REFERENCES

Adler, J.L., Zickl, R., 1969. Winter vomiting disease. Journal of infectious diseases 119, 668-673.

Ahmed, S.M., Hall, A.J., Robinson, A.E., Verhoef, L., Premkumar, P., Parashar, U.D., Koopmans, M., Lopman, B.A., 2014. Global prevalence of norovirus in cases of gastroenteritis: a systematic review and meta-analysis. The lancet infectious diseases 14, 725-730.

Ahmed, S.M., Lopman, B.A., Levy, K., 2013. A systematic review and meta-analysis of the global seasonality of norovirus. PloS one 8, e75922.

Ambert-Balay, K., Bon, F., Le Guyader, F., Pothier, P., Kohli, E., 2005. Characterization of new recombinant noroviruses. Journal of clinical microbiology 43, 5179-5186.

Ao, Y., Jinjin, W., Hua, L., Yaqing, H., Xiaogeng, D., Xuan, W., Jingyao, P., Hailong, Z., Miao, J., Zhaojun, D., 2017. Norovirus GII.P16/GII.2-associated gastroenteritis, China, 2016. Emerging infectious disease journal 23, 1172-1175.

Arana, A., Cilla, G., Montes, M., Gomariz, M., Pérez-Trallero, E., 2014. Genotypes, recombinant forms, and variants of norovirus GII.4 in Gipuzkoa (Basque country, Spain), 2009-2012. PloS one 9, e98875.

Atmar, R.L., Estes, M.K., 2001. Diagnosis of noncultivatable gastroenteritis viruses, the human caliciviruses. Clinical microbiology reviews 14, 15-37.

Bidalot, M., Thery, L., Kaplon, J., De Rougemont, A., Ambert-Balay, K., 2017. Emergence of new recombinant noroviruses GII.p16-GII.4 and GII.p16-GII.2, France, winter 2016 to 2017. Euro surveillance: bulletin

Européen sur les maladies transmissibles = European communicable disease bulletin 22, pii: 30508.Bodhidatta, L., Abente, E., Neesanant, P., Nakjarung, K., Sirichote, P., Bunyarakyothin, G., Vithayasai, N., Mason, C.J., 2015. Molecular epidemiology and genotype distribution of noroviruses in children in Thailand from 2004 to 2010: A multi-site study. Journal of medical virology 87, 664-674.

Bon, F., Ambert-Balay, K., Giraudon, H., Kaplon, J., Le Guyader, S., Pommepuy, M., Gallay, A., Vaillant, V., de Valk, H., Chikhi-Brachet, R., Flahaut, A., Pothier, P., Kohli, E., 2005. Molecular epidemiology of caliciviruses detected in sporadic and outbreak cases of gastroenteritis in France from December 1998 to February 2004. Journal of clinical microbiology 43, 4659-4664.

Boon, D., Mahar, J.E., Abente, E.J., Kirkwood, C.D., Purcell, R.H., Kapikian, A.Z., Green, K.Y., Bok, K., 2011. Comparative evolution of GII.3 and GII.4 norovirus over a 31-year period. Journal of virology 85, 8656-8666.

Bruggink, L.D., Dunbar, N.L., Marshall, J.A., 2016a. Emergence of GII.Pg norovirus in gastroenteritis outbreaks in Victoria, Australia. Journal of medical virology 88, 1521-1528.

Bruggink, L.D., Moselen, J.M., Marshall, J.A., 2016b. The comparative molecular epidemiology of GII.P7_GII.6 and GII.P7_GII.7 norovirus outbreaks in Victoria, Australia, 2012-2014. Intervirology 59, 60-65.

Buesa, J., Collado, B., López-Andújar, P., Abu-Mallouh, R., Rodríguez Díaz, J., García Díaz, A., Prat, J., Guix, S., Llovet, T., Prats, G., Bosch, A., 2002. Molecular epidemiology of caliciviruses causing outbreaks and sporadic cases of acute gastroenteritis in Spain. Journal of clinical microbiology 40, 2854-2859.

Bull, R.A., Hansman, G.S., Clancy, L.E., Tanaka, M.M., Rawlinson, W.D., White, P.A., 2005. Norovirus recombination in ORF1/ORF2 overlap. Emerging infectious diseases 11, 1079-1085.

Bull, R.A., Tanaka, M.M., White, P.A., 2007. Norovirus recombination. Journal of general virology 88, 3347-3359.

Bull, R.A., Tu, E.T.V., McIver, C.J., Rawlinson, W.D., White, P.A., 2006. Emergence of a new norovirus genotype II.4 variant associated with global outbreaks of gastroenteritis. Journal of clinical microbiology 44, 327-333.

Chaimongkol, N., Khamrin P., Malasao, R., Thongprachum, A., Kongsricharoern, T., Ukarapol, N., Ushijima, H., Maneekarn, N., 2014. Molecular characterization of norovirus variants and genetic diversity of noroviruses and sapoviruses in Thailand. Journal of medical virology 86, 1210-1218.

Chaimongkol, N., Khamrin, P., Suantai, B., Saikhreang, W., Thongprachum, A., Malasao, R., Ukarapol, N., Kongsricharoern, T., Ushijima, H., Maneekarn, N., 2012. A wide variety of diarrhea viruses circulating in pediatric patients in Thailand. Clinical laboratory.58, 117-123.

Chan-It, W., Thongprachum, A., Khamrin, P., Kobayashi, M., Okitsu, S., Mizuguchi, M., Ushijima, H., 2012. Emergence of a new norovirus GII.6 variant in Japan, 2008-2009. Journal of medical virology 84, 1089-1096.

Chan-It, W., Thongprachum, A., Okitsu, S., Mizuguchi, M., Ushijima, H., 2010. Epidemiology and molecular characterization of sapovirus and astrovirus in Japan, 2008-2009. Japanese journal of infectious diseases 63, 302-303.

Chan, M.C., Chan, P.K., 2013. Complete genome sequence of a novel recombinant human norovirus genogroup II genotype 4 strain associated with an epidemic during summer of 2012 in Hong Kong, Genome announcements, pii: e00140-12.

Chan, M.C., Lee, N., Hung, T.N., Kwok, K., Cheung, K., Tin, E.K., Lai, R.W., Nelson, E.A., Leung, T.F., Chan, P.K., 2015. Rapid emergence and

predominance of a broadly recognizing and fast-evolving norovirus GII.17 variant in late 2014. Nature communications 6, 10061.

Chang, K.O., Sosnovtsev, S.S., Belliot, G., Wang, Q., Saif, L.J., Green, K.Y., 2005. Reverse genetics system for porcine enteric calicivirus, a prototype sapovirus in the Caliciviridae. Journal of virology 79, 1409-1416.

Chen, R., Neill, J.D., Noel, J.S., Hutson, A.M., Glass, R.I., Estes, M.K., Prasad, B.V.V., 2004. Inter- and intragenus structural variations in caliciviruses and their functional implications. Journal of virology 78, 6469-6479.

