Grippe Aviaire

Octobre 2006

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LISTE DES TITRES

060363653
PASCAL

Avian flu (H5N1) : Its epidemiology, prevention, and implications for anesthesiology

Titre : Avian flu (H5N1) : Its epidemiology, prevention, and implications for anesthesiology

Auteur(s) : EDLER Alice A
Affiliation(s) : Department of Anesthesia, Stanford University Medical Center, Stanford, CA 94305-5640, United States

Source : Journal of clinical anesthesia. 2006; 18 (1) : 1-4
ISSN : 0952-8180
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 18 ref.

Résumé : Avian flu, influenza A subtype H5N1, is an emergent and virulent disease that poses a threat to the health and safety of the world community. Avian flu is I of more than 25 influenza A viruses that reside primarily in birds but also infect humans and other mammals. Avian flu is responsible for the current outbreak in Asia: H5N1 has now displayed probable human-to-human transmission; it could be a harbinger of a global epidemic. Anesthesiologists are exposed to a risk for infection when they are involved in airway instrumentation of infected patients. Given the evidence of emerging resistance to common antiviral agents used to treat H5N1 influenza virus and limited supply of H5N1 vaccine, prevention is our best protection. The following article will detail the virology and preventive public health practices for H5N1. This knowledge can also be used to define and prevent other yet unidentified infectious threats.

Code(s) de classement : 002B27A

Descripteur(s) anglais
Descripteur(s) : Epidemiology; Prevention; Communicable disease; Epidemic; Anesthesia; Avian influenza
Desc. génériques : Anesthesia; Medical sciences
Descripteur(s) français
Descripteur(s) : Epidemiologie; Prevention; Maladie contagieuse; Epidemie; Anesthesie; Grippe aviaire
Desc. génériques : Anesthesie; Sciences medicales
Localisation : INIST, Shelf number 26972, INIST No. 354000139060120010

Origine de la notice : INIST

H7N3 avian influenza virus found in a South American wild duck is related to the chilean 2002 poultry outbreak, contains genes from equine and North American wild bird lineages, and is adapted to domestic Turkeys

Titre : H7N3 avian influenza virus found in a South American wild duck is related to the chilean 2002 poultry outbreak, contains genes from equine and North American wild bird lineages, and is adapted to domestic Turkeys

Auteur(s) : SPACKMAN Erica; MCCRACKEN Kevin G; WINKER Kevin; SWAYNE David E
Affiliation(s) : Southeast Poultry Research Laboratory, USDA-ARS, 934 College Station Road, Athens, Georgia 30605, United States; Institute of Arctic Biology and Department of Biology and Wildlife, 907 Yukon Drive, Fairbanks, Alaska 99775, United States; University of Alaska Museum, 907 Yukon Drive, Fairbanks, Alaska 99775, United States

Source : Journal of virology. 2006; 80 (15) : 7760-7764
ISSN : 0022-538X
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 9 ref.

Résumé : An H7N3 avian influenza virus (AIV) was isolated from a Cinnamon Teal (Anas cyanoptera) (A/CinnamonTeal/Bolivia/4537/01) during a survey of wild waterfowl in Bolivia in 2001. The NA and M genes had the greatest identity with North American wild bird isolates, the NS was most closely related to an equine virus, and the remaining genes were most closely related to isolates from an outbreak of H7N3 in commercial poultry in Chile in 2002. The HA protein cleavage site and the results of pathogenesis studies in chickens were consistent with a low-pathogenicity virus, and the infective dose was 10<sup>5 times higher for chickens than turkeys.

Code(s) de classement : 002A05C10

Descripteur(s) anglais
Descripteur(s) : Avian influenzavirus; Influenza A virus; Horse; Aves; American; Poultry; Gene; Microbiology; Virology
Desc. génériques : Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Perissodactyla; Ungulata; Mammalia; Vertebrata; Veterinary; Farming animal
Descripteur(s) français
Descripteur(s) : Influenzavirus aviaire; Virus grippal A; Cheval; Aves; Americain; Volaille; Gene; Microbiologie; Virologie
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Perissodactyla; Ungulata; Mammalia; Vertebrata; Veterinaire; Animal elevage
Localisation : INIST, Shelf number 13592, INIST No. 354000138970130480

Origine de la notice : INIST

Influenza virus receptor specificity and cell tropism in mouse and human airway epithelial cells

Titre : Influenza virus receptor specificity and cell tropism in mouse and human airway epithelial cells

Auteur(s) : IBRICEVIC Aida; PEKOSZ Andrew; WALTER Michael J; NEWBY Celeste; BATTAILE John T; BROWN Earl G; HOLTZMAN Michael J; BRODY Steven L
Affiliation(s) : Department of Internal Medicine, Washington University School of Medicine, St. Louis, Missouri, United States; Department of Molecular Microbiology, Washington University School of Medicine, St. Louis, Missouri, United States; Department of Biochemistry, Microbiology and Immunology, University of Ottawa, Ontario, Canada; Department of Cell Biology, Washington University School of Medicine, St. Louis, Missouri, United States

Source : Journal of virology. 2006; 80 (15) : 7469-7480
ISSN : 0022-538X
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 61 ref.

Résumé : Recent human infections caused by the highly pathogenic avian influenza virus H5N1 strains emphasize an urgent need for assessment of factors that allow viral transmission, replication, and intra-airway spread. Important determinants for virus infection are epithelial cell receptors identified as glycans terminated by an <alpha>2,3-linked sialic acid (SA) that preferentially bind avian strains and glycans terminated by an <alpha>2,6-linked SA that bind human strains. The mouse is often used as a model for study of influenza viruses, including recent avian strains; however, the selectivity for infection of specific respiratory cell populations is not well described, and any relationship between receptors in the mouse and human lungs is incompletely understood. Here, using in vitro human and mouse airway epithelial cell models and in vivo mouse infection, we found that the <alpha>2,3-linked SA receptor was expressed in ciliated airway and type II alveolar epithelial cells and was targeted for cell-specific infection in both species. The <alpha>2,6-linked SA receptor was not expressed in the mouse, a factor that may contribute to the inability of some human strains to efficiently infect the mouse lung. In human airway epithelial cells, <alpha>2,6-linked SA was expressed and functional in both ciliated and goblet cells, providing expanded cellular tropism. Differences in receptor and cell-specific expression in these species suggest that differentiated human airway epithelial cell cultures may be superior for evaluation of some human strains, while the mouse can provide a model for studying avian strains that preferentially bind only the <alpha>2,3-linked SA receptor.

