

Tab 3A – Treatment/Prophylaxis Algorithm – Appendix D (ECHD Avian Influenza Epi Response Protocol) to Annex I (ECHD Pandemic Influenza Plan) to ECHD Emergency Operations Plan

ANTIVIRAL AGENT	AGE GROUP (years)				
	1-6	7-9	10-12	13-64	>65
Amantadine^A (oral¹)					
TREATMENT, Influenza A	5mg/kg body weight/day up to 150 mg in two divided doses ^B	5mg/kg body weight/day up to 150 mg in two divided doses ^B	100 mg twice daily ^C	100 mg twice daily ^C	≤ 100 mg/day
PROPHYLAXIS, Influenza A	5mg/kg body weight/day up to 150 mg in two divided doses ^B	5mg/kg body weight/day up to 150 mg in two divided doses ^B	100 mg twice daily ^C	100 mg twice daily ^{C,G}	≤ 100 mg/day
Rimantadine^D (oral¹)					
TREATMENT	NA ^F	NA	NA	100 mg/day twice a day ^{C,G}	100 mg/day
PROPHYLAXIS, Influenza A	5mg/kg body weight/day up to 150 mg in two divided doses ^B	5mg/kg body weight/day up to 150 mg in two divided doses ^B	100 mg twice daily ^C	100 mg twice daily ^C	100 mg/day ^H
Zanamivir^{I,J} (inhaler¹)					
TREATMENT, Influenza A and B	NA	10 mg twice daily	10 mg twice daily	10 mg twice daily	10 mg twice daily
Oseltamivir (oral¹)					
TREATMENT, Influenza A and B	Dose varies by child's weight ^L	Dose varies by child's weight ^L	Dose varies by child's weight ^L	75 mg twice daily X 5 days	75 mg twice daily X 5 days
PROPHYLAXIS, Influenza A and B	Dose varies by child's weight ^L	Dose varies by child's weight ^L	Dose varies by child's weight ^L	75 mg once daily X 10 days or 4 days after recovery of symptoms	75 mg once daily X 10 days or 4 days after recovery of symptoms

(From Prevention and Control of Influenza Recommendations of the Advisory Committee on Immunization Practices [ACIP], July 2005. Modified to reflect FDA approval of use of oseltamivir for prophylaxis in children, December 2005.).

NOTE: Amantadine manufacturers include Endo Pharmaceuticals (Symmetrel[®] –tablet and syrup) and Geneva Pharms Tech (Amantadine HCL–capsule); USL Pharma (Amantadine HCL– capsule and tablet); and Alpharma, Carolina Medical, Copley Pharmaceutical, HiTech Pharma, Mikart, Morton Grove, and Pharmaceutical Associates (Amantadine HCL–syrup), and Sandoz.

Rimantadine is manufactured by Forest Laboratories (Flumadine[®] –tablet and syrup); Corepharma, Impax Labs (Rimantadine HCL–tablet), and Amide Pharmaceuticals (Rimantadine HCL–tablet).

Zanamivir is manufactured by GlaxoSmithKline (Relenza[®] –inhaled powder).

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Oseltamivir is manufactured by Roche Pharmaceuticals (Tamiflu[®] –tablet).

Information based on data published by the U.S. Food and Drug Administration at www.fda.gov, accessed 3/30/2005.

¹ Common Side Effects:

Amantadine: CNS, GI.

Rimantidine: CHS, GI (less often than amantadine).

Oseltamivir: GI.