Chhabra, P., Dhongade, R.K., Kalrao, V.R., Bavdekar, A.R., Chitambar, S.D., 2009. Epidemiological, clinical, and molecular features of norovirus infections in western India. Journal of medical virology 81, 922-932.

Chhabra, P., Walimbe, A.M., Chitambar, S.D., 2010. Complete genome characterization of genogroup II norovirus strains from India: Evidence of recombination in ORF2/3 overlap. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases. 10, 1101-1109.

Chiba, S., Sakuma, Y., Kogasaka, R., Akihara, M., Horino, K., Nakao, T., Fukui, S., 1979. An outbreak of gastroenteritis associated with calicivirus in an infant home. Journal of medical virology 4, 249-254.

Cubitt, W.D., Barrett, A.D.T., 1984. Propagation of human candidate calicivirus in cell culture. Journal of general virology 65, 1123-1126.

Cubitt, W.D., McSwiggan, D.A., Moore, W., 1979. Winter vomiting disease caused by calicivirus. Journal of clinical pathology 32, 786-793.

Cubitt, W.D., Pead, P.J., Saeed, A.A., 1981. A new serotype of calicivirus associated with an outbreak of gastroenteritis in a residential home for the elderly. Journal of clinical pathology 34, 924-926.

Dang Thanh, H., Than, V.T., Nguyen, T.H., Lim, I., Kim, W., 2016. Emergence of norovirus GII.17 variants among children with acute gastroenteritis in South Korea. PloS one 11, e0154284.

de Graaf, M., van Beek, J., Koopmans, M.P.G., 2016. Human norovirus transmission and evolution in a changing world. Nature reviews. Microbiology 14, 421-433.

Dey, S.K., Phan, T.G., Mizuguchia, M., Okitsua, S., Ushijima, H., 2010. Novel recombinant norovirus in Japan. Virus Genes 40, 362-364.

Dey, S.K., Phathammavong, O., Nguyen, T.D., Thongprachum, A., Chan-It, W., Okitsu, S., Mizuguchi, M., Ushijima, H., 2012. Seasonal pattern and genotype distribution of sapovirus infection in Japan, 2003-2009. Epidemiology and infection 140, 74-77.

Eden, J.S., Tanaka, M.M., Boni, M.F., Rawlinson, W.D., White, P.A., 2013. Recombination within the pandemic norovirus GII.4 lineage. Journal of virology 87, 6270-6282.

Eden, J.S., Bull, R.A., Tu, E., McIver, C.J., Lyon, M.J., Marshall, J.A., Smith, D.W., Musto, J., Rawlinson, W.D., White, P.A., 2010. Norovirus GII.4 variant 2006b caused epidemics of acute gastroenteritis in Australia during 2007 and 2008. Journal of clinical virology: the official publication of the Pan American Society for Clinical Virology 49, 265-271.

Epifanova, N.V., 2015. Genetic variants of norovirus of GII.6 genotype. Molecular genetics, microbiology and virology 30, 192-200.

Estes, M.K., Prasad, B.V., Atmar, R.L., 2006. Noroviruses everywhere: has something changed? Current opinion in infectious diseases 19, 467-474.

Fajardo, Á., Tort, F.L., Victoria, M., Fumian, T.M., Miagostovich, M.P., Leite, J.P.G., Cristina, J., Colina, R., 2014. Phylogenetic analyses of Norovirus strains detected in Uruguay reveal the circulation of the novel GII.P7/GII.6 recombinant variant. Infection, genetics and evolution:

journal of molecular epidemiology and evolutionary genetics in infectious diseases. 28, 328-332.

Fankhauser, R.L., Monroe, S.S., Noel, J.S., Humphrey, C.D., Bresee, J.S., Parashar, U.D., Ando, T., Glass, R.I., 2002. Epidemiologic and molecular trends of "Norwalk-like Viruses" associated with outbreaks of gastroenteritis in the United States. Journal of infectious diseases 186, 1-7.

Farkas, T., Zhong, M.W., Jing, Y., Huang, W.P., Espinosa, M.S., Martinez, N., Morrow, L.A., Ruiz-Palacios, M.G., Pickering, K.L., Jiang, X., 2004. Genetic diversity among sapoviruses. Archives of virology 149, 1309-1323.

Fumian, T.M., da Silva Ribeiro de Andrade, J., Leite, J.P.G., Miagostovich, M.P., 2016. Norovirus recombinant strains isolated from gastroenteritis outbreaks in southern Brazil, 2004–2011. PloS one 11, e0145391.

Gallimore, C.I., Cheesbrough, J.S., Lamden, K., Bingham, C., Gray, J.J., 2005. Multiple norovirus genotypes characterised from an oyster-associated outbreak of gastroenteritis. International journal of food microbiology 103, 323-330.

Gallimore, C.I., Iturriza-Gomara, M., Lewis, D., Cubitt, D., Cotterill, H., Gray, J.J., 2006. Characterization of sapoviruses collected in the United Kingdom from 1989 to 2004. Journal of medical virology 78, 673-682.

Gao, Z., Li, X., Yan, H., Li, W., Jia, L., Hu, L., Hu, H., Liu, B., Li, J., Wang, Q., 2015. Human calicivirus occurrence among outpatients with diarrhea in Beijing, China, between April 2011 and March 2013. Journal of medical virology 87, 2040-2047.

Giammanco, G.M., Rotolo, V., Medici, M.C., Tummolo, F., Bonura, F., Chezzi, C., Martella, V., De Grazia, S., 2012. Recombinant norovirus GII.g/GII.12 gastroenteritis in children. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases. 12, 169-174.

Glass, P.J., White, L.J., Ball, J.M., Leparc-Goffart, I., Hardy, M.E., Estes, M.K., 2000. Norwalk virus open reading frame 3 encodes a minor structural protein. Journal of virology 74, 6581-6591.

Glass, R.I., Parashar, U.D., Estes, M.K., 2009. Norovirus gastroenteritis. The New England journal of medicine 361, 1776-1785.

Grant, L.R., O'Brien, K.L., Weatherholtz, R.C., Reid, R., Goklish, N., Santosham, M., Parashar, U., Vinje, J., 2017. Norovirus and sapovirus epidemiology and strain characteristics among Navajo and Apache infants. PloS one 12, e0169491.

Green, K.Y., 2013. Caliciviridae: the noroviruses, In: Knipe, D.M., Howley, P. (Eds.), Field's virology. Lippincott Williams and Wilkins, Philadelphia.

Green, K.Y., 2016. Chapter 3.5 - Molecular epidemiology and evolution of noroviruses. In: Lennart, S., Desselberger, U., Greenberg, H.B., Estes, M.K. (Eds.), Viral Gastroenteritis. Academic Press, Boston, pp. 423-445.