Code(s) de classement : 002A05C10

Descripteur(s) anglais
Descripteur(s) : Influenzavirus; Mouse; Human; Specificity; Tropism; Respiratory tract; Epithelial cell; Microbiology; Virology
Desc. génériques : Virology; Microbiology; Biological sciences; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Respiratory system
Descripteur(s) français
Descripteur(s) : Influenzavirus; Souris; Homme; Specificite; Tropisme; Voie respiratoire; Cellule epitheliale; Microbiologie; Virologie
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Orthomyxoviridae; Virus; Rodentia; Mammalia; Vertebrata; Appareil respiratoire
Localisation : INIST, Shelf number 13592, INIST No. 354000138970130190

Origine de la notice : INIST

060359315
PASCAL

Pandemic influenza : A potential role for statins in treatment and prophylaxis

Titre : Pandemic influenza : A potential role for statins in treatment and prophylaxis

Auteur(s) : FEDSON David S
Source : Clinical infectious diseases. 2006; 43 (2) : 199-205
ISSN : 1058-4838
CODEN : CIDIEL
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 84 ref.

Résumé : The next influenza pandemic may be imminent. Because antiviral agents and vaccines will be unavailable to people in most countries, we need to determine whether other agents could offer clinical benefits. Influenza is associated with an increase in acute cardiovascular diseases, and influenza viruses induce proinflammatory cytokines. Statins are cardioprotective and have anti-inflammatory and immunomodulatory effects, and they thus might benefit patients with influenza. This hypothesis should be evaluated by using administrative databases to search for reduced rates of hospitalization and death due to influenzarelated conditions among people taking statins. These studies should be followed by laboratory studies of statins in animal and cell-based models of influenza virus infection and, later, by clinical trials. Positive results from such studies would provide physicians in all countries with something to offer patients for treatment and prophylaxis of pandemic influenza. Generic statins will be widely distributed and inexpensive. They might be the only agents that could alter the course of a global pandemic.

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Influenza A; Statin derivative; Treatment; Prevention; Antilipemic agent
Desc. génériques : Virology; Infectious diseases; Medical sciences; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Grippe A; Statine derive; Traitement; Prevention; Hypolipemiant
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection
Localisation : INIST, Shelf number 18407, INIST No. 354000156875860100

Origine de la notice : INIST

060356510
PASCAL

A/(H5Nl) avian influenza in Asia : DoD global emerging infections surveillance and response system (GEIS) participation in world health organization global outbreak alert and response network

Titre : A/(H5Nl) avian influenza in Asia : DoD global emerging infections surveillance and response system (GEIS) participation in world health organization global outbreak alert and response network

Auteur(s) : WITT Clara J; MALONE Joseph L
Affiliation(s) : WRAIR, 503 Robert Grant Ave, Silver Spring MD 20910, United States; Medical Corps, US Navy, United States

Source : Revue internationale des services de sante des forces armees. 2006; 79 (2) : 104-112 [8 p.]
Informations congrès : *International Congress on Military Medicine, *35, *Washington, DC United States, *2004-09-12
ISSN : 0259-8582
CODEN : RSSAEZ
Date de publication : 2006
Pays de publication : Belgium
Langue(s) : English
Langue(s) du résumé : French
Type de document : Serial; *Conference-Meeting
Nombre de références : 20 ref.

Résumé : Le Systeme de surveillance et de reponse pour les maladies emergentes du Departement Americain de la Defense (DoD-GEIS) est partenaire du Reseau global d' alerte et de reponse aux epidemies (GOARN) de l' Organisation Mondiale de la Sante (OMS). Au cours de l' epidemie de grippe aviaire a virus H5N1 de l' hiver et du printemps 2004, le GEIS a fourni une assistance en matiere de surveillance, de controle, de prevention et de capacites de diagnostic de laboratoire pour les maladies infectieuses emergentes, renforcant les efforts du GOARN pour contenir la menacante emergence de la pandemie de grippe. L' ensemble de cet effort s' appuyait sur le Plan de preparation a la pandemie de grippe de l' OMS. Cet article fait la somme des points-cles du Plan de preparation de l' OMS et des activites de soutien du DoD-GEIS a ce plan.

Code(s) de classement : 002B01; 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Emerging disease; Influenza A; Asia; Surveillance; Response; Health system; Participation; World; Public health; Organization; Epidemic; Network; Planning; WHO; Medicine; Avian influenza
Desc. génériques : Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Maladie emergente; Grippe A; Asie; Surveillance; Reponse; Systeme sante; Participation; Monde; Sante publique; Organisation; Epidemie; Reseau; Planification; OMS; Medecine; Pandemie; Grippe aviaire
Desc. génériques : Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection
Localisation : INIST, Shelf number 14692, INIST No. 354000142382410050

Origine de la notice : INIST

060355082
PASCAL

Influenza aviaire, grippe aviaire et menace de pandemie : un nouvel enjeu en sante au travail; Bird flu, human flu and the threat of a pandemic : new challenges in occupational medicine

Titre : Influenza aviaire, grippe aviaire et menace de pandemie : un nouvel enjeu en sante au travail; Bird flu, human flu and the threat of a pandemic : new challenges in occupational medicine

Auteur(s) : LE BACLE C; DUCLOVEL PAME N; DURAND E
Affiliation(s) : Departement Etudes et assistance medicales, INRS, Unknown

Source : Documents pour le medecin du travail. 2006; (106) : 139-168
ISSN : 0339-6517
Date de publication : 2006
Pays de publication : France
Langue(s) : French
Type de document : Serial
Nombre de références : 56 ref.

Résumé : Ce dossier medico-technique construit en cinq parties propose un etat des lieux sur les virus influenza, l' influenza aviaire, la grippe saisonniere, la grippe aviaire et le risque de pandemie grippale. Il aborde egalement la question du risque de grippe aviaire chez les professionnels exposes. Les mesures de prevention qui seraient a mettre en place en fonction de chaque situation sont traitees. Ce dossier complete les informations deja disponibles sur le site de l' INRS (www.inrs.fr) L' annexe a la fin de cet article resume les principales recommandations elaborees par le ministere de la Sante et des Solidarites pour les etablissements de sante.

