncer con el principal oncólogo del Ministerio de Sanidad, Andréi Kaprin.

El científico destacó que Sputnik V ha demostrado "la misma efectividad" en todos los segmentos de edad, incluido los mayores de 60 años.

"Entre los 4-6 preparados (contra el coronavirus) que hay en el mundo (…), por lo que vemos, Sputnik V ocupa, por sus cualidades, el primer lugar", resaltó.

Además, consideró que aquellas personas que ya contrajeron el virus, pero tienen pocos anticuerpos, deberían vacunarse igual que los que nunca han resultado infectados.

"La duración de los efectos (inmunológicos) de esta vacuna serán muy prolongados. Esperamos que sean dos años o más", agregó.

Sputnik V, a la que Rusia ya ha sumado otras dos vacunas -EpiVacCorona y CoviVac-, ya ha sido registrada en 50 países con una población de más de 1.300 millones de personas.

La Agencia Europea de Medicamentos (EMA) inició la pasada semana el proceso de evaluación de Sputnik V, un paso que debería conducir a una licencia para su uso en territorio de la Unión Europea (UE).

El Fondo de Inversiones Directas Ruso ha firmado contratos con una decena de farmacéuticas de Brasil, China, Irán, Serbia o Corea del Sur para la producción en el exterior de unas 1.400 millones de dosis y, según la prensa, hay conversaciones en marcha con el mismo fin con países europeos.

Fuente: Hola News. Disponible en https://cutt.ly/VxSY2Cd

Vacuna contra la covid-19: cuáles son los efectos secundarios más comunes de las vacunas contra el coronavirus (y por qué es normal tenerlos)

15 mar. Experimentar algún efecto secundario leve tras vacunarse contra el coronavirus es normal y hasta puede ser un signo de que la vacuna está funcionando.

Tras la inmunización, es posible que aparezca algo de fiebre, malestar, dolor o cansancio. Cada individuo puede experimentar uno de estos síntomas, una combinación de los mismos o ninguno.

Pero estos efectos secundarios desaparecen generalmente a las pocas horas o días.

"La enfermedad es muchísimo peor que la inmensa mayoría de efectos secundarios de la vacuna. Las vacunas salvan vidas con un alto grado de protección", le dice a BBC Mundo el virólogo Julian Tang, de la Universidad de Leicester, en Reino Unido.

Los expertos recomiendan estar alerta tras recibir la vacuna ya que, en caso de producirse una reacción alérgica grave, esta ocurre a los pocos minutos y horas de la inoculación.

Esto último, sin embargo, está demostrando ser bastante poco probable.

De acuerdo a un estudio liderado por especialistas del Hospital General de Massachusetts, en Boston, Estados Unidos, la prevalencia de una reacción anafiláctica es de entre 2,5 y 11,1 casos por millón de dosis de la vacuna de Pfizer, por ejemplo.

Y la mayoría de esos casos se da en pacientes con historial de alergias.

Dicha estadística puede variar ligeramente según el tipo de población o de vacuna, pero da una medida de lo poco probable que es desarrollar una reacción alérgica.

¿Qué tan común es desarrollar efectos secundarios y por qué los expertos lo consideran algo normal que no debe preocupar?

Reacción natural del organismo

"Es difícil dar números concretos sobre qué tan probable será desarrollar un efecto secundario leve porque cada población o individuo responde de manera distinta", aclara Julian Tang.

En Reino Unido, uno de los países más avanzados en la campaña de vacunación, una de cada 10 personas experimenta algún efecto adverso leve.

Pero esto, insisten los expertos, es algo "completamente normal".

"La vacuna, al igual que un virus, no deja de ser un agente extraño que provoca que el organismo reaccione y produzca anticuerpos", explica a BBC Mundo la doctora Josefina López, quien participa en la campaña de vacunación en Madrid, España.

"Para protegerse, el cuerpo genera una respuesta inflamatoria. Y eso puede hacer subir la temperatura y que aparezcan dolores y malestares. Es un proceso normal que puede ocurrir con cualquier vacuna, no solo con las del coronavirus", agrega la especialista.

Para hacerse una idea, una respuesta inflamatoria también puede aparecer ante algo tan común como un golpe o herida.

"La inflamación es algo que el cuerpo también experimenta durante un impacto severo en la rodilla tras caerse. Entonces sientes dolor, enrojecimiento e hinchazón en la zona", le explica a BBC Mundo el profesor Wilbur Chen, de la Escuela de Medicina de la Universidad de Maryland, en Estados Unidos.

En ese sentido, es normal "esperar que haya posibles efectos adversos no solo a una vacuna, sino también a un medicamento o incluso alimento. Hay que pensar en estas reacciones como el indicio común de que la vacuna funciona. Cualquier síntoma se resolverá generalmente a los 2 o 3 días", señala Chen.

¿Cuándo pueden desarrollarse los efectos secundarios?

Llevamos pocos meses de vacunación y eso implica que los estudios se actualizan constantemente.

"Los efectos adversos en personas jóvenes pueden ser más notorios, lo cual no implica gravedad", dice López.

Esto es porque "habitualmente las personas mayores experimentan un deterioro de la respuesta inmune que es normal al envejecer", apunta Wilbur Chen.

En las vacunas que requieren dos dosis, como la de Pfizer, Moderna o Sputnik V, parece haber cierta inclinación a experimentar algún efecto secundario tras recibir la segunda dosis.

"La primera dosis genera una respuesta inmune media y la segunda la refuerza. Es por ello que la segunda genera una respuesta más robusta y se asocia más a experimentar algún efecto

secundario", explica a BBC Mundo el doctor Andrew Badley, de la Clínica Mayo, en Estados Unidos.

Tang también alerta que el tipo de síntomas puede ser magnificado por la percepción de los pacientes.

"Muchos pacientes, nerviosos o ansiosos por vacunarse, pueden experimentar algún dolor leve y luego reportarlo mayor de lo que es. La psique también influye", dice el experto.

¿Qué hacer entonces si se experimenta algún síntoma?

"En mi caso, cuando me vacuné con el compuesto AstraZeneca/Oxford, me dio un poco de fiebre y malestar y simplemente tomé paracetamol", revela Julian Tang.

Antiinflamatorios como el paracetamol o el ibuprofeno pueden ayudar a aliviar los efectos secundarios de las vacunas, aunque se recomienda consultar con un médico antes de tomarlos.

No es recomendable tomar estos medicamentos antes de vacunarse a modo preventivo.

Los Centros para el Control y Prevención de Enfermedades (CDC, por sus siglas en inglés) en EE.UU. aconsejan aplicar una toalla limpia y húmeda y mover y ejercitar el brazo vacunado para aliviar cualquier posible incomodad.

En el caso de tener algo de fiebre, ayuda beber mucho líquido y vestir ligero.

Fuente: BBC NEWS. Disponible en https://cutt.ly/7xSA22L

Comenzará ensayo clínico con fármaco CIGB2020 para fortalecer la inmunidad innata

17 mar. Un nuevo ensayo clínico determinará la evaluación del efecto y seguridad del tratamiento por vía nasal y sublingual con el fármaco CIGB2020, en personas que han sido contactos o sospechosos de infección por coronavirus SARS-COV-2, informó el Registro Público Cubano de Ensayos Clínicos.

Según el sitio web del Centro de Ingeniería Genética y Biotecnología (CIGB), el ensayo clínico controlado y aleatorizado, cuyo promotor principal es esa institución, ha sido aprobado por el Centro para el Control Estatal de Medicamentos, Equipos y Dispositivos Médicos (Cecmed).

Nombrado Inmunopotenciador, el CIGB2020 ha resultado efectivo en su aplicación a personas confirmadas con la COVID-19, limitando el progreso de la afección hasta estadios de mayor complejidad y gravedad.

Según el Registro Público Cubano de Ensayos Clínicos, el estudio se realizará en sujetos asintomáticos, mayores de 60 años, y evaluará el tiempo de la aparición de síntomas de infecciones por SARS-COV-2, enfermedades gripales u otros síndromes febriles, así como apreciará la naturaleza y duración de esas sintomatologías e identificará eventos adversos.

El ensayo será realizado con una muestra de 1 440 personas y

finalizará en agosto de 2021. Se espera que el tiempo medio de aparición de síntomas respiratorios con el uso del CIGB2020 supere al tiempo medio sin el uso de este en el grupo control.

Vicente Vérez Bencomo, director general del Instituto Finlay de Vacunas, explicó que el CIGB2020 es capaz de estimular la inmunidad de la persona a nivel local, donde se halla la puerta de entrada del virus al organismo.

De acuerdo con el doctor Eduardo Martínez Díaz, presidente del BioCubaFarma, el fármaco impide que el virus sobrepase el sistema inmune del organismo y, a la vez, logra un equilibrio en la inmunidad natural o innata, lo que contribuye a salvar vidas y otros notables beneficios en grupos de riesgo.

Cuba cuenta con cinco candidatos vacunales ANTI-COVID-19; además, BioCubaFarma ha trabajado en 16 proyectos con nuevos tratamientos y tecnologías médicas para prevenir y combatir la enfermedad, de los cuales 11 se encuentran en estudios clínicos o en ensayos de intervención en pacientes y grupos vulnerables.

Fuente: Cubadebate. Disponible en https://cutt.ly/4xGTUJT

OPS recomienda que se siga usando vacuna AstraZeneca

18 mar. La Organización Panamericana de la Salud pidió el miércoles a los países de las Américas que sigan incluyendo las vacunas AstraZeneca en sus planes de inmunización contra el coronavirus porque hasta ahora no está demostrado que provoque riesgos de coagulación en la sangre.

Recientemente varios países europeos como Alemania, Francia, Italia y España suspendieron el uso de ese fármaco por reportes de que algunas personas que la recibieron presentaron coágulos. Tanto la compañía como los reguladores europeos han expresado que por ahora no hay evidencias de que la vacuna sea la responsable.

Sylvain Aldighieri, gerente de Incidente para COVID-19 de la OPS, aseguró en conferencia de prensa virtual que ya se investigan los casos en Europa y dijo que "no anticipamos un impacto de este evento en la distribución por el mecanismo COVAX".

La OPS distribuirá más de 26 millones de vacunas en Latinoamérica y el Caribe a través del mecanismo, la mayoría de AstraZeneca. Según Aldighieri, esas dosis son producidas en Corea del Norte e India, mientras que los dos lotes que se aplicaron en Europa y reportaron problemas fueron fabricados en ese continente.

En la última semana, los contagios en las Américas se aceleraron en casi la mitad de los países de la región: cerca de 1,3 millones de personas se enfermaron y casi 31.000 murieron por COVID-19.

Aunque se han aplicado 138 millones de dosis en el continente, sólo 28 millones han llegado a Latinoamérica y el Caribe, dice la OPS.

En Latinoamérica la vacunación tiene lugar a través de dos vías. Por un lado está COVAX, que funciona como una canasta de vacunas a la que los suscriptores pueden

acceder a un mejor precio.

Fue creado por la Organización Mundial de la Salud y otras instituciones internacionales y distribuye sólo las vacunas que han sido aprobadas por la OMS, que son cuatro hasta el momento, incluyendo a las de AstraZeneca, y Pfizer. Diez países de la región, entre ellos El Salvador y Honduras, recibirán las dosis de COVAX gratis, al ser considerados de escasos recursos. Por otra parte, algunos países han sellado acuerdos bilaterales con laboratorios para asegurarse más vacunas.

La OPS dijo que espera que las primeras dosis de COVAX en la región terminen de llegar antes del 7 de abril. Por ahora solo un puñado de los países ha recibido vacunas AstraZeneca a través del mecanismo, entre ellos Guatemala y El Salvador, fabricadas en Corea del Sur. Otros dos países, Perú y Colombia, han recibido vacunas Pfizer por ser parte de un plan piloto de COVAX.

En los próximos días la OPS espera entregar cerca de 728.000 dosis en cinco países, aunque no detalló cuáles son. Hasta ahora ha efectuado pedidos para más de 3,4 millones de vacunas.

Aldighieri dijo que la red de vigilancia de vacunación que existe en la región "no ha reportado señales de alarma" con las dosis de AstraZeneca que ya se han aplicado en las Américas, y aseguró que "los beneficios de las vacunas superan sus riesgos".

El subdirector de la OPS, Jarbas Barbosa, también recomendó a los países que ya han implementado la primera dosis que prosigan sus planes. "Tenemos buena información de que los países pueden dar la segunda dosis", dijo. "La vacuna es muy efectiva después de la primera".

Después de los reportes en Europa, la Organización Mundial de la Salud y la Agencia Europea de Medicinas iniciaron investigaciones. Ambas instituciones habían aprobado el uso de emergencia de la vacuna de AstraZeneca.

Entre los países que han firmado acuerdos bilaterales para recibir ese fármaco están Argentina, Bolivia, Brasil, Colombia, Chile, Ecuador, El Salvador, México y Panamá. En la gran mayoría de los casos las vacunas aún no han llegado.

Aunque Venezuela nunca tuvo un acuerdo bilateral, el gobierno del presidente Nicolás Maduro descartó autorizar el uso de la vacuna de AstraZeneca. Por su parte, Panamá dijo que está evaluando los reportes sobre la vacuna y otros países como Ecuador y Bolivia no se han pronunciado.

Fuente: Washington Hispanic. Disponible en https://cutt.ly/KxG6eAv

México decomisa 5,700 dosis falsas de la vacuna Sputnik V

18 mar. México decomisó más de 5.700 dosis de la vacuna rusa Sputnik V en una aeronave privada que estaba en el aeropuerto de Campeche, en el sureste del país, y que se dirigía a Honduras. Las autoridades rusas aseguraron el jueves que se trata de un fármaco falso.

La Administración General de Aduanas y el ejército mexicano detectaron el miércoles por la noche 1.155 frascos (el equivalente a 5.775 dosis) de la supuesta vacuna rusa entre refrescos y golosinas en una hielera que estaba en un avión privado que se disponía a trasladarse a la ciudad hondureña de San Pedro Sula, indicó Aduanas en un comunicado.

Las autoridades mexicanas creyeron que las vacunas eran reales y las resguardaron convenientemente.

Sin embargo, la entidad pública rusa encargada del manejo de la Sputnik V en el extranjero, el Fondo Ruso de Inversión Directa, indicó el jueves en un comunicado que se trata de "un lote de falsas vacunas" contra el coronavirus.

"El análisis de las fotografías del lote incautado, incluido el diseño de los contenedores y sus etiquetas, sugiere que se trata de una sustancia falsa que nada tiene que ver con la vacuna original",

Comparación de la vacuna original y la falsa:

Un lote de vacunas falsas Sputnik V fue confiscado en México. Vea esta comparación del Sputnik V genuino con una versión falsa. (TWITTER / @sputnikvaccine)

señalaron las autoridades rusas. "El proceso de envío también fue una violación de los protocolos de embalaje y transporte de la vacuna oficial Sputnik V".

Rusia recordó que su fármaco sólo se distribuye "a través de los canales oficiales y se administra solamente a través de los programas oficiales de vacunación" y explicó que cada lote tiene un código QR que permite su rastreo.

A juicio de las autoridades rusas, este caso es un ejemplo de los ataques en su contra. "El gobierno de México detuvo y evitó esta provocación posiblemente dirigida a desacreditar la vacuna Sputnik ", agregó la nota en la que Rusia felicitó a los funcionarios mexicanos por su actuación y se comprometió a cooperar en la investigación de los hechos.

La tripulación y los pasajeros de la aeronave fueron puestos a disposición de la fiscalía federal mexicana. El comunicado no detalló cuántas personas eran.

Fuente: Chicago Tribune. Disponible en https://cutt.ly/bxHw0bl

Denuncian en Cuba campaña contra vacuna para Covid-19

17 mar. Medios de prensa de Cuba denunciaron hoy una nueva campaña lanzada desde la ciudad estadounidense de Miami, esta vez para desacreditar a la vacuna Soberana 02 contra la COVID-19.

De acuerdo con la televisión nacional, el youtuber Alexander Otaola afirmó la pasada semana que ese candidato vacunal cubano, en fase III de ensayo clínico, estaría causando reacciones negativas en niños a quienes, supuestamente, se les aplicó.

El reporte televisivo recordó que en Cuba no se vacunó a menores de edad en ninguna de las tres fases de ensayos clínicos de la Soberana 02, ni en ninguna de las fases por las que ya pasaron los otros

candidatos, pues no han sido aprobados para edades pediátricas.

Sobre el tema, Dagmar García, directora de investigaciones del Instituto Finlay de Vacunas, afirmó a ese espacio que para la inmunización a personas de edades pediátricas es imprescindible demostrar primero la seguridad e inmunogenicidad del medicamento en adultos.

Explicó García que se diseña el ensayo clínico en población pediátrica, que será sometido a evaluación de la entidad regulatoria nacional en las próximas semanas.

Detalló, asimismo, que ese ensayo se realizará en niños de cinco a 18 años de edad divididos en dos grupos etarios, primero los de 12 a 18, aunque la fecha de implementación dependerá de la revisión y aprobación del protocolo de investigación clínica.

La científica aseguró que no será preciso esperar a concluir la Fase III de Soberana 02 para iniciar procedimientos similares con las dosis previstas para los menores de edad, una vez comprobada la seguridad e inmunogenicidad del medicamento.

"...en Cuba no se vacunó a menores de edad en ninguna de las tres fases de ensayos clínicos de la Soberana 02, ni en ninguna de las fases por las que ya pasaron los otros candidatos, pues no han sido aprobados para edades pediátricas. "

Fuente: Prensa Latina. Disponible en https://cutt.ly/8xHjMat

Panel BioMérieux BIOFIRE Respiratory 2.1 (RP2.1) con SARS-CoV-2, se convierte en la primera prueba diagnóstica para la COVID-19 en obtener la autorización De Novo de la FDA

20 mar. BioMérieux (Marcy-l'Étoile, Francia) recibió la autorización De Novo de la Administración de Alimentos y Medicamentos de EUA (FDA), para el panel BIOFIRE RP2.1, lo que lo convierte en la primera prueba de diagnóstico para el SARS-CoV-2 de cualquier tipo a la que se le otorga estado De Novo por la FDA de EUA.

El panel permite la detección de 22 patógenos virales y bacterianos responsables de infecciones respiratorias, incluido el SARS-CoV-2 (la causa de la enfermedad COVID -19). La FDA de EUA le otorgó al panel el estatus De Novo después de haber pasado por la vía de revisión normal de la FDA de EUA por fuera de la vía de Autorización de Uso en Emergencias (AUE). La autorización De Novo será simultánea a la revocatoria de la AUE de la FDA de EUA que se obtuvo el 1 de mayo de 2020 para el panel. Los kits BIOFIRE RP2.1 Panel AUE y De Novo, son idénticos con la excepción de cambios en el etiquetado.

El panel BIOFIRE RP2.1 permite a

los proveedores de atención médica identificar rápidamente los patógenos respiratorios comunes que se encuentran en pacientes que presentan una infección aguda del tracto respiratorio, utilizando una prueba simple. El panel BIOFIRE RP2.1 produce resultados en aproximadamente 45 minutos utilizando muestras de hisopado nasofaríngeo (NPS) en medio de transporte o solución salina.

Se ejecuta en los sistemas BIOFIRE FILMARRAY 2.0 y BIOFIRE Torch, totalmente automatizados, requiriendo solo dos minutos de tiempo para la preparación de la muestra.

La solicitud De Novo fue respaldada por un estudio clínico prospectivo multicéntrico en el que se evaluó el desempeño del ensayo BIOFIRE RP2.1 Panel SARS-CoV-2, en más de 500 muestras frente a una referencia combinada de tres ensayos moleculares independientes de SARS-CoV-2, cada uno con la designación AUE de la FDA de EUA. El ensayo BIOFIRE RP2.1 Panel SARS-CoV-2 demostró un porcentaje de concordancia positivo (PPA) del 98,4% y un porcentaje de concordancia negativo (NPA) del 98,9%.

"La autorización De Novo del Panel BIOFIRE RP2.1 demuestra cómo BioFire se dedica a responder a una pandemia global en rápida evolución con urgencia y exactitud. Esta es la primera prueba COVID-19 autorizada De Novo por la FDA de EUA", dijo Pierre Boulud, director de operaciones clínicas de bioMérieux.

Fuente: LabMedica. Disponible en https://cutt.ly/CxHYA0p

Cuba probará la eficacia de la vacuna Soberana 02 en un nuevo estudio

21 mar. Cuba probará el próximo lunes la eficacia de la vacuna Soberana 02, uno de sus cinco candidatos anticovid, en un estudio de intervención con 150.000 voluntarios de La Habana, anunció este sábado el grupo empresarial biofarmacéutico del país, BioCubaFarma.

El ensayo, aprobado hoy por el Centro Estatal para el Control de Medicamentos y Dispositivos Médicos, evaluará los efectos directos e indirectos de la vacunación en los "cohortes poblacionales" de riesgo de infección, enfermedad y dispersión de la epidemia.

Este término denomina al grupo de personas que comparten una exposición a la enfermedad y se observan durante un tiempo, precisó BioCubaFarma en su cuenta en Twitter.

Los participantes pertenecen al grupo de riesgo de los trabajadores de la salud, del sector farmacéutico y biotecnológico de la capital cubana y otros sectores definidos por el Ministerio de Salud Pública.

La investigación se realizará simultáneamente a la tercera y última fase de ensayos clínicos de "Soberana 02", desarrollada por el Instituto Finlay de Vacunas (IFV), que comenzó a principios de marzo en la capital cubana con 44.000 personas.

El otro candidato vacunal que el lunes estrena la última fase de ensayos clínicos también es

"Abdala", pero en las provincias orientales de Santiago de Cuba, Guantánamo y Granma.

El Centro de Ingeniería Génetica y Biotecnología (Cigb) es el encargado de producir este proyecto de inmunización.

Cuba atraviesa desde enero una tercera ola de contagios con 10 de sus 15 provincias y el municipio especial Isla de la Juventud en fase epidémica y un promedio diario de entre 700 y 900 contagios.

Fuente: HOLA NEWS. Disponible en https://cutt.ly/nxHOmDi

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374 records.

1.20210077616VARICELLA ZOSTER VIRUS VACCINE
US - 18.03.2021
Int.Class A61K 39/25 Appl.No 17104024 Applicant MOGAM INSTITUTE FOR BIOMEDICAL RESEARCH
Inventor Hyo Jung NAM

The present invention relates to a vaccine composition for prevention or treatment of chicken pox or herpes zoster, the vaccine composition comprising a surface protein (gE) of Varicella Zoster Virus and especially an aluminum salt as an adjuvant. The vaccine composition according to the present invention employs a protein antigen, thus showing greater outstanding stability than a live vaccine and has an optimized mixture ratio of adjuvants to elicit effective antibody induction, thereby being useful as a vaccine for preventing or treating Varicella Zoster Virus-caused chicken pox or herpes zoster.

2.20210069319VACCINE MOLECULES
US - 11.03.2021
Int.Class A61K 39/145 Appl.No 16645135 Applicant University of Oslo Inventor Gunnveig Grødeland

Provided herein is technology relating to vaccines and particularly, but not exclusively, to compositions, methods, and uses of a mixture of immunogenic vaccine molecules comprising components for targeting the dimeric vaccine molecules to antigen-presenting cells and components for eliciting an immunogenic response, wherein the components for eliciting an immunogenic response preferably comprise at least three variants of an immunogenic protein, such as variants of immunogenic proteins obtained from three or more different strains of a pathogenic organism.

3.WO/2021/048338COMBINATION VACCINE FOR INTRADERMAL ADMINISTRATION
WO - 18.03.2021
Int.Class A61K 39/02 Appl.No PCT/EP2020/075454 Applicant INTERVET INTERNATIONAL B.V.
Inventor JANSEN, Theodorus
The present invention relates to the field of veterinary vaccinology, namely to combination vaccines for swine. In particular the invention relates to a combination vaccine for protection against a pathogenic infection with porcine circo virus type 2 (PCV2) and Mycoplasma hyopneumoniae (Mhyo) comprising non-replicating immunogen of PCV2 and non-replicating immunogen of Mhyo. The vaccine is characterized in that it is an oil-in-water emulsion comprising squalane, vitamin E-acetate and silica. In another embodiment, the invention relates to a combination vaccine for protection against a pathogenic infection with PCV2 and Mhyo by intradermal administration.

4.20210069318VLP Stabilized Vaccine Compositions
US - 11.03.2021
Int.Class A61K 39/12 Appl.No 16988659 Applicant Inventprise, LLC Inventor Subhash V. Kapre

The invention is directed to compositions and methods for the stabilization of viral and bacterial vaccines. Vaccines of the invention are contained in VLPs with stabilizing agents such as, for example, sugar alcohols (e.g., sorbitol) and degraded gelatins. Preferably the gelatin has an average molecular weight of 10,000 kilodaltons or less. These vaccines have a substantially improved thermostability as well as long term stability. The invention is also directed to the manufacture of a vaccine or the invention and methods for the administration of a vaccine of the invention to patients.

5.20210077610A VACCINE TO PROTECT A PIG AGAINST ACTINOBACILLUS PLEUROPNEUMONIAE
US - 18.03.2021
Int.Class A61K 39/102 Appl.No 16954055 Applicant Intervet Inc. Inventor Maarten Hendrik Witvliet

The present invention pertains to a vaccine to protect a pig against an infection with *Actinobacillus pleuropneumoniae*, the vaccine comprising an RTX toxin of *Actinobacillus pleuropneumoniae* recombinantly expressed by a baculovirus, and a pharmaceutically acceptable carrier.

6.20210070818VACCINE COMPOSITIONS AND METHODS OF MAKING SAME
US - 11.03.2021
Int.Class C07K 14/435 Appl.No 16771800 Applicant TNG Pharmaceuticals, Inc. Inventor Kent R. Van Kampen

Disclosed herein are fusion proteins comprising a truncated thrombostasin protein having at least 85% sequence homology to a thrombostasin protein, wherein the thrombostasin protein has a carboxy terminal deletion; and a fusion partner protein that is a non-thrombostasin protein. Further disclosed are vaccine compositions thrombostasin proteins having a comprising a carboxy terminal deletion, and methods for inhibiting a response to a thrombostasin protein in a host in need thereof, comprising the disclosed fusion proteins or vaccine compositions. Further disclosed are methods for the preparation of a fusion protein composition.

7.WO/2021/046186VACCINE FOR TREATMENT OF CANCER AND METHOD OF MAKING BY STRESS REPROGRAMMING
WO - 11.03.2021
Int.Class A61K 39/00 Appl.No PCT/US2020/049151 Applicant VCELL THERAPEUTICS, INC. Inventor VACANTI, Charles A.
A method has been developed to enhance the efficacy of cancer vaccines by activating the immune system against a greater variety of antigens expressed in the tumor cells. In this modification, the vaccine is created against not only the more mature cancer cells, but also cancer stem cells (CSCs), that act as tumor propagating cells, and can also be made against as the more mature progeny of the CSCs that are normally present within the malignant tumors in numbers which are too low to effectively manufacture a vaccine against their antigens, but which are responsible for recurrence of the malignant tumor. These include pluripotent and stem cells induced from cells in a tumor biopsy by exposure to stress inducing agents that cause the cells to almost die, thereby causing cells to de-differentiate. The method greatly increases the variety of the tumor antigens at which the vaccine is targeted.

8.20210069311METHOD OF PRODUCING IMMUNOTHERAPY VACCINE
US - 11.03.2021
Int.Class A61K 39/00 Appl.No 17011542 Applicant CyTIX Inc. Inventor Sadatoshi SAKUMA

A method of producing an immunotherapy vaccine is provided. The method includes performing a heat treatment to exosomes separated from cancer cells or body fluids including blood of a cancer patient to promote inactivation of proteolytic enzymes in the exosomes, and introducing or co-culturing the exosomes in dendritic cells derived from blood of the cancer patient or a healthy person to make antigen-presenting cells.

9.20210069323VACCINE COMPOSITION CONTAINING SYNTHETIC ADJUVANT
US - 11.03.2021
Int.Class A61K 39/39 Appl.No 16855622 Applicant Infectious Disease Research Institute Inventor Steven G. Reed

Compositions and methods, including vaccines and pharmaceutical compositions for inducing or enhancing an immune response are disclosed based on the discovery of useful immunological adjuvant properties in a synthetic, glucopyranosyl lipid adjuvant (GLA) that is provided in substantially homogeneous form. Chemically defined, synthetic GLA offers a consistent vaccine component from lot to lot without the fluctuations in contaminants or activity that compromise natural-product adjuvants. Also provided are vaccines and pharmaceutical compositions that include GLA and one or more of an antigen, a Toll-like receptor (TLR) agonist, a co-adjuvant and a carrier such as a pharmaceutical carrier.

10.20210077395HYDROPHILIC FILTRATION DURING MANUFACTURE OF VACCINE ADJUVANTS
US - 18.03.2021
Int.Class A61K 9/107 Appl.No 17015550 Applicant NOVARTIS AG Inventor Gottfried Kraus

An improved method for the manufacture of an oil-in-water emulsion involves three procedures: (i) preparation of a preliminary emulsion; (ii) micro fluidization of the preliminary emulsion to reduce its droplet size; and (iii) filtration of the microfluidized emulsion through a hydrophilic membrane. The emulsions are useful as vaccine adjuvants.

11.2021201168Optimized polypeptide for a subunit vaccine against avian reovirus
AU - 11.03.2021
Int.Class Appl.No 2021201168 Applicant Gavish-Galilee Bio Applications, Ltd Inventor
An isolated polypeptide comprising an amino acid sequence corresponding to the amino acid residues forming a full or partial a-helical domain, the hinge domain, the p-triple spiral domain and a full or partial globular head domain of an avian reovirus sigma C protein, and lacking the amino acid sequence that is N-terminal to said a-helical domain is provided. Furthermore, a vaccine comprising, or a viral vector expressing, at least one of the isolated polypeptides of the present invention is provided.

12.20210077615TRIMERIC S1-CD40L FUSION PROTEIN VACCINE AGAINST MIDDLE EAST RESPIRATORY SYNDROME-CORONAVIRUS
US - 18.03.2021
Int.Class A61K 39/215 Appl.No 17101603 Applicant King Abdulaziz University Inventor Anwar M. HASHEM

An immunogenic CD40-targeted trimeric MERS-CoV S1 fusion polypeptide as well as a corresponding polynucleotide encoding it and its use for safely inducing immune responses directed against MERS-CoV without inducing vaccine associated respiratory pathologies associated with non-targeted vaccines.

13.3792360MARBURG VIRUS VACCINE WITH HUMAN REPLICATION-DEFICIENT ADENOVIRUS AS VECTOR
EP - 17.03.2021
Int.Class C12N 15/40 Appl.No 18918057 Applicant ACAD OF MILITARY MEDICAL SCIENCE PLA Inventor CHEN WEI
The present invention relates to a nucleotide sequence as shown in SEQ ID NO: 1 for encoding a Marburg virus envelope glycoprotein, and to a human replication-deficient recombinant adenovirus capable of expressing the nucleotide sequence and a preparation method therefor, as well as an application thereof in the preparation of a vaccine against Marburg virus disease. The vaccine uses an E1 and E3 deleted replication-deficient human type-5 adenovirus as a vector, and HEK293 cells integrating an adenovirus E1 gene as a packaging cell line, and a protective antigen gene carried is a codon-optimized Marburg virus Angola strain envelope glycoprotein gene. After codon optimization of the envelope glycoprotein gene, significant expression of envelope glycoprotein can be detected in transfected cells.

14.20210077614TRIMERIC S1-CD40L FUSION PROTEIN VACCINE AGAINST MIDDLE EAST RESPIRATORY SYNDROME-CORONAVIRUS
US - 18.03.2021
Int.Class A61K 39/215 Appl.No 17101572 Applicant King Abdulaziz University Inventor Anwar M. HASHEM

An immunogenic CD40-targeted trimeric MERS-CoV S1 fusion polypeptide as well as a corresponding polynucleotide encoding it and its use for safely inducing immune responses directed against MERS-CoV without inducing vaccine associated respiratory pathologies associated with non-targeted vaccines.

15.20210069309VACCINES AGAINST AN ONCOGENIC ISOFORM OF ESR1 AND METHODS OF USING THE SAME
US - 11.03.2021
Int.Class A61K 39/00 Appl.No 16953211 Applicant Duke University Inventor Herbert K. Lyerly

Methods of reducing the likelihood of a cancer or precancer developing resistance to a cancer therapeutic or prevention agent are provided herein. The methods include administering the cancer therapeutic or prevention agent and a vaccine comprising a polynucleotide encoding a polypeptide whose expression or activation is correlated with development of resistance of the cancer or precancer to the cancer therapeutic or prevention agent to a subject. The vaccine may include a polynucleotide encoding an ESR1 polypeptide or a truncation, deletion or substitution mutant thereof. Methods of using the vaccine including the polynucleotide encoding the ESR1 polypeptide to treat a cancer or precancer are also provided.

16.20210077606VACCINES AGAINST AN ONCOGENIC ISOFORM OF HER2 (ErbB2) AND METHODS OF USING THE SAME
US - 18.03.2021
Int.Class A61K 39/00 Appl.No 16953221 Applicant Duke University Inventor Herbert K. Lyerly

Methods of reducing the likelihood of a cancer or precancer developing resistance to a cancer therapeutic or prevention agent are provided herein. The methods include administering a vaccine comprising a polynucleotide encoding a polypeptide whose expression or activation is correlated with development of resistance of the cancer or precancer to the cancer therapeutic or prevention agent to a subject. The vaccine may include a polynucleotide encoding a HER2 polypeptide or a truncation, deletion or

substitution mutant thereof. Methods of using the vaccine including the polynucleotide encoding the HER2 polypeptide to treat a cancer or precancer are also provided. The vaccines may be administered with a cancer therapeutic or prevention agent or a checkpoint inhibitor immunomodulatory agent.

17.WO/2021/045969HEPATITIS B VIRUS VACCINES
WO - 11.03.2021
Int.Class C07K 14/02 Appl.No PCT/US2020/048411 Applicant VIR BIOTECHNOLOGY, INC. Inventor BRUENING, Eric
The present disclosure relates to isolated polynucleotides and polypeptides, and related hepatitis B virus (HBV) vaccines. The present disclosure also relates to viral vectors for expressing such polypeptides, and which may be used in HBV vaccines, as well as methods of protecting a subject from HBV infection and methods of treating HBV in a subject comprising administering the polypeptides, vectors, or vaccines described herein. Methods of designing and producing an HBV vaccine comprising designing vaccine antigens to cover the diversity within a geographic area using an antigen amino acid sequence that efficiently covers the epitopes in the HBV genotypes present in the geographic area are also provided herein.

18.20210077602COMPOSITION AND THERAPEUTIC ANTI-TUMOUR VACCINE
US - 18.03.2021
Int.Class A61K 39/00 Appl.No 17000007 Applicant ERYTECH PHARMA Inventor Yann GODFRIN

The invention relates to a composition which induces, in a host, a cytotoxic cell response directed against cells expressing an antigen, in particular tumour cells, and which comprises red blood cells containing said antigen. These red blood cells may be in the form of an immune complex with an immunoglobulin, in particular IgG, which recognizes an epitope at the surface of the red blood cells, and/or be heat-treated or chemically treated so as to promote phagocytosis of said red blood cells by dendritic cells. As a variant, the red blood cells may be xenogenic red blood cells. The invention also relates to a therapeutic especially anti-tumour vaccine containing such a composition.

19.20210069312FRANCISELLA GLYCOCONJUGATE VACCINES
US - 11.03.2021
Int.Class A61K 39/02 Appl.No 17098809 Applicant London School of Hygiene and Tropical Medicine Inventor Brendan Wren

The disclosure relates to a glycoconjugate vaccine conferring protection against *Francisella tularensis* infections and a method to manufacture a glycoconjugate antigen.

20.WO/2021/042830RECOMBINANT HUMAN PAPILLOMA VIRUS VACCINE COMPOSITION AND USE THEREOF
WO - 11.03.2021
Int.Class A61K 39/295 Appl.No PCT/CN2020/098205 Applicant IMMUNE-PATH BIOTECHNOLOGY (SUZHOU) CO., LTD. Inventor ZHOU, Chenliang
Disclosed in the present invention are a recombinant human papilloma virus vaccine composition and a use thereof. Compared with other combinations of antigens and adjuvants, the new vaccine composition provided in the present invention has a more beneficial immune effect.

21.WO/2021/050701RECOMBINANT HERPESVIRUS OF TURKEY VECTORS EXPRESSING ANTIGENS OF AVIAN PATHOGENS AND USES THEREOF
WO - 18.03.2021
Int.Class C12N 7/00 Appl.No PCT/US2020/050164 Applicant ZOETIS SERVICES LLC Inventor RONG, Sing

The invention relates to recombinant viral vectors for the insertion and expression of foreign genes for use in safe immunizations to protect against a variety of pathogens. The invention also relates to multivalent compositions or vaccine comprising one or more recombinant rival vectors for protection against a variety of pathogens. The present invention relates to methods of making an using said recombinant viral vectors.