Guntapong, R., Hansman GS., Oka T., Ogawa S., Kageyama T., Pongsuwanna Y., Katayama, K., 2004. Norovirus and sapovirus infections in Thailand. Japanese journal of infectious diseases. 57, 276-278.

Han, J., Ji, L., Shen, Y., Wu, X., Xu, D., Chen, L., 2015. Emergence and predominance of norovirus GII.17 in Huzhou, China, 2014-2015. Virology journal 12, 139.

Han, M.G., Smiley, J.R., Thomas, C., Saif, L.J., 2004. Genetic recombination between two genotypes of genogroup III bovine noroviruses (BoNVs) and capsid sequence diversity among BoNVs and Nebraska-like bovine enteric caliciviruses. Journal of clinical microbiology 42, 5214-5224.

Hansman, G.S., Katayama, K., Maneekarn, N., Peerakome, S., Khamrin, P., Tonusin, S., Okitsu, S., Nishio, O., Takeda, N., Ushijima, H., 2004. Genetic diversity of norovirus and sapovirus in hospitalized infants with

sporadic cases of acute gastroenteritis in Chiang Mai, Thailand. Journal of clinical microbiology 42, 1305-1307.

Hansman, G.S., Oka, T., Katayama, K., Takeda, N., 2007a, Human sapoviruses: genetic diversity, recombination, and classification. Reviews in medical virology 17, 133-141.

Hansman, G.S., Saito, H., Shibata, C., Ishizuka, S., Oseto, M., Oka, T., Takeda, N., 2007b, Outbreak of gastroenteritis due to sapovirus. Journal of clinical microbiology 45, 1347-1349.

Harada, S., Okada, M., Yahiro, S., Nishimura, K., Matsuo, S., Miyasaka, J., Nakashima, R., Shimada, Y., Ueno, T., Ikezawa, S., Shinozaki, K., Katayama, K., Wakita, T., Takeda, N., Oka, T., 2009. Surveillance of pathogens in outpatients with gastroenteritis and characterization of sapovirus strains between 2002 and 2007 in Kumamoto prefecture, Japan. Journal of medical virology 81, 1117-1127.

Hardy, M.E., 2005. Norovirus protein structure and function. FEMS microbiology letters 253, 1-8.

Hardy, M.E., Kramer S.F., Treanor J.J., Estes, M.K., 1997. Human calicivirus genogroup II capsid sequence diversity revealed by analyses of the prototype snow mountain agent. Archives of virology 147, 1469-1479.

Hernandez, J.D.M., Silva, L.D.D., Sousa Junior, E.C., Lucena, M.S.S., Soares, L.D.S., Mascarenhas, J.D.P., Gabbay, Y.B., 2016. Analysis of uncommon norovirus recombinants from Manaus, Amazon region, Brazil: GII.P22/GII.5, GII.P7/GII.6 and GII.Pg/GII.1. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases 39, 365-371.

Hoa Tran, T.N., Trainor, E., Nakagomi, T., Cunliffe, N.A., Nakagomi, O., 2013. Molecular epidemiology of noroviruses associated with acute sporadic gastroenteritis in children: global distribution of genogroups, genotypes

and GII.4 variants. Journal of clinical virology: the official publication of the Pan American Society for Clinical Virology 56, 185-193.

Hoffmann, D., Mauroy, A., Seebach, J., Simon, V., Wantia, N., Protzer, U., 2013. New norovirus classified as a recombinant GII.g/GII.1 causes an extended foodborne outbreak at a university hospital in Munich. Journal of clinical virology: the official publication of the Pan American Society for Clinical Virology 58, 24-30.

Huhti, L., Szakal, E.D., Puustinen, L., Salminen, M., Huhtala, H., Valve, O., Blazevic, V., Vesikari, T., 2011. Norovirus GII-4 causes a more severe gastroenteritis than other noroviruses in young children. The Journal of infectious diseases 203, 1442-1444.

Iizuka, S., Oka T., Tabara K., Omura T., Katayama K., Takeda N., Noda, M., 2010. Detection of sapoviruses and noroviruses in an outbreak of gastroenteritis linked genetically to shellfish. Journal of medical virology 82, 1247-1254.

Iritani, N., Kaida, A., Abe, N., Kubo, H., Sekiguchi, J.I., Yamamoto, S.P., Goto, K., Tanaka, T., Noda, M., 2014. Detection and genetic characterization of human enteric viruses in oyster-associated gastroenteritis outbreaks between 2001 and 2012 in Osaka City, Japan. Journal of medical virology 86, 2019-2025.

Iritani, N., Yamamoto, S.P., Abe, N., Kubo, H., Oka, T., Kaida, A., 2016. Epidemics of GI.2 sapovirus in gastroenteritis outbreaks during 2012-2013 in Osaka City, Japan. Journal of medical virology 88, 1187-1193.

Jia, L.P., Qian, Y., Zhang, Y., Deng, L., Liu, L.Y., Zhu, R.N., Zhao, L.Q., Huang, H., Zheng, C.G., Dong, H.J., 2014. Prevalence and genetic diversity of noroviruses in outpatient pediatric clinics in Beijing, China 2010-2012. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases 28, 71-77.

Jiang, X., Wang, M., Wang, K., Estes, M.K., 1993. Sequence and genomic organization of norwalk virus. Virology 195, 51-61.

Kapikian, A.Z., Wyatt, R.G., Dolin, R., Thornhill, T.S., Kalica, A.R., Chanock, R.M., 1972. Visualization by immune electron microscopy of a 27-nm particle associated with acute infectious nonbacterial gastroenteritis. Journal of virology 10, 1075-1081.

Karst, S.M., Wobus, C.E., Lay, M., Davidson, J., Virgin, H.W., 2003. STAT1-dependent innate immunity to a norwalk-like virus. Science 299, 1575-1578.

Katayama, K., Shirato-Horikoshi, H., Kojima, S., Kageyama, T., Oka, T., Hoshino, F.B., Fukushi, S., Shinohara, M., Uchida, K., Suzuki, Y., Gojobori, T., Takeda, N., 2002. Phylogenetic analysis of the complete genome of 18 norwalk-like viruses. Virology 299, 225-239.

Khamrin, P., Kumthip, K., Supadej, K., Thongprachum, A., Okitsu, S., Hayakawa, S., Ushijima, H., Maneekarn, N., 2017. Noroviruses and sapoviruses associated with acute gastroenteritis in pediatric patients in Thailand: increased detection of recombinant norovirus GII.P16/GII.13 strains. Archives of virology 162, 3371-3380.

Khamrin, P., Kumthip, K., Yodmeeklin, A., Supadej, K., Ukarapol, N., Thongprachum, A., Okitsu, S., Hayakawa, S., Ushijima, H., Maneekarn, N., 2016. Molecular characterization of norovirus GII.17 detected in healthy adult, intussusception patient, and acute gastroenteritis children in Thailand. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases 44, 330-333.