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Public health; Work place; Occupational exposure; Avian influenzavirus; Risk; Prevention; Influenza; Treatment; Influenzavirus; Recommendation; Ministry; Human; Animal; France; Avian influenza
Desc. génériques : Virology; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus; Viral disease; Infection; Europe; Occupational medicine
Descripteur(s) français
Descripteur(s) : Sante publique; Lieu travail; Exposition professionnelle; Influenzavirus aviaire; Risque; Prevention; Grippe; Traitement; Influenzavirus; Recommandation; Ministere; Homme; Animal; France; Menace; Pandemie; Grippe aviaire
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus; Virose; Infection; Europe; Medecine du travail
Localisation : INIST, Shelf number 26798, INIST No. 354000115697050010

Origine de la notice : INIST

060354905
PASCAL

Immunization with reverse-genetics-produced H5N1 influenza vaccine protects ferrets against homologous and heterologous challenge. Commentary

Titre : Immunization with reverse-genetics-produced H5N1 influenza vaccine protects ferrets against homologous and heterologous challenge. Commentary

Auteur(s) : HAMPSON Alan W, comment; GOVORKOVA Elena A; WEBBY Richard J; HUMBERD Jennifer; SEILER Jon P; WEBSTER Robert G
Affiliation(s) : Australian Influenza Specialist Group, Richmond, and School of Applied Sciences and Engineering, Monash University, Clayton, Victoria, Australia; Department of Infectious Diseases, St. Jude Children's Research Hospital, United States; Department of Pathology, University of Tennessee, Memphis, United States

Source : The Journal of infectious diseases. 2006; 194 (2) : 143-145,159-167 [12 p.]
ISSN : 0022-1899
CODEN : JIDIAQ
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Type de document : article; comments
Nombre de références : 53 ref.

Résumé : Background. Multiple cases of transmission of avian H5N1 influenza viruses to humans illustrate the urgent need for an efficacious, cross-protective vaccine. Methods. Ferrets were immunized with inactivated whole-virus vaccine produced by reverse genetics with the hemagglutinin (HA) and neuraminidase genes of A/HK/213/03 virus. Ferrets received a single dose of vaccine (7 or 15 <mu>g of HA) with aluminum hydroxide adjuvant or 2 doses (7 g of HA each) without adjuvant and were challenged with 10<sup>6 50% egg infectious doses of A/HK/213/03, A/HK/156/97, or A/Vietnam/1203/04 virus. Results. One or 2 doses of vaccine induced a protective antibody response to the vaccine strain. All immunization regimens completely protected ferrets from challenge with homologous wild-type A/HK/213/03 virus: no clinical signs of infection were observed, virus replication was significantly reduced (P<.05) and was restricted to the upper respiratory tract, and spread of virus to the brain was prevented. Importantly, all vaccinated ferrets were protected against lethal challenge with the highly pathogenic strain A/Vietnam/1203/04. The 2-dose schedule induced higher levels of antibodies that were cross-reactive to antigenically distinct H5N1 viruses. Conclusions. H5N1 vaccines may stimulate an immune response that is more cross-protective than what might be predicted by in vitro assays and, thus, hold potential for being stockpiled as "initial" pandemic vaccines.

Code(s) de classement : 002A05; 002B05

Descripteur(s) anglais
Descripteur(s) : Genetic vaccine; Microbiology; Infection; Avian influenza
Desc. génériques : Microbiology; Biological sciences; Infectious diseases; Medical sciences
Descripteur(s) français
Descripteur(s) : Vaccin genetique; Microbiologie; Infection; Grippe aviaire
Desc. génériques : Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales
Localisation : INIST, Shelf number 2052, INIST No. 354000138812980030

Origine de la notice : INIST

060348647
PASCAL

Nasopharyngeal shedding of severe acute respiratory syndrome-associated coronavirus is associated with genetic polymorphisms

Titre : Nasopharyngeal shedding of severe acute respiratory syndrome-associated coronavirus is associated with genetic polymorphisms

Auteur(s) : CHEN Wei Ju; YANG Jyh Yuan; LIN Jih Hui; FANN Cathy S J; OSYETROV Valeriy; KING Chwan Chuen; CHEN Yi Ming Arthur; CHANG Hsiao Ling; KUO Hung Wei; FONG LIAO; HO Mei Shang
Affiliation(s) : Institute of Biomedical Science, Academia Sinica, National Taiwan University, Taiwan; Center for Disease Control, National Taiwan University, Taiwan; Graduate Institute of Epidemiology, National Taiwan University, Taiwan; Institute of Public Health, National Yang-Ming University, Taipei, Taiwan

Source : Clinical infectious diseases. 2006; 42 (11) : 1561-1569
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CODEN : CIDIEL
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 46 ref.

Résumé : Background. A high initial or peak severe acute respiratory syndrome (SARS)-associated coronavirus (SARS-CoV) load in nasopharyngeal specimens was shown to be associated with a high mortality rate. Because all infected individuals were devoid of preeexisting protective immunity against SARS-CoV, the biological basis for the variable virus burdens in different patients remains elusive. Methods. The nationwide SARS database in Taiwan was analyzed, and genotyping of 281 single-nucleotide polymorphisms (SNPs) of 65 genes was performed for 94 patients with SARS, to identify SNPs for which distribution between patients with or without detectable nasopharyngeal shedding of SARS-CoV was biased. Results. Titers of SARS-CoV shed in nasopharyngeal specimens varied widely, ranging from nondetectable to 10<sup>8 SARS-CoV RNA copies/mL, and they were correlated positively with a high mortality rate (P<.0001, by trend test) and with early death (i.e., death occurring within 2 weeks of the onset of illness) (P =.0015, by trend test). Virus shedding was found to be higher among male patients (P =.0014, by multivariate logistic regression) and among older patients (P =.015, by multivariate logistic regression). Detectable nasopharyngeal shedding of SARS-CoV was associated with polymorphic alleles of interleukins 18 (P =.014) and 1A (P =.031) and a member of NF<kappa>B complex (reticuloendotheliosis viral oncogene homolog B [RelB]) (P =.034), all of which are proinflammatory in nature, as well as the procoagulation molecule fibrinogen-like protein 2 (P =.008). Conclusion. The SARS-CoV load is a determinant of clinical outcomes of SARS, and it is associated with polymorphisms of genes involved in innate immunity, which might be regulated in an age- and sex-dependent manner. The findings of the present study provided leads to genes involved in the host response to SARS-CoV infection; if substantiated with functional studies, these findings may be applicable to other newly emerged respiratory viruses (e.g., the influenza pandemic strain).

