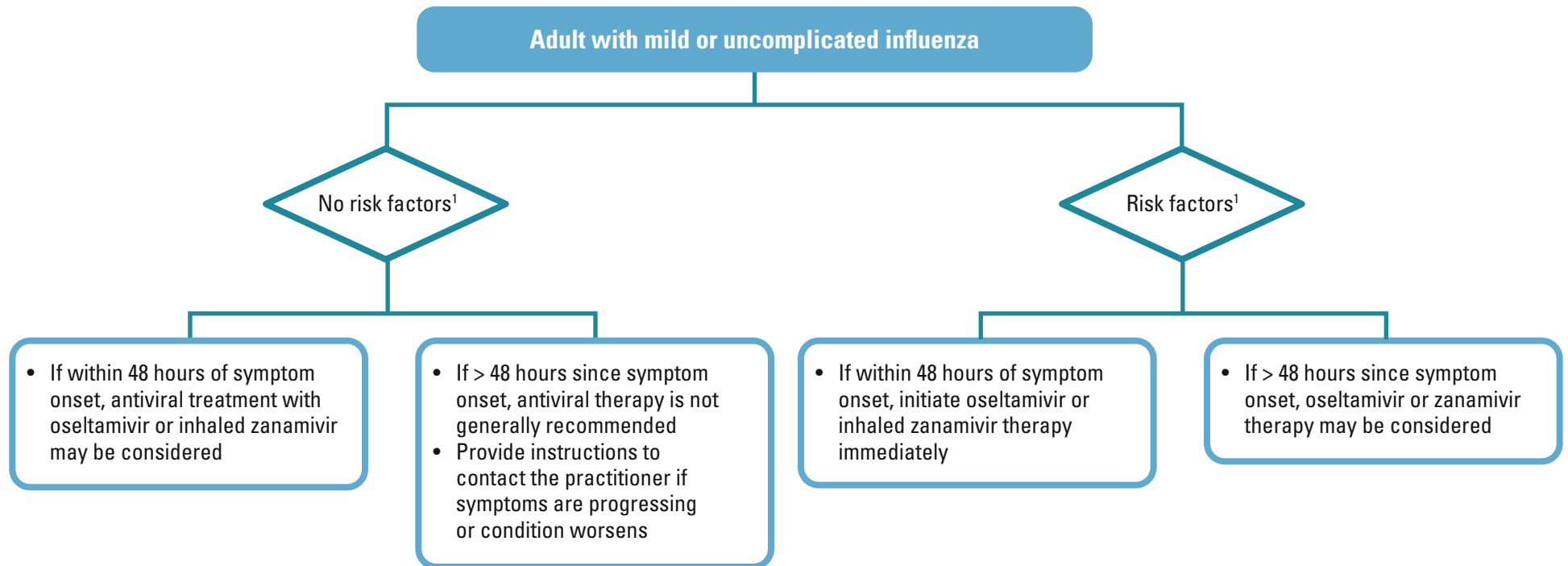


> Algorithm for oseltamivir and zanamivir treatment of mild or uncomplicated influenza in adults—December 2011 *From: The Use of Antiviral Drugs for Influenza: Guidance for Practitioners 2011-2012*