Khamrin, P., Maneekarn, N., Peerakome, S., Tonusin, S., Malasao, R., Mizuguchi, M., Okitsu, S., Ushijima, H., 2007. Genetic diversity of noroviruses and sapoviruses in children hospitalized with acute gastroenteritis in Chiang Mai, Thailand. Journal of medical virology 79, 1921-1926.

Khamrin, P., Maneekarn, N., Thongprachum, A., Chaimongkol, N., Okitsu, S., Ushijima, H., 2010. Emergence of new norovirus variants and genetic heterogeneity of noroviruses and sapoviruses in children admitted to hospital with diarrhea in Thailand. Journal of medical virology 82, 289-296.

Kim, J.S., Kim, H.S., Hyun, J., Kim, H.S., Song, W., 2015. Molecular epidemiology of human norovirus in Korea in 2013. BioMed research international 2015.

Kitamoto, N., Oka, T., Katayama, K., Li, T.C., Takeda, N., Kato, Y., Miyoshi, T., Tanaka, T., 2012. Novel monoclonal antibodies broadly reactive to human recombinant sapovirus-like particles. Microbiology and immunology 56, 760-770.

Kittigul, L., Pombubpa, K., Taweekate, Y., Diraphat, P., Sujirarat, D., Khamrin, P., Ushijima, H., 2010. Norovirus GII-4 2006b variant circulating in patients with acute gastroenteritis in Thailand during a 2006-2007 study. Journal of medical virology 82, 854-860.

Kjeldsberg, E., 1977. Small spherical viruses in faeces from gastroenteritis patients. Acta pathologica et microbiologica Scandinavica. Section B, Microbiology 85B, 351-354.

Knipe, D.M., Howley, P., 2013. Fields virology, Vol 1. Wolters Kluwer Health.

Kobayashi, S., Fujiwara, N., Yasui, Y., Yamashita, T., Hiramatsu, R., Minagawa, H., 2012. A foodborne outbreak of sapovirus linked to catered box lunches in Japan. Archives of virology 157, 1995-1997.

Kojima, S., Kageyama, T., Fukushi, S., Hoshino, F.B., Shinohara, M., Uchida, K., Natori, K., Takeda, N., Katayama, K., 2002. Genogroup-specific PCR primers for detection of Norwalk-like viruses. Journal of virological methods 100, 107-114.

Kroneman, A., Vega, E., Vennema, H., Vinjé, J., White, P.A., Hansman, G., Green, K., Martella, V., Katayama, K., Koopmans, M., 2013. Proposal for a unified norovirus nomenclature and genotyping. Archives of Virology 158, 2059-2068.

Kroneman, A., Verhoef, L., Harris, J., Vennema, H., Duizer, E., van Duynhoven, Y., Gray, J., Iturriza, M., Böttiger, B., Falkenhorst, G., Johnsen, C., von Bonsdorff, C.H., Maunula, L., Kuusi, M., Pothier, P., Gallay, A., Schreier, E., Höhne, M., Koch, J., Szücs, G., Reuter, G., Krisztalovics, K., Lynch, M., McKeown, P., Foley, B., Coughlan, S., Ruggeri, F.M., Di Bartolo, I., Vainio, K., Isakbaeva, E., Poljsak-Prijatelj, M., Grom, A.H., Mijovski, J.Z., Bosch, A., Buesa, J., Fauquier, A.S., Hernandéz-Pezzi, G., Hedlund, K.O., Koopmans, M., 2008. Analysis of integrated virological and epidemiological reports of norovirus outbreaks collected within the foodborne viruses in Europe network from 1 July 2001 to 30 June 2006. Journal of clinical microbiology 46, 2959-2965.

Kumar, S., Stecher, G., Tamura, K., 2016. Mega7: Molecular evolutionary genetics analysis version 7.0 for bigger datasets. Molecular biology and evolution 33, 1870-1874.

Lambden, P.R., Caul, E.O., Ashley, C.R., Clarke, I.N., 1993. Sequence and genome organization of a human small round-structured (Norwalk-like) virus. Science 259, 516-519.

Lasure, N., Gopalkrishna, V., 2017. Epidemiological profile and genetic diversity of sapoviruses (SaVs) identified in children suffering from acute gastroenteritis in Pune, Maharashtra, Western India, 2007-2011. Epidemiology and infection 145, 106-114.

Lee, L.E., Cebelinski, E.A., Fuller, C., Keene, W.E., Smith, K., Vinjé, J., Besser, J.M., 2012. Sapovirus outbreaks in long-term care facilities, Oregon and Minnesota, USA, 2002-2009. Emerging infectious diseases 18, 873-876.

Lee, S.G., Cho, H.G., Paik, S.Y., 2015. Molecular epidemiology of norovirus in South Korea. BMB reports 48, 61-67.

Leshem, E., Wikswo, M., Barclay, L., Brandt, E., Storm, W., Salehi, E., DeSalvo, T., Davis, T., Saupe, A., Dobbins, G., Booth, H.A., Biggs, C., Garman, K., Woron, A.M., Parashar, U.D., Vinjé, J., Hall, A.J., 2013. Effects and clinical significance of GII.4 Sydney norovirus, United States, 2012-2013. Emerging infectious diseases 19, 1231-1238.

Lim, K.L., Hewitt, J., Sitabkhan, A., Eden, J.S., Lun, J., Levy, A., Merif, J., Smith, D., Rawlinson, W.D., White, P.A., 2016. A multi-site study of norovirus molecular epidemiology in Australia and New Zealand, 2013-2014. PloS one 11, e0145254.

Lindell, A.T., Grillner, L., Svensson, L., Wirgart, B.Z., 2005. Molecular epidemiology of norovirus infections in Stockholm, Sweden, during the years 2000 to 2003: Association of the GGIIb genetic cluster with infection in children. Journal of clinical microbiology 43, 1086-1092.

Lindesmith, L.C., Beltramello, M., Donaldson, E.F., Corti, D., Swanstrom, J., Debbink, K., Lanzavecchia, A., Baric, R.S., 2012. Immunogenetic mechanisms driving norovirus GII.4 antigenic variation. PLoS Pathogens 8, e1002705.

Lindesmith, L.C., Donaldson, E.F., LoBue, A.D., Cannon, J.L., Zheng, D.P., Vinje, J., Baric, R.S., 2008. Mechanisms of GII.4 norovirus persistence in human populations. PLoS medicine 5, e31.

Liu, B., Clarke, I.N., Lambden, P.R., 1996. Polyprotein processing in Southampton virus: identification of 3C-like protease cleavage sites by in vitro mutagenesis. Journal of virology 70, 2605-2610.

