

References

1. Barr IG, Hurt A, Iannello P, Tomasov C, Deed N, Komadina N. Increased adamantane resistance in influenza A(H3) viruses in Australia and neighbouring countries in 2005. *Antiviral Res.* 2007;73:112–7. DOI: 10.1016/j.antiviral.2006.08.002
2. Saito R, Li D, Suzuki H. Amantadine-resistant influenza A (H3N2) virus in Japan, 2005–2006. *N Engl J Med.* 2007;356:312–3. DOI: 10.1056/NEJMc062989
3. Hauge SH, Dudman S, Borgen K, Lackenby A, Hungnes O. Oseltamivir-resistant influenza viruses A (H1N1), Norway, 2007–08. *Emerg Infect Dis.* 2009;15:155–62. DOI: 10.3201/eid1502.081031
4. Hurt AC, Ernest J, Deng Y, Iannello P, Besselaar T, Birch C, et al. Emergence and spread of oseltamivir-resistant A (H1N1) influenza viruses in Oceania, South East Asia and South Africa. *Antiviral Res.* 2009;83:90–3. DOI: 10.1016/j.antiviral.2009.03.003
5. Sheu TG, Deyde V, Okomo-Adhiambo M, Garten R, Xu X, Bright R, et al. Surveillance for neuraminidase inhibitor resistance among human influenza A and B viruses circulating worldwide from 2004 to 2008. *Antimicrob Agents Chemother.* 2008;52:3284–92. DOI: 10.1128/AAC.00555-08
6. Gubareva LV, Matrosovich M, Brenner M, Bethell R, Webster R. Evidence for zanamivir resistance in an immunocompromised child infected with influenza B virus. *J Infect Dis.* 1998;178:1257–62. DOI: 10.1086/314440
7. Hurt AC, Holien J, Parker M, Kelso A, Barr I. Zanamivir-resistant influenza viruses with a novel neuraminidase mutation. *J Virol.* 2009;83:10366–73. Medline DOI: 10.1128/JVI.01200-09
8. Dapat C, Saito R, Kyaw Y, Naito M, Hasegawa G, Suzuki Y, et al. Epidemiology of human influenza A and B viruses in Myanmar from 2005 to 2007. *Intervirology.* 2009;52:310–20. DOI: 10.1159/000237738
9. Hurt AC, Barr I, Hartel G, Hampson A. Susceptibility of human influenza viruses from Australasia and South East Asia to the neuraminidase inhibitors zanamivir and oseltamivir. *Antiviral Res.* 2004;62:37–45. DOI: 10.1016/j.antiviral.2003.11.008
10. Tashiro M, McKimm-Breschkin J, Saito T, Klimov A, Macken C, Zambon M, et al. Surveillance for neuraminidase-inhibitor-resistant influenza viruses in Japan, 1996–2007. *Antivir Ther.* 2009;14:751–61. DOI: 10.3851/IMP1194
11. Suzuki Y, Saito R, Zaraket H, Dapat C, Caperig-Dapat I, Suzuki H. Rapid and specific detection of amantadine-resistant Ser31Asn mutated influenza A viruses by the cycling probe method. *J Clin Microbiol.* 2009; Epub ahead of print.
12. Okomo-Adhiambo M, Nguyen HT, Sleeman K, Sheu TG, Deyde VM, Garten RJ, et al. Host cell selection of influenza neuraminidase variants: implications for drug resistance monitoring in A (H1N1) viruses. *Antiviral Res.* 2009 Nov 13. Epub ahead of print.
13. McKimm-Breschkin J, Trivedi T, Hampson A, Hay A, Klimov A, Tashiro M, et al. Neuraminidase sequence analysis and susceptibilities of influenza virus clinical isolates to zanamivir and oseltamivir. *Antimicrob Agents Chemother.* 2003;47:2264–72. DOI: 10.1128/AAC.47.7.2264-2272.2003

Address for correspondence: Clyde Dapat, Department of Public Health, Graduate School of Medical and Dental Sciences, Niigata University, 1-757 Asahimachi-dori, Niigata City, Niigata Prefecture, 951-8510, Japan; email: clyde@med.niigata-u.ac.jp

The opinions expressed by authors contributing to this journal do not necessarily reflect the opinions of the Centers for Disease Control and Prevention or the institutions with which the authors are affiliated.

etymologia

Yersinia

[yər-sin'-e-ə]

This genus of gram-negative bacteria was named after bacteriologist Alexandre-Émile-John Yersin (1863–1943). Born in Switzerland, he studied medicine in Paris and began a successful early career in the laboratory. He worked on rabies with Pierre Roux and on the tubercle bacillus under Robert Koch in Germany. He later worked at the Institut Pasteur on the toxic properties of the diphtheria bacillus and eventually signed on as a doctor on a ship headed for Saigon and Manila. In 1894, while he still worked for a French shipping company, he investigated an outbreak of plague in Hong Kong. After 7 days in a makeshift laboratory, he isolated the plague bacterium, which he called *Pasteurella pestis*.

Japanese bacteriologist Shibasaburo Kitasato had arrived in Hong Kong, a few days before Yersin and also had isolated the bacterium. Kitasato published his findings in English and Japanese. Yersin published his in French. He also established a laboratory in Nha Trang, Vietnam, where he developed an antiplague serum that reduced the death rate from 90% to ≈7%. Since 1970, the organism has been called *Yersinia pestis*.

Source: Burns W. Alexandre Yersin and his adventures in Vietnam. 2003; Medical Research Council National Institute for Medical Research. <http://www.himr.mrc.ac.uk/millhillesays/2003/yersin/>; <http://www.whonamedit.com/doctor.cfm/2454.html>; Dorland's illustrated medical dictionary, 31st ed. Philadelphia: Saunders Elsevier; 2007.