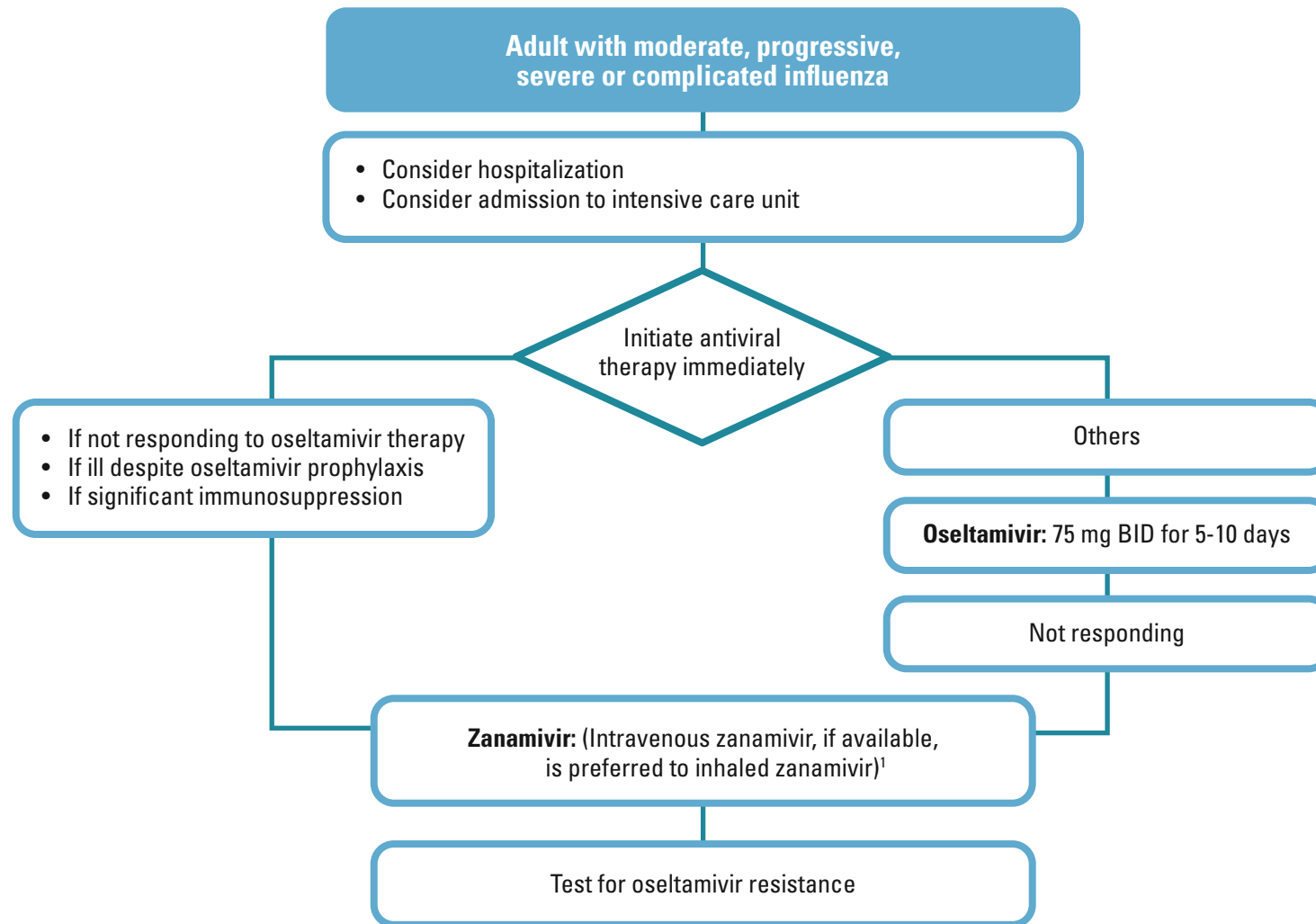
¹ • Asthma and other chronic pulmonary disease, including bronchopulmonary dysplasia, cystic fibrosis, chronic bronchitis and emphysema
• Cardiovascular disease (excluding isolated hypertension; including congenital and acquired heart disease such as congestive heart failure and symptomatic coronary artery disease)
• Malignancy
• Chronic renal insufficiency
• Chronic liver disease
• Diabetes mellitus and other metabolic diseases

