

1. Department of Virology I

- 1) Azami NAM, Moi ML, Ami Y, Suzuki Y, Lim CK, Taniguchi S, Saijo M, Takasaki T, Kurane I. Genotype-specific and cross-reactive neutralizing antibodies induced by dengue virus infection: detection of antibodies with different levels of neutralizing activities against homologous and heterologous genotypes of dengue virus type 2 in common marmosets (*Callithrix jacchus*). *Virol J* 15(1):51, 2018
- 2) Bui TT, Moi ML, Nabeshima T, Takemura T, Nguyen TT, Nguyen LN, Pham HTT, Nguyen TTT, Manh DH, Dumre SP, Mizukami S, Hirayama K, Tajima S, Le MTQ, Aoyagi K, Hasebe F, Morita K. A single amino acid substitution in the NS4B protein of Dengue virus confers enhanced virus growth and fitness in human cells in vitro through IFN-dependent host response. *J Gen Virol* 99(8):1044-1057, 2018
- 3) Demetria C, Smith I, Tan T, Villarico D, Simon EM, Centeno R, Tachedjian M, Taniguchi S, Shimojima M, Miranda NLJ, Miranda ME, Rondina MMR, Capistrano R, Tandoc A 3rd, Marsh G, Eagles D, Cruz R, Fukushi S. Reemergence of Reston ebolavirus in cynomolgus monkeys, the Philippines, 2015. *Emerg Infect Dis* 24(7):1285-1291, 2018
- 4) Ejiri H*, Lim CK*, Isawa H, Fujita R, Murota K, Sato T, Kobayashi D, Kan M, Hattori M, Kimura T, Yamaguchi Y, Takayama-Ito M, Horiya M, Posadas-Herrera G, Minami S, Kuwata R, Shimoda H, Maeda K, Katayama Y, Mizutani T, Saijo M, Kaku K, Shinomiya H, Sawabe K. Characterization of a novel thogotovirus isolated from *Amblyomma testudinarium* ticks in Ehime, Japan: A significant phylogenetic relationship to Bourbon virus. *Virus Res* 249:57-65, 2018 (* These authors contributed equally to this work as first authors.)
- 5) Ejiri H*, Lim CK*, Isawa H, Yamaguchi Y, Fujita R, Takayama-Ito M, Kuwata R, Kobayashi D, Horiya M, Posadas-Herrera G, Iizuka-Shiota I, Kakiuchi S, Katayama Y, Hayashi T, Sasaki T, Kobayashi M, Morikawa S, Maeda K, Mizutani T, Kaku K, Saijo M, Sawabe K. Isolation and characterization of Kabuto Mountain virus, a new tick-borne phlebovirus from *Haemaphysalis flava* ticks in Japan. *Virus Res* 244:252-261, 2018 (*These authors contributed equally to this work as first authors.)
- 6) Fujii H, Kakiuchi S, Tsuji M, Nishimura H, Yoshikawa T, Yamada S, Omura N, Inagaki T, Shibamura M, Harada S, Taniguchi S, Saijo M. Application of next-generation sequencing to detect acyclovir-resistant herpes simplex virus 1 variants at low frequency in thymidine kinase gene of the isolates recovered from patients with hematopoietic stem cell transplantation: *J Virol Methods* 251:123-128, 2018
- 7) Fujii H, Harada S, Yoshikawa T, Yamada S, Omura N, Shibamura M, Inagaki T, Kato H, Fukushi S, Saijo M. Differences in the likelihood of acyclovir resistance-associated mutations in the thymidine kinase genes of herpes simplex virus 1 and varicella-zoster virus. *Antimicrob Agents Chemother* 63(5):pii: e00017-19, 2019 (doi: 10.1128/AAC.00017-19, posted online 11 March 2019)
- 8) Fujita R, Kato F, Kobayashi D, Murota K, Takasaki T, Tajima S, Lim CK, Saijo M, Isawa H, Sawabe K. Persistent viruses in mosquito cultured cell line suppress multiplication of flaviviruses. *Heliyon* 4(8):e00736, 2018
- 9) Gaowa, Wulantuya, Yin X, Guo S, Ding C, Cao M, Kawabata H, Sato K, Ando S, Fujita H, Kawamori F, Su H, Shimada M, Shimamura Y, Masuda S, Ohashi N. Spotted fever group *Rickettsia* in Inner Mongolia, China, 2015-2016. *Emerg Infect Dis* 24(11):2105-2107, 2018