Code(s) de classement : 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Severe acute respiratory syndrome; Nasopharynx; Polymorphism; Coronavirus
Desc. génériques : Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Coronaviridae; Nidovirales; Virus; Respiratory disease; Lung disease
Descripteur(s) français
Descripteur(s) : Syndrome respiratoire aigu severe; Nasopharynx; Polymorphisme; Coronavirus
Desc. génériques : Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Coronaviridae; Nidovirales; Virus; Appareil respiratoire pathologie; Poumon pathologie

060347180
PASCAL

Pandemic influenza and its implications for transplantation

Titre : Pandemic influenza and its implications for transplantation

Auteur(s) : KUMAR D; HUMAR A
Affiliation(s) : Infectious Diseases and Multi-Organ Transplantation, University of Toronto, Ontario, Canada

Source : American journal of transplantation. 2006; 6 (7) : 1512-1517
ISSN : 1600-6135
Date de publication : 2006
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 46 ref.

Résumé : Influenza viruses are important infections in transplant recipients. They may lead to complications including viral pneumonia, secondary bacterial infections and graft dysfunction. There has been a recent widespread outbreak of highly pathogenic H5N1 avian influenza among domestic poultry and wild birds along with a number of human cases with severe disease and high mortality. Genetic changes in the H5N1 virus may lead to efficient human-to-human transmission, heralding the onset of the next influenza pandemic. Discussed are the implications that such a pandemic may have on transplant patients. Logical inferences can be made from data on influenza in transplant patients and from experience with other respiratory virus outbreaks. In the event of a pandemic, it is likely that transplant patients will have more severe disease and higher mortality as compared to the general population. Vaccination and antiviral strategies may be less effective in this population. Implications for transplant programs in general are also discussed.

Code(s) de classement : 002B25; 002B30A11; 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Homotransplantation; Public health; World; Transplantation; Treatment; Pandemic; Avian influenza
Desc. génériques : Medical sciences; Public health; Medical sciences; Virology; Infectious diseases; Medical sciences; Surgery; Graft
Descripteur(s) français
Descripteur(s) : Homotransplantation; Sante publique; Monde; Transplantation; Traitement; Pandemie; Grippe aviaire
Desc. génériques : Sciences medicales; Sante publique; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Chirurgie; Greffe
Localisation : INIST, Shelf number 27587, INIST No. 354000138867680010

Origine de la notice : INIST

060345713
PASCAL

Pathogenicity of a highly pathogenic avian influenza virus, A/chicken/Yamaguchi/7/04 (H5N1) in different species of birds and mammals

Titre : Pathogenicity of a highly pathogenic avian influenza virus, A/chicken/Yamaguchi/7/04 (H5N1) in different species of birds and mammals

Auteur(s) : ISODA N; SAKODA Y; KISHIDA N; BAI G R; MATSUDA K; UMEMURA T; KIDA H
Affiliation(s) : Laboratory of Microbiology, Department of Disease Control, Graduate School of Veterinary Medicine, Hokkaido University, Sapporo, Japan; Laboratory of Comparative Pathology, Graduate School of Veterinary Medicine, Hokkaido University, Sapporo, Japan

Source : Archives of virology. 2006; 151 (7) : 1267-1279
ISSN : 0304-8608
Date de publication : 2006
Pays de publication : Austria
Langue(s) : English
Type de document : Serial
Nombre de références : 28 ref.

Résumé : Outbreaks of highly pathogenic avian influenza (HPAI) have been occurring in domestic poultry in Asia since 1996. In the beginning of 2004, HPAI outbreaks were caused by H5N1 virus in two farms and a group of pet chickens in different areas of Japan. In the present study, the pathogenicity of A/chicken/Yamaguchi/7/04 (H5N1), which had been isolated from a dead chicken during the first outbreak in Japan, was assessed in chickens, quails, budgerigars, ducklings, mice, and miniature pigs by experimental infection. The virus was highly pathogenic to all the birds tested. Mice were susceptible to infection with a low mortality rate and miniature pigs were resistant to infection with the virus.

Code(s) de classement : 002A05C10; 002A05C04

Descripteur(s) anglais
Descripteur(s) : Avian influenzavirus; Influenza A virus; Chicken; Pathogenicity; Mammalia; Avian influenza
Desc. génériques : Virology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Aves; Vertebrata; Veterinary; Poultry; Farming animal
Descripteur(s) français
Descripteur(s) : Influenzavirus aviaire; Virus grippal A; Poulet; Pouvoir pathogene; Mammalia; Grippe aviaire
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Aves; Vertebrata; Veterinaire; Volaille; Animal elevage
Localisation : INIST, Shelf number 6355, INIST No. 354000142406760030

Origine de la notice : INIST

060345655
PASCAL

Characterization of a highly pathogenic H5N1 influenza virus derived from bar-headed geese in China

Titre : Characterization of a highly pathogenic H5N1 influenza virus derived from bar-headed geese in China

Auteur(s) : ZHOU Ji Yong; SHEN Hui Gang; CHEN Hong Xun; TONG Guang Zhi; MING LIAO; YANG Han Chun; LIU Jian Xin
Affiliation(s) : Laboratory of Virology and Immunology, Institute of Preventive Veterinary Medicine, Zhejiang University, 268 Kaixuan Road, Hangzhou, Zhejiang 310029, China; College of Life Sciences, Zhejiang University, 268 Kaixuan Road, Hangzhou, Zhejiang 310029, China; National Key Laboratory of Veterinary Biotechnology, Harbin Veterinary Research Institute, Chinese Academy of Agricultural Sciences, Harbin 150001, China; Key Laboratory of Poultry Raising and Disease Control of Ministry of Agriculture, Southern China Agricultural University, Guangzhou 510642, China; Key Laboratory of Preventive Veterinary Medicine of Ministry of Agriculture, China Agricultural University, Beijing 100094, China

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CODEN : JGVIAY
Date de publication : 2006
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 36 ref.