• Hemoglobinopathies such as sickle cell disease
• Immunosuppression or immunodeficiency due to disease (e.g. HIV infection, especially if CD4 is < 200 x 10⁶/L), or iatrogenic, due to medication
• Certain rheumatologic diseases such as rheumatoid arthritis, systemic lupus erythematosus, psoriatic arthritis, antiphospholipid syndrome, scleroderma, spondyloarthropathies, Sjogren's syndrome, dermatomyositis, vasculitis, sarcoidosis, polyarteritis nodosa
• Neurologic disease and neurodevelopmental disorders that compromise handling of respiratory secretions (cognitive dysfunction, spinal cord injury, seizure disorders, neuromuscular disorders, cerebral palsy, metabolic disorders)

• Children younger than 2 years of age (Children who are 2 years through 4 years of age also have a higher rate of complications compared to older children; however, the risk for these children is lower than the risk for children younger than 2 years)
• Individuals 65 years of age or older
• People of any age who are residents of nursing homes or other chronic care facilities
• Pregnant women and women up to 2 weeks post partum regardless of how the pregnancy ended
• Individuals < 18 years of age who are on chronic aspirin therapy
• Morbid obesity (BMI > 40)
• First Nations, Inuit and Metis Canadians

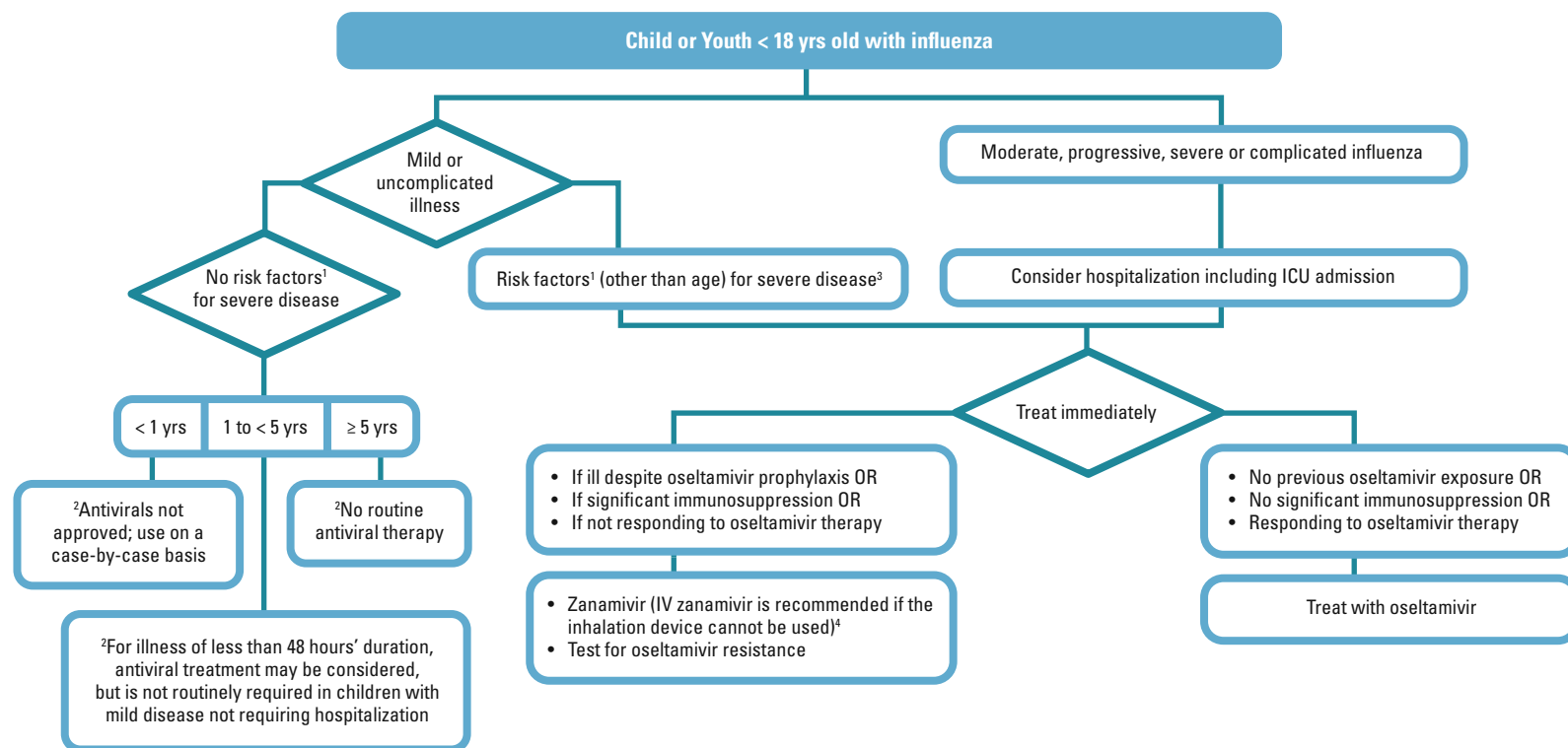
> Algorithm for oseltamivir and zanamivir treatment of moderate, progressive, severe or complicated influenza in adults—December 2011

