

21 . Influenza Virus Research Center

- 1) T.Shiino, N.Okabe, Y.Yasui, T.Sunagawa, M.Ujike, M.Obuchi, N.Kishida, H.Xu, E.Takashita, A.Anraku, R.Ito, T.Doi, M.Ejima, H.Sugawara, H.Horikawa, S.Yamazaki, Y.Kato, A.Oguchi, N.Fujita, T.Odagiri, M.Tashiro, and H.Watanabe. Molecular evolutionary analysis of the influenza A(H1N1)pdm, May-September, 2009: temporal and spatial spreading profile of the viruses in Japan. *PLoS One.* 5: e11057, 2010
- 2) Y.Matsuzaki, K.Mizuta, E.Takashita, M.Okamoto, T.Itagaki, F.Katsushima, Y.Katsushima, Y.Nagai, and H.Nishimura. Comparison of virus isolation using the Vero E6 cell line with real-time RT-PCR assay for the detection of human metapneumovirus. *BMC Infectious Diseases.* 10: 170, 2010
- 3) M.Okamoto, K.Sugawara, E.Takashita, Y.Muraki, S.Hongo, H.Nishimura and Y.Matsuzaki. Longitudinal course of human metapneumovirus antibody titers and reinfection in healthy adults. *Journal of Medical Virology.* 82: 2092-2096, 2010
- 4) Ichinohe T, Ainai A, Nakamura T, Akiyama Y, Maeyama JI, Odagiri T, Tashiro M, Takahashi H, Sawa H, Tamura SI, Chiba J, Kurata T, Sata T, Hasegawa H. Induction of cross-protective immunity against influenza A virus H5N1 by an intranasal vaccine with extracts of mushroom mycelia. *J Med Virol.* 82(1):128-37. 2010
- 5) Barr IG, McCauley J, Cox N, Daniels R, Engelhardt OG, Fukuda K, Grohmann G, Hay A, Kelso A, Klimov A, Odagiri T, Smith D, Russell C, Tashiro M, Webby R, Wood J, Ye Z, Zhang W; Writing Committee of the World Health Organization Consultation on Northern Hemisphere Influenza Vaccine Composition for 2009-2010. Epidemiological, antigenic and genetic characteristics of seasonal influenza A(H1N1), A(H3N2) and B influenza viruses: basis for the WHO recommendation on the composition of influenza vaccines for use in the 2009-2010 Northern Hemisphere season. *Vaccine.* 2010 Feb 3;28(5):1156-67. Epub 2009 Dec 9.
- 6) Matsuzaki Y, Mizuta K, Aoki Y, Suto A, Abiko C, Sanjoh K, Sugawara K, Takashita E, Itagaki T, Katsushima Y, Ujike M, Obuchi M, Odagiri T, Tashiro M. A two-year survey of the oseltamivir-resistant influenza A(H1N1) virus in Yamagata, Japan and the clinical effectiveness of oseltamivir and zanamivir. *Virol J.* 2010 Mar 5;7(1):53
- 7) M.Ujike, K.Shimabukuro, K. Mochizuki, M.Obuchi, T. Kageyama, M. Shirakura, N. Kishida, K. Yamashita, H.Horikawa, Y.Kato, N. Fujita, M. Tashiro, T.Odagiri, and the Working Group for Influenza Virus Surveillance in Japan Oseltamivir-Resistant Influenza Viruses A (H1N1) during 2007–2009 Influenza Seasons, Japan. *Emerging Infectious Diseases* • www.cdc.gov/eid • Vol. 16, No. 6, 926-935, 2010
- 8) Ikeno D, Kimachi K, Kino Y, Harada S, Yoshida K, Tochihara S, Itamura S, Odagiri T, Tashiro M, Okada K, Miyazaki C, Ueda K. Immunogenicity of an inactivated adjuvanted whole-virion influenza A (H5N1, NIBRG-14) vaccine administered by intramuscular or subcutaneous injection. *Microbiol Immunol.* 2010 Feb;54(2):81-8.
- 9) Ichinohe T, Ainai A, Ami Y, Nagata N, Iwata N, Kawaguchi A, Suzuki Y, Odagiri T, Tashiro M, Takahashi H, Strayer DR, Carter WA, Chiba J, Tamura S, Sata T, Kurata T, Hasegawa H. Intranasal administration of adjuvant-combined vaccine protects monkeys from challenge with the highly pathogenic influenza A H5N1 virus. *J Med Virol.* 2010 Oct;82(10):1754-61.