22.WO/2021/050864HUMAN CYTOMEGALOVIRUS VACCINE
WO - 18.03.2021
Int.Class A61K 31/7105 Appl.No PCT/US2020/050392 Applicant MODERNATX, INC. Inventor JOHN, Shinu
Aspects of the invention relate to methods for producing an antigen-specific immune response to human cytomegalovirus (hCMV) in a subject by administering mRNA vaccines comprising hCMV antigenic polypeptides gH, gL, UL128, UL130, UL131 A and gB formulated in lipid nanoparticles, wherein the antigen-specific immune response to hCMV results in neutralizing antibodies that have i) a geometric mean titer of at least 3-fold against epithelial cell infection or ii) a geometric mean ratio of 9-41 against epithelial cell infection or iii) a geometric mean ratio of 4-8-fold against fibroblast infection.

23.20210069310ENDOGENOUS TUMOR-DERIVED CIRCULAR RNA AND PROTEINS THEREOF FOR USE AS VACCINE
US - 11.03.2021
Int.Class A61K 39/00 Appl.No 16960280 Applicant Rolf Jonas Andreas NILSSON Inventor Rolf Jonas Andreas NILSSON

The present invention relates to an endogenous tumor-derived circular ribonucleic acid (circ RNA) as well as one or more proteins expressed from said tumor-derived circ RNA. The invention further relates said tumor-derived circ RNA and the protein(s) expressed thereof for use vaccines in the prophylaxis and/or treatment of cancer.

24.WO/2021/045073SEASONAL INFLUENZA VACCINE CAPABLE OF INDUCING VIRUS-SPECIFIC ANTIBODY INTO NASAL CAVITY
WO - 11.03.2021
Int.Class A61K 39/145 Appl.No PCT/JP2020/033175 Applicant DENKA COMPANY LIMITED Inventor MITSUMATA, Ryotaro
Provided is a seasonal influenza vaccine having higher efficacy compared with a split vaccine. A seasonal influenza vaccine which can induce a virus-specific antibody in a nasal cavity mucosa, contains a whole inactivated particle of an influenza virus as an active ingredient, and is intended to be administered subcutaneously at a single dose of 15 μgHA/strain or more in terms of an antigen dose.

25.20210077613RECOMBINANT MEASLES VACCINE EXPRESSING HTERT
US - 18.03.2021
Int.Class A61K 39/165 Appl.No 16611786 Applicant INVECTYS Inventor Pierre LANGLADE DEMOYEN

The invention relates a recombinant measles virus plasmid capable of expressing a human telomerase reverse transcriptase (hTERT) protein fused at N-terminus with a protein enhancing addressing of the hTERT protein to proteasome. The invention further relates to a vaccine comprising said plasmid or particles rescued therefrom, and uses thereof, especially in preventing or treating a tumor in a patient.

26.WO/2021/044436IMMUNOGENIC COMPOSITIONS AGAINST ENTERIC DISEASES AND METHODS FOR ITS PREPARATION THEREOF
WO - 11.03.2021
Int.Class A61K 39/112 Appl.No PCT/IN2020/050763 Applicant SERUM INSTITUTE OF INDIA PRIVATE LIMITED Inventor DHERE, Rajeev Mhalasakant
The present disclosure relates to novel immunogenic monovalent and multivalent polysaccharide-protein conjugate vaccine compositions comprising a polysaccharide selected from Salmonella serovar strains S. typhi; S. paratyphi A; S. typhimurium and S. enteritidis and alternative improved methods of polysaccharide fermentation, polysaccharide purification, polysaccharide-protein conjugation and stable formulation. The present disclosure further relates to methods for inducing an immune response in subjects against Salmonella typhi and non-typhi related diseases and/or for reducing or preventing Salmonella typhi and non-typhi related diseases in subjects using the compositions disclosed herein. The vaccine elicits bactericidal antibodies and is useful for prevention of gastroenteritis, enteric and typhoid fever.

27.20210077627METHOD OF TREATING CANCER
US - 18.03.2021
Int.Class A61K 47/14 Appl.No 17108099 Applicant Intensity Therapeutics, Inc. Inventor Lewis H. BENDER

The invention provides a method for treating cancer using a coadministration strategy that combines local codelivery of a therapeutic agent and an intracellular penetration enhancing agent, and optionally in further combination with local administration of an immunotherapeutic agent, such as a cancer vaccine or NKT agonist. The invention also provides a method for treating cancer using an intracellular penetration enhancing agent. The methods of the invention aim to substantially kill and/or destroy the target tumor cells, as well as those cancerous cells that have metastasized to other parts of the body.

28.2019311320New attenuated virus strain and use thereof as a vaccine
AU - 11.03.2021
Int.Class A61K 39/12 Appl.No 2019311320 Applicant Centre National de la Recherche Scientifique (CNRS) Inventor
The invention relates to an attenuated virus strain derived from a human *metapneumovirus* strain comprising the genome sequence represented by sequence SEQ ID No. 1, said attenuated strain comprising one or more genetic modifications of said sequence SEQ ID NO. 1 which attenuate the virulence of said strain.

29.WO/2021/043804IMMUNOTHERAPY TARGETING TUMOR NEOANTIGENIC PEPTIDES
WO - 11.03.2021
Int.Class A61K 39/00 Appl.No PCT/EP2020/074429 Applicant INSTITUT CURIE Inventor AMIGORENA, Sebastian
The present disclosure relates to a method for selecting a tumor neoantigenic peptide wherein said method comprises: - a step of identifying, among mRNA sequences from cancer cells of a subject, a fusion transcript sequence comprising a transposable element (TE) sequence and an exonic sequence, and including an open reading frame (ORF), and - a step of selecting a tumor neoantigenic peptide of at least 8 amino acids, encoded by a part of said ORF of the fusion transcript sequence, wherein said ORF overlaps the junction between the TE and the exonic sequence, is pure TE and/or is non-canonical, and wherein said tumor neoantigenic peptide binds to at least one Major Histocompatibility Complex (MHC) molecule of said subject. The present disclosure also relates to tumor neoantigenic peptide obtained

according to the present method, vaccine or immunogenic composition, antibodies and immune cells derived thereof and their use in therapy of cancer.

30.3790578GENETICALLY MODIFIED RECOMBINANT VACCINIA ANKARA (RMVA) VACCINES OF IMPROVED STABILITY AND METHODS OF PREPARATION THEREOF
EP - 17.03.2021
Int.Class A61K 39/12 Appl.No 19800357 Applicant HOPE CITY Inventor WUSSOW FELIX
A vaccine composition comprising an immunologically effective amount of recombinant modified vaccinia Ankara (rMVA) virus comprising IE1, IE2 and pp65 or antigenic fragments thereof, which is genetically stable after at least 10 passages. A method of improving the stability of such rMVA upon passage by including one or more of the modifications: (1) inserting one or more nucleic acid sequences encoding the CMV antigens or antigenic fragments thereof into one or more insertion sites including but not limited to 044L/045L, IGR3, G1L/I8R, and Del3 but not including Del2; (2) codon optimizing the nucleic acid sequences encoding the CMV antigens by removing consecutive cytosines or guanines; and (3) introducing one or more mutations in the amino acid sequences of the CMV antigens.

31.20210077623SYNTHETIC VACCINE
US - 18.03.2021
Int.Class A61K 39/395 Appl.No 16640317 Applicant MEDIZINISCHE HOCHSCHULE HANNOVER Inventor Thomas Wirth

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.

32.WO/2021/047698POLYPEPTIDES MIMICKING EPITOPE OF BROADLY NEUTRALIZING ANTIBODY VRC01 AS ANTIGENS FOR A VACCINE PREVENTING HIV-1 INFECTION
WO - 18.03.2021
Int.Class C07K 14/005 Appl.No PCT/CZ2020/050066 Applicant BIOTECHNOLOGICKY USTAV AVCR, V. V. I. Inventor MALY, Petr
The present invention provides a polypeptide mimicking epitope of glycoprotein gp120 of HIV-1 virus, which is recognized by a paratope of broadly neutralizing antibody VRC01, has the length up to 100 amino acid residues and contains an amino acid sequence: X1YKNX2INX3AX4X5VX6X7VKRX8IDX9ILAX10LP (SEQ ID NO. 1),, in which: X1 is selected from amino acids A, N, R; X2 is selected from amino acids A, R, D; X3 is selected from amino acids R, V, P; X4 is selected from amino acids V, L, S; X5 is selected from amino acids T, G, R; X6 is selected from amino acids G, T; X7 is selected from amino acids L, A; X8 is selected from amino acids V, I; X9 is selected from amino acids G, A, R; X10 is selected from amino acids R, A, G; with a directly attached alpha-helical structure at the N-terminus or C-terminus.

33.20210077605VEGFR-2 TARGETING DNA VACCINE FOR COMBINATION THERAPY
US - 18.03.2021
Int.Class A61K 39/00 Appl.No 17107203 Applicant VAXIMM AG Inventor Heinz Lubenau

The present invention relates to an attenuated strain of *Salmonella* comprising at least one copy of a DNA molecule comprising an expression cassette encoding a VEGF receptor protein, for use in the treatment of cancer, wherein the treatment further comprises the administration of at least one further anti-cancer agent. The present invention further relates to a pharmaceutical composition comprising an attenuated strain of *Salmonella* comprising at least one copy of a DNA molecule comprising an expression cassette encoding a VEGF receptor protein, wherein the pharmaceutical composition further comprises at least one further attenuated strain of *Salmonella* comprising at least one copy of a further DNA molecule comprising a further expression cassette encoding a tumor antigen or a tumor stroma antigen.

34.20210069324METHODS OF USING A VACCINE COMPOSITION CONTAINING SYNTHETIC ADJUVANT
US - 11.03.2021
Int.Class A61K 39/39 Appl.No 16855656 Applicant Infectious Disease Research Institute Inventor Steven G. Reed

Compositions and methods, including vaccines and pharmaceutical compositions for inducing or enhancing an immune response are disclosed based on the discovery of useful immunological adjuvant properties in a synthetic, glycopyranosyl lipid adjuvant (GLA) that is provided in substantially homogeneous form. Chemically defined, synthetic GLA offers a consistent vaccine component from lot to lot without the fluctuations in contaminants or activity that compromise natural-product adjuvants. Also provided are vaccines and pharmaceutical compositions that include GLA and one or more of an antigen, a Toll-like receptor (TLR) agonist, a co-adjuvant and a carrier such as a pharmaceutical carrier.

35.20210069316Ebola Virus and Marburg Virus Glycoprotein Mucin-Like Domain Replacement Expression System used as New Vaccine Approaches
US - 11.03.2021
Int.Class A61K 39/12 Appl.No 16772348 Applicant UNIVERSITY OF MANITOBA Inventor Xiaojian Yao

We have developed a series of Ebola vims envelope glycoprotein (EboGP)-based chimeric fusion proteins that are still able to maintain an efficient EboGP-mediated virus entry in various cell types including human antigen-presenting cells (APCs) while presenting large viral polypeptides, such as HIV Env v3-v5 domain (as large as 241 aa), at the apex and the sides of each EboGP monomer to elicit robust host immune responses. This invention demonstrates the feasibility of an EboGP-based chimeric fusion technology as a novel vaccine approach against different microbial pathogens, including that in human and animals, and against cancers.

36.3791891IDENTIFICATION OF IMMUNOGENIC MHC CLASS II PEPTIDES FOR IMMUNE-BASED THERAPY
EP - 17.03.2021
Int.Class A61K 39/00 Appl.No 20182703 Applicant CZERNIECKI BRIAN J Inventor CZERNIECKI BRIAN J
The invention provides compositions, methods, and vaccines that may stimulate the immune system and that may be used for treating malignancies associated with overexpression of the HER-3 protein. Such compositions include epitopes of the HER-3 protein.

37.WO/2021/051065TERT, WT-1, PMSA IMMUNOGENIC COMPOSITIONS AND METHODS OF TREATMENT USING THE SAME
WO - 18.03.2021
Int.Class A61K 31/7088 Appl.No PCT/US2020/050687 Applicant INOVIO PHARMACEUTICALS, INC. Inventor YAN, Jian
Disclosed herein are compositions and methods for treating cancer and in particular vaccines that treat and provide protection against tumor growth. The present invention is directed to an anti-cancer vaccine. The vaccine can comprise at least three cancer antigens. Preferably, the at least three cancer antigens include hTERT, WT-1, and PSMA.

38.2021201224PRRS virus variant, European PRRS virus cDNA clone, and uses thereof
AU - 11.03.2021
Int.Class Appl.No 2021201224 Applicant Boehringer Ingelheim Vetmedica GmbH Inventor
The present invention belongs to the field of animal health and provides means to study Porcine Reproductive and Respiratory Syndrome (PRRS), a viral disease affecting swine, and for the development of vaccines, therapeutics and diagnostics for the prophylaxis, treatment and diagnosis of PRRS. In a first consideration, the invention relates to a new PRRS virus variant, and, in a second consideration, to a nucleic acid sequence which comprises the genome of an infectious genotype I (EU) PRRS virus clone. Based on this, new PRRS vaccine candidates with improved properties are provided.

39.3792628METHODS FOR PREDICTING THE USEFULNESS OF NEOANTIGENS FOR IMMUNOTHERAPY
EP - 17.03.2021
Int.Class G01N 33/50 Appl.No 20193183 Applicant BIONTECH RNA PHARMACEUTICALS GMBH Inventor VORMEHR MATHIAS
The present invention relates to methods for predicting peptides or polypeptides such as T cell epitopes useful for immunotherapy such as for vaccination. In particular, the present invention relates to methods for predicting whether peptides or polypeptides such as tumor-associated antigens or epitopes, in particular tumor-associated neoantigens or neoepitopes, are immunogenic and, in particular, useful for immunotherapy such as for vaccination. The methods of the invention may be used, in particular, for the provision of vaccines which are specific for a patient's tumor and, thus, in the context of personalized cancer vaccines.

40.WO/2021/048159ASSAY
WO - 18.03.2021
Int.Class G01N 33/569 Appl.No PCT/EP2020/075128 Applicant GLAXOSMITHKLINE BIOLOGICALS SA Inventor CHAPLET, Michael
The present invention relates to in vitro assays, more particularly ELISA assays. Said ELISA assays comprise antibodies capable of binding Ubiquitous surface protein A2 (UspA2) from Moraxella catarrhalis. The present invention relates to assays for assessing the binding of antibodies to UspA2 and the relative potency of vaccine test samples comprising UspA2. In particular, the invention relates to in vitro relative potency assays used in the release of vaccine that comprises UspA2 to the public.

41.20210077608MULTIVALENT PNEUMOCOCCAL POLYSACCHARIDE-PROTEIN CONJUGATE COMPOSTION
US - 18.03.2021
Int.Class A61K 39/09 Appl.No 16966584 Applicant SANOFI PASTEUR INC. Inventor Kyungjun AN

Provided are mixed carrier, multivalent pneumococcal conjugate compositions comprising 21 different pneumococcal capsular polysaccharide-protein conjugates, wherein each of the conjugates includes a

capsular polysaccharide from a different serotype of *Streptococcus pneumoniae* conjugated to either tetanus toxoid (TT) or CRM_{197}, wherein the *Streptococcus pneumoniae* serotypes are selected from 1, 3, 4, 5, 6A, 6B, 7F, 8, 9N, 9V, 10A, 11 A, 12F, 14, 15B, 18C, 19A, 19F, 22F, 23F, and 33F, where the capsular polysaccharides of two of serotypes 1, 3, and 5 and one or both of serotypes 15B and 22F are conjugated to TT and the remaining capsular polysaccharides are conjugated to CRM_{197}. Also provided are methods of producing the mixed carrier, multivalent pneumococcal conjugate compositions and methods of using the same for prophylaxis against *Streptococcus pneumoniae* infection or disease in a subject.

42.WO/2021/046159CD8 BINDING AGENTS AND USES THEREOF
WO - 11.03.2021
Int.Class C07K 16/28 Appl.No PCT/US2020/049110 Applicant GENENTECH, INC. Inventor KOERBER, James Thomas
Provided are CD8 binding agents comprising a VHH domain that specifically binds human CD8. Also provided are nucleic acids encoding such CD8 binding agents, vectors comprising such nucleic acids, host cells comprising same, and methods of making such CD8 binding agents. Also provided are CD8 binding agents having the VHH domain conjugated to a detectable label. Provided are methods of using such CD8 binding agents to detect CD8+ T cells, monitor disease progress, and monitor treatment progress in a subject having cancer, autoimmune disease or condition, transplant rejection or graft-versus-host disease.

43.20210069313VACCINATION AGAINST DIABETES, OBESITY AND COMPLICATIONS THEREOF
US - 11.03.2021
Int.Class A61K 39/02 Appl.No 17084853 Applicant INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE (INSERM) Inventor Vincent BLASCO-BAQUE

Vaccines for preventing or treating diabetes, obesity and complications thereof are provided. The vaccines comprise at least one active agent such as attenuated *Porphyromonas gingivalis*, inactivated *Porphyromonas gingivalis*, a subunit of *Porphyromonas gingivalis*, a recombinant or isolated immunogenic polypeptide or peptide from *Porphyromonas gingivalis* or a cDNA from *Porphyromonas gingivalis.*

44.WO/2021/045632CANCER VACCINE
WO - 11.03.2021
Int.Class A61K 47/54 Appl.No PCT/NZ2020/050099 Applicant VICTORIA LINK LTD Inventor HERMANS, Ian Francis
The invention relates to a combination of a TLR-9 agonist and a conjugate of Formula (I) or pharmaceutically acceptable salt thereof. (Formula (I))

45.20210069315FLAVIVIRUS VACCINE
US - 11.03.2021
Int.Class A61K 39/12 Appl.No 16772131 Applicant CureVac AG Inventor Patrick BAUMHOF

The present invention is directed to an artificial nucleic acid and to a polypeptide suitable for use in the treatment or prophylaxis of an infection with a flavivirus, in particular an infection with yellow fever virus or with dengue virus, or of a disorder related to such an infection. The present invention is also directed to a composition, preferably an immunogenic composition, comprising the artificial nucleic acid or the inventive polypeptide. In particular, the present invention concerns an immunogenic composition against a flavivirus, such as yellow fever virus or dengue virus. Further, the invention concerns a kit, particularly a kit of parts, comprising the artificial nucleic acid, polypeptide or (immunogenic) composition. The invention

is further directed to a method of treating or preventing a disorder or a disease, first and second medical uses of the artificial nucleic acid, polypeptide, composition, in particular the first and second medical uses of the immunogenic composition according to the invention.

46.WO/2021/050954COMPOSITIONS AND METHODS RELATED TO HUMAN NEUTRALIZING ANTIBODIES TO HEPATITIS B
WO - 18.03.2021
Int.Class A61K 39/42 Appl.No PCT/US2020/050509 Applicant THE ROCKEFELLER UNIVERSITY Inventor WANG, Qiao
Provided are broadly neutralizing antibodies (bNAbs) and antigen binding fragments thereof that bind with specificity to epitopes expressed by Hepatitis B virus (HBV). The bNAbs target non-overlapping epitopes on the HBV S antigen (HBsAg). Pharmaceutical compositions that contain the bNAbs, or modified bNAbs, are provided. Combinations of the bNAbs are included, and are useful for prophylaxis and therapy of HBV infection, and for inhibiting development of HBV escape mutations in infected individuals. Expression vectors encoding the bNAbs and antigenic fragments of them are included, as are methods of making the bNAbs and antigenic fragments of them. HBV peptides for use as vaccines are provided, and include at least two non-overlapping epitopes from the HBsAg. Diagnostic reagents comprising the bNAbs or antigenic fragments thereof are provided, as are methods of detecting HBV and diagnosing HBV infection.

47.20210077565NUCLEOTIDE AND CELLULAR VACCINE COMPOSITION
US - 18.03.2021
Int.Class A61K 38/08 Appl.No 16985393 Applicant Mallen HUANG Inventor Mallen HUANG

A method of treating a Philadelphia chromosome-positive tumor in a subject comprises administering to the subject a therapeutic composition comprising an incubated combined mixture of (a) a first component comprising (i) Philadelphia chromosome-positive tumor lysate, (ii) plasmid encoding bcr/abl fusion protein, or (iii) bcr/abl fusion peptide; and (b) a second component comprising plasmacytoid dendritic cells expressing Toll-like receptor 9 and modified for stable expression of CD40 ligand or GM-CSF by a nucleotide sequence engineered into said plasmacytoid dendritic cells.

48.20210069116METHOD FOR REDUCING ZOONOTIC INFECTIOUS DISEASES
US - 11.03.2021
Int.Class A61K 9/28 Appl.No 16848841 Applicant US Biologic, Inc. Inventor Douglas Steven Zatechka

The presently disclosed subject matter relates to a composition and method of using the composition for oral delivery of a bioactive agent to a subject. More particularly, the presently disclosed subject matter relates to a composition comprising an effective amount of at least one bioactive agent layered over a substrate and a method of reducing zoonotic infectious disease by administering the composition to a subject. The presently disclosed subject matter further relates to a method of preparing the composition.

49.20210068388A MULTIPURPOSE POTENTIATOR COMPOSITION AND THE METHODS THEREOF
US - 11.03.2021
Int.Class A01N 1/02 Appl.No 16770657 Applicant T. Umakanthan Inventor T. Umakanthan

Disclosed is a multipurpose potentiator composition comprising: sodium carbonate monohydrate, sodium carbonate anhydrous, potassium nitrate, sodium chloride and water such that the potentiating composition is applied to alter physical or chemical properties or both of a substance on which the potentiating composition is applied. Also provided is a container for holding the composition.

50.WO/2021/047210IMMUNIZATION-PURPOSE SUSPENDING AGENT, VACCINE SUSPENSION PREPARATION METHOD AND SPRAY-DROP IMMUNIZATION METHOD

WO - 18.03.2021
Int.Class A61K 9/10 Appl.No PCT/CN2020/093093 Applicant FOSHAN STANDARD BIO-TECH CO., LTD. Inventor TAN, Zhijian
Provided is an immunization-purpose suspending agent, comprising the following raw materials in parts by weight: 15-40 parts of sodium alginate, 5-20 parts of guar gum, 2-10 parts of blow-dried powder, 1-10 parts of a surfactant, and 12-74 parts of anhydrous glucose. Accordingly, also provided are a vaccine suspension preparation method using the immunization-purpose suspending agent, and a spray-drop immunization method. The suspending agent compounded with the various components is liable to dissolve in water so as to form a viscous, uniform and stable solution, mixing the suspending agent with a coccidia vaccine dilute can maintain uniform dispersion and suspension of coccidia oocysts, and gel droplets sprayed from the suspending agent can retain moisture and has good adhesion, thereby ensuring viability of the coccidia oocysts and effective adhesion thereof on chick fluff for chick pecking, so as to establish a uniform immunity. The vaccine suspension preparation method is simple and easy to operate. Spray-drop immunization using a spray-drop device realizes uniform spray-dropping and automated immunity, and the amount of intake of vaccine suspensions of chicks is controlled by controlling the spray-drop amount.

51.WO/2021/042947MINICIRCLE DNA VACCINE DESIGN AND USE
WO - 11.03.2021

Int.Class C12N 15/63 Appl.No PCT/CN2020/108419 Applicant SYNO MINICIRCLE BIOTECHNOLOGY CO., LTD. Inventor CHEN, Ping

Disclosed are minicircle DNA vaccine design and use. Specifically, the invention relates to a minicircle DNA vector for expressing specific antigens or antigen fragments of pathogenic microorganisms in vivo. The minicircle DNA vector can mediate antigen proteins to be efficiently expressed in vivo, the immunogenicity of DNA vaccines is enhanced, and meanwhile, the safety problem caused by resistance genes can be avoided. The minicircle DNA vector can be used for preventing and/or treating common infectious diseases and related cancers, and has the advantages of stronger antigen expression and higher safety.

52.20210070839ALBUMIN VARIANTS AND CONJUGATES

US - 11.03.2021

Int.Class C07K 14/765 Appl.No 16820421 Applicant Albumedix Ltd Inventor Karen Ann Delahay

The present invention relates to conjugation-competent albumins and albumin-related polypeptides, and their conjugates with at least one moiety, and to polynucleotides encoding them.

53.20210077600FUSION PROTEINS COMPRISING MODIFIED ALPHA VIRUS SURFACE GLYCOPROTEINS AND TUMOR ASSOCIATED ANTIGEN AND METHODS THEREOF

US - 18.03.2021

Int.Class A61K 39/00 Appl.No 16844271 Applicant OMNICYTE Inventor Peter LEONARDI

The present disclosure relates to fusion proteins that comprise one or more modified alpha virus surface glycoproteins and one or more tumor specific antigens. Also disclosed are fusion proteins that comprise one or more modified alpha virus surface glycoproteins and one or more viral specific antigens. Also disclosed are fusion proteins that comprise one or more modified alpha virus surface glycoproteins. It also relates to methods to activate the immune system in cancer patients to infiltrate and kill tumor cells or cells infected with a latent virus. The present disclosure provides a platform technology that elicits a faster, broader and stronger immune response using the fusion proteins.

54.20210069251PEPTIDES AND COMBINATION OF PEPTIDES OF NON-CANONICAL ORIGIN FOR USE IN IMMUNOTHERAPY AGAINST DIFFERENT TYPES OF CANCERS

US - 11.03.2021

Int.Class A61K 35/17 Appl.No 17089502 Applicant Immatics Biotechnologies GmbH Inventor 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.

55.20210070808EPITOPE FOCUSING BY VARIABLE EFFECTIVE ANTIGEN SURFACE CONCENTRATION

US - 11.03.2021

Int.Class C07K 14/005 Appl.No 17070334 Applicant Distributed Bio, Inc. Inventor Jacob E. GLANVILLE

The present disclosure provides compositions and methods for the generation of an antibody or immunogenic composition, such as a vaccine, through epitope focusing by variable effective antigen surface concentration. Generally, the composition and methods of the disclosure comprise three steps: a “design process” comprising one or more in silico bioinformatics steps to select and generate a library of potential antigens for use in the immunogenic composition; a “formulation process”, comprising in vitro testing of potential antigens, using various biochemical assays, and further combining two or more antigens to generate one or more immunogenic compositions; and an “administering” step, whereby the immunogenic composition is administered to a host animal, immune cell, subject or patient. Further steps may also be included, such as the isolation and production of antibodies raised by host immune response to the immunogenic composition.

56.20210069320CROSS-IMMUNIZING ANTIGEN VACCINE AND METHOD FOR PREPARATION THEREOF

US - 11.03.2021

Int.Class A61K 39/145 Appl.No 16956212 Applicant Green BioMed, Inc. Inventor Kenji SEKIKAWA

The present invention provides a fusion polypeptide that induces a humoral immune response and a cellular immune response to a virus, containing antigens or fragments thereof of the following (a) and (b), and having an oligomerization activity:

(a) an antigen of the virus or a fragment thereof containing a B cell epitope conserved among subtypes of the virus; and
(b) an antigen of the virus or a fragment thereof containing a T cell epitope conserved among subtypes of the virus
(wherein the antigen(s) or the fragment(s) thereof of (a) and/or (b) have an oligomerization activity, or the fusion polypeptide further contains (c) a polypeptide having an oligomerization activity in addition to the antigens or the fragments thereof (a) and (b)).

57.20210069250NOVEL PEPTIDES AND SCAFFOLDS FOR USE IN IMMUNOTHERAPY AGAINST HEAD AND NECK SQUAMOUS CELL CARCINOMA AND OTHER CANCERS

US - 11.03.2021

Int.Class A61K 35/17 Appl.No 17076261 Applicant IMMATICS BIOTECHNOLOGIES GMBH Inventor ANDREA MAHR

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.

58.20210077609A MODIFIED BRUCELLA VACCINE STRAIN FOR THE TREATMENT OF BRUCELLOSIS

US - 18.03.2021

Int.Class A61K 39/02 Appl.No 16766629 Applicant CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS (CSIC) Inventor María Jesús GRILLÓ DOLSET

The present application provides a modified *Brucella* strain, its use as a medicament, and its use as a medicament for the treatment and/or prevention of brucellosis. The *Brucella* strain has been modified through an inactivation of the wzm gene. Further, the present application provides a pharmaceutical composition which comprises the modified *Brucella* strain, its use as a medicament, and its use as a medicament for the treatment and/or prevention of bmcellosis. The present application also provides a kit which comprises the modified *Brucella* strain and a pharmaceutically acceptable carrier or diluent and its use for the treatment and/or prevention of brucellosis.

59.202100708 10COMPOSITIONS AND METHODS USING METHANOTROPHIC S-LAYER PROTEINS FOR EXPRESSION OF HETEROLOGOUS PROTEINS

US - 11.03.2021

Int.Class C07K 14/195 Appl.No 16643390 Applicant San Diego State University (SDSU) Foundation, dba San Diego State University Research Foundation Inventor Marina KALYUZHNAYA

In alternative embodiments, provided are compositions and methods for making a chimeric polypeptide comprising an S-layer polypeptide and a heterologous polypeptide or peptide. In alternative embodiments, the compositions and methods comprise recombinantly engineering a methylotrophic or methanotrophic bacteria to recombinantly express a chimeric polypeptide comprising an S-layer polypeptide and a heterologous polypeptide or peptide. Also provided are compositions and methods for displaying or immobilizing proteins on a methanotrophic S-layer. In alternative embodiments, provided are compositions and methods comprising recombinant methylotrophic or methanotrophic bacteria comprising assembled or self-assembled recombinant or isolated chimeric S-layer polypeptides. In alternative embodiments, provided are compositions and methods using recombinant methylotrophic or methanotrophic bacteria, optionally a *Methylomicrobium alcaliphilum*, optionally a *M. alcaliphilum* sp. 20Z, for ectoine ((4S)-2-methyl-1,4,5,6-tetrahydropyrimidine-4-carboxylic acid), for the production or synthesis of a protein, e.g., an ectoine, or an enzyme, e.g., a lipase.

60.WO/2021/050510ENGINEERED PEPTIDE AND PEPTIDE MIMETIC COMPOSITIONS AND METHODS

WO - 18.03.2021

Int.Class A61K 38/00 Appl.No PCT/US2020/049888 Applicant THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY Inventor ALTIERI, Dario

The present invention relates to Mitochondrial Fission Factor (MFF)-derived peptides or peptide mimetics and to methods of making MFF-derived peptides or peptide mimetics. Also provided are methods of treating a disease in a subject in need thereof, comprising administering to the subject an effective amount of a MFF-derived peptide or peptide mimetic.

61.202100776 07IMMUNOGENIC COMPOSITION

US - 18.03.2021

Int.Class A61K 39/085 Appl.No 16954337 Applicant GLAXOSMITHKLINE BIOLOGICALS SA Inventor Amirreza FARIDMOAYER

The present invention discloses modified *Staphylococcus aureus* ClfA proteins that contain glycosylation site consensus sequences. The invention also discloses a conjugate comprising a modified ClfA protein and an antigen (for example a *Staphylococcus aureus* saccharide antigen), wherein the antigen is linked (either directly or through a linker) to an amino acid residue of the modified ClfA protein.

62.20210071198REPLICATION-DEFECTIVE ARENAVIRUS VECTORS

US - 11.03.2021

Int.Class C12N 15/86 Appl.No 16861758 Applicant UNIVERSITÄT ZÜRICH Inventor Daniel D. Pinschewer

The invention relates to an infectious arenavirus particle that is engineered to contain a genome with the ability to amplify and express its genetic information in infected cells but unable to produce further infectious progeny particles in normal not genetically engineered cells. One or more of the four arenavirus open reading frames glycoprotein (GP), nucleoprotein (NP). matrix protein Z and RNA-dependent RNA polymerase L are removed or mutated to prevent replication in normal cells but still allowing gene expression in arenavirus vector-infected cells, and foreign genes coding for an antigen or other protein of interest or nucleic acids modulating host gene expression are expressed under control of the arenavirus promoters, internal ribosome entry sites or under control of regulatory elements that can be read by the viral RNA-dependent RNA polymerase, cellular RNA polymerase I, RNA polymerise II or RNA polymerase III. The modified arenaviruses are useful as vaccines and therapetitic agents for a variety of diseases.

63.20210070819ANTIGENIC PEPTIDES DERIVING FROM SECRETOGRANIN V AND USES THEREOF FOR THE DIAGNOSIS AND TREATMENT OF TYPE 1 DIABETES

US - 11.03.2021

Int.Class C07K 14/47 Appl.No 16981352 Applicant INSERM (Institut National de la Santé et de la Recherche Médicale) Inventor Roberto MALLONE

Despite the notion that human $CD8^+$ T cells are the final mediators of autoimmune β-cell destruction in type 1 diabetes (TID), none of their target epitopes has been demonstrated to be naturally processed and presented by β cells. The inventors therefore performed an epitope discovery study combining HLA Class I peptidomics and transcriptomics strategies. Inflammatory cytokines increased β-cell peptide presentation in vitro, paralleling upregulation of HLA Class I expression. Peptide sources included known β-cell antigens and several insulin granule proteins. Secretogranin V (SCG5/7B2) was identified as a novel β-cell antigen, which was processed into HLA-A2- and HLA-A3-restricted epitopes recognized by circulating naïve $CD8^+$ T cells in type 1 diabetic and healthy donors. HLA-A2-bound neo-epitopes were also represented and originated from an alternative SCG5-009 mRNA splice isoform. Accordingly, the present invention relates to antigenic peptides derived from secretogranin V and uses thereof for the diagnosis and treatment of T1D.

64.20210079102COMBINATION THERAPY OF CANCER INVOLVING MULTI-SPECIFIC BINDING PROTEINS THAT ACTIVATE NATURAL KILLER CELLS

US - 18.03.2021

Int.Class C07K 16/28 Appl.No 16967218 Applicant Dragonfly Therapeutics, Inc. Inventor Gregory P. Chang

Combination therapy of a cancer with a multi-specific binding protein that bind a tumor associated antigen, the NKG2D receptor, and CD16, in combination with a second anti-cancer agent are described.

Also described are pharmaceutical compositions of the multi-specific binding protein, and therapeutic methods useful for the treatment of cancer in combination with a second anti-cancer agent.

65.WO/2021/045617METHOD AND SYSTEM FOR THE MANAGEMENT OF PRODUCTION ANIMALS

WO - 11.03.2021

Int.Class A01K 29/00 Appl.No PCT/NL2020/050542 Applicant PIGLETS TREARMENT SYSTEM B.V. Inventor CLAESSENS, Antoon Willem Johan

The present invention pertains to a method and system for the management of a production animal living in a confined space, the method comprising operator means to impose a treatment of the production animal to support its growth, wherein the living of the production animal and the said treatment together result in one or more events in the confined space, the method further comprising assessing the one or more events, and concomitantly assessing an animal effectiveness of the production animal, determining a relationship between the one or more events and the animal effectiveness, and using the relationship to control the operator means to control a future treatment of the production animal to increase the animal effectiveness.

66.2021201233VACCINES FOR NEISSERIA GONORRHOEAE

AU - 11.03.2021

Int.Class Appl.No 2021201233 Applicant GlaxoSmithKline Biologicals SA Inventor

A method for immunizing a subject in need thereof against Neisseria gonorrhoeae by administering an immunogenic composition comprising one or more of the following: (i) a NHBA antigen

67.20210070876ANTI-CD73 ANTIBODIES AND COMPOSITIONS

US - 11.03.2021

Int.Class C07K 16/28 Appl.No 17012942 Applicant SYMPHOGEN A/S Inventor Michael Monrad GRANDAL

This invention relates to anti-CD73 antibodies and methods of using them in treating diseases and conditions related to CD73 activity, e.g., cancer.

68.WO/2021/046616METHODS OF IDENTIFYING MHC-BOUND PEPTIDES

WO - 18.03.2021

Int.Class G01N 33/68 Appl.No PCT/AU2020/050976 Applicant MONASH UNIVERSITY Inventor PURCELL, Anthony

The present invention relates to a method for characterising major histocompatibility complex-bound peptides via mass spectrometry, wherein sample peptides are labelled with isobaric tags and analysed together with non-sample carrier peptides.

69.20210079475METHODS AND KITS FOR DETERMINING A PERSONALIZED TREATMENT REGIMEN FOR A SUBJECT SUFFERING FROM A PATHOLOGIC DISORDER

US - 18.03.2021

Int.Class C12Q 1/6883 Appl.No 17100987 Applicant YISSUM RESEARCH DEVELOPMENT COMPANY OF THE HEBREW UNIVERSITY OF JERUSALEM LTD. Inventor Yoav SMITH

The invention relates to methods and kits for determining and optimizing a personalized treatment regimen for a subject suffering from a pathologic disorder based on calculating the value of M, that indicates the ability of said subject to eliminate said disorder. The invention specifically relates to optimization of interferon treatment of viral disorders.