From: *The Use of Antiviral Drugs for Influenza: Guidance for Practitioners 2011-2012*



¹ *Inhaled zanamivir cannot be administered via ventilator*

> Algorithm for oseltamivir and zanamivir treatment of influenza in children and youth (< 18 yrs old)—December 2011 *From: The Use of Antiviral Drugs for Influenza: Guidance for Practitioners 2011-2012*



¹ • Asthma and other chronic pulmonary disease, including bronchopulmonary dysplasia, cystic fibrosis, chronic bronchitis and emphysema
• Cardiovascular disease (excluding isolated hypertension; including congenital and acquired heart disease such as congestive heart failure and symptomatic coronary artery disease)
• Malignancy
• Chronic renal insufficiency
• Chronic liver disease
• Diabetes mellitus and other metabolic disease

• Hemoglobinopathies such as sickle cell diseases
• Immunosuppression or immunodeficiency due to disease (e.g. HIV infection, especially if CD4 is < 200 x 10⁹/L), or iatrogenic, due to medication
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• Neurologic disease and neurodevelopmental disorders that compromise handling of respiratory secretions (cognitive dysfunction, spinal cord injury, seizure disorders, neuromuscular disorders, cerebral palsy, metabolic disorders)

• Children younger than 2 years of age (Children who are 2 years through 4 years of age also have a higher rate of complications compared to older children; however, the risk for these children is lower than the risk for children younger than 2 years)
• Individuals 65 years of age or older
• People of any age who are residents of nursing homes or other chronic care facilities
• Pregnant women and women up to 2 weeks post partum regardless of how the pregnancy ended
• Individuals < 18 years of age who are on chronic aspirin therapy
• Morbid obesity (BMI > 40)
• First Nations, Inuit and Metis Canadians

² In the above scenarios in those with mild or uncomplicated illness, treatment is not routinely recommended if ill for > 48 hrs.

³ If ill for more than 48 hours, treatment may be considered on a case-by-case basis for children ≥ 1 year of age (antivirals not approved for infants < 1 year of age).

⁴ Inhaled zanamivir cannot be administered via ventilator.

> Algorithm for oseltamivir and zanamivir treatment of influenza in children and youth (< 18 yrs old)—December 2011 *From: The Use of Antiviral Drugs for Influenza: Guidance for Practitioners 2011-2012*

Oseltamivir and zanamivir regimens adapted from: <http://www.cdc.gov/h1n1flu/recommendation.htm>

