

Table S1: Influenza A(H1N1)pdm09 and A(H3N2) virus isolates exhibiting RI or HRI by one or more NAIs (n=21).

#	Sub-type	Strain Designation	WHO CC	Oseltamivir	Zanamivir	Peramivir	Laninamivir	Substitution in virus isolate ^b	Substitution in original specimen ^b	Patient setting	Antiviral treatment	Immuno-compromised	Date of collection (y/m/d)
				Fold change in IC ₅₀ ^a									
1	H1N1	A/SENDAI/85/2016	Tokyo	<u>941</u>	1.0	<u>258</u>	2.4	H275Y	H275Y	Community	No	No	2016-12-17
2	H1N1	A/SENDAI/84/2016	Tokyo	<u>881</u>	0.9	<u>246</u>	2.1	H275Y	H275Y	Community	No	No	2016-12-15
3	H1N1	A/HAWAII/25/2017	Atlanta	<u>847</u>	0.9	<u>222</u>	1.5	H275Y	H275Y	Unknown	Unknown	Unknown	2017-04-20
4	H1N1	A/SHIZUOKA-C/58/2016	Tokyo	<u>842</u>	1.3	<u>240</u>	3.4	H275Y	H275Y	Community	No	No	2016-08-10
5	H1N1	A/FUKUOKA-C/42/2016	Tokyo	<u>834</u>	1.2	<u>215</u>	3.4	H275Y	H275Y	Community	Yes, oseltamivir	No	2016-12-22
6	H1N1	A/HAWAII/20/2017	Atlanta	<u>832</u>	0.8	<u>250</u>	1.7	H275Y	H275Y	Unknown	No	Unknown	2017-03-26
7	H1N1	A/VICTORIA/2500/2016	Melbourne	<u>642</u>	1.3	<u>111</u>	2.9	H275Y	H275Y	Hospital	Yes, oseltamivir	Yes	2016-08-07
8	H1N1	A/SYDNEY/158/2016	Melbourne	<u>610</u>	1.0	<u>141</u>	2.3	H275Y	H275Y	Hospital	Yes, oseltamivir	No	2016-07-08
9	H1N1	A/Guangdong-Zhongshan/SWL1326/2017	Beijing	<u>479</u>	1.6	n/t ^c	n/t	H275Y	Not available ^e	Hospital	Unknown	No	2017-04-11
10	H1N1	A/Zhejiang-Kecheng/SWL1187/2017	Beijing	<u>357</u>	1.0	n/t	n/t	H275Y	Not available	Hospital	Unknown	No	2017-03-04
11	H1N1	A/Hebei-Xinhua/SWL1106/2017	Beijing	<u>208</u>	0.7	n/t	n/t	H275Y	Not available	Hospital	Unknown	No	2017-02-07
12	H1N1	A/Fujian-Licheng/SWL1165/2017	Beijing	<u>187</u>	1.7	n/t	n/t	H275Y	Not available	Hospital	Unknown	No	2017-02-27
13	H1N1	A/CALIFORNIA/193/2016	Atlanta	<u>14</u>	8.8	2.7	2.9	D199G	D199G	Unknown	No	Unknown	2016-12-24
14	H1N1	A/Heilongjiang-Jianhua/SWL1249/2017	Beijing	9.8	<u>17</u>	n/t	n/t	S110F	Not available	Hospital	Unknown	No	2017-03-29
1	H3N2	A/Latvia/02-062187/2017	London	<u>14</u>	<u>11</u>	n/t	n/t	N329K	Not available	Hospital	Unknown	Unknown	2017-02-22
2	H3N2	A/Poland/17C/2017	London	<u>14</u>	8.1	n/t	n/t	N329K	N329K	Community	Unknown	Unknown	2017-03-01
3	H3N2	A/Poland/12186/2016	London	<u>14</u>	9.1	n/t	n/t	N329K	N329K	Hospital	No	Unknown	2016-12-12
4	H3N2	A/Luxembourg/61798/2016	London	<u>12</u>	7.4	n/t	n/t	None ^d	None	Community	Unknown	Unknown	2016-12-02
5	H3N2	A/CHIBA-C/96/2016	Tokyo	<u>11</u>	<u>19</u>	5.3	<u>17</u>	D151N	None	Community	Yes, zanamivir	No	2016-09-08
6	H3N2	A/Ireland/81104/2016	London	<u>10.5</u>	3.4	n/t	n/t	S331R	S331R	Community	No	Unknown	2016-12-15
7	H3N2	A/Guangdong-Zhenjiang/1326/2017	Beijing	5.5	<u>31</u>	n/t	n/t	D151G/D mix	Not available	Hospital	Unknown	No	2017-04-18

^a RI and HRI fold-change values are displayed underlined and in bold typeface.

^b Amino acid position numbering is A subtype specific. The majority of samples are sequenced using next generation sequencing methodology. Precise methodology differs by WHOCC. A minority of samples are sequenced by Sanger methodology.

^c n/t: not tested.

^d None: no amino acid substitutions compared to viruses with NI phenotype.

^e Clinical specimen not available for sequencing.