70.20210079014FUNCTIONALIZED HETEROCYCLES AS ANTIVIRAL AGENTS

US - 18.03.2021

Int.Class C07D 495/14 Appl.No 17022660 Applicant ENANTA PHARMACEUTICALS, INC. Inventor Joseph Panarese

The present invention discloses compounds of Formula (I), or pharmaceutically acceptable salts, thereof:

which inhibit the protein(s) encoded by hepatitis B virus (HBV) or interfere with the function of the HBV life cycle of the hepatitis B virus and are also useful as antiviral agents. The present invention further relates to pharmaceutical compositions comprising the aforementioned compounds for administration to a subject suffering from HBV infection. The invention also relates to methods of treating an HBV infection in a subject by administering a pharmaceutical composition comprising the compounds of the present invention.

71.20210069317CONSTRUCTION OF WEST NILE VIRUS AND DENGUE VIRUS CHIMERAS FOR USE IN A LIVE VIRUS VACCINE TO PREVENT DISEASE CAUSED BY WEST NILE VIRUS

US - 11.03.2021

Int.Class A61K 39/12 Appl.No 16952864 Applicant The United States of America, as represented by the Secretary, Dept. of Health and Human Services Inventor Alexander G. Pletnev

The present invention relates to attenuated, immunogenic West Nile virus chimeras built on a dengue virus backbone for the production of immunogenic, live, attenuated West Nile virus vaccines,

72.WO/2021/048221INACTIVATION PROCESS FOR VIRUSES

WO - 18.03.2021

Int.Class C12N 7/00 Appl.No PCT/EP2020/075223 Applicant VALNEVA AUSTRIA GMBH Inventor SCHLEGL, Robert

Described herein are methods for inactivation of viruses with higher yield and recovery, and compositions produced by such methods.

73.WO/2021/043869INFLUENZA VIRUS VACCINES AND USES THEREOF

WO - 11.03.2021

Int.Class A61K 39/145 Appl.No PCT/EP2020/074539 Applicant JANSSEN VACCINES & PREVENTION B.V. Inventor JONGENEELEN, Mandy, Antonia, Catharina

Provided herein are group 2 influenza hemagglutinin stem polypeptides, nucleic acids encoding said polypeptides, vectors comprising said nucleic acid and pharmaceutical compositions comprising the same, as well as methods of their use, in particular in the prevention and/or treatment of influenza virus infections.

74.WO/2021/045836ANTI-SARS-COV-2-SPIKE GLYCOPROTEIN ANTIBODIES AND ANTIGEN-BINDING FRAGMENTS

WO - 11.03.2021

Int.Class A61K 39/215 Appl.No PCT/US2020/039707 Applicant REGENERON PHARMACEUTICALS, INC. Inventor BABB, Robert

The present disclosure provides antibodies and antigen-binding fragments thereof that bind specifically to a coronavirus spike protein and methods of using such antibodies and fragments for treating or preventing viral infections (e.g., coronavirus infections). The present disclosure provides neutralizing human antigen-binding proteins that specifically bind to SARS-CoV-2-S, for example, antibodies or antigen-binding fragments thereof.

75.WO/2021/044005ANTI-CD73 ANTIBODIES

WO - 11.03.2021

Int.Class C07K 16/28 Appl.No PCT/EP2020/074804 Applicant SYMPHOGEN A/S Inventor GRANDAL, Michael Monrad

This invention relates to anti-CD73 antibodies and methods of using them in treating diseases and conditions related to CD73 activity, e.g., cancer.

76.20210070890METHOD FOR OBTAINING PURIFIED BACTERIAL POLYSACCHARIDES

US - 11.03.2021

Int.Class C08B 37/00 Appl.No 17010084 Applicant SERUM INSTITUTE OF INDIA PRIVATE LIMITED Inventor Rajeev Mhalasakant DHERE

The present disclosure relates to a method for obtaining purified bacterial polysaccharides. The method comprises simultaneous removal of impurities as well as sizing of bacterial polysaccharides using an acid instead of conventional mechanical sizing methods. The method is simple, rapid and cost effective. The method results in high polysaccharide recovery and low impurity content. The purified polysaccharide obtained by the method of the present disclosure may be used for large scale production of polysaccharide-protein conjugate vaccines.

77.WO/2021/046466METHODS, COMPOSITIONS, AND SYSTEMS FOR PROFILING OR PREDICTING AN IMMUNE RESPONSE

WO - 11.03.2021

Int.Class G01N 33/68 Appl.No PCT/US2020/049563 Applicant AVAIL BIO, INC. Inventor CARIO, Clinton L.

The present disclosure provides methods, systems, compositions relating to developing an antibody repertoire of an immune response. The methods may comprise using an epitope of a non-wild type antigen to identify an antibody from a sample of a subject exhibiting said immune response. The methods, systems and compositions may use an identified antibody to generate an antibody repertoire. The method may be used to monitor an immune response to a drug or biologic, and to ascertain a therapeutic target or molecule.

78.1020210027606 오량체 기반 재조합 단백질 백신 플랫폼 및 이를 발현하는 시스템

KR - 11.03.2021

Int.Class C12N 15/62 Appl.No 1020190106390 Applicant 연세대학교 산학협력단 Inventor 성백린

본 발명은 오량체 기반 재조합 단백질 백신을 생산하기 위한 재조합 발현 벡터, 상기 발현 벡터가 도입된 숙주세포 및 상기 벡터 및 숙주세포를 이용하여 오량체 기반 재조합 단백질 백신을 생산하는 방법에 관한 것이다. 본 발명에 의하면 원핵세포에서 재조합 단백질의 발현양 및 수용성을 크게 향상시킴으로써 높은 수율로 항원 단백질을 생산할 수 있을 뿐만 아니라 구조적으로도 정교한 오량체 형태의 항원 단백질을 생산할 수 있으며, 본 발명의 오량체 형태의 융합 단백질을 포함하는 바이러스 백신은 면역원성이 크게 향상될 수 있다.

79.3511015GENETISK STABIL LEVENDE SVÆKKET RESPIRATORISK SYNCYTIALVIRUSVACCINE OG FREMSTILLING DERAF

DK - 15.03.2021

Int.Class A61K 39/155 Appl.No 19150800 Applicant The United States of America, as represented by the Secretary, Department of Health and Human Services Inventor COLLINS, Peter L.

Provided herein are recombinant respiratory syncytial viruses that contain mutations that make the disclosed viruses attractive vaccine candidates. The viruses disclosed contain attenuating mutations designed to have increased genetic and phenotypic stability. Desired combinations of these mutations can be made to achieve desired levels of attenation. Exemplary vaccine candidates are described. Also provided are polynucleotides capable of encoding the described viruses, as wells as methods for producing the viruses and methods of use.

80.3790579MVA VECTORS FOR EXPRESSING MULTIPLE CYTOMEGALOVIRUS (CMV) ANTIGENS AND USE THEREOF

EP - 17.03.2021

Int.Class A61K 39/245 Appl.No 18918002 Applicant HOPE CITY Inventor WUSSOW FELIX

Disclosed is an expression system for co-expressing multiple human cytomegalovirus (HCMV) antigens to stimulate potent humoral and cellular immune responses against HCMV infection. The expression system may include a vector inserted with multiple nucleic acid sequences that encode multiple subunits of HCMV antigens linked by one or more linking sequences such that the subunits are co- expressed simultaneously. Also disclosed are vaccine compositions comprising the expression system or the vector and methods of preventing or treating HCMV infections using the vaccine compositions.

81.WO/2021/046653ANTI-ONCOLYTIC VIRUS ANTIGEN ANTIBODIES AND METHODS OF USING SAME

WO - 18.03.2021

Int.Class C07K 16/08 Appl.No PCT/CA2020/051230 Applicant CENTRE FOR DRUG RESEARCH AND DEVELOPMENT Inventor CUMMINS, Emma J.

Provided are antibodies that specifically bind Vaccinia Virus (VV) A56 or B5 antigen. Also provided are fusion proteins and conjugates that comprise the antibodies. Pharmaceutical compositions and kits that comprise the antibodies, fusion proteins and conjugates are also provided. Aspects of the present disclosure further include methods of using the antibodies, fusion proteins and conjugates, e.g., for therapeutic purposes. In certain embodiments, provided are methods that comprise administering an antibody, fusion protein or conjugate of the present disclosure to an individual having cancer, wherein the individual comprises cancer cells infected with VV, and wherein the antibody, fusion protein or conjugate is targeted to the infected cancer cells by VV antigens expressed on the surface of the infected cancer cells. Aspects of the present disclosure further include methods of targeting an antibody, fusion protein, or conjugate that specifically binds an oncolytic virus (OV) antigen to cancer cells in an individual.

82.WO/2021/050832METHODS FOR TREATING CANCER USING SERIAL ADMINISTRATION OF E3 UBIQUITIN LIGASE DEGRADERS

WO - 18.03.2021

Int.Class A61K 31/426 Appl.No PCT/US2020/050339 Applicant DANA-FARBER CANCER INSTITUTE, INC. Inventor MITSIADES, Constantine S.

The present invention relates, in part, to methods for treating cancer using serial administration of E3 ubiquitin ligase degraders. In one aspect, a method of decreasing the viability of a population of cancer cells comprising contacting the cancer cells with a first heterobifunctional proteolysis-targeting chimera (PROTAC) that recruits an E3 ubiquitin ligase to an oncogenic protein and sequentially contacting the cancer cells with a second heterobifunctional PROTAC that recruits a different E3 ubiquitin ligase to the oncogenic protein, thereby decreasing the viability of the cancer cells, is provided.

83.20210079113CANCER THERAPY USING CLDN6 TARGET-DIRECTED ANTIBODIES IN VIVO

US - 18.03.2021

Int.Class C07K 16/30 Appl.No 17071121 Applicant Ganymed Pharmaceuticals GmbH Inventor Ugur Sahin

The invention relates to the treatment and/or prevention of tumor diseases associated with cells expressing CLDN6, in particular cancer and cancer metastasis using antibodies which bind to CLDN6. The present application demonstrates that the binding of antibodies to CLDN6 on the surface of tumor cells is sufficient to inhibit growth of the tumor and to prolong survival and extend the lifespan of tumor patients. Furthermore, binding of antibodies to CLDN6 is efficient in inhibiting growth of CLDN6 positive germ cell tumors such as teratocarcinomas or embryonal carcinomas, in particular germ cell tumors of the testis.

84.3791859FORMULATIONS FOR SMALL INTESTINAL DELIVERY OF RSV AND NOROVIRUS ANTIGENS

EP - 17.03.2021

Int.Class A61K 9/00 Appl.No 20195995 Applicant VAXART INC Inventor TRAGER GEORGE

Provided herein are compositions and methods for generating an immunogenic response in humans. Further provided are methods for designing such compositions, e.g., for vaccines.

85.3792272VACCINES WITH HIGHER CARBOHYDRATE ANTIGEN DENSITY AND NOVEL SAPONIN ADJUVANT

EP - 17.03.2021

Int.Class C07H 15/00 Appl.No 20187437 Applicant OBI PHARMA INC Inventor LEE WEI HAN

The present invention provides saponin adjuvants, which are useful in vaccines against carbohydrate antigens.

86.20210077611COMPOSITIONS, METHODS AND USES FOR THERMALLY STABLE HUMAN PAPILLOMAVIRUS FORMULATIONS

US - 18.03.2021

Int.Class A61K 39/12 Appl.No 16921253 Applicant THE REGENTS OF THE UNIVERSITY OF COLORADO, A BODY CORPORATE Inventor Theodore Randolph

Embodiments of the present invention provide for novel compositions and methods for making and using a thermally stable human papilloma virus (HPV) formulation or other stabilized multimeric virus formulation. Certain embodiments concern lyophilizing HPV formulations in the presence or absence of adjuvants. Other embodiments concern lypophilizing HPV capsomere vaccines in order to increase stability of an immunogenic composition against HPV infection for storage, delivery and use. In yet other embodiments, a single immunogenic composition can include a thermally stable formulation of multiple virus serotypes.

87.WO/2021/048003CHIMERIC FILOVIRUS VACCINES

WO - 18.03.2021

Int.Class A61K 39/12 Appl.No PCT/EP2020/074701 Applicant KATHOLIEKE UNIVERSITEIT LEUVEN Inventor DALLMEIER, Kai

The present invention relates to polynucleotides comprising a sequence of a live, infectious, attenuated Flavivirus wherein a nucleotide sequence encoding at least a part of a Filovirus glycoprotein is located at the intergenic region between the E and NS1 gene of said Flavivirus, such that a chimeric virus is expressed, characterised in that the encoded sequence C terminally of the E protein of said Flavivirus and N terminally of the signal peptide of the NS1 protein of said Flavivirus comprises in the following order : a further signal peptide of a Flavivirus NS1 protein, a filovirus glycoprotein wherein the N terminal signal peptide is absent, a TM domain of a flaviviral E protein.

88.2019321375Hepatitis B virus (HBV) dsRNA agent compositions and methods of use thereof

AU - 11.03.2021

Int.Class C12N 15/113 Appl.No 2019321375 Applicant Alnylam Pharmaceuticals, Inc. Inventor

The present disclosure relates to double stranded RNA agents targeting the hepatitis B virus (HBV) genome, and methods of using such agents to inhibit expression of one or more HBV genes and methods of treating subjects having an HBV infection or HBV-associated disorder, *e.g.,* chronic hepatitis B infection.

89.2021038243 小腸送達のための製剤

JP - 11.03.2021

Int.Class Appl.No 2020191383 Applicant バクサート　インコーポレイテッド Inventor タッカー ショーン

【課題】ヒトにおいて免疫原性反応を生じさせるための組成物および方法の提供。
【解決手段】組成物には、(ii)ヒトの回腸への免疫原性生物学的作用物質の送達を誘導する作用物質によって包含される、免疫原性生物学的作用物質が含まれ、ここで、作用物質(ii)は閾値 pH5.8～6.8 を有する腸溶性コーティング(例えば、Eudragit(登録商標))である。さらに、そのような組成物、例えばワクチンを設計するための方法が提供される。
【選択図】図１

90.20210069322HEPATITIS B IMMUNISATION REGIMEN AND COMPOSITIONS

US - 11.03.2021

Int.Class A61K 39/29 Appl.No 16772203 Applicant GLAXOSMITHKLINE BIOLOGICALS SA Inventor Virginia AMMENDOLA

There is provided a method of treating chronic hepatitis B infection (CHB) in a human, comprising the steps of:

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  - a) administering to the human a composition comprising a replication-defective chimpanzee adenoviral (ChAd) vector comprising a polynucleotide encoding a hepatitis B surface antigen (HBs) and a nucleic acid encoding a hepatitis B virus core antigen (HBc);
  - b) administering to the human a composition comprising a Modified Vaccinia Virus Ankara (MVA) vector comprising a polynucleotide encoding a hepatitis B surface antigen (HBs) and a nucleic acid encoding a hepatitis B virus core antigen (HBc); and
  - c) administering to the human a composition comprising a recombinant hepatitis B surface antigen (HBs), recombinant hepatitis B virus core antigen (HBc) and an adjuvant.

91.WO/2021/048402LASSAVIRUS VACCINES

WO - 18.03.2021

Int.Class A61K 39/12 Appl.No PCT/EP2020/075541 Applicant KATHOLIEKE UNIVERSITEIT LEUVEN Inventor DALLMEIER, Kai

The present invention relates to polynucleotides comprising a sequence of a live, infectious, attenuated Flavivirus wherein a nucleotide sequence encoding at least a part of a arenavirus glycoprotein protein is located at the intergenic region between the E and NS1 gene of said Flavivirus, such that a chimeric virus is expressed, characterised in that the encoded sequence C terminally of the E protein of said Flavivirus and N terminally of the signal peptide of the NS1 protein of said Flavivirus comprises in the following order: - a further signal peptide of a Flavivirus NS1 protein, -an arenavirus Glycoprotein protein lacking the N

terminal signal sequence and the GP2 transmembrane domain, - a TM1 and TM2 domain of a flaviviral E protein.

92.20210070887FLT3L-Fc FUSION PROTEINS AND METHODS OF USE

US - 11.03.2021

Int.Class C07K 19/00 Appl.No 16951458 Applicant Gilead Sciences, Inc. Inventor Alexandre Ambrogelly

Provided are FLT3L-Fc fusion proteins, polynucleotides encoding such fusion proteins, expression cassettes, vectors, cells and kits comprising such fusion proteins, and methods of using.

93.2587044Intrinsic system for viral vector transgene regulation

GB - 17.03.2021

Int.Class C12N 15/86 Appl.No 202006476 Applicant UNIV PLYMOUTH Inventor MICHAEL JARVIS

A method for the regulated removal of heterologous genetic material from disseminating viral vaccine vectors, comprising: - providing a wild-type or parental viral vector which includes a recombinantly engineered duplication of genomic sequence; - providing an antigen expression cassette which comprises a transgene and regulatory genetic elements flanked by copies of a region of the wild-type/parental genomic sequence; - inserting the cassette into the vector so that the transgene is flanked by the wildtype/parental genomic sequence and its duplicated sequence; whereby homologous recombination subsequently results in removal of the transgene to leave only a single copy of the homology sequence, thereby regenerating the wild type/parental virus genome with an absence of any non parental virus genetic sequence, wherein the rate of transgene removal from the viral genome, and reversion of recombinant virus genome to wild-type/parental, is a function of the length of the selected duplicated sequence. The vector maybe herpes virus based, and use as a vaccine is claimed.

94.2021037322 低侵襲表皮電気穿孔装置

JP - 11.03.2021

Int.Class Appl.No 2020190104 Applicant イノビオ　ファーマシューティカルズ，インコーポレイティド Inventor ケイト　ブロデリック

【課題】本開示は、電気穿孔して１つまたは複数の抗原を送達するための装置、ならびにこの装置を使用し、表皮組織の細胞を電気穿孔して１つまたは複数の抗原を送達する方法を対象とする。
【解決手段】本装置は、筐体と、筐体から突出する複数の電極アレイであって、それぞれが少なくとも１つの電極を含む電極アレイと、これらの電極に電気的に結合されたパルス発生器と、パルス発生器に電気的に結合されたプログラム可能なマイクロコントローラと、パルス発生器およびマイクロコントローラに結合された電力源とを備

える。電極アレイは、空間的に分離した部位を画定する。
【選択図】図１

95.20210079072Antibodies Against Infectious Diseases

US - 18.03.2021

Int.Class C07K 16/14 Appl.No 16937447 Applicant TAIPEI MEDICAL UNIVERSITY Inventor Sy-Jye LEU

The invention provides anti-CaENO1 antibodies and humanized antibodies as effective diagnostic agent or therapeutic treatment against infections caused by *Candida* spp. (preferably *Candida. albicans, Candida tropicalis*), fluconazole resistance *Candida* spp., *Streptococcus*, or *Staphylococcus.*

96.20210070805CD40 TARGETED PEPTIDES AND USES THEREOF

US - 11.03.2021

Int.Class C07K 7/08 Appl.No 17089463 Applicant Regents of the Univeristy of Minnesota Inventor Bernhard J. Hering

The present disclosure is related to compositions comprising peptides that bind CD40 and methods of use in inhibiting interaction of CD40 and CD154 and inducing immunosuppression. Provided herein are methods of transplantation and methods of inhibiting donor specific immune response. Also provided herein are methods of treatment for autoimmune diseases, inflammatory diseases and cancer.

97.20210082583METHODS AND SYSTEMS OF PRIORITIZING TREATMENTS, VACCINATION, TESTING AND/OR ACTIVITIES WHILE PROTECTING THE PRIVACY OF INDIVIDUALS

US - 18.03.2021

Int.Class G16H 50/80 Appl.No 17106279 Applicant Gal EHRLICH Inventor Gal EHRLICH

An aspect of some embodiments of the invention relates to system and methods for anonymously selecting subjects for treatment against an infectious disease caused by a pathogen, comprising: 1. a plurality of electronic devices configured with instructions to generate an ID, when in proximity of another such electronic device, one or both of transmit said ID to said another electronic device and receive an ID from said another electronic device, generating a score based on a plurality of such received IDs, receiving information from a server, displaying relevant treatment instructions to said subjects based on received information; 2. at least one server comprising instructions for sending to said plurality of electronic devices information to display said relevant treatment instructions; where said at least one server or said electronic devices comprise instructions to generate a prediction of likelihood of a subject transmitting said pathogen, based on a score of the subject.

98.20210079047PREVENTION, TREATMENT AND DIAGNOSIS OF P.GINGIVALIS INFECTION

US - 18.03.2021

Int.Class C07K 14/195 Appl.No 17098021 Applicant Oral Health Australia PTY Ltd Inventor Eric Charles REYNOLDS

The invention relates to generation and use of cellular and humoral responses for the prevention and treatment of *P. gingivalis* related conditions and diseases.

99.20210069308Combination Immunotherapy Compositions Against Cancer and Methods

US - 11.03.2021

Int.Class A61K 39/00 Appl.No 16951739 Applicant GLOBEIMMUNE, INC. Inventor James Hodge

Disclosed are immunotherapeutic compositions and the concurrent use of combinations of such compositions for the improved induction of therapeutic immune responses and/or for the prevention, amelioration and/or treatment of disease, including, but not limited to, cancer and infectious disease.

100.20210079068ANTIBODY GENE THERAPY FOR TREATMENT AND PREVENTION OF INFECTION BY RABIES LYSSAVIRUS

US - 18.03.2021

Int.Class C07K 16/10 Appl.No 17024424 Applicant Auburn University Inventor Henry J. Baker

Disclosed are compositions, vectors, and methods for treating and preventing rabies lyssavirus infection in a subject in need thereof, including rabies lyssavirus encephalitis. The disclosed compositions relate to anti-rabies immunoglobulins and vectors for expressing anti-rabies immunoglobulins such as adeno-associated virus (AAV) vectors that express anti-rabies immunoglobulins in a subject in need thereof. In some embodiments, the disclosed methods relate to treating and/or preventing an infection by rabies lyssavirus in a subject in need thereof, the methods comprising administering to the subject a dose of an adeno-associated virus (AAV) vector that expresses an immunoglobulin that binds and neutralizes rabies lyssavirus in the subject.

101.2021036878 ワクチン開発のための改善されたＢ型インフルエンザウイルス複製
JP - 11.03.2021

Int.Class Appl.No 2020182549 Applicant ウィスコンシン　アルムニ　リサーチ　ファンデイション Inventor 河岡　義裕

【課題】Ｂ型インフルエンザウイルスの「内部」セグメントを有しつつ、培養細胞及び孵化鶏卵においてウイルス力価・全タンパク質収率・ＨＡ含量等を増強し、且つヒトにおいて安全である、変異型Ｂ型インフルエンザウイルスを提供する。
【解決手段】Ｂ型インフルエンザウイルスの「内部」セグメントにおける好ましいアミノ酸変異の位置及び種類を、スクリーニングによって選択及び特定すると共に、逆遺伝学によって選択及び特定し、これらを組み合わせて得られる特定の組換えＢ型インフルエンザウイルスを提供する。
【選択図】図６Ａ

102.20210070796MINIMAL SAPONIN ANALOGUES, SYNTHESIS AND USE THEREOF

US - 11.03.2021

Int.Class C07H 15/256 Appl.No 16853393 Applicant MEMORIAL SLOAN-KETTERING CANCER CENTER Inventor David Y. Gin

Truncated triterpene saponin analogues containing a trisaccharide or tetrasaccharide ester are disclosed. Also disclosed are pharmaceutical compositions comprising truncated saponin analogues and synthetic methods of producing the truncated saponin analogues. Another aspect of the present application relates to a method for immunizing a subject, comprising administering to the subject the pharmaceutical composition comprising a minimal saponin analogue and an antigen.

103.2021038167 鼻腔にウイルス特異的抗体を誘導可能な季節性インフルエンザワクチン

JP - 11.03.2021

Int.Class Appl.No 2019160280 Applicant デンカ株式会社 Inventor 三股　亮大郎

【課題】スプリットワクチンに比べて有効性の高い季節性インフルエンザワクチンを提供する。
【解決手段】鼻腔粘膜においてウイルス特異的抗体を誘導するインフルエンザワクチンであって、インフルエンザウイルス不活化全粒子を有効成分とし、１回当たり抗原量として１５μｇＨＡ／株以上が皮内投与される季節性インフルエンザワクチン。
【選択図】なし

104.2019306504Methods and compositions using recombinant dendritic cells for cancer therapy

AU - 11.03.2021

Int.Class A61K 35/15 Appl.No 2019306504 Applicant Enochian Biopharma, Inc. Inventor

Disclosed herein are methods and compositions for treating cancer by eliciting an immune response by administering dendritic cells expressing heterologous proteins. In some embodiments, a dendritic cell comprises one or more heterologous nucleic acid molecules encoding for CD40L and CXCL13. In some embodiments, the dendritic cell further comprises a heterologous nucleic acid molecule encoding for CD93. In yet additional embodiments, the dendritic cells expressing heterologous proteins are activated.

105.WO/2021/051066HER3 PULSED DC1 THERAPY

WO - 18.03.2021

Int.Class A61P 35/00 Appl.No PCT/US2020/050689 Applicant H. LEE MOFFITT CANCER CENTER AND RESEARCH INSTITUTE, INC. Inventor CZERNIECKI, Brian J.

Disclosed are compositions and methods comprising the administration of pulsed dendritic cells and an immunoregulator molecule inhibitor for the treatment of cancer.

106.WO/2021/050778LIPOPOLYSACCHARIDE MOLECULES FOR ENHANCING IMMUNE RESPONSES

WO - 18.03.2021

Int.Class A61K 9/127 Appl.No PCT/US2020/050260 Applicant THE PENN STATE RESEARCH FOUNDATION Inventor MEREDITH, Timothy

The present disclosure provides compositions and methods for enhancing immune response in a subject. In an embodiment, this disclosure provides modified LPS molecules and compositions comprising the modified LPS molecules. The disclosure also provides methods for enhancing an immune response in a subject.

107.20210070813SALMONELLA SIIE-DERIVED PEPTIDES FOR MANIPULATION OF LONG-LIVED PLASMA CELLS

US - 11.03.2021

Int.Class C07K 14/255 Appl.No 16644852 Applicant DEUTSCHES RHEUMA-FORSCHUNGSZENTRUM BERLIN Inventor Koji TOKOYODA

An isolated polypeptide includes the amino acid sequence EEAEKAKEAAEKALNEAFE or an amino acid sequence with a sequence identity of least 70%, 80%, or 90% identity to that sequence. The polypeptide is no longer than 200 or 170 amino acids. A nucleic acid encodes the polypeptide, a gene therapy vector includes the nucleic acid and genetically modified cells express the polypeptide. The polypeptide, the nucleic acid, the gene therapy vector and/or the cell can be used for the treatment of a disease associated with pathogenic long-lived plasma cells.

108.20210077620COMPOSITIONS COMPRISING CHEMOTHERAPEUTIC AGENTS AND CHECKPOINT INHIBITORS AND METHODS OF USE

US - 18.03.2021

Int.Class A61K 39/395 Appl.No 16772381 Applicant NORTH CAROLINA STATE UNIVERSITY Inventor Zhen GU

Disclosed herein are methods of treating/inhibiting/reducing a non-immunogenic cancer in a subject or inducing blockade inhibitor susceptibility (such as, for example, PD-1/PDLI, CTLA-4/B7-1/2, and/or CD47/SIRPa inhibitor susceptibility) in a tumor in a subject with a cancer, said methods comprising administering to the subject a hydrogel matrix comprising a chemotherapeutic agent (including, but not limited to gemcitabine) and a blockade inhibitor (including, but not limited to aPD-1/PD-LI blockade inhibitor, such as, for example nivolumab, pembrolizumab, pidilizumab, atezolizumab, avelumab,

durvalumab, and BMS-936559; a CTLA-4/B7-1/2 inhibitor such as, for example, Ipilimumab; and/or a CD47/SIRPa inhibitor such as, for example Hu5F9-G4, CVI, B6H12, 2D3, CC-90002, and TTI-621).

109.WO/2021/044039SSEA-4 BINDING MEMBERS

WO - 11.03.2021

Int.Class C07K 16/18 Appl.No PCT/EP2020/074878 Applicant SCANCELL LIMITED Inventor DURRANT, Linda Gillian

The disclosure relates to the expression of stage-specific embryonic antigen 4 (SSEA-4) on stem memory T-cells (TSCM), which can then be used as a target to isolate, activate and expand this T cell subset both in vivo and in vitro. It also relates to the pharmaceutical antibody composition binding SSEA-4 targeting TSCM, as well as methods for use thereof. The antibody of the disclosure recognises the SSEA-4 glycolipid and induces proliferation of TSCM which could be used to sort this unique population from blood for clinical expansion for adoptive T-cell transfer of T-cell receptor (TCR) transduced, chimeric antigen receptor (CAR)-T transduced or cells for haematopoietic stem cell transplant. Methods of use include, without limitation, in cancer therapies and diagnostics. Examples related to the antibody with the designation F2811.72.

110.20210079383METHODS AND SYSTEMS FOR T CELL RECEPTOR ANALYSIS

US - 18.03.2021

Int.Class C12N 15/10 Appl.No 17025822 Applicant 10X Genomics, Inc. Inventor Katherine PFEIFFER

Featured are devices, systems, and methods of use for profiling a T cell receptor (TCR) from individual T cells or a population of T cells, and the use of profiling antigen-presenting cells (pAPCs) in such methods, compositions, and systems.

111.WO/2021/046250METHODS OF TREATMENT

WO - 11.03.2021

Int.Class A61K 31/519 Appl.No PCT/US2020/049248 Applicant INTRA-CELLULAR THERAPIES, INC. Inventor LI, Peng

The disclosure relates to the combination of inhibitors of phosphodiesterase 1 (PDE1) useful for the treatment of certain cancers or tumors, such as colon cancer. In another embodiment, the disclosure relates to the use of inhibitors of PDE1 and an optional antitumor agent for the treatment of certain cancers or tumors.

112.WO/2021/050722AN IMMUNOTHERAPEUTIC FOR PROSTATE CANCER TREATMENT

WO - 18.03.2021

Int.Class A61K 38/17 Appl.No PCT/US2020/050194 Applicant HEXAMER THERAPEUTICS, INC. Inventor MILLER, Keith Douglas

The present disclosure describes a GnRH therapeutic for neutralizing GnRH levels in subjects which can reduce testosterone levels to attenuate or eliminate prostate cancer cell growth and/or metastasis. The therapeutic is produced synthetically. The GnRH therapeutic includes a hapten carrier (hC) comprising a monomeric peptide (MP), synthesized separately from the GnRH peptide, and following self-assembly of the hC, GnRH is covalently coupled to form a GnRH-hC conjugate which can serve as a therapeutic. The MP includes heptad repeats following a specific pattern. The hC can include a GnRH peptide attached to a monomeric peptide prior to self-assembly to form a therapeutic. Optionally, the GnRH-hC conjugate further includes one or more T-cell epitopes at the N- and/or C-terminus of the one or more amphipathic alpha-helices. The present disclosure also describes compositions including immunogenic compositions including the therapeutics described herein.

113.WO/2021/048381METHOD FOR IDENTIFYING STABLE MHC BINDING PEPTIDES USING MASS SPECTROMETRY

WO - 18.03.2021

Int.Class G01N 33/68 Appl.No PCT/EP2020/075512 Applicant EVAXION BIOTECH APS Inventor KRINGELUM, Jens

Disclosed is an MS based method for identification of MHC binding peptides, where the binding capability is quantitatively assessed to allow distinction between stably binding peptides and peptides that are unlikely to be presented to T-cells. The method includes a step of time-course or thermostability testing of naturally processed peptides bound to MHC. Also disclosed are methods for preparation of immunogenic compositions.

114.WO/2021/048279MANAGEMENT OF CONDITIONS OTHER THAN MULTIPLE SCLEROSIS IN OFATUMUMAB-TREATED PATIENTS

WO - 18.03.2021

Int.Class C07K 16/28 Appl.No PCT/EP2020/075331 Applicant NOVARTIS AG Inventor MERSCHHEMKE, Martin

The disclosure relates to methods of providing a multiple sclerosis (MS) treatment that allows controlling conditions other than MS such as infections.

115.20210069206MIRTAZAPINE AS A PRE-SHIPPING INHIBITOR OF BOVINE RESPIRATORY DISEASE

US - 11.03.2021

Int.Class A61K 31/55 Appl.No 16947607 Applicant Iowa State University Research Foundation, Inc. Inventor Steven Alan Carlson

Methods for preventing feedlot bovine respiratory diseases employing mirtazapine as pre-shipment treatments are disclosed. Compositions are further disclosed. Beneficially, the methods and compositions provide safe and cost-effective management of a costly disease.

116.2021201228Improved lipid formulation

AU - 11.03.2021

Int.Class Appl.No 2021201228 Applicant Arbutus Biopharma Corporation Inventor

The invention features a cationic lipid of formula (I), an improved lipid formulation comprising a cationic lipid of formula I and corresponding methods of use. Also disclosed are targeting lipids, and specific lipid formulations comprising such targeting lipids.

117.WO/2021/045870MIRTAZAPINE AS A PRE-SHIPPING INHIBITOR OF BOVINE RESPIRATORY DISEASE

WO - 11.03.2021

Int.Class A61K 315/5 Appl.No PCT/US2020/045597 Applicant IOWA STATE UNIVERSITY RESEARCH FOUNDATION, INC. Inventor CARLSON, Steven

Methods for preventing feedlot bovine respiratory diseases employing mirtazapine as pre-shipment treatments are disclosed. Compositions are further disclosed. Beneficially, the methods and compositions provide safe and cost-effective management of a costly disease.

118.20210077583PLASMID DNA ENCODING BETA-ENDORPHIN, BACTERIAL PRODUCER, ANALGESIC AGENT

US - 18.03.2021

Int.Class A61K 38/22 Appl.No 16766836 Applicant Ilya Vladimirovich DUKHOVLINOV Inventor Ilya Vladimirovich DUKHOVLINOV

Inventions relate to medicine, pharmacology, biotechnology, molecular biology, genetic engineering and can be used for analgesia. A plasmid DNA for transient expression in mammalian cells is proposed and represented by DNA backbone containing prokaryotic and eukaryotic elements, as well as a fragment providing enhanced capture of plasmid DNA by cells and a polynucleotide encoding beta-endorphin modified for increasing the affinity for receptors and codon-optimized for expression in mammalian cells. There are also proposed a producer of such plasmid DNA on the basis of a bacterial cell and an analgesic agent for application in mammals, in particular, humans, on its basis. The technical result of the use of the developed plasmid DNA and analgesic based on it is to increase the controllability of the synthesis of beta-endorphin exactly, in increasing the efficiency of plasmid DNA from which beta-

endorphin is synthesized, and reducing its amount to achieve analgesia, in increasing the duration of analgesia and in expanding the spectrum of analgesic drugs.

119.WO/2021/048400METHOD FOR IDENTIFYING T-CELL EPITOPES

WO - 18.03.2021

Int.Class G01N 33/50 Appl.No PCT/EP2020/075539 Applicant EVAXION BIOTECH APS Inventor KRINGELUM, Jens

Disclosed is a method for T-cell epitope prediction where quantitative scores of stability in the binding between peptides and MHC molecules are integrated into the derivation of the likelihood that a peptide of defined amino acid sequence constitutes a T-cell epitope. Preferably, stability data are obtained an MS-based method for identification of MHC binding peptides, where the binding capability is quantitatively assessed to allow distinction between stably binding peptides and peptides that are unlikely to be presented to T-cells; this method includes a step of time-course or thermostability testing of naturally processed peptides bound to MHC. Also disclosed are methods for preparation of personalized immunogenic compositions, methods of therapeutic treatment of malignancies, and a computer system that implements the T-cell epitope prediction method.

120.WO/2021/0432083, 5-DISUBSTITUTED PYRAZOLE COMPOUNDS AS KINASE INHIBITORS AND USES THEREOF

WO - 11.03.2021

Int.Class C07D 403/12 Appl.No PCT/CN2020/113233 Applicant IMPACT THERAPEUTICS, INC Inventor CAI, Sui Xiong

The disclosure provides novel compounds as represented in Formula (I), wherein A0-A2, R0-R6, L, Z and Q are defined herein. The compounds of Formula (I) are CHK1 inhibitors. Therefore, the compounds of the disclosure can be used to treat diseases, disorders and conditions associated with continuous activation of CHK1 or with high internal DNA damage or injury during DNA replication, such as cancers.