Résumé : Influenza A viruses are usually non-pathogenic in wild aquatic birds, their natural reservoir. However, from May to July 2005, at Qinghai Lake in China, an unprecedented outbreak of highly pathogenic H5N1 avian influenza virus caused the death of thousands of wild migratory waterbirds. Herein, H5N1 influenza virus from bar-headed geese collected during the outbreak was characterized. Genomic analysis showed that A/Bar-headed Goose/Qinghai/0510/05 (Bh H5N1 virus) is a reassortant virus. Amino acid residue (lysine) at position 627 in the PB2 gene of the Bh H5N1 virus was the same as that of the human H5N1 virus (A/HK/483/97) and different from that of H5N1 avian influenza viruses deposited in GenBank. Antigenic analysis showed that significant antigenic variation has occurred in the Bh H5N1 virus. The Bh H5N1 virus induced systemic infections and caused 100% mortality in chickens and mice, and 80% mortality in ducks and geese. Bh H5N1 virus titres were higher in multiple organs of chickens, ducks and geese than in mice, and caused more severe histological lesions in chickens, ducks and mice than in geese. These results support the need to pay close attention and create control programmes to prevent the transmission of highly pathogenic avian influenza virus from wild migratory waterbirds into domestic chickens, ducks, geese and mammalian hosts.

Code(s) de classement : 002A05C10; 002A05C04

Descripteur(s) anglais
Descripteur(s) : Influenza A virus; Pathogenicity; China; Microbiology; Virology; Avian influenza
Desc. génériques : Virology; Microbiology; Biological sciences; Virology; Microbiology; Biological sciences; Influenzavirus A; Orthomyxoviridae; Virus; Asia
Descripteur(s) français
Descripteur(s) : Virus grippal A; Pouvoir pathogene; Chine; Microbiologie; Virologie; Grippe aviaire
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Virologie; Microbiologie; Sciences biologiques; Influenzavirus A; Orthomyxoviridae; Virus; Asie
Localisation : INIST, Shelf number 13533, INIST No. 354000142400560040

Origine de la notice : INIST

Differential expression of chemokines and their receptors in adult and neonatal macrophages infected with human or avian influenza viruses

Titre : Differential expression of chemokines and their receptors in adult and neonatal macrophages infected with human or avian influenza viruses

Auteur(s) : JIANFANG ZHOU; LAW Helen K W; CHUNG YAN CHEUNG; NG Iris H Y; MALIK PEIRIS J S; YU LUNG LAU
Affiliation(s) : Department of Paediatrics and Adolescent Medicine, Hong Kong Jockey Club Clinical Research Centre, Faculty of Medicine, Hong Kong; Research Centre of Infection and Immunology, University of Hong Kong, Pokfulam, Hong Kong; Department of Microbiology, Hong Kong Jockey Club Clinical Research Centre, Faculty of Medicine, Hong Kong

Source : The Journal of infectious diseases. 2006; 194 (1) : 61-70
ISSN : 0022-1899
CODEN : JIDIAQ
Date de publication : 2006
Pays de publication : United States
Langue(s) : English
Type de document : Serial
Nombre de références : 47 ref.

Résumé : In 1997, avian influenza virus H5N1 was transmitted directly from chicken to human and resulted in a severe disease that had a higher mortality rate in adults than in children. The characteristic mononuclear leukocyte infiltration in the lung and the high inflammatory response in H5N1 infection prompted us to compare the chemokine responses between influenza virus-infected adult and neonatal monocyte-derived macrophages (MDMs). The effects of avian influenza virus A/Hong Kong/483/97 (H5N1) (H5N1/97), its precursor A/Quail/ Hong Kong/Gl/97 (H9N2) (H9N2/G1), and human influenza virus A/Hong Kong/54/98 (H1N1) (H1N1/98) were compared. Significantly higher expression of CCL2, CCL3, CCL5, and CXCL10 was induced by avian influenza viruses than by human influenza virus. Moreover, the increase in CCL3 expression in H5N1/97-infected adult MDMs was significantly higher than that in neonatal MDMs. Enhanced expression of CCR1 and CCR5 was found in avian virus-infected adult MDMs. The strong induction of chemokines and their receptors by avian influenza viruses, particularly in adult MDMs, may account for the severity of H5N1 disease.

Code(s) de classement : 002A05C10; 002B05

Descripteur(s) anglais
Descripteur(s) : Human; Avian influenzavirus; Chemokine receptor; Adult; Newborn; Macrophage; Microbiology; Infection
Desc. génériques : Virology; Microbiology; Biological sciences; Infectious diseases; Medical sciences; Influenzavirus A; Orthomyxoviridae; Virus
Descripteur(s) français
Descripteur(s) : Homme; Influenzavirus aviaire; Recepteur chimiokine; Adulte; Nouveau ne; Macrophage; Microbiologie; Infection
Desc. génériques : Virologie; Microbiologie; Sciences biologiques; Maladies infectieuses; Sciences medicales; Influenzavirus A; Orthomyxoviridae; Virus
Localisation : INIST, Shelf number 2052, INIST No. 354000138894240070

Origine de la notice : INIST

A socially neutral disease? Individual social class, household wealth and mortality from Spanish influenza in two socially contrasting parishes in Kristiania 1918-19

Titre : A socially neutral disease? Individual social class, household wealth and mortality from Spanish influenza in two socially contrasting parishes in Kristiania 1918-19

Auteur(s) : MAMELUND Svenn Erik
Affiliation(s) : Department of Economics, University of Oslo, P.O. Box 1095 Blindern, 0317 Oslo, Norway

Source : Social science and medicine 1982. 2006; 62 (4) : 923-940
ISSN : 0277-9536
CODEN : SSMDEP
Date de publication : 2006
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 1 p.1/2

Résumé : The Spanish influenza pandemic of 1918-19 was one of the most devastating diseases in history, killing perhaps as many as 50-100 million people worldwide. Much of the literature since 1918 has favored the view that mortality from Spanish influenza was class neutral. This view has prevailed, even though several contemporary surveys showed that there indeed were clear differences between the classes in disease incidence and that case fatality rates from influenza and pneumonia also varied according to socioeconomic status. Furthermore, studies of more recent influenza epidemics have also shown that there can be clear class differentials in mortality in this type of illness-is there any reason to believe that Spanish influenza was different? This paper is the first study in which individual- and household-level data which are unique for the period are utilized to test the conservative hypothesis that Spanish influenza was a socially neutral disease with respect to mortality. Through the use of Cox regressions in an analysis of two socially contrasting parishes in the Norwegian capital city of Kristiania, it is shown that apartment size as an indicator of wealth of a household, in addition to social status of place of residence, were the only socioeconomic variables that had an independent and significant effect on mortality after controlling for age, sex and marital status.

