

Preliminary summary on oseltamivir-resistant H1N1 virus: France

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Over the 2007-2008 influenza season in the northern hemisphere influenza season, a total of 733 H1N1 viruses have been tested for oseltamivir resistance (H274Y) from France, of which 339 (46,25%) were found to be resistant.

Data by month of specimen collection:

Month of sampling	Sept 07	Oct 07	Nov 07	Dec 07	Jan 08	Feb 08	Mar 08	Apr 08
No.of H1N1 isolates tested	0	4	7	91	297	294	34	6
No. (%) of viruses resistant to oseltamivir			1	38	118	153	25	4

Specimen collection:

Collection sites consisted of outpatient clinics (90%), emergency clinics (5%) and hospitals (5%). No difference was noted for detection of resistant viruses relative to susceptible ones across sites of sample collection.

Geographical distribution:

Oseltamivir resistance prevalence has been higher in the northern and western part of the country with an average of 54.5% resistance prevalence in the north versus 37.6% in the south, and an average of 52% resistance prevalence in the west versus 30.3% in the east.

Demography:

Specimens were collected from both adults and children. There are no apparent age distribution differences between patients infected by resistant and sensitive viruses (0-80 vs 0-70 for S and R viruses, respectively). The M/F ratio was identical.

Oseltamivir use:

Of the 15 patients with infection by resistant strain for whom antiviral treatment history is available, oseltamivir was administered after the sampling.

Vaccination history:

Among patients with known recent vaccination history, there was no difference in vaccination rates between patients with resistant virus infection and patients with susceptible virus.

Clinical features:

Thus far, no differences in severity and clinical features between patients infected by resistant and sensitive viruses have been detected. This comparison was carried out in 451 patients, 247 with a susceptible virus and 204 with a resistant virus .Further investigations are in progress. No serious infections and deaths related to resistant H1N1 virus have been noted.

Special underlying conditions:

No data available

Other findings:

The percentage of resistant A(H1N1) viruses detected in France increased from 36% in week 1 of 2008 (beginning of the epidemic) to reach 61% by week 7, the last week of the A(H1N1) epidemic. This trend was observed in all regions of France.

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