121.20210071318COMBINATORIAL DERIVATIVES OF OLIGOPEPTIDES HAVING ANTIVIRAL PROPERTIES

US - 11.03.2021

Int.Class C40B 40/10 Appl.No 16771467 Applicant Boris Slavinovich FARBER Inventor Boris Farber

The invention relates to organic and bio-organic combinatorial chemistry, specifically to new combinatorial libraries of oligopeptide derivatives and supra molecular structures based thereon that have powerful antiviral properties when used without being separated into individual components. The aim of the invention is to synthesize combinatorial oligopeptide derivatives that have antiviral properties and a new mechanism of action and that can be used to significantly improve treatment effectiveness and reduce treatment duration in the case of viral diseases such as influenza and herpesvirus infections.

This aim is achieved by synthesizing combinatorial oligopeptide derivatives having antiviral properties, characterized in that the combinatorial oligopeptide derivatives, in the structure of which lysine, histidine, and arginine amino groups as well as serine and threonine alcoholic residues are available for modification, are simultaneously combinatorially modified by at least two different covalent modifiers, and subsequently the resulting combinatorial mixture is used whole, without purification and without separation of each individual derivative, as an antiviral agent in various pharmaceutical compositions. The result is modified complementary protected oligopeptides that have powerful antiviral properties and on the basis of which a medicinal, veterinary, or cosmetic product having a broad spectrum of activity can be obtained. The agent has a broad spectrum of action and low toxicity, and is suitable for industrial production.

122.20210072248BIOMARKERS PREDICTIVE OF ANTI-IMMUNE CHECKPOINT RESPONSE

US - 11.03.2021

Int.Class G01N 33/574 Appl.No 16771802 Applicant Dana-Farber Cancer Institute, Inc. Inventor Rizwan Haq

The present invention is based in part on the identification of Fbxw7 as a biomarker predictive of responsiveness to anti-immune checkpoint therapies.

123.WO/2021/046497ORALLY DELIVERED THERAPEUTICAL COMPOSITION AND USE THEREOF

WO - 11.03.2021

Int.Class A61K 38/22 Appl.No PCT/US2020/049609 Applicant SHEN, Haifa Inventor SHEN, Haifa

This disclosure is directed to a pharmaceutical composition comprising a bioactive agent (active pharmaceutical ingredient, API) and at least one long chain fatty acid (LCFA), wherein the long chain fatty acid can comprise a carbon chain having at least 10 carbon atoms and can comprise a free carboxylic acid group or a salt thereof. The LCFA-conjugated active pharmaceutical ingredient (API) can be resistant to acid degradation in digestive system and facilitate the delivery of the API across the small intestinal epithelial cell membrane via fatty acid transport protein 4 (FATP4, also known as SLC27A4). The pharmaceutical composition can be formulated in acid- resistant (enteric-release) dosage forms for oral administration in patients. This disclosure is further directed to a process for producing the LCFA-conjugated bioactive agent including protein, polypeptide, small molecule drugs, DNA, RNA, oligonucleotide, or a combination thereof.

124.WO/2021/046398COMBINATION ANTIVIRAL THERAPY FOR MEASLES

WO - 11.03.2021

Int.Class C07K 14/005 Appl.No PCT/US2020/049473 Applicant THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK Inventor POROTTO, Matteo

Described herein are peptides, compositions, and method of treating measles or HIV infection with antiviral peptide conjugates comprising a fusion inhibitory peptide (FIP) conjugated to a C-terminal heptad repeat

(HRC) peptide. Also described herein are soluble stabilized measles F proteins, compositions, and method of preventing measles infection with the stabilized F protein, which can be administered alone, or in combination with the antiviral peptide conjugates described herein.

125.1020210028065 그래핀이 분산 함유된 생리 식염수 및 그를 이용한 코로나 바이러스 백신

KR - 11.03.2021

Int.Class A61K 33/44 Appl.No 1020200054820 Applicant 김한식 Inventor 김한식

본 발명은 질환을 고치려는 목적으로 인체의 혈관, 피하조직에 놓는 주사액, 생리 식염수, 포도당액, 링거액에 관한 것이다. 본 발명의 그래핀이 분산 함유된 생리 식염수 및 그를 이용한 코로나 바이러스 백신은치매질환, 파킨슨병, 루게릭병, 헌팅턴병 등을 포함한 각 질환에 활용하고자 한다. 본 발명의 그래핀이 분산 함유된 생리 식염수 및 그를 이용한 코로나 바이러스 백신은메르스, 사스, 코로나 등 바이러스의 치료제로 활용하고자 한다. 종래 병원에서 사용하고 있는 주사액, 링거액, 생리식염수, 포도당액 등 주사액으로 사용하고 있는 수단에 0.2nm 이하의 크기의 그래핀 분말을 분산하여 치료제로 사용한다. 바이러스가 침투한 인체에 그래핀 분말이 분산된 링거액을 주입하여 고루 몸속에 퍼져서 바이러스와 그래핀분말이 만나면 나노 응집력으로 그래핀 분말과 바이러스가 서로 끌어당겨 달라붙게 된다. 바이러스의 몸통과 스파이크돌기에 그래핀 분말이 달라 붙으면 바이러스는 제 기능을 하지 못해 증식을 하지 못하고 종국에는 사멸을 하게 된다. 본 발명에서 그래핀이 분산 함유된 생리 식염수에 배양된 코로나 바이러스를 섞어 분산과정을 반복하여 코로나 바이러스의 스파이크 돌기의 각 미세한 기관들에 그래핀 나노 분말이 침입하여 코로나 바이러스의 기능을 떨어뜨리거나, 기능을 정지시키거나, 일부 코로나 바이러스를 죽여서 결과적으로는 코로나 바이러스 백신이 된다.

126.69935606ADJUVANZSYSTEME UND IMPFSTOFFE

DE - 11.03.2021

Int.Class A61K 39/39 Appl.No 69935606 Applicant GlaxoSmithKline Biologicals S.A. Inventor GARCON Nathalie

127.20210071141METHODS OF PRODUCING T CELL POPULATIONS USING HYDROXYCITRIC ACID AND/OR A SALT THEREOF

US - 11.03.2021

Int.Class C12N 5/0783 Appl.No 17050045 Applicant The United States of America,as represented by the Secretary,Department of Health and Human Services Inventor Suman Kumar Vodnala

Provided are methods of producing an isolated population of T cells, the method comprising culturing isolated T cells in vitro in the presence of hydroxycitric acid, and/or a salt thereof, wherein the salt is potassium hydroxycitrate or sodium hydroxycitrate. Also provided are related isolated populations of cells, pharmaceutical compositions, and methods of treating or preventing cancer in a mammal.

128.20210070853Use of Anti-Il-6 Antibody, e.g., Clazakizumab for Desensitization of Solid Organ Transplant Recipients and/or for Preventing, Stabilizing or Reducing Antibody Mediated Rejection (ABMR)

US - 11.03.2021

Int.Class C07K 16/24 Appl.No 16959923 Applicant VITAERIS, INC. Inventor Kevin CHOW

Novel therapeutic protocols are provided relating to the use of an anti-IL-6 antibody, e.g., Clazakizumab in order to prevent, stabilize, reduce or arrest antibody mediated rejection responses in patients receiving solid organ transplants, e.g., patients receiving transplanted kidney, heart, liver, lungs, pancreas, intestines or combinations of any of the foregoing. Also novel therapeutic protocols are provided pertaining to the use of an anti-IL-6 antibody, e.g., Clazakizumab as part of a desensitization protocol for treating highly sensitized subjects waiting for and/or after allograft transplants, e.g., patients who are to receive solid organ transplants, e.g., kidney, heart, liver, lungs, pancreas, intestines, skin or combinations of any of the foregoing. The foregoing treatments may be effected in combination with one or more other immunosuppressant regimens or other desensitization procedures.

129.20210079048VMP-LIKE SEQUENCES OF PATHOGENIC BORRELIA SPECIES AND STRAINS

US - 18.03.2021

Int.Class C07K 14/20 Appl.No 16939100 Applicant BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM Inventor Steven J. NORRIS

The present invention relates to DNA sequences encoding Vmp-like polypeptides of pathogenic *Borrelia,* the use of the DNA sequences in recombinant vectors to express polypeptides, the encoded amino acid sequences, application of the DNA and amino acid sequences to the production of polypeptides as antigens for immunoprophylaxis, immunotherapy, and immunodiagnosis. Also disclosed are the use of the nucleic acid sequences as probes or primers for the detection of organisms causing Lyme disease, relapsing fever, or related disorders, and kits designed to facilitate methods of using the described polypeptides, DNA segments and antibodies.

130.WO/2021/046033BIOMIMETIC NANOEMULSIONS FOR OXYGEN DELIVERY

WO - 11.03.2021

Int.Class A61K 9/51 Appl.No PCT/US2020/048906 Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA Inventor ZHANG, Liangfang

A biomimetic oxygen delivery carrier is provided by employing natural cell membrane as a stabilizer for fluorocarbon nanoemulsions. The resulting formulation exhibits a high capacity for delivering oxygen and can be used to successfully resuscitate subjects in need due to for example hemorrhagic shock. This natural-synthetic platform can alleviate the impact of blood shortages in clinical settings among other uses.

131.20210071196PEPTIDES THAT BLOCK TRANSMISSION OF ORTHOTOSPOVIRUSES AND METHODS OF USING THE SAME

US - 11.03.2021

Int.Class C12N 15/82 Appl.No 16913721 Applicant THE BOARD OF TRUSTEES OF THE UNIVERSITY OF ARKANSAS Inventor Ioannis Tzanetakis

Orthotospovirus virions travel through the thrips foregut and enter midgut epithelial cells through the interaction between virus glycoproteins and cellular receptors with several protein motifs thought to be involved in the interaction. Single, double and triple mutant polypeptides in the soybean vein necrosis virus (SVNV)/*Neohydatothrips variabilis* system are provided herein and several are shown to block viral transmission from the thrips to the soybean plants. Methods for inhibiting viral transmission using these polypeptides or constructs comprising polynucleotides encoding peptides are also provided herein.

132.WO/2021/051136METHODS AND COMPOSITIONS FOR TREATING STAPHYLOCOCCAL INFECTIONS

WO - 18.03.2021

Int.Class C07K 16/42 Appl.No PCT/US2020/070530 Applicant THE UNIVERSITY OF CHICAGO Inventor MISSIAKAS, Dominique M.

The current disclosure provides novel compositions for treating bacterial infections. Accordingly, aspects of the disclosure relate to an engineered antibody comprising: LCDR1, LCDR2, and LCDR3 of the light chain variable region of the 3F6 antibody and HCDR1, HCDR2, and HCDR3 of the heavy chain variable region of the 3F6 antibody. Also provided are compositions comprising the antibodies and nucleic acids encoding either the heavy chain or light chain (or both) of the antibodies. Other aspects relate to host cells comprising the antibodies and/or nucleic acids of the disclosure. Further aspects relate to a method of preventing or treating staphylococcal infection comprising the step of administering the antibody of the disclosure to a subject in need thereof. Yet further aspects relate to a method of making the antibody comprising expressing the nucleic acid(s) of the disclosure in a cell and isolating the expressed protein.

133.20210070712Dimeric Quinacrine Derivatives As Autophagy Inhibitors For Cancer Therapy

US - 11.03.2021

Int.Class C07D 219/12 Appl.No 17020558 Applicant The Trustees of the University of Pennsylvania Inventor Ravi K. Amaravadi

The invention provides dimeric quinacrine derivatives and related compounds and compositions, methods of treatment and syntheses. The novel compounds exhibit unexpected anticancer activity and are useful in the treatment of a variety of autophagy-related disorders.

134.3791893AGENT FOR PREVENTING VIRAL INFECTIONS

EP - 17.03.2021

Int.Class A61K 39/12 Appl.No 19799149 Applicant LASKAVY VLADISLAV NIKOLAEVICH Inventor LASKAVY VLADISLAV NIKOLAEVICH

The invention relates to medicine and veterinary medicine, and more specifically to pharmacology, and can be used to prevent viral infections caused by RNA viruses that have a lipid envelope, in particular influenza, transmissible gastroenteritis of swine and other viral infections. The invention expands the range of agents for the claimed purpose. The technical problem of the claimed invention is the expansion of the range of antiviral prophylactic preparations and the formation of new approaches to the problem of preventing human viral diseases, particularly influenza, by intracellular suppression of the virus. A means for preventing viral infections comprises viral material from RNA viruses that have a lipid envelope, and stabilized colloidal selenium at a 1:1 ratio of viral material to stabilized colloidal selenium. The viral material from RNA viruses has titers of 6.0-8.0 lg $TCD_{50/ml}$. To obtain colloidal selenium having particle sizes from 10 to 15 nm, the colloidal selenium is stabilized with polyethylene glycol, and for colloidal selenium having particle sizes from 20 to 40 nm, the colloidal selenium is stabilized with cysteine. The stabilized colloidal selenium has a concentration of 6.0-6.2%.

135.WO/2021/046417COMPOSITIONS AND METHODS FOR DETECTING ALLERGEN REACTIVE TH2 CELLS

WO - 11.03.2021

Int.Class A61K 39/35 Appl.No PCT/US2020/049501 Applicant BENAROYA RESEARCH INSTITUTE AT VIRGINIA MASON Inventor WAMBRE, Eric E.

Provided are methods and compositions for labeling an allergen-specific pathogenic CD4+ T-cell. The method can comprise contacting a cell population comprising CD4+ T cells with a suspected allergen to provide a challenged cell population, contacting the challenged cell population, or a subpopulation thereof, with a first molecule that specifically binds to a biomarker for an allergen-specific pathogenic T cell, wherein binding of the first molecule to the biomarker on a CD4+ cell indicates the cell is an allergen-specific pathogenic CD4+ T cell, and detecting binding of the first molecule to a CD4+ cell, wherein binding to the cell indicates the cell is an allergen-specific pathogenic CD4+ T cell. The method is applicable to monitoring the presence of allergen-specific pathogenic CD4+ T cells and/or efficacy of immunotherapy for allergies in a subject.

136.WO/2021/046207SELF-ASSEMBLING PROTEIN NANOSTRUCTURES DISPLAYING PARAMYXOVIRUS AND/OR PNEUMOVIRUS F PROTEINS AND THEIR USE

WO - 11.03.2021

Int.Class C07K 14/135 Appl.No PCT/US2020/049183 Applicant UNIVERSITY OF WASHINGTON Inventor KING, Neil, P.

Disclosed herein are nanostructures and their use, where the nanostructures include a plurality of first assemblies, each first assembly comprising a plurality of identical first polypeptides selected from I53_dn5A, I53_dn5A.I and I53_dn5A.2, or variants thereof; and a plurality of second assemblies, each second assembly comprising a plurality of identical second polypeptides being 153 dn5B or a variant thereof, wherein the plurality of first assemblies non-covalently interact with the plurality of second assemblies to form a nanostructure; and wherein the nanostructure displays multiple copies of one or more paramyxovirus and/or pneumovirus F proteins, or antigenic fragments thereof.

137.WO/2021/042369NANOPARTICLE HAVING CGAS-STING PATHWAY ACTIVATION FUNCTION, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF

WO - 11.03.2021

Int.Class A61K 33/32 Appl.No PCT/CN2019/104693 Applicant NATIONAL CENTER FOR NANOSCIENCE AND TECHNOLOGY Inventor XU, Jing

A nanoparticle having the cGAS-STING activation function. The nanoparticle is an organic-inorganic hybrid nanoparticle containing a metal ion. The metal ion has the cGAS-STING activation function. The nanoparticle comprises a macromolecule and the metal ion, and is formed by the interaction of the macromolecule with the metal ion and a negative ion. Moreover, the macromolecule can protect the colloidal stability of the nanoparticle. The nanoparticle can effectively trigger the production of STING-dependent type I interferon, and can be administered to a subject using different routes (comprising intravenous therapy, intramuscular injection, intradermal injection, intranasal injection, etc.). A nanoparticle preparation can be used for treating disorders and diseases that are beneficial in regulating STING activity, such as infectious diseases, cancer, inflammation, allergic and autoimmune diseases, and precancerous syndromes. The nanoparticle can also be used for triggering the immune response, and can be used as a vaccine adjuvant.

138.WO/2021/050792SYSTEMS AND METHODS FOR THE PREPARATION OF PEPTIDE-MHC-I COMPLEXES WITH NATIVE GLYCAN MODIFICATIONS

WO - 18.03.2021

Int.Class C07K 14/47 Appl.No PCT/US2020/050276 Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA Inventor SGOURAKIS, Nikolaos, G.

Disclosed herein are novel glycosylated peptide receptive MHC-I complexes that allow for efficient production of glycosylated MHC-I multimers. Such glycosylated peptide receptive MHC-I complexes

include a single-chain MHC-I construct and are produced in mammalian expression systems (e.g., CHO and HEK cells) that allow for the glycosylation of the complexes at one or more native positions. Multimers (e.g., tetramers) produced from the glycosylated peptide receptive MHC-I complexes provided herein advantageously allow for the identification of high-affinity T cell and natural killer cell receptors previously unidentified using traditional unglycosylated MHC tetramers.

139.WO/2021/046361USE OF CALCINEURIN INHIBITOR FREE CTLA4-IG + ANTI-IL6/IL6R FOR LONG TERM IMMUNOSUPPRESSION IN SOLID ORGAN TRANSPLANT RECIPIENTS

WO - 11.03.2021

Int.Class C07K 14/705 Appl.No PCT/US2020/049422 Applicant CEDARS-SINAI MEDICAL CENTER Inventor JORDAN, Stanley, C.

The present invention provides for methods and uses of (i) an IL-6 inhibitor or IL-6R inhibitor, or both; and (ii) CTLA-4 or CTLA-4 fusion proteins for immunosuppression and/or immunomodulation in a solid organ transplant recipient. Various embodiments of the method comprise administering an IL-6 inhibitor or IL-6R inhibitor, or both to the recipient; and administering a or CTLA-4 fusion protein such as CTLA4-Ig to the recipient and may further include administration or use of a calcineurin inhibitor.

140.20210079114THERAPEUTIC AND DIAGNOSTIC TARGET FOR CANCER COMPRISING DLL3 BINDING REAGENTS

US - 18.03.2021

Int.Class C07K 16/30 Appl.No 16953459 Applicant Boehringer Ingelheim International GmbH Inventor Lindsey Jane HUDSON

The present invention provides methods and compositions for treatment, screening, diagnosis and prognosis of cancer, such as lung cancer, pancreatic cancer and skin cancer, for monitoring the effectiveness of cancer, such as lung cancer, pancreatic cancer and skin cancer treatment, and for drug development.

141.3792347METHOD FOR PRODUCING HOMOZYGOUS CELLS

EP - 17.03.2021

Int.Class C12N 5/10 Appl.No 19799779 Applicant UNIV OSAKA Inventor YOSHIMURA YASUHIDE

The purpose of the present invention is to provide a technique by which a site-specific homozygote can be efficiently acquired by increasing cross efficiency and a homozygote in a genome modification-free state can be easily obtained. A method for producing homozygous cells, said method including: (A) a step for, into cells having a heterozygous mutation at a target site, introducing heterozygouse allele specific cleavage of DNA double strand of homologous chromosomes and thus inducing crossing in the presence

of a Bloom's syndrome protein inhibitor to thereby give homozygous cells at the target site; and (B) a step for selecting the homozygous cells.

142.20210079077ERYTHROCYTE-BINDING THERAPEUTICS

US - 18.03.2021

Int.Class C07K 16/18 Appl.No 17011321 Applicant École Polytechnique Fédérale de Lausanne (EPFL) Inventor Jeffrey A. Hubbell

Peptides that specifically bind erythrocytes are described. These are provided as peptidic ligands having sequences that specifically bind, or as antibodies or fragments thereof that provide specific binding, to erythrocytes. The peptides may be prepared as molecular fusions with therapeutic agents, tolerizing antigens, or targeting peptides. Immunotolerance may be created by use of the fusions and choice of an antigen on a substance for which tolerance is desired.

143.20210077527UNIVERSAL DONOR SELECTION METHOD TO IDENTIFY NK-CELL-DONORS

US - 18.03.2021

Int.Class A61K 35/17 Appl.No 17018681 Applicant The Research Institute at Nationwide Children's Hospital Inventor Dean Lee

Described herein are compositions comprising universal donor natural killer (NK) cells, populations of such cells, methods of obtaining and preparing such cells, and methods of use of such cells and compositions in medical treatment of cancers and infectious disease.

144.20210079071ANTIBODY SPECIFIC TO STAPHYLOCOCCUS AUREUS, THERAPEUTIC METHOD AND DETECTION METHOD USING SAME

US - 18.03.2021

Int.Class C07K 16/12 Appl.No 16942077 Applicant William R Church Inventor William R Church

We provide new monoclonal antibody inhibitors of coagulases staphylocoagulase and vWbp for treatment of *S. aureus*. The monoclonal antibodies are useful in targeting the SC N-terminus of SC and vWbp (respectively) and inhibiting prothrombin activation. The monoclonal antibodies are able to bind to and interfere with, modulate, and/or inhibit the binding interactions between the coagulase protein and its ligand protein prothrombin in blood and tissues. The antibodies are effective in inhibiting the activation of prothrombin.

145.WO/2021/051088NK CELL IMMUNOTHERAPY COMPOSITIONS, METHODS OF MAKING AND METHODS OF USING SAME

WO - 18.03.2021

Int.Class A61K 35/17 Appl.No PCT/US2020/050742 Applicant OHIO STATE INNOVATION FOUNDATION Inventor VASU, Sumithira

Natural Killer (NK) cells represent a potent therapeutic for patients suffering from cancer or infectious diseases. NK cells typically represent a minor fraction of the lymphocytes and express multiple receptors that interact with human leukocyte antigen (HLA). Disclosed are methods of expanding NK cells and compositions of NK cells for administration in patients. The methods described herein can be used to identify donor NK cells for administration to a recipient subject. The NK cell compositions disclosed herein can be used to treat a number of diseases including cancer and infectious diseases.

146.20210078991THERAPEUTIC COMPOUNDS

US - 18.03.2021

Int.Class C07D 417/14 Appl.No 16914034 Applicant Gilead Sciences, Inc. Inventor Zhenhong R. Cai

Compounds disclosed herein including compounds of Formula I:

and salts thereof are provided. Pharmaceutical compositions comprising compounds disclosed herein, processes for preparing compounds disclosed herein, intermediates useful for preparing compounds disclosed herein and therapeutic methods for treating an HIV infection using compounds disclosed herein are also provided.

147.20210070843METHOD FOR HIGH-THROUGHPUT SCREENING OF NEUTRALIZING ANTIBODIES, NEUTRALIZING ANTIBODIES PRODUCED THEREFROM, AND USES THEREOF

US - 11.03.2021

Int.Class C07K 16/10 Appl.No 16757460 Applicant ACADEMIA SINICA Inventor An-Suei YANG

Disclosed herein are methods for high-throughput screening of a virus-specific neutralizing antibody. According to certain embodiments of the present disclosure, the virus is an influenza virus. Also disclosed herein are the antibodies selected by the high-throughput screening method, and the uses thereof in the prophylaxis and/or treatment of viral infection.

148.WO/2021/046549COMPOSITIONS AND METHODS FOR THE TREATMENT OF VIRAL INFECTIONS

WO - 11.03.2021

Int.Class A61K 47/68 Appl.No PCT/US2020/049772 Applicant CIDARA THERAPEUTICS, INC. Inventor BALKOVEC, James, M.

Compositions and methods for the treatment of viral infections include conjugates containing inhibitors of viral neuraminidase (e.g., zanamivir, peramivir, or analogs thereof) linked to an Fc monomer, an Fc

domain, and Fc-binding peptide, an albumin protein, or albumin-binding peptide. In particular, conjugates can be used in the treatment of viral infections (e.g., influenza viral infections).

149.WO/2021/051042UNIVERSAL DONOR SELECTION METHOD TO IDENTIFY NK-CELL-DONORS

WO - 18.03.2021

Int.Class A61K 35/12 Appl.No PCT/US2020/050634 Applicant THE RESEARCH INSTITUTE AT NATIONWIDE CHILDREN'S HOSPITAL Inventor LEE, Dean

Described herein are compositions comprising universal donor natural killer (NK) cells, populations of such cells, methods of obtaining and preparing such cells, and methods of use of such cells and compositions in medical treatment of cancers and infectious disease. In one aspect, the present disclosure relates to a method of selecting universal donor NK cells for therapeutic administration to a subject in need thereof.

150.2021038246 分泌様免疫グロブリンを含む組成物

JP - 11.03.2021

Int.Class Appl.No 2020192922 Applicant ツェー・エス・エル・ベーリング・アクチエンゲゼルシャフト Inventor ブレーズ・コーテジー

【課題】分泌様免疫グロブリン、特に分泌様ＩｇＡおよび／または分泌様ＩｇＭを含む組成物を製造するための方法、ならびに該方法によって得ることができる組成物の提供。
【解決手段】（ａ）非精製形態のＪ鎖含有免疫グロブリンを含む血液由来のタンパク質組成物を得る工程、（ｂ）工程（ａ）の組成物と分泌成分を混合する工程を含む、インビトロにおいて分泌様免疫グロブリンを含む組成物を製造する方法、ならびに該方法によって得ることができる、分泌様ＩｇＡおよび／もしくは分泌様ＩｇＭまたはそれらの組み合わせを含む組成物。
【選択図】なし

151.20210077601MEDICAMENT FOR USE IN A METHOD OF INDUCING OR EXTENDING A CELLULAR CYTOTOXIC IMMUNE RESPONSE
US - 18.03.2021

Int.Class A61K 39/00 Appl.No 16953891 Applicant Bundesrepublik Deutschland letztvertreten durch das Robert Koch-Institut vertreten durch seinen Präs Inventor Richard KROCZEK

The present invention relates to a medicament for use in a method of inducing a cellular cytotoxic immune response, the method comprising the steps of: i) administering to a patient a delivery system comprising (a) a molecule binding to a receptor on the surface of a dendritic cell, (b) an antigen-comprising protein bound to molecule of (a) and (c) a first adjuvant, wherein upon binding of the molecule of (a) to the receptor, the protein of (b) is internalized and processed in the dendritic cell and the antigen comprised in the protein is presented on the surface of the dendritic cell, thereby activating a

T cell in the patient; and ii) administering to the patient a re-activator selected from the group consisting of (d) complexed interleukin 2 (IL-2cx), (e) a peptide-loaded major histocompatibility complex class I (MHC-I) presenting cell and a second adjuvant, and (f) a combination of (d) and (e), wherein the peptide is derived from the antigen-comprising protein as defined in step i), thereby reactivating the T cell activated in step i), wherein the re-activator of step ii) is administered in a time frame of from 0 h to 14 days after the administration of the delivery system of step i).

152.WO/2021/046073FEED COMPOSITION

WO - 11.03.2021

Int.Class A23L 33/135 Appl.No PCT/US2020/048980 Applicant DUPONT NUTRITION BIOSCIENCES APS Inventor GIBBS, Kirsty

Provided herein, inter alia, are feed or feed additive compositions comprising chitin-glucan as well as methods for making and using the same for improving the performance of a subject with respect to feed conversion ratio (FCR), weight gain, feed efficiency, carcass quality, maintenance of a healthy guy microbiome, and/or decreased susceptibility to intestinal pathogens and diseases associated with the same.

153.20210078959HIV PROTEASE INHIBITORS

US - 18.03.2021

Int.Class C07D 247/00 Appl.No 16925096 Applicant Gilead Sciences, Inc. Inventor Zhenhong R. Cai

The invention provides a compound of Formula I:

or a pharmaceutically acceptable salt thereof as described herein. The invention also provides pharmaceutical compositions comprising a compound of Formula I, processes for preparing compounds of Formula I, therapeutic methods for treating the proliferation of the HIV virus, treating AIDS or delaying the onset of AIDS symptoms in a mammal using compounds of Formula I.

154.20210069238METHODS OF MAKING NOVEL PHARMACEUTICAL COMPOSITIONS

US - 11.03.2021

Int.Class A61K 31/74 Appl.No 17084995 Applicant HIGHLIGHT THERAPEUTICS, S.L. Inventor MARISOL QUINTERO ORTIZ

The present invention relates to compositions comprising complexes that are formed by polyinosinic-polycytidylic acid with a polyalkyleneimine, such as polyethyleneimine, that present uniform structural and functional features, as well as to methods for preparing the compositions that comply with regulatory requirements. The present invention additionally relates to use of said compositions as medicaments (in particular for treating cancer), alone or in combination with other therapeutic agents and/or in specific

medical methods. Moreover, the administration of these compositions is associated to changes in the expression of specific genes, in cell responses, and/or in composition of immune cell populations that can be used as specific biomarkers and/or as additional target for medical treatment.

155.WO/2021/050563ANTIBODY TREATMENT FOR LESIONAL TISSUE OF HIDRADENITIS SUPPURATIVA

WO - 18.03.2021

Int.Class A61P 17/06 Appl.No PCT/US2020/049964 Applicant THE ROCKEFELLER UNIVERSITY Inventor KRUEGER, James

Provided are methods for treating Hidradenitis Suppurativa (HS). The methods include administering to an HS patient an IL-17 receptor agonist. A representative IL-17 receptor agonist is brodalumab. Weekly brodalumab dosing improves HS in patients with draining tunnels. In embodiments, the IL-17 receptor agonist comprises an IL-17 receptor binding partner that specifically binds to human IL- 17 receptor A, and inhibits the binding of EL-17A to said IL- 17 receptor A.

156.20210077617IMMUNE MODULATION

US - 18.03.2021

Int.Class A61K 39/35 Appl.No 16960869 Applicant N-Fold LLC Inventor Howard B. Sosin

The disclosure relates to compositions, methods of use and making, and kits for immunomodulation. In some embodiments, the present invention also provides compositions including at least one antigen substantially co-localized with at least one adjuvant agent in a format selected from patch, capsule, tablet, gel, matrix, paste, reservoir, adhesive, liquid, suspension, lyophilized solid, liquid contained within one or more lumenal units, and combinations thereof, wherein one or both of the antigen and the adjuvant agent is a crude preparation, and wherein the composition is characterized in that administration to a subject in need thereof results in an immune response in the subject to the antigen.

157.20210070859METHODS OF ASSESSING AND TREATING CANCER IN SUBJECTS HAVING DYSREGULATED LYMPHATIC SYSTEMS

US - 11.03.2021

Int.Class C07K 16/28 Appl.No 17096513 Applicant Ensemble Group Holdings Inventor Michael David KUO

Provided herein is a method for determining cancer treatment using an immune-modulating therapy in a subject in need thereof. The method comprises assessing whether a lymphatic system in a subject is dysregulated. When the lymphatic system is dysregulated, a treatment for the lymphatic system is determined before a therapeutic amount of an immune-modulating therapy is administered to treat cancer in the subject. Alternatively, when the lymphatic system is dysregulated, an immune-modulating therapy is selected to treat cancer in the subject. The immune-modulating therapy is independent of

immune-cell priming, antigen trafficking, antigen presentation, and any combination thereof. The subject may also be treated for cancer accordingly.

158.20210079421METHODS TO PRODUCE CHIMERIC ADENO-ASSOCIATED VIRUS/BOCAVIRUS PARVOVIRUS

US - 18.03.2021

Int.Class C12N 15/86 Appl.No 16076219 Applicant University of Iowa Research Foundation Inventor Ziying Yan

A method of preparing a chimeric virus comprising bocavirus capsid protein (VP) and a recombinant adeno-associated (AAV) viral genome, and isolated mutant bocavirus genomes, are provided.

159.20210074393MEDICAL CARE SUPPORT DEVICE, MEDICAL CARE SUPPORT METHOD, AND MEDICAL CARE SUPPORT PROGRAM

US - 11.03.2021

Int.Class G16H 10/60 Appl.No 17011672 Applicant FUJIFILM Corporation Inventor Haruyasu NAKATSUGAWA

A medical care support device includes a first display control unit that performs control of displaying, on a display unit, electronic medical record information including medical care information used for medical care for a subject and relative health information absence information or health information presence information representing presence or absence of relative health information on health of a relative of the subject, a reception unit that receives a display instruction performed according to the display of the relative health information presence information for displaying the relative health information on the display unit, and a second display control unit that performs control of displaying the relative health information on the display unit in a case where the reception unit receives the display instruction.

160.20210075595Auditable System and Methods for Secret Sharing

US - 11.03.2021

Int.Class H04L 9/08 Appl.No 16567060 Applicant Guardtime SA Inventor Ahto TRUU

Parties communicate input values to a central entity by first decomposing them according to a chosen operation into share values, which are sent either directly or, in a transformed form such as being hashed and/or encrypted, via a bulletin board data structure, to respective nodes, such that no node receives the input value itself. The nodes then combine the share values using the operation and pass these respective node values to the central entity for computation of a global value. The operation of the parties and of the nodes may be made verifiable by aggregating the share values within a party or the received share values within a node using a data and computational structure such as a hash tree or skip list. Digital signing and timestamping may also be applied.

161.3791863PROCESS FOR THE PRODUCTION OF HYBRIDOSOMES

EP - 17.03.2021

Int.Class A61K 9/127 Appl.No 20190918 Applicant ANJARIUM BIOSCIENCES AG Inventor DE BEER JOEL

The present invention provides a hybrid biocompatible carrier (hybridosome) comprising a lipid bilayer of a biocompatible delivery module (BDM) and a membrane of an engineered drug encapsulation module (EDEM) comprising at least one ionizable cationic lipid, wherein said hybridosome is the result of fusion of said BDM and EDEM. The invention further provides said hybridosome for use as a medicament; pharmaceutical compositions comprising said hybridosome and methods of manufacturing of said hybridosome.

162.20210069232CLICK-MODIFIED MRNA

US - 11.03.2021

Int.Class A61K 31/7115 Appl.No 16955837 Applicant BASECLICK GMBH Inventor Thomas FRISCHMUTH

The present invention relates to alkyne- and/or azide-modified mRNA, processes for producing such modified mRNA, cells which are transfected to include the modified mRNA, pharmaceutical compositions containing the modified mRNA or cells including the modified mRNA, and to uses of such mRNA, cells or pharmaceutical compositions in mRNA based therapeutic and/or prophylactic applications.

163.3178837URLC10-AFLEDT PEPTID OG VACCINE, DER INDEHOLDER DETTE

DK - 15.03.2021

Int.Class C07K 7/06 Appl.No 15829303 Applicant Oncotherapy Science, Inc. Inventor Tsunoda, Takuya

The present invention provides URLC10-derived epitope peptides having the ability to induce cytotoxic T cells. The present invention further provides polynucleotides encoding the peptides, antigen-presenting cells presenting the peptides, and cytotoxic T cells targeting the peptides, as well as methods of inducing the antigen-presenting cells or CTLs. The present invention also provides compositions and pharmaceutical compositions containing them as an active ingredient. Further, the present invention provides methods of treating and/or preventing cancer, and/or preventing postoperative recurrence thereof, using the peptides, polynucleotides, antigen-presenting cells, cytotoxic T cells or pharmaceutical compositions of the present invention. Methods of inducing an immune response against cancer are also provided.

164.WO/2021/047451DNA NANOVACCINE, PREPARATION METHOD THEREFOR AND USE THEREOF

WO - 18.03.2021

Int.Class A61K 39/00 Appl.No PCT/CN2020/113489 Applicant NATIONAL CENTER FOR NANOSCIENCE AND TECHNOLOGY Inventor DING, Baoquan

Provided are a DNA nanovaccine, a preparation method therefor and the use thereof. The DNA nanovaccine comprises a DNA nanostructure, a tumor antigen polypeptide-DNA complex and an immunologic adjuvant, and the immunologic adjuvant comprises a double-stranded RNA immunologic adjuvant and/or a CpG immunologic adjuvant. In the present invention, a nanostructure is constructed, wherein the nanostructure is assembled from a DNA template, a DNA chain for assisting in folding and a capture DNA chain. By hybridizing the capture DNA chain with a functional component, the precise positioning and assembling of a tumor antigen molecule and an immunologic adjuvant molecule on the surface of the DNA self-assembled nanostructure is realized; in addition, a controllable DNA molecule "switch" is designed on one side of the tubular DNA nanostructure, which switch can respond to the acid environment of an endosome after entering an antigen-presenting cell, and open the tubular structure responsively to release the tumor antigen and the immunologic adjuvant molecule. The nanostructure has a tumor antigen-specific immunostimulatory effect and is a tumor vaccine used for the immunotherapy and prevention of various types of malignant tumors.

165.20210069258COMPOSITIONS COMPRISING BACTERIAL STRAINS

US - 11.03.2021

Int.Class A61K 35/74 Appl.No 16908919 Applicant 4D Pharma Research Limited Inventor Imke Elisabeth MULDER

The invention provides compositions comprising bacterial strains for treating and preventing inflammatory and autoimmune diseases.