Liu, X., Yamamoto, D., Saito, M., Imagawa, T., Ablola, A., Tandoc Iii, A.O., Segubre-Mercado, E., Lupisan, S.P., Okamoto, M., Furuse, Y., Saito, M., Oshitani, H., 2015. Molecular detection and characterization of

sapovirus in hospitalized children with acute gastroenteritis in the Philippines. Journal of clinical virology: the official publication of the Pan American Society for Clinical Virology 68, 83-88.

Lochridge, V.P., Hardy, M.E., 2003. Snow mountain virus genome sequence and virus-like particle assembly. Virus genes 26, 71-82.

Loury, P., Le Guyader, F.S., Le Saux, J.C., Ambert-Balay, K., Parrot, P., Hubert, B., 2015. A norovirus oyster-related outbreak in a nursing home in France, January 2012. Epidemiology and infection 143, 2486-2493.

Lu, J., Ling, F., Limei, S., Hanri, Z., Yanling, L., Huanying, Z., Siwei, W., Feng, Y., Tie, S., Jinyan, L., Changwen, K., Yonghui, Z., Jan, V., Hui, L., 2017. Association of GII.P16-GII.2 recombinant norovirus strain with increased norovirus outbreaks, Guangdong, China, 2016. Emerging infectious diseases 23, 1188-1190.

Lu, J., Sun, L., Fang, L., Yang, F., Mo, Y., Lao, J., Zheng, H., Tan, X., Lin, H., Rutherford, S., Guo, L., KE, C., Hui, L., 2015. Gastroenteritis outbreaks caused by norovirus GII.17, Guangdong province, China, 2014-2015. Emerging infectious diseases 21, 1240-1242.

Luke Tzu-Chi, L., Ting-Yu, K., Ching-Yi, W., Wan-Ting, L., Aron, J.H., Fang-Tzy, W., 2017. Recombinant GII.P16-GII.2 norovirus, Taiwan, 2016. Emerging infectious diseases 23, 1180-1183.

Mäde, D., Trübner, K., Neubert, E., Höhne, M., Johne, R., 2013. Detection and typing of norovirus from frozen strawberries involved in a large-scale gastroenteritis outbreak in Germany. Food and environmental virology 5, 162-168.

Madeley, C.R., 1979. Comparison of the features of astroviruses and caliciviruses seen in samples of feces by electron microscopy. Journal of infectious diseases 139, 519-523.

Malasao, R., Maneekarn, N., Khamrin, P., Pantip, C., Tonusin, S., Ushijima, H., Peerakome, S., 2008. Genetic diversity of norovirus, sapovirus, and astrovirus isolated from children hospitalized with acute gastroenteritis in Chiang Mai, Thailand. Journal of medical virology 80, 1749-1755.

Mans, J., Murray, T.Y., Nadan, S., Netshikweta, R., Page, N.A., Taylor, M.B., 2016. Norovirus diversity in children with gastroenteritis in South Africa from 2009 to 2013: GII.4 variants and recombinant strains predominate. Epidemiology and infection 144, 907-916.

Mans, J., Murray, T.Y., Taylor, M.B., 2014. Novel norovirus recombinants detected in South Africa. Virology journal 11, 1-9.

Martella, V., Decaro, N., Lorusso, E., Radogna, A., Moschidou, P., Amorisco, F., Lucente, M.S., Desario, C., Mari, V., Elia, G., Banyai, K., Carmichael, L.E., Buonavoglia, C., 2009. Genetic heterogeneity and recombination in canine noroviruses. Journal of virology 83, 11391-11396.

Martella, V., Medici, M.C., De Grazia, S., Tummolo, F., Calderaro, A., Bonura, F., Saporito, L., Terio, V., Catella, C., Lanave, G., Buonavoglia, C., Giammanco, G.M., 2013. Evidence for recombination between pandemic GII.4 norovirus strains New Orleans 2009 and Sydney 2012. Journal of clinical microbiology 51, 3855-3857.

Mathijs, E., Denayer, S., Palmeira, L., Botteldoorn, N., Scipioni, A., Vanderplasschen, A., Thiry, E., Dierick, K., 2011. Novel norovirus recombinants and of GII.4 sub-lineages associated with outbreaks between 2006 and 2010 in Belgium. Virology journal 8, 310.

Mathijs, E., Muylkens, B., Mauroy, A., Ziant, D., Delwiche, T., Thiry, E., 2010. Experimental evidence of recombination in murine noroviruses. The Journal of general virology 91, 2723-2733.

Matsushima, Y., Ishikawa, M., Shimizu, T., Komane, A., Kasuo, S., Shinohara, M., Nagasawa, K., Kimura, H., Ryo, A., Okabe, N., Haga, K., Doan, Y.H.,

Katayama, K., Shimizu, H., 2015. Genetic analyses of GII.17 norovirus strains in diarrheal disease outbreaks from December 2014 to March 2015 in Japan reveal a novel polymerase sequence and amino acid substitutions in the capsid region. Euro surveillance: bulletin Européen sur les maladies transmissibles = European communicable disease bulletin 20, pii: 21173.

Matussek, A., Dienus, O., Djeneba, O., Simpore, J., Nitiema, L., Nordgren, J., 2015. Molecular characterization and genetic susceptibility of sapovirus in children with diarrhea in Burkina Faso. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases. 32, 396-400.

Medici, M.C., Tummolo, F., Martella, V., Giammanco, G.M., De Grazia, S., Arcangeletti, M.C., De Conto, F., Chezzi, C., Calderaro, A., 2014. Novel recombinant GII.P16_GII.13 and GII.P16_GII.3 norovirus strains in Italy. Virus research 188, 142-145.

Mladenova, Z., Steyer, A., Steyer, A.F., Ganesh, B., Petrov, P., Tchervenjakova, T., Iturriza-Gomara, M., 2015. Aetiology of acute paediatric gastroenteritis in Bulgaria during summer months: prevalence of viral infections. Journal of medical microbiology 64, 272-282.

Morens, D., Zweighaft, R., Vernon, T., Gary, G.W., Eslien, J., Wood, B., Holman, R., Dolin, R., 1979. A waterborne outbreak of gastroenteritis with secondary person-to-person spread. The Lancet 313, 964-966.

Motomura, K., Boonchan, M., Noda, M., Tanaka, T., Takeda, N., 2016. Norovirus epidemics caused by new GII.2 chimera viruses in 2012–2014 in Japan. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases. 42, 49-52.

Nakata, S., Honma, S., Numata, K.K., Kogawa, K., Ukae, S., Morita, Y., Adachi, N., Chiba, S., 2000. Members of the family caliciviridae (Norwalk virus and Sapporo virus) are the most prevalent cause of gastroenteritis

outbreaks among infants in Japan. The Journal of infectious diseases 181, 2029-2032.