- 10) Gokuden M, Fukushi S, Saijo M, Nakadouzo F, Iwamoto Y, Yamamoto M, Hozumi N,

- Nakayama K, Ishitani K, Nishi N, Ootsubo M. Low seroprevalence of severe fever with thrombocytopenia syndrome virus antibodies in individuals living in an endemic area in Japan. *Jpn J Infect Dis* 71(3):225-228, 2018
- 11) Hidaka Y, Lim CK, Takayama-Ito M, Park CH, Kimitsuki K, Shiwa N, Inoue KI, Ito T. Segmentation of the rabies virus genome. *Virus Res* 252:68-75, 2018
- 12) Hirotsuki H, Maeda Y, Shimojima M, Maeda K, Iwata H, Takeyoshi M. Effects of soluble tumor necrosis factor (TNF) on antibody-dependent cellular cytotoxicity of therapeutic anti-TNF- α antibody. *Immunol Invest* 20:1-10, 2018
- 13) Hishiki T, Kato F, Nio Y, Watanabe S, Wen Tan NW, Yamane D, Miyazaki Y, Lin CC, Suzuki R, Tajima S, Lim CK, Saijo M, Hijikata M, Vasudevan SG, Takasaki T. Stearoyl-CoA desaturase-1 is required for flavivirus RNA replication. *Antiviral Res* 165:42-46, 2019
- 14) Inagaki T, Satoh M, Fujii H, Yamada S, Shibamura M, Yoshikawa T, Harada S, Takeyama H, Saijo M. Acyclovir sensitivity and neurovirulence of herpes simplex virus type 1 with amino acid substitutions in the viral thymidine kinase gene, which were detected in the patients with intractable herpes simplex encephalitis previously reported. *Jpn J Infect Dis* 71(5):343-349, 2018
- 15) Ishii J, Shishido-Hara Y, Kawamoto M, Fujiwara S, Imai Y, Nakamichi K, Kohara N. A punctate magnetic resonance imaging pattern in a patient with systemic lupus erythematosus is an early sign of progressive multifocal leukoencephalopathy: A clinicopathological study. *Intern Med* 57(18):2727-2734, 2018
- 16) Jain J, Okabayashi T, Kaur N, Nakayama E, Shioda T, Gaiind R, Kurosu T, Sunil S. Evaluation of an immunochromatography rapid diagnosis kit for detection of chikungunya virus antigen in India, a dengue-endemic country. *Virology* 15:84, 2018
- 17) Kakiuchi S, Tsuji M, Nishimura H, Wang L, Takayama-Ito M, Kinoshita H, Lim CK, Taniguchi S, Oka A, Mizuguchi M, Saijo M. Human parainfluenza virus type 3 infections in hematopoietic stem cell transplantation patients: The mode of nosocomial infections and the prognosis. *Jpn J Infect Dis* 71(2):109-115, 2018
- 18) Kato F, Ishida Y, Kawakami A, Takasaki T, Saijo M, Miura T, Hishiki T. Evaluation of *Macaca radiata* as a non-human primate model of Dengue virus infection. *Sci Rep* 8(1):3421, 2018
- 19) Kawamori F, Shimazu Y, Sato H, Monma N, Ikegaya A, Yamamoto S, Fujita H, Morita H, Tamaki Y, Su H, Shimada M, Takamoto N, Shimamura Y, Masuda S, Ando S, Ohashi N. Evaluation of diagnostic assay for Rickettsioses using duplex real-time PCR in multiple laboratories in Japan. *Jpn J Infect Dis* 71(4):267-273, 2018
- 20) Kimura T, Fukuma A, Shimojima M, Yamashita Y, Mizota F, Yamashita M, Otsuka Y, Kan M, Fukushi S, Tani H, Taniguchi S, Ogata M, Kurosu T, Morikawa S, Saijo M, Shinomiya H. Seroprevalence of severe fever with thrombocytopenia syndrome (SFTS) virus antibodies in humans and animals in Ehime prefecture, Japan, an endemic region of SFTS. *J Infect Chemother* 24(10):802-806, 2018
- 21) Kinoshita H, Nakamichi K, Lim CK, Takayama-Ito M, Wang L, Iizuka I, Kurane I, Saijo M. A loop-mediated isothermal amplification assay for the detection and quantification of JC polyomavirus in cerebrospinal fluid: a diagnostic and clinical management tool and technique for progressive multifocal leukoencephalopathy. *Virology* 15(1):136, 2018