166.3791884COMBINATION OF HEPARIN AND MAGNESIUM SALT FOR THE TREATMENT OF VIRAL INFECTIONS

EP - 17.03.2021

Int.Class A61K 31/727 Appl.No 19197581 Applicant BUNZ OSKAR Inventor BUNZ OSKAR

A pharmaceutical or veterinary composition is disclosed, comprising heparin and one or more pharmaceutically acceptable magnesium salts. Further, the pharmaceutical or veterinary composition or a combination of heparin and one or more pharmaceutically acceptable magnesium salts for use in a prophylactic or therapeutic method for treating virus infections is disclosed. The treatment preferably is a topical treatment or intravenous treatment.

167.20210079001COMPOUNDS AND METHODS FOR THE MODULATION OF AHR

US - 18.03.2021

Int.Class C07D 487/04 Appl.No 16967100 Applicant IDEAYA BIOSCIENCES, INC. Inventor Hilary Plake BECK

Provided herein are compounds, compositions and methods of using the compounds and compositions for the treatment of diseases modulated, as least in part, by AhR. The compounds are represented by formula:

wherein the letters and symbols a, b, c, d, e, f, A, R^1, X^1, Ar^1 and Ar^2 have the meanings provided in the specification.

168.2021038225 ネコ用がんワクチン

JP - 11.03.2021

Int.Class Appl.No 2020177514 Applicant アンヴェクティ Inventor ピエール・ラングラード・ドゥモイヤン

【課題】ネコのための革新的ながん免疫療法（がんワクチン）戦略を提供する。
【解決手段】テロメラーゼ触媒活性を失ったネコテロメラーゼ、またはその断片をコードする配列を含む核酸を含む免疫原性組成物を提供する。
【選択図】なし

169.WO/2021/045292CRM197 PROTEIN EXPRESSION METHOD

WO - 11.03.2021

Int.Class C07K 7/08 Appl.No PCT/KR2019/012899 Applicant GENOFOCUS CO., LTD. Inventor KIM, Jeong Hyun

The present invention relates to a signal sequence for expressing a CRM197 protein in Escherichia coli and secreting same into the periplasm, and a use thereof, and more specifically, to: a signal sequence for expressing a CRM197 protein; a nucleic acid for coding the signal sequence; a nucleic acid construct or expression vector comprising the nucleic acid and a CRM197 protein gene; a recombinant microorganism having the nucleic acid construct or expression vector introduced therein; and a CRM197 protein production method comprising a step for culturing the recombinant microorganism. According to the present invention, a CRM197 protein having the same physicochemical/immunologic properties as the protein isolated from the parent bacteria may be expressed even in regular Escherichia coli of which a redox potential is not adjusted, and a CRM197 protein having high periplasmic secretion efficiency may be produced even without shifting the pH of a culture medium in order to increase secretion into the periplasm, and thus the present invention is very useful in CRM197 protein production.

170.WO/2021/050936METHODS OF TREATMENT WITH CD8 T CELL-MEDIATED IMMUNE THERAPY

WO - 18.03.2021

Int.Class A61K 35/17 Appl.No PCT/US2020/050487 Applicant PROVIDENCE HEALTH & SERVICES - OREGON Inventor GUNDERSON, Andrew

Methods of treating a subject with cancer with CD8 T cell-mediated immune therapy are provided. The methods include measuring an amount of CXCR3-positive T cells in a peripheral blood sample or a tumor sample from a subject with cancer following treatment of the subject with at least one dose of the CD8 T cell-mediated therapy and comparing the amount of CXCR3-positive T cells in the sample to a control. Responsiveness of the cancer to the CD8 T cell-mediated therapy is predicted based on whether there is an increase or decrease in the amount of CXCR3-positive T cells in the sample. Methods further including treating the subject with at least one additional dose of the CD8 T cell-mediated immune therapy are also provided.

171.20210068378HUMANIZED T CELL CO-RECEPTOR MICE

US - 11.03.2021

Int.Class A01K 67/027 Appl.No 17031255 Applicant Regeneron Pharmaceuticals, Inc. Inventor Lynn Macdonald

The invention provides genetically modified non-human animals that express chimeric human/non-human T cell co-receptor polypeptides (e.g., CD4, CD8α, CD8β), as well as embryos, cells, and tissues comprising the same. Also provided are constructs for making said genetically modified animals and methods of making the same.

172.WO/2021/048081IMMUNOTHERAPEUTIC COMPOSITIONS

WO - 18.03.2021

Int.Class A61K 39/245 Appl.No PCT/EP2020/075002 Applicant GLAXOSMITHKLINE BIOLOGICALS SA Inventor ANDERSON, David Evander

The present disclosure provides compositions and methods useful for treating Glioblastoma Multiforme (GBM) which comprise virus-like particles (VLPs) comprising murine leukemia virus (MLV) core proteins and the human cytomegalovirus epitopes, gB and pp65, formulated with an adjuvant comprising a saponin and a TLR4 agonist.

173.WO/2021/051009METHODS AND COMPOSITIONS TO DIRECT BREAKDOWN OF INSULIN MRNA IN BENIGN FASHION

WO - 18.03.2021

Int.Class A61P 37/04 Appl.No PCT/US2020/050572 Applicant CITY OF HOPE Inventor ROEP, Bart Otto

Methods and compositions discussed herein allow for preventing or treating type 1 diabetes (T1D) including directing the breakdown of insulin mRNA.

174.10946110Systems and methods for providing ultraviolet sterilization, disinfection and decontamination of gaming equipment

US - 16.03.2021

Int.Class A61L 2/10 Appl.No 16866517 Applicant Gaming Arts, LLC Inventor David Colvin

Systems and methods for providing ultraviolet (UV) sterilization, disinfection and decontamination of electronic gaming machines (EGMs), gaming chips, dice, playing cards, currency, TITO tickets, etc. The ultraviolet sterilization, disinfection and decontamination may include a plurality of UV LEDs or RGB-UV LEDs of such wavelengths to be effective in reducing or eliminating viruses or the like. Pass through or planar arrays of UV or RGB-UV LEDs are mounted to or installed within a variety of gaming devices or equipment such as EGMs, chip trays, dice holders, automatic card shufflers, bill validators, magnetic card readers, currency counting or currency dispensing devices, printers, etc.

175.20210070440VISION BASED CALIBRATION SYSTEM FOR UNMANNED AERIAL VEHICLES

US - 11.03.2021

Int.Class B64C 39/02 Appl.No 17062887 Applicant ZIPLINE INTERNATIONAL INC. Inventor Peter Abeles

A system includes a camera configured such that a field of view of the camera is positioned to capture a base portion and a movable portion of an aircraft. A computer communicatively connected to the camera is configured to determine a relative orientation between a base identification feature of the base portion and a movable identification feature of the movable portion of the aircraft based on image data received from the camera. The computer is also configured to determine a position of the movable portion of the aircraft based on the relative orientation between the base identification feature and the movable identification feature and a position of the base portion and to compare the position of the movable portion to a reported position for the movable portion to determine a variance. An aircraft control system is configured to monitor a state of the aircraft based on the variance.

176.20210079067NEUTRALIZING ANTIBODIES TO EBOLA VIRUS GLYCOPROTEIN AND THEIR USE

US - 18.03.2021

Int.Class C07K 16/10 Appl.No 16959644 Applicant The U.S.A., as represented by the Secretary, Department of Health and Human Services Inventor Nancy Sullivan

Antibodies and antigen binding fragments that specifically bind to ebolavirus glycoprotein and neutralize ebolavirus infection are disclosed. Nucleic acids encoding these antibodies, vectors, and host cells are also provided. The disclosed antibodies, antigen binding fragments, nucleic acids and vectors can be used, for example, to inhibit an ebolavirus infection in a subject.

177.WO/2021/050612COMPOSITIONS AND METHODS FOR THE TREATMENT OF RESPIRATORY SYNCYTIAL VIRUS

WO - 18.03.2021

Int.Class C07D 401/14 Appl.No PCT/US2020/050022 Applicant CIDARA THERAPEUTICS, INC. Inventor BORCHARDT, Allen

Compositions and methods for the treatment of viral infections include conjugates containing inhibitors of viral RSV F protein (e.g., Presatovir, MDT 637, JNJ 179, TMC353121, Ziresovir, or an analog thereof) linked to an Fc monomer, an Fc domain, and Fc-binding peptide, an albumin protein, or albumin-binding peptide. In particular, conjugates can be used in the treatment of viral infections (e.g., RSV infections).

178.3792630LATERAL FLOW IMMUNOASSAY DEVICE FOR DETECTION OF CANDIDA INFECTION

EP - 17.03.2021

Int.Class G01N 33/558 Appl.No 19197213 Applicant GADIA SA Inventor DUCREST PERCEVENT

The present invention relates to a method for the detection of Candida spp infection in a sample by lateral flow immunoassay and a lateral flow immunoassay device, in particular useful for the early stage detection of Candida spp infections and uses thereof. Antibodies against Hwp1 are measured with a test line comprising Hwp1 protein fragment.

179.WO/2021/048345LATERAL FLOW IMMUNOASSAY DEVICE FOR DETECTION OF CANDIDA INFECTION AND USES THEREOF

WO - 18.03.2021

Int.Class G01N 33/558 Appl.No PCT/EP2020/075462 Applicant GADIA SA Inventor DUCREST, Percevent

The present invention relates to a method for the detection of Candida spp infection in a sample by lateral flow immunoassay and a lateral flow immunoassay device, based on a fragment of Hwp1 (Hwp1.3), in particular useful for the early stage detection of Candida spp infections and uses thereof.

180.20210077434COMBINATION OF IMMUNOTHERAPY WITH LOCAL CHEMOTHERAPY FOR THE TREATMENT OF MALIGNANCIES

US - 18.03.2021

Int.Class A61K 31/175 Appl.No 17098180 Applicant THE JOHNS HOPKINS UNIVERSITY Inventor DIMITRIOS MATHIOS

The presently disclosed subject matter provides methods, compositions, and kits for the treatment of cancer using a combination treatment comprising a locally administered chemotherapy and an immunotherapeutic agent. The presently disclosed subject matter also provides methods of promoting the combination treatment and instructing a patient to receive the combination treatment are also provided, as well immunotherapeutic, non-immunosuppressive compositions comprising the combination treatment, and methods of using the immunotherapeutic, non-immunosuppressive compositions for treating cancer.

181.2019305637Methods of treating lung cancer with a PD-1 axis binding antagonist, an antimetabolite, and a platinum agent

AU - 11.03.2021

Int.Class A61K 31/282 Appl.No 2019305637 Applicant Genentech, Inc. Inventor

The present disclosure provides methods for treating lung cancer (such as non-small cell lung cancer, e.g., Stage IV non-squamous non-small cell lung cancer) in an individual. The methods comprise administering to the individual a PD-1 axis binding antagonist (such as an anti-PD-L1 antibody, e.g., atezolizumab), an antimetabolite (e.g., pemetrexed), and a platinum agent (e.g., cisplatin or carboplatin).

182.20210069284PHOSPHORYLCHOLINE CONJUGATES AND USES THEREOF

US - 11.03.2021

Int.Class A61K 38/07 Appl.No 17101374 Applicant TPCERA LTD. Inventor Yehuda SHOENFELD

The present invention provides phosphorylcholine conjugates and pharmaceutical compositions comprising same for the prevention or treatment of autoimmune diseases. In particular, the conjugates of the present invention are effective in treating autoimmune diseases associated with pathological inflammation.

183.20210074147PROLACTIN RECEPTOR BINDING PROTEINS AND USES THEREOF

US - 11.03.2021

Int.Class G08G 1/01 Appl.No 16828351 Applicant AbbVie Inc. Inventor Mark Anderson

The present invention encompasses PRLR binding proteins. Specifically, the invention relates to antibodies that are chimeric, CDR grafted and humanized antibodies. Preferred antibodies have high affinity for hPRLR and neutralize hPRLR activity in vitro and in vivo. An antibody of the invention can be a full-length antibody or an antigen-binding portion thereof. Methods of making and methods of using the antibodies of the invention are also provided. The antibodies, or antibody portions, of the invention are useful for detecting hPRLR and for inhibiting hPRLR activity, e.g., in a human subject suffering from a disorder in which hPRLR activity is detrimental. Also included in the invention are anti-PRLR antibody drug conjugates (ADCs).

184.20210069168Methods of Treating Respiratory Illnesses, Alleviating Inflammation and Visceral Pain, and Alleviating Opioid Addiction While Suppressing Withdrawal Symptoms

US - 11.03.2021

Int.Class A61K 31/4468 Appl.No 17013623 Applicant Eric Dawayne Ford Inventor Eric Dawayne Ford

The present invention provides a method of treating a respiratory illness in a subject in need thereof, comprising administering to the subject a therapeutically effective amount of a compound comprising a reaction product of a reaction mixture comprising: a) N-phenyl-N-[1-(2-phenylethyl)piperidin-4-yl]propanamide or a derivative thereof; and b) dimethyl sulfoxide. Also provided are methods of alleviating opioid addiction while suppressing withdrawal symptoms and alleviating inflammation and visceral pain with minimal risk of addiction in a subject in need thereof, comprising administering to the subject a therapeutically effective amount of the compound described above.

185.20210081414COLLABORATIVE DATASET CONSOLIDATION VIA DISTRIBUTED COMPUTER NETWORKS

US - 18.03.2021

Int.Class G06F 16/2458 Appl.No 17037005 Applicant data. World, Inc. Inventor Bryon Kristen Jacob

Various embodiments relate generally to data science and data analysis, computer software and systems, and wired and wireless network communications to provide an interface between repositories of disparate datasets and computing machine-based entities that seek access to the datasets, and, more specifically, to a computing and data storage platform that facilitates consolidation of one or more datasets, whereby a collaborative data layer and associated logic facilitate, for example, efficient access to, and implementation of, collaborative datasets. In some examples, a method may include receiving data representing a query into a collaborative dataset consolidation system, identifying datasets relevant to the query, generating one or more queries to access disparate data repositories, and retrieving data representing query results. In some cases, one or more queries are applied (e.g., as a federated query) to atomized datasets stored in one or more atomized data stores, at least two of which may be different.

186.20210069321IMMUNOTHERAPEUTIC COMPOSITIONS

US - 11.03.2021

Int.Class A61K 39/245 Appl.No 17014028 Applicant GLAXOSMITHKLINE BIOLOGICALS SA Inventor Kirsten SCHNEIDER-OHRUM

The present disclosure provides compositions and methods useful for treating Glioblastoma Multiforme (GBM) which comprise virus-like particles (VLPs) comprising murine leukemia virus (MLV) core proteins and the human cytomegalovirus epitopes, gB and pp65, formulated with an adjuvant comprising a saponin and a TLR4 agonist.

187.20210070872ANTI-GITR ANTIBODIES AND METHODS OF USE THEREOF

US - 11.03.2021

Int.Class C07K 16/28 Appl.No 16999374 Applicant Agenus Inc. Inventor Volker SEIBERT

The present disclosure provides antibodies that specifically bind to human glucocorticoid-induced TNFR family related receptor (GITR) and compositions comprising such antibodies. In a specific aspect, the antibodies specifically bind to human GITR and modulate GITR activity, e.g., enhance, activate or induce GITR activity, utilizing such antibodies. The present disclosure also provides methods for treating disorders, such as cancer and infectious diseases, by administering an antibody that specifically binds to human GITR and modulates GITR activity e.g., enhances, activates or induces GITR activity.

188.WO/2021/048324NOVEL MOLECULES FOR DIAGNOSIS

WO - 18.03.2021

Int.Class A61P 25/00 Appl.No PCT/EP2020/075420 Applicant AC IMMUNE SA Inventor ADOLFSSON, Oskar

The present invention relates to novel amyloid-beta (abeta) binding molecules, in particular to abeta antibodies or antigen-binding fragments thereof and/or uses thereof. The provided molecules can also be used for determining a predisposition to amyloid-beta associated diseases, disorders or conditions, monitoring residual disorder of a disease or condition, or predicting the responsiveness of a patient who is suffering from such disease or condition to the treatment with a certain medicament. Thus, the invention relates to novel molecules that can be employed for the diagnosis of diseases, disorders or conditions associated with amyloid-beta. A sandwich immunoassay may be based on capture and detection amyloid-beta binding antibodies or antigen-binding fragments thereof in which one or other of the capture or detection antibody or antigen-binding fragment thereof displays no cross-reactivity to soluble amyloid precursor protein (APP). The other amyloid-beta binding antibody or antigen-binding fragment my display cross- reactivity to soluble amyloid precursor protein (APP) without compromising the specificity of the assay against soluble APP.

189.20210077399MAGNETIC LIPOSOMES AND RELATED TREATMENT AND IMAGING METHODS

US - 18.03.2021

Int.Class A61K 9/127 Appl.No 17053691 Applicant UNIVERSITY OF FLORIDA RESEARCH FOUNDATION, INCORPORATED Inventor Adam J. Grippin

Provided herein is a liposome comprising ribonucleic acid (RNA) molecules, a lipid mixture comprising DOTAP and cholesterol, and iron oxide nanoparticles (IONPs). Also provided herein is a liposome comprising ribonucleic acid (RNA) molecules and a lipid mixture comprising DOTAP and cholesterol, wherein the DOTAP and cholesterol are present in the lipid mixture at a DOTAP:cholesterol ratio of about 3:1 by mass. Related cells comprising the liposome, populations of cells, and compositions are also provided. Methods of making a liposome and methods of using the liposome are further provided.

190.WO/2021/046480NUCLEIC ACID-MEDIATED DELIVERY OF THERAPEUTICS

WO - 11.03.2021

Int.Class A61K 9/00 Appl.No PCT/US2020/049580 Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA Inventor KWON, Young, Jik

The disclosure provides for compositions comprising one or more therapeutic compounds that are complexed with nucleic acid fragments to form nanoparticles, and uses thereof, n another embodiment or a further embodiment of any of the foregoing embodiments, the one or more therapeutic compounds are small molecules that can associate or bind with DNA or RNA. In another embodiment or a further embodiment of any of the foregoing embodiments, the nucleic acid fragments are complexed with the one or more therapeutic compounds at a wt/wt ratio of 2:1 to 10:1.

191.WO/2021/046220COMPOUNDS AND METHODS FOR TREATING CANCER

WO - 11.03.2021

Int.Class A61K 31/55 Appl.No PCT/US2020/049200 Applicant DANA-FARBER CANCER INSTITUTE, INC. Inventor D'ANDREA, Alan

The present application provides, in some aspects, methods of treating cancers, such as homologous recombination (HR)-deficient cancers. In some embodiments, the disclosure provides a method for treating cancer by administering to a subject a compound of Formula (I): or a pharmaceutically acceptable salt thereof.

192.20210069336BIOMIMETIC NANOMATERIALS AND USES THEREOF

US - 11.03.2021

Int.Class A61K 47/54 Appl.No 16635786 Applicant Ohio State Innovation Foundation Inventor Yizhou DONG

The present disclosure relates to biomimetic nanomaterials, compounds, compositions, and methods for delivery of therapeutic, diagnostic, or prophylactic agents (for example, a nucleic acid).

193.20210077587GENOTYPE STRATIFICATION IN DIABETES TREATMENT AND PREVENTION

US - 18.03.2021

Int.Class A61K 38/28 Appl.No 16644461 Applicant DIAMYD MEDICAL AB Inventor Anders ESSEN-MÖLLER

The present invention relates to a method for treatment or prevention of an autoimmune disease in a patient, comprising: (a) Determining the HLA genotype of the patient; and (b) Subjecting the patient to a treatment regimen based on said genotype.

194.20210079070NEUTRALIZING ANTIBODIES TO HIV-1 ENV AND THEIR USE

US - 18.03.2021

Int.Class C07K 16/10 Appl.No 16971826 Applicant The United States of America, as represented by the Secretary, Department of Health and Human Servic Inventor Paolo Lusso

Antibodies and antigen binding fragments that specifically bind to HIV-1 Env and neutralize HIV-1 are disclosed. Nucleic acids encoding these antibodies, vectors and host cells are also provided. Methods for detecting HIV-1 using these antibodies are disclosed. In addition, the use of these antibodies, antigen binding fragment, nucleic acids and vectors to prevent and/or treat an HIV-1 infection is disclosed.

195.20210077597NUCLEIC ACID-BASED BOTULINUM NEUROTOXIN FOR THERAPEUTIC USE

US - 18.03.2021

Int.Class A61K 38/48 Appl.No 16970320 Applicant BontanaTherapies GmbH Inventor Jonas FÜNER

The invention relates to a botulinum neurotoxin-encoding nucleic acid for therapeutic use. The invention further relates to the transfection of skeletal muscle cells and smooth muscle cells and the glands of the skin, and of other skin cells with botulinum neurotoxin (BoNT)-encoding nucleic acids (RNA or DNA) with or without the use of a secretory signal, for therapeutic and/or cosmetic purposes.

196.10946037Pharmaceutical composition for the prevention or treatment of nicotine addiction and withdrawal symptoms including miRNA

US - 16.03.2021

Int.Class A61K 48/00 Appl.No 16927193 Applicant KOREA INSTITUTE OF SCIENCE AND TECHNOLOGY Inventor Heh-In Im

Disclosed is a pharmaceutical composition for preventing or treating nicotine addiction or withdrawal symptoms. The pharmaceutical composition includes miR-137 as an active ingredient. Overexpression of miR-137 in an animal model having nicotine addiction or withdrawal symptoms results in relief, prevention or amelioration of the symptoms. Therefore, the use of miR-137 contributes to the prevention or treatment of nicotine addiction or withdrawal symptoms and is expected to be useful for developing relevant therapeutic agents.

197.20210077463Methods and Combination Therapy to Treat Cancer

US - 18.03.2021

Int.Class A61K 31/4184 Appl.No 16772306 Applicant PFIZER INC. Inventor Christoffel Hendrik Boshoff

This invention relates to a method of treating cancer by administering a combination therapy comprising a combination of a MEK inhibitor and a PD-1 axis binding antagonist, or a combination of a MEK inhibitor and a PARP inhibitor, or a combination of a MEK inhibitor and a PD-1 axis binding antagonist and a PARP inhibitor to a patient in need thereof.

198.20210079054PEPTIDE IMMUNOGENS OF IL-31 AND FORMULATIONS THEREOF FOR THE TREATMENT AND/OR PREVENTION OF ATOPIC DERMATITIS

US - 18.03.2021

Int.Class C07K 14/54 Appl.No 16771948 Applicant UBI US Holdings, LLC. Inventor Chang Yi WANG

The present disclosure is directed to individual peptide immunogen constructs targeting portions of the Interleukin-31 (IL-31) protein for the treatment and/or prevention of a pruritic condition and/or an allergic condition, such as atopic dermatitis. The present disclosure is also directed to compositions containing the peptide immunogen constructs, methods of making and using the peptide immunogen constructs, and antibodies produced by the peptide immunogen constructs.

199.3791889C-MET RECEPTOR TARGETING CONSTRUCTS AND USES THEREOF

EP - 17.03.2021

Int.Class A61K 38/17 Appl.No 20182924 Applicant CEDARS SINAI MEDICAL CENTER Inventor MEDINA-KAUWE LALI K

Disclosed herein are drug delivery molecules that comprise a ligand that targets a cell surface molecule; a membrane penetration domain; and a payload binding domain; and pharmaceutical compositions comprising the same. Also disclosed are methods of treating cancer, inhibiting the progression of cancer, preventing cancer metastasis, and delivering a therapeutic compound to the brain in a subject in need thereof, the methods comprising identifying a subject in need thereof; providing a composition comprising the drug delivery molecule as disclosed herein; and administering an effective amount of the composition to the subject.

200.20210077474FORMULATIONS OF 6-(2-HYDROXY-2-METHYLPROPOXY)-4-(6-(6-((6-METHOXYPYRIDIN-3-YL)METHYL)-3,6-DIAZABICYCLO[3.1.1]HEPTAN-3-YL)PYRIDIN-3-YL)PYRAZOLO[1,5-A]PYRIDINE-3-CARBONITRILE

US - 18.03.2021

Int.Class A61K 31/439 Appl.No 17001793 Applicant Loxo Oncology, Inc. Inventor Mark REYNOLDS

6-(2-hydroxy-2-methylpropoxy)-4-(6-(6-((6-methoxypyridin-3-yl)methyl)-3,6-diazabicyclo[3.1.1]heptan-3-yl)pyridin-3-yl)pyrazolo[1,5-a]pyridine-3-carbonitrile, or a pharmaceutically acceptable salt, amorphous form, polymorph form, or pharmaceutical composition (including solid formulations or liquid formulations) thereof and the use thereof for treating diseases and disorders which can be treated with a RET kinase inhibitor, such as RET-associated diseases and disorders, e.g., proliferative disorders such as cancers, including hematological cancers and solid tumors, and gastrointestinal disorders such as IBS are disclosed.

201.20210071143ACTIVE CXCR4+ IMMUNE CELLS AND METHODS FOR THEIR PRODUCTION AND USE

US - 11.03.2021

Int.Class C12N 5/0783 Appl.No 17029606 Applicant UNIVERSITY OF PITTSBURGH - OF THE COMMONWEALTH SYSTEM OF HIGHER EDUCATION Inventor Pawel KALINSKI

Provided herein are active CXCR4+ CD8; T cells, active CXCR4+ type-1 CD4+ T cells and active CXCR4+ NK cells and populations of those cells, methods for making active CXCR4+ T cells and NK cells and populations of those cells, and methods for using active CXCR4+ T cells and NK cells and populations of those cells for the treatment of cancer, precartcerous conditions and chronic infections.

202.WO/2021/048274TREATMENT AND PREVENTION OF CANCER USING HER3 ANTIGEN-BINDING MOLECULES

WO - 18.03.2021

Int.Class C07K 16/32 Appl.No PCT/EP2020/075319 Applicant HUMMINGBIRD BIOSCIENCE HOLDINGS PTE. LTD. Inventor BOYD-KIRKUP, Jerome Douglas

Methods for treating or preventing a cancer in a subject are disclosed, wherein the cancer comprises cells having a mutation resulting in increased expression of a ligand for HER3, wherein the method comprises administering a therapeutically or prophylactically effective amount of an antigen-binding molecule which is capable of binding to HER3 to the subject.

203.20210079380Immune Repertoire Sequence Amplification Methods and Applications

US - 18.03.2021

Int.Class C12N 15/10 Appl.No 17103001 Applicant Augmenta Bioworks, Inc. Inventor Christopher J. Emig

The present invention relates generally to the field of immune binding proteins and method for obtaining immune binding proteins from genomic or other sources. The present invention also relates to nucleic acids encoding the immune binding proteins in which the natural multimeric association of chains is maintained in the nucleic acids and the immune binding proteins made therefrom. For example nucleic acids encoding antibodies that are amplified from a B-cell using the methods of the invention maintain the natural pairing of heavy and light chains from the B-cell. This maintenance of pairing (or multimerization) produces libraries and/or repertoires of immune binding proteins that are enriched for useful binding molecules.

204.WO/2021/046178COMPOUNDS AND METHODS FOR TREATING CANCER

WO - 11.03.2021

Int.Class A61K 31/45 Appl.No PCT/US2020/049140 Applicant DANA-FARBER CANCER INSTITUTE, INC. Inventor D'ANDREA, Alan

The present application provides, in some aspects, methods of treating cancers, such as homologous recombination (HR)-deficient cancers. In some embodiments, the disclosure provides a method for

treating cancer by administering to a subject a compound of Formula (A) or a pharmaceutically acceptable salt thereof. In a first general aspect, the present disclosure provides a method of treating a homologous recombination (HR)-deficient cancer or a POLQ-overexpressing cancer, the method comprising: (i) identifying a subject having an HR-deficient cancer or a POLQ-overexpressing cancer, or both; and (ii) after (i), administering to the subject a therapeutically effective amount of a compound of Formula (A), or a pharmaceutically acceptable salt thereof In some embodiments, the compound of Formula (A) has Formula (I), or a pharmaceutically acceptable salt thereof.

205.20210070756TETRACYCLIC BROMODOMAIN INHIBITORS

US - 11.03.2021

Int.Class C07D 471/22 Appl.No 17099133 Applicant AbbVie Inc. Inventor Steven D. Fidanze

The present invention provides for compounds of formula (I)

wherein R^1, R^2, R^6, Y^1, Y^2, Y^3, A^1, A^2, A^3, and A^4 have any of the values defined in the specification, and pharmaceutically acceptable salts thereof, that are useful as agents in the treatment of diseases and conditions, including inflammatory diseases, cancer, and AIDS. Also provided are pharmaceutical compositions comprising one or more compounds of formula (I).

206.20210077382COMPOSITIONS, DEVICES, AND METHODS FOR THE TREATMENT OF OPIOID-RECEPTOR-MEDIATED CONDITIONS

US - 18.03.2021

Int.Class A61K 9/00 Appl.No 17024149 Applicant Opiant Phamaceuticals, Inc. Inventor Roger Crystal

Drug products adapted for nasal delivery comprising naltrexone, alone or in combination with excipients, are provided. Pre-primed devices for intranasal administration of the drug products are also provided. In addition, methods for treating and preventing a variety of opioid receptor-mediated diseases, disorders, addictions, symptoms, reward-based behaviors, and conditions with the drugs products are provided

207.20210070731TRICYCLIC KINASE INHIBITORS AND USE THEREOF

US - 11.03.2021

Int.Class C07D 401/04 Appl.No 17012788 Applicant Nivedita Namdev Inventor Nivedita Namdev

The present application provides novel compounds that are inhibitors of kinases, including AMPK-related kinases like NUAK1, NUAK2, SIK1, SIK2, SIK3, MARK1, MARK2, MARK3, MARK4, as well as AURKA, AURKB, AURKC, CLK1, CLK2, DCAMKL2, MAPK7, MKNK2, PIK3CD, PKN3, RET, TAOK1, TAOK2, TAOK3, ULK2 and their mutants. The application also provides compositions, including pharmaceutical compositions, kits that include compounds, and methods of making and using

compounds. The compounds provided herein are useful in treating diseases, disorders, or conditions that are mediated by these kinases.

208.20210079115METHODS OF TREATING RENAL CANCER WITH AN ANTI- PSMA/CD3 ANTIBODY

US - 18.03.2021

Int.Class C07K 16/30 Appl.No 16852371 Applicant Janssen Biotech, Inc. Inventor Theresa McDevitt

Bispecific monoclonal antibodies and methods for treating cancer are set forth herein.

209.20210070734ESTER SUBSTITUTED ION CHANNEL BLOCKERS AND METHODS FOR USE

US - 11.03.2021

Int.Class C07D 401/12 Appl.No 16952863 Applicant Nocion Therapeutics, Inc. Inventor Bridget McCarthy Cole

The invention provides compounds of Formula (I), or pharmaceutically acceptable salts thereof:

The compounds, compositions, methods and kits of the invention are useful for the treatment of pain, itch, and neurogenic inflammation.

210.20210080471LC-MS METHODS FOR ANTIBODY ISOTYPING AND QUANTIFICATION

US - 18.03.2021

Int.Class G01N 33/68 Appl.No 17022942 Applicant Regeneron Pharmaceuticals, Inc. Inventor Xiaobin Xu

The present invention provides methods and systems for isotyping and quantification of antibodies based on immunocapture and/or Liquid Chromatography-Mass Spectrometry (LC-MS) analysis. These antibodies are induced by the administration of pharmaceutical products. The immunocapture method comprises contacting samples with a solid support, wherein the pharmaceutical product has been cross-linked directly to the solid support. The MS analysis includes conducting peptide mapping, selecting unique peptides and fragment ions to generate MRM (multiple reaction monitoring) transitions, optimizing collision energy, and determining a LLOQ (lower limit of quantification).

211.WO/2021/042171CANCER IMMUNOTHERAPY

WO - 11.03.2021

Int.Class A61K 31/23 Appl.No PCT/AU2020/050932 Applicant ENA THERAPEUTICS PTY LTD Inventor DEMAISON, Christophe

Methods, compounds, compositions and kits for the treatment and/or prevention of cancer are provided. In particular, methods for the treatment of cancer comprising the administration of a TLR2 agonist, such as a conjugate of dipalmitoyl-S-glyceryl-cysteine (Pam2Cys) and polyethylene glycol (PEG), more

particularly a Pam2Cys-Ser-PEG compound, and an immunostimulant such as an anti-PD-1, anti-PDL-1, anti-PL- 1, or anti-CTLA-4 immunotherapeutic, are provided.

212.20210077398LIPOSOMES COMPRISING SPHINGOMYELIN

US - 18.03.2021

Int.Class A61K 9/127 Appl.No 16956239 Applicant INNOMEDICA HOLDING AG Inventor Stéfan Jonathan HALBHERR

Liposomes which comprise sphingomyelin in the lipid bilayer. The liposomes are configured to cross the blood-brain barrier for the treatment of neuro-degenerative diseases and spinal cord injuries. The liposomes are essentially free of ganglioside. A method of producing liposomes is also disclosed along with use of liposome as a medicament.

213.20210069182ROR-GAMMA MODULATORS

US - 11.03.2021

Int.Class A61K 31/495 Appl.No 17102105 Applicant ESCALIER BIOSCIENCES B.V. Inventor Raju MOHAN

Described herein are retinoic acid related-related orphan nuclear receptor (ROR) modulators and methods of utilizing RORγ modulators in the treatment of dermal diseases, disorders or conditions. Also described herein are pharmaceutical compositions containing such compounds.

214.20210077545BACILLUS COMPOSITIONS AND METHODS OF USE WITH RUMINANTS

US - 18.03.2021

Int.Class A61K 35/742 Appl.No 17029672 Applicant Church & Dwight Co., Inc. Inventor Thomas Rehberger

Bacillus strains, compositions and methods are disclosed for reducing growth of microorganisms in a feed. *Bacillus* strains, compositions and methods are disclosed for providing beneficial effects to animals, including but not limited to increasing performance of the animal.

215.20210069965METHOD AND APPARATUS FOR THREE-DIMENSIONAL FABRICATION

US - 11.03.2021

Int.Class B29C 64/135 Appl.No 16824077 Applicant Carbon, Inc. Inventor Joseph M. DeSimone

A method of forming a three-dimensional object, is carried out by (a) providing a carrier and a build plate, the build plate comprising a semipermeable member, the semipermeable member comprising a build surface with the build surface and the carrier defining a build region therebetween, and with the build surface in fluid communication by way of the semipermeable member with a source of polymerization inhibitor; (b) filling the build region with a polymerizable liquid, the polymerizable liquid

contacting the build surface, (c) irradiating the build region through the build plate to produce a solid polymerized region in the build region, while forming or maintaining a liquid film release layer comprised of the polymerizable liquid formed between the solid polymerized region and the build surface, wherein the polymerization of which liquid film is inhibited by the polymerization inhibitor; and (d) advancing the carrier with the polymerized region adhered thereto away from the build surface on the build plate to create a subsequent build region between the polymerized region and the build surface while concurrently filling the subsequent build region with polymerizable liquid as in step (b). Apparatus for carrying out the method is also described.

216.20210069196THIOCARBAMATE DERIVATIVES AS A2A INHIBITORS, PHARMACEUTICAL COMPOSITION THEREOF AND COMBINATIONS WITH ANTICANCER AGENTS

US - 11.03.2021

Int.Class A61K 31/519 Appl.No 17015850 Applicant iTeos Therapeutics SA Inventor Stefano Crosignani

The present invention relates to thiocarbamate derivatives of Formula (I) which are useful as A2A adenosine receptor (A2AR) inhibitors

Especially, the present invention relates to a pharmaceutical composition comprising an A2A inhibitor of Formula (I) and a lipid carrier such as lauroyl macrogol-32 glycerides, D-α-tocopherol-polyethylene glycol-1000 succinate or a mixture thereof. The pharmaceutical composition of the invention is particularly useful for oral dosing in the treatment of cancers.

The present invention also relates to a combination comprising an A2A receptor inhibitor of Formula (I) and an anticancer agent. The anticancer agent is for example an immunotherapeutic agent, such as a checkpoint inhibitor. The invention further relates to a pharmaceutical composition and a kit of parts comprising such combination. Additionally, the combination of the invention is particularly useful for the treatment and/or prevention of cancers.

217.WO/2021/046331ANTI-STEAP1 ANTIBODIES AND USES THEREOF

WO - 11.03.2021

Int.Class C07K 16/28 Appl.No PCT/US2020/049377 Applicant MEMORIAL SLOAN KETTERING CANCER CENTER Inventor CHEUNG, Nai-Kong V.

The present technology relates generally to the preparation of immunoglobulin-related compositions (e.g., antibodies or antigen binding fragments thereof) that specifically bind STEAP1 protein and uses of the same. In particular, the present technology relates to the preparation of STEAP1 binding antibodies and their use in detecting and treating STEAP1 -associated cancers.