Neesanant, P., Sirinarumitr, T., Chantakru, S., Boonyaprakob, U., Chuwongkomon, K., Bodhidatta, L., Sethabutr, O., Abente, E.J., Supawat, K., Mason, C.J., 2013. Optimization of one-step real-time reverse transcription-polymerase chain reaction assays for norovirus detection and molecular epidemiology of noroviruses in Thailand. Journal of virological methods 194, 317-325.

Nguyen, T.A., Yagyu, F., Okame, M., Phan, T.G., Trinh, Q.D., Yan, H., Hoang, K.T., Cao, A.T.H., Le Hoang, P., Okitsu, S., Ushijima, H., 2007. Diversity of viruses associated with acute gastroenteritis in children hospitalized with diarrhea in Ho Chi Minh City, Vietnam. Journal of medical virology 79, 582-590.

Niendorf, S., Jacobsen, S., Faber, M., Eis-Hübinger, A.M., Hofmann, J., Zimmermann, O., Höhne, M., Bock, C.T., 2017. Steep rise in norovirus cases and emergence of a new recombinant strain GII.P16-GII.2, Germany, winter 2016. Euro surveillance: bulletin Européen sur les maladies transmissibles = European communicable disease bulletin 22, pii: 30447.

Noel, J.S., Fankhauser, R.L., Ando, T., Monroe, S.S., Glass, R.I., 1999. Identification of a distinct common strain of "norwalk-like viruses" having a global distribution. Journal of infectious diseases 179, 1334-1344.

Oka, T., Katayama, K., Ogawa, S., Hansman, G.S., Kageyama, T., Ushijima, H., Miyamura, T., Takeda, N., 2005. Proteolytic processing of sapovirus ORF1 polyprotein. Journal of virology 79, 7283-7290.

Oka, T., Miyashita, K., Katayama, K., Wakita, T., Takeda, N., 2009. Distinct genotype and antigenicity among genogroup II sapoviruses. Microbiology and immunology 53, 417-420.

Oka, T., Mori, K., Iritani, N., Harada, S., Ueki, Y., Iizuka, S., Mise, K., Murakami, K., Wakita, T., Katayama, K., 2012. Human sapovirus classification based on complete capsid nucleotide sequences. Archives of virology. 157, 349-352.

Oka, T., Murakami, K., Wakita, T., Katayama, K., 2011. Comparative site-directed mutagenesis in the catalytic amino acid triad in calicivirus proteases. Microbiology and immunology 55, 108-114.

Oka, T., Wang, Q., Katayama, K., Saif, L.J., 2015. Comprehensive review of human sapoviruses. Clinical microbiology reviews 28, 32-53.

Okada, M., Yamashita, Y., Oseto, M., Ogawa, T., Kaiho, I., Shinozaki, K., 2006. Genetic variability in the sapovirus capsid protein. Virus genes 33, 157-161.

Osborne, C.M., Montano, A.C., Robinson, C.C., Schultz-Cherry, S., Dominguez, S.R., 2015. Viral gastroenteritis in children in Colorado 2006–2009. Journal of medical virology 87, 931-939.

Page, N.A., Groome, M.J., Nadan, S., Netshikweta, R., Keddy, K.H., Poonsamy, B., Moyes, J., Walaza, S., Kahn, K., Madhi, S.A., Taylor, M.B., Mans, J., Cohen, C., 2017. Norovirus epidemiology in South African children. Epidemiology and infection 145, 1942-1952.

Pang, X.L., Lee, B.E., Tyrrell, G.J., Preiksaitis, J.K., 2009. Epidemiology and genotype analysis of sapovirus associated with gastroenteritis outbreaks in Alberta, Canada: 2004-2007. Journal of infectious diseases 199, 547-551.

Parwani, A.V., Saif, L.J., Kang, S.Y., 1990. Biochemical characterization of porcine enteric calicivirus: analysis of structural and nonstructural viral proteins. Archives of virology 112, 41-53.

Patel, M.M., Hall, A.J., Vinjé, J., Parashar, U.D., 2009. Noroviruses: A comprehensive review. Journal of clinical virology: the official publication of the Pan American Society for Clinical Virology 44, 1-8.

Patel, M.M., Widdowson, M.A., Glass, R.I., Akazawa, K., Vinjé, J., Parashar, U.D., 2008. Systematic literature review of role of noroviruses in sporadic gastroenteritis. Emerging infectious diseases 14, 1224-1231.

Phan, T.G., Kuroiwa, T., Kaneshi, K., Ueda, Y., Nakaya, S., Nishimura, S., Yamamoto, A., Sugita, K., Nishimura, T., Yagyu, F., Okitsu, S., Müller, W.E.G., Maneekarn, N., Ushijima, H., 2006a. Changing distribution of norovirus genotypes and genetic analysis of recombinant GIIb among infants and children with diarrhea in Japan. Journal of medical virology 78, 971-978.

Phan, T.G., Nguyen, T.A., Kuroiwa, T., Kaneshi, K., Ueda, Y., Nakaya, S., Nishimura, S., Nishimura, T., Yamamoto, A., Okitsu, S., Ushijima, H., 2005a. Viral diarrhea in Japanese children: results from a one-year epidemiologic study. Clinical laboratory 51, 183-191.

Phan, T.G., Nguyen, T.A., Nishimura, S., Nishimura, T., Yamamoto, A., Okitsu, S., Ushijima, H., 2005b. Etiologic agents of acute gastroenteritis among Japanese infants and children: virus diversity and genetic analysis of sapovirus. Archives of virology 150, 1415-1424.

Phan, T.G., Takanashi, S., Kaneshi, K., Ueda, Y., Nakaya, S., Nishimura, S., Sugita, K., Nishimura, T., Yamamoto, A., Yagyu, F., Okitsu, S., Maneekarn, N., Ushijima, H., 2006b. Detection and genetic characterization of norovirus strains circulating among infants and children with acute gastroenteritis in Japan during 2004-2005. Clinical laboratory 52, 519-525.

Phan, T.G., Yagyu, F., Kozlov, V., Kozlov, A., Okitsu, S., Muller, WE, Ushijima, H., 2006c, Viral gastroenteritis and genetic characterization of recombinant norovirus circulating in Eastern Russia. Clinical laboratory 52, 247-53.

Phumpholsup, T., Chieochansin, T., Vongpunsawad, S., Vuthitanachot, V., Payungporn, S., Poovorawan, Y., 2015a. Human norovirus genogroup II

recombinants in Thailand, 2009-2014. Archives of virology 160, 2603-2609.

Phumpholsup, T., Theamboonlers, A., Wanlapakorn, N., Felber, J.A., Suvaporn, A., Puthanakit, T., Chomto, S., Payungporn, S., Poovorawan, Y., 2015b, Norovirus outbreak at a daycare center in Bangkok, 2014. The Southeast Asian journal of tropical medicine and public health 46, 616-623.

