

Interim Guidance on Antiviral Treatment and Chemoprophylaxis for Human Swine-Origin Influenza A (H1N1) Infections (Jointly Developed by HA CCID and ICB)

1 Susceptibility to antiviral drugs

Available information suggested that the current strain of swine-origin influenza A (H1N1) virus (S-OIV) is susceptible to neuraminidase inhibitors (oseltamivir, zanamivir) and resistant to adamantanes (amantadine, rimantidine).

2 Indications of antiviral therapy

2.1 As treatment

Antiviral should be started as soon as possible for patients fulfilling the clinical and epidemiological criteria for S-OIV infection. Standard duration of therapy is five days.

2.2 As chemoprophylaxis

Based on the current epidemiological information and risk assessment, the following recommendations are made (this will be reviewed regularly based on the developing epidemiological picture of the disease):

2.2.1 Post-exposure prophylaxis

Health care workers who were not using appropriate PPE during close contact (within 1 metre) with a case of human S-OIV infection (confirmed or pending investigation result) during the case's infectious period. Duration of therapy is 10 days after last unprotected exposure.

2.2.2 Pre-exposure prophylaxis

i. When there is no confirmed case of human S-OIV infections locally

Based on risk assessment, it may be considered for health care workers in high risk areas (i.e. isolation facilities for management of human S-OIV infections, triage areas of AED and GOPC, designated clinics) who will be in close contact (within 1 metre) with a case of human S-OIV infection (pending investigation result) during the case's infectious period.

ii. When the first case of human S-OIV infections is confirmed locally

It is recommended for health care workers in high risk areas (i.e. isolation facilities for management of human S-OIV infections, triage areas of AED and GOPC, designated clinics) who will be in close contact (within 1 metre) with a case of human S-OIV infection (confirmed or pending investigation result) during the case's infectious period.

iii. When the WHO declares a pandemic:

CCIDER will decide on use of prophylaxis for all healthcare workers.

3 Summary of antiviral regime for treatment and prophylaxis against infections due to swine-origin influenza A (H1N1) virus:

Agent, group		Treatment	Chemoprophylaxis
<i>Oseltamivir</i>			
Adults		75mg BD	75mg daily
Children (aged 12 months or older), weight:	≤ 15 kg	30mg BD	30mg daily
	15 . 23 kg	45mg BD	45mg daily
	24 . 40 kg	60mg BD	60mg daily
	> 40 kg	75mg BD	75mg daily
<i>Zanamivir</i>			
Adults		Two 5mg inhalations BD	Two 5mg inhalations daily
Children		Two 5mg inhalations BD (aged ≥ 7 yrs)	Two 5mg inhalations daily (aged ≥ 5 yrs)

4 Special issue

4.1 Pregnant women

Both oseltamivir and zanamivir are FDA class C for use in pregnant women. To date, no adverse effects have been reported among women who received oseltamivir or zanamivir during pregnancy or among infants born to women who

have received oseltamivir or zanamivir. They should be used only if potential benefit justifies the potential risk to the embryo or fetus. Zanamivir is an inhaled medication and has less systemic absorption, some experts prefer zanamivir over oseltamivir for use in pregnant women.

4.2 Children under 1 year of age

The US Food and Drug Administration (FDA) has just issued Emergency Use Authorizations (EUAs) on use of oseltamivir for children under one year of age. Since this indication is not licensed in Hong Kong, **informed consent** should be obtained before commencement of treatment. Clinicians are advised to take reference to the document from US CDC on a detailed description of the management of S-OIV infections in young children (available at <http://www.cdc.gov/swineflu/childrentreatment.htm>). Regimens are summarized in the following table:

Age	Treatment	Prophylaxis
< 3 months	12mg BD	Not recommended unless situation judged critical due to limited data on use in this age group
3 . 5 months	20mg BD	20mg daily
6 . 12 months	25mg BD	25 mg daily

Key References

- 1 Scientific Committee on Emerging and Zoonotic Diseases, Centre for Health Protection. General guide to doctors: antiviral use for novel influenza treatment and prophylaxis. Available at http://www.chp.gov.hk/files/pdf/20080131_SCEZD.pdf
- 2 US Centre for Disease Control and Prevention. Interim Guidance on Antiviral Recommendations for Patients with Confirmed or Suspected Swine Influenza A (H1N1) Virus Infection and Close Contacts (28 April 2009). Available at <http://www.cdc.gov/swineflu/recommendations.htm>
- 3 US Food and Drug Administration. FDA News (27 Apr 2009): FDA authorizes emergency use of influenza medicines, diagnostic test in response to swine flu outbreak in humans. Available at <http://www.fda.gov/bbs/topics/NEWS/2009/NEW02002.html>