218.WO/2021/048250MULTI-LAYERED CELL CAPSULES AND USES THEREOF

WO - 18.03.2021

Int.Class A61L 27/24 Appl.No PCT/EP2020/075278 Applicant FUNDACIÓ INSTITUT DE BIOENGINYERIA DE CATALUNYA Inventor RAMÓN AZCÓN, Javier

The present invention provides a hydrogel capsule comprising a cell, a protein, and a cross-linking agent; wherein the cell is within a first core layer comprising the protein; and wherein the first core layer is surrounded by a second layer comprising the protein and the cross-linking agent. The invention further provides the hydrogel capsule for use in therapy, prognosis and diagnosis, a method for culturing cells, a method for differentiating cells, and method for producing the hydrogel capsule. The hydrogel capsules of the invention are particularly useful for encapsulating pancreatic islets.

219.20210077618IMMUNIGENIC ALPHA-BRANCHED TREHALOSE-DIESTERS

US - 18.03.2021

Int.Class A61K 39/39 Appl.No 17046595 Applicant GLAXOSMITHKLINE BIOLOGICALS SA Inventor Jay T EVANS

The invention relates to compounds of formula (I) and their use in eliciting a pro-Thl7 immune response. Further provided are methods of production of said compounds. (Formula I) wherein m is an integer between 4 and 13; n is an integer between 4 and 13; x is an integer between 4 and 13; y is an integer between 4 and 13.

220.20210069225LIPONUCLEOTIDE-BASED THERAPY FOR ARDS

US - 11.03.2021

Int.Class A61K 31/7068 Appl.No 16952557 Applicant Ohio State Innovation Foundation Inventor Ian Christopher Davis

Compositions and method are therefore disclosed for treating ARDS. In particular, disclosed a composition that contains one, two, or more cytidine diphosphate (CDP)-conjugated precursors selected from the group consisting of CDP-choline, CDP-ethanolamine, and CDP-diacylglycerol (CDP-DAG) in a pharmaceutically acceptable carrier for use in treating ARDS.

221.2021201231ANTIBODIES TO TIGIT

AU - 11.03.2021

Int.Class Appl.No 2021201231 Applicant BRISTOL-MYERS SQUIBB COMPANY Inventor

The present invention provides antibodies, or antigen binding fragments thereof, that bind to human TIGIT (T cell immunoreceptor with Ig and ITIM domains), as well as uses of these antibodies or fragments in therapeutic applications, such as in the treatment of cancer or chronic viral infection. Such method of

treatment include combination therapy with inhibitors of other immunomodulatory receptor interactions, such as the PD-i/PD-L interaction. The invention further provides polynucleotides encoding the heavy and/or light chain variable region of the antibodies, expression vectors comprising the polynucleotides encoding the heavy and/or light chain variable region of the antibodies, cells comprising the vectors, and methods of making the antibodies or fragments by expressing them from the cells.

222.20210078936LIPIDS AND LIPID COMPOSITIONS FOR THE DELIVERY OF ACTIVE AGENTS

US - 18.03.2021

Int.Class C07C 229/12 Appl.No 17104294 Applicant NOVARTIS AG Inventor Luis BRITO

This invention provides for a compound of formula (I):

or a pharmaceutically acceptable salt thereof, wherein R^1-R^4, L_1, n and p are defined herein. The compounds of formula (X) and pharmaceutically acceptable salts thereof are cationic lipids useful in the delivery of biologically active agents to cells and tissues.

223.20210069244PHARMACEUTICAL CHIMERIC RECEPTOR COMPOSITION AND METHOD THEREOF

US - 11.03.2021

Int.Class A61K 35/17 Appl.No 16955766 Applicant UWELL BIOPHARMA INC. Inventor TE-LING PANG

Disclosed herein provides a pharmaceutical composition and a disease therapy method. The pharmaceutical composition relates to an artificial chimeric antigen receptor (CAR). Specifically, the pharmaceutical composition includes a CAR protein that is highly specific to CD19 antigen, a vector that is capable of inducing a cell to generate the certain CAR 19 protein and a population of a modified mammal cell including the CAR19 protein, the vector or combination thereof. Furthermore, the artificial CAR19 includes a CD19 antigen-binding fragment, a transmembrane domain, and a signaling domain. The CD19 antigen-binding fragment is a single-chain variable fragment (scFv) having specific amino acid sequences. Additionally, the method relates to a cancer therapy by using said modified mammal cells. Furthermore, the method includes the steps of purifying a population of autologous cells, modifying the population of autologous cells with an artificial CAR, and administrating the modified autologous cells.

224.3792367METHOD FOR THE PRODUCTION OF RAAV AND METHOD FOR THE IN VITRO GENERATION OF GENETICALLY ENGINEERED, LINEAR, SINGLE-STRANDED NUCLEIC ACID FRAGMENTS CONTAINING ITR SEQUENCES FLANKING A GENE OF INTEREST

EP - 17.03.2021

Int.Class C12Q 1/6844 Appl.No 19196672 Applicant UNIV BIELEFELD Inventor MÜLLER KRISTIAN

In a first aspect, the present invention relates to a method for the in vitro generation of genetically engineered, linear, single-stranded nucleic acid fragments containing two viral inverted terminal repeat (ITR) sequences flanking a gene of interest (GOI). The method is based on a rolling circle amplification. In a further aspect, the present invention provides an isolated, linear, single-stranded nucleic acid comprising viral nucleic acid fragments obtainable by a method according to present invention. Further, a method for the production of recombinant virus particles, in particular, recombinant AAV particles (rAAV) based on the linear, single-stranded nucleic acid fragments is described herein. Moreover, a plasmid comprising specific nucleic acid sequence elements is provided.

225.20210077582COMPOSITIONS AND METHODS FOR INCREASING THE EFFICACY OF ANTI-PD-1 ANTIBODY IMMUNOTHERAPY

US - 18.03.2021

Int.Class A61K 38/21 Appl.No 17020164 Applicant Duke University Inventor Brent Hanks

The present disclosure provides, in part, compositions and methods of increasing the efficacy of anti-PD-1/PD-L1 antibody immunotherapy in a subject. The compositions and methods comprise an NLRP3 inhibitor used in combination with a PD-1 or PD-L1 inhibitor for the treatment of cancer.

226.20210077510COMPOSITIONS AND METHODS FOR INHIBITING ARGINASE ACTIVITY

US - 18.03.2021

Int.Class A61K 31/69 Appl.No 16953125 Applicant CALITHERA BIOSCIENCES, INC. Inventor Matthew I. GROSS

The invention relates to methods of treating cancer, with a combination of an arginase inhibitor and a chemotherapeutic agent. The invention further relates to methods of assessing efficacy of a cancer treatment by measuring arginine levels in a tumor.

227.WO/2021/048822TAK-925 FOR USE IN TREATING NARCOLEPSY

WO - 18.03.2021

Int.Class A61K 31/445 Appl.No PCT/IB2020/058483 Applicant TAKEDA PHARMACEUTICAL COMPANY LIMITED Inventor HARTMAN, Deborah

A method for treating narcolepsy type 1 in a subject in need thereof is disclosed, comprising administering to the subject an effective amount of methyl 3-((methylsulfonyl)amino)-2-(((4-phenylcyclohexyl)oxy)methyl)piperidine-1-carboxylate (Compound (I)), or a salt thereof, wherein plasma concentration for Compound (I) is about 5.04 ng/mL or more for about 1 hour or more. Compositions for treating narcolepsy type 1 comprising Compound (I) are also disclosed.

228.WO/2021/048736TREATMENT OF HIDRADENITIS WITH JAK INHIBITORS

WO - 18.03.2021

Int.Class A61K 31/4985 Appl.No PCT/IB2020/058333 Applicant PFIZER INC. Inventor FENSOME, Andrew

Methods for treating hidradenitis suppurtiva using compounds and analogues which inhibit certain kinases including Janus Kinase (JAK).

229.20210079087TREATMENT OF AUTOIMMUNE AND INFLAMMATORY DISORDERS USING ANTIBODIES THAT BIND INTERLEUKIN-17A (IL-17A)

US - 18.03.2021

Int.Class C07K 16/24 Appl.No 17046220 Applicant REMD Biotherapeutics, Inc. Inventor Frank J Calzone

This application provides, inter alia, antibodies or antigen-binding fragments thereof, targeting IL-17A expressed on injured tissues associated with multiple diseases. These anti-IL-17A antibodies, or antigen-binding fragments thereof, have a high affinity for IL-17A and function to inhibit IL-17A. The antibodies and antigen-binding fragments are useful for treatment of human diseases, infections, and other conditions that can be treated by inhibiting IL-17A mediated activity.

230.20210077730Rotary Motor Based Transdermal Injection Device

US - 18.03.2021

Int.Class A61M 5/30 Appl.No 17102958 Applicant Portal Instruments, Inc. Inventor Robert J. Dyer

An apparatus for injectate delivery includes a cartridge, a linear actuator, a rotary motor mechanically coupled the actuator, and a controller coupled to the motor. The controller controls a linear motion of the actuator by controlling an electrical input supplied to the motor in a first interval during which the motor is stationary with the linear actuator engaged with the cartridge to displace an injectate in the cartridge, a second interval following the first interval during which the controller accelerates the motor from stationary to a first speed selected to create a jet of the injectate from the cartridge with a velocity sufficient to pierce human tissue to a subcutaneous depth, a third interval during which the controller maintains the motor at or above the first speed, and a fourth interval during which the controller decelerates the motor to a second speed to deliver the injectate at the subcutaneous depth.

231.20210071148RESTRICTIVE INVERTED TERMINAL REPEATS FOR VIRAL VECTORS

US - 11.03.2021

Int.Class C12N 7/00 Appl.No 16953109 Applicant The University of North Carolina at Chapel Hill Inventor Curtis Hewitt

This invention relates to modified parvovirus inverted terminal repeats (ITRs) that do not functionally interact with wild-type large Rep proteins, synthetic Rep proteins that functionally interact with the modified ITRs, and methods of using the same for delivery of nucleic acids to a cell or a subject. The

modifications provide a novel Rep-ITR interaction that limits vector mobilization, increasing the safety of viral vectors.

232.2021508441ＣＤ３およびＣＤ１３７に結合する改変された抗体可変領域を含む抗原結合分子

JP - 11.03.2021

Int.Class Appl.No 2020530701 Applicant 中外製薬株式会社 Inventor 清水　駿

CD3 および CD137 に結合することができるが、CD3 と CD137 に同時には結合しない抗原結合ドメイン、ならびにそれを使用する方法が提供される。2 つ以上の異なる抗原に結合する抗原結合ドメインをより効率的に取得する方法もまた、提供される。

233.1020210028162 지대근 이영양증 2A 형을 치료하기 위한 재조합 아데노 연관 바이러스 생성물 및 방법

KR - 11.03.2021

Int.Class C12N 15/86 Appl.No 1020207037223 Applicant 더 리서치 인스티튜트 앳 네이션와이드 칠드런스 하스피탈 Inventor 사헨크 자리프

지대근 이영양증 2A 형을 치료하기 위한 생성물 및 방법이 제공된다. 상기 방법에서, 재조합 아데노-연관 바이러스는 칼페인 3 활성을 갖는 단백질을 암호화하는 DNA 를 전달한다.

234.WO/2021/046299METHODS FOR IDENTIFICATION OF ANTIGEN BINDING SPECIFICITY OF ANTIBODIES

WO - 11.03.2021

Int.Class G01N 33/50 Appl.No PCT/US2020/049330 Applicant VANDERBILT UNIVERSITY Inventor SETLIFF, Marion Francis

The present disclosure relates to a method for simultaneous detection of antigens and antigen specific antibodies. LIBRA-seq (Linking B Cell Receptor to Antigen specificity through sequencing) is developed to simultaneously recover both antigen specificity and paired heavy and light chain BCR sequence. LIBRA-seq is a next-generation sequencing-based readout for BCR-antigen binding interactions that utilizes oligonucleotides (oligos) conjugated to recombinant antigens.

235.20210079086Use of Brazikumab to Treat Crohn's Disease

US - 18.03.2021

Int.Class C07K 16/24 Appl.No 16999470 Applicant ASTRAZENECA COLLABORATION VENTURES, LLC Inventor Steven Shiff

The disclosure relates to products and methods for treating Crohn's disease. The products relate to antibodies that inhibit native human IL-23, but do not inhibit IL-12. The disclosure also relates to methods of selecting a subject amenable to IL-23 inhibition therapy to treat Crohn's disease as well as methods of identifying a patient sub-population amenable to such treatment.

236.20210077612GENERATION OF HPV-SPECIFIC T-CELLS

US - 18.03.2021

Int.Class A61K 39/12 Appl.No 16966582 Applicant Baylor College of Medicine Inventor Carlos A. Ramos

Embodiments of the disclosure concern methods and compositions for immunotherapy for human papillomavirus infection and diseases associated therewith. In specific embodiments, methods concern production of immune cells that target one or more antigens of HPV16 and/or HPV18, including methods with stimulation steps that employ IL-7 and IL-15, but not IL-6 and/or IL-12. Other specific embodiments utilize stimulations in the presence of certain cells, such as costimulatory cells and certain antigen presenting cells.

237.WO/2021/050564THERAPEUTIC AGENTS AND METHODS FOR TREATMENT OF LYME DISEASE AND LYME DISEASE-RELATED DISORDERS

WO - 18.03.2021

Int.Class A61P 31/04 Appl.No PCT/US2020/049965 Applicant RAJADAS, Jayakumar Inventor RAJADAS, Jayakumar

Disclosed herein are methods of reducing inflammation in subjects having Borrelia infections and related disorders, the methods including administering therapeutic agents to the subjects and measuring inflammatory and immune markers.

238.20210074436MOBILE AUTOMATION CONTROL OF DISEASE SPREAD

US - 11.03.2021

Int.Class G16H 50/80 Appl.No 16567861 Applicant INTERNATIONAL BUSINESS MACHINES CORPORATION Inventor Craig M. TRIM

Methods and systems for mobile automation control of disease spread are disclosed. A computer-implemented method includes: determining, by a computing device, a health status of a person; determining, by the computing device, that the person is sick based on the health status; determining, by

the computing device, facial and body movements of the person determined to be sick; determining, by the computing device, that the person determined to be sick performed a germ-transmitting activity based on the facial and body movements; and deploying, by the computing device, a cleaning robot to clean based on the determining that the person determined to be sick performed the germ-transmitting activity.

239.WO/2021/048366METHOD FOR THE PRODUCTION OF RAAV AND METHOD FOR THE IN VITRO GENERATION OF GENETICALLY ENGINEERED, LINEAR, SINGLE-STRANDED NUCLEIC ACID FRAGMENTS CONTAINING ITR SEQUENCES FLANKING A GENE OF INTEREST

WO - 18.03.2021

Int.Class C12Q 1/6844 Appl.No PCT/EP2020/075486 Applicant UNIVERSITÄT BIELEFELD Inventor MÜLLER, Kristian

In a first aspect, the present invention relates to a method for the in vitro generation of genetically engineered, linear, single-stranded nucleic acid fragments containing two viral inverted terminal repeat (ITR) sequences flanking a gene of interest (GOI). The method is based on a rolling circle amplification. In a further aspect, the present invention provides an isolated, linear, single-stranded nucleic acid comprising viral nucleic acid fragments obtainable by a method according to present invention. Further, a method for the production of recombinant virus particles, in particular, recombinant AAV particles (rAAV) based on the linear, single-stranded nucleic acid fragments is described herein. Moreover, a plasmid comprising specific nucleic acid sequence elements is provided.

240.20210079361Virus Purification

US - 18.03.2021

Int.Class C12N 7/00 Appl.No 17106135 Applicant CC Biotech LLC Inventor Martha Knight

A spiral tube countercurrent chromatography rotor for separating virus in a two part aqueous solvent is described.

241.2021036892 効力検定

JP - 11.03.2021

Int.Class Appl.No 2020190850 Applicant メゾブラスト・インターナショナル・エスアーエールエル Inventor ポール・シモンズ

【課題】本開示は、細胞治療製品のための効力検定に関する。間葉系の前駆細胞または幹細胞を含む細胞集団の効力検定を提供する。
【解決手段】本発明は、培養された間葉系前駆細胞または幹細胞の生物学的活性または治療有効性を、それらが培養中に放出するＴＧＦ－９レベルに基づいて測定する方法に関する。本発明はまた、細胞が培養中に放出するＴＧＦ－９レベルのレベルに基づいて選択された、間葉系前駆細胞または幹細胞の単離された母集団にも関す

る。本発明はさらに、そのように選択された細胞集団を投与することによって変性椎間板疾患に罹患した対象を治療することに関する。
【選択図】なし

242.WO/2021/048821USE OF AN OREXIN 2 RECEPTOR AGONIST FOR THE TREATMENT OF EXCESSIVE SLEEPINESS

WO - 18.03.2021

Int.Class A61K 31/445 Appl.No PCT/IB2020/058482 Applicant TAKEDA PHARMACEUTICAL COMPANY LIMITED Inventor HARTMAN, Deborah

Described herein are methyl 3-((methylsulfonyl)amino)-2-(((4-phenylcyclohexyl)oxy)methyl)-piperidine-1-carboxylate (Compound (I)), compositions comprising Compound (I), and the use of Compound (I) for the treatment of excessive sleepiness in a subject in need thereof.

243.2021036870 向上した薬物動態を有する抗Ｃ５抗体

JP - 11.03.2021

Int.Class Appl.No 2020173023 Applicant アレクシオン　ファーマシューティカルズ，　インコーポレイテッド Inventor ブルース　エー．　アンドリアン　ジュニア

【課題】本開示は、とりわけ終末補体（例えば、Ｃ５ｂ－９ ＴＣＣのアセンブリ及び／または活性）及びＣ５ａアナフィラトキシン媒介炎症を阻害するため、ひいては補体関連障害を治療するために有用な抗体を提供する。
【解決手段】該抗体は、エクリズマブと比べていくつかの向上した特性を有し、これは例えば、ヒトにおける血清半減期の増加を含む。この開示は、本明細書に記載の新たな抗体が、標的媒介クリアランスに対する感受性を低減し、ひいては既知の抗Ｃ５抗体と比較して、血中のより長い血清排出半減期（半減期）を有することも示す。
【選択図】なし

244.20210072257METHODS OF DIAGNOSING LYME DISEASE

US - 11.03.2021

Int.Class G01N 33/68 Appl.No 17015913 Applicant MICROBPLEX, INC. Inventor Frances Eun-Hyung Lee

Disclosed are methods for diagnosing Lyme disease and distinguishing a new infection from a persistent infection of *Borrelia burgdorferi* in a subject.

245.WO/2021/044264DETECTING TEMPERATURE ABUSE

WO - 11.03.2021

Int.Class C09K 9/02 Appl.No PCT/IB2020/058025 Applicant KING ABDULLAH UNIVERSITY OF SCIENCE AND TECHNOLOGY Inventor RUEPING, Magnus

The present disclosure provides oxadiazaborinine (ODB) dyes represented by Formula (I) wherein each of R1 through R7 are independently selected from the group consisting of hydrogen, halogen, alkyl, cycloalkyl, aryl, arylalkyl, acyl, groups containing oxygen, groups containing nitrogen, groups containing sulfur, groups containing phosphorous, groups containing boron, and groups containing metals, alone or in combination; R8 is selected from the group consisting of C, N, and P; and each X is halogen; and wherein the ODB dye exhibits an irreversible conversion to a dipyrromethene boron difloro-based chromophore or fluorophore when exposed to a temperature at or greater than a predetermined threshold temperature. Articles and devices comprising ODB dyes for use as Time-Temperature Indicators and methods of detecting temperature abuse are described.

246.WO/2021/050583TREATMENT OF TRAUMATIC ENCEPHALOPATHY BY FIBROBLASTS AND THERAPEUTIC ADJUVANTS

WO - 18.03.2021

Int.Class C07D 265/38 Appl.No PCT/US2020/049990 Applicant FIGENE, LLC Inventor ICHIM, Thomas

Embodiments of the disclosure include methods and compositions for treating neurological disorders by stimulating regenerative and anti-inflammatory activity of fibroblasts. In specific embodiments, fibroblasts are administered to an individual with one or more inhibitors of NFkappaB, including minocycline and/or analogues thereof. In specific cases, methods are utilized herein to treat or prevent central nervous system injury, such as chronic injuries including chronic traumatic encephalopathy.

247.20210077726PRESSURE CONTAINER FOR DRIVING A MEDICAL DEVICE

US - 18.03.2021

Int.Class A61M 5/20 Appl.No 17100501 Applicant Sanofi-Aventis Deutschland GMBH Inventor Christian Nessel

The present disclosure relates to a portable pressure container for driving a medical device. The container includes a pressure housing confining an interior volume and a pressure outlet extending through the pressure housing . The interior volume comprises a liquid storage portion and a gas storage portion. The liquid storage portion and the gas storage portion are in flow connection with each other. The liquid storage portion is configured to store a liquid phase of a driving medium. The gas storage portion is configured to store a gas phase of the driving medium. The pressure outlet is only in flow connection with the gas storage portion.

248.20210070832ANTIGEN-SPECIFIC HELPER T-CELL RECEPTOR GENES

US - 11.03.2021

Int.Class C07K 14/725 Appl.No 17076842 Applicant International Institute of Cancer Immunology, Inc. Inventor Haruo SUGIYAMA

The present invention pertains to polynucleotides that encode CDR3 in TCR-[alpha] and TCR-[beta] chain genes of CD4+ helper T-cells that are specific to WT1 helper peptides having an amino acid sequence represented by SEQ ID NO: 123. The present invention further pertains to the peptides encoded by said polynucleotides. The present invention further pertains to CD4+ T cells into which TCR genes that contain said polynucleotides have been introduced, the induction of WT1-specific cytotoxic T-lymphocytes (CTLs) using the CD4+ T-cells, the treatment of cancer, etc.

249.WO/2021/050800METHODS AND COMPOSITIONS FOR THE TREATMENT OF HPV-RELATED CANCER

WO - 18.03.2021

Int.Class A61K 35/747 Appl.No PCT/US2020/050285 Applicant BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM Inventor KLOPP, Ann

Provided herein are methods for identifying patient having treatment resistant cancers, such as HPV-related cancers. Therapeutic methods for treatment of cancers are also provided.

250.20210079059TREATMENT OF CANCER USING GFR ALPHA-4 CHIMERIC ANTIGEN RECEPTOR

US - 18.03.2021

Int.Class C07K 14/725 Appl.No 17078903 Applicant THE TRUSTEES OF THE UNIVERSITY OF PENNSYLVANIA Inventor Donald L. Siegel

The present invention relates to compositions and methods for treating diseases, disorders or conditions associated with the expression of the Glycosyl-phosphatidylinositol (GPI)-linked GDNF family α-receptor 4 (GFRα4).

251.WO/2021/043961DOSING REGIMEN FOR THE TREATMENT OF CANCER WITH AN ANTI ICOS AGONISTIC ANTIBODY AND CHEMOTHERAPY
WO - 11.03.2021

Int.Class A61K 39/395 Appl.No PCT/EP2020/074728 Applicant GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED Inventor BALLAS, Marc S.

The present disclosure relates to a method of treating cancer in a human in need thereof, the method comprising administering to the human an agonist ICOS binding protein or antigen binding portion thereof at a dose of about 0.08 mg to about 240 mg and administering to the human a chemotherapeutic agent.

252.2021038262ＤＭＤ遺伝子のエクソン５内の内部リボソーム進入部位を活性化するための方法及び材料

JP - 11.03.2021

Int.Class Appl.No 2020197111 Applicant リサーチ　インスティチュート　アット　ネイションワイド　チルドレンズ　ホスピタル Inventor ケビン　フラニガン

【課題】ＤＭＤ遺伝子のエクソン５内の内部リボソーム進入部位を活性化するための方法及び材料の提供。
【解決手段】本発明は、ＤＭＤエクソン２重複以外で、ＤＭＤ遺伝子内に５’突然変異を有する患者を治療するためのオリゴマーの送達に関する。本発明は、ＤＭＤ遺伝子のエクソン５内の内部リボソーム進入部位を活性化して、ジストロフィンの機能的切断アイソフォームの翻訳をもたらすための方法及び材料を提供する。該方法及び材料は、デュシェンヌ型筋ジストロフィーまたはベッカー型筋ジストロフィーなどのＤＭＤ遺伝子内の５’突然変異から生じる筋ジストロフィーの治療のために使用され得る。
【選択図】なし

253.20210069295GALECTINS CONTROL MTOR IN RESPONSE TO ENDOMEMBRANE DAMAGE AND PROVIDE A MECHANISM AND TARGET FOR THE TREATMENT OF AUTOPHAGY-RELATED DISEASES

US - 11.03.2021

Int.Class A61K 38/17 Appl.No 16977318 Applicant STC. UNM Inventor Vojo P. Deretic

The present invention is directed to the discovery that Galectins and in particular, Galectin-8 and Galectin-9 control mTor response (Galectin-8 is a mTOR inhibitor and Galectin-9 is modulator/upregulator of AMPKinase) to endomembrane damage and these compositions can be used, either alone or together, optionally in combination with a lysomotropic agent and other bioactive agents as compositions for the treatment of autophagy-elated diseases. The present invention is directed to pharmaceutical compositions and methods for treating autophagy-related diseases as described herein.

254.20210069314Compositions and Methods for Treatment of Cancer

US - 11.03.2021

Int.Class A61K 39/085 Appl.No 16896060 Applicant David S. Terman Inventor David S. Terman

Amid their enormous biologic diversity, we have discovered a new group of evolutionarily modified SAgs, SEG-SEI, that in partnership with endogenous SEG-SEI retain the ability to generate anti-tumor T effector cell devoid of the cytokine-mediated toxicity. Such toxicity has hampered the effective use of canonical SAgs for human cancer treatment. For their MHCII partner, we selected the human HLA-DQ8 allele and show that its contact with SEG-SEI is obligatory for the anti-tumor effect. Here we further show that SEG-SEI collaborate with HLA-DQ8 alleles to expand, differentiate, and chemotactically recruit a tumor neoantigen-primed tumor reactive T cell population that propagates both an acute tumoricidal response and long-term T-cell memory/survival.

255.20210077552MUTANT ADENO-ASSOCIATED VIRUS VIRIONS AND METHODS OF USE THEREOF

US - 18.03.2021

Int.Class A61K 35/76 Appl.No 17100565 Applicant The Regents of the University of California Inventor David V. Schaffer

The present invention provides mutant adeno-associated virus (AAV) that exhibit altered capsid properties, e.g., reduced binding to neutralizing antibodies in serum and/or altered heparin binding and/or altered infectivity of particular cell types. The present invention further provides libraries of mutant AAV comprising one or more mutations in a capsid gene. The present invention further provides methods of generating the mutant AAV and mutant AAV libraries, and compositions comprising the mutant AAV. The present invention further provides recombinant AAV (rAAV) virions that comprise a mutant capsid protein. The present invention further provides nucleic acids comprising nucleotide sequences that encode mutant capsid proteins, and host cells comprising the nucleic acids. The present invention further provides methods of delivering a gene product to an individual, the methods generally involving administering an effective amount of a subject rAAV virion to an individual in need thereof.

256.WO/2021/046401SYSTEMS, METHODS, AND COMPOSITIONS FOR THE INHIBITION OF BACTERIAL TOXINS TO TREAT EARLY MORTALITY SYNDROME IN AQUATIC ANIMALS

WO - 11.03.2021

Int.Class A23K 10/18 Appl.No PCT/US2020/049478 Applicant PEBBLE LABS USA, INC. Inventor SINEVA, Elena

The invention relates to novel systems, methods, and compositions for the competitive inhibition of bacterial toxins expressed in animal systems, and preferably the inhibition of toxins produced by pathogenic bacteria that affect aquatic animals. One aspect of the invention includes methods and compositions for the treatment of Early-Mortality Syndrome (EMS) in shrimp through the use of truncated PirBVp peptides used as competitor inhibitors to reduce formation of the cytotoxic PirAVp/PirBVp dimer complex.

257.WO/2021/046278SYSTEMS, METHODS, AND COMPOSITIONS FOR THE RAPID EARLY-DETECTION OF HOST RNA BIOMARKERS OF INFECTION AND EARLY IDENTIFICATION OF COVID-19 CORONAVIRUS INFECTION IN HUMANS

WO - 11.03.2021

Int.Class B01L 3/00 Appl.No PCT/US2020/049290 Applicant THE REGENTS OF THE UNIVERSITY OF COLORADO A BODY CORPORATE Inventor SAWYER, Sara, L.

The current inventive technology is directed to systems, methods, and compositions detection of host signatures of pathogenic infection, and in particular a rapid detection assay configured to detect target RNA transcripts that may be biomarkers of infection. In one embodiment, the invention includes systems, methods and compositions for the early detection of pathogens or infection in an asymptomatic subject

through a novel lateral flow assay, which in a preferred embodiment may include a rapid self-administered test strip configured to detect one or more RNA transcript biomarkers produced by a subject's innate immune system in response to a pathogen or infection and present in saliva.

258.20210077458DIBENZOTHIOPHENE DERIVATIVES AND METHODS OF TREATING CANCER THEREWITH

US - 18.03.2021

Int.Class A61K 31/381 Appl.No 17046896 Applicant Saint Louis University Inventor Ryan D. MCCULLA

In one aspect, the present disclosure provides a compound of the formula: (I) wherein the variables are as defined herein. In another aspect, the present disclosure also provides pharmaceutical compositions and methods of use of the compounds disclosed herein.

259.20210078981COMPOUNDS AND METHODS FOR INHIBITING JAK

US - 18.03.2021

Int.Class C07D 403/14 Appl.No 16860169 Applicant Dizal (Jiangsu) Pharmaceutical Co., Ltd. Inventor Annika Birgitta Margareta ASTRAND

Disclosed are compounds of formula (I), pharmaceutical compositions comprising such compounds and methods/uses of using the same, for example, for treating a JAK-related disorder, such as cancer, cancer cachexia or an immune disorder:

wherein

-
  - R^1 is methyl or ethyl;
  - R^2 is selected from methyl, ethyl, methoxy and ethoxy;
  - R^3 is selected from hydrogen, chlorine, fluorine, bromine and methyl;
  - R^4 is selected from methyl, ethyl and —CH_2OCH_3;
  - R^5 and R^6 are each individually methyl or hydrogen; and
  - R^7 is selected from methyl, ethyl, —$(CH_2)_2OH$ and —$(CH_2)_2OCH_3$, or a pharmaceutically acceptable salt thereof.

260.20210079426ADENO-ASSOCIATED VIRUS VECTOR VARIANTS FOR HIGH EFFICIENCY GENOME EDITING AND METHODS THEREOF

US - 18.03.2021

Int.Class C12N 15/90 Appl.No 16858199 Applicant CITY OF HOPE Inventor Saswati CHATTERJEE

Adeno-associated virus (AAV) Clade F vectors or AAV vector variants (relative to AAV9) for precise editing of the genome of a cell and methods and kits thereof are provided. Targeted genome editing using the AAV Clade F vectors or AAV vector variants provided herein occurred at frequencies that were shown to be 1,000 to 100,000 fold more efficient than has previously been reported. Also provided are methods of treating a disease or disorder in a subject by editing the genome of a cell of the subject via transducing the cell with an AAV Clade F vector or AAV vector variant as described herein and further transplanting the transduced cell into the subject to treat the disease or disorder of the subject. Also provided herein are methods of treating a disease or disorder in a subject by in vivo genome editing by directly administering the AAV Clade F vector or AAV vector variant as described herein to the subject.

261.20210079057COMPOSITIONS AND METHODS FOR TCR REPROGRAMMING USING FUSION PROTEINS

US - 18.03.2021

Int.Class C07K 14/725 Appl.No 16622791 Applicant TCR2 THERAPEUTICS INC. Inventor Patrick BAEUERLE

Provided herein are T cell receptor (TCR) fusion proteins (TFPs), T cells engineered to express one or more TFPs, and methods of use thereof for the treatment of diseases, including cancer.

262.WO/2021/050696COMPOSITIONS AND METHODS FOR IMPROVING TUMOR PENETRATION OF TUMOR SPECIFIC ANTIBODIES

WO - 18.03.2021

Int.Class A61K 39/395 Appl.No PCT/US2020/050159 Applicant THE RESEARCH FOUNDATION FOR THE STATE UNIVERSITY OF NEW YORK Inventor BALTHASAR, Joseph, P.

Provided are compositions and methods for improving tumor penetrability of anti-tumor antibodies or conjugates thereof. The method comprises administering to an individual in need of treatment an anti-idiotypic antibody in addition to the anti-tumor antibody or conjugate. Examples are provided for anti-HER2 antibodies and anti-idiotypic antibodies that are directed to the anti-HER2 antibodies.

263.3792361NUCLEIC ACID FOR TREATING CRUSTACEAN ALLERGY

EP - 17.03.2021

Int.Class C12N 15/62 Appl.No 19799640 Applicant ASTELLAS PHARMA INC Inventor MARUI TAKANORI

[Problem] To provide a nucleic acid expected to be useful in treating crustacean allergy. [Solution] Provided is a nucleic acid including, in the following order: a base sequence that encodes a signal peptide; a base sequence that encodes a LAMP intra-organelle stabilizing domain; a base sequence that encodes

an allergen domain including Litv1, Litv4, and Litv3; a base sequence that encodes a transmembrane domain; and a base sequence that encodes a LAMP endosomal/lysosomal targeting domain, wherein the nucleic acid includes a base sequence that encodes a chimeric protein.

264.WO/2021/044208ANTIBODY-DRUG CONJUGATE COMPRISING ANTIBODY AGAINST HUMAN ROR1, AND USE FOR THE SAME

WO - 11.03.2021

Int.Class A61K 47/68 Appl.No PCT/IB2020/000649 Applicant LEGOCHEM BIOSCIENCES, INC. Inventor PARK, Yun Hee

The present invention relates to new antibody-drug conjugates (ADCs) targeting ROR1, active metabolites of such ADCs, methods for preparation of such ADCs, uses for such ADCs in treatment and/or prevention of illnesses, and uses for such ADCs in production of drugs for treatment and/or prevention of diseases, more specifically diseases associated with over-expression of ROR1, for example cancer. More specifically, the present invention relates to an antibody-drug conjugate comprising an antibody that binds to ROR1 or an antigen-binding fragment thereof, and a pharmaceutical composition comprising the same.

265.2019310597Anti-siglec-5 antibodies and methods of use thereof

AU - 11.03.2021

Int.Class C07K 16/28 Appl.No 2019310597 Applicant Alector LLC Inventor

The present disclosure is generally directed to compositions that include antibodies, *e.g.*, monoclonal, chimeric, humanized antibodies, antibody fragments, *etc.*, that specifically bind a Siglec-5 protein, *e.g.*, human Siglec-5, and use of such compositions in preventing, reducing risk, or treating an individual in need thereof.

266.WO/2021/050527COMPOSITIONS AND METHODS FOR MAKING AND USING MULTISPECIFIC ANTIBODIES

WO - 18.03.2021

Int.Class A61K 39/395 Appl.No PCT/US2020/049914 Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA Inventor LIU, Bin

The present disclosure relates generally to compositions and methods useful for the production of engineered antibodies having (i) multiple antigen-binding specificities and (ii) Fc regions that have been modified to promote heterodimer formation between heavy chains from antibodies with different specificities. Also provided are recombinant cells, recombinant nucleic acids encoding such engineered antibodies, as well as pharmaceutical compositions containing same.

267.WO/2021/046154GENETIC MODIFICATION OF PLANTS

WO - 11.03.2021

Int.Class A01H 5/00 Appl.No PCT/US2020/049102 Applicant BERMAN, James Inventor BERMAN, James

Gene editing complexes are specifically directed to cannabinoid sequences, such as tetrahydrocannabinol (THC), for excision or inactivation of these sequences. The disclosure is directed to the inhibition of synthesis of THC in a cannabis plant. In doing so, THC would never become an active compound within the plant chemistry and chemotype, thereby eliminating the chance of CBD extracts being contaminated with THC.

268.20210070858CD55-Binding Agent-Related Methods and Compositions

US - 11.03.2021

Int.Class C07K 16/28 Appl.No 16640331 Applicant AgonOx, Inc. Inventor Ryan D. Montler

Provided are methods of treating cell proliferative disorders, including in some instances, cancer. In certain aspects, provided are methods that include administering to a subject having a cell proliferative disorder a therapeutically effective amount of a CD55-binding agent, where at the time of the administering, abnormally proliferating cells of the cell proliferative disorder are not suspected of exhibiting overexpression of CD55. In some embodiments, provided are methods that include administering to a subject having a cell proliferative disorder a therapeutically effective amount of a CD55-binding agent and a therapeutically effective amount of a T cell activator. T cell activators of interest include, e.g., agonists of co-stimulatory receptors, antagonists of inhibitory signals (e.g., immune checkpoint inhibitors), and the like. Also provided are compositions and kits that find use, e.g., in practicing the methods of the present disclosure.