- 10) YIwai, H.Takahashi, D.Hatakeyama, K.Motoshima, M. Ishikawa, K.Sugita, Y.Hashimoto, Y.Harada, S.Itamura, T.Odagiri, M.Tashiro, Y.Sei, K.Yamaguchi and T.Kuzuhara Anti-influenza activity of phenethylphenylphthalimide analogs derived from thalidomide *Bioorganic & Medicinal Chemistry* Volume 18, Issue 14, 15 July 2010, Pages 5379-5390
- 11) TFurukawa, YMuraki, TNoda, ETakashita, RSho, KSugawara, YMatsuzaki, YShimotai and SHongo. Role of the CM2 Protein in the Influenza C Virus Replication Cycle. *Journal of Virology.* 85: 1322-1329, 2011
- 12) M.Ujike, M.Ejima, A.Anraku, K.Shimabukuro, M.Obuchi, N.Kishida, X.Hong, E.Takashita, S.Fujisaki, K.Yamashita, H.Horikawa, Y.Kato, A.Oguchi, N.Fujita, M.Tashiro, T.Odagiri and Influenza Virus Surveillance Group of Japan. Monitoring and characterization of oseltamivir-resistant pandemic (H1N1) 2009 virus, Japan, 2009-2010. *Emerging infectious diseases.* 17: 470-479, 2011
- 13) M.Nakauchi, M.Ujike, M.Obuchi, E.Takashita, ITakayama, M.Ejima, K.Oba, N.Konomi, T.Odagiri, M.Tashiro, T.Kageyama and the influenza virus surveillance group of Japan. Rapid discrimination of oseltamivir-resistant 275Y and -susceptible 275H substitutions in the neuraminidase gene of pandemic influenza A/H1N1 2009 virus by duplex one-step RT-PCR assay. *Journal of Medical Virology.* 83: 1121-1127, 2011
- 14) Nongluk Sriwilajaroen, A.Kadowaki, Y.Onishi, N.Gato, M.Ujike, T. Odagiri , M.Tashiro, Y.Suzuki. Mumefuralandrelated HMF derivatives from Japanese apricot fruitjuice concentrate show multiple inhibitory effects on

- pandemic in influenza A(H1N1) virus Food Chemistry 127, 1-9, 2011
- 15) K.Fukuzawa, K.Omagari, K.Nakajima, E.Nobusawa, S.Tanaka. Sialic acid recognition of the pandemic influenza 2009 H1N1virus:binding mechanism between human receptor and influenza hemagglutinin. Protein and Peptide letters. 18, 530-539, 2011
- 16) Yoshioka A, Fukuzawa K, Mochizuki Y, Yamashita K, Nakano T, Okiyama Y, Nobusawa E, Nakajima K, Tanaka S. Prediction of probable mutations in influenza virus hemagglutinin protein based on large-scale ab initio fragment molecular orbital calculations. Journal of Molecular Graphics and Modeling 2011 (in press)
- 17) Katano H, Kano M, Nakamura T, Kanno T, Asanuma H, Sata T. A novel real-time PCR system for simultaneous detection of human viruses in clinical samples from patients with uncertain diagnoses. J Med Virol. 83: 322-330. 2011
- 18) Sakamoto K, Asanuma H, Nakamura T, Kanno T, Sata T, Katano H. Immune response to intranasal and intraperitoneal immunization with Kaposi's sarcoma-associated herpesvirus in mice. Vaccine 26:3325-3332, 2010
- 19) Takahashi H, Akazawa D, Kato T, Date T, Shirakura M, Nakamura N, Mochizuki H, Tanaka-Kaneko K, Sata T, Tanaka Y, Mizokami M, Suzuki T, Wakita T. Biological properties of purified recombinant HCV particles with an epitope-tagged envelope.Biochemical and Biophysical Research Communications. 395(4):565-571, 2010.
