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Directions for the Emergency Compounding of an Oral Suspension from TAMIFLU Capsules (Final Concentration = 15 mg/mL)

In November 2006, the FDA approved the addition of directions for the emergency compounding of a TAMIFLU oral suspension from TAMIFLU Capsules (15 mg/mL) to the label. These directions are provided for use only during emergency situations. They are not intended to be used if the FDA-approved, commercially manufactured TAMIFLU Oral Suspension is readily available from wholesalers or the manufacturer.

Commercially manufactured TAMIFLU Oral Suspension (12 mg/mL) is the preferred product:

- for pediatric and adult patients who have difficulty swallowing capsules or
- where lower doses are needed.

In the event that the commercially manufactured TAMIFLU Oral Suspension is not available, the pharmacist may compound a suspension (15 mg/mL) from TAMIFLU (oseltamivir phosphate) Capsules 75 mg using either of two vehicles: Cherry Syrup (Humco®) or Ora-Sweet® SF (sugar-free) (Paddock Laboratories).¹ Other vehicles have not been studied.

This compounded suspension should not be used for convenience or when the FDA-approved Tamiflu Oral Suspension is commercially available.

Compounding an oral suspension with this procedure will provide one patient with enough medication for:

- a 5-day course of treatment (twice daily administration) or
- a 10-day course of prophylaxis (once daily administration).

Compounding Procedure

First, calculate the Total Volume of an oral suspension needed to be compounded and dispensed for each patient. The Total Volume required is determined by the weight of each patient. Refer to **Table 5**. *Please note that the table numbers included in these directions (Tables 5, 6, and 7) correspond to the table numbers in the TAMIFLU package insert.*

Table 5 Volume of an Oral Suspension (15 mg/mL) needed to be compounded based upon the patient's weight

Body Weight (kg)	Body Weight (lbs)	Total Volume to Compound per patient (mL)
15 kg or less	33 lbs or less	30 mL

¹ Humco® is a registered trademark of Humco Holding Group, Inc.
Ora-Sweet® SF is a registered trademark of Paddock Laboratories

16 to 23 kg	34 to 51 lbs	40 mL
24 to 40 kg	52 to 88 lbs	50 mL
41 kg or more	89 lbs or more	60 mL

Next, determine the number of capsules and the amount of vehicle (Cherry Syrup or Ora-Sweet SF) that are needed to prepare the Total Volume (calculated from Table 5: 30 mL, 40 mL, 50 mL, or 60 mL) of compounded oral suspension (15 mg/mL). Refer to **Table 6**.

Table 6 Number of TAMIFLU 75 mg Capsules and Amount of Vehicle (Cherry Syrup OR Ora-Sweet SF) Needed to Prepare the Total Volume of a Compounded Oral Suspension (15 mg/mL)

Total Volume of Compounded Oral Suspension needed to be Prepared	30 mL	40 mL	50 mL	60 mL
Required number of Tamiflu 75 mg Capsules	6 capsules (450 mg oseltamivir)	8 capsules (600 mg oseltamivir)	10 capsules (750 mg oseltamivir)	12 capsules (900 mg oseltamivir)
Required volume of vehicle Cherry Syrup (Humco) OR Ora-Sweet SF (Paddock Laboratories)	29 mL	38.5 mL	48 mL	57 mL

Then, follow the procedure below for compounding the oral suspension (15 mg/mL) from TAMIFLU Capsules 75 mg

1. Carefully separate the capsule body and cap and transfer the contents of the required number of TAMIFLU 75 mg Capsules into a clean mortar.
2. Triturate the granules to a fine powder.
3. Add one-third (1/3) of the specified amount of vehicle to the mortar and triturate the powder until a uniform suspension is achieved.
4. Transfer the suspension to an amber glass or amber polyethyleneterephthalate (PET) bottle. A funnel may be used to eliminate any spillage.

5. Add another one-third (1/3) of the vehicle to the mortar, rinse the pestle and mortar by a triturating motion and transfer the contents into the bottle.
6. Repeat the rinsing (Step 5) with the remainder of the vehicle.
7. Close the bottle using a child-resistant cap.
8. Shake well to completely dissolve the active drug and to insure homogeneous distribution of the dissolved drug in the resulting suspension. (Note: The active drug, oseltamivir phosphate, readily dissolves in the specified vehicles. The suspension is caused by some of the inert ingredients of TAMIFLU Capsules which are insoluble in these vehicles.)
9. Put an ancillary label on the bottle indicating “Shake Gently Before Use”. This compounded suspension should be gently shaken prior to administration to minimize the tendency for air entrapment, particularly with the Ora-Sweet SF preparation. *The need to shake the compounded oral suspension gently prior to administration should be reviewed with the parent or guardian when the suspension is dispensed.*
10. Instruct the parent or guardian that any remaining material following completion of therapy must be discarded by either affixing an ancillary label to the bottle or adding a statement to the pharmacy label instructions.
11. Place an appropriate expiration date label according to storage condition (see below).

STORAGE OF THE PHARMACY-COMPOUNDED SUSPENSION:

Refrigeration: Stable for 5 weeks (35 days) when stored in a refrigerator at 2° to 8°C (36° to 46°F).

Room Temperature: Stable for five days (5 days) when stored at room temperature, 25°C (77°F).

Note: The storage conditions are based on stability studies of compounded oral suspensions, using the above mentioned vehicles, which were placed in amber glass and amber polyethyleneterephthalate (PET) bottles. Stability studies have not been conducted with other vehicles or bottle types.

12. Place a pharmacy label on the bottle that includes the patient’s name, dosing instructions, and drug name and any other required information to be in compliance with all State and Federal Pharmacy Regulations. **Refer to Table 7 for the proper dosing instructions.**

Note: This compounding procedure results in a 15 mg/mL suspension, which is different from the commercially available TAMIFLU for Oral Suspension, which has a concentration of 12 mg/mL.

Table 7 Dosing Chart for Pharmacy-Compounded Suspension from TAMIFLU Capsules 75 mg

Body Weight (kg)	Body Weight (lbs)	Dose (mg)	Volume per Dose 15 mg/mL	Treatment Dose (for 5 days)	Prophylaxis Dose (for 10 days)
15 kg or less	33 lbs or less	30 mg	2 mL	2 mL two times a day	2 mL once daily
16 to 23 kg	34 to 51 lbs	45 mg	3 mL	3 mL two times a day	3 mL once daily
24 to 40 kg	52 to 88 lbs	60 mg	4 mL	4 mL two times a day	4 mL once daily
41 kg or more	89 lbs or more	75 mg	5 mL	5 mL two times a day	5 mL once daily

Note: 1 teaspoon = 5 mL

Oral Dosing Device: Consider dispensing the suspension with an oral dosing device (a graduated oral syringe or spoon) suitable for measuring small amounts of suspension. If possible, mark or highlight the graduation corresponding to the appropriate dose (2 mL, 3 mL, 4 mL, or 5 mL) on the oral syringe or spoon for each patient. **The dosing device dispensed with the commercially available TAMIFLU for Oral Suspension should NOT be used with the compounded suspension since it has a different concentration (concentration = 12 mg/mL) than the suspension prepared through the emergency compounding procedure described here (concentration = 15 mg/mL).**

This completes the review of the directions for the emergency compounding of an oral suspension of TAMIFLU from the oral 75 mg capsules. Healthcare professionals should access the TAMIFLU Package Insert, which contains these directions and all tables needed to complete the emergency compounding procedure at www.tamiflu.com, www.rocheusa.com or www.RocheExchange.com.