Code(s) de classement : 002B30A11; 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Disease; Human; Social class; Social aspect; Public health; Household; Economic aspect; Personal income; Inequality; Mortality; Epidemiology; Influenza; Socioeconomic status; Norway; History; Spanish flu
Desc. génériques : Public health; Medical sciences; Virology; Infectious diseases; Medical sciences; Viral disease; Infection; Europe
Descripteur(s) français
Descripteur(s) : Maladie; Homme; Classe sociale; Aspect social; Sante publique; Menage; Aspect economique; Revenu individuel; Inegalite; Mortalite; Epidemiologie; Grippe; Statut socioeconomique; Norvege; Histoire; Medecine sociale; Grippe espagnole
Desc. génériques : Sante publique; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Virose; Infection; Europe
Localisation : INIST, Shelf number 13689, INIST No. 354000133040280130

Origine de la notice : INIST

060339670
PASCAL

An inhibitory effect of A20 on NF-<kappa>B activation in airway epithelium upon influenza virus infection

Titre : An inhibitory effect of A20 on NF-<kappa>B activation in airway epithelium upon influenza virus infection

Auteur(s) : ONOSE Akira; HASHIMOTO Shu; HAYASHI Shinichi; MARUOKA Shuichiro; KUMASAWA Fumio; MIZUMURA Kenji; JIBIKI Itsuro; MATSUMOTO Ken; GON Yasuhiro; KOBAYASHI Tomoko; TAKAHASHI Noriaki; SHIBATA Yasuko; ABIKO Yoshimitsu; SHIBATA Toshikatsu; SHIMIZU Kazufumi; HONE Takashi
Affiliation(s) : Division of Respiratory Medicine, Department of Internal Medicine, Nihon University School of Medicine, 30-1 Oyaguchikamimachi, Itabashi-ku, Tokyo 173-8610, Japan; Department of Biochemistry and Molecular Biology, Nihon University School of Dentistry at Matsudo, Japan; Department of Microbiology, Nihon University School of Medicine, Japan

Source : European journal of pharmacology. 2006; 541 (3) : 198-204
ISSN : 0014-2999
CODEN : EJPHAZ
Date de publication : 2006
Pays de publication : Netherlands
Langue(s) : English
Type de document : Serial
Nombre de références : 39 ref.

Résumé : Influenza is a major disease in humans. The reemergence of avian influenza A viruses has indicated that hyperinflammatory responses are closely related to the severity of disease. Influenza virus infection induces nuclear transcription factor kappaB (NF-KB) activation. NF-KB and NF-KB-dependent gene products promote lung inflammation and injury. Therefore, it is important to investigate the means to attenuate NF-KB activation. A20 is a cytoplasmic zinc finger protein that inhibits NF-KB activity, However, little is known about the role of A20 in influenza virus infection. Here, we have examined the role of A20 in influenza virus infection-induced NF-KB promoter activation in human bronchial epithelial cells. The results showed that (1) A20 protein and mRNA are inducible and expressed in the lung from mice and human bronchial epithelial cells upon influenza virus infection; (2) NF-KB promoter activation was induced in bronchial epithelial cells upon influenza virus infection; and (3) overexpression by transient transfection of A20 attenuated NF-KB promoter activation in bronchial epithelial cells. These results indicate that A20 may function as a negative regulator of NF-<kappa>B-mediated lung inflammation and injury upon influenza virus infection, thereby protecting the host against inflammatory response to influenza virus infection.

Code(s) de classement : 002B02; 002B05C02C

Descripteur(s) anglais
Descripteur(s) : Transcription factor NF<kappa>B; Respiratory tract; Influenzavirus; Viral disease; Influenza; Inflammation
Desc. génériques : Pharmacology; Medical sciences; Virology; Infectious diseases; Medical sciences; Orthomyxoviridae; Virus; Infection; Respiratory system
Descripteur(s) français
Descripteur(s) : Facteur transcription NF<kappa>B; Voie respiratoire; Influenzavirus; Virose; Grippe; Inflammation
Desc. génériques : Pharmacologie; Sciences medicales; Virologie; Maladies infectieuses; Sciences medicales; Orthomyxoviridae; Virus; Infection; Appareil respiratoire
Localisation : INIST, Shelf number 13322, INIST No. 354000115725350110

Origine de la notice : INIST

060337544
PASCAL

Protection against H1, H5, H6 and H9 influenza A infection with liposomal matrix 2 epitope vaccines

Titre : Protection against H1, H5, H6 and H9 influenza A infection with liposomal matrix 2 epitope vaccines

Auteur(s) : ERNST William A; KIM Hyung J; TUMPEY Terrence M; JANSEN Airan D A; TAI Wendy; CRAMER Donald V; ADLER MOORE Jill P; FUJII Gary
Affiliation(s) : Molecular Express, Inc. 13310 S. Figueroa Street, Los Angeles, CA 90061, United States; California State Polytechnic University Pomona, 3801 West Temple Ave, Pomona, CA 91768, United States; Influenza Branch, Centers for Disease Control and Prevention, 1600 Clifton Road, Atlanta, GA 30333, United States

Source : Vaccine . 2006; 24 (24) : 5158-5168
ISSN : 0264-410X
CODEN : VACCDE
Date de publication : 2006
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 28 ref.

Résumé : The recent emergence of multiple avian influenza A subtypes that cause human disease (i.e., H5N1, H9N2 and H7N7), coupled with the fear that one of these strains might precipitate a new pandemic, underscores the need to develop new technological approaches to immunization which elicit protective immune responses against multiple subtypes of influenza A. In response to this demand, several matrix 2 protein ectodomain segments (M2eA) corresponding to the H1N1, H5N1 and H9N2 influenza strains were formulated using a novel liposome-based vaccine technology and evaluated as potential immunogens for developing a "universal" influenza vaccine. Mice immunized with liposomal M2eA survived homologous challenges with H1N1 (100% survival) or H9N2 (80% survival) influenza strains. There were significant reductions in their lung viral load as well as in immunized mice challenged with the H5N1 subtype. The mice vaccinated with an M2eA segment corresponding to the H1N1 and H6N2 (a reassortant influenza A virus carrying the M2eA from PR8/34) strains elicited elevated IgG ELISA antibody titers to this M2eA epitope segment and antiserum from these immunized mice provided passive protection (100% survival) to naive mice receiving a lethal dose of H6N2 influenza virus. These results provide the first evidence that recombinant M2eA epitopes to multiple subtypes elicited immune protection against a homologous challenge and provides further evidence in favor of the development of a "universal" influenza vaccine based on M2eA.