269.WO/2021/048619BIOMARKERS AND TREATMENTS OF ALZHEIMER'S DISEASE AND MILD COGNITIVE IMPAIRMENT

WO - 18.03.2021

Int.Class Appl.No PCT/IB2020/000728 Applicant AXON NEUROSCIENCE SE Inventor NOVAK, Michal

The disclosure provides immunogenic peptides, compositions, means, and methods for treating Alzheimer's disease or mild cognitive impairment. The disclosure turther provides means and methods for diagnosing patients, selecting patients for treatment, and/or evaluating the efficacy of treatment for Alzheimer's disease or mild cognitive impairment

270.20210077634IN VIVO PRODUCTION OF PROTEINS

US - 18.03.2021

Int.Class A61K 48/00 Appl.No 16811648 Applicant ModernaTX, Inc. Inventor Antonin DE FOUGEROLLES

The invention relates to compositions including polynucleotides encoding polypeptides which have been chemically modified by replacing the uridines with 1-methyl-pseudouridine to improve one or more of the stability and/or clearance in tissues, receptor uptake and/or kinetics, cellular access by the compositions, engagement with translational machinery, mRNA half-life, translation efficiency, immune evasion, protein production capacity, secretion efficiency, accessibility to circulation, protein half-life and/or modulation of a cell's status, function, and/or activity.

271.2021038261 がんワクチン組成物およびその使用方法

JP - 11.03.2021

Int.Class Appl.No 2020196997 Applicant ユニヴァーシティ　オブ　ワシントン Inventor マリー　エル.　ディシス

【課題】がんワクチン組成物およびその使用方法を提供すること。
【解決手段】本出願は、投与後に対象において免疫応答を引き出すペプチドのエピトープを含む組成物を記載する。本明細書に記載の組成物は核酸を含む。本出願はまた、ペプチドを含む組成物も記載する。本明細書には、ペプチドのエピトープを含む組成物を、それを必要とする対象に投与するステップを含む方法も記載されている。ポリペプチドをコードするヌクレオチド配列を含む単離され精製されたプラスミド、ならびに賦形剤を含む組成物であって、前記ポリペプチドが、ＣＤＣ２５Ｂ、ＣＯＸ２、ＥＧＦＲ、ＦＡＳＣＩＮ１、ＩＧＦ１Ｒ、ＰＲＬ３、ＲＣＡＳ１、およびＶＣＰから選択される複数のエピトープを含む、組成物。
【選択図】なし

272.20210079043MODULATION OF STRUCTURED POLYPEPTIDE SPECIFICITY

US - 18.03.2021

Int.Class C07K 7/08 Appl.No 16987764 Applicant BicycleRD Limited Inventor Daniel Paul Teufel

The invention describes peptide ligands specific for human plasma Kallikrein.

273.20210079112COMBINATION OF NEAR INFRARED PHOTOIMMUNOTHERAPY TARGETING CANCER CELLS AND HOST-IMMUNE ACTIVATION

US - 18.03.2021

Int.Class C07K 16/30 Appl.No 17040426 Applicant The United States of America, as represented by the Secretary, Department of Health and Human Ser Inventor Hisataka Kobayashi

Provided herein are methods of treating a subject with cancer with a combination of antibody-IR700 molecules and immunomodulators. In particular examples, the methods include administering to a subject with cancer a therapeutically effective amount of one or more antibody-IR700 molecules, where

the antibody specifically binds to a cancer cell surface protein, such as a tumor-specific antigen. The methods also include administering to the subject a therapeutically effective amount of one or more immunomodulators (such as an immune system activator or an inhibitor of immuno-suppressor cells), either simultaneously or substantially simultaneously with the antibody-IR700 molecules, or sequentially (for example, within about 0 to 24 hours). The subject or cancer cells in the subject (for example, a tumor or cancer cells in the blood) are then irradiated at a wavelength of 660 to 740 nm at a dose of at least 1 J/cm^2.

274.WO/2021/043966NLRP3 INHIBITORS

WO - 11.03.2021

Int.Class C07D 249/14 Appl.No PCT/EP2020/074738 Applicant INFLAZOME LIMITED Inventor MILLER, David

The present invention relates to substituted5-membered nitrogen containing heteroaryl compounds, such as triazole esters, where the heteroaryl ring is further substituted via a linking group such as - NH- with a cyclic group which in turn is substituted at the a-position. The present invention further relates to associated salts, solvates, prodrugs and pharmaceutical compositions, and to the use of such compounds in the treatment and prevention of medical disorders and diseases, most especially by NLRP3inhibition.

275.20210079384NON-INVASIVE DETECTION OF RESPONSE TO A TARGETED THERAPY

US - 18.03.2021

Int.Class C12N 15/10 Appl.No 17047013 Applicant The Johns Hopkins University Inventor Victor E. Velculescu

Provided herein are method of determining the efficacy of targeted therapy in a subject by detecting changes in levels of cell-free tumor load (cfTL). In some aspects, the efficacy of targeted therapy is determined a very short time after the targeted therapy is administered. Also provided herein are method of determining resistance to a targeted therapy in a subject by detecting changes in levels of cell-free tumor load (cfTL).

276.20210070801NOVEL COMPOUNDS FOR THE TREATMENT OF NEURODEGENERATIVE DISEASES

US - 11.03.2021

Int.Class C07K 7/02 Appl.No 16959533 Applicant University of South Florida Inventor Jianfeng Cai

Disclosed herein are compounds for the treatment of neurodegenerative diseases and compositions comprising the same.

277.2021508701 ファージテールレングステープメジャータンパク質由来の免疫原性配列、それを発現する細菌、および癌の治療におけるそれらの使用

JP - 11.03.2021

Int.Class Appl.No 2020535625 Applicant アンスティテュ　ギュスタブ　ルシ Inventor ロランス　ジトボーゲル

本発明は、抗癌治療のプロバイオティクスアジュバント化の分野に関する。特に、本発明は、癌治療の効率的なアジュバントとして同定された細菌中に存在するプロファージ由来の免疫原性配列に関する。本発明はこのプロファージ由来の免疫原性配列を発現する細菌組成物、このような配列を含む免疫原性組成物、およびこのプロファージ由来の配列を使用する方法を提供し、抗癌武器を増加させる。

278.WO/2021/046289DOSING REGIMEN FOR THE TREATMENT OF CANCER WITH AN ANTI ICOS AGONISTIC ANTIBODY AND IPILIMUMAB

WO - 11.03.2021

Int.Class C07K 16/28 Appl.No PCT/US2020/049317 Applicant GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED Inventor BALLAS, Marc S.

The present disclosure relates to a method of treating cancer in a human in need thereof, the method comprising administering to the human an agonist ICOS binding protein or antigen binding portion thereof at a dose of about 0.08 mg to about 240 mg and administering to the human ipilimumab.

279.WO/2021/042163METHODS AND AGENTS FOR DETERMINING PATIENT STATUS

WO - 11.03.2021

Int.Class C07K 16/28 Appl.No PCT/AU2020/050921 Applicant THE COUNCIL OF THE QUEENSLAND INSTITUTE OF MEDICAL RESEARCH Inventor WYKES, Michelle

Disclosed are methods and agents for predicting response to therapy, immune status and/or disease progression. More particularly, disclosed are methods, agents and kits for analyzing cellular distribution of PD-L2, including its nuclear localization, for stratifying a patient as a likely responder or non-responder to a therapy, for predicting treatment outcome of a patient with a therapy, for managing treatment of a patient with a therapy, for monitoring a disease in a patient following treatment with a therapy, for determining the status of a disease and/or for determining the immune status of a patient.

280.20210079088ANTIBODY FOR BINDING TO INTERLEUKIN 4 RECEPTOR

US - 18.03.2021

Int.Class C07K 16/24 Appl.No 16994464 Applicant SUZHOU CONNECT BIOPHARMACEUTICALS, LTD. Inventor Wei ZHENG

Disclosed is an antibody capable of binding to the interleukin 4 (IL-4) receptor (IL-4). Also disclosed are a nucleic acid sequence encoding the antibody, a vector including the nucleic acid sequence, and a host cell transformed or transfected with the vector. Provided are a method for producing the antibody, a medical use of the antibody, and a kit including the antibody.

281.20210077832METHODS OF TREATING CANCER WITH DENDRITIC CELL MOBILIZING AGENTS

US - 18.03.2021

Int.Class A61N 5/10 Appl.No 16961436 Applicant Celldex Therapeutics, Inc. Inventor Tibor KELER

Methods of treating cancer comprising administering to patients a dendritic cell mobilizing agent (e.g., Flt3 ligand) in combination with radiation and/or immunoregulatory agents (e.g., checkpoint inhibitors), are disclosed.

282.20210069234IMMUNOSTIMULATOR, PHARMACEUTICAL COMPOSITION, AND FOOD OR BEVERAGE

US - 11.03.2021

Int.Class A61K 31/722 Appl.No 16321781 Applicant ZENOAQ RESOURCE CO., LTD. Inventor Etsuya OKAMOTO

Provided is an immunostimulator containing: chitosan and/or a chitosan derivative each having a weight-average molecular weight of 10k to 1000k; and an anionic surfactant, the immunostimulator being in particulate form. Also provided are a pharmaceutical composition and an alimentary product, each containing the immunostimulator as an active ingredient.

283.20210079046NON-CHROMATOGRAPHIC PURIFICATION OF MACROCYCLIC PEPTIDES BY A RESIN CATCH AND RELEASE

US - 18.03.2021

Int.Class C07K 7/64 Appl.No 16618847 Applicant BRISTOL-MYERS SQUIBB COMPANY Inventor Gardner S. CREECH

The disclosure is directed to compounds and methods for preparing purified macrocyclic peptide using “catch-release” methods. These methods comprise reacting a free amino group of a resin-bound linear peptide with an azide- or alkyne-functionalized cap to form a resin-bound capped linear peptide having an azide- or alkyne-functionalized cap; cleaving said capped linear peptide from the resin to form a free capped linear peptide having an azide- or alkyne-functionalized cap; reacting the free capped linear peptide having an azide-functionalized cap with an alkyne-functionalized catch resin, or reacting the free capped linear peptide having an akynyl-functionalized cap with an azide functionalized catch resin, to form a catch-resin bound capped linear peptide; reacting the catch-resin bound capped linear peptide under conditions sufficient to effect macrocyclization of the linear peptide and release of the macrocyclic peptide from the catch resin.

284.20210068377RODENTS HAVING A HUMANIZED TMPRSS GENE

US - 11.03.2021

Int.Class A01K 67/027 Appl.No 17099942 Applicant Regeneron Pharmaceuticals, Inc. Inventor Lisa Purcell

Genetically modified rodents such as mice and rats, and methods and compositions for making and using the same, are provided. The rodents comprise a humanization of at least one endogenous rodent Tmprss gene, such as an endogenous rodent Tmprss2, Tmprss4, or Tmprss11d gene.

285.WO/2021/050717IMMUNE CELL SEQUENCING METHODS

WO - 18.03.2021

Int.Class C12Q 1/68 Appl.No PCT/US2020/050184 Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA Inventor VOLLMERS, Christopher

Provided are immune cell RNA sequencing methods. In some embodiments, the methods comprise producing a circularized DNA comprising a complementary DNA (cDNA) and a known heterologous sequence, wherein the cDNA is produced from an immune cell RNA. Such methods further comprise performing rolling circle amplification using the circularized DNA as template to produce a concatemer comprising repeating segments comprising the cDNA and the known heterologous sequence. Such methods further comprise sequencing the concatemer or fragments thereof. Also provided are methods comprising producing immune cell RNA sequencing reads using a R2C2 sequencing method, extracting HLA reads from the sequencing reads, and producing allele-specific HLA sequences from the extracted HLA reads. Also provided are computer-readable media, systems, compositions and kits that find use, e.g., in practicing the methods of the present disclosure.

286.20210077728NEEDLE-FREE INJECTOR FOR LARGE-SCALE, MULTI-DOSE APPLICATIONS

US - 18.03.2021

Int.Class A61M 5/30 Appl.No 17025768 Applicant PORTAL INSTRUMENTS, INC. Inventor Patrick Armand Anquetil

A needle-free injector includes a housing, a cartridge positioned within the housing, and a plunger slidably coupled to and disposed within the chamber, a motor operatively coupled to the plunger, the motor operable to actuate the plunger in the chamber, and a controller operatively coupled to the motor. Methods of delivering an injectate using the needle-free injectors are provided. Methods of facilitating needle-free injection of a fluid using the needle-free injectors are also provided.

287.WO/2021/050937METHODS FOR THE TREATMENT OF ARID1A-DEFICIENT CANCERS

WO - 18.03.2021

Int.Class A61K 38/17 Appl.No PCT/US2020/050488 Applicant THE WISTAR INSTITUTE OF ANATOMY AND BIOLOGY Inventor ZHANG, Rugang

The present disclosure is directed to the use of inibitors of glutamate metabolism to treat cancers that have mutations in ARID1A. Thus, in accordance with the present disclosure, there is provided a method of treating a subject determined to have an ARIDIA-mutated cancer, pre-cancer or benign tumor comprising administering to said subject at least one inhibitor of glutamate metabolism.

288.20210079045BICYCLIC PEPTIDE LIGANDS WITH DETECTABLE MOIETIES AND USES THEREOF

US - 18.03.2021

Int.Class C07K 7/56 Appl.No 17060409 Applicant BicycleRD Limited Inventor Gavin BENNETT

The present invention provides compounds, compositions thereof, and methods of using the same.

289.3791862LIQUID PROTEIN FORMULATIONS CONTAINING VISCOSITY-LOWERING AGENTS

EP - 17.03.2021

Int.Class A61K 9/08 Appl.No 20205250 Applicant EAGLE BIOLOGICS INC Inventor LARSON ALYSSA M

Concentrated, low-viscosity, low-volume liquid pharmaceutical formulations of proteins have been developed. Such formulations can be rapidly and conveniently administered by subcutaneous or intramuscular injection, rather than by lengthy intravenous infusion. These formulations include low-molecular-weight and/or high-molecular-weight proteins, such as mAbs, and viscosity-lowering agents that are typically bulky polar organic compounds, such as many of the GRAS (US Food and Drug Administration List of compounds generally regarded as safe) and inactive injectable ingredients and FDA approved therapeutics.

290.20210077619TREATMENT OF LUPUS USING HUMANIZED ANTI-CXCR5 ANTIBODIES

US - 18.03.2021

Int.Class A61K 39/395 Appl.No 17029801 Applicant SANOFI Inventor Jeffrey MING

This disclosure provides anti-CXCR5 antibodies and their use in the amelioration, treatment, or prevention of lupus. The disclosure also provides prophylactic, immunotherapeutic, and diagnostic compositions comprising an anti-CXCR5 antibody, and the use of such anti-CXCR5 antibodies in methods of preventing or treating lupus in mammals, including humans.

291.20210077562ETBR ANTAGONIST COMPOUNDS, COMPOSITIONS, AND USES

US - 18.03.2021

Int.Class A61K 38/06 Appl.No 17101676 Applicant ENB Therapeutics, Inc. Inventor Sumayah JAMAL

Disclosed herein are ETBR antagonist compounds, pharmaceutical compositions thereof, methods for treating cancers, and methods of forming tertiary lymphoid organs.

292.2021508456ＣＡＲ　Ｔ細胞の作製を改良するための方法

JP - 11.03.2021

Int.Class Appl.No 2020534499 Applicant セレクティス Inventor ボイン　アレックス

細胞表面における抗 TCR CAR の一過性発現を達成するために抗 TCR CAR をコードする RNA の形態にあるヌクレオチド配列を使って、キメラ抗原受容体（CAR）を発現する T 細胞を含むアロ反応性の低い免疫細胞を工学的に作製するための方法。アルファベータ TCR によって認識される抗 TCR CAR を細胞表面に一過性に発現させると、意外なことに、TCR 陰性 CAR 発現細胞の精製が可能になった。TCR 陰性 CAR 発現免疫細胞は、養子治療において、細胞表面抗原に関連する疾患、例えばがんを、少ない副作用で、特に少ない GVHD で処置するために、使用することができる。

293.20210079039COMPOSITIONS AND METHODS FOR THE SELECTIVE DELIVERY OF THERAPEUTIC AND IMAGING AGENTS

US - 18.03.2021

Int.Class C07K 7/02 Appl.No 17048078 Applicant Avelas Biosciences, Inc. Inventor Jesus E. GONZALEZ

Described herein are methods and compositions for the targeted delivery of therapeutic agents and imaging agents.

294.WO/2021/050556COMPOSITIONS AND METHODS FOR INHIBITING RIBOSOME INACTIVATING PROTEINS

WO - 18.03.2021

Int.Class C12Q 1/68 Appl.No PCT/US2020/049957 Applicant RUTGERS, THE STATE UNIVERSITY OF NEW JERSEY Inventor TUMER, Nilgun E.

The disclosure provides in one aspect a method of treating, ameliorating, and/or preventing toxicity caused by a ribosome inactivating protein (RIP) in a subject. In certain embodiments, the method comprises administering to the subject a therapeutically effective amount of at least one compound of the disclosure.

295.WO/2021/047646SUBSTITUTED IMIDAZOQUINOXALINE COMPOUNDS AND USES THEREOF

WO - 18.03.2021

Int.Class C07D 487/04 Appl.No PCT/CN2020/114823 Applicant IMPACT THERAPEUTICS, INC Inventor CAI, Sui Xiong

The disclosure provides substituted imidazo [1, 5-a] quinoxaline and related compounds as kinase inhibitors, and their uses. Specifically, the disclosure provides compounds of Formula I, or pharmaceutically acceptable salts thereof or prodrugs thereof, wherein, A 1-A 3, Cy and R 1-R 2 are defined herein. The compounds of Formula I are kinase inhibitors. Therefore, the compounds of the disclosure can be used to treat clinical conditions caused by DDR function defects, such as cancers. (I)

296.20210077741Injection Device with a Preselector

US - 18.03.2021

Int.Class A61M 5/315 Appl.No 16761341 Applicant Sanofi-Aventis Deutschland GMBH Inventor Michael Helmer

An injection device for setting and injecting a dose of a medicament comprises a housing) extending along an axial direction (z), a dose setting mechanism arranged in the housing, a dose dial displaceable relative to the housing for setting of the dose, a dose tracker (**50; 150**) operably connectable to the dose dial (**12**), the dose tracker is at least one of translationally or rotationally displaceable relative to the housing during setting of a dose, wherein a positional state of the dose tracker relative to the housing is indicative of a size of the dose, and a preselector configured to define a maximum dose positional state of the dose tracker relative to the housing, and a first marker provided on one of the dose tracker and the preselector and configured to indicate the positional state of the dose tracker relative to the preselector.

297.20210069422RATCHET MECHANISM AND INJECTION DEVICE

US - 11.03.2021

Int.Class A61M 5/315 Appl.No 16977941 Applicant SANOFI Inventor Matthew Meredith Jones

The present disclosure relates to a ratchet mechanism and to an injection device for expelling of a number of preset or user-selectable doses of a medicament. The ratchet mechanism comprises a housing and a ratchet member that is circularly shaped and rotationally supported relative to the housing. The ratchet member comprises a ratchet surface, a plurality of ratchet features on the ratchet surface, and one or more intermediate ratchet sections on the ratchet surface extending between the plurality of ratchet features. The ratchet mechanism further comprises a counter ratchet member that is circularly shaped, coaxially arranged relative to the ratchet member, rotatable relative to the ratchet member at least along a first sense of rotation, and rotationally supported relative to the housing. The counter ratchet member comprises a counter ratchet surface, a plurality of counter ratchet features on the counter ratchet surface, and one or more intermediate counter ratchet sections.

298.20210070950STABILIZED CHEMICAL COMPOSITION

US - 11.03.2021

Int.Class C08J 3/24 Appl.No 17054399 Applicant Syngenta Crop Protection AG Inventor Jeffrey David Fowler

Stabilized liquid agrochemical compositions are provided that comprise flowable, liquid dispersion concentrates comprising a) a continuous liquid phase; and b) a dispersed phase comprising a dispersion of gel-like polymer matrix particles having a hardness greater than 0.01 MPa and less than 6 MPa, and where the outside surfaces of the particles comprise a colloidal solid material and the particles have a agrochemically active ingredient distributed therein The agrochemically active ingredient may be solid or liquid and is distributed within the polymer matrix particle. The compositions of the invention can be used directly or with dilution to combat pests or as plant growth regulators.

299.WO/2021/046428NEEDLE-FREE INJECTOR WITH GAS BUBBLE DETECTION

WO - 11.03.2021

Int.Class A61M 5/20 Appl.No PCT/US2020/049517 Applicant PORTAL INSTRUMENTS, INC. Inventor BARKIN, Tyler F.

A needle-free injector includes a housing, a cartridge positioned within the housing, and a plunger slidably coupled to and disposed within the chamber, a motor operatively coupled to the plunger, the motor operable to actuate the plunger in the chamber, and a controller operatively coupled to the motor. The controller is operable to selectively operate the plunger according to any of a first delivery profile, a second delivery profile, and a third delivery profile. The controller may transition from the first delivery profile to the second delivery profile responsive to compression of a gas in the chamber, e.g., upon detecting a spike in a measured current applied to the motor. The controller may transition from the second delivery profile to the third delivery profile responsive to detecting a steady state condition between the measured current and a velocity of the plunger. Methods of delivering an injectate using the needle-free injectors are provided. Methods of facilitating needle-free injection of an injectate using the needle-free injectors are also provided.

300.WO/2021/048135PHARMACEUTICAL COMBINATIONS COMPRISING A FURAZANOBENZIMIDAZOLES AND A CD40 AGONIST FOR USE IN THE TREATMENT OF NEOPLASTIC DISEASES

WO - 18.03.2021

Int.Class A61K 31/4245 Appl.No PCT/EP2020/075094 Applicant BASILEA PHARMACEUTICA INTERNATIONAL AG Inventor GENOUD, Vassilis

The present invention provides pharmaceutical combinations comprising (a) a compound of formula (I) wherein R represents phenyl or pyridinyl; wherein phenyl is optionally substituted by one or two substituents independently selected from lower alkyl, lower alkoxy, hydroxyl, amino, lower alkylamino, lower dialkylamino, acetylamino, halogen and nitro; and wherein pyridinyl is optionally substituted by amino or halogen; R1 represents hydrogen or cyano-lower alkyl; and wherein the prefix lower denotes a radical having up to and including a maximum of 4 carbon atoms; or a pharmaceutically acceptable derivative thereof; and (b) a CD40 agonist.

301.WO/2021/048724COMBINED EXPRESSION OF A CHIMERIC CD3 FUSION PROTEIN AND AN ANTI-CD3-BASED BISPECIFIC T CELL ACTIVATING ELEMENT

WO - 18.03.2021

Int.Class C12N 15/62 Appl.No PCT/IB2020/058302 Applicant BIOTHEUS (SUZHOU) CO., LTD. Inventor LI, Zhiyuan

Provided is a nucleic acid encoding a chimeric CD3 fusion protein and an anti-CD3 based bispecific T cell activator (BiTA) element. Also provided are vectors, engineered immune cells comprising the nucleic acid, the usage thereof and methods for preventing tumor. BiTA secreted by CAB-T cells can simultaneously achieve activation of CAB-T cells and endogenous TCR complexes in non-engineered T cells in tumor, and exert an anti-tumor effect.

302.20210079360VIRAL VECTOR PRODUCTION SYSTEM

US - 18.03.2021

Int.Class C12N 7/00 Appl.No 16980825 Applicant Oxford BioMedica (UK) Limited Inventor Daniel Farley

Disclosed herein are viral vector production systems secreting nuclease for degradation of residual nucleic acid during viral vector production and methods of the same. Such a viral vector production system comprises a viral vector production cell comprising nucleic acid sequences encoding: 1) viral vector components; and 2) a nuclease, wherein the nuclease is expressed in the production cell and secreted in cell culture thereby degrading residual nucleic acid during viral vector production. Another such viral vector production system comprises 1) a viral vector production cell comprising nucleic acid sequences encoding viral vector components; and 2) a nuclease helper cell comprising a nucleic acid sequence encoding a nuclease, wherein the nuclease is expressed and secreted in co-culture of the production cell of 1) and the helper cell of 2), thereby degrading residual nucleic acid during viral vector production.

303.20210070759CRYSTALLINE FORMS OF A BRUTONS TYROSINE KINASE INHIBITOR

US - 11.03.2021

Int.Class C07D 487/04 Appl.No 16951796 Applicant Pharmacyclics LLC Inventor Norbert Purro

Described herein is the Bruton's tyrosine kinase (Btk) inhibitor 1-((R)-3-(4-amino-3-(4-phenoxyphenyl)-1H-pyrazolo[3,4-d]pyrimidin-1-yl)piperidin-1-yl)prop-2-en-1-one, including crystalline forms, solvates and pharmaceutically acceptable salts thereof. Also disclosed are pharmaceutical compositions that include the Btk inhibitor, as well as methods of using the Btk inhibitor, alone or in combination with other therapeutic agents, for the treatment of autoimmune diseases or conditions, heteroimmune diseases or conditions, cancer, including lymphoma, and inflammatory diseases or conditions.

304.WO/2021/046134METHODS OF PREPARING T CELLS FOR T CELL THERAPY

WO - 11.03.2021

Int.Class C12N 5/0783 Appl.No PCT/US2020/049074 Applicant ALLOGENE THERAPEUTICS, INC. Inventor NI, Yajin

Provided herein are methods for preparing T cells for T cell therapy comprising contacting a cell population at a predetermined cell density, with a concentration of an anti- CD3/CD28 nanomatrix and culturing the cells thereby producing a T cell population comprising an increased percentage of at least one T cell subtype. In some embodiments, the method increases the percentage of stem memory T cells.

305.WO/2021/050812METABOLIC REPROGRAMMING OF IMMUNE CELLS FOR THE TREATMENT OR PREVENTION OF DISEASES AND DISORDERS

WO - 18.03.2021

Int.Class A61K 9/14 Appl.No PCT/US2020/050305 Applicant ARIZONA BOARD OF REGENTS ON BEHALF OF ARIZONA STATE UNIVERSITY Inventor ACHARYA, Abhinav

The present invention relates to metabolite-based polymers and polymeric particles that serve as therapeutic agents, compositions comprising the same, and methods of use thereof. The present invention is based, in part, on the development of novel active metabolite-based polymers and polymeric particles and their use as carriers for the delivery of therapeutic agents.

306.20210069337INTEGRIN TARGETING LIGANDS AND USES THEREOF

US - 11.03.2021

Int.Class A61K 47/54 Appl.No 17078331 Applicant Arrowhead Pharmaceuticals, Inc. Inventor Zhen Li

Compounds having affinity for integrins, the synthesis of these compounds, and the use of these compounds as ligands to facilitate the delivery of cargo molecules to cells expressing integrins are described. The described integrin targeting ligands have serum stability and affinity for αvβ3 integrin and/or αvβ5 integrin, and are suitable for conjugation to cargo molecules, such as such as oligonucleotide-based therapeutic agents (e.g., RNAi agents), to facilitate delivery of the cargo molecules to cells and tissues, such as tumor cells, that express integrin αvβ3, integrin αvβ5, or both integrin αvβ3 and integrin αvβ5. Compositions that include integrin targeting ligands and methods of use are also described.

307.WO/2021/050968FUSION CONSTRUCTS TO EXPRESS BIOPHARMACEUTICAL POLYPEPTIDES IN CYANOBACTERIA

WO - 18.03.2021

Int.Class C12N 15/74 Appl.No PCT/US2020/050528 Applicant THE REGENTS OF THE UNIVERSITY OF CALIFORNIA Inventor MELIS, Anastasios

This invention provides compositions and methods for providing high product yield of transgenes encoding biopharmaceutical polypeptides in cyanobacteria and microalgae.

308.20210079085ANTI-GM-CSF ANTIBODIES AND USES THEREOF

US - 18.03.2021

Int.Class C07K 16/24 Appl.No 17109924 Applicant I-Mab Biopharma Co., Ltd. Inventor Zhengyi Wang

Provided are anti-GM-CSF antibodies or fragments thereof including humanized antibodies and fragments. Also provided are uses of the antibodies and fragments for therapeutic, diagnostic and prognostic purposes. Therapeutic uses of the antibodies and fragments, for example include the treatment of inflammatory and autoimmune diseases and disorders.

309.20210079069NEUTRALIZING ANTI-INFLUENZA BINDING MOLECULES AND USES THEREOF

US - 18.03.2021

Int.Class C07K 16/10 Appl.No 17108608 Applicant MEDIMMUNE, LLC Inventor Nicole KALLEWAARD-LELAY

Binding molecules, including bispecific antibodies that include at least two anti-influenza binding domains are disclosed, including binding molecules having a first binding domain that specifically binds influenza A virus and a second binding domain that specifically binds influenza B virus.

310.WO/2021/046451COMPOSITIONS AND METHODS FOR DHFR TUNABLE PROTEIN REGULATION

WO - 11.03.2021

Int.Class A61K 38/00 Appl.No PCT/US2020/049546 Applicant OBSIDIAN THERAPEUTICS, INC. Inventor INNISS, Mara Christine

The present disclosure is related to compositions and methods for the regulated and controlled expression of proteins.

311.20210069285COMPOSITIONS AND METHODS OF TREATING CANCER WITH GLYCOMIMETIC PEPTIDES

US - 11.03.2021

Int.Class A61K 38/08 Appl.No 16960267 Applicant SUSAVION BIOSCIENCES, INC. Inventor Laura L. Eggink

The present disclosure relates to pharmaceutical compositions comprising a peptide or multivalent polypeptide, and an anti-cancer agent. In some embodiments, the anti-cancer agent is conjugated to the peptide or multivalent polypeptide. The present disclosure also relates to a method of treating

cancer or reducing cancer cell proliferation using the peptide or multivalent polypeptide. In some aspects, the peptide or multivalent polypeptide enhances the efficacy of the anti-cancer agent, the targeting of the anti-cancer agent to the cancer cells, or both.

312.20210077672IRRIGATION AND ASPIRATION DEVICE AND METHOD

US - 18.03.2021

Int.Class A61M 1/00 Appl.No 17099482 Applicant Aardvark Medical, Inc. Inventor Peter C. BAKER

Irrigation and/or aspiration devices and methods may be configured to aspirate and irrigate alone, sequentially, or concurrently. The devices and methods may provide a base with a removable head, and adapted for partial or complete separation of the irrigation and aspiration functions. The devices and methods can be configured to aspirate and/or irrigate the nasal and sinus cavities. The devices and methods may be manually and/or automatically controlled. The devices and methods may include removable, and/or replaceable, and/or refillable, and easily cleanable reservoirs for aspirant and irrigant. The device head and/or aspirant reservoir may comprise a diagnostic device, i.e., test device and/or container after use of the devices and methods.

313.20210069147PHARMACEUTICAL COMBINATION AND USES THEREOF

US - 11.03.2021

Int.Class A61K 31/343 Appl.No 17102067 Applicant BIONOMICS LIMITED Inventor Gabriel KREMMIDIOTIS

The invention relates to pharmaceutical combinations comprising a vascular disrupting agent, in particular the tubulin polymerisation inhibitor BNC105, and an immunotherapeutic agent, in particular an anti-PD-L1, PD-1 or CTLA-4 antibody, and use thereof in the treatment of cancer.

314.20210071260TREATMENT TARGETING ONCOLOGY AND NEURODEGENERATION

US - 11.03.2021

Int.Class C12Q 1/6886 Appl.No 16848679 Applicant Laurence FAURE Inventor Laurence FAURE

The present invention relates to the field of medicine and biology. It concerns a new test for screening and therapeutic follow-up in oncology. More particularly, it relates to diagnostic and/or therapeutic tests in oncology and on neurodegenerative diseases. Molecular targeting by peptide vectors and antibodies or by small interfering RNAs (siRNAs) opens a new concept of interdependence for diagnostic and therapeutic tools.

315.WO/2021/043810ANTI-FUCOSYL-GM1 ANTIBODIES

WO - 11.03.2021

Int.Class C07K 16/30 Appl.No PCT/EP2020/074441 Applicant SCANCELL LIMITED Inventor DURRANT, Linda Gillian

The present invention relates to specific binding members, such as antibodies and fragments thereof, that are capable of specifically binding fucosyl-GM1 (Fuc-GM1). It also relates to the use of such binding members in medicine and to nucleic acids encoding such binding members, to methods for detecting Fuc-GM1, as well as methods for treating various diseases, including cancer, using anti-Fuc-GM1 antibodies.

316.WO/2021/050857ANTI-CD371 ANTIBODIES AND USES THEREOF

WO - 18.03.2021

Int.Class C07K 16/28 Appl.No PCT/US2020/050380 Applicant MEMORIAL SLOAN-KETTERING CANCER CENTER Inventor DANIYAN, Anthony

The presently disclosed subject matter provides antibodies or antigen-binding fragments thereof that bind to CD371 and methods of using such antibodies or antigen-binding fragments thereof same. In certain embodiments, the anti-CD371 antibody or an antigen-binding fragment thereof comprises a heavy chain variable region comprising an amino acid sequence that is at least about 80%, at least about 85%, at least about 90%, at least about 95%, at least about 96%, at least about 97%, at least about 98%, at least about 99%, at least about 100% homologous or identical to the amino acid sequence set forth in SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: SEQ ID NO: 9, or SEQ ID NO: 11.

317.20210079423COMPOSITIONS AND METHODS TO MANUFACTURE TUMOR SUPPRESSOR FUSIONS

US - 18.03.2021

Int.Class C12N 15/86 Appl.No 17039468 Applicant TheraPten Biosciences Inc. Inventor Athanasios Alevizopoulos

Provided herein is a fusion protein comprising, or alternatively consisting essentially of, or yet further consisting of an optional signal peptide, a serum albumin, an optional linker, a Phosphatase and Tensin Homolog (PTEN), and an optional purification or detectable marker in any order. Relating polynucleotides, vectors, host cells, pharmaceutical compositions and kits are also disclosed. Further provided are methods for delivering a fusion protein to a subject, treating a cancer or tumor, and/or producing the fusion protein.

318.WO/2021/050645COMPOSITIONS AND METHODS OF TREATING LUPUS NEPHRITIS

WO - 18.03.2021

Int.Class A61K 39/395 Appl.No PCT/US2020/050072 Applicant GENENTECH, INC. Inventor CASCINO, Matthew Dominic

The present disclosure provides methods for treating lupus nephritis in an individual that has lupus by administering to the individual an effective amount of a type II anti-CD20 antibody. In other aspects, the present disclosure provides analogous methods for treating membranous nephropathy.

319.3792278HUMAN ANTI-TAU ANTIBODIES

EP - 17.03.2021

Int.Class C07K 16/18 Appl.No 20178431 Applicant BIOGEN MA INC Inventor WEINREB PAUL H

Provided are novel human tau-specific antibodies as well as fragments, derivatives and variants thereof as well as methods related thereto. Assays, kits, and solid supports related to antibodies specific for tau are also disclosed. The antibody, immunoglobulin chain(s), as well as binding fragments, derivatives and variants thereof can be used in pharmaceutical and diagnostic compositions for tau targeted immunotherapy and diagnosis, respectively.

320.20210078996HPK1 ANTAGONISTS AND USES THEREOF

US - 18.03.2021

Int.Class C07D 471/04 Appl.No 17018591 Applicant Nimbus Saturn, Inc. Inventor Neelu KAILA

The present invention provides compounds, compositions thereof, and methods of using the same for the inhibition of HPK1, and the treatment of HPK1-mediated disorders.

321.20210078998SUBSTITUTED ISOINDOLIN-1-ONES AND 2,3-DIHYDRO-1H-PYRROLO[3,4-c]PYRIDIN-1-ONES AS HPK1 ANTAGONISTS

US - 18.03.2021

Int.Class C07D 471/04 Appl.No 17020122 Applicant Nimbus Saturn, Inc. Inventor Neelu KAILA

The present invention provides compounds, compositions thereof, and methods of using the same for the inhibition of HPK1, and the treatment of HPK1-mediated disorders.

322.20210078997SUBSTITUTED ISOINDOLIN-1-ONES AND 2,3-DIHYDRO-1H-PYRROL[3,4-c]PYRIDIN-1-ONES AS HPK1 ANTAGONISTS

US - 18.03.2021

Int.Class C07D 471/04 Appl.No 17020013 Applicant Nimbus Saturn, Inc. Inventor Neelu KAILA

The present invention provides compounds, compositions thereof, and methods of using the same for the inhibition of HPK1, and the treatment of HPK1-mediated disorders.