- 22) Kitagawa Y, Sakai M, Shimojima M, Saijo M, Itoh M, Gotoh B. Nonstructural protein of severe fever with thrombocytopenia syndrome phlebovirus targets STAT2 and not STAT1 to inhibit type I

- interferon-stimulated JAK-STAT signaling. *Microbes Infect* 20(6):360-368, 2018
- 23) Kitani S, Yoshida M, Boonlucksanawong O, Panbangred W, Anuegoonpipat A, Kurosu T, Ikuta K, Igarashi Y, Nihira T. Cystargamide B, a cyclic lipodepsipeptide with protease inhibitory activity from *Streptomyces* sp. *J Antibiot* 71:662-666, 2018
- 24) Kumagai K, Cherilyn EA, Ando S, Engel JE, Hanada K. Both the N- and C- terminal regions of the Chlamydial inclusion protein D (IncD) are required for interaction with the pleckstrin homology domain of the ceramide transport protein CERT. *Biochem Biophys Res Commun* 505(4):1070-1076, 2018
- 25) Kyaw AK, Ngwe Tun MM, Nabeshima T, Buerano CC, Ando T, Inoue S, Hayasaka D, Lim CK, Saijo M, Thu HM, Thant KZ, Morita K. Japanese Encephalitis- and dengue-associated acute encephalitis syndrome cases in Myanmar. *Am J Trop Med Hyg* 100(3):643-646, 2019
- 26) Maeki T, Tajima S, Kyaw AK, Matsumoto F, Miura K, Yamashita A, Yoshikawa A, Negishi K, Noguchi Y, Tadokoro K, Abe K, Taruya J, Koh J, Ito H, Ikegaya A, Abe F, Wada M, Nishigata T, Ikeda M, Kato F, Taniguchi S, Nakayama E, Takasaki T, Morita K, Lim CK, Saijo M. Comparison of neutralizing antibody titers against Japanese encephalitis virus genotype V strain with those against genotype I and III strains in the sera of Japanese encephalitis patients in Japan in 2016. *Jpn J Infect Dis* 71(5):360-364, 2018
- 27) Matsui T, Kinoshita N, Maeki T, Kutsuna S, Nakamura K, Nakamoto T, Ishikane M, Tajima S, Kato F, Taniguchi S, Lim CK, Saijo M, Ohmagari N. Dengue virus type 2 infection in a traveler returning from Saudi Arabia to Japan. *Jpn J Infect Dis* 72(5):340-342, 2019
- 28) Matsumoto C, Shinohara N, Furuta RA, Tanishige N, Shimajima M, Matsubayashi K, Nagai T, Tsubaki K, Satake M. Investigation of antibody to severe fever with thrombocytopenia syndrome virus (SFTSV) in blood samples donated in a SFTS-endemic area in Japan. *Vox Sang* 113(3):297-299, 2018
- 29) Matsuyama S, Shirato K, Kawase M, Terada Y, Kawachi K, Fukushi S, Kamitani W. Middle East respiratory syndrome coronavirus spike protein is not activated directly by cellular furin during viral entry into target cells. *J Virol* 92; pii: e00683-18, 2018
- 30) Miura T, Makino R, Yamada K, Matsuura M, Okumura M, Yamada S, Watanabe S, Inoue N. Differences in the effects of mutations in GP131, a guinea pig cytomegalovirus homologue of pentameric complex component UL130, on macrophage and epithelial cell infection. *J Gen Virol* 99(10):1425-1431, 2018
- 31) Nakayama E, Tajima S, Kotaki A, Shibasaki KI, Itokawa K, Kato K, Yamashita A, Sekizuka T, Kuroda M, Tomita T, Saijo M, Takasaki T. A summary of the imported cases of Chikungunya fever in Japan from 2006 to June 2016. *J Travel Med* 25(1), 2018 (doi: 10. 1093/jtm/tax072)
- 32) Nguyen TTT, Tajima S, Ikeda M, Nguyen TT, Le THT, Pham TTH, Pham DQ, Le TQM, Maeki T, Taniguchi S, Kato F, Moi ML, Morita K, Lim CK, Saijo M, Hasebe F. Neutralization potency of sera from Vietnamese patients with Japanese encephalitis (JE) against genotypes I and V JE viruses. *Jpn J Infect Dis* 72(2):115-117, 2019