| Medication | | Treatment (5 days) | Chemoprophylaxis (10 days) |
|---|--------------------------|--|---|
| Oseltamivir¹ | | | |
| Adults | | | |
| | | 75 mg twice daily | 75 mg once daily |
| Children ≥ 12 months | | | |
| Body Weight (kg) | Body Weight (lbs) | | |
| ≤15 kg | ≤33lbs | 30 mg twice daily | 30 mg once daily |
| > 15 kg to 23 kg | >33 lbs to 51 lbs | 45 mg twice daily | 45 mg once daily |
| >23 kg to 40 kg | >51 lbs to 88 lbs | 60 mg twice daily | 60 mg once daily |
| >40 kg | >88 lbs | 75 mg twice daily | 75 mg once daily |
| Children 3 months to < 12 months² | | | |
| | | 3 mg/kg/dose twice daily | 3 mg/kg/dose once per day |
| Children < 3 months³ | | | |
| | | 3 mg/kg/dose twice daily | Not recommended unless situation judged critical due to limited data on use in this age group |
| *Please note that antivirals are not approved for the routine treatment of seasonal influenza illness in infants less than 1 year of age. | | | |
| Zanamivir⁴ | | | |
| Adults | | | |
| | | 10 mg (two 5-mg inhalations) twice daily | 10 mg (two 5-mg inhalations) once daily |
| Children (≥7 years or older for treatment, ≥7 years for chemoprophylaxis) | | | |
| | | 10 mg (two 5-mg inhalations) twice daily | 10 mg (two 5-mg inhalations) once daily |

¹ Oseltamivir is administered orally without regard to meals, although administration with meals may improve gastrointestinal tolerability. Oseltamivir is available in 30 mg, 45 mg, and 75 mg capsules, and as a powder for oral suspension that is reconstituted to provide a final concentration of 12 mg/mL. If the commercially manufactured oral suspension is not available, the capsules may be opened and the contents mixed with a sweetened liquid to mask the bitter taste or a suspension can be compounded by retail pharmacies (final concentration 15 mg/mL).

When dispensing commercially manufactured Oseltamivir (TAMIFLU) Powder for Oral Suspension (12 mg/mL), pharmacists should ensure the units of measure on the prescription instructions match the dosing device. Prescribers should watch out for any changes in drug concentration in Canadian supplies of oseltamivir, as in the USA, the concentration of the oseltamivir suspension has been changed to 6 mg/mL.

² Weight-based dosing is preferred. However, if weight is not known, dosing by age for treatment (give two doses per day) or prophylaxis (give one dose per day) of influenza in full-term infants younger than 1 year of age may be necessary:

- 0-3 months (treatment only) = 12 mg (1 mL of 12 mg/mL commercial suspension);
- 3-5 months = 20 mg once daily (1.6 mL of 12 mg/mL of commercial suspension),
- 6-11 months = 25 mg (2 mL of 12 mg/mL commercial suspension) once daily.