Pongsuwanna, Y., Tacharoenmuang, R., Prapanpoj, M., Sakon, N., Komoto, S., Guntapong, R., Taniguchi, K., 2017. Monthly distribution of norovirus and sapovirus causing viral gastroenteritis in Thailand. Japanese journal of infectious diseases 70, 84-86.

Prasad, B.V.V., Hardy, M.E., Dokland, T., Bella, J., Rossmann, M.G., Estes, M.K., 1999. X-ray crystallographic structure of the norwalk virus capsid. Science 286, 287-290.

Puustinen, L., Blazevic, V., Huhti, L., Szakal, E.D., Halkosalo, A., Salminen, M., Vesikari, T., 2012. Norovirus genotypes in endemic acute gastroenteritis of infants and children in Finland between 1994 and 2007. Epidemiology and infection 140, 268-275.

Ramani, S., Atmar, R.L., Estes, M.K., 2014. Epidemiology of human noroviruses and updates on vaccine development. Current opinion in gastroenterology 30, 25-33.

Rasanen, S., Lappalainen, S., Kaikkonen, S., Hamalainen, M., Salminen, M., Vesikari, T., 2010. Mixed viral infections causing acute gastroenteritis in children in a waterborne outbreak. Epidemiology and infection 138, 1227-34.

Reuter, G., Krisztalovics, K., Vennema, H., Koopmans, M., Szűcs, G., 2005. Evidence of the etiological predominance of norovirus in gastroenteritis outbreaks-emerging new-variant and recombinant noroviruses in Hungary. Journal of medical virology 76, 598-607.

Reymao, T.K., Hernandez, J.D., Costa, S.T., Sousa, M.S., Oliveira, D.S., Silva, L.D., Bandeira, R.D., Lima, I.C., Soares, L.D., Mascarenhas, J.D., Gabbay, Y.B., 2016. Sapoviruses in children with acute gastroenteritis from Manaus, Amazon region, Brazil, 2010-2011. Revista do Instituto de Medicina Tropical de Sao Paulo 58, 81.

Richardson, C., Bargatze, R.F., Goodwin, R., Mendelman, P.M., 2013. Norovirus virus-like particle vaccines for the prevention of acute gastroenteritis. Expert review of vaccines 12, 155-167.

Rohayem, J., Münch, J., Rethwilm, A., 2005. Evidence of Recombination in the Norovirus Capsid Gene. Journal of virology 79, 4977-4990.

Sang, S., Zhao, Z., Suo, J., Xing, Y., Jia, N., Gao, Y., Xie, L., Du, M., Liu, B., Ren, S., Liu, Y., 2014. Report of recombinant norovirus GII.g/GII.12 in Beijing, China. PloS one 9, e88210.

Shimizu, H., Phan, T.G., Nishimura, S., Okitsu, S., Maneekarn, N., Ushijima, H., 2007. An outbreak of adenovirus serotype 41 infection in infants and children with acute gastroenteritis in Maizuru City, Japan. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases 7, 279-284.

Shioda, K., Cosmas, L., Audi, A., Gregoricus, N., Vinje, J., Parashar, U.D., Montgomery, J.M., Feikin, D.R., Breiman, R.F., Hall, A.J., 2016. Population-based incidence rates of diarrheal disease associated with norovirus, sapovirus, and astrovirus in Kenya. PloS one 11, e0145943.

Siebenga, J.J., Vennema, H., Zheng, D.-P., Vinjé, J., Lee, B.E., Pang, X.-L., Ho, E.C.M., Lim, W., Choudekar, A., Broor, S., Halperin, T., Rasool, N.B.G., Hewitt, J., Greening, G.E., Jin, M., Duan, Z.-J., Lucero, Y., O'Ryan, M., Hoehne, M., Schreier, E., Ratcliff, R.M., White, P.A., Iritani, N., Reuter, G., Koopmans, M., 2009. Norovirus illness is a global problem: Emergence and spread of norovirus GII.4 variants, 2001-2007. Journal of infectious diseases 200, 802-812.

Sisay, Z., Djikeng, A., Berhe, N., Belay, G., Gebreyes, W., Abegaz, W.E., Njahira, M.N., Wang, Q.H., Saif, L.J., 2016. Prevalence and molecular characterization of human noroviruses and sapoviruses in Ethiopia. Archives of virology 161, 2169-2182.

Spratt, H.C., Marks, M.I., Gomersall, M., Gill, P., Pai, C.H., 1978. Nosocomial infantile gastroenteritis associated with minirotavirus and calicivirus. The Journal of pediatrics 93, 922-926.

Svraka, S., Vennema, H., van der Veer, B., Hedlund, K.-O., Thorhagen, M., Siebenga, J., Duizer, E., Koopmans, M., 2010. Epidemiology and genotype analysis of emerging sapovirus-associated infections across Europe. Journal of clinical microbiology 48, 2191-2198.

Takanashi, S., Wang, Q., Chen, N., Shen, Q., Jung, K., Zhang, Z., Yokoyama, M., Lindesmith, L.C., Baric, R.S., Saif, L.J., 2011. Characterization of emerging GII.g/GII.12 noroviruses from a gastroenteritis outbreak in the United States in 2010. Journal of clinical microbiology 49, 3234-3244.

Tan, D., Deng, L., Wang, M., Li, X., Ma, Y., Liu, W., 2015. High prevalence and genetic diversity of noroviruses among children with sporadic acute gastroenteritis in Nanning City, China, 2010-2011. Journal of medical virology 87, 498-503.

Tan, M., Huang, P., Meller, J., Zhong, W., Farkas, T., Jiang, X., 2003.Mutations within the P2 domain of norovirus capsid affect binding to human histo-blood group antigens: Evidence for a binding pocket. Journal of virology 77, 12562-12571.

Terashima, H., Chiba, S., Sakuma, Y., Kogasaka, R., Nakata, S., Minami, R., Horino, K., Nakao, T., 1983. The polypeptide of a human calicivirus. Archives of Virology 78, 1-7.

Thongprachum, A., Chan-it, W., Khamrin, P., Saparpakorn, P., Okitsu, S., Takanashi, S., Mizuguchi, M., Hayakawa, S., Maneekarn, N., Ushijima, H., 2014. Molecular epidemiology of norovirus associated with gastroenteritis and emergence of norovirus GII.4 variant 2012 in Japanese pediatric patients. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases 23, 65-73.

Thongprachum, A., Khamrin, P., Chan-It, W., Malasao, R., Chaimongkol, N., Okitsu, S., Mizuguchi, M., Maneekarn, N., Hayakawa, S., Ushijima, H., 2013. Emergence of norovirus GII/4 2006a and 2006b variants in hospitalized children with acute gastroenteritis in Thailand. Clinical laboratory 59, 271-276.

Thongprachum, A., Khamrin, P., Maneekarn, N., Hayakawa, S., Ushijima, H., 2016. Epidemiology of gastroenteritis viruses in Japan: Prevalence, seasonality, and outbreak. Journal of medical virology 88, 551-570.