- 33) Nukuzuma S, Nukuzuma C, Kameoka M, Sugiura S, Nakamichi K, Tasaki T, Hidaka K, Takegami T. Establishment of COS-JC cells persistently producing archetype JC polyomavirus. *Microbiol Immunol* 62(8):524-530, 2018
- 34) Ogawa M, Shirasago Y, Ando S, Shimajima M, Saijo M, Fukasawa M. Caffeic acid, a coffee-related organic acid, inhibits infection by severe fever with thrombocytopenia syndrome virus in vitro. *J Infect Chemother* 24(8):597-601, 2018

- 35) Oh H, Shin J, Lee C, Ochiai M, Nojima K, Lim CK, Raut S, Lisovsky I, Williams S, Yoo K, Shin DY, Ato M, Ye Q, Han K, Lee C, Lee N, Hong JY, Jung K, Hung PV, Jeong J. The 2nd Meeting of National Control Laboratories for Vaccines and Biologicals in the Western Pacific. *Osong Public Health Res Perspect* 9(3) : 133-139, 2018
- 36) Omura N, Yoshikawa T, Fujii H, Shibamura M, Inagaki T, Kato H, Egawa K, Harada S, Yamada S, Takeyama H, Saijo M. A novel system for constructing a recombinant highly-attenuated vaccinia virus strain (LC16m8) expressing foreign genes and Its application for the generation of LC16m8-based vaccines against herpes simplex virus 2. *Jpn J Infect Dis* 71(3):229-233, 2018
- 37) Ozawa H, Tajima S, Nakayama E, Kato K, Yamashita A, Sekizuka T, Kuroda M, Usuku S. Isolation and complete genome sequencing of Zika virus imported from the Dominican Republic to Japan. *Jpn J Infect Dis* 71(1):72-74, 2018
- 38) Phanthanawiboon S, Pambudi S, Omokoko MD, Hanabara K, A-Nuegoonpipat A, Kamitani W, Ikuta K, Kurosu T. Construction of a high-yield dengue virus by replacing nonstructural proteins 3-4B without increasing virulence. *Biochem Biophys Res Commun* 495:1221-1226, 2018
- 39) Prow NA, Liu L, Nakayama E, Cooper TH, Yan K, Eldi P, Hazlewood JE, Tang B, Le TT, Setoh YX, Khromykh AA, Hobson-Peters J, Diener KR, Howley PM, Hayball JD, Suhrbier A. A vaccinia-based single vector construct multi-pathogen vaccine protects against both Zika and chikungunya viruses. *Nat Commun* 9(1):1230, 2018
- 40) Saasa N, Kajihara M, Dautu G, Mori-Kajihara A, Fukushi S, Sinkala Y, Morikawa S, Mweene A, Takada A, Yoshimatsu K, Arikawa J. Expression of a recombinant nucleocapsid protein of Rift Valley fever virus in Vero cells as an immunofluorescence antigen and its use for serosurveillance in traditional cattle herds in Zambia. *Vector Borne Zoonotic Dis* 8(5):273-277, 2018
- 41) Saijo M. Pathophysiology of severe fever with thrombocytopenia syndrome and development of specific antiviral therapy. *J Infect Chemother* 24(10):773-781, 2018
- 42) Sayama Y, Zamoto-Niikura A, Matsumoto C, Saijo M, Ishihara C, Matsubayashi K, Nagai T, Satake M. Analysis of antigen-antibody cross-reactivity among lineages and sublineages of Babesia microti parasites using human babesiosis specimens. *Transfusion* 58(5):1234-1244, 2018
- 43) Setoh YX, Peng NY, Nakayama E, Amarilla AA, Prow NA, Suhrbier A, Khromykh AA. Fatal brain infection is not a unique characteristic of Brazilian Zika viruses. *Viruses* 10(10):E541, 2018
- 44) Shigemura T, Nakazawa Y, Yoshikawa T, Fujii H, Yamada S, Saijo M, Okuyama R. Severe acyclovir-resistant herpes simplex virus 1 infection following cord blood transplantation. *Int J Hematol* 108(3):237-238, 2018
- 45) Shimada M, Takamoto N, Su H, Sasahara H, Shimamura Y, Ando S, Ohashi N. Predominance shift of different P44-expressing *Anaplasma phagocytophilum* in infected HL-60, THP-1, NB4, and RF/6A cell lines. *Jpn J Infect Dis* 72:73-80, 2019
