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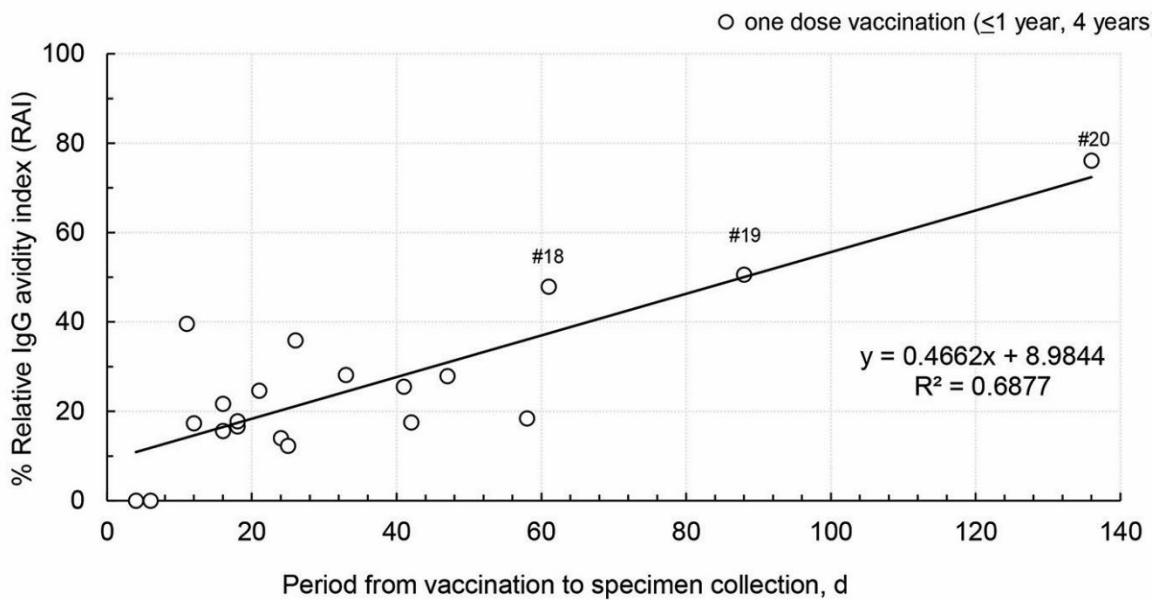
# Analysis of Suspected Measles Cases with Discrepant Measles-Specific IgM and rRT-PCR Test Results, Japan

## Appendix

**Appendix Table.** Primer and probe sequences used to detect febrile exanthematous viruses other than measles virus using real-time reverse transcription PCR or PCR\*

Virus	Primer/probe	Sequence (5'→3')	Reporter-quencher	Ref. no.
Rubella virus	NS(32–54)Fwd	CCTAHYCCCATGGAGAAACTCCT	FAM-MGB	(1)
	NS(143–160)Rev	AACATCGCGCACTTCCA		
	NS(93–106)Probe	CCGTGGCAGTTGG		
Enterovirus	Forward primer	CCCTGAATGCGGCTAATCC	FAM-BHQ1	(2)
	Reverse primer	ATTGTACCCATAAGCAGCCA		
	Probe	AACCGACTACTTGGGTGTCCTGTTTC		
Human parechovirus	ParechoF31	CTGGGGCCAAAAGCCA	FAM-MGB	(3)
	K30	GGTACCTTCTGGGCATCCTTC		
	HPeV-WT-MGB	AAACACTAGTTGTAWGCCCC		
Human herpesvirus 6	TAQ6E	CAAAGCCAAATTATCCAGAGCG	FAM-MGB	(4,5)
	TAQ6B	CGCTAGGTTGAGAATGATCGA		
	HHV6 probe	CACCAGACGTACACCCGAAGGAAT		
Human herpesvirus 7	TAQ7F	ATGTACCAATACGGTCCCACTTG	FAM-MGB	(6)
	TAQ7R	AGAGCTTGCCTGTCATGTT		
	HHV7 probe	CACGGCAATAACTCTAG		
Parvovirus B19	Parvo B19_fw	AATGCAGATGCCCTCCA	FAM-MGB	(7)
	Parvo B19_rev	ATGATTCTCTGACTGGT		
	Parvo B19 Taq_probe	AACASTGARACCCCGCGCTCTAGTAC		
Epstein-Barr virus	Forward primer	CTTAGAATGGTGGCCGGGCTGTAAAAT	NA	(8)
	Reverse primer	ATCCAGTACGTCTTGAGGCCAAG		
Cytomegalovirus	Forward primer	GCGCGTACCGTTGAAAGAAAAGCATAA	NA	(8)
	Reverse primer	TGGGCACTCGGGTCTTCATCTCTTAC		
Adenovirus	Forward primer	TTCCCCATGGCNCACAAYAC	NA	(9)
	Reverse primer	TGCCKRCTCATRGGGTGRAAGTT		