Code(s) de classement : 002A05F04

Descripteur(s) anglais
Descripteur(s) : Antigenic determinant; Vaccine; Liposome; Influenza A
Desc. génériques : Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences; Viral disease; Infection
Descripteur(s) français
Descripteur(s) : Determinant antigenique; Vaccin; Liposome; Grippe A
Desc. génériques : Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques; Virose; Infection
Localisation : INIST, Shelf number 20289, INIST No. 354000142496690070

Origine de la notice : INIST

060333176
PASCAL

Travailler ensemble pour la sante. Rapport sur la sante dans le monde 2006. Resume

Titre : Travailler ensemble pour la sante. Rapport sur la sante dans le monde 2006. Resume

Auteur(s) : Organisation Mondiale de la Sante OMS Bureau Regional de l' Europe Copenhague, International
Source : 2006; 16 p.
Éditeur : Organisation Mondiale de la Sante. (O.M.S.), Geneve
Date de publication : 2006
Pays de publication : France
Langue(s) : French
Type de document : Book
Nombre de références : dissem.

Résumé : Cette premiere decennie du XXIe siecle voit d' immenses progres dans le bien-etre humain coexister avec un extreme denuement. En ce qui concerne la situation sanitaire dans le monde, nous pouvons constater les effets benefiques des nouveaux medicaments et des nouvelles technologies. Pourtant il n' y a jamais eu autant de regressions. Dans certains des pays les plus pauvres, l' esperance de vie s' est effondree, tombant a moins de la moitie de celle des pays les plus riches - par suite des ravages que fait le VIH/SIDA dans certaines zones de l' Afrique subsaharienne et dans plus d' une douzaine d' Etats en desherence. Ces revers s' accompagnent, dans les pays riches comme dans les pays pauvres, d' une montee des inquietudes devant la menace d' infections nouvelles telles que le SRAS et la grippe aviaire et de pathologies comportementales "occultes" telles que les troubles mentaux et la violence domestique

Code(s) de classement : 002B30A01

Descripteur(s) anglais
Descripteur(s) : Health; Evaluation; Risk analysis; Health policy; Poverty; Prevention; Statistical data; Risk factor; Behavior; Risk taking; Population; High risk; Morbidity; Mortality; World; Decrease; Risk
Desc. génériques : Public health; Medical sciences
Descripteur(s) français
Descripteur(s) : Sante; Evaluation; Analyse risque; Politique sanitaire; Pauvrete; Prevention; Donnee statistique; Facteur risque; Comportement; Prise risque; Population; Risque eleve; Morbidite; Mortalite; Monde; Diminution; Risque
Desc. génériques : Sante publique; Sciences medicales
Localisation : BDSP/ENSP, Shelf number 153663, AB50/0092

Origine de la notice : BDSP

060333170
PASCAL

Rapport fait au nom de la mission d' information sur la grippe aviaire : mesures preventives. Tome 2. le H5N1 : une menace durable pour la sante animale

Titre : Rapport fait au nom de la mission d' information sur la grippe aviaire : mesures preventives. Tome 2. le H5N1 : une menace durable pour la sante animale

Auteur(s) : LE GUEN Jean Marie; DOOR Jean Pierre, rapp
Auteur(s) : Assemblee Nationale Paris, France
Source : 2006 01 26; 2833; 410 p.; pdf, ann.
Éditeur : Assemblee Nationale, Paris
Date de publication : 2006
Pays de publication : France
Langue(s) : French
Type de document : Book

Résumé : Apres s' etre penchee sur la question des moyens medicaux disponibles en cas de pandemie, la mission d' information dediee a la grippe aviaire et constituee en octobre 2005 par l' Assemblee nationale poursuit ses travaux en publiant ce deuxieme rapport consacre plus particulierement a l' etendue de l' epizootie de grippe aviaire et a ses consequences. Le rapport examine notamment la progression de l' epizootie dans le monde puis les mesures de precaution prises en France par le gouvernement pour tenter d' empecher la propagation du virus H5N1 sur le territoire national : confinement des elevages de volailles, restrictions aux importations de produits en provenance de pays contamines, interdiction des rassemblements d' oiseaux vivants, interdiction du transport et de l' utilisation des oiseaux "appelants" pour la chasse, vaccination de certains elevages. Il fait le point egalement sur les consequences de la crise aviaire au niveau de la filiere avicole (menace sur les exportations, baisse de la consommation interieure) et presente le dispositif d' aide mis en place par le gouvernement pour accompagner la filiere avicole. En fin de rapport, on trouvera une liste de recommandations de la mission ainsi que le texte des differentes auditions auxquelles la mission a procede

Code(s) de classement : 002B30A01

Descripteur(s) anglais
Descripteur(s) : Influenza; Vector; Animal; Plane; Rearing; Hunting; Import; Export; Vaccination; Balance; Proposition; Prevention; Health; France; Epizootics; Risk management
Desc. génériques : Public health; Medical sciences; Viral disease; Infection; Europe
Descripteur(s) français
Descripteur(s) : Grippe; Vecteur; Animal; Plan; Elevage; Chasse; Importation; Exportation; Vaccination; Bilan; Proposition; Prevention; Sante; France; Epizootie; Gestion risque
Desc. génériques : Sante publique; Sciences medicales; Virose; Infection; Europe
Localisation : BDSP/ENSP, Shelf number 153593

Origine de la notice : BDSP

060333051
PASCAL

Grippe. Preparer l' epreuve d' une pandemie

Titre : Grippe. Preparer l' epreuve d' une pandemie

Auteur(s) : BRASSEUR Gregory
Source : TRAVAIL ET SECURITE. 2006-04; (661) : 22-32; ill., fig.
ISSN : 0373-1944
Date de publication : 2006
Pays de publication : France
Langue(s) : French
Type de document : Serial
Nombre de références : dissem.