- 46) Suda Y, Chamberlain J, Dowall S, Saijo M, Horimoto T, Hewson R, Shimojima M. The development of a novel diagnostic assay that uses a pseudotyped vesicular stomatitis virus for the detection of neutralizing activity to Crimean-Congo haemorrhagic fever virus. *Jpn J Infect Dis* 71(3):205-208, 2018
- 47) Suzuki T, Okamoto T, Katoh H, Sugiyama Y, Kusakabe S, Tokunaga M, Hirano J, Miyata Y, Fukuhara T, Ikawa M, Satoh T, Yoshio S, Suzuki R, Saijo M, Huang DCS, Kanto T, Akira S, Matsuura Y. Infection with flaviviruses requires

- BCLXL for cell survival . PLoS Pathog 14(9):e1007299, 2018
- 48) Tadokoro K, Ohta Y, Sato K, Maeki T, Sasaki R, Takahashi Y, Shang J, Takemoto M, Hishikawa N, Yamashita T, Lim CK, Tajima S, Abe K. A Japanese encephalitis patient presenting with Parkinsonism with corresponding laterality of magnetic resonance and dopamine transporter imaging findings. Intern Med 57(15):2243-2246, 2018
- 49) Taira M, Ando S, Kawabata H, Fujita H, Kadosaka T, Sato H, Monma N, Ohashi N, Saijo M. Isolation and molecular detection of *Ehrlichia* species from ticks in western, central, and eastern Japan. Ticks Tick Borne Dis 10: 344-351, 2019
- 50) Takayama-Ito M, Lim CK, Yamaguchi Y, Posadas-Herrera G, Kato H, Iizuka I, Islam MT, Morimoto K, Saijo M. Replication-incompetent rabies virus vector harboring glycoprotein gene of lymphocytic choriomeningitis virus (LCMV) protects mice from LCMV challenge. PLoS Negl Trop Dis 12(4):e0006398, 2018
- 51) Takeda M, Watanabe S, Katano H, Noguchi K, ato Y, Kojima S, Miura T, Majima R, Yamada S, Inoue N . Roles of GP33 , a guinea pig cytomegalovirus-encoded G protein-coupled receptor homolog, in cellular signaling, viral growth and inflammation in vitro and in vivo . PLoS Pathog 14(12):e1007487, 2018
- 52) Tani H, Komeno T, Fukuma A, Fukushi S, Taniguchi S, Shimojima M, Uda A, Morikawa S, Nakajima N, Furuta Y, Saijo M. Therapeutic effects of favipiravir against severe fever with thrombocytopenia syndrome virus infection in a lethal mouse model: Dose-efficacy studies upon oral administration. PLoS One 13(10):e0206416, 2018
- 53) Tohma D, Tajima S, Kato F, Sato H, Kakisaka M, Hishiki T, Kataoka M, Takeyama H, Lim CK, Aida Y, Saijo M. An estrogen antagonist, cyclofenil, has anti-dengue-virus activity . Arch Virol 164(1):225-234, 2019
- 54) Ueno T, Sato N, Kon T, Haga R, Nunomura JI, Nakamichi K, Saijo M, Tomiyama M. Progressive multifocal leukoencephalopathy associated with thymoma with immunodeficiency: a case report and literature review. BMC Neurol 18(1):37, 2018
- 55) Yamada S, Shimojima M, Narita R, Tsukamoto Y, Kato H, Saijo M, Fujita T. RIG-I-Like receptor and toll-Like receptor signaling pathways cause aberrant production of inflammatory cytokines/chemokines in a severe fever with thrombocytopenia syndrome virus infection mouse model. J Virol 92(13): e02246-17, 2018
- 56) Yamagishi T, Kakimoto K, Doi I, Kawakami C, Shimada T, Matsui T, Oishi K, Saijo M. Transmission routes of the virus causing viral hemorrhagic fever: Extreme precautions are prudent but high-quality evidence must be gathered. Infect Control Hosp Epidemiol 40(5):608-609, 2019
- 57) Yoshikawa T, Fujii H, Okutani A, Shibamura M, Omura N, Egawa K, Kato H, Inagaki T, Harada S, Yamada S, Morikawa S, Saijo M. Construction and characterization of bacterial artificial chromosomes harboring the full-length genome of a highly attenuated vaccinia virus LC16m8. PLoS One 13(2):e0192725, 2018