- 20) Haga S, Nagata N, Okamura T, Yamamoto N, Sata T, Yamamoto N, Sasazuki T, Ishizaka Y. TACE antagonists blocking ACE2 shedding caused by the spike protein of SARS-CoV are candidate antiviral compounds. Antiviral Resarch. 85(3):551-5, 2010
- 21) Sugiyama R, Hayafune M, Habu Y, Yamamoto N, Takaku H. HIV-1 RT-dependent DNAzyme expression inhibits HIV-1 replication without the emergence of escape viruses.Nucleic Acids Res. 2010 Sep 9. [Epub ahead of print] 2011 Jan;39(2):589-98
- 22) Yamazaki T, Nagashima M, Ninomiya D, Arai Y, Teshima Y, Fujimoto A, Ainai A, Hasegawa H, Chiba J. Passive immune-prophylaxis against influenza virus infection by the expression of neutralizing anti-hemagglutinin monoclonal antibodies from plasmids. Jpn J Infect Dis. 2011;64(1):40-9.
- 23) Ainai A, Tashiro M, Hasegawa H. Cross-protective immunity against influenza virus infections induced by intranasal vaccination together with a TLR3-mucosal adjuvant. Human Vaccines. 2011 Jan;7(Supplement):174-182.
- 24) Isawa H, Kuwata R, Hoshino K, Tsuda Y, Sakai K, Watanabe S, Nishimura M, Satho T, Kataoka M, Nagata N, Hasegawa H, Bando H, Yano K, Sasaki T, Kobayashi M, Mizutani T, Sawabe K. Identification and molecular characterization of a new nonsegmented double-stranded RNA virus isolated from Culex mosquitoes in Japan. Virus Res. 2011 Jan;155(1):147-55.
- 25) El Hajj H, El-Sabban M, Hasegawa H, Zaatari G, Ablain J, Saab ST, Janin A, Mahfouz R, Nasr R, Kfouri Y, Nicot C, Hermine O, Hall W, de Thé H, Bazarbachi A. Therapy-induced selective loss of leukemia-initiating activity in murine adult T cell leukemia. J Exp Med. 2010 Dec 20;207(13):2785-92.
- 26) Kawaguchi A, Suzuki T, Kimura T, Sakai N, Ayabe T, Sawa H, Hasegawa H. Functional analysis of an alpha-helical antimicrobial peptide derived from a novel mouse defensin-like gene. Biochem Biophys Res Commun. 2010 Aug 6;398(4):778-84.
- 27) Watters KM, Dean J, Hasegawa H, Sawa H, Hall W, Sheehy N. Cytokine and growth factor expression by HTLV-1 Lck-tax transgenic cells in SCID mice. AIDS Res Hum Retroviruses. 2010 May;26(5):593-603.
- 28) Kuroda M, Katano H, Nakajima N, Tobiume M, Ainai A, Sekizuka T, Hasegawa H, Tashiro M, Sasaki Y, Arakawa Y, Hata S, Watanabe M, Sata T. Characterization of quasispecies of pandemic 2009 influenza A virus (A/H1N1/2009) by de novo sequencing using a next-generation DNA sequencer. PLoS One. 2010 Apr 23;5(4):e10256.
- 29) Ikebe T, Ato M, Matsumura T, Hasegawa H, Sata T, Kobayashi K, Watanabe H. Highly frequent mutations in negative regulators of multiple virulence genes in group A streptococcal toxic shock syndrome isolates. PLoS Pathog. 2010 Apr 1;6(4):e1000832.
- 30) Ohno H, Ogata Y, Suguro H, Yokota S, Watanabe A, Kamei K, Yamagoe S, Ishida-Okawara A, Kaneko Y, Horino A, Yamane K, Tsuji T, Nagata N, Hasegawa H, Arakawa Y, Sata T, Miyazaki Y. An outbreak of histoplasmosis among healthy

- young Japanese women after traveling to Southeast Asia. Intern Med. 2010;49(5):491-5.
- 31) Nakauchi M, Yoshikawa T, Nakai H, Sugata K, Yoshikawa A, Asano Y, Ihira M, Tashiro M, Kageyama T. Evaluation of reverse transcription loop-mediated isothermal amplification assays for rapid diagnosis of pandemic influenza A/H1N1 2009 virus. J Med Virol. 83(1):10-15, 2010.
- 32) Nakauchi M, Yasui Y, Miyoshi T, Minagawa H, Tanaka T, Tashiro M, Kageyama T. One-step real-time reverse transcription-PCR assays for detecting and subtyping pandemic influenza A/H1N1 2009, seasonal influenza A/H1N1, and seasonal influenza A/H3N2 viruses. J Virol Methods. 171(1):156-162, 2011.