Résumé : Cet article fait le point sur le virus d' influenza aviaire, qui a touche la France en mars 2006. Au sommaire : Naissance d' une menace pandemique; Precisions sur les virus grippaux; Les pandemies; Epizootie : quel scenario pour demain ? Prevention medicale; Mise en place d' un plan d' urgence; Equarrissage, stade ultime de l' elimination

Code(s) de classement : 002B30A01

Descripteur(s) anglais
Descripteur(s) : Influenza; Virus; Animal; France; Risk analysis; Recommendation; Rearing; Epizootics
Desc. génériques : Public health; Medical sciences; Viral disease; Infection; Europe
Descripteur(s) français
Descripteur(s) : Grippe; Virus; Animal; France; Analyse risque; Recommandation; Elevage; Epizootie
Desc. génériques : Sante publique; Sciences medicales; Virose; Infection; Europe
Localisation : BDSP/ENSP, Shelf number 153157

Origine de la notice : BDSP

060327720
PASCAL

Pandemic influenza preparedness : The critical role of the syringe

Titre : Pandemic influenza preparedness : The critical role of the syringe

Auteur(s) : STRAUSS Kenneth; VAN ZUNDERT Andre; FRID Anders; COSTIGLIOLA Vincenzo
Affiliation(s) : BD, Erembodegem-Dorp 86, European Medical Association, POB 13, 9320 Brussels, Belgium; Department of Anaesthesiology, Catharina Hospital, Brabant Medical School, ICU & Pain Therapy, Michelangelolaan 2, 5623 EJ Eindhoven, Netherlands; Department of Internal Medicine, University Hospital MAS, Malmo, Sweden; European Medical Association, Place de Jamblinne de Meux 12, 1030 Brussels, Belgium

Source : Vaccine . 2006; 24 (22) : 4874-4882
ISSN : 0264-410X
CODEN : VACCDE
Date de publication : 2006
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 22 ref.

Résumé : In the face of an almost unprecedented threat of a global pandemic of influenza it is imperative that stockpiling of appropriate drugs and devices begin now. One vital device is an appropriate syringe for delivering vaccine. With the potential for millions to be infected and the vaccine supply severely stretched it is imperative that the syringe used to vaccinate waste as little vaccine as possible and thus allow for a maximum number of persons to be vaccinated. Our study tested seven leading candidate vaccine syringes for dosing accuracy, dose-capacity per vial, medication wastage and a battery of ergonomic features. One device, the Flu+ syringe, proved superior to the others in all important categories, possibly due to its low dead-space volume and its dosing accuracy. The data suggest that switching to this device from any of the others tested would provide between 2 and 19% additional vaccine doses per vial if the current 10-dose vials are used. Extrapolations from this data suggest that many thousands to millions of additional persons could be vaccinated in mass campaigns. Use of a syringe of this type, and the vaccine savings that would accrue, would likely be important in reducing morbidity and mortality in the event of a pandemic of influenza.

Code(s) de classement : 002A05F04

Descripteur(s) anglais
Descripteur(s) : Vaccine; Avian influenza
Desc. génériques : Immunology; Pharmacology; Applied microbiology; Microbiology; Biological sciences
Descripteur(s) français
Descripteur(s) : Vaccin; Grippe aviaire
Desc. génériques : Immunologie; Pharmacologie; Microbiologie appliquee; Microbiologie; Sciences biologiques
Localisation : INIST, Shelf number 20289, INIST No. 354000115677090210

Origine de la notice : INIST

060327274
PASCAL

Vaccination with cell immunoglobulin mucin-1 antibodies and inactivated influenza enhances vaccine-specific lymphocyte proliferation, interferon-<gamma> production and cross-strain reactivity

Titre : Vaccination with cell immunoglobulin mucin-1 antibodies and inactivated influenza enhances vaccine-specific lymphocyte proliferation, interferon-<gamma> production and cross-strain reactivity

Auteur(s) : SOO HOO W; JENSEN E R; SAADAT A; NIETO D; MOSS R B; CARLO D J; MOLL T
Affiliation(s) : Telos Pharmaceuticals LLC, San Diego, CA, United States

Source : Clinical and experimental immunology Print. 2006; 145 (1) : 123-129
ISSN : 0009-9104
CODEN : CEXIAL
Date de publication : 2006
Pays de publication : United Kingdom
Langue(s) : English
Type de document : Serial
Nombre de références : 18 ref.

Résumé : Influenza virus causes a contagious and potentially serious infection of the upper respiratory tract. While neutralizing antibodies are protective against infection, the problem of antigenic drift remains, requiring the constant monitoring and development of new vaccines. The magnitude of this situation is underscored by the emergence of new potentially human pathogenic influenza strains, avian H5N1 being the most recent example. We present evidence that antibodies against T cell immunoglobulin mucin-1 (TIM-1), a recently identified immunomodulatory molecule, stimulate cellular immunity against influenza viruses and cross-strain immune reactivity. To determine potential immunostimulatory properties of anti-TIM-1, mice were vaccinated with inactivated influenza virus in the presence or absence of TIM-1-specific monoclonal antibodies. Development of cellular immunity against both the influenza strain used for immunization and serotypically distinct virus strains was monitored 3 weeks after vaccination by determining antigen-specific lymphocyte proliferation and cytokine production. Results show that TIM-1 antibodies enhance antigen-specific cellular proliferation (P<0.05) and interferon (IFN)-<gamma> production (P < 0-01). Using blocking anti-CD4 and CD8 antibodies, it was observed that antigen-specific cellular proliferation is CD4-dependent and that the majority of proliferating cells are CD4<sup>+. Finally, vaccination with inactivated influenza virus with TIM-1 antibody results in the significant (P<0.001) induction of proliferation and IFN-y production upon stimulation with one of three serologically distinct strains. TIM-1 antibodies demonstrate an adjuvant effect promoting antigen-specific cellular proliferation and IFN-Y production, which are important for the promotion of cell-mediated immunity. These results are the first to suggest that TIM-1 antibody may serve as a potent adjuvant in the development of new influenza virus vaccines.

Code(s) de classement : 002B06; 002A06

Descripteur(s) anglais
Descripteur(s) : Gamma interferon; Vaccination; Prevention; Immunoglobulins; Mucin; Antibody; Inactivated strain; Influenza; Cell proliferation; Cross reaction; Adjuvant
Desc. génériques : Immunology; Immunopathology; Medical sciences; Immunology; Biological sciences; Viral disease; Infection; Immunology; Immunopathology
Descripteur(s) français
Descripteur(s) : Interferon gamma; Vaccination; Prevention; Immunoglobuline; Mucine; Anticorps; Souche inactivee; Grippe; Multiplication cellulaire; Reaction croisee; Adjuvant
Desc. génériques : Immunologie; Immunopathologie; Sciences medicales; Immunologie; Sciences biologiques; Virose; Infection; Immunologie; Immunopathologie