\*BHQ1, black hole quencher 1; FAM, carboxyfluorescein; Fwd, forward; HHV, human herpesvirus; MGB, minor groove binder; NA, not applicable; Ref., reference; Rev, reverse.



**Appendix Figure.** Correlation between the relative measles IgG avidity index and the interval from vaccination to specimen collection in 20 children who had 1 dose of measles vaccine, Japan. Nos. 18–20 correlate to patient numbers in Table 2. IgG, immunoglobulin G; RAI, relative avidity index.

## References

1. Okamoto K, Fujii K, Komase K. Development of a novel TaqMan real-time PCR assay for detecting rubella virus RNA. *J Virol Methods*. 2010;168:267–71. [PubMed](#)  
<https://doi.org/10.1016/j.jviromet.2010.05.016>
2. Verstrepen WA, Kuhn S, Kockx MM, Van De Vyvere ME, Mertens AH. Rapid detection of enterovirus RNA in cerebrospinal fluid specimens with a novel single-tube real-time reverse transcription-PCR assay. *J Clin Microbiol*. 2001;39:4093–6. [PubMed](#)  
<https://doi.org/10.1128/JCM.39.11.4093-4096.2001>
3. Benschop K, Molenkamp R, van der Ham A, Wolthers K, Beld M. Rapid detection of human parechoviruses in clinical samples by real-time PCR. *J Clin Virol*. 2008;41:69–74. [PubMed](#)  
<https://doi.org/10.1016/j.jcv.2007.10.004>
4. Locatelli G, Santoro F, Veglia F, Gobbi A, Lusso P, Malnati MS. Real-time quantitative PCR for human herpesvirus 6 DNA. *J Clin Microbiol*. 2000;38:4042–8. [PubMed](#)  
<https://doi.org/10.1128/JCM.38.11.4042-4048.2000>

5. Ogawa H, Suzutani T, Baba Y, Koyano S, Nozawa N, Ishibashi K, et al. Etiology of severe sensorineural hearing loss in children: independent impact of congenital cytomegalovirus infection and GJB2 mutations. *J Infect Dis.* 2007;195:782–8. [PubMed](#)  
<https://doi.org/10.1086/511981>
6. Fernandez C, Boutolleau D, Manichanh C, Mangeney N, Agut H, Gautheret-Dejean A. Quantitation of HHV-7 genome by real-time polymerase chain reaction assay using MGB probe technology. *J Virol Methods.* 2002;106:11–6. [PubMed](#) [https://doi.org/10.1016/S0166-0934\(02\)00131-3](https://doi.org/10.1016/S0166-0934(02)00131-3)
7. Takao S, Shigemoto N, Shimazu Y, Tanizawa Y, Fukuda S, Matsuo T. Detection of exanthematic viruses using a TaqMan real-time PCR assay panel in patients with clinically diagnosed or suspected measles. *Jpn J Infect Dis.* 2012;65:444–8. [PubMed](#)  
<https://doi.org/10.7883/yoken.65.444>
8. Tanaka T, Kogawa K, Sasa H, Nonoyama S, Furuya K, Sato K. Rapid and simultaneous detection of 6 types of human herpes virus (herpes simplex virus, varicella-zoster virus, Epstein-Barr virus, cytomegalovirus, human herpes virus 6A/B, and human herpes virus 7) by multiplex PCR assay. *Biomed Res.* 2009;30:279–85. [PubMed](#) <https://doi.org/10.2220/biomedres.30.279>
9. Miura-Ochiai R, Shimada Y, Konno T, Yamazaki S, Aoki K, Ohno S, et al. Quantitative detection and rapid identification of human adenoviruses. *J Clin Microbiol.* 2007;45:958–67. [PubMed](#)  
<https://doi.org/10.1128/JCM.01603-06>