

## **Preliminary summary on oseltamivir-resistant H1N1 virus: China, Hong Kong Special Administrative Region (Hong Kong SAR)**

Reporting date: 7 May 2008

Over the 2007-2008 influenza season in the northern hemisphere influenza, a total of 581 H1N1 viruses were tested for oseltamivir resistance (H274Y) in Hong Kong SAR, of which 68 viruses (11.7%) were found to be resistant.

| Time of sampling                            | 4 <sup>th</sup> Quarter 07 | Jan 08         | Feb 08       | Mar 08        |
|---------------------------------------------|----------------------------|----------------|--------------|---------------|
| No. of H1N1 isolates tested                 | 5                          | 80             | 236          | 260           |
| No. (%) of viruses resistant to oseltamivir | 0                          | 11<br>(13.8 %) | 19<br>(8.1%) | 38<br>(14.6%) |

### **Specimen collection sites:**

Samples were collected from outpatient clinics and hospitals. No differentiation was made across collection sites of resistant viruses relative to susceptible viruses.

### **Geographical distribution:**

The resistant viruses were isolated in different regions of Hong Kong SAR, China.

### **Demography:**

Specimens were collected from both adults and children. The resistant viruses were isolated from all age groups. There are no apparent differences in age distribution between patients infected by resistant and sensitive viruses.

### **Oseltamivir use:**

Initial specimens analysed, in January 2008, were investigated for oseltamivir treatment prior to specimen collection. Nothing specific was discovered thus subsequent cases were not investigated. Generally, oseltamivir use in influenza treatment is uncommon in Hong Kong SAR.

### **Vaccination history:**

Unknown. The Department of Health of Hong Kong SAR recommends seasonal influenza vaccination in health care workers, elderly ( $\geq 65$ ), infants (6-23 months) and high risk groups but the vaccine uptake is low in the general population.

### **Clinical features:**

Thus far, no important differences in severity and clinical features between patients infected by resistant and sensitive viruses.

**Special underlying conditions:** No specific findings.

**Other findings:** Travel history was initially investigated. However, nothing specific was discovered in the first few cases in January and, thus, subsequent cases were not investigated.

**Antiviral resistance of influenza viruses isolated in Hong Kong SAR** - The quarterly data on amantadine and oseltamivir resistance are available at:

<http://www.chp.gov.hk/epidemiology.asp?lang=en&id=412&pid=119&ppid=97&pppid=29>

### **Summary provided by:**

National Influenza Centre, Hong Kong SAR, China