Thongprachum, A., Okitsu, S., Khamrin, P., Maneekarn, N., Hayakawa, S., Ushijima, H., 2017. Emergence of norovirus GII.2 and its novel recombination during the gastroenteritis outbreak in Japanese children in mid-2016. Infection, genetics and evolution: journal of molecular epidemiology and evolutionary genetics in infectious diseases 51, 86-88.

Thongprachum, A., Takanashi, S., Kalesaran, A.F.C., Okitsu, S., Mizuguchi, M., Hayakawa, S., Ushijima, H., 2015. Four-year study of viruses that cause diarrhea in Japanese pediatric outpatients. Journal of medical virology 87, 1141-1148.

Thorne, L.G., Goodfellow, I.G., 2014 Norovirus gene expression and replication. Journal of general virology 95, 278-291.

Timurkan, M.O., Aydin, H., Aktas, O., 2017. Frequency and molecular characterization of human norovirus in Erzurum, Turkey. Turkish journal of medical sciences 47, 960-966.

Tran, A., Talmud, D., Lejeune, B., Jovenin, N., Renois, F., Payan, C., Leveque, N., Andreoletti, L., 2010. Prevalence of rotavirus, adenovirus, norovirus, and astrovirus infections and coinfections among hospitalized children in Northern France. Journal of clinical microbiology 48, 1943-1946.

Truong, T.C., Than, V.T., Kim, W., 2014. Evolutionary phylodynamics of korean noroviruses reveals a novel GII.2/GII.10 recombination event. PloS one 9, e113966.

Tse, H., Lau, S.K.P., Chan, W.-M., Choi, G.K.Y., Woo, P.C.Y., Yuen, K.Y., 2012. Complete genome sequences of novel canine noroviruses in Hong Kong. Journal of virology 86, 9531-9532.

Tuladhar, E., Hazeleger, W.C., Koopmans, M., Zwietering, M.H., Beumer, R.R., Duizer, E., 2012. Residual viral and bacterial contamination of surfaces after cleaning and disinfection. Applied and environmental microbiology 78, 7769-7775.

van Beek, J., Ambert-Balay, K., Botteldoorn, N., Eden, J.S., Fonager, J., Hewitt, J., Iritani, N., Kroneman, A., Vennema, H., Vinje, J., White, P.A., Koopmans, M., 2013. Indications for worldwide increased norovirus activity associated with emergence of a new variant of genotype II.4, late 2012. Euro surveillance: bulletin Europeen sur les maladies transmissibles = European communicable disease bulletin 18, 8-9.

van Regenmortel, M.H.V., Mahy, B.W.J., 2010. Desk encyclopedia of general virology. Elsevier Science.

Vega, E., Barclay, L., Gregoricus, N., Shirley, S.H., Lee, D., Vinjé, J., 2014. Genotypic and epidemiologic trends of norovirus outbreaks in the United States, 2009 to 2013. Journal of clinical microbiology 52, 147-155.

Vennema, H., de Bruin, E., Koopmans, M., 2002. Rational optimization of generic primers used for norwalk-like virus detection by reverse transcriptase polymerase chain reaction. Journal of clinical virology: the official

publication of the Pan American Society for Clinical Virology 25, 233-235.

Verhoef, L.P.B., Kroneman, A., van Duynhoven, Y., Boshuizen, H., van Pelt, W., Koopmans, M., Foodborne Viruses in Europe Network., 2009. Selection tool for foodborne norovirus outbreaks. Emerging infectious diseases 15, 31-38.

Vinjé, J., 2015. Advances in laboratory methods for detection and typing of norovirus. Journal of clinical microbiology 53, 373-381.

Vongpunsawad, S., Venkataram Prasad, B.V., Estes, M.K., 2013. Norwalk virus minor capsid protein VP2 associates within the VP1 shell domain. Journal of virology 87, 4818-4825.

Waters, A., Coughlan, S., Hall, W.W., 2007. Characterisation of a novel recombination event in the norovirus polymerase gene. Virology 363, 11-14.

White, P.A., 2014. Evolution of norovirus. Clinical microbiology and infection: the official publication of the European Society of Clinical Microbiology and Infectious Diseases 20, 741-745.

White, P.A., Hansman, G.S., Li, A., Dable, J., Isaacs, M., Ferson, M., McIver, C.J., Rawlinson, W.D., 2002. Norwalk-like virus 95/96-US strain is a major cause of gastroenteritis outbreaks in Australia. Journal of medical virology 68, 113-118.

Widdowson, M.A., Rockx, B., Schepp, R., van der Poel, W.H.M., Vinje, J., van Duynhoven, Y.T., Koopmans, M.P., 2005. Detection of serum antibodies to bovine norovirus in veterinarians and the general population in the Netherlands. Journal of medical virology 76, 119-128.

Wu, X., Han, J., Chen, L., Xu, D., Shen, Y., Zha, Y., Zhu, X., Ji, L., 2015. Prevalence and genetic diversity of noroviruses in adults with acute gastroenteritis in Huzhou, China, 2013-2014. Archives of virology 160, 1705-1713.

Yan, H., Yagyu, F., Okitsu, S., Nishio, O., Ushijima, H., 2003. Detection of norovirus (GI, GII), sapovirus and astrovirus in fecal samples using reverse transcription single-round multiplex PCR. Journal of virological methods 114, 37-44.

Yokoyama, M., Oka, T., Kojima, H., Nagano, T., Okabe, T., Katayama, K., Wakita, T., Kanda, T., Sato, H., 2012. Structural basis for specific recognition of substrates by sapovirus protease. Frontiers in microbiology 3, 312.

Zeng, M., Gong, Z., Zhang, Y., Zhu, Q., Wang, X., 2011. Prevalence and genetic diversity of norovirus in outpatient children with acute diarrhea in Shanghai, China. Japanese journal of infectious diseases 64, 417-422.

Zhang, H.Y., Qiao, M.K., Wang, X., He, M., Shi, L.M., Xie, G.X., Jin, H.Y., 2016a. Molecular diversity of sapovirus infection in outpatients living in Nanjing, china (2011-2013). Gastroenterology research and practice 2016, 4210462.

Zhang, S.X., Li, L., Yin, J.W., Jin, M., Kong, X.Y., Pang, L.L., Zhou, Y.K., Tian, L.G., Chen, J.X., Zhou, X.N., 2016b. Emergence of human caliciviruses among diarrhea cases in southwest China. BMC infectious diseases 16, 511.

Zhirakovskaia, E.V., Tikunov, A.Y., Bodnev, S.A., Klemesheva, V.V., Netesov, S.V., Tikunova, N.V., 2015. Molecular epidemiology of noroviruses associated with sporadic gastroenteritis in children in Novosibirsk, Russia, 2003-2012. Journal of medical virology 87, 740-753.