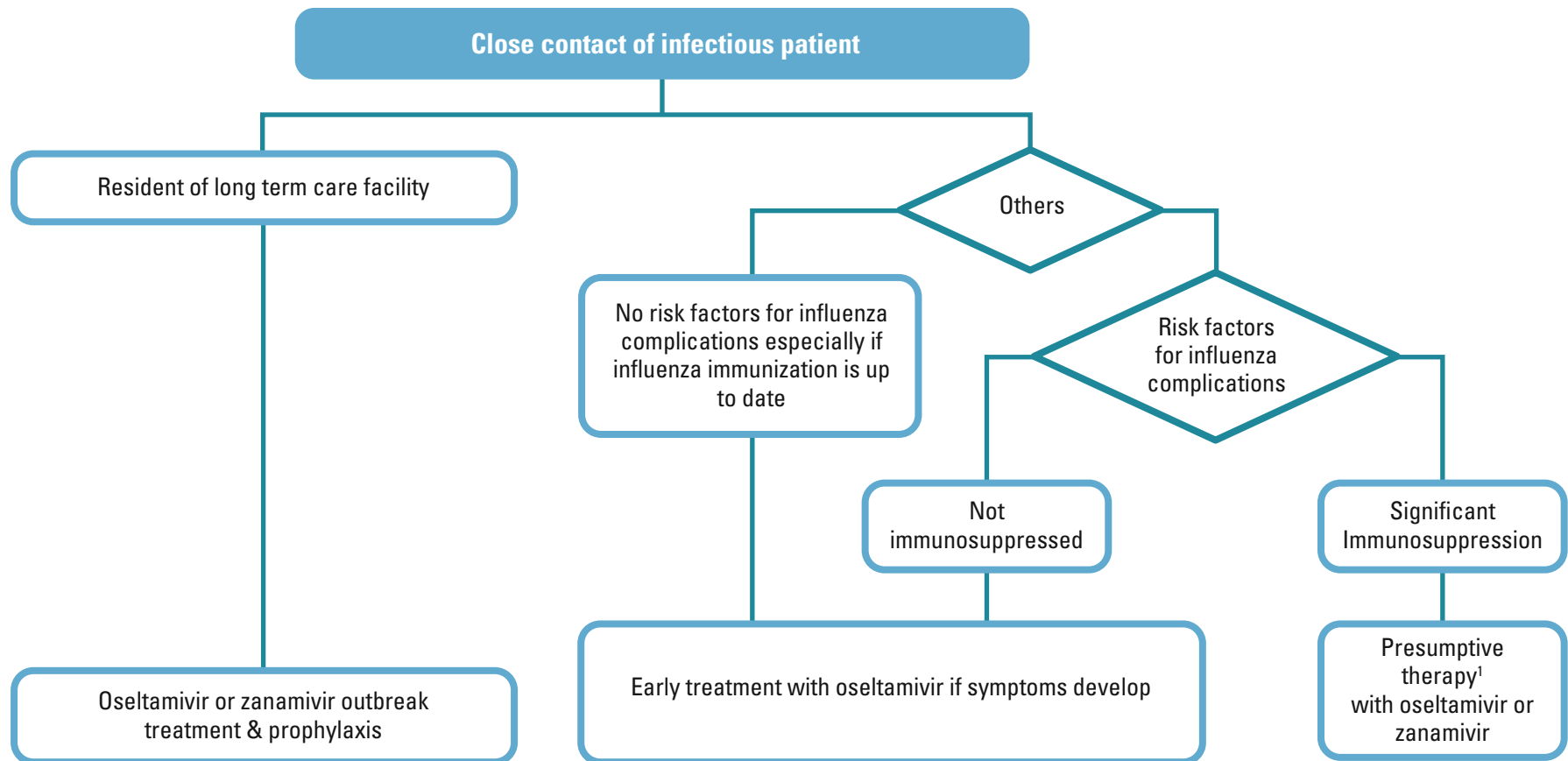
³ Current weight-based dosing recommendations are not intended for premature infants. Premature infants may have slower clearance of oseltamivir due to immature renal function, and doses recommended for full term infants may lead to very high drug concentrations in this age group. Very limited data from a cohort of premature infants demonstrated that oseltamivir concentrations among premature infants given 1 mg/kg body weight twice daily were similar to those observed with the recommended treatment doses in term infants (3 mg/kg body weight twice daily). Observed drug concentrations were highly variable among premature infants. These data are insufficient to recommend a specific dose of oseltamivir for premature infants.

⁴ Zanamivir is administered by inhalation using a proprietary “Diskhaler” device distributed together with the medication. Zanamivir is a dry powder, not an aerosol, and should not be administered using nebulizers, ventilators, or other devices typically used for administering medications in aerosolized solutions. Zanamivir is not recommended for persons with chronic respiratory diseases such as asthma or chronic obstructive pulmonary disease that increase the risk of bronchospasm.

<http://www.ammi.ca/guidelines>

> Algorithm for oseltamivir and zanamivir prophylaxis or early therapy in close contacts of infectious patients—December 2011

From: *The Use of Antiviral Drugs for Influenza: Guidance for Practitioners 2011-2012*



¹ Presumptive treatment is therapy with twice daily doses of oseltamivir or zanamivir initiated before the onset of influenza symptoms in close contacts of individuals with suspected or proved influenza illness