323.WO/2021/050964HPK1 ANTAGONISTS AND USES THEREOF

WO - 18.03.2021

Int.Class A61K 31/4035 Appl.No PCT/US2020/050524 Applicant NIMBUS SATURN, INC. Inventor KAILA, Neelu

The present invention provides compounds, compositions thereof, and methods of using the same for the inhibition of HPK1, and the treatment of HPK1-mediated disorders.

324.20210079370ANIMAL PRODUCT FREE SYSTEM AND PROCESS FOR PURIFYING A BOTULINUM TOXIN

US - 18.03.2021

Int.Class C12N 9/52 Appl.No 17064548 Applicant Allergan, Inc. Inventor Hui Xiang

Chromatographic processes and systems for purifying *a botulinum* toxin from an APF fermentation medium.

325.20210079367NOVEL CRISPR-ASSOCIATED (CAS) PROTEIN

US - 18.03.2021

Int.Class C12N 9/22 Appl.No 17097880 Applicant Locanabio, Inc. Inventor Matthew Merrill Carter

A new CRISPR-associated (Cas) protein, termed “CasM,” is described, as well as polynucleotides encoding the same and methods of using CasM for site-specific genome engineering. CasM proteins are capable of targeting and cleaving single-stranded RNA.

326.WO/2021/050991COMPOSITIONS AND METHODS FOR TREATMENT OF FRIEDREICH'S ATAXIA

WO - 18.03.2021

Int.Class A61K 31/7088 Appl.No PCT/US2020/050551 Applicant LACERTA THERAPEUTICS, INC Inventor FALK, Darin

The present application provides compositions for treatment of Friedreich's Ataxia (FA). These include, but are not limited to, nucleic acid constructs and recombinant vectors comprising a human frataxin 5' untranslated region (5'UTR FXN) and a human frataxin (FXN) nucleotide sequence are provided herein. Also provided are methods for treatment of FA.

327.WO/2021/047804IN VITRO METHOD FOR TRANSDUCTION OF T CELLS IN THE PRESENCE OF MALIGNANT CELLS

WO - 18.03.2021

Int.Class A61K 39/00 Appl.No PCT/EP2020/069484 Applicant MILTENYI BIOTEC B.V. & CO. KG Inventor CORDES, Nicole

The present invention provides an in-vitro method of reducing the efficiency of transducing malignant cells of the blood system of a subject that are not derived from T cells with lentiviral vector particles without reducing the efficiency of transducing T cells in a sample comprising T cells and said malignant cells. A combination of compositions comprising a first composition and a second composition is also disclosed, wherein said first composition comprises i) transduced T cells of a subject, wherein said transduced T cells express a CAR comprising an antigen binding domain, wherein the antigen binding domain of said CAR binds specifically to a tag of a tagged polypeptide, and ii) non-transduced malignant cells of the blood system of said subject, and wherein said second composition comprises said tagged polypeptide, wherein said tagged polypeptide binds specifically to an antigen expressed on the surface of said malignant cells. Alternatively, the transduced T cells of said first composition may comprise a nucleic acid encoding a CAR and an inducible gene expression system, and said second composition may comprise an induction agent inducing said gene system.

328.20210069178Method for Inducing a Sustained Immune Response

US - 11.03.2021

Int.Class A61K 31/485 Appl.No 16898557 Applicant Cytocom Inc. Inventor Noreen Griffin

A method for inducing a sustained immune response in humans or animal patient suffering from human immunodeficiency virus (HIV) acquired immune deficiency syndrome (AIDS, autoimmune disease, cancer, inflammation, and neurodegenerative diseases comprises daily administration to such patients a single oral tablet, rapidly dissolving film, capsule, liquid or cream dose of an Immediate release naltrexone composition comprising between about 0.01 to about 10 mg of naltrexone. In order to provide a benefit the naltrexone must be an Immediate release composition comprising between about 0.01 and about 10 mg of naltrexone

329.20210078977NOVEL PYRIMIDINES AS EGFR INHIBITORS AND METHODS OF TREATING DISORDERS

US - 18.03.2021

Int.Class C07D 403/04 Appl.No 16950465 Applicant Dana-Farber Cancer Institute, Inc. Inventor Nathanael S. GRAY

The application relates to a compound having Formula (I):

which modulates the activity of EGFR, a pharmaceutical composition comprising the compound, and a method of treating or preventing a disease in which EGFR plays a role.

330.20210078988MODULATORS OF INDOLEAMINE 2,3-DIOXYGENASE

US - 18.03.2021

Int.Class C07D 413/14 Appl.No 16618830 Applicant GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED Inventor Ghotas EVINDAR

Provided are IDO inhibitor compounds of Formula I and pharmaceutically acceptable salts thereof, their pharmaceutical compositions, their methods of preparation, and methods for their use in the prevention and/or treatment of diseases.

331.WO/2021/045728TUMOR SPECIFIC ANTIBODY CONJUGATES AND USES THEREFOR

WO - 11.03.2021

Int.Class C07K 16/30 Appl.No PCT/US2019/049336 Applicant THE UNIVERSITY OF NORTH CAROLINA AT CHARLOTTE Inventor PINKU, Mukherjee

Provided are antibodies, and fragments and derivatives thereof, particularly humanized derivatives thereof, which bind to tumor antigens. Also provided are nucleic acid molecules encoding chimeric antigen receptors (CARs) that bind to tumor antigens, polypeptides and CARs encoded by the nucleic acid molecules, vectors and host cells that include the nucleic acid molecules, methods of making the same, and methods for using the same to generate a persisting population of genetically engineered T cells in a subject, expanding a population of genetically engineered T cells in a subject, modulating the amount of cytokine secreted by a T cell, reducing the amount of activation- induced calcium influx into a T cell, providing an anti-tumor immunity to a subject, treating a mammal having a MUC1-associated disease or disorder, stimulating a T cell-mediated immune response to a target cell population or tissue in a subject, and imaging a MUC1- associated tumor.

332.20210079015NOVEL DIHYDROISOXAZOLE COMPOUNDS AND THEIR USE FOR THE TREATMENT OF HEPATITIS B

US - 18.03.2021

Int.Class C07D 498/04 Appl.No 16764525 Applicant Novartis AG Inventor Jiping FU

The invention provides compounds of Formula (I) n R3b Z W Q R3a H Y N R1 R4 R2 O (I) as described herein, along with stereoisomeric forms salts, hydrates, solvates, and salts thereof and pharmaceutical compositions and pharmaceutical combinations containing such compounds, as well as methods to use these compounds, salts and compositions for treating viral infections, particularly infections caused by hepatitis B virus (HBV), and for reducing the occurrence of serious conditions associated with HBV.

333.WO/2021/046155VECTORIZED EDITING OF NUCLEIC ACIDS TO CORRECT OVERT MUTATIONS

WO - 11.03.2021

Int.Class C12N 15/86 Appl.No PCT/US2020/049104 Applicant VOYAGER THERAPEUTICS, INC. Inventor HALES, Kelly

The disclosure relates to compositions, methods, and processes for the preparation, use, and/or formulation of adeno-associated virus (AAV) particle comprising a viral gene and a capsid, wherein the viral genome comprises at least one Vectorized Editing of Nucleic acids to correct Overt Mutations (VENOM) element.

334.20210069342ANTIBODY-DRUG CONJUGATE COMPRISING ANTIBODY AGAINST HUMAN ROR1 AND USE FOR THE SAME

US - 11.03.2021

Int.Class A61K 47/68 Appl.No 16940326 Applicant Yun Hee Park Inventor Yun Hee Park

The present invention relates to new antibody-drug conjugates (ADCs) targeting ROR1, active metabolites of such ADCs, methods for preparation of such ADCs, uses for such ADCs in treatment and/or prevention of illnesses, and uses for such ADCs in production of drugs for treatment and/or prevention of diseases, more specifically diseases associated with over-expression of ROR1, for example cancer. More specifically, the present invention relates to an antibody-drug conjugate comprising an antibody that binds to ROR1 or an antigen-binding fragment thereof, and a pharmaceutical composition comprising the same.

335.10947213TLR7/8 antagonists and uses thereof

US - 16.03.2021

Int.Class C07D 401/04 Appl.No 15929348 Applicant Merck Patent GmbH Inventor Brian A. Sherer

Compounds of Formula 1 and pharmaceutically acceptable compositions thereof are useful as TLR7/8 antagonists.

336.20210071222METHODS AND MEANS FOR THE PRODUCTION OF IG-LIKE MOLECULES

US - 11.03.2021

Int.Class C12P 21/00 Appl.No 16934925 Applicant Merus N.V. Inventor Cornelis Adriaan DE KRUIF

The invention provides means and methods for producing one or more Ig-like molecules in a single host cell. Novel CH3 mutations enabling the production of monospecific and/or bispecific Ig-like molecules of interest are also provided.

337.20210070855ANTI-CD47 ANTIBODIES THAT DO NOT CAUSE SIGNIFICANT RED BLOOD CELL AGLLUTINATION

US - 11.03.2021

Int.Class C07K 16/28 Appl.No 16964828 Applicant NANJING LEGEND BIOTECH CO., LTD. Inventor Tao Zhao

Provided are antibodies including monoclonal, human, primate, rodent, mammalian, chimeric, humanized and CDR-grafted antibodies, and antigen binding fragments and antigen binding derivatives thereof. These antibodies bind to CD47 protein, particularly human CD47, modulate, e.g., inhibit, block, antagonize, neutralize or otherwise interfere with CD47 expression, activity and/or signaling, including inhibiting CD47 and SIRPa interaction; do not cause a significant level of hemagglutination of human red blood cells. These antibodies may not enhance RBC phagocytosis.

338.3792281METHODS OF TREATING PSORIASIS USING IL-17 ANTAGONISTS

EP - 17.03.2021

Int.Class C07K 16/24 Appl.No 20187002 Applicant NOVARTIS AG Inventor GUETTNER ACHIM

The disclosure relates to novel regimens for treating psoriasis, which employ a therapeutically effective amount of an IL-17 antagonist, e.g., an IL-17 binding molecule, e.g., an IL-17 antibody, such as the secukinumab antibody, or an IL-17 receptor binding molecule, e.g., an IL-17 receptor antibody.

339.WO/2021/046315INHIBITORS OF ENCEPHALITIC ALPHAVIRUSES

WO - 11.03.2021

Int.Class A61K 39/12 Appl.No PCT/US2020/049351 Applicant WISCONSIN ALUMNI RESEARCH FOUNDATION Inventor GOLDEN, Jennifer, Elizabeth

Compounds of Formula I and Formula II: pharmaceutical compositions containing them, and use of the compounds as active ingredients to treat infection with alphavirus.

340.20210074431GENE EXPRESSION SUBTYPE ANALYSIS OF HEAD AND NECK SQUAMOUS CELL CARCINOMA FOR TREATMENT MANAGEMENT

US - 11.03.2021

Int.Class G16H 50/30 Appl.No 16642558 Applicant GeneCentric Therapeutics, Inc. Inventor Myla LAI-GOLDMAN

Methods are provided for determining a subtype of head and neck squamous cell carcinoma (HNSCC) of an individual by detecting the expression level of at least one subtype classifier selected from a group of genes that are relevant for determining HNSCC subtypes. Also provided herein are methods for

determining a suitable treatment and predicting the overall survival and the likelihood of metastasis for the HNSCC patients according to their subtypes.

341.WO/2021/050986LNP-FORMULATED MRNA THERAPEUTICS AND USE THEREOF FOR TREATING HUMAN SUBJECTS

WO - 18.03.2021

Int.Class A61K 9/51 Appl.No PCT/US2020/050546 Applicant MODERNATX, INC. Inventor AUGUST, Allison

The disclosure features methods of treatment comprising systemic administration of mRNA encoding a therapeutic protein and delivered by lipid nanoparticle to human subjects.

342.20210079056C-TYPE NATRIURETIC PEPTIDE ENGRAFTED ANTIBODIES

US - 18.03.2021

Int.Class C07K 14/58 Appl.No 17046695 Applicant Bayer Aktiengesellschaft Inventor Damian BROCKSCHNIEDER

The present invention relates to an antibody or a fragment thereof comprising at least one heterologous amino acid sequence incorporated within at least one CDR region of said antibody or fragment thereof, wherein said at least one heterologous amino acid sequence comprises an N-terminal linker sequence (Ntls), a C-Type Natriuretic Peptide (CNP) and a C-terminal linker sequence (Ctls). Optionally, at least a portion of said at least one CDR region is replaced by said at least one heterologous amino acid sequence incorporated therein. The present invention further relates to such antibody or fragment thereof for use in a method for treatment, a composition comprising such antibody or fragment thereof, a nucleic acid or a mixture of nucleic acids encoding such antibody or fragment thereof, a host cell comprising such nucleic acid or such mixture of nucleic acids and to a process for producing such antibody or fragment thereof.

343.20210069343ANTIBODY-DRUG CONJUGATES AND USES THEREOF

US - 11.03.2021

Int.Class A61K 47/68 Appl.No 17076477 Applicant Immunomedics, Inc. Inventor David M. Goldenberg

The present invention relates to therapeutic immunoconjugates comprising SN-38 attached to an antibody or antigen-binding antibody fragment. The antibody may bind to Trop-2 or CEACAM5 and the immunoconjugate may be administered at a dosage of between 4 mg/kg and 16 mg/kg, preferably 4, 6, 8, 9, 10, 12, or 16 mg/kg. When administered at specified dosages and schedules, the immunoconjugate can reduce solid tumors in size, reduce or eliminate metastases and is effective to treat cancers resistant to standard therapies, such as radiation therapy, chemotherapy or immunotherapy. Surprisingly, the immunoconjugate is effective to treat cancers that are refractory to or relapsed from irinotecan.

344.WO/2021/050948COMPOSITIONS AND METHODS FOR TCR REPROGRAMMING USING FUSION PROTEINS

WO - 18.03.2021

Int.Class A61K 35/17 Appl.No PCT/US2020/050503 Applicant TCR2 THERAPEUTICS INC. Inventor BAEUERLE, Patrick

Provided herein are recombinant nucleic acids encoding T cell receptor (TCR) fusion proteins (TFPs) and a TCR constant domain, modified T cells expressing the encoded molecules, and methods of use thereof for the treatment of diseases, including cancer. Described herein are modified T cells comprising fusion proteins of TCR subunits, including CD3 epsilon, CD3gamma, CD3 delta, TCR gamma, TCR delta, TCR alpha and TCR beta chains with binding domains specific for cell surface antigens that have the potential to overcome limitations of existing approaches.

345.20210079118ANIMAL MODELS AND THERAPEUTIC MOLECULES

US - 18.03.2021

Int.Class C07K 16/46 Appl.No 17020997 Applicant Kymab Limited Inventor Allan Bradley

The invention discloses methods for the generation of chimaeric human—non-human antibodies and chimaeric antibody chains, antibodies and antibody chains so produced, and derivatives thereof including fully humanised antibodies; compositions comprising said antibodies, antibody chains and derivatives, as well as cells, non-human mammals and vectors, suitable for use in said methods.

346.WO/2021/050700CYCLOOXYGENASE-2 INHIBITORS AND USES THEREOF

WO - 18.03.2021

Int.Class A61K 31/381 Appl.No PCT/US2020/050163 Applicant THE BROAD INSTITUTE, INC. Inventor WAGNER, Florence Fevrier

The present disclosure describes compounds of the formula: (I), (II), (III), (IV), (V). The compounds described herein may be cyclooxygenase (COX) (e.g., cyclooxygenase 2 (COX2)) inhibitors. The compounds may be radiolabeled. The compounds (e.g., radiolabeled compounds) may be useful (e.g., as positron emission tomography (PET) imaging agents) for diagnosing a disease. The compounds may also be useful for treating or preventing a disease. The present disclosure also describes pharmaceutical compositions and kits including the compounds; and methods of using the compounds.

347.20210069239Compositions and Methods Comprising Prostate Stem Cell Antigen (PSCA) Chimeric Antigen Receptors (CARs)

US - 11.03.2021

Int.Class A61K 35/14 Appl.No 17017238 Applicant The Trustees of the University of Pennsylvania Inventor Yangbing Zhao

The present disclosure provides modified immune cells or precursors thereof (e.g. T cells) comprising a chimeric antigen receptor (CAR) capable of binding human PSCA. CARs capable of binding human PSCA, and nucleic acids encoding the same are also provided. Provided herein are bispecific CARs capable of binding human PSCA and human PSMA, nucleic acids encoding the same, and modified immune cells comprising the same. Modified immune cells comprising a PSMA CAR and a PSCA CAR are also provided. Compositions and methods of treatment are also provided.

348.20210079060CD19 VARIANTS

US - 18.03.2021

Int.Class C07K 14/705 Appl.No 16954002 Applicant Aleta Biotherapeutics Inc. Inventor Roy Lobb

CD19 variants, methods of identifying CD19 variants, and methods of using such CD19 variants, e.g., for treating cancer, are described.

349.WO/2021/050656COMPOSITIONS AND METHODS COMPRISING PROSTATE STEM CELL ANTIGEN (PSCA) CHIMERIC ANTIGEN RECEPTORS (CARS)

WO - 18.03.2021

Int.Class C07K 14/705 Appl.No PCT/US2020/050090 Applicant THE TRUSTEES OF THE UNIVERISTY OF PENNSYLVANIA Inventor ZHAO, Yangbing

The present disclosure provides modified immune cells or precursors thereof (e.g. T cells) comprising a chimeric antigen receptor (CAR) capable of binding human PSCA. CARs capable of binding human PSCA, and nucleic acids encoding the same are also provided. Provided herein are bispecific CARs capable of binding human PSCA and human PSMA, nucleic acids encoding the same, and modified immune cells comprising the same. Modified immune cells comprising a PSMA CAR and a PSCA CAR are also provided. Compositions and methods of treatment are also provided.

350.2021508451２Ａ型アッシャー症候群の処置のための材料および方法

JP - 11.03.2021

Int.Class Appl.No 2020534230 Applicant クリスパー　セラピューティクス　アーゲー Inventor カンタードジエバ,　アルベナ

本出願は、ｅｘｖｉｖｏおよびｉｎｖｉｖｏの両方において、２Ａ型アッシャー症候群を有する患者を処置するための材料および方法、ヒト細胞においてＵＳＨ２Ａ遺伝子を編集するための材料および方法、ＩＶＳ４０変異を含むＵＳＨ２Ａ遺伝子を編集するための材料および方法、ＩＶＳ４０変異を含むＵＳＨ２Ａ遺伝子を有する患者を処置するための材料および方法、ならびに細胞のＵＳＨ２Ａ遺伝子内にＩ

ＶＳ４０変異を含む配列を欠失させるための方法を提供する。本出願はまた、ＩＶＳ４０変異を含むＵＳＨ２Ａ遺伝子を編集するための１つまたは複数のｇＲＮＡまたはｓｇＲＮＡも提供する。本出願は、２Ａ型アッシャー症候群を有する患者を処置するための治療を提供する。本出願はまた、２Ａ型アッシャー症候群を有する患者を処置するためのキットを提供する。

351.20210077593DOSE ESCALATION ENZYME REPLACEMENT THERAPY FOR TREATING ACID SPHINGOMYELINASE DEFICIENCY
US - 18.03.2021

Int.Class A61K 38/46 Appl.No 16883407 Applicant ICAHN SCHOOL OF MEDICINE AT MOUNT SINAI Inventor Edward H. Schuchman

The invention relates to dose escalation enzyme replacement therapy using acid sphingomyelinase (ASM) for the treatment of human subjects having acid sphingomyelinase deficiency (ASMD), and, in particular, patients with non-neurological manifestations of Niemann-Pick Disease (NPD), and in certain embodiments, NPD type B.

352.20210079017NEPRILYSIN INHIBITORS

US - 18.03.2021

Int.Class C07D 498/08 Appl.No 16947214 Applicant THERAVANCE BIOPHARMA R&D IP, LLC Inventor Roland Gendron

In one aspect, the invention relates to compounds having the formula:

where R^1-R^6, a, b, and X are as defined in the specification, or a pharmaceutically acceptable salt thereof. These compounds have neprilysin inhibition activity. In another aspect, the invention relates to pharmaceutical compositions comprising such compounds; methods of using such compounds; and processes and intermediates for preparing such compounds.

353.WO/2021/046205ADOPTIVE CELL THERAPY AND METHODS OF DOSING THEREOF

WO - 11.03.2021

Int.Class A61K 39/00 Appl.No PCT/US2020/049181 Applicant TMUNITY THERAPEUTICS INC. Inventor COUGHLIN, Christina

The present disclosure provides methods for the administration of engineered cells, such as T cells, to subjects for adoptive cell therapy. Also provided are compositions and articles of manufacture for use in the methods. The cells express chimeric antigen receptors (CARs) and/or T cell receptors (TCRs), and optionally, other molecules to overcome the immunosuppressive tumor microenvironment. Methods

provided herein may employ a fractionated dosing regimen which may further comprise monitoring the development of a toxicity and managing the symptoms thereof.

354.20210077532Modified Cell Expansion and Uses Thereof

US - 18.03.2021

Int.Class A61K 35/17 Appl.No 17108076 Applicant Innovative Cellular Therapeutics Co., Ltd. Inventor Lei Xiao

The present disclosure relates to compositions and methods for enhancing T cell response and/or CAR cell expansion and/or maintenance in vivo and/or in vitro. For example, a method of enhancing T cell-based therapy comprises administering genetically modified T cells comprising a first chimeric antigen receptor (CAR) and a second CAR, wherein a binding domain of the first CAR binds a first antigen, and a binding domain of the second CAR binds a second antigen. The first antigen is different from the second antigen. In embodiments, the first CAR binds a surface molecule or antigen of a white blood cell.

355.2021038256 オキシム連結のための求核触媒

JP - 11.03.2021

Int.Class Appl.No 2020196260 Applicant バクスアルタ　インコーポレイテッド Inventor ユルゲン　ジークマン

【課題】種々の試薬に関連する費用を最小限に抑え、患者の受容者への健康上のリスクを最小限に抑えつつ、タンパク質の薬力学的および／または薬物動態特性を改善する、水溶性ポリマーをタンパク質に複合化させるための物質および方法を提供する。
【解決手段】本発明は、タンパク質にポリマーを複合化させるための物質および方法を提供し、それは種々の試薬に関連する費用を最小限に抑え、患者の受容者への健康上のリスクを最小限に抑えつつ、タンパク質の薬力学的および／または薬物動態特性を改善する。本発明の種々の実施形態において、アニリンの代わりに使用するための代替的な触媒が提供される。
【選択図】なし

356.WO/2021/046515INHIBITORS OF RECEPTOR INTERACTING PROTEIN KINASE I FOR THE TREATMENT OF DISEASE

WO - 11.03.2021

Int.Class C07D 471/04 Appl.No PCT/US2020/049667 Applicant BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM Inventor LEWIS, Richard

Disclosed herein are compounds which inhibit RIPK1, pharmaceutical compositions, and methods of treatment of RIPK1 -mediated diseases, such as neurodegenerative disorders, inflammatory disorders, and cancer.

357.WO/2021/050953COMPOSITIONS AND METHODS FOR THE DELIVERY OF THERAPEUTIC BIOLOGICS FOR TREATMENT OF DISEASE

WO - 18.03.2021

Int.Class A61K 9/10 Appl.No PCT/US2020/050508 Applicant ELEKTROFI, INC. Inventor BROWN, Paul

The present disclosure provides compositions and methods for treating a disease or condition in a subject in need thereof, comprising administering to the subject a pharmaceutically effective amount of a composition comprising a plurality of particles comprising at least one therapeutic biologic suspended in a pharmaceutically acceptable liquid carrier.

358.20210070698INHIBITORS OF INDOLEAMINE 2,3-DIOXYGENASE AND METHODS OF THEIR USE

US - 11.03.2021

Int.Class C07C 275/42 Appl.No 16959487 Applicant BRISTOL-MYERS SQUIBB COMPANY Inventor James Aaron BALOG

The present invention provides a compound of formula (II): an inhibitor of indoleamine 2,3-dioxygenase (IDO), which may be used as medicaments for the treatment of proliferative disorders, such as cancer, viral infections and/or autoimmune diseases. Its prodrugs are disclosed.

359.1020210028752 항바이러스 화합물

KR - 12.03.2021

Int.Class C07D 491/048 Appl.No 1020217006854 Applicant 얀센 바이오파마, 인코퍼레이트. Inventor 왕 광위

본 명세서에는 신규 항바이러스 화합물, 및 하나 이상의 항바이러스 화합물을 포함하는 약제학적 조성물, 그리고 이들의 합성 방법이 개시된다. 또한, 본 명세서에는 하나 이상의 소분자 화합물에 의해 파라믹소바이러스 바이러스성 감염을 개선 및/또는 치료하는

방법이 개시된다. 파라믹소바이러스 감염의 예에는 인간 호흡기 세포융합 바이러스(RSV)에 의해 야기된 감염이 포함된다.

360.1020210028223HIV gp120 을 표적화하는 항체 및 사용 방법

KR - 11.03.2021

Int.Class C07K 16/10 Appl.No 1020217003050 Applicant 길리애드 사이언시즈, 인코포레이티드 Inventor 발라크리쉬난, 미니

HIV gp120 에 결합하고 HIV 를 중화시키는 항체가 개시된다. 또한, 이러한 항체를 단독으로 사용하거나 또는 HIV 감염을 치료 또는 예방하기 위한 다른 치료제와 조합하여 사용하는 방법이 개시된다.

361.20210069137TRANSDERMAL ANALGESIC FORMULATION

US - 11.03.2021

Int.Class A61K 31/192 Appl.No 16772027 Applicant MEAT & LIVESTOCK AUSTRALIA LTD Inventor Paul MILLS

Provided herein is a transdermal liquid formulation that includes a propionic acid-based non-steroidal anti-inflammatory agent, such as ketoprofen, and a dermal penetration enhancer containing an alcohol, an emollient and an essential oil. Methods of using and making the aforementioned transdermal liquid formulation are also provided herein.

362.20210079073TARGETING CYTOTOXIC CELLS WITH CHIMERIC RECEPTORS FOR ADOPTIVE IMMUNOTHERAPY

US - 18.03.2021

Int.Class C07K 16/18 Appl.No 16837356 Applicant Novartis AG Inventor Michael C. Milone

The present invention provides compositions and methods for regulating the specificity and activity of T cells. In one embodiment, the invention provides a type of chimeric antigen receptor (CAR) wherein the CAR is termed a “KIR-CAR” which is a CAR design comprising a component of a receptor naturally found on natural killer (NK) cells. In one embodiment, the NK receptor includes but is not limited to a naturally occurring activating and inhibitory receptor of NK cells known as a killer cell immunoglobulin-like receptor (KIR).

363.WO/2021/046131COMPOSITIONS AND METHODS FOR THE TREATMENT OF CONGENITAL ICHTHYOSES

WO - 11.03.2021

Int.Class C12N 15/86 Appl.No PCT/US2020/049070 Applicant KRYSTAL BIOTECH, INC. Inventor KRISHNAN, Suma

The present disclosure provides recombinant nucleic acids comprising one or more polynucleotides encoding an ichthyosis-associated polypeptide; viruses comprising the recombinant nucleic acids; compositions comprising the recombinant nucleic acids and/or viruses; methods of their use; and articles of manufacture or kits thereof.

364.20210070845ANTI-CCT5 BINDING MOLECULES AND METHODS OF USE THEREOF

US - 11.03.2021

Int.Class C07K 16/18 Appl.No 16771954 Applicant Juno Therapeutics, Inc. Inventor Susan BYRNE

Provided are CCT5-binding molecules, including anti-CCT5 antibodies and antigen- binding fragments thereof such as heavy chain variable (VH) regions and single-chain antibody fragments, and conjugates comprising the anti-CCT5 binding molecules such as immunoconjugates and antibody-drug conjugates, and chimeric receptors comprising the anti-CCT5 binding molecules such as chimeric antigen receptors (CARs). In some embodiments, the anti-CCT5 antibodies or antigen-binding fragments thereof specifically bind to CCT5. Also provided are genetically engineered cells expressing the CARs or CCT5-binding molecules and uses thereof such as in adoptive cell therapy.

365.20210077621METHODS FOR INHIBITING FIBROSIS IN A SUBJECT IN NEED THEREOF

US - 18.03.2021

Int.Class A61K 39/395 Appl.No 16917157 Applicant University of Leicester Inventor Nigel John Brunskill

In one aspect, the invention provides methods for treating, inhibiting, alleviating or preventing fibrosis in a mammalian subject suffering, or at risk of developing a disease or disorder caused or exacerbated by fibrosis and/or inflammation. In one embodiment, the invention provides methods of treating a subject suffering from renal fibrosis. In one embodiment, the invention provides methods of reducing proteinuria in a subject suffering from a renal disease or condition associated with proteinuria. The methods comprise the step of administering, to a subject in need thereof, an amount of a MASP-2 inhibitory agent effective to inhibit MASP-2-dependent complement activation.

366.20210079116METHODS FOR REDUCING PROTEINURIA IN A HUMAN SUBJECT SUFFERING FROM IMMUNOGLOBULIN A NEPHROPATHY

US - 18.03.2021

Int.Class C07K 16/40 Appl.No 16911682 Applicant University of Leicester Inventor Nigel John Brunskill

In one aspect, the invention provides methods for reducing proteinuria in a human subject suffering, or at risk of developing Immunoglobulin A Nephropathy (IgAN). The methods comprise the step of

administering, to a subject in need thereof, an amount of a MASP-2 inhibitory antibody effective to inhibit MASP-2-dependent complement activation.

367.WO/2021/046143CD24-ASSOCIATED PARTICLES AND RELATED METHODS AND USES THEREOF

WO - 11.03.2021

Int.Class C12N 15/86 Appl.No PCT/US2020/049087 Applicant SANA BIOTECHNOLOGY, INC. Inventor EMMANUEL, Akinola Olumide

Provided herein are non-cell particles, e.g. virus particles or virus-like particles, such as pseudotyped lentiviral-like particles, containing an exogenous CD24 or a biologically active portion of CD24. In some embodiments, the non-cell particles, e.g. virus particles or virus-like particles, such as pseudotyped lentiviral-like particles, can further contain an exogenous CD47 or a biologically active portion of CD47. Also provided herein are compositions containing such non-cell particles and methods of making and using the non-cell particles.

368.20210070748INHIBITORS OF BRUTONS TYROSINE KINASE

US - 11.03.2021

Int.Class C07D 417/14 Appl.No 16514544 Applicant Pharmacyclics LLC Inventor Gordana B. Atallah

Disclosed herein are reversible and irreversible inhibitors of Bruton's tyrosine kinase (Btk). Also disclosed are pharmaceutical compositions that include the compounds. Methods of using the Btk inhibitors are described, alone or in combination with other therapeutic agents, for the treatment of autoimmune diseases or conditions, heteroimmune diseases or conditions, cancer, including lymphoma, and inflammatory diseases or conditions.

369.20210079098PD-L1-BINDING MOLECULES COMPRISING SHIGA TOXIN A SUBUNIT SCAFFOLDS

US - 18.03.2021

Int.Class C07K 16/28 Appl.No 17027120 Applicant Molecular Templates, Inc. Inventor Eric Poma

Provided herein are PD-L1 binding molecules comprising or conjugated to a toxin, e.g. a Shiga toxin A Subunit derived polypeptide. In some embodiments, the PD-L1 binding molecules are cytotoxic. In some embodiments, the PD-L1 binding molecules are capable of delivering a CD8+ T-cell epitope to an MEW class molecule inside a PD-L1 positive cell. The PD-L1 binding molecules described herein have uses for selectively killing specific cells (e.g., PD-L1 positive tumor cells and/or immune cells); for selectively delivering cargos to specific cells (e.g., PD-L1 positive tumor cells or immune cells), and as therapeutic and/or diagnostic molecules for treating and diagnosing a variety of conditions, including cancers and tumors involving PD-L1 expressing cells (e.g., PD-L1 positive tumor cells or immune cells).

370.20210079097PD-L1-BINDING MOLECULES COMPRISING SHIGA TOXIN A SUBUNIT SCAFFOLDS

US - 18.03.2021

Int.Class C07K 16/28 Appl.No 17025729 Applicant Molecular Templates, Inc. Inventor Eric Poma

Provided herein are PD-L1 binding molecules comprising or conjugated to a toxin, e.g. a Shiga toxin A Subunit derived polypeptide. In some embodiments, the PD-L1 binding molecules are cytotoxic. In some embodiments, the PD-L1 binding molecules are capable of delivering a CD8+ T-cell epitope to an MHC class molecule inside a PD-L1 positive cell. The PD-L1 binding molecules described herein have uses for selectively killing specific cells (e.g., PD-L1 positive tumor cells and/or immune cells); for selectively delivering cargos to specific cells (e.g., PD-L1 positive tumor cells or immune cells), and as therapeutic and/or diagnostic molecules for treating and diagnosing a variety of conditions, including cancers and tumors involving PD-L1 expressing cells (e.g., PD-L1 positive tumor cells or immune cells).

371.20210079366CAS12A SYSTEMS, METHODS, AND COMPOSITIONS FOR TARGETED RNA BASE EDITING

US - 18.03.2021

Int.Class C12N 9/22 Appl.No 16954032 Applicant THE BROAD INSTITUTE, INC. Inventor Feng Zhang

Embodiments herein are directed to engineered CRISPR-Cas effector proteins that comprise at least one modification that enhances binding of the of the CRISPR complex to the binding site and/or alters editing preference as compared to wild type. In certain embodiments, the CRISPR-Cas effector protein is a Type V effector protein, e.g., Cpf1. Embodiments herein are directed to viral vectors for delivery of CRISPR-Cas effector proteins, including Cpf1. The vectors may be designed to allow packaging of the CRISPR-Cas effector protein within a single vector. Embodiments herein also include delivery vectors, constructs, and methods of delivering larger genes.

372.20210079464METHODS, DEVICES, AND SYSTEMS FOR ANALYTE DETECTION AND ANALYSIS

US - 18.03.2021

Int.Class C12Q 1/6874 Appl.No 16953071 Applicant Ultima Genomics, Inc. Inventor Nathan BECKETT

Provided are systems and methods for analyte detection and analysis. A system can comprise an open substrate. The open substrate may be configured to rotate or otherwise move. The open substrate can comprise an array of individually addressable locations, with analytes immobilized thereto. The substrate may be spatially indexed to identify nucleic acid molecules from one or more sources, and/or sequences thereof, with the respective one or more sources. A solution comprising a plurality of probes may be directed across the array to couple at least one of the plurality of probes with at least one of the analytes to form a bound probe. A detector can be configured to detect a signal from the bound probe via scanning of the substrate while minimizing temperature fluctuations of the substrate or optical aberrations caused by bubbles.

373.20210071182COMPOSITIONS AND METHODS FOR IMMUNOONCOLOGY

US - 11.03.2021

Int.Class C12N 15/113 Appl.No 16498361 Applicant NOVARTIS AG Inventor Jennifer BROGDON

The present disclosure is directed to genome editing systems, reagents and methods for immunooncology.

374.20210079348PROCESSES FOR PRODUCTION OF TUMOR INFILTRATING LYMPHOCYTES AND USES OF SAME IN IMMUNOTHERAPY

US - 18.03.2021

Int.Class C12N 5/0783 Appl.No 17041305 Applicant Iovance Biotherapeutics, Inc. Inventor Seth Wardell

The present invention provides improved and/or shortened methods for expanding TILs and producing therapeutic populations of TILs, including novel methods for expanding TIL populations in a closed system that lead to improved efficacy, improved phenotype, and increased metabolic health of the TILs in a shorter time period, while allowing for reduced microbial contamination as well as decreased costs. Such TILs find use in therapeutic treatment regimens.

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

Results Search in US Patent Collection db for: (ABST/vaccine AND ISD/20210311->20210321), 12 records.

	PAT. NO.	Title
1	10,948,420	Automated agglutination analyzer with contour comparison
2	10,947,293	Peptides and combination of peptides for use in immunotherapy against various tumors
3	10,947,286	Peptides and combination of peptides for use in immunotherapy against lung cancer, including NSCLC, SCLC and other cancers
4	10,947,277	Nucleic acids encoding zika virus-like particles and their use in zika virus vaccines and diagnostic assays
5	10,946,088	Preparation of influenza virus vaccine antigens
6	10,946,087	Vaccine compositions against dengue virus diseases
7	10,946,085	Streptococcus uberis extract as an immunogenic agent
8	10,946,081	*03 restricted peptides for use in immunotherapy against cancers and related methods

9	10,946,078	Treatment of canine atopic dermatitis
10	10,946,077	Cooperia vaccine
11	10,946,064	Personalized immunotherapy against several neuronal and brain tumors
12	10,945,962	Controlled-release peptide compositions and uses thereof

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