Zanamivir: Bronchospasm

- ^A The drug package insert should be consulted for dosage recommendations for administering amantadine to persons with creatinine clearance 50 ml/min/1.73m².
- ^B 5 mg/kg body weight of amantadine or rimantadine syrup = 1 tsp/2.2 lbs.
- ^C Children aged 10 years who weigh <40 kg should be administered amantadine or rimantadine at a dosage, based on body weight, of 5 mg/kg/day.
- ^D A reduction in dosage to 100 mg/day of rimantadine is recommended for persons who have severe hepatic dysfunction or those with creatinine clearance 10 mL/min. Other persons with less severe hepatic or renal dysfunction taking 100 mg/day of rimantadine should be observed closely, and the dosage should be reduced or the drug discontinued, if necessary.
- ^E Approved by FDA only for treatment among adults.
- ^F Not applicable.
- ^G Rimantadine is approved by FDA for treatment among adults. However, certain experts in the management of influenza consider it appropriate for treatment among children. (See American Academy of Pediatrics, 2003 Red Book.)
- ^H Older nursing-home residents should be administered only 100 mg/day of rimantadine. A reduction in dosage to 100 mg/day should be considered for all persons aged 65 years if they experience possible side effects when taking 200 mg/day.
- ^I Zanamivir administered via inhalation using a plastic device included in the medication package. Patients will benefit from instruction and demonstration of the correct use of the device.
- ^J Zanamivir is not approved for prophylaxis.
- ^K A reduction in the dose of oseltamivir is recommended for persons with creatinine clearance <30 ml/min.
- ^L The dose recommendation for children who weigh 15 kg is 30 mg twice a day. For children who weigh >15 to 23 kg, the dose is 45 mg twice a day. For children who weigh >23 to 40 kg, the dose is 60 mg twice a day. For children who weigh >40 kg, the dose is 75 mg twice a day.

Tamiflu Compound 1,2,3

Dilution Chart (15 ml of Oseltamivir per 1 ml) See Dosing Chart

Total Volume of Extemporaneous Preparation	25 ml Volume	50 ml Volume	75 ml Volume
Number of Tamiflu capsules	5 capsules	10 capsules	15 capsules
Cherry Syrup (Humco Co)	24 ml	49 ml	73 ml
Ora-Sweet SF (Paddock Labs)	24 ml	49 ml	73 ml

1. Carefully separate the capsule body and cap and transfer the contents of the indicated number of Tamiflu 75 mg capsules into a clean mortar.
2. Triturate the granules to a fine powder.
3. Add 1/3 of the specified amount of vehicle and triturate the powder until a uniform suspension is achieved.
4. Transfer the suspension to a bottle. A funnel may be used to eliminate any spillage.

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5. Again, add 1/3 of the vehicle to the mortar, rinse the pestle and mortar by a tritulating motion and transfer the vehicle into the bottle.
6. Repeat the rinsing Step 5 with the remainder of the vehicle.
7. Close the bottle with cap.
8. Shake well to insure homogenous distribution of the drug in solutions.
9. Label bottle and add “SHAKE BEFORE USING” label.
10. Place appropriate expiration date according to storage methods.

Expiration Dating

The stability of the compound made with **Cherry Syrup** at a concentration of 15mg/ml (different than the commercially available product) was evaluated by an internal study and found that the preparation is:

- Stable for 35 days under refrigeration (41°F/5°C) when stored in either amber glass or amber PET bottles.
- Stable for 5 days at room temperature (77°F/25°C/60% relative humidity) in both amber glass and amber PET bottles.
- NOT stable at 86°F/30°C/65% relative humidity after 5 days in either glass or amber PET bottles.
- The resulting preparation, using this vehicle, is palatable, chemically and physically stable, and microbiologically preserved under conditions specified above.

The stability of the compound made with **ORA-Sweet Syrup** at a concentration of 15mg/ml (different than the commercially available product) was evaluated by an internal study and found that the preparation is:

- Stable for 35 days under refrigeration (41°F/5°C) when stored in either amber glass or amber PET bottles.
- Stable for 5 days at room temperature (77°F/25°C/60% relative humidity) in both amber glass and amber PET bottles.
- NOT stable at 86°F/30°C/65% relative humidity after 5 days in either glass or amber PET bottles.
- The resulting preparation, using this vehicle, is palatable, chemically and physically stable, and microbiologically preserved under conditions specified above.

Body Weight in Kg	Body Weight in lbs	Recommended Treatment Dose for 5 days	Volume per Dose 15 mg/ml
≤15 kg	≤ 33 lbs	30 mg BID	2 ml
>15-23 kg	> 33-51 lbs	45 mg BID	3 ml
>23-40 kg	> 51-88 lbs	60 mg BID	4 ml
>40 kg	> 88 lbs	75 mg BID	5 ml

NOTE: 1 teaspoon = 5 ml

Consider using / dispensing a graduated oral syringe for measuring small amounts

References

- ¹ TAMIFLU Package Insert.
- ² Data on File (Reference # 155-040), Hoffman-La Roche., Nutley, NJ 07110
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